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2020 FARS/CRSS Coding and Validation Manual

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16. Abstract

NHTSA has collected motor vehicle traffic crash data since the early 1970s to support its mission to reduce motor vehicle traffic crashes, injuries, and deaths on our Nation's trafficways. The two data systems included in this Coding and Validation Manual are the Fatality Analysis Reporting System (FARS) and the Crash Report Sampling System (CRSS). The 2020 data coding year has brought substantial change to the FARS and CRSS data collections. Here are a few highlights of the most noteworthy items.

The electronic collection software used by both FARS and CRSS to record the codes used for analysis has been replaced. The legacy *Microcomputer Data Entry (MDE)* has been replaced by the new *Records-Based Information Solution (RBIS)*.

The *Vehicle Level* has been reorganized to allow for the addition of six new data elements and the removal of one data element due to NHTSA's implementation of the software used to interpret Vehicle Identification Numbers (VINs).

The data element *Person Type* on the Not a Motor Vehicle Occupant level has been expanded to collect more specific types of non-motorists on motorized or non-motorized personal conveyances.

Prior to 2020 the Related Factors on each coding level had coding limitations (e.g., Crash-Related Factors allowed up to three selections). Beginning with the data collection year 2020, the analyst/coder may select all Related Factors that apply to the situation.

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Introduction

The National Highway Traffic Safety Administration (NHTSA) has collected motor vehicle traffic crash data since the early 1970s to support its mission to reduce motor vehicle traffic crashes, injuries, and deaths on our Nation's trafficways. The two data systems included in this Coding and Validation Manual are the Fatality Analysis Reporting System (FARS) and the Crash Report Sampling System (CRSS).

FARS

FARS contains data derived from a census of fatal motor vehicle traffic crashes in the 50 States, the District of Columbia, and Puerto Rico. To be included in FARS, a crash must involve a motor vehicle traveling on a trafficway customarily open to the public and must result in the death of at least one person (occupant of a vehicle or a non-motorist) within 30 days of the crash. FARS was conceived, designed, and developed by NHTSA's National Center for Statistics and Analysis (NCSA) in 1975 to provide an overall measure of highway safety, to help identify traffic safety problems, to suggest solutions, and to help provide an objective basis to evaluate the effectiveness of motor vehicle safety standards and highway safety programs.

CRSS

CRSS builds on the retiring, long running National Automotive Sampling System General Estimates System (NASS GES). CRSS is a sample of police-reported motor vehicle traffic crashes involving all types of motor vehicles, pedestrians, and cyclists, ranging from property-damage-only crashes to those that result in fatalities. CRSS is used to estimate the overall crash picture, identify highway safety problem areas, measure trends, drive consumer information initiatives, and form the basis for cost- and benefit analyses of highway safety initiatives and regulations. The target population of the CRSS is all police-reported traffic crashes of motor vehicles (motorcycles, passenger cars, SUVs, vans, light trucks, medium- or heavy-duty trucks, buses, etc.). The CRSS target population is the same as the previous NASS GES target population.

Crash Versus Accident

NHTSA adopted the policy to use the term crash instead of Accident. Accordingly, effective 2009, the term *crash* is used throughout this manual.

The American National Standard Institute (ANSI) D16.1 - Manual on Classification of Motor Vehicle Traffic Crashes, in its 8th edition (2017)¹ has also adopted the use of the term "crash" instead of "accident." This is known as the ANSI Manual.

The use of the term "crash" instead of "accident" in the 8th edition of ANSI D16.1 is not a change in the classification other than the term.

Incidents or scenarios involving collision events, and those involving non-collision events, as defined in ANSI D16.1, are both still included in the term "crash."

Collision events include those involving a motor vehicle and fixed objects (poles, walls, buildings, barriers, bridge supports, etc.) and those involving a motor vehicle and non-fixed objects (pedestrians, animals, pedalcyclists, other motor vehicles, etc.).

Besides scenarios involving a collision, a crash also shall include non-collision scenarios such as the following:

- A single motor vehicle on a roadway catches fire;
- A motor vehicle runs off a trafficway and is immersed in a body of water;
- An occupant of a motor vehicle is injured by falling from that vehicle while it is in motion or on a roadway;
- An occupant of a motor vehicle is injured by shifting cargo or flying objects within that vehicle during emergency handling/braking;
- A vehicle suffers damage from a pavement irregularity (loose plate, high manhole, pothole, etc.);
- And others.

Consult the ANSI Manual for a more precise and complete presentation of these concepts. As a minimum, the following ANSI D16.1 terms should be well understood to properly select and classify cases for FARS and CRSS. The paragraph reference numbers from the ANSI Manual are provided to aid look-up.

- 2.2.1 Trafficway
- 2.4.1 Harmful Event
- 2.4.2 Deliberate Intent
- 2.4.3 Legal Intervention
- 2.4.4 Unstabilized Situation
- 2.4.5 Cataclysm

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 $^{^{1} \} Available \ at \ \underline{www.transportation.gov/sites/dot.gov/files/docs/resources/government/traffic-records/304331/ansid16-2017.pdf}$

- 2.4.6 Crash (formerly Accident)
- 2.4.9 Transport Crash
- 2.4.12 Motor Vehicle Crash
- 2.4.17 Road Vehicle Crash
- 2.4.18 Traffic Crash
- 2.4.19 Non-traffic Crash
- 2.4.22 Motor Vehicle Traffic Crash

New and Noteworthy in 2020

The 2020 data coding year has brought substantial change to the FARS and CRSS data collections. Below are just a few highlights of the most noteworthy items. Please visit the <u>2020</u> *FARS/CRSS Manual Changes Summary* for the specific changes in each coding level.

The electronic collection software used by both FARS and CRSS to record the codes used for analysis has been replaced. The legacy Microcomputer Data Entry (MDE) has been replaced by the new Records-Based Information Solution (RBIS).

The <u>Vehicle Level</u> has been reorganized to allow for the addition of six new data elements and the removal of one data element due to NHTSA's implementation of the software used to interpret Vehicle Identification Numbers (VINs), known as vPIC. For more information, visit <u>vPIC Make / vPIC Model / vPIC Body Class Overview</u>. Due to these new vPIC-derived data elements, starting with the 2020 data collection year, the <u>NCSA Make/Model/Body Type tables</u> will no longer be maintained. They are now located as an appendix.

The data element <u>Person Type</u> on the Not a Motor Vehicle Occupant level has had an expansion to collect more specific types of non-motorists on motorized or non-motorized personal conveyances.

Prior to 2020 the Related Factors on each coding level had coding limitations (e.g., Crash-Related Factors allowed up to three selections). Beginning with the data collection year 2020, the analyst/coder may select all Related Factors that apply to the situation. In addition, each Related Factor code has been increased to three digits (001, 002, 003, etc.). This three-digit increase allows for the addition of more codes in the future.

2020 FARS/CRSS Manual Changes Summary

Below is a list of elements that have substantial changes for **2020**. These changes, as well as others, are highlighted throughout the manual by **bold/italic** type.

IT IS RECOMMENDED THAT YOU REVIEW THE ENTIRE MANUAL FOR ALL CHANGES.

Intro Changes

SECTION	SECTION NAME	NEW/ REVISED VALUES	NEW/ REVISED REMARKS	COMMENTS
100	FARS Submission Instructions		X	Revised remarks to replace Microcomputer Data Entry (MDE) with Records-Based Information Solution (RBIS)
	FARS Coding Forms			Coding forms removed
200	Form Coding Instructions		X	 Revised remarks: General Instructions Revised remarks to replace <i>MDE</i> with <i>RBIS</i> Revised remarks: How to Structure a Case Revised remarks: Created Records
300	Data Element Coding Instructions		X	Revised remarks: Section Organization
400	Understanding and Managing Consistency Checks		X	New section with remarks
	Consecutive Number		X	• Revised remarks to replace <i>MDE</i> with <i>RBIS</i>

Crash Level Changes

ELEMENT #	ELEMENT NAME	NEW/ REVISED VALUES	NEW/ REVISED REMARKS	COMMENTS
<u>C3</u>	Number of Forms Submitted for Persons Not in Motor Vehicles		X	Revised remarks to reflect the new non-motorist person types
<u>C4</u>	Number of Vehicle Forms Submitted		X	New reference to Coding Guides
<u>C6 / C7</u>	County / City		X	Revised remarks for clarification Revised remarks: 998/9898 (Not Reported)
<u>C9</u>	Crash Time		X	New reference to Coding Guides
<u>C10</u>	Trafficway Identifier		X	 Revised remarks regarding alleys and parking lots Revised remarks to replace MDE with RBIS

ELEMENT #	ELEMENT NAME	NEW/ REVISED VALUES	NEW/ REVISED REMARKS	COMMENTS
<u>C12</u>	Land Use and Functional System		X	• Revised remarks: 8/98 (Not Reported)
<u>C13</u>	Ownership		X	Revised remarks: 98 (Not Reported)
<u>C16</u>	Milepoint		X	Revised remarks: 9999.8 (Not Reported)
<u>C17</u>	Global Position		X	Revised remarks: 7s (Not Reported)
				• Revised remarks to replace <i>MDE</i> with <i>RBIS</i>
				Revised remarks for Geo-locator Tool
<u>C18</u>	Crash Events		X	• Revised remarks to replace <i>MDE</i> with <i>RBIS</i>
				New references to Coding Guides.
				Revised remarks: Areas of Impact (Other Vehicle)
<u>C19</u>	First Harmful Event		X	Revised remarks: 01 (Rollover/Overturn)
				Revised remarks: 15 (Non-Motorist on Personal Conveyance)
				Revised remarks: 46 (Traffic Signal Support)
<u>C20</u>	Manner of Collision of the FHE		X	Revised remarks: 98 (Not Reported)
<u>C21</u>	Relation to Junction		X	New references to Coding Guides
				• Revised remarks: 8/98 (Not Reported)
				Added Remarks for CRSS SPECIAL INSTRUCTION
<u>C22</u>	Type of Intersection	X	X	New attribute and remarks: 11 (Other Intersection Type)
				• Revised remarks: 98 (Not Reported)
<u>C23</u>	Relation to Trafficway		X	New reference to Coding Guides
				• Revised remarks: 98 (Not Reported)
<u>C25</u>	Light Condition		X	Revised remarks: 8 (Not Reported)
<u>C26</u>	<u>Atmospheric</u>	X	X	Revised format: "Select All That Apply"
	Conditions			Removed general remarks regarding selecting only two conditions (due to revised "Select All That Apply" format)
				Removed attribute and remarks: 00 (No Additional Atmospheric Conditions)
				• Revised remarks: 98 (Not Reported)

ELEMENT #	ELEMENT NAME	NEW/ REVISED VALUES	NEW/ REVISED REMARKS	COMMENTS
<u>C29</u>	Notification Time EMS		X	New reference to Coding Guides New table examples: Example Coding Scenarios for Different EMS Times
<u>C30</u>	Arrival Time EMS		X	Revised remarks: link to new tables under Notification Time EMS New reference to Coding Guides
<u>C31</u>	EMS Time at Hospital		X	Revised remarks: link to new tables under Notification Time EMS New reference to Coding Guides
<u>C32</u>	Related Factors - Crash Level	X	X	 Revised format: "Select All That Apply" Revised format: 3 numeric Removed general remarks regarding selecting only three conditions (due to revised "Select All That Apply" format) Revised remarks: 000 (None) 001 (Inadequate Warning of Exits, Lanes Narrowing, Traffic Controls, etc.) 002 (Shoulder Design or Condition) 004 (No or Obscured Pavement Marking) 005 (Surface Under Water) 013 (Aggressive Driving/Road Rage by Non-Contact Vehicle Driver) 028 (Regular Congestion) Revised numeric and remarks: 999 (Reported as Unknown)
<u>C34</u>	Stratum		X	Revised remarks regarding multiple crashes on one PCR

Vehicle Level Changes

ELEMENT #	ELEMENT NAME	NEW/ REVISED VALUES	NEW/ REVISED REMARKS	COMMENTS
<u>V5</u>	Unit Type		X	Revised general remarks
<u>V6</u>	Hit and Run	X	X	• Removed attribute and remarks: 9 (Reported as Unknown)
<u>V7</u>	Registration State		X	Revised remarks: 91 (Not Reported)
<u>V8</u>	Registered Vehicle Owner		X	 Revised general remarks Revised attribute label and remarks: 3 (Vehicle Registered as <i>Commercial</i>/Business/Company/Government Vehicle)
	vPIC Make / vPIC Model / vPIC Body Class Overview		X	Revised section name: Vehicle vPIC Make / vPIC Model / vPIC Body Class Overview Revised remarks throughout section regarding new procedures using vPIC
<u>NEW V9</u> Old V13	Vehicle Identification Number		X	• Element moved from V13 to <i>V9</i> • Revised remarks: 8s (Not Reported)
NEW V10 Old V12	Vehicle Model Year		X	 Element moved from V12 to V10 Revised remarks: 9998 (Not Reported) New remarks: 9999 (Unknown)
NEW VII	vPIC Make	X	X	New data elementNew codes and attributesNew remarks
NEW V12	vPIC Model	X	X	 New data element New codes and attributes New remarks
NEW V13	vPIC Body Class	X	X	New data elementNew codes and attributesNew remarks
<u>NEW V14</u> Old V9	NCSA Make	X	X	 Revised Element name: Vehicle NCSA Make Element moved from V9 to V14 Revised remarks: 97 (Not Reported) Revised remarks: 99 (Unknown Make)

#	ELEMENT NAME	NEW/ REVISED VALUES	NEW/ REVISED REMARKS	COMMENTS
<u>NEW V15</u>	NCSA Model	X	X	• Revised Element name: Vehicle NCSA Model
Old V10				• Element moved from V10 to V15
				• Revised remarks: 997 (Not Reported)
				Revised remarks: 999 (Unknown)
<u>NEW V16</u>	NCSA Body Type	X	X	• Revised element name: NCSA Body Type
Old V11				• Element moved from V11 to V16
				Analytical note removed (under Light Conventional Trucks)
				Revised attribute labels and remarks:
				 42 (Light <i>Truck Vehicle</i> Based Motor home [chassis mounted])
				 65 (Medium/Heavy truck Vehicle based Motor Home)
				 73 (Camper or Motor Home, Unknown truck type GVWR)²
				Revised remarks:
				o 97 (Other Vehicle Type)
				o 98 (Not Reported)
				o 99 (Unknown Body Type)
<u>NEW V17</u>	Final Stage Body	X	X	New data element
	<u>Class</u>			New codes and attributes
				New remarks
<u>NEW V18</u>	Power Unit GVWR	X	X	New data element
				New codes and attributes
				New remarks
<u>NEW V19</u>	Vehicle Trailing		X	• Element moved from V14 to V19
Old V14				Revised definition
<u>NEW V20</u>	<u>Trailer VIN</u>		X	• Element moved from V15 to V20
Old V15				Revised remarks: 8s (Not Reported)
<u>NEW V21</u>	Trailer GVWR	X	X	New data element
				New codes and attributes
				New remarks

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² Gross vehicle weight rating

ELEMENT #	ELEMENT NAME	NEW/ REVISED VALUES	NEW/ REVISED REMARKS	COMMENTS
NEW V22 Old V16	<u>Jackknife</u>		X	• Element moved from V16 to V22
NEW V23 Old V17	Motor Carrier Identification Number	X	X	 Element moved from V17 to <i>V23</i> New reference to Coding Guides Revised general remarks
				 Revised attribute label and remarks: Issuing Authority: 99 (<i>Reported as</i> Unknown) Identification Number: 9s (<i>Reported as</i> Unknown) Revised Remarks: 00/0s (Not Applicable) Revised Remarks: 77/7s (Not Reported)
Old V18 NEW V24 Old V19	GVWR / GCWR Vehicle Configuration	X	X	 Removed Element Element moved from V19 to V24 New reference to Coding Guides Revised Remarks: 00 (Not Applicable) Revised Remarks: 10 (Vehicle 10,000 lbs. or Less Placarded for Hazardous Materials) Revised attribute label and remarks: 99 (Reported as Unknown)
NEW V25 Old V20	Cargo Body Type	X	X	 Element moved from V20 to V25 New reference to Coding Guides Revised general remarks Revised remarks: 00 (Not Applicable (N/A)) Revised attribute and remarks: 99 (Reported as Unknown)
NEW V26 Old V21	Hazardous Materials Involvement / Placard		X	 Element moved from V21 to V26 Revised remarks: HM2: 8 (Not Reported) HM3: 8888 (Not Reported) HM4: 88 (Not Reported) HM5: 8 (Not Reported)
NEW V27 Old V22	Bus Use		X	 Element moved from V22 to V27 Revised remarks: 98 (Not Reported)

ELEMENT #	ELEMENT NAME	NEW/ REVISED VALUES	NEW/ REVISED REMARKS	COMMENTS
<u>NEW V28</u>	Special Use	X	X	• Element moved from V23 to V28
Old V23				New attribute and remarks: 19 (Motor Vehicle Used for Vehicle Sharing Mobility)
				Revised attribute label and remarks: 20 (<i>Motor</i> Vehicle Used for Electronic Ride-Hailing (<i>Transportation Network Company</i>))
				• Revised remarks: 98 (Not Reported)
<u>NEW V29</u>	Emergency Motor		X	• Element moved from V24 to V29
Old V24	<u>Vehicle Use</u>			• Revised remarks: 0 (Not Applicable)
				• Revised remarks: 8 (Not Reported)
<u>NEW V30</u>	Travel Speed		X	• Element moved from V25 to V30
Old V25				• Revised remarks: 998 (Not Reported)
<u>NEW V31</u>	<u>Underride</u> / Override		X	• Element moved from V26 to V31
Old V26				Revised general remarks
<u>NEW V32</u>	Rollover		X	• Element moved from V27 to V32
Old V27				Revised remarks: 1 (Rollover, Tripped by Object/Vehicle)
				• Revised remarks: 2 (Rollover, Untripped)
<u>NEW V33</u>	Location of Rollover		X	• Element moved from V28 to V33
Old V28				
<u>NEW V34</u>	Areas of Impact -		X	• Element moved from V29 to V34
Old V29	Initial Contact Point / Damaged Areas			New references to Coding Guides
	_			New diagrams
				• Revised remarks: 98 (Not Reported)
				• Revised remarks to replace <i>MDE</i> with <i>RBIS</i>
NEW V35	Extent of Damage		X	• Element moved from V30 to V35
Old V30				• Revised remarks: 8 (Not Reported)
<u>NEW V36</u>	Vehicle Removal	X	X	• Element moved from V31 to V36
Old V31				• Revised attribute label: 3 (Towed <i>But</i> Not Due to Disabling Damage)
				• Revised remarks: 8 (Not Reported)

ELEMENT #	ELEMENT NAME	NEW/ REVISED VALUES	NEW/ REVISED REMARKS	COMMENTS
<u>NEW V37</u>	Sequence of Events		X	• Element moved from V32 to V37
Old V32				Revised remarks:
				o 01 (Rollover/Overturn)
				o 15 (Non-Motorist on Personal Conveyance)
				o 46 (Traffic Signal Support)
				o 98 (Harmful Event, Details Not Reported)
<u>NEW V38</u>	Most Harmful Event		X	• Element moved from V33 to V38
Old V33				Revised remarks:
				o 01 (Rollover/Overturn)
				o 03 (Immersion or Partial Immersion)
				o 04 (Gas Inhalation)
				o 15 (Non-Motorist on Personal Conveyance)
				o 16 (Thrown or Falling Object)
				o 18 (Other Object [Not Fixed])
				o 46 (Traffic Signal Support)
				o 59 (Traffic Sign Support)
				 73 (Object That Had Fallen from Motor Vehicle In-Transport)
				o 98 (Harmful Event, Details Not Reported)
<u>NEW V39</u>	Fire Occurrence		X	• Element moved from V34 to V39
Old V34				
<u>NEW V40</u>	Motor Vehicle Automated Driving		X	• Element moved from V35 to V40
V35	System(s)			• Revised Remarks, Subfield 1: 98 (Not Reported)

ELEMENT #	ELEMENT NAME	NEW/ REVISED VALUES	NEW/ REVISED REMARKS	COMMENTS
<u>NEW V41</u>	Related Factors - Vehicle Level	X	X	• Element moved from V36 to V41
Old V36				Revised format: "Select All That Apply"
				Revised format: 3 numeric
				Removed general remarks regarding selecting only two conditions (due to revised "Select All That Apply" format)
				Revised remarks:
				o 000 (None)
				030 (Multi-Wheeled Motorcycle Conversion)
				o 032 (Vehicle Registration for Handicapped)
				o 044 (Adaptive Equipment)
				Revised numeric and remarks: 999 (Reported as Unknown)
<u>NEW V42</u>	Vehicle License Plate		X	• Element moved from V37 to V42
Old V37	Number			Revised remarks: 999999998 (Not Reported)

Driver Level Changes

ELEMENT #	ELEMENT NAME	NEW/ REVISED VALUES	NEW/ REVISED REMARKS	COMMENTS
<u>D3</u>	<u>Vehicle Number -</u> <u>Driver Level</u>		X	• Revised remarks to replace <i>MDE</i> with <i>RBIS</i>
<u>D5</u>	Driver's License State		X	Revised remarks: 98 (Not Reported)
<u>D6</u>	Driver's ZIP Code	X	X	New attribute and remarks: 99998 (Not Reported)
				• Revised attribute label and remarks 99999 (<i>Reported as</i> Unknown)
				Revised remarks for CRSS Special Instruction.
<u>D7</u>	Non-CDL License		X	• Revised remarks, Type: 0 (Not Licensed)
	Type/Status			• Revised remarks, Status: 0 (Not Licensed)
<u>D10</u>	License Compliance with Class of Vehicle		X	Revised remarks: 0 (Not Licensed)
D14-D18	All Driver Level Counters		X	 Revised remarks: 00 (None) Revised remarks to replace <i>MDE</i> with <i>RBIS</i>

ELEMENT #	ELEMENT NAME	NEW/ REVISED VALUES	NEW/ REVISED REMARKS	COMMENTS
<u>D18</u>	Previous Other Moving Violation Convictions		X	Revised general remarks
<u>D19</u>	Date of <i>Oldest</i> Crash, Suspension, Conviction	X	X	 Revised Element name: Date of First Oldest Crash, Suspension, Conviction New remarks: 00 (No Record)
<u>D20</u>	Date of Most Recent Crash, Suspension, Conviction	X	X	Revised Element name: Date of <i>Last Most Recent</i> Crash, Suspension, Conviction New remarks: 00 (No Record)
<u>D21</u>	Violations Charged	X	X	 Revised attribute label: 04 (Inattentive, careless, improper driving, <i>driving without due care</i>) Revised remarks: 97 (Not Reported)
<u>D22</u>	Speeding Related		X	Revised definition Revised general remarks
D23	Condition (Impairment) at Time of Crash		X	 Revised remarks: 04 (Paraplegic or in a Wheelchair) 06 (Deaf) 07 (Blind) 98 (Not Reported)

ELEMENT #	ELEMENT NAME	NEW/ REVISED VALUES	NEW/ REVISED REMARKS	COMMENTS
<u>D24</u>	Related Factors - Driver Level	X	X	Revised format: "Select All That Apply"
	<u>Driver Level</u>			Revised format: 3 numeric
				Removed general remarks regarding selecting only four conditions (due to revised "Select All That Apply" format)
				• Revised remarks to replace <i>MDE</i> with <i>RBIS</i>
				New comparison chart added under 057 (Driving with Tire-Related problems)
				• Revised attribute label: 006 (Careless Driving, Inattentive Operation, Improper Driving, Driving Without Due Care)
				• Revised attribute label and remarks: 034 (<i>Improper</i> Passing <i>Location on Right Side</i>)
				Revised remarks:
				o 000 (None)
				o 013 (Mentally Challenged)
				o 028 (Improper Lane Usage)
				 036 (Operating the Vehicle in an Erratic, Reckless, or Negligent Manner)
				o 052 (Operator Inexperience)
				o 057 (Driving with Tire-Related problems)
				• Revised numeric and remarks: <i>999</i> (Reported as Unknown)

Precrash Level Changes

ELEMENT #	ELEMENT NAME	NEW/ REVISED VALUES	NEW/ REVISED REMARKS	COMMENTS
	Precrash Data Overview		X	New reference to Coding Guides
	Precrash Examples		X	• Examples 7 and 8, Critical Precrash (Event): Updated attribute labels
PC4	Contributing Circumstances, Motor	X	X	• Revised attribute label and remarks: 00 (None <i>Noted</i>)
	<u>Vehicle</u>			• Revised remarks: 01 (Tires)
				Removed attribute and remarks: 98 (Not Reported)
PC5	Trafficway		X	New reference to Coding Guides.
	<u>Description</u>			• Revised remarks: 8 (Not Reported)
PC6	Total Lanes in		X	New reference to Coding Guides.
	Roadway			• Revised remarks: 8 (Not Reported)
<u>PC7</u>	Speed Limit		X	Revised remarks: 98 (Not Reported)
PC8	Roadway Alignment		X	Revised general remarks
				• Revised remarks: 8 (Not Reported)
<u>PC9</u>	Roadway Grade		X	Revised remarks: 8 (Not Reported)
<u>PC10</u>	Roadway Surface Type		X	Revised remarks: 8 (Not Reported)
<u>PC11</u>	Roadway Surface Conditions		X	Revised remarks: 98 (Not Reported)
<u>PC12</u>	Traffic Control Device		X	Revised general remarks
				• Revised remarks: 97 (Not Reported)
<u>PC13</u>	Device Functioning		X	Revised remarks: 8 (Not Reported)
<u>PC15</u>	Driver Maneuvered to	X	X	Revised general remarks
	Avoid			• Revised attribute label: 04 (<i>Contact</i> Motor Vehicle (<i>in this Crash</i>))
				• Revised remarks: 00 (Driver Did Not Maneuver to Avoid)
				• Revised remarks: 98 (Not Reported)
<u>PC16</u>	<u>Driver Distracted By</u>		X	Revised general remarks
				• Revised remarks to replace <i>MDE</i> with <i>RBIS</i>
				• Revised remarks: 96 (Not Reported)
				• Revised remarks: 15 (Other Mobile Phone Related)

ELEMENT #	ELEMENT NAME	NEW/ REVISED VALUES	NEW/ REVISED REMARKS	COMMENTS
<u>PC17</u>	Pre-Event Movement		X	Revised remarks: 04 (Starting in Road)
	(Prior to Recognition of Critical Event)			• Revised remarks to replace <i>MDE</i> with <i>RBIS</i>
<u>PC18</u>	Critical Event - Precrash (Category)		X	New reference to Coding Guides
<u>PC19</u>	Critical Event -		X	• Revised remarks to replace <i>MDE</i> with <i>RBIS</i>
	Precrash (Event)			Revised remarks:
				 64 (From Parking Lane/Shoulder, Median/Crossover, Roadside)
				o 80 (Pedestrian in Road)
				o 81 (Pedestrian Approaching Road)
				o 82 (Pedestrian Unknown Location)
				 83 (Pedalcyclist or Other Non-Motorist in Road)
				 84 (Pedalcyclist or Other Non-Motorist Approaching Road)
				 85 (Pedalcyclist or Other Non-Motorist Unknown Location)
				o 87 (Animal in Road)
				o 88 (Animal Approaching Road)
				o 89 (Animal - Unknown Location)
				o 90 (Object in Road)
				o 91 (Object Approaching Road)
				o 92 (Object Unknown Location)
<u>PC20</u>	Attempted Avoidance Maneuver		X	Revised general remarks
	<u>ivianeuvei</u>			• Revised remarks to replace <i>MDE</i> with <i>RBIS</i>
				Revised remarks: 01 (No Avoidance Maneuver)
<u>PC21</u>	Pre-Impact Stability		X	• Revised remarks to replace <i>MDE</i> with <i>RBIS</i>

Person (Motor Vehicle Occupant) Level Changes

ELEMENT #	ELEMENT NAME	NEW/ REVISED VALUES	NEW/ REVISED REMARKS	COMMENTS
<u>P5</u>	Age		X	Revised remarks: 998 (Not Reported)
<u>P6</u>	Sex		X	Revised remarks: 8 (Not Reported)
<u>P9</u>	Seating Position		X	Revised remarks: 56 (Appended to a Motor Vehicle for Motion)
				Revised remarks: 98 (Not Reported)
<u>P10</u>	Restraint System Use		X	• Revised remarks to replace <i>MDE</i> with <i>RBIS</i>
				• Revised remarks: 98 (Not Reported)
<u>P11</u>	Helmet Use		X	Revised remarks: 98 (Not Reported)
<u>P12</u>	Air Bag Deployed		X	Revised remarks: 08 (Deployed - Combination)
				• Revised remarks: 98 (Not Reported)
<u>P13</u>	Ejection		X	Revised remarks: 7 (Not Reported)
<u>P14</u>	Ejection Path		X	• Revised remarks to replace <i>MDE</i> with <i>RBIS</i>
<u>P15</u>	Extrication		X	Revised definition
				Revised general remarks
				Revised Remarks: 0 (Not Extricated or Not Applicable)
<u>P16</u>	Police-Reported		X	Revised general remarks
	Alcohol Involvement			• Revised remarks: 1 (Yes [Alcohol Involved])
				Revised remarks: 8 (Not Reported)
				Revised remarks in FARS Special Instruction
<u>P17</u>	Method of Alcohol Determination by Police		X	• Revised remarks: 2 (Preliminary Breath Test [PBT])

ELEMENT #	ELEMENT NAME	NEW/ REVISED VALUES	NEW/ REVISED REMARKS	COMMENTS
<u>P18</u>	Alcohol Test		X	Revised general remarks
				• Revised remarks to replace <i>MDE</i> with <i>RBIS</i>
				Revised remarks
				o Subfield 1: 8 (Not Reported)
				o Subfield 2:
				 Coding Hierarchy
				"Note regarding Preliminary Breath Tests:"
				■ 01 (Blood)
				■ 02 (Breath Test [AC])
				■ 03 (Urine)
				■ 08 (Other Test Type)
				■ 10 (Preliminary Breath Test [PBT])
				■ 95 (Not Reported)
				o Subfield 3:
				■ 000-939 (Actual Value)
				■ 995 (Not Reported)
				998 (Positive Reading with No Actual Value)
				■ Note: State Law Versus Practice
				 Note: Computed Estimates of Blood Alcohol Concentration
<u>P19</u>	Police Reported Drug		X	Revised general remarks
	Involvement			• Revised remarks: 8 (Not Reported)
<u>P21</u>	Drug Toxicology		X	• Revised remarks to replace <i>MDE</i> with <i>RBIS</i>
	Results			Revised remarks:
				o Subfield 1: 8 (Not Reported)
				o Subfield 2:
				■ 97 (Unknown Specimen)
				■ 96 (Not Reported)
				o Subfield 3: 095 (Not Reported)
<u>P22</u>	Transported to First Medical Facility by	X	X	Revised attribute label: 0 (Not Transported for Treatment)
				Revised remarks: 8 (Not Reported)

ELEMENT #	ELEMENT NAME	NEW/ REVISED VALUES	NEW/ REVISED REMARKS	COMMENTS
<u>P26</u>	Related Factors -	X	X	Revised format: "Select All That Apply"
	Person (Motor Vehicle Occupant)			• Revised format: 3 numeric
	Level			Removed general remarks regarding selecting only three conditions (due to revised "Select All That Apply" format)
				Revised remarks:
				o 000 (None)
				o 008 (Mentally Challenged)
				o 026 (Following Improperly)
				o 028 (Improper Lane Usage)
				 029 (Intentional Illegal Driving on Road Shoulder, In Ditch, On Sidewalk, or on Median)
				 033 (Passing Where Prohibited by Posted Signs, Pavement Markings, or School Bus Displaying Warning Not to Pass)
				o 037 (Traveling on Prohibited Trafficways)
				o 040 (Passing Through or Around Barrier)
				041 (Failure to Observe Warning or Instructions on Vehicles Displaying Them)
				o 042 (Failure to Signal Intentions)
				044 (Driving Too Fast for Conditions or In Excess of Posted Maximum)
				o 045 (Driving Less Than Posted Minimum)
				o 047 (Making Right Turn from Left-Turn Lane, Left Turn from Right-Turn Lane)
				o 051 (Operator Inexperience)
				o 052 (Unfamiliar with Roadway)
				o 056 (Non-Driver Flees Scene)
				o 057 (Improper Tire Pressure)
				o 059 (Overcorrecting)
				Note under group: Vision Obscured By
				 Note under group: Skidding, Swerving, Sliding Due To:
				Revised numeric and remarks: 999 (Reported as Unknown)

Person (Not A Motor Vehicle Occupant) Level Changes

ELEMENT #	ELEMENT NAME	NEW/ REVISED VALUES	NEW/ REVISED REMARKS	COMMENTS
NM4	Vehicle Number of Motor Vehicle Striking Non- Motorist		X	Revised general remarks to remove old guidance
NM7	Person Type	X	X	 Remove attribute and remarks: 08 (Person on Personal Conveyances) New attributes and remarks: 11 (Person on Motorized Personal Conveyance) 12 (Person on Non-Motorized Personal Conveyance) 13 (Person on Personal Conveyance, Unknown if Motorized or Non-Motorized) Revised remarks: 05 (Pedestrian) Revised remarks: 10 (Persons In/On Buildings)
<u>NM9</u>	Pedestrian/Bike Typing		X	 Revised Note regarding personal conveyances Revised remarks to replace MDE with RBIS
<u>NM10</u>	Non-Motorist Location at Time of Crash		X	 New reference to Coding Guides Revised remarks: 98 (Not Reported)
<u>NM11</u>	Non-Motorist Action/ Circumstances		X	 Revised remarks to replace MDE with RBIS Revised remarks: 05 (Movement Along Roadway with Traffic [In or Adjacent to Travel Lane]) 06 (Movement Along Roadway Against Traffic [In or Adjacent to Travel Lane]) 16 (Movement Along Roadway - Direction Unknown) 12 (Disabled Vehicle Related [Working on, Pushing, Leaving/Approaching]) 98 (Not Reported)
<u>NM12</u>	Non-Motorist Contributing Circumstances		X	 Revised remarks to replace MDE with RBIS Revised remarks: 01 (Dart-Out - Visual Obstruction Noted) 02 (Failure to Yield Right-of-Way)

ELEMENT #	ELEMENT NAME	NEW/ REVISED VALUES	NEW/ REVISED REMARKS	COMMENTS
NM13	Non-Motorist Distracted By		X	 Revised general remarks Revised remarks to replace <i>MDE</i> with <i>RBIS</i> Revised remarks: 15 (Other Mobile Phone Related) 96 (Not Reported)
<u>NM14</u>	Non-Motorist Safety Equipment		X	Revised remarks to replace <i>MDE</i> with <i>RBIS</i> Revised remarks: 8 (Not Reported)
<u>NM22</u>	Transported to First Medical Facility By	X		• Revised attribute label: 0 (Not Transported <i>for Treatment</i>)
<u>NM25</u>	Death Time		X	New reference to Coding Guides
NM26	Related Factors - Person (Not A Motor Vehicle Occupant) Level	X	X	 Revised format: "Select All That Apply" Revised format: 3 numeric Removed general remarks regarding selecting only three conditions (due to revised "Select All That Apply" format) Revised remarks: 000 (None) 008 (Mentally Challenged) 013 (Motorized Wheelchair Rider) 094 (Emergency Medical Services Personnel) New attributes and remarks: 100 (Using a Shared Micromobility Device) 101 (Obstructed Sidewalk (for this Person)) Revised numeric and remarks: 999 (Reported as Unknown)

Supplemental Data Elements Changes

ELEMENT #	ELEMENT NAME	NEW/ REVISED VALUES	NEW/ REVISED REMARKS	COMMENTS
SP1	Death Certificate Number		X	• Revised format remarks to replace <i>MDE</i> with <i>RBIS</i>
SP3	Race / Hispanic Origin		X	• Revised remarks to replace <i>MDE</i> with <i>RBIS</i>

Appendices Changes

APPENDIX	COMMENTS
VIN Decode Errors	New VIN Decode Errors added to Appendices
Alphabetical Listing of NCSA Makes	• Revised name to Alphabetical Listing of <i>NCSA</i> Makes
	Moved from Vehicle Level to Appendices
Numerical Listing of NCSA Makes	• Revised name to Numerical Listing of <i>NCSA</i> Makes
	Moved from Vehicle Level to Appendices
NCSA Make / Model / Body Type Tables	• Revised name to <i>NCSA</i> Make / Model / Body Type Tables
	Moved from Vehicle Level to Appendices
2020 Coding Guides	• New 2020 Coding Guides added to Appendices

NEED HELP IN CODING? CONTACT NISR THROUGH THE CDAN HELPDESK. See the <u>Coding Guide: How to Create a Coding Question Ticket in the CDAN Helpdesk</u> for helpful information.

2020 FARS/CRSS Element Definitions

Crash Level Elements

2020 Element ID	Element Name	FARS, CRSS, Case Structure	Definitions
<u>C1</u>	State Number	FARS Only	This element identifies the State in which the crash occurred.
<u>C2</u>	Consecutive Number	FARS Only	This element identifies the unique case number assigned by the data entry system.
<u>C3</u>	Number of Forms Submitted for Persons Not in MV	Case Structure	This element records the number of Person Level (Not a Motor Vehicle Occupant) forms that are applicable to this case.
<u>C4</u>	Number of Vehicle Forms Submitted	Case Structure	This element records all contact motor vehicles that the officer has reported on the police crash report as a unit involved in the crash.
<u>C5</u>	Number of Person Forms Submitted	Case Structure	This element records the number of Person Level (Motor Vehicle Occupant) forms that are applicable to this case.
<u>C6</u>	County	FARS Only	This element refers to the location of the unstabilized event with regard to the county.
<u>C7</u>	City	FARS Only	This element refers to the location of the unstabilized event with regard to the city.
<u>C8</u>	Crash Date	FARS, CRSS	This element identifies the date on which the crash occurred.
<u>C9</u>	Crash Time	FARS, CRSS	This element identifies the time at which the crash occurred.
<u>C10</u>	Trafficway Identifier	FARS Only	This element captures the identity (name) of the trafficway on which the crash occurred.
<u>C11</u>	Route Signing	FARS Only	This element identifies the route signing of the trafficway on which the crash occurred. Code the value that represents the FHWA approved Land Use and Functional System. FHWA classification obtainable from the State Highway Department must be used. No other classification source is acceptable. Refer problems in obtaining the FHWA classification to the State DOT planning office.

2020 Element ID	Element Name	FARS, CRSS, Case Structure	Definitions
C12 (a/b)	Land Use and Functional System	FARS Only	Land Use: The classification of the segment of the trafficway on which the crash occurred based on FHWA-approved adjusted Census boundaries of small urban and urbanized areas.
			• Functional System: This element identifies the functional classification of the segment of the trafficway on which the crash occurred.
<u>C13</u>	Ownership	FARS Only	This element identifies the entity that has legal ownership of the segment of the trafficway on which the crash occurred.
<u>C14</u>	National Highway System	FARS Only	This element identifies whether or not this crash occurred on a trafficway that is part of the National Highway System.
<u>C15</u>	Special Jurisdiction	FARS Only	This element identifies if the location on the trafficway where the crash occurred qualifies as a Special Jurisdiction even though it may be patrolled by State, county, or local police (e.g., all State highways running through Indian reservations are under the jurisdiction of the Indian reservation).
<u>C16</u>	Milepoint	FARS Only	This element identifies the milepoint nearest to the location where the crash occurred.
<u>C17</u>	Global Position	FARS, CRSS	This element identifies the location of the crash using Global Position coordinates.
<u>C18</u>	Crash Events	FARS, CRSS	The Crash Events table records in chronological sequence, the set of events resulting from an unstabilized situation that constitutes a motor vehicle traffic crash.
<u>C19</u>	First Harmful Event	FARS, CRSS	The first injury or damage producing event of the crash.
<u>C20</u>	Manner of Collision of the First Harmful Event	FARS, CRSS	This element identifies the orientation of two motor vehicles in-transport when they are involved in the First Harmful Event of a collision crash. If the First Harmful Event is not a collision between two motor vehicles in-transport it is classified as such.

2020 Element ID	Element Name	FARS, CRSS, Case Structure	Definitions
C21 (a/b)	Relation to Junction	FARS, CRSS	The coding of this data element is done in two subfields and based on the location of the first harmful event of the crash. It identifies the crash's location with respect to presence in an interchange area and the crash's location with respect to presence in or proximity to components typically in junction or interchange areas.
<u>C22</u>	Type of Intersection	FARS, CRSS	This element identifies and allows separation of various intersection types.
<u>C23</u>	Relation to Trafficway	FARS, CRSS	This element identifies the location of the crash as it relates to its position in or outside the trafficway based on the First Harmful Event.
<u>C24</u>	Work Zone	FARS, CRSS	This data element captures that this was a "Work Zone Crash" as defined in ANSI D16.1, 8th Edition. If the crash qualifies as a "Work Zone Crash" then the type of work activity is identified.
<u>C25</u>	Light Condition	FARS, CRSS	This element records the type/level of light that existed at the time of the crash as reported in the case material.
<u>C26</u>	Atmospheric Condition	FARS, CRSS	This element identifies the prevailing atmospheric conditions that existed at the time of the crash as recorded on the police crash report.
<u>C27</u>	School Bus Related	FARS, CRSS	This data element indicates if a school bus, or motor vehicle functioning as a school bus, is related to the crash.
<u>C28</u>	Rail Grade Crossing Identifier	FARS Only	This element identifies if the crash occurred in or near a Rail Grade Crossing.
<u>C29</u>	Notification Time EMS	FARS Only	Notification Time EMS is the time emergency medical service was notified.
<u>C30</u>	Arrival Time EMS	FARS Only	Arrival Time EMS is the time emergency medical service arrived on the crash scene.
<u>C31</u>	EMS Time at Hospital	FARS Only	EMS Time at Hospital is the time emergency medical service arrived at the treatment facility (hospital, clinic, trauma center, etc.) to which it was transporting victims of the crash.

2020 Element ID	Element Name	FARS, CRSS, Case Structure	Definitions
<u>C32</u>	Related Factors - Crash Level	FARS, CRSS	This element identifies factors related to the crash expressed in the case material.
<u>C33</u>	Interstate Highway	CRSS Only	This element identifies whether or not the crash occurred on an interstate highway. Interstate highway is a Federal Highway Administration classification.
<u>C34</u>	Stratum	CRSS Only	The CRSS stratum applicable to this police crash report.
<u>C35</u>	Police Jurisdiction	CRSS Only	The number of the police jurisdiction from which the police crash report was originally sampled.

Vehicle Level Elements

2020 Element ID	Element Name	FARS, CRSS, Case Structure	Definition
<u>V1</u>	State Number	FARS Only	This element identifies the State in which the crash occurred.
<u>V2</u>	Consecutive Number	FARS Only	This element identifies the unique case number assigned by the data entry system.
<u>V3</u>	Vehicle Number	FARS, CRSS, Case Structure	This element identifies the number assigned to this vehicle in the crash.
<u>V4</u>	Number of Occupants	FARS, CRSS	This element identifies the number of occupants in each vehicle.
<u>V5</u>	Unit Type	FARS, CRSS	This element identifies the type of unit that applies to this motor vehicle at the time it became an involved vehicle in the crash and was reported as a unit on the police crash report.
<u>V6</u>	Hit-And-Run	FARS, CRSS	This element refers to cases where a vehicle is a contact vehicle in the crash and does not stop to render aid (this can include drivers who flee the scene on foot).
<u>V7</u>	Registration State	FARS, CRSS	This element identifies the State in which this vehicle was registered.
<u>V8</u>	Registered Vehicle Owner	FARS Only	This element is used to determine the type of registered owner of the vehicle.

2020 Element ID	Element Name	FARS, CRSS, Case Structure	Definition
<u>V9</u>	Vehicle Identification Number	FARS, CRSS	This element records the Vehicle Identification Number (VIN) or alphanumeric identifier in the case material of a single vehicle or the power unit of a combination vehicle.
<u>V10</u>	Vehicle Model Year	FARS, CRSS	This element identifies the manufacturer's model year of this vehicle.
<u>V11</u>	vPIC Make	FARS, CRSS	This element identifies the Make (manufacturer brand name) of this vehicle as per NHTSA vPIC submissions.
<u>V12</u>	vPIC Model	FARS, CRSS	This element identifies the Model of this vehicle using NHTSA's VIN decoder application, vPIC.
<u>V13</u>	vPIC Body Class	FARS, CRSS	This element identifies a classification of this vehicle based on its general body configuration, size, shape, doors, etc. as defined by the manufacturer.
<u>V14</u>	NCSA Make	FARS, CRSS	This element identifies the make (manufacturer) of this vehicle by NHTSA historically.
<u>V15</u>	NCSA Model	FARS, CRSS	This element identifies the <i>NCSA</i> model of this vehicle within a given <i>NCSA</i> make.
<u>V16</u>	NCSA Body Type	FARS, CRSS	This element identifies a classification of this vehicle based on its general body configuration, size, shape, doors, etc.
<u>V17</u>	Final Stage Body Class	FARS, CRSS	This element captures the completed/finished body class for an Incomplete Vehicle. An incomplete vehicle is completed by a final stage manufacturer. The intent of this data element is to capture the body class for incomplete vehicles when they are finished for road-use.
<u>V18</u>	Power Unit GVWR	FARS, CRSS	This element identifies the range of Gross Vehicle Weight Rating (GVWR) of the power unit as identified by the manufacturer through the vehicle's <u>VIN</u> submission.

2020 Element ID	Element Name	FARS, CRSS, Case Structure	Definition
<u>V19</u>	Vehicle Trailing	FARS, CRSS	This element identifies whether this vehicle had any attached trailing units or was towing another motor vehicle.
<u>V20</u>	Trailer Vehicle Identification Number	FARS, CRSS	This element records the vehicle identification number (VIN) or alphanumeric identifier in the case material of any trailing units of a combination vehicle.
<u>V21</u>	Trailer GVWR	FARS, CRSS	This element identifies the Gross Vehicle Weight Rating of a trailing unit as identified by the manufacturer in the trailer's <u>VIN</u> .
<u>V22</u>	<u>Jackknife</u>	FARS, CRSS	This element identifies if this vehicle experienced a "jackknife" anytime during the unstabilized situation.
<u>V23</u>	Motor Carrier Identification Number	FARS, CRSS	This element records the issuing authority and motor carrier identification number if applicable to this vehicle.
<u>V24</u>	Vehicle Configuration	FARS, CRSS	This element identifies the general configuration of this vehicle when applicable.
<u>V25</u>	Cargo Body Type	FARS, CRSS	This element identifies the primary cargo carrying capability of this vehicle when applicable.
<u>V26</u>	Hazardous Material Involvement/Placard	FARS, CRSS	This element identifies the presence of hazardous cargo for this vehicle and records information about the hazardous cargo when present.
<u>V26 (1)</u>	Hazardous Material Involvement/Placard - HM1	FARS, CRSS	This element indicates whether the vehicle was carrying hazardous materials - involvement.
<u>V26 (2)</u>	Hazardous Material Involvement/Placard - HM2	FARS, CRSS	This element indicates the presence of hazardous materials and whether the vehicle displayed a hazardous materials placard.
<u>V26 (3)</u>	Hazardous Material Involvement/Placard - HM3	FARS, CRSS	This element indicates the 4-digit identification number.
<u>V26 (4)</u>	Hazardous Material Involvement/Placard - HM4	FARS, CRSS	This element indicates the single-digit hazardous material class number for the vehicle.

2020 Element ID	Element Name	FARS, CRSS, Case Structure	Definition
<u>V26 (5)</u>	Hazardous Material Involvement/Placard - HM5	FARS, CRSS	This element indicates whether or not any hazardous cargo was released from the cargo tank or compartment.
<u>V27</u>	Bus Use	FARS, CRSS	This data element describes the common type of bus service this vehicle was being used for at the time of the crash or the primary use for the bus if not in service at the time of the crash.
<u>V28</u>	Special Use	FARS, CRSS	This data element identifies if a special use is applicable to this vehicle at the time it was involved in the crash.
<u>V29</u>	Emergency Motor Vehicle Use	FARS, CRSS	Emergency Motor Vehicle Use indicates operation of any motor vehicle that is legally authorized by a government authority to respond to emergencies with or without the use of emergency warning equipment, such as a police vehicle, fire truck, or ambulance while actually engaged in such response.
<u>V30</u>	Travel Speed	FARS, CRSS	This element records the speed the vehicle was traveling prior to the occurrence of the crash as reported by the investigating officer.
<u>V31</u>	<u>Underride/Override</u>	FARS Only	This element indicates whether an underride or override occurred during the crash involving this vehicle.
<u>V32</u>	Rollover	FARS, CRSS	This element identifies whether a rollover or overturn occurred during the crash involving this vehicle.
<u>V33</u>	Location of Rollover	FARS, CRSS	This element identifies the location of the trip point or start of the vehicle's roll.
<u>V34 (1)</u>	Areas of Impact - Initial Contact Point	FARS, CRSS	This subfield identifies the area on this vehicle that produced the first instance of injury to non-motorists or occupants of this vehicle, or that resulted in the first instance of damage to other property or to this vehicle.
<u>V34 (2)</u>	Areas of Impact - Damaged Areas	FARS, CRSS	This subfield identifies all the areas on this vehicle that were damaged in the crash as reflected in the case material.

2020 Element ID	Element Name	FARS, CRSS, Case Structure	Definition
<u>V35</u>	Extent of Damage	FARS, CRSS	This element indicates the amount of damage sustained by this vehicle in this crash as indicated in the case material based on an operational damage scale.
<u>V36</u>	Vehicle Removal	FARS, CRSS	This data element describes the mode in which the vehicle left the scene of the crash.
<u>V37</u>	Sequence of Events	FARS, CRSS	The events in sequence related to this motor vehicle, regardless of injury and/or property damage. Code each event for this vehicle in the order in which they occur, time wise, from the police crash report narrative and diagram.
<u>V38</u>	Most Harmful Event	FARS, CRSS	This element identifies the event that resulted in the most severe injury or, if no injury, the greatest property damage involving this motor vehicle.
<u>V39</u>	Fire Occurrence	FARS, CRSS	This element identifies whether or not a fire in any way related to the crash occurred in this vehicle.
<u>V40</u>	Motor Vehicle Automated Driving System(s)	FARS, CRSS	The hardware and software that are collectively capable of performing part of or all the dynamic driving task on a sustained basis. This term, Automated Driving System (ADS), is used generically to describe any system capable of level 1-5 driving automation. (SAE 2016) See Figure 21.
<u>V41</u>	Related Factors - Vehicle Level	FARS, CRSS	This element identifies factors related to this vehicle expressed in the case material.
<u>V42</u>	Vehicle License Plate Number	CRSS Only	This element captures the license plate number of this vehicle.

Driver Level Elements

2020 Element ID	Element Name	FARS, CRSS, Case Structure	Definition
<u>D1</u>	State Number	FARS Only	This element identifies the State in which the crash occurred.
<u>D2</u>	Consecutive Number	FARS Only	This element identifies the unique case number assigned by the data entry system.
<u>D3</u>	<u>Vehicle Number - Driver</u> <u>Level</u>	Case Structure	This element identifies the vehicle number associated with this driver.
<u>D4</u>	<u>Driver Presence</u>	FARS, CRSS	This element identifies whether or not a driver was present in this vehicle at the onset of the unstabilized situation.
<u>D5</u>	Driver's License State	FARS, CRSS	This element identifies the State of issue for the license held by this driver.
<u>D6</u>	Driver's ZIP Code	FARS, CRSS	This element identifies the ZIP Code of this driver's area of residence.
<u>D7</u>	Non-CDL License Type / Status	FARS Only	This element identifies in two subfields the type of license held by this driver and the status of the license at the time of the crash.
<u>D8</u>	Commercial Motor Vehicle License Status	FARS Only	This element indicates the status for a driver's Commercial Driver's License (CDL) if applicable.
<u>D9</u>	Compliance with License Endorsements	FARS Only	This element indicates whether the vehicle driven at the time of the crash requires endorsement(s) on a CDL and whether this driver is complying with the CDL endorsements.
<u>D10</u>	License Compliance with Class of Vehicle	FARS Only	This element refers to the type of license possessed or not possessed by the driver for the class of vehicle being driven at the time of the crash.
<u>D11</u>	Compliance with License Restrictions	FARS Only	This element identifies if a driver was compliant with restrictions on their license.
<u>D12</u>	Driver Height	FARS Only	This element identifies a driver's height.
<u>D13</u>	Driver Weight	FARS Only	This element identifies a driver's weight.
<u>D14</u>	Previous Recorded Crashes	FARS Only	This element records any previous crashes for this driver. Count only the events occurring within 5 years <i>of</i> the crash date.

2020 Element ID	Element Name	FARS, CRSS, Case Structure	Definition
D15 (1)	Previous Recorded Suspensions, Revocations, and Withdrawals Subfield 1: Previous Underage Administrative Per Se for BAC	FARS Only	This subfield records any underage pre- conviction administrative license suspension, revocation, or withdrawal in the previous 5 years including those for zero-tolerance alcohol violations while driving or refusing to submit to chemical testing. This subfield is only for administrative actions associated with alcohol. These are NOT BAC CONVICTIONS. [BAC = blood alcohol concentration]
D15 (2)	Previous Recorded Suspensions, Revocations, and Withdrawals Subfield 2: Previous Administrative Per Se for BAC (Not Underage)	FARS Only	This subfield records the count of previous pre-conviction administratively imposed suspensions, revocations, or withdrawals within the previous 5 years for driving with a BAC above a specified limit or refusing to submit to chemical testing. This subfield is only for administrative actions associated with alcohol. These are NOT BAC CONVICTIONS.
D15 (3)	Previous Recorded Suspensions, Revocations, and Withdrawals Subfield 3: Previous Recorded Other Suspensions, Revocations, or Withdrawals	FARS Only	This subfield records any previous license suspensions, revocations, or withdrawals for this driver other than Administrative action for BAC violations. This subfield would include administrative actions associated with drugged driving. Count only the events occurring within 5 years of the crash date. If it can be identified on the driving record, do not include in this count recorded actions resulting from nontraffic-related issues or offenses (e.g., failure to pay child support, failure to appear in court for a non-driving offense, a suspension imposed for a drug-related offense not involving the operation of a motor vehicle). Also note that "cancellation" of a CDL license is not counted here. If a driver has been DISQUALIFIED for a CDL, record this here.
<u>D16</u>	Previous DWI Convictions	FARS Only	This element records any previous DWI convictions for this driver. Count only the events occurring within 5 years <i>of</i> the crash date.

2020 Element ID	Element Name	FARS, CRSS, Case Structure	Definition
<u>D17</u>	Previous Speeding Convictions	FARS Only	This element records any previous Speeding convictions for this driver. Count only the events occurring within 5 years of the crash date.
<u>D18</u>	Previous Other Moving Violation Convictions	FARS Only	This element records any other previous moving violations or convictions for this driver. Count only the events occurring within 5 years <i>of</i> the crash date.
<u>D19</u>	Date of <i>Oldest</i> Crash, Suspension, Conviction	FARS Only	This element identifies the date of the <i>oldest</i> crash, suspension, or conviction recorded in elements D14 through D18. Count only dates of events occurring within 5 years <i>of</i> the crash date.
<u>D20</u>	Date of <i>Most Recent</i> Crash, Suspension, Conviction	FARS Only	This element identifies the date of the <i>most recent</i> crash, suspension, or conviction recorded in elements D14 through D18. Count only dates of events occurring within 5 years <i>of</i> the crash date.
<u>D21</u>	Violations Charged	FARS, CRSS	This element identifies all violations, citations, and infractions noted as charged to this driver in this crash, regardless of whether the driver survived the crash.
<u>D22</u>	Speeding Related	FARS, CRSS	This element identifies if the driver <i>was</i> speed <i>ing and it</i> was related to the crash as identified by law enforcement.
<u>D23</u>	Condition (Impairment) at Time of Crash	FARS, CRSS	This element identifies physical impairments to this driver or non-motorist who may have contributed to the cause of the crash as identified by law enforcement.
<u>D24</u>	Related Factors - Driver Level	FARS, CRSS	This element identifies factors related to this driver expressed in the case material.

Precrash Level Elements

2020 Element ID	Element Name	FARS, CRSS, Case Structure	Definition
PC1	State Number	FARS Only	This element identifies the State in which the crash occurred.
PC2	Consecutive Number	FARS Only	This element identifies the unique case number assigned by the data entry system.
PC3	<u>Vehicle Number - Precrash</u> <u>Level</u>	Case Structure	This element identifies the number assigned to this vehicle in the crash.
PC4	Contributing Circumstances, Motor Vehicle	FARS, CRSS	This element describes the possible pre- existing motor vehicle defects or maintenance conditions that may have contributed to the crash.
PC5	Trafficway Description	FARS, CRSS	This element identifies the value indicated in the case material that best describes the trafficway flow just prior to this vehicle's critical precrash event.
<u>PC6</u>	Total Lanes in Roadway	FARS, CRSS	This element identifies the value indicated in the case material that best describes the number of roadway lanes just prior to this vehicle's critical precrash event.
PC7	Speed Limit	FARS, CRSS	This element identifies the value indicated in the case material that best represents the speed limit just prior to this vehicle's critical precrash event.
PC8	Roadway Alignment	FARS, CRSS	This element identifies the value indicated in the case material that best represents the roadway alignment prior to this vehicle's critical precrash event.
PC9	Roadway Grade	FARS, CRSS	This element identifies the value indicated in the case material that best represents the roadway grade prior to this vehicle's critical precrash event.
<u>PC10</u>	Roadway Surface Type	FARS Only	This element identifies the value indicated in the case material that best represents the roadway surface type prior to this vehicle's critical precrash event.
<u>PC11</u>	Roadway Surface Conditions	FARS, CRSS	This element identifies the value indicated in the case material that best represents the roadway surface condition prior to this vehicle's critical precrash event.

2020 Element ID	Element Name	FARS, CRSS, Case Structure	Definition
PC12	Traffic Control Device	FARS, CRSS	This element identifies the sign or signal indicated in the case material that best describes the traffic controls in the vehicle's environment just prior to this vehicle's critical precrash event.
PC13	Device Functioning	FARS, CRSS	This element identifies the functionality of the traffic control device recorded for this vehicle in the element Traffic Control Device.
<u>PC14</u>	Driver's Vision Obscured By	FARS, CRSS	This data element records impediments to a driver's visual field that were noted in the case material.
PC15	Driver Maneuvered to Avoid	FARS, CRSS	This data element identifies the thing(s) the driver attempted to avoid while the vehicle was on the road portion of the trafficway, just prior to the First Harmful Event for this vehicle.
<u>PC16</u>	Driver Distracted By	FARS, CRSS	This element identifies the attribute(s) that best describe this driver's attention to driving prior to the driver's realization of an impending critical event or just prior to impact if realization of an impending critical event does not occur. This element reports on the presence of any distractions that may or may not have contributed to the crash. Distraction from the primary task of driving occurs when drivers divert their attention from the driving task to some other activity. Also, driving while daydreaming or lost in thought is identified as distracted driving by NHTSA. Physical conditions/ impairments (fatigue, alcohol, medical condition, etc.) or psychological states (anger, emotional, depressed, etc.) are not identified as distractions by NHTSA.
<u>PC17</u>	Pre-Event Movement (Prior to Recognition of Critical Event)	FARS, CRSS	This element identifies the attribute that best describes this vehicle's activity prior to the driver's realization of an impending critical event or just prior to impact if the driver took no action or had no time to attempt any evasive maneuvers.
PC18	Critical Event - Precrash (Category)	FARS, CRSS	This element identifies the category of the event that was critical to this vehicle being involved in the crash.

2020 Element ID	Element Name	FARS, CRSS, Case Structure	Definition
<u>PC19</u>	Critical Event - Precrash (Event)	FARS, CRSS	This element identifies the critical event that made the crash imminent (i.e., something occurred that made the collision possible).
<u>PC20</u>	Attempted Avoidance Maneuver	FARS, CRSS	This element identifies movements/ actions taken by the driver, within a critical crash envelope, in response to a CRITICAL PRECRASH EVENT .
PC21	Pre-Impact Stability	FARS, CRSS	This element assesses the stability of the vehicle after the critical event, but before the impact.
PC22	Pre-Impact Location	FARS, CRSS	This element assesses the location of the vehicle after the critical event, but before the First Harmful Event for this vehicle.
PC23	Crash Type	FARS, CRSS	This element describes the type of crash this in-transport vehicle was involved in based on the FIRST HARMFUL EVENT and the precrash circumstances.

Person (Motor Vehicle Occupant) Level Elements

2020 Element ID	Element Name	FARS, CRSS, Case Structure	Definition
<u>P1</u>	State Number	FARS Only	This element identifies the State in which the crash occurred.
<u>P2</u>	Consecutive Number	FARS Only	This element identifies the unique case number assigned by the data entry system.
<u>P3</u>	Vehicle Number - Person Level	Case Structure	This element identifies the vehicle number associated with this motor vehicle occupant.
<u>P4</u>	Person Number	Case Structure	This element identifies a number for the motor vehicle occupant in consecutive order for the vehicle they occupied.
<u>P5</u>	Age	FARS, CRSS	This element identifies the person's age, in years, with respect to the person's last birthday.
<u>P6</u>	Sex	FARS, CRSS	This element identifies the sex of the person involved in the crash.
<u>P7</u>	Person Type	FARS, CRSS	This element describes the role of this person involved in the crash.

2020 Element ID	Element Name	FARS, CRSS, Case Structure	Definition
<u>P8</u>	Injury Severity	FARS, CRSS	This element describes the severity of the injury to this person in the crash.
<u>P9</u>	Seating Position	FARS, CRSS	This element identifies the location of this person in or on the vehicle.
<u>P10</u>	Restraint System Use	FARS, CRSS	This element records the restraint equipment in use by the occupant and any indication of mis-use of the available restraint system, at the time of the crash.
<u>P11</u>	Helmet Use	FARS, CRSS	This element records the helmet use, and any indications of mis-use of the helmet, by motor vehicle occupants of <u>NCSA</u> <u>BODY TYPES</u> 80-91, 96, and 97 at the time of the crash.
<u>P12</u>	Air Bag Deployed	FARS, CRSS	This element is used to record air bag deployment for this person as reported in the case material.
<u>P13</u>	Ejection	FARS, CRSS	This element describes the ejection status and degree of ejection for this person, excluding motorcycle occupants.
<u>P14</u>	Ejection Path	FARS Only	This element identifies the path by which this person was ejected from the vehicle.
<u>P15</u>	Extrication	FARS Only	This element identifies if <i>equipment was</i> used to remove this person from the vehicle.
<u>P16</u>	Police Reported Alcohol Involvement	FARS, CRSS	This data element reflects only the judgment of law enforcement as to whether alcohol was involved or not for this person.
<u>P17</u>	Method of Alcohol Determination (By Police)	FARS Only	This element describes the method by which the police made the determination as to whether alcohol was involved or not for this person.
<u>P18 (1)</u>	Alcohol Test Status	FARS, CRSS	This element identifies if an alcohol (ethanol) test was given to this person.
P18 (2)	Alcohol Test Type	FARS, CRSS	This element identifies the type of the alcohol (ethanol) test that was used for this person.
<u>P18 (3)</u>	Alcohol Test Result	FARS, CRSS	This element identifies the alcohol (ethanol) test result for this person.

2020 Element ID	Element Name	FARS, CRSS, Case Structure	Definition
<u>P19</u>	Police Reported Drug Involvement	FARS, CRSS	This data element reflects only the judgment of law enforcement as to whether drugs were involved or not for this person.
<u>P20</u>	Method of Drug Determination (By Police)	FARS Only	This element identifies the method by which the police made the determination as to whether drugs were involved or not for this person.
P21 (1)	Drug Test Status	FARS Only	This element identifies if a chemical test for the presence of drugs was given to this person.
<u>P21 (2)</u>	Drug Specimen	FARS Only	This element identifies the bodily tissue or fluid used to perform a chemical test for the presence of drugs in this person.
<u>P21 (3)</u>	Drug Test Result	FARS Only	This element records the result of a chemical test for the presence of drugs in this person.
<u>P22</u>	Transported to First Medical Facility By	FARS, CRSS	This element identifies the method of transportation this person was provided to receive treatment at the first hospital or medical facility.
<u>P23</u>	Died at Scene/En route	FARS Only	This element identifies if this person died at the scene of the crash or en route to a hospital or treatment facility.
<u>P24</u>	Death Date	FARS Only	This element records the month, day, and year of this person's death.
<u>P25</u>	Death Time	FARS Only	This element identifies the hour and minute of this person's death using the 24-hour clock format.
<u>P26</u>	Related Factors - Person (MV Occupant) Level	FARS, CRSS	This element identifies factors related to motor vehicle occupants other than drivers expressed in the case material.
SP1	Death Certificate Number	FARS Only	This element identifies the four-digit GSA code for the city where the death occurred, the two-digit State number and the six-digit sequence number from the death certificate as assigned by the State Vital Statistics or Vital Records Department.
SP2	Fatal Injury at Work	FARS Only	This element indicates if the death certificate identified this person as being "at work" at the time of the crash.

2020 Element ID	Element Name	FARS, CRSS, Case Structure	Definition
SP3	Race/Hispanic Origin	FARS Only	This element indicates the race and Hispanic origin of this person from the death certificate.

Person (Not A Motor Vehicle Occupant) Level Elements

2020 Element ID	Element Name	FARS, CRSS, Case Structure	Definition
NM1	State Number	FARS Only	This element identifies the State in which the crash occurred.
NM2	Consecutive Number	FARS Only	This element identifies the unique case number assigned by the data entry system.
NM3	Person Number	Case Structure	This element identifies a number for people that are not in a motor vehicle in consecutive order.
NM4	Vehicle Number of Motor Vehicle Striking Non- Motorist	FARS, CRSS	This data element captures the intransport vehicle that made contact with this non-motorist.
NM5	Age	FARS, CRSS	This element identifies the person's age, in years, with respect to the person's last birthday.
NM6	Sex	FARS, CRSS	This element identifies the sex of the person involved in the crash
NM7	Person Type	FARS, CRSS	This element describes the role of this person involved in the crash.
<u>NM8</u>	Injury Severity	FARS, CRSS	This element describes the severity of the injury to this person in the crash.
NM9	Pedestrian/Bike Typing	FARS, CRSS	This element describes the precrash actions leading to crashes between motor vehicles and pedestrians or bicyclists.
NM9 - PB27	Marked Crosswalk Present - Pedestrian (See the companion Pedestrian/ Bicyclist Manual)	FARS, CRSS	This element identifies if a marked crosswalk was present at the crash site.
NM9 - PB27	Marked Crosswalk Present - Bicyclist (See the companion Pedestrian/Bicyclist Manual)	FARS, CRSS	This element identifies if a marked crosswalk was present at the crash site.
NM9 - PB28	Sidewalk Present - Pedestrian (See the companion Pedestrian/ Bicyclist Manual)	FARS, CRSS	This element identifies if a sidewalk was present at the crash site.

2020 Element ID	Element Name	FARS, CRSS, Case Structure	Definition
NM9 - PB28	Sidewalk Present - Bicyclist (See the companion Pedestrian/Bicyclist Manual)	FARS, CRSS	This element identifies if a sidewalk was present at the crash site.
NM9 - PB29	School Zone - Pedestrian (See the companion Pedestrian/Bicyclist Manual)	FARS, CRSS	This element identifies if the crash occurred in a school zone.
NM9 - PB29	School Zone - Bicyclist (See the companion Pedestrian/ Bicyclist Manual)	FARS, CRSS	This element identifies if the crash occurred in a school zone.
NM9 - PB30	Crash Type - Pedestrian (See the companion Pedestrian/ Bicyclist Manual)	FARS, CRSS	This element summarizes the circumstances of the crash for this pedestrian.
NM9 - PB30B	Crash Type - Bicyclist (See the companion Pedestrian/ Bicyclist Manual)	FARS, CRSS	This element summarizes the circumstances of the crash for this bicyclist.
NM9 - PB31	Crash Location - Pedestrian (See the companion Pedestrian/Bicyclist Manual)	FARS, CRSS	This element summarizes the circumstances of the crash for this pedestrian.
NM9 - PB31B	Crash Location - Bicyclist (See the companion Pedestrian/Bicyclist Manual)	FARS, CRSS	This element identifies if the crash location with respect to an intersection.
NM9 - PB32	Pedestrian Position (See the companion Pedestrian/Bicyclist Manual)	FARS, CRSS	This element identifies the location of the pedestrian with respect to the trafficway when contacted.
NM9 - PB32B	Bicyclist Position (See the companion Pedestrian/Bicyclist Manual)	FARS, CRSS	This element identifies the location of the bicyclist with respect to the trafficway when contacted.
NM9 - PB33	Pedestrian Initial Direction (See the companion Pedestrian/Bicyclist Manual)	FARS, CRSS	This element identifies the compass direction of travel of the pedestrian prior to being contacted.
NM9 - PB33B	Bicyclist Direction (See the companion Pedestrian/Bicyclist Manual)	FARS, CRSS	This element identifies the travel direction of the bicyclist with respect to the flow of traffic prior to being contacted.
NM9 - PB34	Motorist Initial Direction (See the companion Pedestrian/ Bicyclist Manual)	FARS, CRSS	This element identifies the compass direction of travel of the motorist prior to being involved in the crash.
NM9 - PB35	Motorist Maneuver (See the companion Pedestrian/Bicyclist Manual)	FARS, CRSS	This element identifies if the motorist was engaged in a turning maneuver at an intersection prior to being involved in the crash.

2020 Element ID	Element Name	FARS, CRSS, Case Structure	Definition
NM9 - PB36	Intersection Leg (See the companion Pedestrian/Bicyclist Manual)	FARS, CRSS	This element identifies on which leg of an intersection the crash occurred.
NM9 - PB37	Pedestrian Scenario (See the companion Pedestrian/Bicyclist Manual)	FARS, CRSS	This element summarizes the movements of the pedestrian and motorist in an intersection area.
NM9 - PB38	Crash Group - Pedestrian (See the companion Pedestrian/Bicyclist Manual)	FARS, CRSS	This element provides general groupings of the more specific individual Crash Types - Pedestrian.
NM9 - PB38B	Crash Group - Bicyclist (See the companion Pedestrian/ Bicyclist Manual)	FARS, CRSS	This element provides general groupings of the more specific individual Crash Types - Bicyclist.
<u>NM10</u>	Non-Motorist Location at Time of Crash	FARS, CRSS	This element identifies the location of the non-motorist with respect to the roadway at the time of the crash.
<u>NM11</u>	Non-Motorist Action/ Circumstances	FARS, CRSS	This element describes the action(s) of the non-motorist at the time of their involvement in the crash.
<u>NM12</u>	Non-Motorist Contributing Circumstances	FARS, CRSS	This element describes the action(s) and/or circumstances of the non-motorist that law enforcement indicated may have contributed to the crash.
<u>NM13</u>	Non-Motorist Distracted By	FARS, CRSS	This element identifies the attribute(s) that best describe this non-motorist's attention prior to the non-motorist's involvement in this crash. This element reports on the presence of any distractions that may or may not have contributed to the crash. Distraction, for a non-motorist, occurs when a non-motorist's attention is diverted from the task of navigating in public to some other activity. Also, daydreaming or lost in thought are identified as distractions by NHTSA. Physical conditions/ impairments (fatigue, alcohol, medical condition, etc.) or psychological states (anger, emotional, depressed, etc.) are not identified as distractions by NHTSA.
<u>NM14</u>	Non-Motorist Safety Equipment	FARS, CRSS	This element identifies the safety equipment that was used and not used by this non-motorist as reflected in the case material.

2020 Element ID	Element Name	FARS, CRSS, Case Structure	Definition
<u>NM15</u>	Condition (Impairment) at Time of Crash	FARS, CRSS	This element attempts to identify any physical impairment to this non-motorist that may have contributed to the cause of the crash.
<u>NM16</u>	Police Reported Alcohol Involvement	FARS, CRSS	This data element reflects only the judgment of law enforcement as to whether alcohol was involved or not for this person.
<u>NM17</u>	Method of Alcohol Determination (By Police)	FARS Only	This element describes the method by which the police made the determination as to whether alcohol was involved or not for this person.
NM18 (1)	Alcohol Test Status	FARS, CRSS	This element identifies if an alcohol (ethanol) test was given to this person.
NM18 (2)	Alcohol Test Type	FARS, CRSS	This element identifies the type of the alcohol (ethanol) test that was used for this person.
<u>NM18 (3)</u>	Alcohol Test Result	FARS, CRSS	This element identifies the alcohol (ethanol) test result for this person.
<u>NM19</u>	Police Reported Drug Involvement	FARS, CRSS	This data element reflects only the judgment of law enforcement as to whether drugs were involved or not for this person.
<u>NM20</u>	Method of Drug Determination (By Police)	FARS Only	This element identifies the method by which the police made the determination as to whether drugs were involved or not for this person.
NM21 (1)	Drug Test Status	FARS Only	This element identifies if a chemical test for the presence of drugs was given to this person.
NM21 (2)	Drug Specimen	FARS Only	This element identifies the bodily tissue or fluid used to perform a chemical test for the presence of drugs in this person.
NM21 (3)	Drug Test Result	FARS Only	This element records the result of a chemical test for the presence of drugs in this person.
<u>NM22</u>	Transported to First Medical Facility By	FARS, CRSS	This element identifies the method of transportation this person was provided to receive treatment at the first hospital or medical facility.

2020 Element ID	Element Name	FARS, CRSS, Case Structure	Definition
<u>NM23</u>	Died at Scene/En route	FARS Only	This element identifies if this person died at the scene of the crash or en route to a hospital or treatment facility.
<u>NM24</u>	Death Date	FARS Only	This element records the month, day, and year of this person's death.
<u>NM25</u>	Death Time	FARS Only	This element identifies the hour and minute of this person's death using the 24-hour clock format.
<u>NM26</u>	Related Factors - Person (Not a MV Occupant) Level	FARS, CRSS	This element identifies factors related to people not in a motor vehicle expressed in the case material.
SP1	Death Certificate Number	FARS Only	This element identifies the four-digit GSA code for the city where the death occurred, the two-digit State number and the six-digit sequence number from the death certificate as assigned by the State Vital Statistics or Vital Records Department.
SP2	Fatal Injury at Work	FARS Only	This element indicates if the death certificate identified this person as being "at work" at the time of the crash.
SP3	Race/Hispanic Origin	FARS Only	This element indicates the race and Hispanic origin of this person from the death certificate.

100. FARS Submission Instructions

101. How to Submit

Each case must have at least one Person Level form with <u>INJURY SEVERITY</u> attribute Fatal Injury.

2020 Data

Enter data directly using procedures described in the FARS *Records-Based Information Solution* Manual (*RBIS* Manual).

102. When to Submit

Make submissions at any time during the week via the *RBIS*.

103. Data Sources

- 1. Use the <u>ANSI D16.1 Manual on Classification of Motor Vehicle Traffic Crashes</u> for definitions in coding the FARS forms.
- 2. Obtain information from death certificates for people who die as a result of injuries sustained in a motor vehicle crash.
- 3. Use the State Driver Licensing Files, Vehicle Registration Files, Highway Department Files, Crash Reports, and Vital Statistics Reports.
- 4. See the FARS *RBIS* manual for instructions on obtaining data and responding to requests for data on vehicles and drivers not registered or licensed in your State.
- 5. The message system should be used to obtain data on involved Out-of-State drivers and vehicles.
- 6. Hierarchy for Case material:
 - a. An Early Notification Report can get corrected/replaced/clarified by
 - b. A police crash report can get corrected/replaced/clarified by
 - c. A Supplemental police crash report can get corrected/replaced/clarified by
 - d. A Reconstruction Report
- 7. Hierarchy for police reported information on the police crash report:
 - a. If information provided in the narrative directly contradicts a coded box, the narrative detail takes precedence over the checkbox.
- 8. When coding elements: Statements by witnesses in narratives, including those from vehicle passengers or pedestrians, may be used to provide information when police sources are unavailable. The officer's assessment on the police crash report will take precedence over items reported by witnesses in all cases. The officer's assessment includes any statements from a witness included by the officer as part of the police crash report narrative. In absence of clarification by the officer in the police crash report, information that is contradictory from witness statements should not be used.

9. The use of satellite imagery products (GOOGLE Earth, Bing Maps, etc.) shall be limited to verifying or clarifying information already contained in the source materials used to code the FARS case. Satellite imagery products shall not be used to create new data (e.g., Grade not available on crash report; Google street level should not be used to determine grade) or add to information not otherwise available in the original case material (e.g., case material indicate traffic signal, but do not report if pedestrian signal available; do not use satellite imagery tools to determine presence of a pedestrian signal). Imagery included in a State's official video log of Roadway Inventory or in their Linear Reference System is acceptable for coding the FARS case.

200. Coding Instructions

201. General Instructions

- 201.1 **Codes**
- 201.1.1 All codes are numeric except <u>Trafficway Identifier</u>, <u>Additional State Information</u>, <u>Rail Grade Crossing Identifier</u>, <u>Vehicle Identification Number</u>, <u>Trailer Vehicle Identification Number</u>, and <u>Motor Carrier Identification Number</u>.
- 201.1.2 The code for attribute **Unknown** is always *a variation of* 9 (*e.g.*, *9*, *99*, *9999*). **Unknown** should only be used when all sources for obtaining information on an element have been searched and the information is missing or stated unknown. In an element that includes the attribute **Not Reported, Unknown** is only used for stated unknowns.
- 201.1.3 The code for attribute **Not Applicable** or its equivalent is always zero(s), except for data elements C29-C31 where **Not Applicable** (**Not Notified**) is 8888, *P10 where None Used/Not Applicable is (1) 20 and (2) 7, P11 where (1) Not Applicable is 20 and (2) None Used/Not Applicable is 7*, P13 where **Not Applicable** is 8, P24/NM24 where **Not Applicable** (**non-fatal**) is 8888888, P25/NM25 where **Not Applicable** (**non-fatal**) is 8888, and SP2 where **Not Applicable** (**not a fatality**) is 8.
- 201.1.4 The code for attribute **None** is always zero except for <u>Alcohol Test Result</u>, <u>Motor Carrier Identification Number</u>, <u>Restraint System Use</u>, <u>Helmet Use</u>, and <u>Non-Motorist Safety Equipment</u>.

201.2 Coding Blanks

- 201.2.1 Blanks are used only in fields to be later updated with four exceptions:
 - 201.2.1.1 If <u>Driver Presence</u> is coded "0" or "9" all other driver information except <u>Related Factors-Driver Level</u> must be blank.
 - 201.2.1.2 If VIN is less than seventeen characters, see the guidance in VIN.
 - 201.2.1.3 If <u>Trafficway Identifier</u> is less than 30 characters, do not zero-fill or 9-fill. Leave remaining characters blank. The second **Trafficway Identifier** field is also left blank for non-junction crashes.
 - 201.2.1.4 If <u>Motor Carrier Identification Number</u> is less than 9 characters, do not zero-fill or 9-fill. Leave remaining characters blank.
 - 201.2.2 All codes are right-justified except <u>VIN</u>, <u>Trailer VIN</u>, <u>Trafficway Identifier</u> and Motor Carrier Identification Number.

201.3 Vehicle, Driver, Precrash, and both Person Levels

- 201.3.1 Vehicles are numbered consecutively beginning with "001."
- 201.3.2 For each vehicle, people are numbered consecutively beginning with "001." Order is not important. The driver does not have to be "001."
- 201.3.3 People not in motor vehicles are numbered consecutively beginning with "01." Order is not important.

201.4 Miscellaneous

- 201.4.1 The number of changes per case is not limited.
- 201.4.2 Request of other States for information should always follow the format of the *RBIS* Out-Of-State Data Request whether the *RBIS* itself or the mail is used.
- 201.4.3 Refer all coding questions through the CDAN Helpdesk. See the <u>Coding Guide: How to</u> <u>Create a Coding Question Ticket in the CDAN Helpdesk for helpful information.</u>
- 201.4.4 Copies of all cases or other actions submitted must be retained for 3 years after the data collection year.
- 201.4.5 If a State will not allow transmittal of complete <u>VIN</u>, send a memorandum to the *CDAN Helpdesk* informing *HQ* of this fact.
- 201.5 Special Case, FARS ONLY Coding Fatal Traffic Crashes for which there is only a death certificate.
- 201.5.1 Be sure the death occurred within thirty (30) days (720 hours) of the crash. If you don't know, do not submit the case. If it occurred after 30 days (720 hours), do not submit.

201.6 Code the required elements as follows:

The following elements must be coded. If any of these elements are left blank or if an edit check is violated that involves the coding of one of these elements, you will not have a usable FARS *or CRSS* case.

Crash Level

Crash Date - Appropriate Day, Month, and Year

Crash Time - Appropriate hour and minute if known, 9999 if not known

Number of Forms Submitted for Persons Not in Motor Vehicles - 00-99

Number of Vehicle Forms Submitted - 001-999

Number of Motor Vehicle Occupant Forms Submitted - 000-999

Crash Events - Table completed in **RBIS**

<u>First Harmful Event</u> - Appropriate attribute derived from table, 99 if *reported as un*known

Vehicle Level

Vehicle Number - 001-999

Number of Occupants - 01-98 if known, 99 if unknown

Unit Type - 1-4

Driver Level

Vehicle Number - 001-999

Driver Presence - Appropriate attribute if known, 9 if unknown

Precrash Form

Vehicle Number - 001-999

Crash Type - 01-99

Person Level (Motor Vehicle Occupant)

Vehicle Number - 001-999

Person Number - 001-999

Person Type - 01-03, 09 for occupants

Person Level (Not a Motor Vehicle Occupant)

Person Number - 001-999

Vehicle Number of Motor Vehicle Striking Non-Motorist - 001-999

<u>Person Type</u> - 04-**07**, 10-**13**, 19 for non-occupants

201.6.1 Code all other elements with the proper attribute if information is known. If no information is known, code the items **Unknown** or **Not Reported** as appropriate. The following eight exceptions should all use code 0 (zero) as appropriate for the situation:

- SCHOOL BUS RELATED;
- RAIL GRADE CROSSING IDENTIFIER;
- HIT-AND-RUN;
- JACKKNIFE;
- ROLLOVER;
- EMERGENCY MOTOR VEHICLE USE;
- FIRE OCCURRENCE; and
- CONTRIBUTING CIRCUMSTANCES, MOTOR VEHICLE.

202. Deletion Instructions

See FARS *Records-Based Information Solution (RBIS)* Manual for instructions on how to delete a case.

203. How to Structure a Case

When creating an *RBIS* case structure, it is important to understand and correctly enter the proper number of Persons Not in Motor Vehicles, Vehicles, and Motor Vehicle Occupants. This initial structuring of the case is important for dependent data elements once your case is created. The following instructions are intended to assist in the proper structuring of your case.

Step 1: Number of Persons Not in Motor Vehicles

Enter the number of people involved in this crash who are not in motor vehicles. This includes:

- Occupants of Non-Motor Vehicle Transport Devices (i.e., people riding in an animaldrawn conveyance, on an animal, or injured occupants of a railway train or a road vehicle on rails)
- Pedestrians
- Bicyclists
- Other Cyclists
- People on Personal Conveyances (motorized and non-motorized)
- People In/On Buildings
- Unknown Types of Non-Motorists

For detailed explanations and examples of each, please see **PERSON TYPE**.

Important things to consider:

- Do not include non-contact people. For example, if the case material identifies three pedestrians and only one of them was contacted by a vehicle or something set into motion by a vehicle, you do not include the two who were not contacted.
- Do not include witnesses or other people not directly involved in the crash.
- Do not include uninjured occupants of railway trains or road vehicles on rails.

Step 2: Number of Vehicles (in-transport, parked/stopped off roadway)

Enter the number of vehicles involved in this crash. This includes:

- Motor Vehicles In-Transport (Inside or Outside the Trafficway)
- Motor Vehicles Not In-Transport Within the Trafficway
- Motor Vehicles Not In-Transport Outside the Trafficway
- Working Motor Vehicles (Highway Construction, Maintenance, Utility Only)

For detailed explanations and examples of each, please see **UNIT TYPE**.

Important things to consider:

- You must have at least one motor vehicle "In-Transport" involved in the crash to be considered a FARS or CRSS case.
- For a Not In-Transport Motor Vehicle (Parked or Working) to be included in the case, it must be involved in a harmful event with a Motor Vehicle In-Transport.
- Do not include Phantom or Non-Contact Vehicles (i.e., a vehicle that did not directly contact another vehicle and has no harmful event in the crash).
- It is possible to have a case where one vehicle sets something into motion, and then the thing set into motion hits another vehicle. In this case, even though the two vehicles

never made direct contact with each other, both vehicles would be considered contact vehicles and should be entered because they both had harmful events. For more information about set in motion cases, please see <u>RELATED FACTORS - CRASH</u> <u>LEVEL</u>, and <u>AREAS OF IMPACT</u>.

• A vehicle that sets something into motion, striking a person or property and causes injury or damage, is a contact vehicle and should be included in this count.

Step 3: Number of Person Forms for a Vehicle

Enter the number of occupants in the vehicle. An occupant is any person who is part of a motor vehicle (i.e., in it, on it, or attached to it).

For special handling of uninjured occupants for which there is NO Person Level data in the case material, see Created Records below.

There are three special rules for counting occupants when structuring a case:

- **Buses:** For vehicle <u>NCSA BODY TYPES 50-52, 55, 58, and 59</u> you will enter ONLY the Driver (regardless of injury) and injured passengers when you are structuring the case. Do not include uninjured passengers. The total <u>number of occupants</u> (including uninjured occupants) will be added later on the Vehicle Form once your case has been created.
- **Unknown:** If the actual number of motor vehicle occupants is unknown, include the driver, if there is one, plus all other known occupants in the count (even if there is no information in the case material).
- Uninjured Passengers with no information in the case material: See <u>Created Records</u> below.

Important things to consider:

People ejected or who fall from a motor vehicle in-transport are still considered occupants of that vehicle for the duration of the unstabilized situation.

Step 4: Injury Severity

Enter the injury severity for each of the Person Forms you entered in Steps 1 and 3. For detailed explanations and examples, please see **INJURY SEVERITY.**

Created Records

A Created Record is generated when the total <u>number of occupants</u> (entered on the Vehicle form) is greater than *the* <u>Number of Person Forms</u> *entered when structuring the case* and the *NCSA BODY TYPE is not a bus* (*BODY TYPES 50, 51, 52, 55, 58, or 59 [large buses]*).

This is intended to streamline data entry and only applies when information is not available for some or all uninjured passengers, as is the case in some States that do not require information to be collected for uninjured passengers. In these situations, the system automatically generates a created person record with a set of standard values.

If there are uninjured passengers of an in-transport motor vehicle (other than *NCSA BODY TYPES 50, 51, 52, 55, 58 or 59 [large buses]*), the *RBIS* will automatically populate all of the data elements on the "Created" Person Level (MV Occupant) Form generated by *RBIS*. Because

this is a shortcut to auto-fill data, ensure the values that would apply to each occupant exactly match the values shown in the table below. You will be prompted in *RBIS* to confirm your acceptance of created records (see Figure 1).



Figure 1: Created Records Message

Case Structuring Inducing Created Records:

- 1. When structuring a case, enter the Number of *Person Forms submitted*. *Exclude* uninjured passengers for which you have no data anywhere in the case material.
- 2. On the Vehicle form, code the <u>NUMBER OF OCCUPANTS</u> data element with the total number of occupants (both injured and uninjured) in the vehicle, as indicated in the case material.
- 3. Once the <u>vPIC BODY CLASS</u> and <u>NCSA BODY TYPE</u> have been selected, and it is not a bus, the system will generate "Created" Person Level (MV Occupant) forms for the additional occupants (i.e., forms for the uninjured passengers excluded when structuring in "1" above.). A confirmation message will appear (see <u>Figure 1</u> above). Once confirmed, the system then fills in the form with the data shown in the Table.

In the following situations people must be counted in *Number of Person Forms for a Vehicle when structuring a case*:

- 1. If the vehicle is a *large* Bus (*BODY TYPES 50-52, 55, 58, 59*) only the driver and injured bus passengers are entered into the system for these vehicles, and additional Person forms will not be automatically created.
- 2. Any driver or injured passenger of a motor vehicle in transport.
- 3. Any occupant of a motor vehicle not in transport.

The Created Records are editable and each of the values in the table below can be edited as appropriate. The standard edit checks are activated.

Created Records Standard Set of Values

Element Name	Code	Attribute
Age	998	Not Reported
Sex	8	Not Reported
Person Type	02	Passenger of a Motor Vehicle in Transport
Injury Severity	0	No Apparent Injury (O)
Seating Position	98	Not Reported
Restraint System Use Subfield 1 ¹²³	98	Not Reported
Restraint System Use Subfield 2	7	None Used/Not Applicable
Helmet Use Subfield 1 ¹²³	98/ 20	Not Reported/None Used/Not Applicable
Helmet Use Subfield 2	7	None Used/Not Applicable
Air Bag Deployed	98/ 20	Not Reported/Not Applicable
Ejection	7	Not Reported
*Ejection Path	0	Ejection Path Not Applicable
*Extrication	0	Not Extricated or Not Applicable
Police-Reported Alcohol Involvement	8	Not Reported
*Method of Alcohol Determination (By Police)	9	Not Reported
Alcohol Test Status	0	Test Not Given
Alcohol Test Type	00	Test Not Given
Alcohol Test Result	996	Test Not Given
Police Reported Drug Involvement	8	Not Reported
*Method of Drug Determination (By Police)	8	Not Reported
*Drug Test Status	0	Test Not Given
*Drug Specimen	00	Test Not Given
*Drug Test Result	000	Test Not Given
Transported to First Medical Facility By	0	Not Transported for Treatment
*Died at Scene/En Route	0	Not Applicable
*Death Date	88 88 8888	Not Applicable (Non-fatal)
*Death Time	8888	Not Applicable (Non-fatal)
Person Related Factor	0 00	None
*Death Certificate Number	0s	Not Applicable (not a fatality)
*Fatal Injury at Work	8	Not Applicable (not a fatality)
*Race	0 00	Not a Fatality (not applicable)
*Hispanic Origin	00	Not a Fatality (not applicable)

*FARS Only Elements

- 1. For Passenger Vehicles, Automobile Derivatives, Utility Vehicles, Light/Medium/Heavy Trucks, Motorhomes, (NCSA BODY TYPE equals 1-79, 92-95, 98, or 99) RESTRAINT SYSTEM USE Subfield 1-Type of Restraint System in Use will auto-populate with 98 (Not Reported) and Subfield 2 ANY INDICATION OF MIS-USE as 7 (None Used/Not Applicable) and HELMET USE Subfield 1- as 20 (Not Applicable) and HELMET USE Subfield 2 ANY INDICATION OF MIS-USE as 7 (None Used/Not Applicable).
- 2. For Motorcycles, Mopeds, All-terrain Vehicles, All-terrain Cycles, Other Motored Cycles, Unknown Motored Cycle Types, and ATVs, (NCSA BODY TYPE equals 80-84, or 88-91), RESTRAINT SYSTEM USE Subfield 1-Type of Restraint System in Use will autofill with 20 (None Used/Not Applicable) and Subfield 2 Any Indication of Mis-Use will autofill with 7 (None Used/Not Applicable) and HELMET USE Subfield 1 will autofill with 98 (Not Reported) and HELMET USE Subfield 2 ANY INDICATION OF MIS-USE as 7 (None Used/Not Applicable).

For Unenclosed and Enclosed Three Wheel Motorcycles/Autocycles, ROVs, and Other Vehicle Types, (NCSA BODY TYPE <u>equals</u> 85-87, 96, or 97) RESTRAINT SYSTEM USE Subfield 1-Type of Restraint System in Use will autopopulate with 98 (Not Reported) and Subfield 2 - Any Indication of Mis-Use as 7 (None Used/Not Applicable) and HELMET USE Subfield 1- as 98 (Not Reported) and HELMET USE Subfield 2 - ANY INDICATION OF MIS-USE as 7 (None Used/Not Applicable).

300. Data Element Coding Instructions

301. Section Organization

- 301.1 For each element, an instruction page follows in the order of the elements on the *coding levels*. In an element that is duplicated on more *than* one *coding level*, the instructions are provided in the first occurrence of the element with *a* reference *and hyperlink in* the *subsequent* occurrence.
- 301.1.1 The letters in the upper right-hand corner refer to *the Coding Levels*:
 - 'C' Crash Level
 - 'V' Vehicle Level
 - 'D' Driver Level
 - 'PC' Precrash Level (Vehicle/Driver)
 - 'P' Person Level (MV Occupant)
 - 'NM' Person Level (Not a MV Occupant)
- 301.1.2 The *Format* section gives the type *of* element (*e.g.*, *numeric*, *alphanumeric*).
- 301.1.3 The *Element Value* section lists the attributes for the element and their associated codes.
- 301.1.4 The *Remarks* section contains coding instructions, special instructions, etc., for the element.

400. Understanding and Managing Consistency Checks

In an edit check, data elements are presented in all capital letters so the reader may quickly recognize which elements are included in the edit check. The individual attributes are not written out, but rather are represented by their codes. To fully understand the edit check, the reader should look up the data element(s), identify the code(s), and read the attribute(s).

401. Consistency Check Formats

There are three types of edit check formats (if/then, unlikely, and case status / structure error).

401.1 IF/THEN Edit Checks

If/then edit checks can further take one of two forms:

- Must/must not, or
- Should/should not

The majority of edit checks are presented in this form. The form is a statement that says: If (first condition) then (second condition). The "then" clause in this form includes the word(s) "should"/"should not" or "must"/"must not." So, the edit check is saying: If the first condition exists, then the second condition:

- Should or should not exist, or
- Must or must not exist.

See more below on interpreting and resolving "should" vs. "must" edit checks.

Please be aware that the issue could be with the coding of the data element(s) associated with the IF condition, the THEN condition, or both.

Example:

2B0P: If JACKKNIFE equals 1-3, then VEHICLE TRAILING must not equal 0, 9.

Read as: If the data element JACKKNIFE equals 1 (No), 2 (Yes-First Event), or 3 (Yes-Subsequent Event), then the data element VEHICLE TRAILING must not equal 0 (No Trailing Units) or 9 (Unknown).

Explanation: If the data element JACKKNIFE is coded with codes that apply to an articulated vehicle (codes 1-3), it follows that the element VEHICLE TRAILING must be coded with at least one trailing unit. On the other hand, VEHICLE TRAILING could be coded correctly, and JACKKNIFE might need to be corrected.

401.2 UNLIKELY Edit Checks

Another format an edit check may take is an "unlikely" statement; meaning the condition is unlikely but possible.

Example:

U020: UNLIKELY: FIRST HARMFUL EVENT equals 02, 04, 06, 51, or 72.

Read as: It is unlikely that the FIRST HARMFUL EVENT is 02 (Fire/Explosion), 04 (Gas Inhalation), 06 (Injured in Vehicle (Non-Collision)), 51 (Jackknife (harmful to this vehicle)), or 72 (Cargo/Equipment Loss, Shift, or Damage (harmful)).

Explanation: These events are all non-collision harmful events that typically occur after some other event. For example, when 02 (Fire/Explosion) is coded, it is usually following a collision event such as striking a motor vehicle in-transport. Because it is possible for these codes to be the FHE, the UNLIKELY edit check is merely to make the analyst pause and double check the coding to be sure it is correct.

401.3 Case Status/Structure Integrity Error

The third format an edit check may take is a "case status/structure integrity error" presented as a factual statement.

• Example 1 (Case Status):

FAOF: If FIRST HARMFUL EVENT equals blank, then case status is flawed.

Read as: The FHE cannot be blank.

• Example 2 (Case Structure Integrity):

CSI2: There must be exactly one DRIVER LEVEL FORM corresponding to each VEHICLE LEVEL FORM.

Read as: There must be one driver level form for each vehicle.

402. Level 1 and Level 2 Edit Checks

All edit checks are either Level 1 or Level 2.

402.1 Level 1 Edit Checks

Level 1 edit checks include:

- "If/then" edit checks with "must/must not" in the "then" clause
- Case status/structure integrity errors

Level 1 edit checks cannot be overridden. The combination of conditions is not possible. Your coding or the entry system must be fixed to clear the error.

Level 1 Example:

4Z0P: If SEQUENCE OF EVENTS equals 02, then FIRE OCCURRENCE for this vehicle must equal 1.

Read as: If the SEQUENCE OF EVENTS equals 02 (Fire/Explosion), then you must also code FIRE OCCURRENCE as 1 (Yes) for this vehicle.

Explanation: This Level 1 edit check cannot be overridden. If you've coded a fire/explosion for this vehicle in the Crash Events Table, then the data element FIRE OCCURRENCE must also reflect the presence of the fire/explosion for this vehicle.

402.2 Level 2 Edit Checks

Level 2 edit checks include:

- "If/then" edit checks with "should/should not" in the "then" clause
- Unlikely edit checks

Level 2 edit checks may be overridden if you determine the coding is correct.

Level 2 Example:

V052: If BUS USE equals 04, then vPIC BODY CLASS should equal 016 (Bus), or FINAL STAGE BODY CLASS should equal 016 (Bus).

Read as: If BUS USE is coded 04 (Intercity), then NCSA BODY TYPE for this vehicle should be 51 (Cross Country/Intercity Bus).

Explanation: This Level 2 edit check can be overridden if necessary. If you have something other than this coding combination, be sure to check your coding first before overriding the edit check.

402.3 Resolving Edit Checks

Do not be intimidated by edit checks. They are meant as aids and safety nets for coding accurately, but you should not interpret them as saying "what you coded must be wrong." You need to evaluate what the edit check is saying, what your documents are saying, and what you have coded.

If you determine that what you have coded is correct according to coding instructions, and you cannot override the edit check, it may be the edit check that is faulty. You should report this by submitting a coding help ticket through the <u>CDAN HelpDesk</u>. See the <u>Coding Guide:</u> <u>How to Create a Coding Question Ticket in the CDAN Helpdesk</u> for helpful information.

403. Overriding Edit Checks

403.1 Level 2 Edit Checks

Sometimes Level 2 edit checks need to be overridden. The edit check is there to make the analyst pause and take a second look at the coding to be certain it is correct before taking the next step and overriding the edit check. When an edit check override is necessary, a short but detailed explanation is required describing why the code combination is correct.

General notes for overriding Level 2 Edit Checks:

- Provide enough detail to demonstrate proper coding.
- Please do not use the override reason: "Per PCR" or similar. More detail is required.
- For age, include age and/or date of birth shown on PCR.
- For Blood Alcohol Concentration (BAC), include the BAC shown on the PCR for CRSS, and the BAC and source document for FARS.
- Generally, include the information used to code the data elements included in the edit check.
- When applicable, indicate that the State coding rules were used.
- Override explanations are reviewed to verify proper coding, as part of the data quality control efforts.

Example:

U170: UNLIKELY: RESTRAINT SYSTEM USE Subfield-1 Type of Restraint System in Use equals 01.

Read as: It is unlikely that the RESTRAINT SYSTEM USE Subfield 1, Type of Restraint System in Use is equal to 01 (Shoulder Belt Only Used).

Explanation: It is unusual for a person to only be using a shoulder belt and not also a lap belt. You should check your coding against your case material to be certain. If you are certain this is the correct coding, you may override this edit check.

Example Override Reason: "Person using shoulder belt but sitting on lap belt."

403.2 Level 1 Edit Checks

Level 1 edit checks cannot be overridden. A Level 1 edit check is saying the combination of conditions is not possible. Your coding or the system must be fixed to clear the error. Review your case material and coding instructions to see if you can identify any errors you made and make corrections accordingly. If you believe that what you have coded is correct according to coding instructions and the case material you have, you should report this by submitting a coding help ticket through the <u>CDAN HelpDesk</u>. See the <u>Coding Guide: How to Create a Coding Question Ticket in the CDAN Helpdesk</u> for helpful information.

State Number - FARS Only

FORMAT: 2 numeric

SAS NAME: Accident.STATE

ELEMENT VALUES:

Codes	Attributes
01	Alabama
02	Alaska
04	Arizona
05	Arkansas
06	California
08	Colorado
09	Connecticut
10	Delaware
11	District of Columbia
12	Florida
13	Georgia
15	Hawaii
16	Idaho
17	Illinois
18	Indiana
19	Iowa
20	Kansas
21	Kentucky
22	Louisiana
23	Maine
24	Maryland
25	Massachusetts
26	Michigan
27	Minnesota
28	Mississippi
29	Missouri
30	Montana

Codes	Attributes
31	Nebraska
32	Nevada
33	New Hampshire
34	New Jersey
35	New Mexico
36	New York
37	North Carolina
38	North Dakota
39	Ohio
40	Oklahoma
41	Oregon
42	Pennsylvania
43	Puerto Rico
44	Rhode Island
45	South Carolina
46	South Dakota
47	Tennessee
48	Texas
49	Utah
50	Vermont
51	Virginia
52	Virgin Islands
53	Washington
54	West Virginia
55	Wisconsin
56	Wyoming

Definition: This element identifies the State in which the crash occurred.

Remarks: None.

Consistency Checks (See Section 400):

Error ID	IF	THEN
200P	CITY is greater than 0000 and less than 9997, and COUNTY is greater than 000 and less than 997,	COUNTY and CITY must be valid codes for the STATE.
220P	LIGHT CONDITION equals 4, and STATE is not equal to 02,	CRASH TIME must equal 0300-0900, 9999.
2300	LIGHT CONDITION equals 5, and STATE is not equal to 02,	CRASH TIME should equal 1600-2200, 9999.
4X6A	NON-MOTORIST DISTRACTED BY equals 17,	STATE should equal GA, MN, MO, NV, NY, or SC.
909P	STATE or PSU_STATE is equal to GA, and any VEHICLE IDENTIFICATION NUMBER (VIN) does not equal 0s, 8s, or 9s,	VEHICLE IDENTIFICATION NUMBER (VIN) should be unique within a crash.
A010	STATE equals 02, and LIGHT CONDITION equals 4,	CRASH TIME should equal 0300-1000, 9999.
A020	STATE equals 02, and LIGHT CONDITION equals 5,	CRASH TIME should equal 1500-2359, 9999.
A16A	FUNCTIONAL SYSTEM equals 1, and STATE does not equal 02, and RELATION TO JUNCTION equals 01, 07, 18, or 19,	TRAFFICWAY DESCRIPTION should equal 2 or 3.
A940	STATE NUMBER equals 11,	maximum SPEED LIMIT (not including 98 or 99) should equal 55.
A945	STATE NUMBER equals 15,	maximum SPEED LIMIT (not including 98 or 99) should equal 60.
A950	STATE NUMBER equals 02, 09, 10, 25, 34, 36, 41, 43, 44, 50,	maximum SPEED LIMIT (not including 98 or 99) should equal 65.
A955	STATE NUMBER equals 01, 05, 06, 12, 13, 17, 18, 19, 21, 24, 26, 27, 28, 29, 33, 37, 39, 42, 45, 47, 51, 53, 54, 55,	maximum SPEED LIMIT (not including 98 or 99) should equal 70.
A960	STATE NUMBER equals 04, 08, 20, 22, 23, 31, 35, <i>or</i> 38,	maximum SPEED LIMIT (not including 98 or 99) should equal 75.
A961	STATE NUMBER equals 16, 30, 32, 40 , 46, 49, 56,	maximum SPEED LIMIT (not including 98 or 99) should equal 80.
A962	STATE NUMBER equals 48,	maximum SPEED LIMIT (not including 98 or 99) should equal 85.
BJ8P	DRIVER DISTRACTED BY equals 17,	STATE should equal GA, MN, MO, NV, NY, or SC.

Error ID	IF	THEN
G01P	STATE is, and GLOBAL POSITION - LATITUDE (degrees) is not equal to 77, 88, 99,	LATITUDE (degrees) must be equal to, or greater than (1d), and LATITUDE (degrees) must not be greater than (2d).
G02P	STATE is, and GLOBAL POSITION LATITUDE (degrees) equals (1d),	LATITUDE (minutes) must be equal to, or greater than (1s).
G03P	STATE is, and GLOBAL POSITION LATITUDE (degrees) equals (2d),	LATITUDE (minutes) must not be greater than (2s).
G04P	STATE is, and GLOBAL POSITION LONGITUDE (degrees) is not equal to 777, 888, 999,	LONGITUDE (degrees) must be equal to, or greater than (3d), and LONGITUDE (degrees) must not be greater than (4d).
G05P	STATE is, and GLOBAL POSITION LONGITUDE (degrees) equals (3d),	LONGITUDE (minutes) must be equal to, or greater than (3s).
G06P	STATE is, and GLOBAL POSITION LONGITUDE (degrees) equals (4d),	LONGITUDE (minutes) must not be greater than (4s).
U370	UNLIKELY: EXTENT OF DAMAGE equals 8 if STATE does not equal <i>06</i> , 17, 18, 34, <i>36</i> , 48, 49, or 53.	
U430	UNLIKELY: VEHICLE REMOVAL equals 8 unless STATE equals <i>TX</i> .	
U683	UNLIKELY: OWNERSHIP equals 98 or 99 unless STATE equals <i>06</i> , <i>12</i> , <i>or</i> 48.	
V983	VEHICLE TRAILING equals 3,	STATE should equal 04, 08, 16, 18, 20, 30-32, 38-41, 46, 49.
V984	STATE does not equal 04, 08, 16, 18, 20, 30-32, 38-41, 46, 49,	VEHICLE TRAILING should not equal 3.

Consecutive Number - FARS Only

FORMAT: 4 numeric

SAS NAME: Accident.ST_CASE

ELEMENT VALUES:

Codes	Attributes
0001-9999	Assigned Number

Definition: This element identifies the unique case number assigned by the data entry system.

Remarks: Please complete FARS forms with the RBIS assigned case number.

Crash Level Data Elements

- C1 State Number FARS Only
- C2 Consecutive Number FARS Only
- C3 Number of Forms Submitted for Persons Not in Motor Vehicles
- C4 Number of Vehicle Forms Submitted
- C5 Number of Motor Vehicle Occupant Forms Submitted
- C6 County / C7 City FARS Only
- C8 Crash Date
- C9 Crash Time
- C10 Trafficway Identifier FARS Only
- C11 Route Signing FARS Only
- C12 Land Use and Functional System FARS Only
- C13 Ownership FARS Only
- C14 National Highway System FARS Only
- C15 Special Jurisdiction FARS Only
- C16 Milepoint FARS Only
- C17 Global Position
- C18 Crash Events
- C19 First Harmful Event
- C20 Manner of Collision of the First Harmful Event
- C21 Relation to Junction
- C22 Type of Intersection
- C23 Relation to Trafficway
- C24 Work Zone
- C25 Light Condition
- C26 Atmospheric Conditions
- C27 School Bus Related
- C28 Rail Grade Crossing Identifier FARS Only
- C29 Notification Time EMS FARS Only
- C30 Arrival Time EMS FARS Only
- C31 EMS Time at Hospital FARS Only
- C32 Related Factors Crash Level

C33 - Interstate Highway - CRSS Only

C34 - Stratum - CRSS Only

C35 - Police Jurisdiction - CRSS Only

Additional State Information

C3 - Number of Forms Submitted for Persons Not in Motor Vehicles

FORMAT: 2 numeric

SAS NAME: Accident.PEDS

ELEMENT VALUES:

Codes	Attributes
00-99	Actual Number

Definition: This element records the number of Person Level (Not a Motor Vehicle Occupant) forms that are applicable to this case.

Remarks: This count will match exactly the people counted in the case structure field "Number of Persons Not in Motor Vehicles." Occupants of any motor vehicle in-transport, parked/stopped off roadway motor vehicles, working motor vehicles, or motor vehicles in motion outside the trafficway will **not** be counted in this field.

The count for this field includes:

- 1. Occupants of a Non-Motor Vehicle Transport Device (people riding in an animal-drawn conveyance, on an animal, injured occupants of railway trains) PERSON TYPE code 04.
- 2. Pedestrians, Bicyclists, and Other Cyclists PERSON TYPE codes 05, 06, and 07.
- 3. People on Personal Conveyances (i.e., skaters, wheelchair occupants) <u>PERSON TYPE</u> *codes 11-13*.
- 4. Any injured people **outside** the trafficway that are not in a motor vehicle (in buildings) PERSON TYPE *code* **10** (**Persons In/On Buildings**).

Error ID	IF	THEN
5Y0F	FIRST HARMFUL EVENT equals 08, 09, 15,	NUMBER OF FORMS SUBMITTED FOR PERSONS NOT IN MOTOR VEHICLES must not equal 00.
CSI4	NUMBER OF FORMS SUBMITTED FOR PERSONS NOT IN MOTOR VEHICLES must equal the actual number of persons not in motor vehicles in this case.	
PB34	NUMBER OF FORMS SUBMITTED FOR PERSONS NOT IN MOTOR VEHICLES equals 01, and FIRST HARMFUL EVENT equals 08, and RELATION TO JUNCTION (b) equals 02,	PEDESTRIAN/BIKE TYPING -CRASH TYPE - PEDESTRIAN must not equal 320, 330, 360, 680, 830, 890, 900, or 910.

Error ID	IF	THEN
PB35	NUMBER OF FORMS SUBMITTED FOR PERSONS NOT IN MOTOR VEHICLES equals 01, and FIRST HARMFUL EVENT equals 08, and RELATION TO JUNCTION (b) equals 02,	PEDESTRIAN/BIKE TYPING -CRASH LOCATION - PEDESTRIAN must equal 1.
PBA8	NUMBER OF FORMS SUBMITTED FOR PERSONS NOT IN MOTOR VEHICLES equals 1, and the FIRST HARMFUL EVENT equals 08, 09, or 15, and NON-MOTORIST LOCATION AT TIME OF CRASH equals 01 or 02;	RELATION TO JUNCTION (SPECIFIC LOCATION) must equal 3.

C4 - Number of Vehicle Forms Submitted

FORMAT: 3 numeric

SAS NAME: Accident.VE_TOTAL

ELEMENT VALUES:

Codes	Attributes
001-999	Actual Number

Definition: This element records all contact motor vehicles that the officer has reported on the police crash report as a unit involved in the crash.

Remarks: Included are in-transport vehicles, not in-transport vehicles (parked/stopped off roadway/ working motor vehicles), or vehicles located outside the trafficway boundaries.

When identifying contact vehicles for this count:

- 1. Remember all vehicles that are part of the unstabilized situation are part of the crash. Therefore, when recording the number of vehicles involved, the vehicles need not make contact with one another. They need only have a harmful event as part of the unstabilized situation. For example, two vehicles are traveling through an intersection when a pedestrian steps into the roadway. The first vehicle strikes the pedestrian and the second vehicle swerves to avoid the first, loses control, and overturns. Both vehicles in this situation are "contact" vehicles; therefore, this is a two-vehicle crash.
- 2. Even though there are no injuries in the vehicle, or the amount of damage sustained is below the State threshold, if the vehicle is involved in a harmful event it is still a contact vehicle within the entire crash and should be included in this count even if the vehicle information section is not completed on the police crash report.

See the *Coding Guide: Involved Vehicles and Contact Vehicles* for helpful information.

IMPORTANT:

Remember, you must have **at least one Motor Vehicle In-Transport** involved in the crash for this to be a reportable case.

Error ID	IF	THEN
050P	PERSON TYPE equals 04-07, 10-19, and NUMBER OF VEHICLE FORMS SUBMITTED equals 001,	VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST must equal 001.
1A0P	RELATED FACTORS-CRASH LEVEL equals θ 14,	NUMBER OF VEHICLE FORMS SUBMITTED must be greater than 001.
2Z0F	any SEQUENCE OF EVENTS equals 12, 14, 45, 54, 55,	NUMBER OF VEHICLE FORMS SUBMITTED must be greater than 001.
428P	CRASH TYPE equals 20-91,	NUMBER OF VEHICLE FORMS SUBMITTED must be greater than 001.
429P	NUMBER OF VEHICLE FORMS SUBMITTED equals 001,	CRASH TYPE must equal 00, 01-16, 92, 98, 99.
42AP	NUMBER OF MOTOR VEHICLES FORMS SUBMITTED equals 001, and RELATION TO TRAFFICWAY equals 02, 04, 06-08, 12, and ATTEMPTED AVOIDANCE MANEUVER equals 00 or 01,	CRITICAL EVENT - PRECRASH (EVENT) should equal 01-06, 08-14, or 19.
670F	FIRST HARMFUL EVENT equals 12, 14, 45, 54, 55,	NUMBER OF VEHICLE FORMS SUBMITTED must be greater than 001.
A080	DRIVER PRESENCE equals 0, and FIRST HARMFUL EVENT equals 12, and NUMBER OF VEHICLE FORMS SUBMITTED equals 002,	one RELATED FACTORS-DRIVER LEVEL should equal 0 20 or 0 54.
A090	NUMBER OF VEHICLE FORMS SUBMITTED is greater than 001,	there should be at least one vehicle with TRAVEL SPEED of 001-151, 997-999, or blanks.
A091	NUMBER OF VEHICLE FORMS SUBMITTED is greater than one, and CRITICAL EVENT – PRECRASH (EVENT) equals 70-73,	TRAFFICWAY DESCRIPTION should equal 0 for at least one other vehicle in the crash.
AZDQ	DRIVER MANEUVERED TO AVOID equals 04,	NUMBER OF VEHICLE FORMS SUBMITTED must be greater than 001.
CSI1	NUMBER OF VEHICLE FORMS must equal the actual number of VEHICLE LEVEL FORMS for this case.	
CSI2	There must be exactly one DRIVER LEVEL FORM corresponding to each VEHICLE LEVEL FORM.	
V594	RELATED FACTORS - VEHICLE LEVEL equals 029,	NUMBER OF VEHICLE FORMS SUBMITTED must be greater than 002.

Consistency Checks (FARS Only) (See Section 400):

Error ID	IF	THEN
431P	NUMBER OF VEHICLE FORMS SUBMITTED equals 002, and UNDERRIDE/OVERRIDE equals 1-8, 9 for one vehicle,	UNDERRIDE/OVERRIDE for the other vehicle must equal 0.
432P	NUMBER OF VEHICLE FORMS SUBMITTED equals 001,	UNDERRIDE/OVERRIDE must equal 0.

C5 - Number of Motor Vehicle Occupant Forms Submitted

FORMAT: 3 numeric

SAS NAME: Accident.PERSONS

ELEMENT VALUES:

Codes	Attributes
000-999	Actual Number

Definition: This element records the number of Person Level (Motor Vehicle Occupant) forms that are applicable to this case.

Remarks: This element is derived when structuring the case. See <u>203. How to Structure a Case</u> section for remarks.

Error ID	Error Message
CSI3	NUMBER OF MOTOR VEHICLE OCCUPANT FORMS SUBMITTED must equal the actual number of Person Level (Motor Vehicle Occupant) forms for this case.

C6 - County / C7 City - FARS Only

FORMAT: one set 3 numeric, one set 4 numeric

SAS NAME: Accident.COUNTY, Person.COUNTY, Accident.CITY

ELEMENT VALUES:

County:

Codes	Attributes
000	Not Applicable
001-996	GSA Codes
997	Other
998	Not Reported
999	Unknown

City:

Codes	Attributes
0000	Not Applicable
0001-9996	GSA Codes
9997	Other
9898	Not Reported
9999	Unknown

Definition: This element refers to the location of the unstabilized event with regard to the County/City.

Remarks: COUNTY and CITY are considered one field. Both must be submitted at the same time.

If COUNTY only is known, CITY may be 9999 (Unknown).

Code CITY as **0000** (Not Applicable) if the crash does not occur within city limits.

Code CITY as 9997 (Other) if CITY is other than those given by the GSA Codes.

Code CITY as **9999** (Unknown) if crash location is unknown.

Code COUNTY as 997 (Other) if COUNTY is other than those given by the GSA Codes.

Code COUNTY as 999 (Unknown) if location is unknown.

In general, 000 and 0000 (Not Applicable) should be used when there is no GSA code for the crash location.

997 and 9997 (Other) should be used when the Analyst knows there is a GSA code for the location, but the attribute does not appear on the master GSA code list provided by NHTSA Headquarters. Both situations should be reported to NHTSA Headquarters.

998 and 9898 (Not Reported)

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "Not Reported." *Check to see if "Unknown" is more appropriate for the situation*.

Code **Not Reported** in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).

Error ID	IF	THEN
200P	CITY is greater than 0000 and less than 9997, and COUNTY is greater than 000 and less than 997,	COUNTY and CITY must be valid codes for the STATE.
210P	CITY is greater than 0000 and less than 9997,	COUNTY must not equal 999.

C8 - Crash Date

FORMAT: 2 sets of 2 numeric and 1 set of 4 numeric

SAS NAME: Accident.DAY, Vehicle.DAY, Person.DAY, Parkwork.PDAY, Accident.MONTH, Accident.DAY_WEEK, Accident.YEAR, Vehicle.MONTH, Person.MONTH, Parkwork.PMONTH

ELEMENT VALUES:

Codes	Attributes
01-12	Month
01-31	Day (FARS ONLY)
Current (<i>prefilled</i>)	Year

Definition: This element identifies the date on which the crash occurred.

Remarks: If the police crash report indicates that the crash (usually a hit-and-run) occurred between some p.m. and a.m. time (e.g., 8:00 p.m. and 6:00 a.m.) on either a preceding or following day, code the crash as occurring on the following day. If a range of days is indicated (e.g., between Sunday and Friday), code the last date of the range (e.g., Friday).

FARS SPECIAL INSTRUCTION:

In cases where the crash date is reported as Unknown on the police crash report, refer to the death certificate for the death date to establish the crash date.

CRSS SPECIAL INSTRUCTION:

The date of the crash is rolled up from CRSS sampling program.

If the date of the crash is unknown, use the date the crash was reported. If the <u>time of the crash</u> is unknown, record the time as 9999.

If the month cannot be determined from the police crash report, enter the month of the Ending Contact Date from the Inventory Record.

If the crash date on the police crash report does not match the crash date shown on the data entry screen and it is determined that the crash date on the police crash report is correct, the crash date is corrected.

Error ID	IF	THEN
170F	CRASH MONTH equals current month,	CRASH DAY should be at least 2 days prior to current day or 99.
1C0P	the VEHICLE MODEL YEAR is not equal to 9998 or 9999,	the VEHICLE MODEL YEAR must not be greater than CRASH YEAR plus ONE.

Error ID	IF	THEN
921P	NCSA MAKE is not 97, 98, 99, and equals, and NCSA MODEL equals,	VEHICLE MODEL YEAR must equal, or CRASH YEAR plus 1.
A030	CRASH MONTH equals 05-09,	ATMOSPHERIC CONDITIONS should not equal 03, 04, 11, 12.
A040	CRASH MONTH equals 05-09,	ROADWAY SURFACE CONDITIONS should not equal 03, 04, 10.
A041	CRASH MONTH equals 05-09,	SEQUENCE OF EVENTS, FIRST HARMFUL EVENT, MOST HARMFUL EVENT should not equal 48.
FP4F	CRASH DATE is blank,	case status is flawed.
V620	CRASH MONTH is between January and March,	the VEHICLE MODEL YEAR should NOT be greater than the CRASH YEAR unless it equals 9998 or 9999 (contact Coding Assistance through the CDAN Helpdesk.).
VP05	vPIC MAKE is not 99997, 99998, 99999, and equals, and vPIC MODEL equals,	VEHICLE MODEL YEAR must equal, or CRASH YEAR plus 1.

Consistency Checks (FARS Only) (See Section 400):

Error ID	IF	THEN
3K0P	DATE OF <i>MOST RECENT</i> CRASH [Year], SUSPENSION, CONVICTION is not equal to 9999 and DATE OF <i>MOST RECENT</i> CRASH [Month], SUSPENSION, CONVICTION is not equal to 99,	DATE OF <i>MOST RECENT</i> CRASH, SUSPENSION, CONVICTION must be less than or equal to CRASH DATE.
3U1P	DEATH DATE equals CRASH DATE, and CRASH HOUR is not equal to 99,	DEATH HOUR must not be less than CRASH HOUR.
3U2P	DEATH DATE equals CRASH DATE, and DEATH HOUR equals CRASH HOUR and CRASH MINUTE is not equal to 99,	DEATH MINUTE must not be less than CRASH MINUTE.
4V1F	INJURY SEVERITY equals 4,	DEATH DATE and DEATH TIME for this person must be within 720 hours of the CRASH DATE and CRASH TIME.
4V2F	CRASH MONTH equals 12, and DEATH MONTH equals 01,	DEATH YEAR must equal CRASH YEAR plus 1.
4V3F	CRASH MONTH equals 12,	DEATH MONTH must equal 01, 12, 88, 99.
4V4F	CRASH MONTH equals 02-11, and DEATH MONTH is not equal to 88 or 99,	DEATH MONTH must equal CRASH MONTH or CRASH MONTH plus 1.

Error ID	IF	THEN
4V5F	CRASH MONTH equals 01, and DEATH MONTH is not equal to 88 or 99,	DEATH MONTH must equal CRASH MONTH or CRASH MONTH plus 1 or CRASH MONTH plus 2.
5K0P	The Year of DATE OF <i>OLDEST</i> CRASH, SUSPENSION, CONVICTION must be within five years of the Year of CRASH DATE.	
6V0P	DEATH DATE must not be less than CRASH DATE.	
7V0F	DEATH YEAR equals 9999,	CRASH MONTH must not be 01-11.
P520	CRASH DATE and DEATH DATE are the same, and CRASH TIME and DEATH TIME are the same,	TRANSPORTED TO FIRST MEDICAL FACILITY BY should equal 0 and DIED AT SCENE/EN ROUTE should equal 7.

C9 - Crash Time

FORMAT: 4 numeric

SAS NAME: Accident.HOUR, Accident.MINUTE, Vehicle.HOUR, Vehicle.MINUTE,

Person.HOUR, Person.MINUTE, Parkwork.PHOUR, Parkwork.PMINUTE

ELEMENT VALUES:

Codes	Attributes
0000- 2359	Valid military time (Code midnight as "0000")
9999	Unknown

Definition: This element identifies the time at which the crash occurred.

Remarks: Enter the time at which the crash occurred as shown on the police crash report. This is the preferred time in all cases. If the crash time is not reported, unknown, or known to be in error, then all available information in the case material should be used to determine CRASH TIME. If the hour cannot be determined, then enter **9999** (**Unknown**).

See the <u>Coding Guide: TIME: Crash Times, EMS Times, Death Times</u> for helpful information.

If the police crash report indicates the crash occurred during some time interval of greater than one hour (e.g., 8:00 p.m. to 6:00 a.m., or 8:00 a.m. to 5:00 p.m.), enter **9999** (**Unknown**). However, if the interval is one hour or less, code the midpoint of the interval.

Examples:

- 8:00 p.m. to 9:00 p.m., enter **2030**
- 8:30 p.m. to 9:30 p.m., enter **2100**
- 8:50 p.m. to 9:30 p.m., enter **2110**

When the time is available but a.m. versus p.m. is not shown on the police crash report, base the time on <u>LIGHT CONDITION</u> (e.g., time is 10:00, LIGHT CONDITION is **2** (**Dark - Not Lighted**); code as **2200**).

AM - Starts at 00:00 Midnight

PM - Starts at 12:00 Noon

How to Code Midnight:

In general, code midnight as 0000 in military time. Midnight is considered to be the beginning of a new day rather than the end of a day. One minute after midnight is 12:01 and is coded as 0001. However, there may be confusion over which day the source is referring to when "midnight" is cited or referred to without explanation. Our practice may not be the practice followed in your sources; therefore, you must determine which part of the day for the crash date given is being considered in your sources. The following are examples of midnight time references that do not easily translate to FARS and CRSS times.

- "midnight"
- 12:00-midnight
- 24:00

End of Day:

If your data sources give you a <u>CRASH DATE</u> and are consistent in talking about the end of that day, when they give a non-translatable "midnight" time reference of the crash, then you should code Crash Time as 2359.

Beginning of Day:

If your sources give a <u>CRASH DATE</u> and are consistent in referring to the beginning or early moments of that day when they give a non-translatable "midnight" crash time, code "midnight" as **0000**.

FARS SPECIAL INSTRUCTION:

If the day of the crash and the day of EMS Notification do not have the same date, then be sure to use attribute <u>018</u> (<u>Date of Crash and Date of EMS Notification Were Not the Same Day</u>) in RELATED FACTORS - CRASH LEVEL.

CRSS SPECIAL INSTRUCTION:

The time of the crash is rolled up from CRSS sampling program. If the time of the crash is unknown, record the time as **9999** (**Unknown**).

If the time of the crash on the police crash report does not match the crash time shown on the data entry screen and it is determined that the crash time on the police crash report is correct, then the crash time should be changed to reflect the time listed on the police crash report.

Error ID	IF	THEN
ID		
220P	LIGHT CONDITION equals 4, and STATE is not equal to 02,	CRASH TIME must equal 0300-0900, 9999.
2300	LIGHT CONDITION equals 5, and STATE is not equal to 02,	CRASH TIME should equal 1600-2200, 9999.
A010	STATE equals 02, and LIGHT CONDITION equals 4,	CRASH TIME should equal 0300-1000, 9999.
A020	STATE equals 02, and LIGHT CONDITION equals 5,	CRASH TIME should equal 1500-2359, 9999.
A050	CRASH TIME equals 0900-1600,	LIGHT CONDITION should not equal 2-6.
A060	CRASH TIME equals 2300-0400,	LIGHT CONDITION should not equal 1, 4, 5, 9.
FP5F	CRASH TIME is blank,	case status is flawed.

Consistency Checks (FARS Only) (See Section 400):

Error ID	IF	THEN
3U1P	DEATH DATE equals CRASH DATE, and CRASH HOUR is not equal to 99,	DEATH HOUR must not be less than CRASH HOUR.
3U2P	DEATH DATE equals CRASH DATE, and DEATH HOUR equals CRASH HOUR and CRASH MINUTE is not equal to 99,	DEATH MINUTE must not be less than CRASH MINUTE.
4V1F	INJURY SEVERITY equals 4,	DEATH DATE and DEATH TIME for this person must be within 720 hours of the CRASH DATE and CRASH TIME.
A070	NOTIFICATION TIME EMS is not 8888, 9998, or 9999,	NOTIFICATION TIME EMS should not be more than 120 minutes later than CRASH TIME.
E09P	ARRIVAL TIME EMS equals 0000-2359, CRASH TIME-hour equals ARRIVAL TIME EMS-hour, and ARRIVAL TIME EMS-minute is greater than CRASH TIME-minute,	NOTIFICATION TIME EMS-hour should not equal 99.
P520	CRASH DATE and DEATH DATE are the same, and CRASH TIME and DEATH TIME are the same,	TRANSPORTED TO FIRST MEDICAL FACILITY BY should equal 0 and DIED AT SCENE/EN ROUTE should equal 7.
P56P	DIED AT SCENE/EN ROUTE equals 7,	DEATH TIME should be within 30 minutes of the CRASH TIME.

C10 - Trafficway Identifier - FARS Only

FORMAT: 2 sets, 30 alphanumeric

SAS NAME: Accident.TWAY_ID, Accident.TWAY_ID2

ELEMENT VALUES:

Codes	Attributes
	Actual Posted Number, Assigned Number, or Common Name (if no posted or assigned number) except:
9s	Unknown

Definition: This element captures the identity (name) of the trafficway on which the crash occurred.

Remarks:

For Non-Junction Crashes:

Code the TRAFFICWAY IDENTIFIER from the police crash report or highway department in the top row. Leave the bottom row blank.

For Intersection Crashes (Not Within an Interchange Area):

Code the TRAFFICWAY IDENTIFIER for the trafficway with the highest function class in the top row. Code the second TRAFFICWAY IDENTIFIER at the intersection, if provided by the police, in the bottom row. If the vehicles are traveling on different roadways of equal class, assign the crash to the roadway on which the motor vehicle precipitating the crash is traveling and record this roadway in the top row.

For Intersection-Related Crashes (Not Within an Interchange Area):

Code the TRAFFICWAY IDENTIFIER for the trafficway provided by the police in the top row. This does not necessarily have to be the highest functional class. In all cases, this will be the trafficway where the <u>FIRST HARMFUL EVENT</u> occurred, or the Unstabilized Situation began. Code the second TRAFFICWAY IDENTIFIER at the intersection, if provided by the police, in the bottom row.

For Intersection Crashes Within an Interchange Area:

If the <u>FIRST HARMFUL EVENT</u> occurs within the intersection of a ramp and the surface roadway:

- Code the TRAFFICWAY IDENTIFIER provided on the police report or highway log in the top row (this does not necessarily have to be the highest function class).
- Code <u>ROUTE SIGNING</u> for the trafficway in the top row.
- It is important to code the <u>LAND USE AND FUNCTIONAL SYSTEM</u>, <u>OWNERSHIP</u>, and <u>NATIONAL HIGHWAY SYSTEM</u> for the highest class of trafficway at this intersection.

• Use the bottom row to record the second TRAFFICWAY IDENTIFIER provided by the police for this intersection.

For Intersection-Related Crashes Within an Interchange Area:

Code the TRAFFICWAY IDENTIFIER for the trafficway provided by the police in the top row. In many cases, this will be the trafficway where the <u>FIRST HARMFUL EVENT</u> occurred or the Unstabilized Situation began. Code the second TRAFFICWAY IDENTIFIER at the intersection, if provided by the police, in the bottom row.

For Ramp Crashes:

If the crash occurs on the ramp or is related to the ramp, include the word "RAMP" and/or the ramp ID number after the trafficway's identifier (e.g., I-10 RAMP).

General Guidelines for Coding Trafficway Identifier:

This data is obtained from the State Highway Department, or if same as that used by the State Highway Department, from the police crash report. Enter all alphabetic characters with **CAPITAL LETTERS**. If less than 30 characters, left-justify and do not zero-fill.

- Use <u>standard USPS abbreviations</u> for the street name suffix (ex. AVE, BLVD, CT, FWY). Do not include punctuation at the end of the suffix abbreviation.
- Do not enter the street address where the crash occurred. For example, 245 Elm St. would be entered as ELM ST in *RBIS*.
- Do not enter milepoints here following the trafficway even if provided on the report. Milepoints are entered in the element MILEPOINT.
- Do not enter a cross street referenced by the investigating officer for a **non-junction** crash. For example, if the report states, "the crash occurred on Main Street, 0.6 miles south of Girard Avenue," Girard Avenue does not go in TRAFFICWAY IDENTIFIER 2. TRAFFICWAY IDENTIFIER 2 is reserved for intersection and intersection-related crashes.
- If a trafficway is known to have both a route identifier and a common name record the route identifier first followed by the common name (Example: State Route 3 is also Indian Head Highway and would be coded as SR-3 INDIAN HEAD HWY).

Obtained from the State Highway Department, or if same as that used by the State Highway Department, from the police crash report.

- If <u>ROUTE SIGNING</u> is **1** (**Interstate**), you must enter "I-" in the first two spaces of TRAFFICWAY IDENTIFIER.
- If <u>ROUTE SIGNING</u> is **2** (**US Highway**), you must enter "US-" in the first three spaces of TRAFFICWAY IDENTIFIER.
- If <u>ROUTE SIGNING</u> is **3** (**State Highway**), you must enter "SR-" in the first three spaces of TRAFFICWAY IDENTIFIER.
- If <u>ROUTE SIGNING</u> is **4** (**County Road**), you must enter "CR-" in the first three spaces of TRAFFICWAY IDENTIFIER followed by the route number OR name if there is no number.

Immediately after the route designation (I-, US-, or SR-), you should enter the corresponding highway number. For example, Interstate 70 should be coded as "I-70" and US 66 should be coded as "US-66." You must use a dash in the highway designation between the capital letters and the number.

If one trafficway is both a State Highway and an Interstate Highway, <u>ROUTE SIGNING</u> must always be coded "1-Interstate." You should always try to obtain the route number and milepoint that correspond to the Route Signing (Interstate).

a) If the TRAFFICWAY IDENTIFIER and <u>MILEPOINT</u> are available for only the State Highway then code <u>ROUTE SIGNING</u> as **1** (**Interstate**), enter "I-" in the first two spaces of TRAFFICWAY IDENTIFIER followed by the full State Highway Identifier as normal (including any letters.) Code the State Highway Milepoint under the element <u>MILEPOINT</u>.

Example: If California 215 is also Interstate 15, then code "I-SR215" or "I-CA215."

b) If the TRAFFICWAY IDENTIFIER and <u>MILEPOINT</u> are available for both the State Highway and the Interstate Highway, enter "I-" in the first two spaces of TRAFFICWAY IDENTIFIER followed by the Interstate number. You may then also enter the State Highway Identifier anywhere after the Interstate route number. Code the Interstate Milepoint under the element <u>MILEPOINT</u>.

Example: "I-15 SR215" or "I-15 CA215"

Similarly, if a State Highway is also a U.S. Highway, <u>ROUTE SIGNING</u> must always be coded "2-US Highway." You should always try to obtain the route number and milepoint that correspond to the Route Signing (US Highway).

a) If the TRAFFICWAY IDENTIFIER and MILEPOINT are available only for the State Highway, then code ROUTE SIGNING as 2 (US Highway), enter "US-" in the first three spaces of TRAFFICWAY IDENTIFIER followed by the full State Highway Identifier as normal (including any letters). Code the State Highway Milepoint under the element MILEPOINT.

Example:

If Florida Route 25 is also US Route 27, then code "US-SR25" or "US-FL25."

b) If the TRAFFICWAY IDENTIFIER and MILEPOINT are available for both the U.S. Highway and the State Highway, enter "US-" in the first three spaces of TRAFFICWAY IDENTIFIER followed by the U.S. route number. You may then also enter the State Highway Identifier anywhere after the U.S. route number. Code the U.S. Route Milepoint under the element MILEPOINT.

Example:

"US-27 SR25" or "US-27 FL25"

Overlapping Roadways of Equal Function Class

For situations where you are presented with a roadway with two equal functional class identifiers for the same roadway, such as a stretch of roadway that is both US-10 and US-25, record both trafficways in TRAFFICWAY IDENTIFIER #1 using the "slash" format. The lower number

trafficway should appear before the slash (e.g., "US-10/25"). This would also apply to Interstates, State, and County roadways with two designations of equal class.

Other Land Ways (e.g., alleys, parking lot ways)

Crashes that occur on *alleys*, parking lot ways, or privately-owned land ways open to the public for transportation will likely not be named in the State Highway Department inventory. If the police provide a name for this trafficway, use that name. If, however, you are provided a street address OR the name of the adjacent trafficway (i.e., not the location where the crash occurred) OR the location information is blank, enter "NONE."

Alley: A land way providing vehicular access, in general, as a narrow lane between houses or buildings to the rear of those houses or buildings; some of which may further serve as access to a driveway. This also includes the land ways between or behind buildings that connect several lots to the main trafficway. Alleys are trafficways when they serve this function.

Parking Lot: See the <u>ANSI D 16.1 8th Edition</u>, Section 2.5.22 for the definition of Parking Lot, and the included areas of parking stalls, lot aisles, and lot ways. Parking stalls and lot aisles are not trafficways. Parking lot ways in parking lots open to the public are considered trafficways. To be a parking lot way, the paved area should have at least one outlet to another trafficway. In parking lots, features common to other trafficways including crosswalks, traffic controls (signs or signals), and lane lines are indications of a parking lot way.

Error ID	IF	THEN
1F1P	RELATION TO JUNCTION (b) does not equal 02, 03,	the second TRAFFICWAY IDENTIFIER should be blank.
340P	ROUTE SIGNING equals 1,	the first position of TRAFFICWAY IDENTIFIER #1 must be "I" and the second position must be "-".
341P	the first position of TRAFFICWAY IDENTIFIER No. 1 equals "I" and the second position equals "-",	ROUTE SIGNING must equal 1 or 7.
350P	ROUTE SIGNING is 2,	the first two positions of TRAFFICWAY IDENTIFIER No. 1 must be "US" and the third position must be "-".
351P	the first two positions of TRAFFICWAY IDENTIFIER #1 equals "US" and third position equals "-",	ROUTE SIGNING must equal 2 or 7.
360P	ROUTE SIGNING equals 3,	the first two positions of TRAFFICWAY IDENTIFIER No. 1 must be "SR" and the third position must be "-".
361P	the first two positions of TRAFFICWAY IDENTIFIER #1 equals "SR" and third position equals "-",	ROUTE SIGNING must equal 3 or 7.

Error ID	IF	THEN
362P	ROUTE SIGNING equals 4,	the first two positions of TRAFFICWAY IDENTIFIER #1 must be "CR" and the third position must be "-".
781P	TYPE OF INTERSECTION equals 02-07, 10, or 11,	TRAFFICWAY IDENTIFIER (b) should not be blank.
AC0A	RELATION TO JUNCTION (b) equals 02, 03,	the second TRAFFICWAY IDENTIFIER should not be all blank.

C11 - Route Signing - FARS Only

FORMAT: 1 numeric

SAS NAME: Accident.ROUTE

ELEMENT VALUES:

Codes	Attributes
1	Interstate
2	US Highway
3	State Highway
4	County Road
5	Local Street - Township
6	Local Street - Municipality
7	Local Street - Frontage Road
8	<u>Other</u>
9	Unknown

Definition: This element identifies the route signing of the trafficway on which the crash occurred. Code the value that represents the FHWA approved Land Use and Functional System. FHWA classification obtainable from the State Highway Department must be used. No other classification source is acceptable. Refer problems in obtaining the FHWA classification to the State DOT planning office.

Remarks: Before coding this element, be certain of which trafficway is to be coded. This element is coded with respect to the trafficway in the top row of <u>TRAFFICWAY IDENTIFIER</u>. If there is any question, refer to the remarks section of TRAFFICWAY IDENTIFIER for a hierarchy for selecting the appropriate trafficway to be coded.

CODING FRONTAGE ROADS

If the crash occurs on a frontage road that is part of a larger, higher order trafficway (such as Interstate, U.S. Highway, or State Route), use the following guideline to code the highway elements:

- Code <u>TRAFFICWAY IDENTIFIER</u> and <u>LAND USE AND FUNCTIONAL SYSTEM</u> (b) for the **01** (Interstate), **02** (Principal Arterial Other Freeways and Expressways), or **04** (Minor Arterial).
- Code ROUTE SIGNING 7 (Local Street Frontage Road).

Make sure to include the highway designation in TRAFFICWAY IDENTIFIER when using 7 (Local Street - Frontage Road). See TRAFFICWAY IDENTIFIER.

If the **Frontage Road** is a separate trafficway, code all highway elements for that trafficway. **Frontage Road** is not used.

8 (Other) is used for route signings other than those previously listed and would include **Other Limited Access**, **Other Major Artery**, and crashes that occur on parking lot ways or other privately owned landways open to the public for transportation.

Error ID	IF	THEN
260P	ROUTE SIGNING equals 1,	NATIONAL HIGHWAY SYSTEM must equal 1.
320P	LAND USE AND FUNCTIONAL SYSTEM (b) equals 01, and ROUTE SIGNING does not equal 7,	NATIONAL HIGHWAY SYSTEM must equal 1.
330P	NATIONAL HIGHWAY SYSTEM equals 0, 9,	ROUTE SIGNING must not equal 1.
340P	ROUTE SIGNING equals 1,	the first position of TRAFFICWAY IDENTIFIER #1 must be "I" and the second position must be "-".
341P	the first position of TRAFFICWAY IDENTIFIER No. 1 equals "I" and the second position equals "-",	ROUTE SIGNING must equal 1 or 7.
350P	ROUTE SIGNING is 2,	the first two positions of TRAFFICWAY IDENTIFIER No. 1 must be "US" and the third position must be "-".
351P	the first two positions of TRAFFICWAY IDENTIFIER #1 equals "US" and third position equals "-",	ROUTE SIGNING must equal 2 or 7.
360P	ROUTE SIGNING equals 3,	the first two positions of TRAFFICWAY IDENTIFIER No. 1 must be "SR" and the third position must be "-".
361P	the first two positions of TRAFFICWAY IDENTIFIER #1 equals "SR" and third position equals "-",	ROUTE SIGNING must equal 3 or 7.
362P	ROUTE SIGNING equals 4,	the first two positions of TRAFFICWAY IDENTIFIER #1 must be "CR" and the third position must be "-".
A280	ROUTE SIGNING equals 1,	SPECIAL JURISDICTION should not equal 1-5, 8, 9.
A290	ROUTE SIGNING equals 1, and RELATION TO JUNCTION (a) equals 0,	RELATION TO JUNCTION (b) should not equal 02-04, 06, 08, 16.
A291	RELATION TO JUNCTION (b) equals 07,	ROUTE SIGNING should not equal 5, 6.
A300	ROUTE SIGNING equals 1,	TRAFFICWAY DESCRIPTION should equal 2, 3, 6 for at least one vehicle.

Error ID	IF	THEN
A310	ROUTE SIGNING equals 1, and RELATION TO JUNCTION (a) equals 0,	TOTAL LANES IN ROADWAY should not equal 1 for any vehicle.
A320	ROUTE SIGNING equals 1, and RELATION TO JUNCTION (a) equals 0,	SPEED LIMIT should not equal 05-40 for any vehicle.
A330	ROUTE SIGNING equals 1, 2,	ROADWAY SURFACE TYPE should equal 1, 2, 8 for at least one vehicle.
A350	ROUTE SIGNING equals 1,	FIRST HARMFUL EVENT should not equal 10.
A360	RELATION TO JUNCTION(b) equals 07,	ROUTE SIGNING should not equal 4-8.
A700	SPEED LIMIT is greater than 65 for every vehicle and STATE NUMBER does not equal 48,	ROUTE SIGNING should equal 1-4.
A820	FIRST HARMFUL EVENT equals 46, and RELATION TO JUNCTION (a) equals 1, and RELATION TO JUNCTION (b) does not equal 02, 03, 05,	ROUTE SIGNING should not equal 1.
A840	ROUTE SIGNING equals 7,	LAND USE AND FUNCTIONAL SYSTEM (b) should equal 01-03.
A850	LAND USE AND FUNCTIONAL SYSTEM (b) equals 02, and ROUTE SIGNING equals 2,	NATIONAL HIGHWAY SYSTEM should equal 1.
A882	RELATION TO TRAFFICWAY equals 07,	ROUTE SIGNING should not equal 1.
A920	NATIONAL HIGHWAY SYSTEM equals 0, 9,	LAND USE AND FUNCTIONAL SYSTEM (b) should not equal 02, and ROUTE SIGNING should not equal 2.

C12 - Land Use and Functional System - FARS Only

FORMAT: 1 numeric occurring 1 time, 2 numeric occurring 1 time

SAS NAME: Accident.RUR_URB, Accident.FUNC_SYS

ELEMENT VALUES:

C12a: Land Use

Codes	Attributes
1	Rural
2	Urban
6	Trafficway Not in State Inventory
8	Not Reported
9	<u>Unknown</u>

C12b: Functional System

Codes	Attributes
01	Interstate
02	Principal Arterial - Other Freeways and Expressways
03	Principal Arterial - Other
04	Minor Arterial
05	Major Collector
06	Minor Collector
07	Local
96	Trafficway Not in State Inventory
98	Not Reported
99	<u>Unknown</u>

Definition (Land Use): The classification of the segment of the trafficway on which the crash occurred based on the Federal Highway Administration (FHWA) approved adjusted Census boundaries of small urban and urbanized areas.

Definition (Functional System): This element identifies the functional classification of the segment of the trafficway on which the crash occurred.

Remarks: Before coding this element, be certain of which trafficway is to be coded. This element is coded with respect to the trafficway selected in NATIONAL HIGHWAY SYSTEM, OWNERSHIP, ROUTE SIGNING, and in the top row of TRAFFICWAY IDENTIFIER. The exception would be an intersection crash in an interchange. Please see the remarks below and in TRAFFICWAY IDENTIFIER for a hierarchy for selecting the appropriate trafficway to be coded.

Code the value that represents the FHWA approved Land Use and Functional System. FHWA classification obtainable from the State Highway Department must be used. No other classification source is acceptable. Refer problems in obtaining the FHWA classification to the State DOT planning office.

Land Use:

- **6** (**Trafficway Not in State Inventory**) is used when a qualifying motor vehicle traffic crash occurs on a trafficway that is not included in the State highway inventory. Examples include crashes that occur on parking lot ways or other privately owned landways open to the public for transportation.
- 8 (Not Reported) is used when the crash occurred on a reportable trafficway but the information to record LAND USE is missing or unavailable. *Check to see if 9 (Unknown) is more appropriate for the situation.*
- **9** (Unknown) is used when the crash occurred on a reportable trafficway, but it is unknown if the crash location is within the boundaries of an urban area. If LAND USE is unknown, FUNCTIONAL SYSTEM, OWNERSHIP and NATIONAL HIGHWAY SYSTEM can still be coded with known values. For example, it may be known that the crash occurred somewhere along on an interstate. Thus, the trafficway is owned by the State and is part of the NHS. However, it may not be known if the location was within urban boundaries or not.

Functional System:

- **96** (**Trafficway Not in State Inventory**) is used when a qualifying motor vehicle traffic crash occurs on a trafficway that is not included in the State highway inventory. Examples include crashes that occur on parking lot ways or other privately owned landways open to the public for transportation.
- **98** (Not Reported) is used when the crash occurred on a reportable trafficway but the information to record FUNCTIONAL SYSTEM is missing or unavailable. *Check to see if 99* (*Unknown*) is more appropriate for the situation.
- **99** (**Unknown**) is used when the crash occurred on a reportable trafficway, but the functional classification of the segment of the trafficway on which the crash occurred can't be determined or the applicable segment can't be determined. If FUNCTIONAL SYSTEM is unknown, LAND USE, <u>OWNERSHIP</u> and <u>NATIONAL HIGHWAY SYSTEM</u> can still be coded with a known value. For example, it may be known that the crash occurred within or outside urban boundaries (LAND USE). However, the trafficway may change classification along its length and the segment of the trafficway on which the crash occurred may not be known.

NON-JUNCTION CRASHES

Assign the crash to the trafficway on which the <u>FIRST HARMFUL EVENT</u> occurred. If the FIRST HARMFUL EVENT occurred on private property, assign the crash to the trafficway on which the vehicle was traveling when the Unstabilized Situation began.

INTERSECTION CRASHES (Not Within an Interchange)

In an at-intersection crash, assign the crash to the highest function class of trafficway at the intersection. If the vehicles are traveling on different roadways of equal class, assign the crash to the roadway on which the motor vehicle precipitating the crash is traveling.

INTERSECTION CRASHES (Within an Interchange)

Interchange crashes that occur in an intersection of a ramp that connects a higher and a lower class trafficway should be assigned to the highest-class trafficway. For example: vehicle #1 strikes vehicle #2 in the intersection of the I-270 ramp and US-10. Code FUNCTIONAL SYSTEM as **01** (Interstate).

Ramps are part of the highest class of trafficway to which they connect. Therefore, if a crash occurs on a ramp, including in the merge/diverge lanes, and it is not an Intersection crash, it is assigned to the highest class of trafficway to which the ramp connects. Example: vehicle #1 overturns on the ramp of I-270 and US-10. Code FUNCTIONAL SYSTEM **01** (Interstate). This includes intersection-related and entrance/exit ramp related crashes for RELATION TO JUNCTION.

OTHER CRASHES (Within an Interchange)

For other crashes that occur within an interchange, other than intersection crashes, code FUNCTIONAL SYSTEM for the trafficway on which the vehicles were traveling. Example, vehicle #1 strikes vehicle #2 on US-10 bridge within the I-270 interchange (not in the intersection of any ramp, or on any ramp). Code FUNCTIONAL SYSTEM for US-10 and not I-270.

QUESTIONABLE CASES

In any questionable case, the higher function class takes precedence.

Error ID	IF	THEN
1T0P	SPEED LIMIT for every vehicle is greater than 55, and not equal to 98 or 99,	LAND USE AND FUNCTIONAL SYSTEM (a) should not equal 2 or 6, and LAND USE AND FUNCTIONAL SYSTEM (b) should not equal 06, 07, or 96.
300P	NATIONAL HIGHWAY SYSTEM equals 0, 9,	LAND USE AND FUNCTIONAL SYSTEM (b) must not equal 01.
320P	LAND USE AND FUNCTIONAL SYSTEM (b) equals 01, and ROUTE SIGNING does not equal 7,	NATIONAL HIGHWAY SYSTEM must equal 1.
A110	FIRST HARMFUL EVENT equals 10,	LAND USE AND FUNCTIONAL SYSTEM (b) should not equal 01-03.
A11A	FUNCTIONAL SYSTEM (b) equals 01,	OWNERSHIP must equal 01 or 31.
A12A	either FUNCTIONAL SYSTEM (b) or OWNERSHIP equals 96,	both must equal 96.

Error ID	IF	THEN
A13A	LAND USE (a) equals 6,	FUNCTIONAL SYSTEM (b) must equal 96.
A14A	FUNCTIONAL SYSTEM (b) equals 96,	LAND USE a must equal 6.
A150	LAND USE AND FUNCTIONAL SYSTEM (b) equals 01, 02, and RELATION TO JUNCTION (a) equals 0,	RELATION TO JUNCTION (b) should not equal 02-04, 06, 08.
A15A	FUNCTIONAL SYSTEM (b) equals 99,	LAND USE (a) should equal 9, OWNERSHIP should equal 99, and NATIONAL HIGHWAY SYSTEM should equal 9.
A160	LAND USE AND FUNCTIONAL SYSTEM (b) equals 01-06,	ROADWAY SURFACE TYPE should equal 1, 2, 8, or 9 for at least one vehicle.
A16A	FUNCTIONAL SYSTEM equals 1, and STATE does not equal 02, and RELATION TO JUNCTION equals 01, 07, 18, or 19,	TRAFFICWAY DESCRIPTION should equal 2 or 3.
A170	ROADWAY SURFACE TYPE equals 3-5 for every vehicle,	LAND USE AND FUNCTIONAL SYSTEM (b) should not equal 01-06.
A180	LAND USE AND FUNCTIONAL SYSTEM (b) equals 01,	SPECIAL JURISDICTION should not equal 1-5, 8, 9.
A190	LAND USE AND FUNCTIONAL SYSTEM (b) equals 02,	SPECIAL JURISDICTION should not equal 4.
A200	RELATION TO JUNCTION (b) equals 07,	LAND USE AND FUNCTIONAL SYSTEM (b) should not equal 06, 07, or 96.
A210	LAND USE AND FUNCTIONAL SYSTEM (b) equals 01, 02, and RELATION TO JUNCTION (a) equals 0,	TRAFFIC CONTROL DEVICE should not equal 01-04, 07, 20, 23, 40, 50, 65.
A220	LAND USE AND FUNCTIONAL SYSTEM (b) equals 01, 02, and RELATION TO JUNCTION (a) equals 0,	SPEED LIMIT should not equal 05-40 for any vehicle.
A230	SEQUENCE OF EVENTS equals 10,	LAND USE AND FUNCTIONAL SYSTEM (b) should not equal 01-03.
A240	LAND USE AND FUNCTIONAL SYSTEM (b) equals 01, and RELATION TO JUNCTION (a) equals 0,	TRAVEL SPEED should not equal 005-040 for any vehicle.
A250	LAND USE AND FUNCTIONAL SYSTEM (b) equals 01-03, and RELATION TO JUNCTION (a) equals 1, and RELATION TO JUNCTION (b) does not equal 03, 05, 20,	TOTAL LANES IN ROADWAY should not equal 1 for the vehicles involved in the FIRST HARMFUL EVENT.
A720	LAND USE AND FUNCTIONAL SYSTEM (b) equals 01, 02,	TRAFFICWAY DESCRIPTION should equal 2, 3, 6 for at least one vehicle.

Error ID	IF	THEN
A810	FIRST HARMFUL EVENT equals 46, and RELATION TO JUNCTION (a) equals 1, and RELATION TO JUNCTION (b) does not equal 02, 03, 05,	LAND USE AND FUNCTIONAL SYSTEM (b) should not equal 01.
A840	ROUTE SIGNING equals 7,	LAND USE AND FUNCTIONAL SYSTEM (b) should equal 01-03.
A850	LAND USE AND FUNCTIONAL SYSTEM (b) equals 02, and ROUTE SIGNING equals 2,	NATIONAL HIGHWAY SYSTEM should equal 1.
A860	NATIONAL HIGHWAY SYSTEM equals 1,	LAND USE AND FUNCTIONAL SYSTEM (b) should equal 01-03.
A883	RELATION TO TRAFFICWAY equals 07,	LAND USE AND FUNCTIONAL SYSTEM (b) should not equal 01.
A900	SPEED LIMIT equals 60 <i>or</i> 65 for every vehicle and STATE NUMBER does not equal <i>20 or</i> 48,	LAND USE AND FUNCTIONAL SYSTEM (b) should not equal 04-07 or 96.
A910	LAND USE AND FUNCTIONAL SYSTEM (b) equals 04-07 or 96,	NATIONAL HIGHWAY SYSTEM should equal 0, 9.
A920	NATIONAL HIGHWAY SYSTEM equals 0, 9,	LAND USE AND FUNCTIONAL SYSTEM (b) should not equal 02, and ROUTE SIGNING should not equal 2.
U684	UNLIKELY: LAND USE (a) equals 8.	
U685	UNLIKELY: FUNCTIONAL SYSTEM (b) equals 98.	
U686	UNLIKELY: LAND USE and FUNCTIONAL SYSTEM (a/b) equals 9, 99.	

C13 - Ownership - FARS Only

FORMAT: 2 numeric

SAS NAME: Accident.RD_OWNER

ELEMENT VALUES:

Codes	Attributes
01	State Highway Agency
02	County Highway Agency
03	Town or Township Highway Agency
04	City or Municipal Highway Agency
11	State Park, Forest, or Reservation Agency
12	Local Park, Forest, or Reservation Agency
21	Other State Agency
25	Other Local Agency
26	Private (other than RailRoad)
27	Railroad
31	State Toll Road
32	Local Toll Authority
40	Other Public Instrumentality (i.e., Airport)
50	Indian Tribe Nation
60	Other Federal Agency
62	Bureau of Indian Affairs
63	Bureau of Fish and Wildlife
64	US Forest Service
66	National Park Service
67	Tennessee Valley Authority
68	Bureau of Land Management
69	Bureau of Reclamation
70	Corps of Engineers
72	Air Force
74	Navy/Marines
80	Army
96	Trafficway Not in State Inventory
98	Not Reported
99	<u>Unknown</u>

Definition: This element identifies the entity that has legal ownership of the segment of the trafficway on which the crash occurred.

Remarks: Before coding this element, be certain of which trafficway is to be coded. This element is coded with respect to the trafficway selected in NATIONAL HIGHWAY SYSTEM, LAND USE AND FUNCTIONAL SYSTEM, ROUTE SIGNING, and in the top row of TRAFFICWAY IDENTIFIER. The exception would be an intersection crash in an interchange. Please see the remarks section of TRAFFICWAY IDENTIFIER for a hierarchy for selecting the appropriate trafficway to be coded.

Code the level of government that best represents the highway owner irrespective of whether agreements exist for maintenance or other purposes.

- "State" means owned by one of the 50 States, the District of Columbia, or the Commonwealth of Puerto Rico including quasi-official State commissions or organizations;
- "County, local, municipal, town, or township" means owned by one of the officially recognized governments established under State authority;
- "Federal" means owned by one of the branches of the U.S. Government or independent establishments, government corporations, quasi-official agencies, organizations, or instrumentalities;
- "Other" means any other group not already described above or nongovernmental organizations with the authority to build, operate, or maintain toll or free highway facilities.
- Only private roads that are open to public travel (e.g., toll bridges) are to be reported in HPMS.

96 (**Trafficway Not in State Inventory**) is used when a qualifying motor vehicle traffic crash occurs on a trafficway that is not included in the State highway inventory. Examples include crashes that occur on parking lot ways or other privately owned landways open to the public for transportation.

98 (Not Reported) is used when the crash occurred on a reportable trafficway but the information to record OWNERSHIP is missing or unavailable. *Check to see if 99* (*Unknown*) *is more appropriate for the situation*.

99 (Unknown) is used when the crash occurred on a reportable trafficway, but it can't be determined which entity has legal ownership of the segment of the trafficway on which the crash occurred or the applicable segment can't be determined. If OWNERSHIP is unknown, <u>LAND USE and FUNCTIONAL SYSTEM</u> and <u>NATIONAL HIGHWAY SYSTEM</u> can still be coded with known values. For example, it may be known that the crash occurred in an urban area on a minor collector that is not part of the NHS. However, the location detail may not be sufficient to determine OWNERSHIP (e.g., **03** (Town or Township Highway Agency) or **04** (City or Municipal Highway Agency)).

Federal Highway Administration classification obtainable from the State Highway Department must be used.

No other classification source is acceptable. Refer problems in obtaining the FHWA classification to the State DOT planning office.

Error ID	IF	THEN
A11A	FUNCTIONAL SYSTEM (b) equals 01,	OWNERSHIP must equal 01 or 31.
A12A	either FUNCTIONAL SYSTEM (b) or OWNERSHIP equals 96,	both must equal 96.
A15A	FUNCTIONAL SYSTEM (b) equals 99,	LAND USE (a) should equal 9, OWNERSHIP should equal 99, and NATIONAL HIGHWAY SYSTEM should equal 9.
U683	UNLIKELY: OWNERSHIP equals 98 or 99 unless STATE equals <i>06</i> , <i>12</i> , <i>or</i> 48.	

C14 - National Highway System - FARS Only

FORMAT: 1 numeric

SAS NAME: Accident.NHS

ELEMENT VALUES:

Codes	Attributes
0	This section IS NOT on the NHS
1	This section IS ON the NHS
9	Unknown if this section is on the NHS

Definition: This element identifies whether or not this crash occurred on a trafficway that is part of the National Highway System.

Remarks: The National Highway System includes the Interstate System and consists of principal arterial system routes and some Strategic Highway Network connectors functionally classified below principal arterial.

Federal Highway Administration classification obtainable from the State Highway Department must be used. No other classification source is acceptable. Refer problems in obtaining the FHWA classification to Regional State Assignee.

Error ID	IF	THEN
260P	ROUTE SIGNING equals 1,	NATIONAL HIGHWAY SYSTEM must equal 1.
300P	NATIONAL HIGHWAY SYSTEM equals 0, 9,	LAND USE AND FUNCTIONAL SYSTEM (b) must not equal 01.
320P	LAND USE AND FUNCTIONAL SYSTEM (b) equals 01, and ROUTE SIGNING does not equal 7,	NATIONAL HIGHWAY SYSTEM must equal 1.
330P	NATIONAL HIGHWAY SYSTEM equals 0, 9,	ROUTE SIGNING must not equal 1.
A15A	FUNCTIONAL SYSTEM (b) equals 99,	LAND USE (a) should equal 9, OWNERSHIP should equal 99, and NATIONAL HIGHWAY SYSTEM should equal 9.
A850	LAND USE AND FUNCTIONAL SYSTEM (b) equals 02, and ROUTE SIGNING equals 2,	NATIONAL HIGHWAY SYSTEM should equal 1.
A860	NATIONAL HIGHWAY SYSTEM equals 1,	LAND USE AND FUNCTIONAL SYSTEM (b) should equal 01-03.
A910	LAND USE AND FUNCTIONAL SYSTEM (b) equals 04-07 or 96,	NATIONAL HIGHWAY SYSTEM should equal 0, 9.

Error ID	IF	THEN
A920	NATIONAL HIGHWAY SYSTEM equals 0, 9,	LAND USE AND FUNCTIONAL SYSTEM (b) should not equal 02, and ROUTE SIGNING should not equal 2.

C15 - Special Jurisdiction - FARS Only

FORMAT: 1 numeric

SAS NAME: Accident.SP_JUR

ELEMENT VALUES:

Codes	Attributes
0	No Special Jurisdiction
1	National Park Service
2	Military
3	Indian Reservation
4	College/University Campus*
5	Other Federal Properties*
8	Other
9	Unknown

Definition: This element identifies if the location on the trafficway where the crash occurred qualifies as a Special Jurisdiction even though it may be patrolled by State, county, or local police (e.g., all State highways running through Indian reservations are under the jurisdiction of the Indian reservation).

Remarks: Road must be under the regulation of Special Jurisdiction, although it may be patrolled by State, county, or local police forces.

There is a difference between a National Park and National Forest. Only areas described as National Parks should be 1 (National Park Service). State parks should be coded as 8 (Other), and National Forests should be coded as 0 (No Special Jurisdiction).

State highways running through Indian Reservations must be coded as 3 (Indian Reservation).

* These values are unlikely occurrences and will raise an error flag.

Error ID	IF	THEN
A180	LAND USE AND FUNCTIONAL SYSTEM (b) equals 01,	SPECIAL JURISDICTION should not equal 1-5, 8, 9.
A190	LAND USE AND FUNCTIONAL SYSTEM (b) equals 02,	SPECIAL JURISDICTION should not equal 4.
A280	ROUTE SIGNING equals 1,	SPECIAL JURISDICTION should not equal 1-5, 8, 9.
U010	UNLIKELY: SPECIAL JURISDICTION equals 4 or 5.	

C16 - Milepoint - FARS Only

FORMAT: 5 numeric

SAS NAME: Accident.MILEPT

ELEMENT VALUES:

Codes	Attributes
0.0000	None
	Actual to Nearest Tenth Mile
9999.8	Not Reported
9999.9	Unknown

Definition: This element identifies the milepoint nearest to the location where the crash occurred.

Remarks: Refer to the remarks section under <u>LAND USE AND FUNCTIONAL SYSTEM</u> for the hierarchy of selecting the trafficway to be coded.

Code the MILEPOINT for the respective <u>TRAFFICWAY IDENTIFIER</u>. For crashes that occur on entrance or exit ramps use the milepoint associated with the ramp location with respect to the trafficway to which it belongs. When transitioning between two trafficways of equal functional class choose the milepoint of the exiting trafficway.

Obtained from the State Highway Department. Code the actual Milepoint to the nearest .1 mile with decimal. Right justify if less than 5 digits. For example, if Milepoint is 10, you must code "0010.0."

The Difference Between Mile POINTS and Mile POSTS:

Mile POINTS make up the length of a road. They are part of a State's official Linear Referencing System (LRS). Mile points are measurements of the road and are expressed in decimal format. This LRS is used for the State's official Trafficway Asset Management. This information can come ONLY from a State's DOT out of their official Roadway Inventory, Roadlog, or other Roadway information collection system; because, the physical mile POST may or may not align with the LRS mile POINT.

The Mile POST (sometimes called Mile Markers or Mile Post Markers) is the physical, numerical marker located on the roadside. This is typically the information located on police crash reports, as law enforcement frequently refer to the mile posts or mile markers when describing the location of an incident. **DO NOT CODE THE MILE POST.**

9999.8 (Not Reported) is used when the information to record MILEPOINT is not applicable, missing, or unavailable. Check to see if 0000.0 (None) or 9999.9 (Unknown) are more appropriate for the situation.

Consistency Checks (See Section 400):

Error ID	IF	THEN
U740	UNLIKELY: MILEPOINT is greater than 0500.0.	

C17 - Global Position

FORMAT: 8 numeric, 9 numeric

SAS NAME: Accident.LATITUDE, Accident.LONGITUD

ELEMENT VALUES:

Codes	Attributes
	Latitude (dd.mm.ss.ss) (degrees/minutes/seconds)
	Longitude (ddd.mm.ss.ss) (degrees/minutes/seconds)
7s	Not Reported
8s	Not Available
9s	Reported as Unknown

Definition: This element identifies the location of the crash using Global Position coordinates.

Remarks: "Global Position" refers to the geographic location of the crash. It is expressed in Degrees, Minutes, and Seconds of **Latitude**; and Degrees, Minutes, and Seconds of **Longitude**:

Latitude: dd mm ss.ss (Degrees/Minutes/Seconds)

Longitude: ddd mm ss.ss (Degrees/Minutes/Seconds)

In some instances, your source documents may display Longitude as a negative (-) number. You may disregard the minus (-) sign. Code the complete valid Latitude and Longitude if available, if not blank, and if not unknown. You must code valid Latitude or Longitude minutes and seconds when coding a valid value for Latitude or Longitude degrees (for example: Latitude - 38 99 99.99 is invalid).

Right-Justify Degrees and Minutes:

Note that **Longitude** Degrees can be up to three digits. Code Degrees less than three digits in the right-most positions and "0s" to the left. Code **Latitude** or **Longitude** Minutes less than two digits in the right-most position with "0s" to the left. Examples: Longitude "77 degrees - 7 minutes - no seconds" is coded 077 07 00.00; Longitude "80 degrees - no minutes - no seconds" is coded 080 00 00.00; Latitude "30 degrees - one minute - 30 seconds" is coded 30 01 30.00.

Latitude and Longitude Seconds:

Code the value of **Latitude** or **Longitude** Seconds to two significant places after the decimal. If the **Latitude** or **Longitude** Seconds precision is less than two decimal positions, enter "0s" in the right-most positions of Seconds. Always right-justify any data before the decimal point with added "0s" to the left (e.g., 5.1 seconds is 05.10 with no spaces before the decimal point).

A Geo-locator tool is available on RBIS to assist generating latitude and longitude when they are not available on the crash report or through State sources.

7s (Not Reported)

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "Not Reported." Check to see if 8s (Not Available) or 9s (Reported as Unknown) is more appropriate for the situation.

Code **7s** (**Not Reported**) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).

9s (**Reported as Unknown**) is selected if the investigating officer reported that the global position of the crash was not known.

FARS SPECIAL INSTRUCTION:

The State police crash report may include the geographic location in a format compatible with this element, or the State Highway Department may be able to provide it from a State Geographic Information System (GIS) or Global Positioning System (GPS).

CRSS SPECIAL INSTRUCTION:

Use location information provided on the crash report to pinpoint the crash location according to the Geolocator tool instructions. If the crash report does not provide enough information to pinpoint the location with the Geolocator tool, code as 7s (Not Reported).

Consistency Checks (See Section 400):

Error ID	IF	THEN
G01P	STATE is and GLOBAL POSITION - LATITUDE (degrees) is not equal to 77, 88, 99,	LATITUDE (degrees) must be equal to, or greater than (1d), and LATITUDE (degrees) must not be greater than (2d).
G02P	STATE is, and GLOBAL POSITION - LATITUDE (degrees) equals (<u>1d</u>),	LATITUDE (minutes) must be equal to, or greater than (1s).
G03P	STATE is, and GLOBAL POSITION - LATITUDE (degrees) equals (<u>2d</u>),	LATITUDE (minutes) must not be greater than $(2s)$.
G04P	STATE is and GLOBAL POSITION - LONGITUDE (degrees) is not equal to 777, 888, 999,	LONGITUDE (degrees) must be equal to, or greater than (3d), and LONGITUDE (degrees) must not be greater than (4d).
G05P	STATE is, and GLOBAL POSITION - LONGITUDE (degrees) equals (<u>3d</u>),	LONGITUDE (minutes) must be equal to, or greater than $(3s)$.
G06P	STATE is, and GLOBAL POSITION - LONGITUDE (degrees) equals (4d),	LONGITUDE (minutes) must not be greater than (4s).
G07P	any part of GLOBAL POSITION - LATITUDE (degrees, minutes, or seconds) is all 8s,	all parts of LATITUDE must be all 8s.

Error ID	IF	THEN
G08P	any part of GLOBAL POSITION - LONGITUDE (degrees, minutes, or seconds) is all 8s,	all parts of LONGITUDE must be all 8s.
G09P	any part of GLOBAL POSITION - LATITUDE (degrees, minutes, or seconds) is all 9s,	all parts of LATITUDE must be all 9s.
G0AP	any part of GLOBAL POSITION - LONGITUDE (degrees, minutes, or seconds) is all 7s,	all parts of LONGITUDE must be all 7s.
G0BP	any part of GLOBAL POSITION - LATITUDE (degrees, minutes, or seconds) is all 7s,	all parts of LATITUDE must be all 7s.
G10P	any part of GLOBAL POSITION - LONGITUDE (degrees, minutes, or seconds) is all 9s,	all parts of LONGITUDE must be all 9s.
G11P	any part of GLOBAL POSITION - LATITUDE (degrees, minutes, or seconds) is blank,	all parts of LATITUDE must be blank.
G12P	any part of GLOBAL POSITION - LONGITUDE (degrees, minutes, or seconds) is blank,	all parts of LONGITUDE must be blank.

C18 - Crash Events

FORMAT: Elements Completed in RBIS

SAS NAME: (See Below)

Definition: The Crash Events table records in chronological sequence, the set of events resulting from an unstabilized situation that constitutes a motor vehicle traffic crash.

Remarks: The "crash" is concluded in time when all events that originate from the unstabilized situation are stabilized. The Crash Events table is designed to provide a coded description of all qualifying events that occurred in the crash.

With this coded chronological sequence of qualified crash events, traffic safety analysts can review the entire series of events involving in-transport motor vehicles. Various areas of concern to the highway safety community can be easily assessed using this data. For instance, the injury severity in crashes can be assessed relative to the number and type of impacts involved. Likewise, certain collision configurations that may create a greater hazardous condition for the occupants can be identified. Other possible areas of analysis would be the mix of vehicles sizes or the types of objects the different classes of vehicles impact.

To complete the Crash Events table, each event for each vehicle is recorded in the order in which they occur, timewise, based on the description of the crash from the crash report narrative, diagram, or other relevant case material. Crash Events includes both harmful and non-harmful events that occur in the crash. Recording of Crash Events ends at the last harmful event of the entire crash. Therefore, a non-harmful event (e.g., Crossing the Centerline) that occurs following the last harmful event of the crash will not be included.

The Crash Events table is completed based on the actions of the in-transport motor vehicle(s) in the case. Consequently, other involved traffic units (parked motor vehicle, working motor vehicle, pedestrian, etc.) are only identified in the events for the in-transport motor vehicle that contacted it. If the crash report includes an event that involves only not in-transport motor vehicles and/or non-motorists, that specific event is not entered as an event in the coded crash sequence. Examples Include:

- Not in-transport vehicle impacts pedestrian, other not in-transport vehicle, or fixed object.
- Pedestrian or pedalcyclist impacts an object, a not in-transport vehicle, other non-motorist.

See the Coding Guide: Crash Events Table, Vehicle Placement for helpful information.

*Note: Data recorded in the Crash Events table is used to derive the following data elements:

- <u>FIRST HARMFUL EVENT (FHE</u>) the first injury or damage producing event in each crash.
- <u>AREAS OF IMPACT Initial (AOI Initial)</u> the first Areas of Impact value for each vehicle.
- <u>SEQUENCE OF EVENTS (SOE)</u> all events (harmful and non-harmful) associated with each in-transport motor vehicle in the table.

For items identified in a "damaged property" section on the report, include all items listed associated with the applicable vehicle in the best order that can be determined. If the actual order cannot be determined, use the listed order of items. In a multi-vehicle crash, if it cannot be determined which vehicle is associated with the damaged property listed, assign these items to the vehicle most likely to be associated with this property. If this cannot be established, omit these events.

C18 Crash Events Table Columns

Vehicle Number	Areas of Impact	Sequence of	Vehicle Number	Areas of Impact
(This Vehicle)	(This Vehicle)	Events (SOE)	(Other Vehicle)	(Other Vehicle)

Event Number

FORMAT: Element Completed in RBIS

SAS NAME: Cevent.EVENTNUM, Vevent.EVENTNUM

ELEMENT VALUES:

Codes	Attributes
001-999	Actual Number

Remarks: This is a computer assigned number beginning with "001." The event number(s) show the chronological sequence of the qualifying harmful and non-harmful events in the crash. Qualifying events are those that involve an in-transport motor vehicle or an object set in motion by an in-transport motor vehicle.

In the *RBIS* this will be the row position and not displayed as a column in the entry table.

Vehicle Number (This Vehicle)

FORMAT: Element Completed in RBIS

SAS NAME: Cevent. VNUMBER1, Vevent. VNUMBER1

ELEMENT VALUES:

Codes	Attributes
001-999	Actual Number

Remarks: Enter the number of the in-transport motor vehicle associated with the event in the SEQUENCE OF EVENTS column of the Crash Events Table. Vehicles are assigned the police crash report's vehicle number unless a vehicle number from the police crash report is not used in the case (e.g., non-contact vehicle). See the <u>Coding Guide: Crash Events Table, Vehicle</u> <u>Placement for helpful information.</u>

Areas of Impact (This Vehicle)

FORMAT: *Element* Completed in *RBIS* **SAS NAME**: Cevent.AOI1, Vevent.AOI1

ELEMENT VALUES: *

Codes	Attributes
00	Non-Collision
01-12	Clock Points
13	Тор
14	Undercarriage
61	<u>Left</u>
62	Left-Front Side
63	Left-Back Side
81	Right
82	Right-Front Side
83	Right-Back Side
18	Cargo/Vehicle Parts Set in Motion
19	Other Objects or Person Set in Motion
20	Object Set in Motion, Unknown if Cargo/Vehicle Parts or Other
98	Not Reported
99	Reported as Unknown

Remarks: Identifies the contact point (if applicable) for the vehicle coded in Vehicle Number (This Vehicle) associated with this event. If the event is a Collision event, code the value that identifies the impact area or indicates this vehicle set an object in motion. If the event is a Non-Collision *Harmful* event, use the attribute **00** (Non-Collision). If the event is a Non-Harmful event, then skip entry of an AREAS OF IMPACT (This Vehicle) value for that event.

This field uses the same values and Remarks as the Vehicle Level data element AREAS OF IMPACT - Initial Contact Point. The Vehicle Level data element AREAS OF IMPACT - Initial Contact Point is derived from the Crash Events Table and will always be the first recorded AREA OF IMPACT value for each vehicle in the table. See the Coding Guide: Vehicle Components and Areas of Impact for helpful information.

Sequence of Events

FORMAT: *Element* Completed in *RBIS* **SAS NAME:** Cevent.SOE, Vevent.SOE

ELEMENT VALUES:

Non-Harmful Events:

Codes	Attributes
61	Equipment Failure (blown tire, brake failure, etc.)
62	Separation of Units
63	Ran Off Roadway-Right
64	Ran Off Roadway-Left
79	Ran off Roadway - Direction Unknown
71	End Departure
65	<u>Cross Median</u>
68	<u>Cross Centerline</u>
66	Downhill Runaway
67	<u>Vehicle Went Airborne</u>
69	Re-entering Roadway
70	Non-harmful, Swaying Trailer/Jackknife
60	Cargo/Equipment Loss or Shift (non-harmful)

Non-Collision Harmful Events:

Codes	Attributes
01	Rollover/Overturn
02	Fire/Explosion
03	Immersion or Partial Immersion
04	Gas Inhalation
51	Jackknife (harmful to this vehicle)
06	Injured in Vehicle (Non-Collision)
44	Pavement Surface Irregularity (Ruts, Potholes, Grates, etc.)
07	Other Non-Collision
72	Cargo/Equipment Loss, Shift, or Damage (harmful)
16	Thrown or Falling Object
05	Fell/Jumped from Vehicle

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Collision With Motor Vehicle In-Transport:

Codes	Attributes
12	Motor Vehicle In-Transport
54	Motor Vehicle In-Transport Strikes or is Struck by Cargo, Persons, or Objects Set in Motion from/by Another Motor Vehicle In-Transport
55	Motor Vehicle in Motion Outside the Trafficway

Collision With Object Not Fixed:

Codes	Attributes
08	<u>Pedestrian</u>
09	Pedalcyclist
10	Railway Vehicle
74	Road Vehicle on Rails
11	Live Animal
49	Ridden Animal or Animal-Drawn Conveyance
18	Other Object (Not Fixed)
15	Non-Motorist on Personal Conveyance
14	Parked Motor Vehicle
45	Working Motor Vehicle
73	Object That Had Fallen from Motor Vehicle In-Transport
91	<u>Unknown Object Not Fixed</u>

Collision With Fixed Object:

Codes	Attributes
17	Boulder
19	Building
58	Ground
20	Impact Attenuator/Crash Cushion
50	Bridge Overhead Structure
21	Bridge Pier or Support
23	Bridge Rail (Includes Parapet)
24	Guardrail Face
52	Guardrail End

Codes	Attributes
25	Concrete Traffic Barrier
57	Cable Barrier
26	Other Traffic Barrier
59	Traffic Sign Support
46	Traffic Signal Support
30	Utility Pole/Light Support
31	Other Post, Other Pole, or Other Supports
32	Culvert
33	Curb
34	Ditch
35	Embankment
38	Fence
39	Wall
40	Fire Hydrant
41	Shrubbery
42	Tree (Standing Only)
48	Snow Bank
53	Mailbox
43	Other Fixed Object
93	Unknown Fixed Object

Not Reported/Unknown

Codes	Attributes
98	Harmful Event, Details Not Reported
99	Reported as Unknown

Remarks: This data element is derived from the Crash Events Table. Recording of Crash Events ends at the last harmful event of the entire crash. Therefore, a <u>non-harmful event</u> (e.g., Crossing the Centerline) that occurs following the last harmful event of the crash will not be included. Correction to the SEQUENCE OF EVENTS order must be made by revision to the Crash Events Table. This field uses the same values and Remarks as the Vehicle Level data element **SEQUENCE OF EVENTS**.

Vehicle Number (Other Vehicle)

FORMAT: Element Completed in RBIS

SAS NAME: Cevent.VNUMBER2, Vevent.VNUMBER2

ELEMENT VALUES:

Codes	Attributes
001-999	Actual Number

Remarks: This identifies the vehicle number of the vehicle contacted by the motor vehicle intransport recorded in "Vehicle Number (This Vehicle)." This field is applicable only when the event is a collision between two motor vehicles (i.e., SEQUENCE OF EVENTS codes 12, 54, 55, 14, or 45). If the event is **not** a collision between two motor vehicles, then Vehicle Number (Other Vehicle) is not applicable and left blank. See the Coding Guide: Crash Events Table, Vehicle Placement for helpful information.

Areas of Impact (Other Vehicle)

FORMAT: *Element* Completed in *RBIS* **SAS NAME:** Cevent.AOI2, Vevent.AOI2

ELEMENT VALUES:

Codes	Attributes
00	Non-Collision
01-12	<u>Clock Points</u>
13	<u>Top</u>
14	<u>Undercarriage</u>
61	<u>Left</u>
62	<u>Left-Front Side</u>
63	<u>Left-Back Side</u>
81	Right
82	Right-Front Side
83	Right-Back Side
18	Cargo/Vehicle Parts Set in Motion
19	Other Objects or Person Set in Motion
20	Object Set in Motion, Unknown if Cargo/Vehicle Parts or Other
98	Not Reported
99	Reported as Unknown

Remarks: Identifies the contact point for the vehicle coded in Vehicle Number (*Other* Vehicle) associated with this event. *If the event is not a collision between two motor vehicles, then AOI* (*Other Vehicle*) *is not applicable and left blank.*

This field uses the same values as the Vehicle Level data element <u>AREAS OF IMPACT</u> - <u>Initial Contact Point</u>. The Vehicle Level data element AREAS OF IMPACT - Initial Contact Point is derived from the Crash Events Table and will always be the first recorded AREAS OF IMPACT value for each vehicle in the table. *See the <u>Coding Guide: Vehicle Components and Areas of Impact for helpful information.*</u>

C19 - First Harmful Event

FORMAT: 2 numeric

SAS NAME: Accident.HARM_EV, Vehicle.HARM_EV, Person.HARM_EV,

Parkwork.PHARM_EV **ELEMENT VALUES:**

Non-Collision Harmful Events:

Codes	Attributes
01	Rollover/Overturn
02	<u>Fire/Explosion</u>
03	Immersion or Partial Immersion
04	Gas Inhalation
51	Jackknife (harmful to this vehicle)
06	Injured in Vehicle (Non-Collision)
44	Pavement Surface Irregularity (Ruts, Potholes, Grates, etc.)
07	Other Non-Collision
16	Thrown or Falling Object
72	Cargo/Equipment Loss, Shift, or Damage (harmful)
05	Fell/Jumped from Vehicle

Collision With Motor Vehicle In-Transport:

Codes	Attributes
12	Motor Vehicle In-Transport
54	Motor Vehicle In-Transport Strikes or is Struck by Cargo, Persons, or Objects Set in Motion from/by Another Motor Vehicle In-Transport
55	Motor Vehicle in Motion Outside the Trafficway

Collision With Object Not Fixed:

Codes	Attributes
08	<u>Pedestrian</u>
09	Pedalcyclist
10	Railway Vehicle
74	Road Vehicle on Rails
11	<u>Live Animal</u>

Codes	Attributes
49	Ridden Animal or Animal Drawn Conveyance
18	Other Object (Not Fixed)
15	Non-Motorist on Personal Conveyance
14	Parked Motor Vehicle
45	Working Motor Vehicle
73	Object That Had Fallen from Motor Vehicle In-Transport
91	Unknown Object Not Fixed

Collision With Fixed Object:

Codes	Attributes
17	Boulder
19	Building
58	Ground
20	Impact Attenuator/Crash Cushion
50	Bridge Overhead Structure
21	Bridge Pier or Support
23	Bridge Rail (Includes Parapet)
24	Guardrail Face
52	Guardrail End
25	Concrete Traffic Barrier
57	Cable Barrier
26	Other Traffic Barrier
59	Traffic Sign Support
46	Traffic Signal Support
30	<u>Utility Pole/Light Support</u>
31	Other Post, Other Pole, or Other Supports
32	<u>Culvert</u>
33	<u>Curb</u>
34	<u>Ditch</u>
35	Embankment
38	<u>Fence</u>
39	Wall

Codes	Attributes
40	Fire Hydrant
41	Shrubbery
42	Tree (Standing Only)
48	Snow Bank
53	<u>Mailbox</u>
43	Other Fixed Object
93	<u>Unknown Fixed Object</u>

Not Reported/Unknown

Codes	Attributes
98	Harmful Event, Details Not Reported
99	Reported as Unknown

Definition: *The first* injury- or damage-producing event of the crash.

Remarks: On following page.

Non-Collision Harmful Events

Non-Collision events involving motorcycles and vehicles with a "load":

Non-Collision events may occur before or after a collision event. They should not be coded as a separate event if they occur as part of a collision event.

Examples:

- A motorcycle strikes a deer, overturns, and the rider becomes separated from the vehicle. Code the collision event, not the non-collision "Rollover/Overturn" and "Fell/Jumped from Vehicle" that occur as part of the collision event.
- One tractor/trailer rear-ends another tractor/trailer. The impact pushes the lead vehicle's load into the back of the tractor cab with part falling onto the roadway. Code the collision event, not the non-collision "cargo-loss or shift" that occurred as part of the collision event.

01 (**Rollover/Overturn**) is used when a motor vehicle rotates (rollover) at least one quarter turn onto its side or end. For motorcycles, laying the motorcycle down on its side is sufficient to code **01** (**Rollover/Overturn**) as a harmful event if damage or injury is produced, even though the data element **ROLLOVER** is not applicable to motorcycles.

If there is a **01** (**Rollover/Overturn**) that begins in another location but involves a ditch or embankment in the case (e.g., "rolled through the ditch," "rolled down the embankment," "came to rest against the embankment"), then the rule applies where if there is no damage associated with an impact with the fixed object during the rollover, it is not included in the Crash Events. If there is indication that damage resulted from an impact with the fixed object, it is included in the Crash Events. This follows the same logic as striking a tree or another vehicle during an overturn.

Note: For vehicles with attached trailing unit(s) by fixed or non-fixed linkage, when either the power unit or the trailing unit(s) rolls over, the entire vehicle will be considered a rollover. This applies to all motor vehicles with any type of trailing unit(s). If a motorcycle is pulling a trailing unit that overturns, the motorcycle should have 01 (Rollover/Overturn) in its Crash Events. However, since the power unit is a motorcycle, the element ROLLOVER still does NOT apply.

02 (**Fire/Explosion**) is used for a vehicle fire or explosion that occurs during the crash sequence or as a result of the crash.

As it pertains to the occurrence of **02** (**Fire/Explosion**), the crash circumstances are not considered stabilized until the threat of damage to this vehicle, or injury consequences to this vehicle's occupants, has ceased. Therefore, the crash sequence is not considered stabilized until all occupants have exited the vehicle and the scene has been declared safe by police or other authority. Fires that occur at a later time to vehicles abandoned at the scene (in open fields, on hillsides, etc.) or to vehicles removed from the scene to another location (tow yard, curbside, etc.) are not considered part of the crash sequence.

03 (Immersion or Partial Immersion) is used when an in-transport motor vehicle enters a body of water and results in injury or damage. This code would also be used if the vehicle came to rest

in water and the depth cannot be ascertained from case material. **NOTE:** In immersion fatalities the injury to the person may be noted as "drowning."

- **04** (**Gas Inhalation**) includes injury or death as a result of toxic fumes, such as carbon monoxide fumes leaking from a motor vehicle in-transport.
- **51** (Jackknife [harmful to this vehicle]) applies to a condition that occurs to an articulated vehicle, (any vehicle with a trailing unit(s) connected by a hitch; truck tractor or single-unit truck with one or more trailers, articulated bus, car pulling a boat on a trailer, etc.) while in motion. The condition reflects a loss of control of the vehicle by the driver in which the trailer(s) yaws from its normal straight-line path behind the power unit, striking the power unit, causing damage to the power unit or trailer. Jackknife should only be coded as a harmful event if there is clear indication of damage to the jackknifed vehicle or injury to its occupants caused by the jackknife.
- **06** (**Injured in Vehicle [non-collision]**) is used when an occupant is injured during an unstabilized situation without a collision, excluding cargo/equipment loss or shift. Examples: Driver slams on brake, causing an unrestrained passenger to be injured. Driver makes a sharp turn causing driver to strike head on side window, knocking driver unconscious.
- **44** (**Pavement Surface Irregularity [ruts, potholes, grates, etc.]**) is used when the pavement surface irregularity is on a paved surface. Other examples include indication of contact with a dip, depression, low spot, trough, etc.) If the impact is with a surface irregularity (e.g., ruts, potholes) not on a paved surface use the **58** (**Ground**). For a vehicle that "bottoms out" on the paved surface (causing damage) due to speed but not because of a pavement surface irregularity, use attribute **07** (**Other Non-Collision**).
- **07** (Other Non-Collision). Non-collision not captured in the listed non-collision attributes.

Examples:

- Damage to the vehicle produced by its own dislodged vehicle parts (including hood flying up and contacting the windshield).
- A vehicle "bottoms out" (causing damage) due to speed but not because of a pavement surface irregularity. Damage due to pavement surface irregularities should be coded **44** (**Pavement Surface Irregularity [ruts, potholes, grates, etc.]**).
- 16 (Thrown or Falling Object) is used when any object (1) is thrown (intentionally or unintentionally) and impacts an in-transport vehicle, or (2) falls onto, into, or in the path of an intransport motor vehicle. If a tree limb falls from a tree and is contacted by a car, enter 16 (Thrown or Falling Object). If a person maliciously throws an object off an overpass into traffic below, enter 16 (Thrown or Falling Object). This excludes contacts made by loads or objects set in motion by a motor vehicle (see 54 (Motor Vehicle In-Transport Strikes or is Struck by Cargo, Persons, or Objects Set in Motion from/by Another Motor Vehicle In-Transport)).
- **72** (Cargo/Equipment Loss, Shift, or Damage [harmful]) refers specifically to the loss or shift of items carried on or in a motor vehicle or its trailing unit, causing damage and/or injury to the vehicle, its occupants, its parts, trailing unit, or the cargo itself. Harm can be measured in loss of monetary value from unrecoverable cargo loss as well as physical damage. This attribute should never be used to refer to a "collision" event (see **54** (Motor Vehicle In-Transport Strikes or is

Struck by Cargo, Persons, or Objects Set in Motion from/by Another Motor Vehicle In-Transport).

Examples:

- A pickup truck brakes rapidly to avoid a collision. This causes a piece of lumber in the pickup bed to smash through the rear window.
- Unsecured cargo shifts inside a box truck and bursts through the wall of the trailer.
- Pallets of beehives on a flatbed truck fall off the truck on a sharp curve causing the hives to open and the bees to fly away.

Notes:

In situations when a cargo shift is part of a collision event, the cargo shift is not coded separately. See Non-Collision events involving motorcycles and vehicles with a "load."

- Unsecured cargo shifts inside a box truck causing a loss of control. The driver overcorrects, driving off the road. This would be a 60 (Cargo/Equipment Loss or Shift [non-harmful]) in the SEQUENCE OF EVENTS.
- Use <u>07 (Other Non-Collision)</u> in a situation where a motor vehicle in transport is towing another unit (motor vehicle, trailer, etc.) and the second unit collides into the back of the power unit (not a Jackknife or part of a collision event).

05 (**Fell/Jumped from Vehicle**) is used when an occupant of this vehicle falls or jumps (not suicide) from the vehicle causing injury. For example, an occupant of a motor vehicle intransport leans against the car door, it opens and the occupant falls out; or a person riding on a vehicle's exterior (hood, roof, running board, etc.) falls or jumps, and is injured by the fall. If an occupant falls or jumps from a vehicle and is struck by that vehicle, use this attribute.

Collision With a Motor Vehicle In-Transport

12 (**Motor Vehicle In-Transport**) is used when the injury- or damage-producing event is two motor vehicles in-transport making contact within the trafficway boundaries. In-transport means that the motor vehicle is in motion or on the roadway portion of a trafficway.

54 (Motor Vehicle In-Transport Strikes or is Struck by Cargo, Persons, or Objects Set in Motion from/by Another Motor Vehicle In-Transport) is used when the injury- or damage-producing event is two motor vehicles in-transport making contact by something set in motion by one or both of the vehicles.

In crashes involving harmful events caused by objects set in motion by a motor vehicle intransport, remember that a vehicle's load is considered part of the vehicle.

Examples:

If cargo falls from a truck (in-transport) and strikes another motor vehicle intransport, this is treated as a two-vehicle crash. Therefore, the proper code for both vehicles is 54 (Motor Vehicle In-Transport Strikes or is Struck by Cargo, Persons, or Objects Set in Motion from/by Another Motor Vehicle In-Transport) and the AREA OF IMPACT (This Vehicle) column is coded 18 (Cargo/Vehicle Parts Set in Motion).

- If an in-transport vehicle strikes an at-rest object that was previously cargo or part of another motor vehicle in-transport, the SEQUENCE OF EVENTS for that event is 73 (Object That Had Fallen from Motor Vehicle In-Transport). If that object is then propelled into another motor vehicle in-transport, the proper SEQUENCE OF EVENTS attribute for this next event is 54 (Motor Vehicle In-Transport Strikes or is Struck by Cargo, Persons, or Objects Set in Motion from/by Another Motor Vehicle In-Transport) and the AREA OF IMPACT (This Vehicle) column is coded 19 (Other Objects or Person Set in Motion).
- If an in-transport vehicle strikes an at-rest object that was not cargo or part of another motor vehicle in-transport, the SEQUENCE OF EVENTS for that event is 18 (Other Object [Not Fixed]). If that object is then propelled into another motor vehicle intransport, the proper SEQUENCE OF EVENTS code for this next event is 54 (Motor Vehicle In-Transport Strikes or is Struck by Cargo, Persons, or Objects Set in Motion from/by Another Motor Vehicle In-Transport) and the AREA OF IMPACT (This Vehicle) column is coded 19 (Other Objects or Person Set in Motion).

This attribute does not apply when the cargo, people, or objects set in motion by an in-transport motor vehicle strikes something other than another in-transport motor vehicle. In this case, use the applicable "collision with non-fixed object" or "collision with fixed object" code for the thing struck by the cargo, person, or object set in motion.

Examples:

- If cargo falls from a truck (in-transport) and strikes another vehicle that is not intransport, the proper SEQUENCE OF EVENTS attribute is 14 (Parked Motor Vehicle) or 45 (Working Motor Vehicle) depending on which type of not intransport vehicle was contacted by the load and the AREA OF IMPACT (This Vehicle) column is coded 18 (Cargo/Vehicle Parts Set in Motion).
- If cargo falls from a truck (in-transport) and strikes a pedestrian, the proper SEQUENCE OF EVENT attribute would be <u>08 (Pedestrian)</u> and the <u>AREA OF</u> <u>IMPACT (This Vehicle)</u> column is coded <u>18 (Cargo/Vehicle Parts Set in Motion)</u>.
- If a pedestrian is struck by an at-rest object propelled by an in-transport vehicle (parked motor vehicle, stop sign, etc.), the proper SEQUENCE OF EVENTS attribute for this harmful event is **08** (**Pedestrian**) and the <u>AREA OF IMPACT</u> (This Vehicle) column is coded **19** (**Other Objects or Person Set in Motion**).

55 (**Motor Vehicle in Motion Outside the Trafficway**) is used when the injury- or damage-producing event is two motor vehicles in-transport making contact outside the trafficway boundaries in a motor vehicle traffic crash.

Example:

A vehicle loses control attempting to turn into a gas station and strikes another vehicle pulling away from the pump in the station lot.

Collision With Object Not Fixed

08 (**Pedestrian**) is used for all those not on a personal conveyance. A person pushing a vehicle should be coded **08** (**Pedestrian**). A person being carried by another person should also be considered a **08** (**Pedestrian**).

09 (**Pedalcyclist**) is used for any person on a non-motorized other road vehicle propelled by pedaling. Examples include a bicycle, tricycle, unicycle, or pedal car.

If a non-motorist is hit as a result of a vehicle to vehicle collision and you cannot reasonably determine which vehicle struck the non-motorist, use the lowest vehicle number of the MVIT(s) involved in the vehicle to vehicle event that resulted in the pedestrian or pedalcyclist collision. In the element RELATED FACTORS - PERSON (NOT A MOTOR VEHICLE OCCUPANT) LEVEL, use code 031 Default Code Used for Vehicle Numbering.

10 (**Railway Vehicle**) is any land vehicle that is (1) designed primarily for, or in use for, moving people or property from one place to another on rails and (2) not in use on a land way other than a railway.

- Inclusions: Railway Trains, Streetcar/trolley on private way.
- Exclusions: Streetcar/trolley operating on trafficway.

74 (**Road Vehicle on Rails**) is any land vehicle on rails operating in a trafficway.

- Inclusions: Streetcar/trolley operating on trafficway.
- Exclusions: Railway Trains, Streetcar/trolley on private way, Streetcar/trolley or electric bus operating on tires.

11 (Live Animal) is used for collisions with live animals (domesticated or wild) that are not themselves being used as transportation or to draw a wagon, cart, or other transport device (see <u>ANSI D16.1</u>). Default to 11 (Live Animal) if it cannot be determined if the struck animal is alive, dead, or if it was being ridden or drawing a transport device.

49 (**Ridden Animal or Animal-Drawn Conveyance**) is used for ridden animals and animals drawing transport devices. See **18** (**Other Object [Not Fixed]**) for an animal carcass.

18 (**Other Object [Not Fixed]**) is used when a motor vehicle in-transport strikes a non-fixed object that is known NOT to have been the cargo or part of another motor vehicle in-transport or when it is UNKNOWN whether the object was the cargo or part of another motor vehicle intransport (i.e., refers to objects such as a dead body, animal carcass, construction cones or barrels, an unattached trailer, a bicycle without a rider, downed tree limbs or power lines, or debris from a prior crash). For objects that have become separated from a motor vehicle intransport not as a result of a prior crash, use attribute **73** (**Object That Had Fallen from Motor Vehicle In-Transport)**.

15 (**Non-Motorist on Personal Conveyance**) is used for pedestrians using personal conveyances. A personal conveyance is a device, other than a transport device, used by a pedestrian for personal mobility assistance or recreation. These devices can be motorized or human powered, but not propelled by pedaling.

Inclusions:

- 1 Rideable toys
 - a. Roller skates, in-line skates
 - b. Skateboards
 - c. Skates
 - d. Baby carriage
 - e. Scooters
 - f. Toy wagons
- 2 Motorized rideable toys
 - a. Motorized skateboard
 - b. Motorized toy car
 - c. Motorized kick scooter
- 3 Devices for personal mobility assistance
 - a. Self-balancing personal conveyance (e.g., Segway-style device)
 - b. Motorized and non-motorized wheelchair
 - c. Mobility aid scooters

Exclusions:

- 1. Golf cart
- 2. Low speed vehicles (LSVs)
- 3. Go-carts
- 4. Minibike
- 5. "Pocket" motorcycles
- Motor scooters
- 7. Moped
- **14** (**Parked Motor Vehicle**) is used when the impact occurred between a motor vehicle intransport and a motor vehicle neither on a roadway nor in motion. A vehicle stopped off the roadway, its door open over a roadway, is not in-transport.
- **45** (Working Motor Vehicle) is used to indicate the motor vehicle contacted was in the act of performing construction, maintenance, or utility work related to the trafficway when it became an involved unit. The vehicle should be known to be in the act of performing work. This "work" may be located within open or closed portions of the trafficway and motor vehicles performing

these activities can be within or outside the trafficway boundaries. This code does not include private construction/maintenance vehicles, or vehicles such as garbage trucks, delivery trucks, taxis, emergency vehicles, tow trucks, etc. **DO NOT evaluate this attribute on** *NCSA* **Body Type alone.**

Examples:

- 1. Asphalt/steam roller working in a highway construction zone paving the roadway or flattening dirt.
- 2. State highway maintenance crew painting lane lines on the road, mowing grass on the roadside or median, repairing potholes, removing debris from the roadway, etc.
- 3. Utility truck or a "cherry picker," performing maintenance on power lines along the roadway or maintaining a traffic signal.
- 4. A private excavating company contracted by the State digging the foundation for a new overpass.
- 5. A State, county, or privately-owned snowplow, plowing ice/snow as part of a highway maintenance activity.
- 6. Street sweeper sweeping the street.
- 7. A vehicle in a mobile work convoy displaying arrow boards or other signaling devices warning motorists of the work activity.
- 8. A law enforcement vehicle that is participating strictly in a stationary construction or mobile maintenance activity as a traffic slowing, control, signaling, or calming influence.

NOTE: Code "45" excludes working activities other than highway construction, maintenance, or utility vehicles (garbage truck picking up trash, mail/delivery trucks while making deliveries, personal vehicles plowing snow, etc. These are considered motor vehicles In-transport). Use RELATED FACTORS-VEHICLE LEVEL <u>042 (Other Working Vehicle</u> [Not Construction, Maintenance, Utility, Police, Fire, or EMS Vehicle]) to identify these vehicles.

A question may arise when a police, fire, or emergency medical vehicle is struck on the roadway while at the scene of a crash, at a traffic stop, or as traffic control. The question becomes, "has its function changed from being a motor vehicle in-transport to a working vehicle?" The answer is "no." Treat these situations as a motor vehicle in-transport striking another motor vehicle in-transport. Use RELATED FACTORS-VEHICLE LEVEL <u>041</u> (Police, Fire, or EMS Vehicle Working at the Scene of an Emergency or Performing Other Traffic Control Activities) to identify that this vehicle was struck while performing these work activities.

73 (**Object That Had Fallen from Motor Vehicle In-Transport**) is used when a motor vehicle in-transport impacts a non-fixed object at rest that is known to have been the cargo or part of another motor vehicle in-transport. Do not use this attribute for debris from a prior crash. This attribute does not include vehicle occupants that are ejected or fall from a motor vehicle in-transport. (Example: Motorcycle operator falling from a motorcycle.) For people falling from a motor vehicle, see non-collision event **05** (Fell/Jumped From Vehicle). For impacts involving

two motor vehicles in transport resulting from cargo, people, or objects set in motion see 54 (Motor Vehicle In-Transport Strikes or is Struck by Cargo, Persons, or Objects Set in Motion from/by another Motor Vehicle In-Transport). For at rest detached trailers (e.g., a detached semi-trailer), use attribute 18 (Other Object [Not Fixed]). If cargo fell from a vehicle, came to rest, and was struck, this attribute would apply. If the cargo was at rest as a result of a prior crash, use attribute 18 (Other Object [Not Fixed]).

91 (Unknown Object Not Fixed) is used when the event involves an object that is known to be not fixed but the case material does not identify the specific object.

Collision With Fixed Object

The attributes <u>58 (Ground)</u>, <u>33 (Curb)</u>, <u>34 (Ditch)</u>, and <u>35 (Embankment)</u> are grouped under the Collision With Fixed Object subset because they are intended to be harmful events in the crash (i.e., they are associated with an impact that produces injury or damage). When coding these events there must be fields on the police crash report or verbiage in the narrative such as "struck," "hit," "impacted," etc. that identify these as harmful.

For cases where the indication of the harmful event came from the narrative, there may not be a corresponding indication of damage in any police crash report field. In these instances, code the harmful event as stated in the narrative and include the corresponding attribute under <u>AREAS</u> OF IMPACT.

If there is no indication of damage from contact with the fixed object in fields on the police crash report and the narrative language does not identify it as a harmful event (e.g., "came to rest on the embankment," "drove through" or "drove across" the ditch and/or the embankment, or "drove over" the curb), do not code 33 (Curb), 34 (Ditch), or 35 (Embankment) in the SEOUENCE OF EVENTS.

- **17** (**Boulder**) is a rock of sufficient mass that when struck by a motor vehicle moves very little and remains basically intact. It may be considered as a fixed object.
- **19** (**Building**) is used when the vehicle impacts a roofed and walled structure built for permanent use. The type of construction material used is not of interest, nor is the use of the building.
- **58** (**Ground**) is used when the impact is with an earthen or paved surface off the roadway. **58** (**Ground**) is not to be entered when the harmful event is **01** (**Rollover/Overturn**).

Indication of furrowing, gouging, or digging in of the tires/wheels is not sufficient to code the collision event **58** (**Ground**). For example, if the police crash report narrative states, "the trucks tires dug into the turf causing the vehicle to roll over," the harmful event should be **01** (**Rolloyer/Overturn**).

- **20** (**Impact Attenuator/Crash Cushion**) is a device for controlling the absorption of energy released during vehicle collision (crash cushion). Its most common application involves the protection of fixed roadside objects such as bridge piers, elevated gores at exit ramps, etc. Examples include barrels filled with water or sand, and plastic collapsible structures.
- **50** (**Bridge Overhead Structure**) is used when striking the bottom of a bridge while traveling underneath it. See <u>Figure 20</u> for a diagram of Bridge Components.
- **21** (**Bridge Pier or Support**) is a square or round column of stone, concrete, brick, steel, or wood for supporting a bridge between abutments. This attribute includes the bridge abutments

that are supporting the ends of a bridge. Abutments are generally designed for retaining or supporting the embankment under bridge ends and composed of stone, concrete, brick, or wood (includes the wing-walls). See **Figure 20** for a diagram of Bridge Components.

- **23** (**Bridge Rail [Includes Parapet]**) is a wooden, brick, stone, concrete, or metal fence-like structure that runs along the outer most edge of the roadway or sidewalk on the bridge or a rail constructed along the top of a parapet. Balustrade is often used synonymously with parapet. See Figure 20 for a diagram of Bridge Components.
 - Bridges do not need to support another roadway. It may be an overpass for a train or even for a viaduct (water conduit).
- **24** (**Guardrail Face**) is a low barrier that has the primary longitudinal structure composed of metal (plates, mesh, box beam, etc.). A guardrail is differentiated from **25** (**Concrete Traffic Barrier**) by the material making up the greatest part of the longitudinal portion of the structure. In the case of guardrails, this is metal whereas in concrete barriers this is concrete (including concrete rails). If the crash report does not differentiate between guardrail face and end, default to guardrail face.

Guardrails that serve as bridge rails should be coded as **23 (Bridge Rails [includes Parapet])**.

- **52** (**Guardrail End**) is used if a vehicle strikes the end of a guardrail. Guardrails can have a separate flat or rounded piece of metal attached to the end of an expanse of guardrail face.
- **25** (**Concrete Traffic Barrier**) refers to the longitudinal traffic barriers constructed of concrete. This includes all temporary concrete barriers regardless of location (i.e., temporary Jersey Barrier on a bridge being used to control traffic during bridge repair/construction). Concrete walls (vertical side surfaces) do not apply here; see 39 (Wall).
- **57** (**Cable Barrier**) refers to a flexible barrier system that uses several cables typically supported by steel posts. These barriers are designed to help lessen impact or keep vehicles within the confines of the road.
- **26** (Other Traffic Barrier) is used for all other longitudinal barriers such as wood or rock.
- **59** (**Traffic Sign Support**) is used when the post supporting a traffic sign, or the sign itself, is hit by a motor vehicle in-transport. This includes mile marker posts and elevated signs.
- **46** (**Traffic Signal Support**) is used when the post supporting a traffic signal, or the signal itself, is hit by a motor vehicle in-transport. *Use* **46** (*Traffic Signal Support*) for a railroad crossing arm/gate.
- **30** (**Utility Pole/Light Support**) refers to supports for highway lighting systems, not including other private lighting systems (e.g., parking lot lights). **30** (**Utility Pole/Light Support**) is used for electrical, telephone, cable, and other utility pole-type supports.
- **31** (Other Post, Other Pole, or Other Supports) is used for posts other than highway signs, utility poles, or light supports (reflectors on poles alongside of roadway, parking meters, flag poles, etc.). For mailbox posts, use **53** (Mailbox). For fence posts, use **38** (Fence).
- 32 (Culvert) is a man-made drain or channel crossing under a road, sidewalk, etc.

- **33** (**Curb**) is a concrete or asphalt structure that borders the paved surface. It provides drainage control and pavement edge delineation. The face of the curb may be sloped or vertical. Ensure that the case material provide some indication that damage has occurred when a vehicle strikes a curb. This attribute includes collisions with curbing that forms raised islands, medians, or separators. For example, if the report identifies the vehicle struck/collided with a traffic island, channelizing island, raised median, or separator use **33** (**Curb**) not **43** (**Other Fixed Object**).
- **34** (**Ditch**) includes any man-made structure for drainage purposes. A ditch ends where a culvert begins and resumes on the opposite side of the culvert. Reference to a "ditchbank," "embankment of the ditch," or "ditch embankment" should be coded under **34** (**Ditch**).
- **35** (**Embankment**) is a raised structure to hold back water, to carry a roadway, or the result of excavation or washout (including erosion) that may be faced with earth (or rock, stone, or concrete). A **35** (**Embankment**) can usually be differentiated from a <u>39 (Wall)</u> by its incline, whereas a wall is usually vertical. However, there are exceptions to this, such as a retaining wall that may be inclined or a vertical embankment that is caused by a natural event such as a washout.

In crashes involving a field approach or driveway crossing, use attribute **35** (**Embankment**) when no specific components (e.g., culverts or ditches) are identified.

- 38 (Fence) includes the fence posts. A Fence can be made of wood, chain link, stone, etc.
- **39** (Wall) is a primarily vertical structure composed of concrete, metal, timber, or stone that is not part of a building or a fence but typically is used for retaining earth, abating noise, and separating areas (but not for containment as in the primary function of a fence). Also included as **39** (Wall) is headwalls (or endwalls) that are sometimes provided on culvert ends principally to protect the sides of the embankment around the culvert opening against erosion. This does not include wing-walls, which are attached to ends of bridge abutments and extend back at an angle from the roadway. Wingwalls should be coded as **21** (Bridge Pier or Support).
- **40** (**Fire Hydrant**) refers to the roadside device used by fire departments to provide water for fighting fires. Usually made of steel, these devices are also referred to as fire plugs or fire standpipes in some areas.
- **41** (**Shrubbery**) refers to vegetation that is usually of a woody multi-stemmed variety and in most instances is low growing rather than tall. May also be called bushes. Some common examples are boxwood, hawthorn, and mountain laurel.
- **42** (**Tree** [**Standing Only**]) is used when a vehicle strikes a standing tree. This includes impacts from overhanging branches, tree stumps, or large cactus (Saguaro). If a vehicle strikes a fallen tree, use **18** (**Other Object** [**Not Fixed**]). If a tree falls on a vehicle as it is passing by, use **16** (**Thrown or Falling Object**).
- **48** (**Snow Bank**) is used when snowfall and/or road plowing creates essentially fixed barriers of snow/ice that are not snow-covered earth or rock embankments.
- **53** (**Mailbox**) refers to a private residence mail/newspaper box including the post. A cluster of private mailboxes is included in this attribute. This element does not include U.S. Mailbox, which are typically blue and are for general public use. Code a U.S. Mailbox as **43** (**Other Fixed Object**).

43 (Other Fixed Object) is used when the object is fixed (considered a permanent structure) and is not described by any of the other fixed object attributes. This attribute excludes collisions with curbing that forms raised islands, medians, or separators (see <u>33</u> (Curb)).

Examples:

- Bus shelters
- Pedestrian walkways
- Toll booths
- Guy wires supporting utility poles
- U. S. Mailbox for public use

Other examples would include property damage to standing crops, yards, and other vegetation (excluding: 41 (Shrubbery), 42 (Tree [Standing Only]), and 58 (Ground) if noted on the crash report.

When the case material identifies a non-specific object impact, apply the following guidelines. If the case material only identifies the harmful event as:

- "Fixed Object," then use 43 (Other Fixed Object)
- "Sign," then use **59** (**Traffic Sign Support**)
- "Post," then use 31 (Other Post, Other Pole, or Other Supports)
- "Signpost," then use 59 (Traffic Sign Support)
- "Bridge," then use 23 (Bridge Rail [Includes Parapet]) when the vehicle is on top of the bridge. When the vehicle is going under the bridge, then use 21 (Bridge Pier or Support)
- "Barrier," then use **26** (Other Traffic Barrier)

93 (Unknown Fixed Object) is used when the event involves an object that is known to be fixed but the case material does not identify the specific object.

Not Reported/Unknown

98 (Harmful Event, Details Not Reported) is used when a harmful event was reported but the object classification was not reported.

99 (**Reported as Unknown**) is used when police indicate unknown.

Consistency Checks (See Section 400):

Error ID	IF	THEN
252P	RELATION TO TRAFFICWAY equals 01, 02, 03, 04, 07, 08, 10, 11, 12, 98, or 99,	UNIT TYPE for VEHICLE NUMBER (OTHER VEHICLE) involved in the FIRST HARMFUL EVENT must not equal 3.
253P	RELATION TO TRAFFICWAY equals 03,	CRASH TYPE should equal 06-10, 98, or 99 for the in-transport vehicles involved in the FIRST HARMFUL EVENT.
254P	RELATION TO TRAFFICWAY equals 01, and RELATION TO JUNCTION (b) equals 20,	TRAFFICWAY DESCRIPTION must equal 6 for at least one vehicle involved in the FIRST HARMFUL EVENT.
255P	RELATION TO TRAFFICWAY equals 01 or 11,	UNIT TYPE for VEHICLE NUMBER (THIS VEHICLE) involved in the FIRST HARMFUL EVENT must equal 1.
256P	RELATION TO TRAFFICWAY equals 01 or 11,	UNIT TYPE for VEHICLE NUMBER (OTHER VEHICLE) involved in the FIRST HARMFUL EVENT should equal 1 or 4.
257P	RELATION TO TRAFFICWAY equals 05,	UNIT TYPE for VEHICLE NUMBER (OTHER VEHICLE) involved in the FIRST HARMFUL EVENT must equal 1, 3, or 4.
258P	RELATION TO JUNCTION (b) is 05 or 20	TRAFFICWAY DESCRIPTION should equal 6 for <i>at least one</i> vehicle involved in the FIRST HARMFUL EVENT.
3E00	CRITICAL EVENT - PRECRASH (EVENT) equals 65-68 or 70-73 for a vehicle involved in the FIRST HARMFUL EVENT,	RELATION TO JUNCTION (b) should not equal 01 or 18.
421P	MANNER OF COLLISION OF THE FIRST HARMFUL EVENT equals 01,	AREAS OF IMPACT-INITIAL CONTACT POINT for one vehicle in the FIRST HARMFUL EVENT must equal 12, and AREAS OF IMPACT-INITIAL CONTACT POINT for the other vehicle in the FIRST HARMFUL EVENT must equal 06.
422P	MANNER OF COLLISION OF THE FIRST HARMFUL EVENT equals 02,	AREAS OF IMPACT-INITIAL CONTACT POINT for one vehicle in the FIRST HARMFUL EVENT must equal 12, and AREAS OF IMPACT- INITIAL CONTACT POINT for the other vehicle in the FIRST HARMFUL event must equal 12.

Error ID	IF	THEN
423P	MANNER OF COLLISION OF THE FIRST HARMFUL EVENT equals 06,	AREAS OF IMPACT-INITIAL CONTACT POINT for one vehicle in the FIRST HARMFUL EVENT must equal 01, 11, 12, 98, 99, and AREAS OF IMPACT-INITIAL CONTACT POINT for the other vehicle in the FIRST HARMFUL EVENT must equal 01-05, 07-11, 61-63, 81-83 98, 99.
424P	MANNER OF COLLISION OF THE FIRST HARMFUL EVENT equals 09,	AREAS OF IMPACT-INITIAL CONTACT POINT for one vehicle in the FIRST HARMFUL EVENT should equal 06, and AREAS OF IMPACT-INITIAL CONTACT POINT for the other vehicle in the FIRST HARMFUL EVENT should equal 01-05, 07-11, 61-63, 81-83, 98, 99.
425P	MANNER OF COLLISION OF THE FIRST HARMFUL EVENT equals 10,	AREAS OF IMPACT- INITIAL CONTACT POINT for one vehicle in the FIRST HARMFUL EVENT should equal 06, and AREAS OF IMPACT- INITIAL CONTACT POINT for the other vehicle in the FIRST HARMFUL EVENT should equal 06, 98, 99.
426P	MANNER OF COLLISION OF THE FIRST HARMFUL EVENT equals 02,	CRASH TYPE must not equal 64-67 for the vehicles involved in the FIRST HARMFUL EVENT.
427P	MANNER OF COLLISION OF THE FIRST HARMFUL EVENT equals 06,	CRASH TYPE must not equal 20-43 or 50-53 for the vehicles involved in the FIRST HARMFUL EVENT.
42CP	there are two vehicles involved in the FIRST HARMFUL EVENT,	those two vehicles' CRASH TYPES must belong to the same CRASH TYPE Configuration.
440F	FIRST HARMFUL EVENT equals 08, 09, 15, and RELATION TO TRAFFICWAY equals 01,	there must be at least one Person Level (Not a MV Occupant) form with NON-MOTORIST LOCATION AT TIME OF CRASH equal to 01-03, 09-11, 13, 16, 23, 98, or 99.
450F	FIRST HARMFUL EVENT equals 08, 09, 15, and RELATION TO TRAFFICWAY equals 07,	there must be at least one Person Level (Not a MV Occupant) form with NON-MOTORIST LOCATION AT TIME OF CRASH equal to 14.
460F	FIRST HARMFUL EVENT equals 08, 09, 15, and RELATION TO TRAFFICWAY equals 02,	there must be at least one Person Level (Not a MV Occupant) form with NON-MOTORIST LOCATION AT TIME OF CRASH equal to 02, 20.

Error ID	IF	THEN
470F	FIRST HARMFUL EVENT equals 08, 09, 15, and RELATION TO TRAFFICWAY equals 03, 08, 10, 12,	there must be at least one Person Level (Not a MV Occupant) form with NON-MOTORIST LOCATION AT TIME OF CRASH equal to 20, 22, 28, 98, 99.
480F	FIRST HARMFUL EVENT equals 08, 09, 15, and RELATION TO TRAFFICWAY equals 04, 06,	there must be at least one Person Level (Not a MV Occupant) form with NON-MOTORIST LOCATION AT TIME OF CRASH equal to 09, 16, 20, 21, 24, 25, 28, 98, 99.
490F	FIRST HARMFUL EVENT equals 08, 09, 15, and RELATION TO TRAFFICWAY equals 05,	there must be at least one Person Level (Not a MV Occupant) form with NON-MOTORIST LOCATION AT TIME OF CRASH equal to 24, 25.
500F	FIRST HARMFUL EVENT equals 01-11, 14-21, 23-26, 30-35, 44-53, 57-59, 72, 73, or 98,	MANNER OF COLLISION OF THE FIRST HARMFUL EVENT must not equal 01, 02, 06-11, 98, 99.
510F	FIRST HARMFUL EVENT equals 12, 54, 55,	MANNER OF COLLISION OF THE FIRST HARMFUL EVENT must not equal 00.
520F	FIRST HARMFUL EVENT equals 10,	TRAFFIC CONTROL DEVICE must not equal 01-04, 07-09, 20, 21, 23, 28, 29, 50, 98 for the vehicle involved in the first harmful event.
530F	FIRST HARMFUL EVENT equals 08, 09, 15, and RELATION TO TRAFFICWAY equals 99,	there must be at least one Person Level (Not a MV Occupant) form with NON-MOTORIST LOCATION AT TIME OF CRASH equal to 09, 98, 99.
531F	FIRST HARMFUL EVENT equals 08, 09, 15, and RELATION TO TRAFFICWAY equals 11,	there must be at least one Person Level (Not a MV Occupant) form with NON-MOTORIST LOCATION AT TIME OF CRASH equal to 11.
532F	FIRST HARMFUL EVENT equals 14, and RELATION TO TRAFFICWAY equals 07,	at least one previous CRASH EVENTS- SEQUENCE OF EVENTS should equal 63, 64, 71, or 79 for the motor vehicle in transport involved in the FIRST HARMFUL EVENT.
540F	FIRST HARMFUL EVENT equals 02,	the vehicle involved in the FIRST HARMFUL EVENT must have FIRE OCCURRENCE equal to 1.
550F	FIRST HARMFUL EVENT equals 08,	at least one person must have PERSON TYPE equal 05, 10.
560F	FIRST HARMFUL EVENT equals 09,	at least one person must have PERSON TYPE equal to 06, 07.
570F	FIRST HARMFUL EVENT equals 05, 06,	at least one PERSON TYPE equal to 01-03, 09 must have INJURY SEVERITY equal to 1-5 or blank.

Error ID	IF	THEN
580F	FIRST HARMFUL EVENT equals 14, and RELATED FACTORS - PERSON (MV OCCUPANT) LEVEL does not equal 032, 089 for at least one occupant in the not in-transport motor vehicle involved in the FIRST HARMFUL EVENT,	RELATION TO TRAFFICWAY should not equal 01.
590F	FIRST HARMFUL EVENT equals 15,	at least one Person Level form must have a PERSON TYPE code of <i>11</i> , <i>12</i> , <i>or 13</i> .
5Y0F	FIRST HARMFUL EVENT equals 08, 09, 15,	NUMBER OF FORMS SUBMITTED FOR PERSONS NOT IN MOTOR VEHICLES must not equal 00.
670F	FIRST HARMFUL EVENT equals 12, 14, 45, 54, 55,	NUMBER OF VEHICLE FORMS SUBMITTED must be greater than 001.
9BAP	MANNER OF COLLISION OF THE FIRST HARMFUL EVENT equals 07, and PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 10 or 11 for neither one of the vehicles involved in the FIRST HARMFUL EVENT,	CRASH TYPE should equal 44-49, 98, 99 for the vehicles involved in the FIRST HARMFUL EVENT.
9ВСР	MANNER OF COLLISION OF THE FIRST HARMFUL EVENT equals 08, and PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 10 or 11 for neither one of the vehicles involved in the FIRST HARMFUL EVENT,	CRASH TYPE should equal 64-67, 98, 99 for the vehicles involved in the FIRST HARMFUL EVENT.
9BDP	MANNER OF COLLISION OF THE FIRST HARMFUL EVENT equals 01,	CRASH TYPE should not equal 44-49 for the vehicles involved in the FIRST HARMFUL EVENT.
9C0P	FIRST HARMFUL EVENT equals 55,	there must be at least one vehicle with UNIT TYPE equal to 1.
A041	CRASH MONTH equals 05-09,	SEQUENCE OF EVENTS, FIRST HARMFUL EVENT, MOST HARMFUL EVENT should not equal 48.
A080	DRIVER PRESENCE equals 0, and FIRST HARMFUL EVENT equals 12, and NUMBER OF VEHICLE FORMS SUBMITTED equals 002,	one RELATED FACTORS-DRIVER LEVEL should equal 0 20 or 0 54.
A100	FIRST HARMFUL EVENT is not equal to 02, 04, 05, 10, 16,	there should be one vehicle with TRAVEL SPEED of 001-151, 997-999, or blanks.
A1A0	ROADWAY SURFACE CONDITIONS equals 01 for a vehicle involved in the FIRST HARMFUL EVENT,	ATMOSPHERIC CONDITIONS should not equal 02-04, 11, 12.

Error ID	IF	THEN
A1B0	TRAFFIC CONTROL DEVICE equals 20, 21 for a vehicle involved in the FIRST HARMFUL EVENT,	RELATION TO JUNCTION (b) should not equal 01, 18.
A250	LAND USE AND FUNCTIONAL SYSTEM (b) equals 01-03, and RELATION TO JUNCTION (a) equals 1, and RELATION TO JUNCTION (b) does not equal 03, 05, 20,	TOTAL LANES IN ROADWAY should not equal 1 for the vehicles involved in the FIRST HARMFUL EVENT.
A293	WORK ZONE equals 1-3, and RELATION TO JUNCTION (b) equals 02, 03,	TRAFFIC CONTROL DEVICE should equal 01-03, 20, 40, 97, or 98 for the vehicle(s) involved in the FIRST HARMFUL EVENT.
A294	WORK ZONE equals 1-3, and RELATION TO JUNCTION (b) equals 01, 04, 05, 08, 17-19,	TRAFFIC CONTROL DEVICE should equal 00, 21, 28, 40, 50, 97, or 98 for the vehicle(s) involved in the FIRST HARMFUL EVENT.
A370	FIRST HARMFUL EVENT equals 99,	MANNER OF COLLISION OF THE FIRST HARMFUL EVENT should not equal 00, 01- 11.
A380	FIRST HARMFUL EVENT equals 01 and this vehicle is involved in the FIRST HARMFUL EVENT and vPIC BODY CLASS does not equal 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring / Sport Touring), 082 (Motorcycle - Cruiser), 084 Offroad Vehicle - Dirt Bike / Off-Road), 085 (Motorcycle - Dual Sport / Adventure / Supermoto / On/Off-Road), 086 (Off-road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small / Minibike), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 104 (Motorcycle - Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motocross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle), for this vehicle, and RELATION TO TRAFFICWAY equals,	LOCATION OF ROLLOVER should equal respectively.
A390	FIRST HARMFUL EVENT equals 17, 19-21, 23-26, 30-35, 38-43, 52, 53, 57, 58 , 93,	RELATION TO TRAFFICWAY should not equal 01, 02, 07, 11.
A3C0	FIRST HARMFUL EVENT equals 02-07,16, 44, 51, 72,	CRASH TYPE must equal 00 for the vehicle involved in the FIRST HARMFUL EVENT.

Error ID	IF	THEN
A3D0	FIRST HARMFUL EVENT equals 01-07, 16, 44, 51, 72,	CRASH TYPE must not equal 20-91.
A3E0	CRASH TYPE equals 13,	FIRST HARMFUL EVENT must equal 08, 09, 11, 15, or 49.
A41A	FIRST HARMFUL EVENT equals 02, 04, 07, 16, 44, or 54,	CRITICAL EVENT - PRECRASH (EVENT) should equal 98 for the vehicles involved in the FIRST HARMFUL EVENT.
A420	FIRST HARMFUL EVENT equals 10,	RELATION TO JUNCTION (b) should equal 06.
A421	FIRST HARMFUL EVENT equals 20, 21, 23, 24, 25, 26, 30, 32, 33, 34, 35, 40, 46, 52, 53, 57, 59,	RELATION TO TRAFFICWAY should equal 03, 04, 08, 10, or 12.
A430	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 10-11 for a vehicle involved in the FIRST HARMFUL EVENT,	RELATION TO JUNCTION (b) should not equal 01, 18.
A440	RELATION TO JUNCTION (b) equals 06,	TRAFFIC CONTROL DEVICE should equal 65 for any vehicle involved in the FIRST HARMFUL EVENT.
A480	CRASH TYPE equals 00,	FIRST HARMFUL EVENT must equal 02-07, 16, 44, 51, 72.
A4A0	CRASH TYPE equals 01-16,	FIRST HARMFUL EVENT must not equal 12.
A4B4	CRASH TYPE equals 12 (Stationary Object on Road) or 13 (Pedestrian/Animal on Road),	RELATION TO TRAFFICWAY should not equal 4 (On Roadside) unless the FIRST HARMFUL EVENT occurs in a bicycle lane.
A4BP	FIRST HARMFUL EVENT equals 54 or 55,	CRASH TYPE must equal 98 for the vehicles involved in the FIRST HARMFUL EVENT.
A4C0	RELATION TO JUNCTION (b) equals 04,	at least one PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) for the vehicles involved in the FIRST HARMFUL EVENT should equal 10, 11, 13, or 98.
A4DP	CRASH TYPE equals 20-91,	FIRST HARMFUL EVENT must equal 12.
A4EP	CRASH TYPE equals 11,	FIRST HARMFUL EVENT must equal 14.
A60F	FIRST HARMFUL EVENT equals 14,	CRASH TYPE should equal 01-11, 14, 15, 92, 98, 99.
A611	TRAFFICWAY DESCRIPTION equals 6 for at least one vehicle involved in the FIRST HARMFUL EVENT,	RELATION TO JUNCTION (b) should equal 02, 03, 05, 17-20.

Error ID	IF	THEN
A61F	FIRST HARMFUL EVENT equals 08, 09, 11, 15, 49, and RELATION TO TRAFFICWAY equals 01, 02, 07, 11, and PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) is not equal to 00, 13 for the vehicle involved in the FIRST HARMFUL EVENT,	CRASH TYPE should equal 13 for the vehicle involved in the FIRST HARMFUL EVENT.
A61G	the FIRST HARMFUL EVENT equals 08, and PERSON TYPE equals 05, and NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 21, 22, 24, 25, 28, and the VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is involved in the FIRST HARMFUL EVENT,	CRASH TYPE should not equal 13 for this vehicle.
A61H	the FIRST HARMFUL EVENT equals 09, and PERSON TYPE equals 06, 07, and NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 21, 22, 24, 25, 28, and the VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is involved in the FIRST HARMFUL EVENT,	CRASH TYPE should not equal 13 for this vehicle.
A61J	the FIRST HARMFUL EVENT equals 15, and PERSON TYPE equals 11, 12, or 13, and NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 21, 22, 24, 25, 28, and the VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is involved in the FIRST HARMFUL EVENT,	CRASH TYPE should not equal 13 for this vehicle.
A61K	the FIRST HARMFUL EVENT equals 49, and PERSON TYPE equals 04, and NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 21, 22, 24, 25, 28, and the VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is involved in the FIRST HARMFUL EVENT,	CRASH TYPE should not equal 13 for this vehicle.
A62F	FIRST HARMFUL EVENT equals 18, 43, 73, 91, or 93, and RELATION TO TRAFFICWAY equals 01, 02, or 11,	CRASH TYPE should equal 12 or 15 for the vehicle involved in the FIRST HARMFUL EVENT.
A62G	FIRST HARMFUL EVENT equals 98 and RELATION TO TRAFFICWAY equals 01, 02, or 11,	CRASH TYPE must equal 16 for the vehicle involved in the FIRST HARMFUL EVENT.
A63F	FIRST HARMFUL EVENT equals 01,	CRASH TYPE should equal 01-10, 98, 99 for the vehicle involved in the FIRST HARMFUL EVENT.

Error ID	IF	THEN
A65F	FIRST HARMFUL EVENT equals 14, and RELATED FACTORS - PERSON (MV OCCUPANT) LEVEL equals 032 or 089 for an occupant of the parked vehicle involved in the FIRST HARMFUL EVENT,	CRASH TYPE should equal 15, 92, or 98 for the in-transport vehicle involved in the FIRST HARMFUL EVENT.
A66F	FIRST HARMFUL EVENT equals 14, and CRASH TYPE equals 01-10 or 14,	RELATED FACTORS - PERSON (MV OCCUPANT) LEVEL must not equal 032 or 089 for any occupant of the parked vehicle involved in the FIRST HARMFUL EVENT.
A770	FIRST HARMFUL EVENT equals 46,	TRAFFIC CONTROL DEVICE should equal 01-04, 65 for the vehicle involved in the FIRST HARMFUL EVENT.
A780	FIRST HARMFUL EVENT equals 46,	TRAFFIC CONTROL DEVICE should not equal 00 for the vehicle involved in the FIRST HARMFUL EVENT.
A790	FIRST HARMFUL EVENT equals 46,	RELATION TO JUNCTION (b) should not equal 01, 07.
A800	FIRST HARMFUL EVENT equals 46,	RELATION TO TRAFFICWAY should not equal 01, 02, 05, 07, 11.
A801	FIRST HARMFUL EVENT equals 12,	RELATION TO TRAFFICWAY must not equal 5.
A890	RELATION TO JUNCTION (b) equals 01,	TRAFFIC CONTROL DEVICE should not equal 01-04, 20, or 21 for any vehicle involved in the FIRST HARMFUL EVENT.
A891	RELATION TO JUNCTION (b) equals 98 or 99,	TRAFFIC CONTROL DEVICE should not equal 01, 02, 03, 20, 21, or 65 for a vehicle involved in the FIRST HARMFUL EVENT.
AC1A	FIRST HARMFUL EVENT equals 54,	MANNER OF COLLISION OF THE FIRST HARMFUL EVENT should equal 11.
AM1P	FIRST HARMFUL EVENT equals 54, or SEQUENCE OF EVENTS equals 54 for any vehicle,	one RELATED FACTORS-CRASH LEVEL must equal θ 14.
AZ2P	FIRST HARMFUL EVENT does not equal 02-07, 16, 44, 51, 72, and CRITICAL EVENT-PRECRASH (EVENT) equals 14, and ATTEMPTED AVOIDANCE MANEUVER equals 01,	CRASH TYPE must equal 14 for the vehicle involved in the FIRST HARMFUL EVENT.
AZ5P	CRITICAL EVENT-PRECRASH (EVENT) equals 70-73 for a vehicle involved in the FIRST HARMFUL EVENT,	RELATION TO JUNCTION (b) should equal 04 or 08.

Error ID	IF	THEN
B15P	CRITICAL EVENT - PRECRASH (EVENT) equals 91, and ATTEMPTED AVOIDANCE MANEUVER equals 00, 01, and the vehicle is involved in the FIRST HARMFUL EVENT,	CRASH TYPE should equal 15.
B16P	CRITICAL EVENT - PRECRASH (EVENT) equals 90, and ATTEMPTED AVOIDANCE MANEUVER equals 01, and the vehicle is involved in the FIRST HARMFUL EVENT,	CRASH TYPE should equal 12 or 15.
BZ80	MANNER OF COLLISION OF THE FIRST HARMFUL EVENT equals 00,	CRASH TYPE must equal 00, 01-16, 92, 98, 99 for the vehicle in the FIRST HARMFUL EVENT.
BZ90	CRASH TYPE equals 01-05, and PRE-IMPACT LOCATION is not equal to 0 or 5,	at least one SEQUENCE OF EVENTS prior to the FIRST HARMFUL EVENT must equal 63.
BZ91	CRASH TYPE equals 06-10, and PRE-IMPACT LOCATION is not equal to 0 or 5,	at least one SEQUENCE OF EVENTS prior to the FIRST HARMFUL EVENT must equal 64.
D530	any VIOLATIONS CHARGED equal 36 for a vehicle involved in the FIRST HARMFUL EVENT,	RELATION TO JUNCTION (b) should equal 06.
FA0F	FIRST HARMFUL EVENT equals blank,	case status is flawed.
FA1F	CRASH TYPE for all in-transport vehicles not involved in the FIRST HARMFUL EVENT must equal 98.	
PB34	NUMBER OF FORMS SUBMITTED FOR PERSONS NOT IN MOTOR VEHICLES equals 01, and FIRST HARMFUL EVENT equals 08, and RELATION TO JUNCTION (b) equals 02,	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN must not equal 320, 330, 360, 680, 830, 890, 900, or 910.
PB35	NUMBER OF FORMS SUBMITTED FOR PERSONS NOT IN MOTOR VEHICLES equals 01, and FIRST HARMFUL EVENT equals 08, and RELATION TO JUNCTION (b) equals 02,	PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN must equal 1.
PBA8	NUMBER OF FORMS SUBMITTED FOR PERSONS NOT IN MOTOR VEHICLES equals 1, and the FIRST HARMFUL EVENT equals 08, 09, or 15, and NON-MOTORIST LOCATION AT TIME OF CRASH equals 01 or 02;	RELATION TO JUNCTION (SPECIFIC LOCATION) must equal 3.
PC20	RELATION TO TRAFFICWAY equals 02-08, 10, or 12,	PRE-IMPACT LOCATION of the vehicle(s) involved in the FIRST HARMFUL EVENT should equal 0, 4, 5, or 9.

Error ID	IF	THEN
U020	UNLIKELY: FIRST HARMFUL EVENT equals 02, 04, 06, 51, or 72.	
U030	UNLIKELY: FIRST HARMFUL EVENT equals 12, 55, and MANNER OF COLLISION OF THE FIRST HARMFUL EVENT equals 10, 11.	
U640	UNLIKELY: FIRST HARMFUL EVENT equals 99.	
V79P	ROLLOVER equals 2, and FIRST HARMFUL EVENT equals 01,	CRASH TYPE must equal 01-10, 14, 15, or 98 for the vehicle involved in the FIRST HARMFUL EVENT.

Consistency Checks (CRSS Only) (See Section 400):

Error ID	IF	THEN
A3G0	INTERSTATE HIGHWAY equals 1, and RELATION TO JUNCTION (a) equals 1, and RELATION TO JUNCTION (b) is not equal to 03 or 05 or 20,	TOTAL LANES IN ROADWAY should not equal 1 for at least one vehicle involved in the FIRST HARMFUL EVENT.
A3H0	INTERSTATE HIGHWAY equals 1, and RELATION TO JUNCTION (a) equals 1, and RELATION TO JUNCTION (b) is not equal to 03 or 05 or 20,	TRAFFICWAY DESCRIPTION should not equal 4 for at least one vehicle involved in the FIRST HARMFUL EVENT.
A3J0	INTERSTATE HIGHWAY equals 1, and RELATION TO JUNCTION (a) equals 1, and RELATION TO JUNCTION (b) is not equal to 03 or 05 or 20,	SPEED LIMIT should not equal 01-40 for at least one vehicle involved in the FIRST HARMFUL EVENT.
A3K0	FIRST HARMFUL EVENT equals 10,	INTERSTATE HIGHWAY should not equal 1.
A930	INTERSTATE HIGHWAY equals 1, and RELATION TO JUNCTION (a) equals 1, and RELATION TO JUNCTION (b) is not equal to 03, 05, or 20,	TRAFFIC CONTROL DEVICE should not equal 01-03, 20, 23, or 65 for at least one vehicle involved in the FIRST HARMFUL EVENT.

Consistency Checks (FARS Only) (See Section 400):

Error ID	IF	THEN
A110	FIRST HARMFUL EVENT equals 10,	LAND USE AND FUNCTIONAL SYSTEM (b) should not equal 01-03.
A350	ROUTE SIGNING equals 1,	FIRST HARMFUL EVENT should not equal 10.
A810	FIRST HARMFUL EVENT equals 46, and RELATION TO JUNCTION (a) equals 1, and RELATION TO JUNCTION (b) does not equal 02, 03, 05,	LAND USE AND FUNCTIONAL SYSTEM (b) should not equal 01.
A820	FIRST HARMFUL EVENT equals 46, and RELATION TO JUNCTION (a) equals 1, and RELATION TO JUNCTION (b) does not equal 02, 03, 05,	ROUTE SIGNING should not equal 1.
V536	CRASH TYPE equals 20-49,	TRAFFICWAY DESCRIPTION should be the same for the vehicles involved in the FIRST HARMFUL EVENT.
V537	CRASH TYPE equals 68, 69, 82, 83, 86, 87, 88, or 89,	the vehicles involved in the FIRST HARMFUL EVENT should have a RELATION TO JUNCTION equal to 02, 04, or 08.
V539	CRASH TYPE equals 50-67,	ROADWAY ALIGNMENT should not equal 2 for both vehicles involved in the FIRST HARMFUL EVENT, and should not equal 3 for both vehicles involved in the FIRST HARMFUL EVENT.
V750	UNDERRIDE/OVERRIDE equals 1-3,	FIRST HARMFUL EVENT or at least one SEQUENCE OF EVENTS (for this vehicle) should equal 12, 55.
V760	UNDERRIDE/OVERRIDE equals 4-6,	FIRST HARMFUL EVENT or at least one SEQUENCE OF EVENTS (for this vehicle) should equal 14, 45.

C20 - Manner of Collision of the First Harmful Event

FORMAT: 2 numeric

SAS NAME: Accident.MAN_COLL, Vehicle.MAN_COLL, Person.MAN_COLL,

Parkwork.PMAN_COLL

ELEMENT VALUES:

Codes	Attributes
00	The First Harmful Event was Not a Collision with a Motor Vehicle In-Transport
01	Front-to-Rear
02	Front-to-Front
06	Angle
07	Sideswipe-Same Direction
08	Sideswipe-Opposite Direction
09	Rear-to-Side
10	Rear-to-Rear
11	<u>Other</u>
98	Not Reported
99	Reported as Unknown

Definition: This element identifies the orientation of two motor vehicles in-transport when they are involved in the <u>FIRST HARMFUL EVENT</u> of a collision crash. If the FIRST HARMFUL EVENT is not a collision between two motor vehicles in-transport, it is classified as such.

Remarks:

- **00** (The First Harmful Event was Not a Collision with a Motor Vehicle In-Transport) is used when the <u>FIRST HARMFUL EVENT</u> is not an impact between two in-transport motor vehicles.
- **01** (**Front-to-Rear**) is used when a collision occurs between the rear of one vehicle and the front of another vehicle. If this attribute is selected, the points of impact for the vehicles involved in the FIRST HARMFUL EVENT must be front to back.
- **02** (**Front-to-Front**) is used when a collision occurs between the front end of one vehicle and the front end of another vehicle. If this attribute is selected, the points of impact for the vehicles involved in the <u>FIRST HARMFUL EVENT</u> must both be front.
- **06** (**Angle**) is a crash where two motor vehicles impact at an angle. For example, the front of one motor vehicle impacts the side of another motor vehicle. If this attribute is selected, the points of impact for the vehicles involved in the <u>FIRST HARMFUL EVENT</u> must not be front to front, front to back, back to back, or back to side.
- **07** (**Sideswipe Same Direction**) is used when the case material report that a sideswipe occurred while the two vehicles were traveling in the same direction. (See **Figure 2**.)

Clarification for coding sideswipe attributes 07 and 08: Sideswipe codes are used for both vehicles when the initial engagement has no significant involvement of the front or rear surface areas where the impact swipes along the side surfaces of the vehicles parallel to their direction of travel. If it is unclear if the collision was an angle or a sideswipe, then code it <u>06 (Angle)</u>. Endswipes and side-to-side angle impacts are coded as <u>11 (Other)</u>. (See <u>Figure 2</u>.)

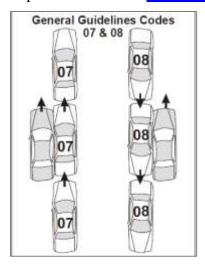


Figure 2: General Guidelines for Sideswipe Codes 07 and 08

08 (**Sideswipe - Opposite Direction**) is used when the case material report that a sideswipe occurred while the two vehicles were traveling in opposite directions. (See <u>Figure 2</u>.)

09 (**Rear-To-Side**) is used when a collision occurs between the rear of one vehicle and the side of another vehicle. If this attribute is selected, the points of impact for the vehicles involved in the <u>FIRST HARMFUL EVENT</u> must back for one and side for the other.

10 (**Rear-To-Rear**) is used when a collision occurs between the rear of one vehicle and the rear of another vehicle. If this attribute is selected, the points of impact for the vehicles involved in the FIRST HARMFUL EVENT must both be back.

11 (Other) should be used for any collision between two motor vehicles in-transport where the collision is not described by attributes "01-10," including set in motion situations.

Examples include:

- One vehicle "end" swipes (endswipe) another vehicle instead of their "sides" swiping.
- One vehicle slides into another vehicle at an angle such that they impact side-toside.
- One vehicle is airborne and makes contact with its front or undercarriage to the other vehicle's hood or top.
- Cargo or other load on one motor vehicle in-transport shifts and lands or is thrown into/onto another vehicle.
- The tire of one motor vehicle in-transport throws a stone through the windshield of another vehicle.

• A vehicle occupant or motorcyclist falls or is thrown from a vehicle striking or is struck by another vehicle.

If a police crash report data element is coded with the attribute "Other" but the officer does not specify what this refers to:

- 1. Code **11** (**Other**) if the police crash report attribute choices can be matched to or include all the attributes in FARS/CRSS.
- 2. Code **98** (**Not Reported**) if the police crash report choices cannot be matched to or include all the attributes in FARS/CRSS.

98 (Not Reported) Check to see if <u>00 (The First Harmful Event was Not a Collision with a Motor Vehicle In-Transport)</u> or <u>99 (Reported as Unknown)</u> is more appropriate for the situation.

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**."

Code 98 (Not Reported) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).

99 (Reported as Unknown) is used when police indicate unknown.

Consistency Checks (See Section 400):

Error ID	IF	THEN
420P	MANNER OF COLLISION OF THE FIRST HARMFUL EVENT equals 07, 08,	there must be at least two vehicle forms with AREAS OF IMPACT-INITIAL CONTACT POINT equal to 01-05, 07-11, 61-63, 81-83, 98, 99.
421P	MANNER OF COLLISION OF THE FIRST HARMFUL EVENT equals 01,	AREAS OF IMPACT-INITIAL CONTACT POINT for one vehicle in the FIRST HARMFUL EVENT must equal 12, and AREAS OF IMPACT-INITIAL CONTACT POINT for the other vehicle in the FIRST HARMFUL EVENT must equal 06.

Error ID	IF	THEN
422P	MANNER OF COLLISION OF THE FIRST HARMFUL EVENT equals 02,	AREAS OF IMPACT-INITIAL CONTACT POINT for one vehicle in the FIRST HARMFUL EVENT must equal 12, and AREAS OF IMPACT- INITIAL CONTACT POINT for the other vehicle in the FIRST HARMFUL event must equal 12.
423P	MANNER OF COLLISION OF THE FIRST HARMFUL EVENT equals 06,	AREAS OF IMPACT-INITIAL CONTACT POINT for one vehicle in the FIRST HARMFUL EVENT must equal 01, 11, 12, 98, 99, and AREAS OF IMPACT-INITIAL CONTACT POINT for the other vehicle in the FIRST HARMFUL EVENT must equal 01-05, 07-11, 61-63, 81-83 98, 99.
424P	MANNER OF COLLISION OF THE FIRST HARMFUL EVENT equals 09,	AREAS OF IMPACT-INITIAL CONTACT POINT for one vehicle in the FIRST HARMFUL EVENT should equal 06, and AREAS OF IMPACT-INITIAL CONTACT POINT for the other vehicle in the FIRST HARMFUL EVENT should equal 01-05, 07-11, 61-63, 81-83, 98, 99.
425P	MANNER OF COLLISION OF THE FIRST HARMFUL EVENT equals 10,	AREAS OF IMPACT- INITIAL CONTACT POINT for one vehicle in the FIRST HARMFUL EVENT should equal 06, and AREAS OF IMPACT- INITIAL CONTACT POINT for the other vehicle in the FIRST HARMFUL EVENT should equal 06, 98, 99.
426P	MANNER OF COLLISION OF THE FIRST HARMFUL EVENT equals 02,	CRASH TYPE must not equal 64-67 for the vehicles involved in the FIRST HARMFUL EVENT.
427P	MANNER OF COLLISION OF THE FIRST HARMFUL EVENT equals 06,	CRASH TYPE must not equal 20-43 or 50-53 for the vehicles involved in the FIRST HARMFUL EVENT.
500F	FIRST HARMFUL EVENT equals 01-11, 14-21, 23-26, 30-35, 44-53, 57-59, 72, 73, or 98,	MANNER OF COLLISION OF THE FIRST HARMFUL EVENT must not equal 01, 02, 06-11, 98, 99.
510F	FIRST HARMFUL EVENT equals 12, 54, 55,	MANNER OF COLLISION OF THE FIRST HARMFUL EVENT must not equal 00.
9BAP	MANNER OF COLLISION OF THE FIRST HARMFUL EVENT equals 07, and PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 10 or 11 for neither one of the vehicles involved in the FIRST HARMFUL EVENT,	CRASH TYPE should equal 44-49, 98, 99 for the vehicles involved in the FIRST HARMFUL EVENT.

Error ID	IF	THEN
9ВСР	MANNER OF COLLISION OF THE FIRST HARMFUL EVENT equals 08, and PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 10 or 11 for neither one of the vehicles involved in the FIRST HARMFUL EVENT,	CRASH TYPE should equal 64-67, 98, 99 for the vehicles involved in the FIRST HARMFUL EVENT.
9BDP	MANNER OF COLLISION OF THE FIRST HARMFUL EVENT equals 01,	CRASH TYPE should not equal 44-49 for the vehicles involved in the FIRST HARMFUL EVENT.
A370	FIRST HARMFUL EVENT equals 99,	MANNER OF COLLISION OF THE FIRST HARMFUL EVENT should not equal 00, 01- 11.
AC1A	FIRST HARMFUL EVENT equals 54,	MANNER OF COLLISION OF THE FIRST HARMFUL EVENT should equal 11.
BZ80	MANNER OF COLLISION OF THE FIRST HARMFUL EVENT equals 00,	CRASH TYPE must equal 00, 01-16, 92, 98, 99 for the vehicle in the FIRST HARMFUL EVENT.
U030	UNLIKELY: FIRST HARMFUL EVENT equals 12, 55, and MANNER OF COLLISION OF THE FIRST HARMFUL EVENT equals 10, 11.	

C21 - Relation to Junction

FORMAT: 1 numeric occurring 1 time, 2 numeric occurring 1 time

SAS NAME: Accident.RELJCT1, Accident.RELJCT2

ELEMENT VALUES:

C21a: Within Interchange Area?

Codes	Attributes
0	<u>No</u>
1	<u>Yes</u>
8	Not Reported
9	Reported as Unknown

C21b: Specific Location

Codes	Attributes
01	Non-Junction Non-Junction
02	<u>Intersection</u>
03	<u>Intersection-Related</u>
05	Entrance/Exit Ramp Related
20	Entrance/Exit Ramp
06	Railway Grade Crossing
07	<u>Crossover-Related</u>
04	Driveway Access
08	Driveway Access Related
16	Shared-Use Path Crossing
17	Acceleration/Deceleration Lane
18	Through Roadway
19	Other Location Within Interchange Area
98	Not Reported
99	Reported as Unknown

Definition: The coding of this data element is done in two subfields and based on the location of the <u>FIRST HARMFUL EVENT</u> of the crash. It identifies the crash's location with respect to presence in an interchange area and the crash's location with respect to presence in or proximity to components typically in junction or interchange areas.

Remarks:

CRSS SPECIAL INSTRUCTION:

As of 2020, CRSS coders must use the Geolocator tool provided in RBIS to assist in coding the element RELATION TO JUNCTION. This tool must be used to assist with coding only this data element. If the crash report does not provide enough detail to code this element and you are unable to pinpoint the location, you may code 8 (Not Reported) for Subfield 1 or 98 (Not Reported) for Subfield 2, or Not Reported for both.

Subfield 1 (C21a): Within Interchange Area?

Interchange: An interchange is a system of interconnecting roadways in conjunction with one or more grade separations, providing for the movement of traffic between two or more roadways on different levels.

See the **Coding Guide: Interchanges** for helpful information.

0 (No) is used if the <u>FIRST HARMFUL EVENT</u> of the crash occurs outside of the boundaries of an interchange.

1 (Yes) is used if the location of the <u>FIRST HARMFUL EVENT</u> of the crash is within an interchange area.

8 (Not Reported) Check to see if <u>0</u> (No) or <u>9</u> (Reported as Unknown) are more appropriate for the situation. If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "Not Reported."

Code **8** (**Not Reported**) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).
- **9 (Reported as Unknown)** is used when police indicate unknown.

Subfield 2 (C21b): Specific Location

01 (**Non-Junction**) is used for crashes where the <u>FIRST HARMFUL EVENT</u> occurs **outside** an interchange area and does not occur in or related to a junction, ramp, rail grade crossing, crossover, or shared-use path or trail. This attribute includes crashes that occur on a parking lot way (access Road) at the connection of a parking aisle. (See <u>Figure 4</u>.)

02 (**Intersection**) is used when the <u>FIRST HARMFUL EVENT</u> occurs in an area that: (1) contains a crossing or connection of two or more roadways not classified as a driveway access, and (2) is embraced within the prolongation of the lateral curb lines or, if none, the lateral boundary lines of the roadways. Where the distance along a roadway between two areas meeting these criteria is less than 10 meters, the two areas and the roadway connecting them are considered to be parts of a single intersection. **See the <u>Coding Guide: Intersections</u> for helpful information.**

FARS SPECIAL INSTRUCTION:

In an Intersection, within Interchange Area: if the <u>FIRST HARMFUL EVENT</u> occurs within the intersection of a ramp and the surface roadway: It is important to always code <u>NATIONAL HIGHWAY SYSTEM</u> and <u>LAND USE AND FUNCTIONAL SYSTEM</u> for the highest class of trafficway at this intersection.

03 (**Intersection-Related**) means that the <u>FIRST HARMFUL EVENT</u>: (1) occurs on an approach to or exit from an intersection and (2) results from an activity, behavior, or control related to the movement of traffic units through the intersection. **See the <u>Coding Guide:</u> Intersections for helpful information.**

Notes:

- For crashes where the <u>FIRST HARMFUL EVENT</u> occurs in a crosswalk at an intersection area, use **03** (Intersection-Related).
- For Traffic Circles and Roundabouts, enter <u>02</u> (<u>Intersection</u>) when the <u>FIRST HARMFUL EVENT</u> occurs within the area formed by the prolongation of curb or edge lines of the approach legs of the intersection, regardless of whether or not the collision was in any way related to an intersection. Use <u>03</u> (<u>Intersection-Related</u>) if the <u>FIRST HARMFUL EVENT</u> occurs in the central island or any directional island that serves the rotary intersection.

05 (Entrance/Exit Ramp Related) is used when the <u>FIRST HARMFUL EVENT</u> occurs off the entrance/exit ramp roadway, but is related to the use of or entry onto the ramp. (See <u>Figure 3</u>.)

Note: If the <u>FIRST HARMFUL EVENT</u> occurs in the intersection of a ramp, then use <u>02</u> (<u>Intersection</u>). If the <u>FIRST HARMFUL EVENT</u> occurs on the ramp outside of an intersection of the ramp and the surface roadway and is related to the movement of traffic through the intersection, then use <u>03</u> (<u>Intersection-Related</u>).

20 (Entrance/Exit Ramp) is used when the <u>FIRST HARMFUL EVENT</u> occurs **on** an entrance or exit ramp roadway and is not the result of an activity, behavior, or control related to the movement of traffic units through an intersection. This would include all the areas between the gore and entrance/exit ramp intersection. (See <u>Figure 3</u>.)

06 (**Railway Grade Crossing**) is used when the <u>FIRST HARMFUL EVENT</u> occurred in the area formed by the at-grade connection of a railroad bed and a roadway. Crashes occurring outside a railway grade crossing due to traffic congestion associated with a railway grade crossing are considered non-junction.

07 (**Crossover-Related**) is used when the <u>FIRST HARMFUL EVENT</u> occurs in a crossover or on approach to or exit from a crossover and related to the use of the crossover.

Note: A crossover is the area of the median of a divided trafficway where motor vehicles are permitted to cross the opposing lane of traffic or execute a U-turn.

04 (**Driveway Access**) is used when the <u>FIRST HARMFUL EVENT</u> occurs:

- 1. on a driveway access (See ANSI D16.1 Manual 2.5.9) (See Figure 5.)
- 2. or involves a road vehicle entering or leaving by way of a driveway access where at least one traffic unit (vehicle, pedalcyclist, or pedestrian) is physically on the driveway access within the trafficway.

This attribute includes crashes occurring on sidewalks within the driveway access.

Examples:

- A car turning into a private residence driveway strikes a bicyclist riding on the sidewalk that crosses over the driveway access.
- A tractor trailer backing out of a business entrance onto the trafficway, while partially on the driveway access, is struck by a car on the roadway.

08 (**Driveway Access Related**) is used when the FIRST HARMFUL EVENT:

- 1. occurs adjacent to a driveway,
- 2. does not occur on a **04** (**Driveway Access**), but
- 3. results from an activity, behavior, or control related to the movement of traffic units onto or out of a driveway (See ANSI D16.1 Manual 2.5.9.1). (See Figure 5.)

Examples:

- A vehicle attempting to turn left into a driveway from the eastbound lanes is struck broadside by another vehicle traveling in the westbound lanes,
- A vehicle that has just entered the trafficway from a driveway is struck in the rear before it can gain speed.

Note: When a driveway access junction is within an intersection and the crash would meet the criteria of driveway access or driveway access related, enter <u>02 (Intersection)</u> if the <u>FIRST HARMFUL EVENT</u> was within the boundaries of the intersection or <u>03</u> (<u>Intersection-Related</u>) if it was not, but related to the intersection.

Note: If there is not sufficient detail available to differentiate between driveway access and driveway access related, but it is known that the vehicle was coming out of (or going into) a driveway, default to **08** (**Driveway Access Related**). (See **Figure 5**.)

16 (Shared-Use Path Crossing) is used when the <u>FIRST HARMFUL EVENT</u> occurs at the crossing of a roadway and a shared-use path (see **Note** below for the definition of a shared use

path). At least one non-motorist has to be physically in the crossing of the roadway and the shared-use path, and the crash has to be related to the use of it. If the crossing of a roadway and a shared-use path overlaps/coincides with a crosswalk in a non-intersection area (e.g., mid-block), then select **16** (**Shared-Use Path Crossing**).

Note: A shared-use path is a bikeway **physically separated** from motorized vehicular traffic by an open space or barrier and either within the highway right of way or an independent right of way. Shared-use paths will also be used by pedestrians, skaters, wheelchairs, joggers, and other non-motorist users. A shared-use path is not a sidewalk, and where a shared-use path crosses another land way is similar to, but not, a crosswalk. A shared-use path crossing may overlap/coincide with a crosswalk.

17 (**Acceleration/Deceleration Lane**) is used when the <u>FIRST HARMFUL EVENT</u> occurs on the roadway in an interchange area on an auxiliary or speed-change lane that allows vehicles to accelerate to highway speeds before entering the through roadway or decelerate to safe speeds to negotiate a ramp without interrupting traffic flow on the through roadway exited. (See <u>Figure 3</u>.)

18 (**Through Roadway**) (See <u>Figure 3</u>.) is used when the <u>FIRST HARMFUL EVENT</u> occurs on the roadway within an interchange area but **does not** occur:

- In an intersection or related to an intersection <u>02 (Intersection)</u> or <u>03 (Intersection Related)</u>.
- On a 20 (Entrance/Exit Ramp) or related to the use of the ramp 05 (Entrance/Exit Ramp Related).
- In a <u>17 (Acceleration/Deceleration Lane)</u>.

19 (Other Location Within Interchange Area) is used when the <u>FIRST HARMFUL EVENT</u> occurs within an Interchange, off the roadway (e.g., median, shoulder, roadside) and is not related to the use of or the entry onto a ramp. (See <u>Figure 3</u>.)

Examples:

- A vehicle on the through roadway portion of the interchange departs the roadway and overturns in the median.
- A vehicle leaves the through roadway portion of the interchange and strikes a vehicle parked on the shoulder.

98 (Not Reported) Check to see if <u>99 (Reported as Unknown)</u> is more appropriate for the situation.

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**."

Code **98** (Not Reported) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS

attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).

99 (Reported as Unknown) is used when police indicate unknown.

Valid Combinations for Subfield 1 and Subfield 2

If <u>Subfield TWO</u> is coded:	Subfield ONE may only be coded as:
01 Non-Junction	0 No
02 Intersection	0 No, 1 Yes, 8 Not Reported, 9 Reported as Unknown
03 Intersection-Related	0 No, 1 Yes, 8 Not Reported, 9 Reported as Unknown
04 Driveway Access	0 No, 1 Yes, 8 Not Reported, 9 Reported as Unknown
05 Entrance/Exit Ramp Related	0 No, 1 Yes, 8 Not Reported, 9 Reported as Unknown
06 Railway Grade Crossing	0 No
07 Crossover Related	0 No, 1 Yes, 8 Not Reported, 9 Reported as Unknown
08 Driveway Access Related	0 No, 1 Yes, 8 Not Reported, 9 Reported as Unknown
16 Shared-Use Path or Trail	0 No, 1 Yes, 8 Not Reported, 9 Reported as Unknown
17 Acceleration/Deceleration Lane	1 Yes
18 Through Roadway	1 Yes
19 Other Location Within Interchange Area	1 Yes
20 Entrance/Exit Ramp	0 No, 1 Yes, 8 Not Reported, 9 Reported as Unknown
98 Not Reported	0 No, 1 Yes, 8 Not Reported, 9 Reported as Unknown
99 Reported as Unknown	0 No, 1 Yes, 8 Not Reported, 9 Reported as Unknown

<u>Figure 3</u> below will help identify RELATION TO JUNCTION codes <u>05 (Entrance/Exit Ramp Related)</u>, <u>17 (Acceleration/Deceleration Lane)</u>, <u>18 (Through Roadway)</u>, <u>19 (Other Location Within Interchange Area)</u>, and <u>20 (Entrance/Exit Ramp)</u>.

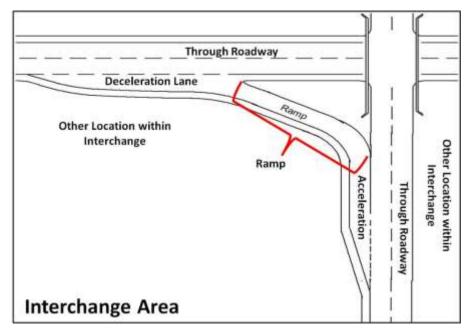


Figure 3: Interchange Area

(See ANSI D16.1 - 2007, 7th Edition)

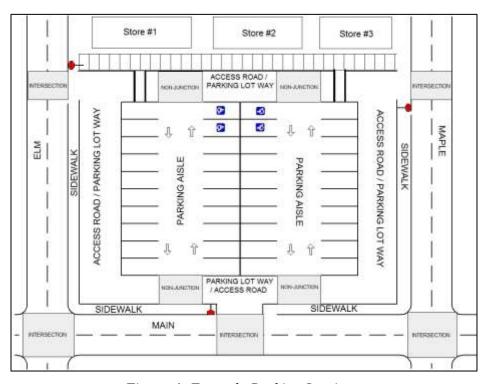


Figure 4: Example Parking Lot Area

(01 (Non-junction), 02 (Intersection))

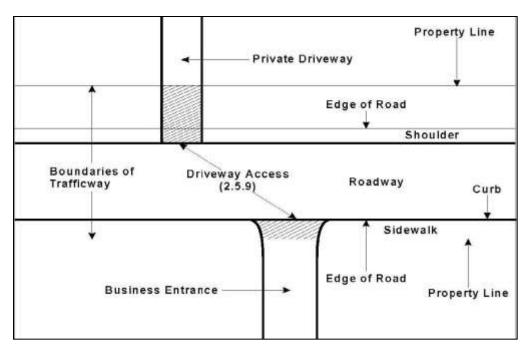


Figure 5: Driveway Access

(See ANSI D16.1 - 2017, 8th Edition)

<u>Figure 6</u> below will help identify if the crash occurred within an Interchange Area for RELATION TO JUNCTION (**C21a**) - **Within Interchange Area**.

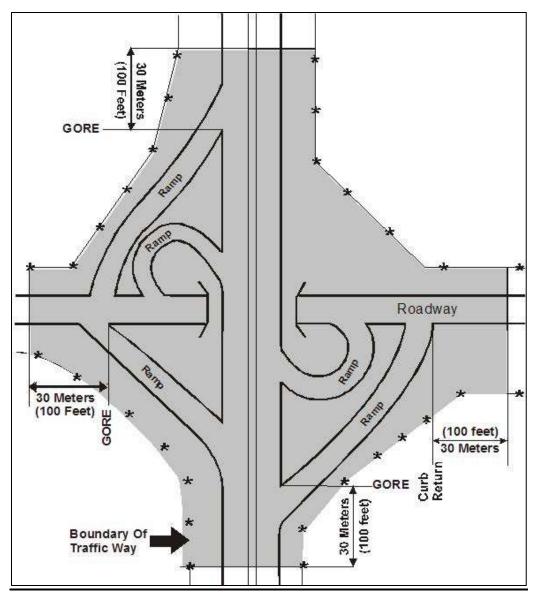


Figure 6: Interchange Crashes

Crashes that occur within the shaded area are interchange Crashes (see ANSI D16.1 - 2017, 8th Edition).

Consistency Checks (See Section 400):

Error ID	IF	THEN
250P	RELATION TO JUNCTION (b) equals 01, 02, 04, 06, 07, 16-19, 98, 99, and RELATION TO TRAFFICWAY equals 03,	TRAFFICWAY DESCRIPTION should equal 2, 3 for at least one vehicle involved in the first harmful event.
254P	RELATION TO TRAFFICWAY equals 01, and RELATION TO JUNCTION (b) equals 20,	TRAFFICWAY DESCRIPTION must equal 6 for at least one vehicle involved in the FIRST HARMFUL EVENT.
258P	RELATION TO JUNCTION (b) is 05 or 20	TRAFFICWAY DESCRIPTION should equal 6 for <i>at least one</i> vehicle involved in the FIRST HARMFUL EVENT.
3E00	CRITICAL EVENT - PRECRASH (EVENT) equals 65-68 or 70-73 for a vehicle involved in the FIRST HARMFUL EVENT,	RELATION TO JUNCTION (b) should not equal 01 or 18.
740P	RELATION TO JUNCTION (b) equals 07,	TRAFFICWAY DESCRIPTION must equal 2, 3 for at least one vehicle.
770P	RELATION TO TRAFFICWAY equals 07,	RELATION TO JUNCTION (b) must equal 01, 03, 08, 19, 98, 99.
772P	RELATION TO TRAFFICWAY equals 07,	RELATION TO JUNCTION (a) must not equal 1.
773P	RELATION TO JUNCTION (b) equals 01,	RELATION TO JUNCTION (a) must equal 0.
773Q	RELATION TO JUNCTION(b) equals 04, 06, 07, or 16,	RELATION TO JUNCTION (a) should not equal 1.
775P	RELATION TO JUNCTION (b) equals 17 or 18 or 19,	RELATION TO JUNCTION (a) must equal 1.
778P	RELATION TO JUNCTION (b) equals 01, 04-08, 16-20,	TYPE OF INTERSECTION must equal 01.
77AP	CRASH TYPE equals 14,	RELATION TO JUNCTION (b) must not equal 02.
77BP	CRASH TYPE equals 68-91,	RELATION TO JUNCTION (b) should not equal 01.
77CP	CRASH TYPE equals 14,	RELATION TO JUNCTION (b) should equal 01, 03, 19.
77DP	RELATION TO TRAFFICWAY equals 07, and RELATION TO JUNCTION (a) equals 1,	RELATION TO JUNCTION (b) should not equal 03, 08.
780P	RELATION TO TRAFFICWAY equals 10,	RELATION TO JUNCTION (b) must not equal 02, 04, 08.
782P	TYPE OF INTERSECTION equals 02-07, 10, or 11,	RELATION TO JUNCTION (b) must equal 02, 03.

Error ID	IF	THEN
783P	RELATION TO JUNCTION (b) equals 98, 99,	TYPE OF INTERSECTION should equal 01, 98, 99.
784P	TYPE OF INTERSECTION equals 01,	RELATION TO JUNCTION (b) must not equal 02, 03.
A131	RELATION TO JUNCTION (b) equals 02, 04, 06, 16, 17, or 20,	RELATION TO TRAFFICWAY must equal 01.
A141	RELATION TO JUNCTION (b) equals 18,	RELATION TO TRAFFICWAY must equal 01 or 11.
A1B0	TRAFFIC CONTROL DEVICE equals 20, 21 for a vehicle involved in the FIRST HARMFUL EVENT,	RELATION TO JUNCTION (b) should not equal 01, 18.
A1E0	RELATION TO JUNCTION (b) equals 19,	RELATION TO TRAFFICWAY must not equal 01, 11, 98, <i>or</i> 99.
A293	WORK ZONE equals 1-3, and RELATION TO JUNCTION (b) equals 02, 03,	TRAFFIC CONTROL DEVICE should equal 01-03, 20, 40, 97, or 98 for the vehicle(s) involved in the FIRST HARMFUL EVENT.
A294	WORK ZONE equals 1-3, and RELATION TO JUNCTION (b) equals 01, 04, 05, 08, 17-19,	TRAFFIC CONTROL DEVICE should equal 00, 21, 28, 40, 50, 97, or 98 for the vehicle(s) involved in the FIRST HARMFUL EVENT.
A420	FIRST HARMFUL EVENT equals 10,	RELATION TO JUNCTION (b) should equal 06.
A430	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 10-11 for a vehicle involved in the FIRST HARMFUL EVENT,	RELATION TO JUNCTION (b) should not equal 01, 18.
A440	RELATION TO JUNCTION (b) equals 06,	TRAFFIC CONTROL DEVICE should equal 65 for any vehicle involved in the FIRST HARMFUL EVENT.
A481	TRAFFICWAY DESCRIPTION equals 6, and RELATION TO JUNCTION (b) does not equal 02, 03,	TOTAL LANES IN ROADWAY should equal 1, 2, 8, 9.
A4C0	RELATION TO JUNCTION (b) equals 04,	at least one PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) for the vehicles involved in the FIRST HARMFUL EVENT should equal 10, 11, 13, or 98.
A610	RELATION TO TRAFFICWAY equals 01, and RELATION TO JUNCTION (b) equals 05,	TRAFFICWAY DESCRIPTION should equal 6 for at least one vehicle involved in the FIRST HARMFUL EVENT.

Error ID	IF	THEN
A611	TRAFFICWAY DESCRIPTION equals 6 for at least one vehicle involved in the FIRST HARMFUL EVENT,	RELATION TO JUNCTION (b) should equal 02, 03, 05, 17-20.
A790	FIRST HARMFUL EVENT equals 46,	RELATION TO JUNCTION (b) should not equal 01, 07.
A890	RELATION TO JUNCTION (b) equals 01,	TRAFFIC CONTROL DEVICE should not equal 01-04, 20, or 21 for any vehicle involved in the FIRST HARMFUL EVENT.
A891	RELATION TO JUNCTION (b) equals 98 or 99,	TRAFFIC CONTROL DEVICE should not equal 01, 02, 03, 20, 21, or 65 for a vehicle involved in the FIRST HARMFUL EVENT.
AZ5P	CRITICAL EVENT-PRECRASH (EVENT) equals 70-73 for a vehicle involved in the FIRST HARMFUL EVENT,	RELATION TO JUNCTION (b) should equal 04 or 08.
D530	any VIOLATIONS CHARGED equal 36 for a vehicle involved in the FIRST HARMFUL EVENT,	RELATION TO JUNCTION (b) should equal 06.
PB04	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN for a person involved in the FIRST HARMFUL EVENT equals 211, 212, 461, 465, 680, 830, 890, 900, or 910,	RELATION TO JUNCTION (b) must not equal 02. Note: this edit is restricted to vehicles which are involved in only one event with pedestrian(s).
PB07	PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE for a person involved in the FIRST HARMFUL EVENT equals 311, 312, 313, 321, 322, or 323,	RELATION TO JUNCTION (b) must equal 04 or 08. Note: this edit is restricted to vehicles which are involved in only one event with bicyclist(s).
PB08	PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE for a person involved in the FIRST HARMFUL EVENT equals 141-144, 147, 151-157, or 159,	RELATION TO JUNCTION (b) must equal 02 or 03. Note: this edit is restricted to vehicles which are involved in only one event with bicyclist(s).
PB34	NUMBER OF FORMS SUBMITTED FOR PERSONS NOT IN MOTOR VEHICLES equals 01, and FIRST HARMFUL EVENT equals 08, and RELATION TO JUNCTION (b) equals 02,	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN must not equal 320, 330, 360, 680, 830, 890, 900, or 910.
PB35	NUMBER OF FORMS SUBMITTED FOR PERSONS NOT IN MOTOR VEHICLES equals 01, and FIRST HARMFUL EVENT equals 08, and RELATION TO JUNCTION (b) equals 02,	PEDESTRIAN/BIKE TYPING - CRASH LOCATION - PEDESTRIAN must equal 1.

Error ID	IF	THEN
PBA8	NUMBER OF FORMS SUBMITTED FOR PERSONS NOT IN MOTOR VEHICLES equals 1, and the FIRST HARMFUL EVENT equals 08, 09, or 15, and NON-MOTORIST LOCATION AT TIME OF CRASH equals 01 or 02;	RELATION TO JUNCTION (SPECIFIC LOCATION) must equal 3.
PC30	PRE-IMPACT LOCATION for a vehicle involved in the first harmful event equals 4, 5, and RELATION TO JUNCTION (b) does not equal 04, 05,	RELATION TO TRAFFICWAY should not equal 01 or 11.

Consistency Checks (CRSS Only) (See Section 400):

Error ID	IF	THEN
A3G0	INTERSTATE HIGHWAY equals 1, and RELATION TO JUNCTION (a) equals 1, and RELATION TO JUNCTION (b) is not equal to 03 or 05 or 20,	TOTAL LANES IN ROADWAY should not equal 1 for at least one vehicle involved in the FIRST HARMFUL EVENT.
А3Н0	INTERSTATE HIGHWAY equals 1, and RELATION TO JUNCTION (a) equals 1, and RELATION TO JUNCTION (b) is not equal to 03 or 05 or 20,	TRAFFICWAY DESCRIPTION should not equal 4 for at least one vehicle involved in the FIRST HARMFUL EVENT.
A3I0	INTERSTATE HIGHWAY equals 1,	RELATION TO JUNCTION (b) should not equal 02, 04, 06, 08, or 16.
A3J0	INTERSTATE HIGHWAY equals 1, and RELATION TO JUNCTION (a) equals 1, and RELATION TO JUNCTION (b) is not equal to 03 or 05 or 20,	SPEED LIMIT should not equal 01-40 for at least one vehicle involved in the FIRST HARMFUL EVENT.
A930	INTERSTATE HIGHWAY equals 1, and RELATION TO JUNCTION (a) equals 1, and RELATION TO JUNCTION (b) is not equal to 03, 05, or 20,	TRAFFIC CONTROL DEVICE should not equal 01-03, 20, 23, or 65 for at least one vehicle involved in the FIRST HARMFUL EVENT.

Consistency Checks (FARS Only) (See Section 400):

Error ID	IF	THEN
1F1P	RELATION TO JUNCTION (b) does not equal 02, 03,	the second TRAFFICWAY IDENTIFIER should be blank.
1Y0P	RELATION TO JUNCTION (b) equals 06,	RAIL GRADE CROSSING IDENTIFIER must not equal 0000000.
750P	RELATION TO JUNCTION (b) equals 07,	RAIL GRADE CROSSING IDENTIFIER must equal 0000000.
A150	LAND USE AND FUNCTIONAL SYSTEM (b) equals 01, 02, and RELATION TO JUNCTION (a) equals 0,	RELATION TO JUNCTION (b) should not equal 02-04, 06, 08.
A16A	FUNCTIONAL SYSTEM equals 1, and STATE does not equal 02, and RELATION TO JUNCTION equals 01, 07, 18, or 19,	TRAFFICWAY DESCRIPTION should equal 2 or 3.
A200	RELATION TO JUNCTION (b) equals 07,	LAND USE AND FUNCTIONAL SYSTEM (b) should not equal 06, 07, or 96.
A210	LAND USE AND FUNCTIONAL SYSTEM (b) equals 01, 02, and RELATION TO JUNCTION (a) equals 0,	TRAFFIC CONTROL DEVICE should not equal 01-04, 07, 20, 23, 40, 50, 65.
A220	LAND USE AND FUNCTIONAL SYSTEM (b) equals 01, 02, and RELATION TO JUNCTION (a) equals 0,	SPEED LIMIT should not equal 05-40 for any vehicle.
A240	LAND USE AND FUNCTIONAL SYSTEM (b) equals 01, and RELATION TO JUNCTION (a) equals 0,	TRAVEL SPEED should not equal 005-040 for any vehicle.
A250	LAND USE AND FUNCTIONAL SYSTEM (b) equals 01-03, and RELATION TO JUNCTION (a) equals 1, and RELATION TO JUNCTION (b) does not equal 03, 05, 20,	TOTAL LANES IN ROADWAY should not equal 1 for the vehicles involved in the FIRST HARMFUL EVENT.
A290	ROUTE SIGNING equals 1, and RELATION TO JUNCTION (a) equals 0,	RELATION TO JUNCTION (b) should not equal 02-04, 06, 08 16.
A291	RELATION TO JUNCTION (b) equals 07,	ROUTE SIGNING should not equal 5, 6.
A310	ROUTE SIGNING equals 1, and RELATION TO JUNCTION (a) equals 0,	TOTAL LANES IN ROADWAY should not equal 1 for any vehicle.
A320	ROUTE SIGNING equals 1, and RELATION TO JUNCTION (a) equals 0,	SPEED LIMIT should not equal 05-40 for any vehicle.
A360	RELATION TO JUNCTION (b) equals 07,	ROUTE SIGNING should not equal 4-8.

Error ID	IF	THEN
A810	FIRST HARMFUL EVENT equals 46, and RELATION TO JUNCTION (a) equals 1, and RELATION TO JUNCTION (b) does not equal 02, 03, 05,	LAND USE AND FUNCTIONAL SYSTEM (b) should not equal 01.
A820	FIRST HARMFUL EVENT equals 46, and RELATION TO JUNCTION (a) equals 1, and RELATION TO JUNCTION (b) does not equal 02, 03, 05,	ROUTE SIGNING should not equal 1.
AC0A	RELATION TO JUNCTION (b) equals 02, 03,	the second TRAFFICWAY IDENTIFIER should not be all blank.
V537	CRASH TYPE equals 68, 69, 82, 83, 86, 87, 88, or 89,	the vehicles involved in the FIRST HARMFUL EVENT should have a RELATION TO JUNCTION equal to 02, 04, or 08.

C22 - Type of Intersection

FORMAT: 2 numeric

SAS NAME: Accident.TYP_INT

ELEMENT VALUES:

Codes	Attributes
01	Not an Intersection
02	Four-Way Intersection
03	<u>T-Intersection</u>
04	<u>Y-Intersection</u>
05	Traffic Circle
06	Roundabout
07	Five-Point, or More
10	<u>L-Intersection</u>
11	Other Intersection Type
98	Not Reported
99	Reported as Unknown

Definition: This element identifies and allows separation of various intersection types.

Remarks: The data element value selected should be based on the location of the <u>FIRST</u> <u>HARMFUL EVENT</u> and is only applicable to intersection or intersection-related crashes.

If it is known that a rotary type of intersection was involved but it is not known if it was a <u>05</u> (<u>Traffic Circle</u>) or a <u>06</u> (<u>Roundabout</u>), default to a <u>05</u> (<u>Traffic Circle</u>).

Intersection refers to an area that 1) contains a crossing or connection of two or more roadways not classified as driveway access, and 2) is embraced within the prolongation of the lateral curb lines, or if none, the lateral boundary lines of the roadways. Where the distance along a roadway between two areas meeting these criteria is less than 33 feet, the two areas and the roadway connecting them are considered to be parts of a single intersection. (See ANSI D.16 - 2.5.10)

- **01** (Not an Intersection) identifies that this crash was not intersection or intersection related.
- **02** (Four-Way Intersection) refers to two roadways that cross or connect.
- **03** (**T-Intersection**) refers to an intersection where two roadways connect, and one roadway does not continue across the other roadway. The roadways form a "T."
- **04 (Y-Intersection)** refers to an intersection where three roadways connect and none of the roadways continue across the other roadways. The roadways form a "Y."

05 (**Traffic Circle**) refers to an intersection of roads where motor vehicles must travel around a circle to continue on the same road or leave on any intersecting road.

A **05** (**Traffic Circle**) must meet the following criteria:

- Entering traffic is controlled by a stop sign, traffic signal, or by no traffic control
- Parking is allowed within the circle
- Pedestrians are allowed access to the central island
- Circle traffic can be required to yield to entering traffic

06 (**Roundabout**) refers to an intersection of roads where motor vehicles must travel around a circle to continue on the same road or leave on any intersecting road. (See <u>Figure 7</u> below.) A **06** (**Roundabout**) must meet the following criteria:

- Entering traffic is controlled by a yield sign only
- Circulating traffic has the right of way
- Pedestrian access is allowed behind the yield sign line
- No parking is allowed in the circle

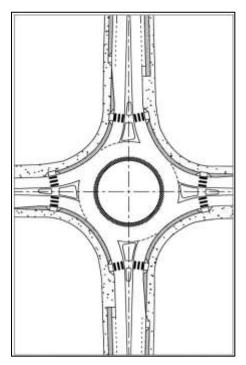


Figure 7: Example of a Typical Single-Lane Roundabout

(See Roundabouts: An Informational Guide - FHWA)

07 (**Five-Point**, **or More**) refers to an intersection where more than two roadways cross or connect.

10 (**L-Intersection**) refers to a two-armed intersection in which one roadway intersects with another roadway but neither roadway extends beyond the other roadway. (Note: This should be configured as an intersection where the arms consist of two different named trafficways.)

11 (Other Intersection Type) refers to an intersection design not captured under one of the other attributes.

98 (Not Reported) Check to see if <u>01 (Not an Intersection)</u> or <u>99 (Reported as Unknown)</u> are more appropriate for the situation.

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**."

Code **98** (**Not Reported**) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).

99 (Reported as Unknown) is used when police indicate unknown.

Consistency Checks (See Section 400):

Error ID	IF	THEN
251P	RELATION TO TRAFFICWAY equals 98, 99,	TYPE OF INTERSECTION should equal 98, 99.
778P	RELATION TO JUNCTION (b) equals 01, 04-08, 16-20,	TYPE OF INTERSECTION must equal 01.
782P	TYPE OF INTERSECTION equals 02-07, 10, or 11,	RELATION TO JUNCTION (b) must equal 02, 03.
783P	RELATION TO JUNCTION (b) equals 98, 99,	TYPE OF INTERSECTION should equal 01, 98, 99.
784P	TYPE OF INTERSECTION equals 01,	RELATION TO JUNCTION (b) must not equal 02, 03.
U698	UNLIKELY: TYPE OF INTERSECTION equals 11.	

Consistency Checks (FARS Only) (See Section 400):

Error ID	IF	THEN
781P	TYPE OF INTERSECTION equals 02-07, 10, or 11,	TRAFFICWAY IDENTIFIER (b) should not be blank.

C23 - Relation to Trafficway

FORMAT: 2 numeric

SAS NAME: Accident.REL_ROAD

ELEMENT VALUES:

Codes	Attributes
01	On Roadway
02	<u>On Shoulder</u>
03	On Median
04	On Roadside
05	Outside Trafficway
06	Off Roadway - Location Unknown
07	In Parking Lane/Zone
08	<u>Gore</u>
10	<u>Separator</u>
11	Continuous Left-Turn Lane
12	Pedestrian Refuge Island or Traffic Island
98	Not Reported
99	Reported as Unknown

Definition: This element identifies the location of the crash as it relates to its position within or outside the trafficway based on the FIRST HARMFUL EVENT.

Remarks: See the Coding Guide: Trafficway Components for helpful information.

01 (**On Roadway**) - The roadway is that part of a trafficway designed, improved, and ordinarily used for motor vehicle travel or, where various classes of motor vehicles are segregated, that part of a trafficway used by a particular class. Separate roadways may be provided for northbound and southbound traffic or for trucks and automobiles. Roadway may be noted as the "travel lanes" and, if present, includes the area between the painted "fog lines." Additionally, a driveway access area is considered part of the roadway of the trafficway to that it connects. This attribute may also be used for cases involving a parked vehicle opening a door into moving traffic, extended mirrors into the travel lane. If a bike lane is immediately adjacent to the curb/edge of the road, code **04** (**On Roadside**). If the bike lane is between lanes of travel or a lane and the parking lane, code **01**(**On Roadway**).

02 (**On Shoulder**) (if present) is that part of a trafficway contiguous with the roadway for emergency use, for accommodation of stopped vehicles, and for lateral support of the roadway structure. A shoulder should be improved or maintained for these purposes. Not all roadways have shoulders.

03 (**On Median**) is defined as that area of a divided trafficway between parallel roads separating travel in opposite directions. The principal functions of a median are to provide the desired freedom from interference of opposing traffic, to provide a recovery area for out-of-control vehicles, to provide a stopping area in case of emergencies, and to minimize headlight glare. Medians may be depressed, raised, or flush. Flush medians can be as little as 4-feet wide between roadway edge lines. Painted roadway edge lines four (4) or more feet wide denote medians. Medians of lesser width must have a barrier to be considered a median. Continuous Left-turn Lanes are **not** considered Medians (see **11** (**Continuous Left-Turn Lane**)).

04 (**On Roadside**) refers to a location off the roadway, but inside the right-of-way. It is the outermost part of the trafficway that lays between the outer property line or other barrier and the edge of the first road encountered in the trafficway. Bicycle lanes and shared use path or trails contiguous with the roadway and sidewalks are also included. For cases involving a vehicle that goes off the roadway into a "tree line," "wood line," "brush line," etc. that is adjacent to the roadway, code as **04** (**On Roadside**) unless there is specific information available in the case material that identify the <u>FIRST HARMFUL EVENT</u> was beyond the boundaries of the trafficway (e.g., a "tree line" in a homeowner's front yard). If a bike lane is immediately adjacent to the curb/edge of the road, code **04** (**On Roadside**). If the bike lane is between lanes of travel or a lane and the parking lane, code **01** (**On Roadsway**).

05 (**Outside Trafficway**) is used for areas not open to the public as a matter of right or custom for moving people or property. This includes property beyond the roadside outside the boundaries of the trafficway. Also, a portion of the trafficway closed for construction is not a trafficway and would be considered **05** (**Outside Trafficway**).

06 (**Off Roadway - Location Unknown**) refers to a location off the roadway, but its relationship to the trafficway boundaries/right-of-way is not known. This should only be used when no reasonable assessment can be made as to the location of the <u>FIRST HARMFUL EVENT</u> because the information in the case is too ambiguous.

07 (**In Parking Lane/Zone**) refers to an area on the roadway, or next to the roadway, on which parking is permitted in marked or unmarked spaces. This includes curbside and edge of-roadway parking (legal residential parking, city-street parking, etc.). Sometimes a strip of roadway can be designated for parking at certain hours of the day (parking lane) and for regular travel at other hours (travel lane). This code should NOT be used during hours when parking is NOT permitted (see **01** (**On Roadway**)).

08 (**Gore**) is an area of land where two roadways diverge or converge. The area is bounded on two sides by the edges of the roadway, which join at the point of divergence or convergence. The direction of traffic must be the same on both of these roadways. The area includes shoulders or marked pavement if any, between the roadways. The third side is 60 meters (approximately 200 feet) from the point of divergence or convergence or, if any other road is within 70 meters (230 feet) of that point, a line 10 meters (33 feet) from the nearest edge of such road. (See **Figure 11**)

Gore Inclusions:

- Areas at rest area or exit ramps
- Areas at truck weight station entry or exit ramps
- Areas where two main roadways diverge or converge

- Areas where a ramp and another roadway, or two ramps, diverge or converge
- Areas where a frontage road and another roadway or two frontage roads diverge or converge

Gore Exclusions:

- Islands for channelizing of vehicle movements. Code these as 12 (Pedestrian Refuge Island or Traffic Island).
- Islands for pedestrian refuge. Code these as 12 (Pedestrian Refuge Island or Traffic Island).
- **10** (**Separator**) is the area of a trafficway between parallel roads separating travel in the same direction or separating a frontage road from other roads. A **10** (**Separator**) may be a physical barrier or a depressed, raised, flush, or vegetated area between roads.
- **11** (**Continuous Left-Turn Lane**) is a two-way left turn lane positioned between opposing straight-through travel lanes.
- **12** (**Pedestrian Refuge Island or Traffic Island**) is coded when case material indicate the <u>FIRST HARMFUL EVENT</u> occurred on a Pedestrian Refuge Island or Traffic Island.

Examples include areas:

- between roadways of a trafficway meant to allow for a non-motorist to pause while traveling from one side of a trafficway to the other side;
- for channelizing the flow of traffic at an intersection;
- in the center of a traffic circle or roundabout;
- dividing the entrance and exit in a driveway access.

98 (Not Reported) *Check to see if* <u>99 (Reported as Unknown)</u> is more appropriate for the *situation*. If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "Not Reported."

Code **98** (**Not Reported**) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 99 (Reported as Unknown) is used when police indicate unknown.

Additional Guidance for Relation to Trafficway

For collision events when the vehicle is overlapping adjacent areas:

- For <u>fixed object collisions</u> (<u>FHE</u>), base RELATION TO TRAFFICWAY on the location of the object struck.
- Fixed objects that are associated with the Trafficway such as curbs, ditches, guardrails, sign supports, utility poles, etc. are not located in the travel lanes or on the shoulder. Therefore, when these fixed objects are contacted in the <u>FIRST HARMFUL EVENT</u>, RELATION TO TRAFFICWAY should be coded with respect to the location of the object contacted (e.g., <u>04 (On Roadside)</u>, <u>03 (On Median)</u>, <u>12 (Pedestrian Refuge Island or Traffic Island)</u>, etc.), regardless of the location of the entire vehicle.
- <u>Non-fixed object collisions</u> (e.g., striking a vehicle on the shoulder or pedestrian on the sidewalk) when the striking vehicle is overlapping two locations (e.g., roadway and shoulder) are also coded with respect to the object contacted, not the striking vehicle.

For Rollover/Overturn crashes when the vehicle is overlapping two locations (e.g., roadway and shoulder) when the roll begins:

When a vehicle begins an overturn and is overlapping two locations at the onset of the overturn, use the LAST area the vehicle entered as the location. For example, <u>04 (On Roadside)</u> would be correct for a case where the documentation identifies a vehicle runs off the roadway, partially through the shoulder, and the front wheels enter the roadside.

Default rules for the location of Ditches, Culverts, Embankments, and Fences:

- Unless there is clear reason to believe otherwise in the case material, ditches, culverts, and embankments are design features common to Trafficways. Therefore, if included as the FHE the appropriate RELATION TO TRAFFICWAY is 04 (On Roadside).
- All fences are considered <u>05</u> (<u>Outside Trafficway</u>) unless, the case material specifically identify the fence is within the trafficway property lines (e.g., a snow fence in the median, or fence identified as government property delineating the right of way and/or property line).

Consistency Checks (See Section 400):

Error ID	IF	THEN
250P	RELATION TO JUNCTION (b) equals 01, 02, 04, 06, 07, 16-19, 98, 99, and RELATION TO TRAFFICWAY equals 03,	TRAFFICWAY DESCRIPTION should equal 2, 3 for at least one vehicle involved in the FIRST HARMFUL EVENT.
251P	RELATION TO TRAFFICWAY equals 98, 99,	TYPE OF INTERSECTION should equal 98, 99.
252P	RELATION TO TRAFFICWAY equals 01, 02, 03, 04, 07, 08, 10, 11, 12, 98, or 99,	UNIT TYPE for VEHICLE NUMBER (OTHER VEHICLE) involved in the FIRST HARMFUL EVENT must not equal 3.

Error ID	IF	THEN
253P	RELATION TO TRAFFICWAY equals 03,	CRASH TYPE should equal 06-10, 98, or 99 for the in-transport vehicles involved in the FIRST HARMFUL EVENT.
254P	RELATION TO TRAFFICWAY equals 01, and RELATION TO JUNCTION (b) equals 20,	TRAFFICWAY DESCRIPTION must equal 6 for at least one vehicle involved in the FIRST HARMFUL EVENT.
255P	RELATION TO TRAFFICWAY equals 01 or 11,	UNIT TYPE for VEHICLE NUMBER (THIS VEHICLE) involved in the FIRST HARMFUL EVENT must equal 1.
256P	RELATION TO TRAFFICWAY equals 01 or 11,	UNIT TYPE for VEHICLE NUMBER (OTHER VEHICLE) involved in the FIRST HARMFUL EVENT should equal 1 or 4.
257P	RELATION TO TRAFFICWAY equals 05,	UNIT TYPE for VEHICLE NUMBER (OTHER VEHICLE) involved in the FIRST HARMFUL EVENT must equal 1, 3, or 4.
42AP	NUMBER OF MOTOR VEHICLE FORMS SUBMITTED equals 001, and RELATION TO TRAFFICWAY equals 02, 04, 06-08, 12, and ATTEMPTED AVOIDANCE MANEUVER equals 00 or 01,	CRITICAL EVENT - PRECRASH (EVENT) should equal 01-06, 08-14, or 19.
440F	FIRST HARMFUL EVENT equals 08, 09, 15, and RELATION TO TRAFFICWAY equals 01,	there must be at least one Person Level (Not a MV Occupant) form with NON-MOTORIST LOCATION AT TIME OF CRASH equal to 01-03, 09-11, 13, 16, 23, 98, or 99.
450F	FIRST HARMFUL EVENT equals 08, 09, 15, and RELATION TO TRAFFICWAY equals 07,	there must be at least one Person Level (Not a MV Occupant) form with NON-MOTORIST LOCATION AT TIME OF CRASH equal to 14.
460F	FIRST HARMFUL EVENT equals 08, 09, 15, and RELATION TO TRAFFICWAY equals 02,	there must be at least one Person Level (Not a MV Occupant) form with NON-MOTORIST LOCATION AT TIME OF CRASH equal to 02, 20.
470F	FIRST HARMFUL EVENT equals 08, 09, 15, and RELATION TO TRAFFICWAY equals 03, 08, 10, 12,	there must be at least one Person Level (Not a MV Occupant) form with NON-MOTORIST LOCATION AT TIME OF CRASH equal to 20, 22, 28, 98, 99.
480F	FIRST HARMFUL EVENT equals 08, 09, 15, and RELATION TO TRAFFICWAY equals 04, 06,	there must be at least one Person Level (Not a MV Occupant) form with NON-MOTORIST LOCATION AT TIME OF CRASH equal to 09, 16, 20, 21, 24, 25, 28, 98, 99.

Error ID	IF	THEN
490F	FIRST HARMFUL EVENT equals 08, 09, 15, and RELATION TO TRAFFICWAY equals 05,	there must be at least one Person Level (Not a MV Occupant) form with NON-MOTORIST LOCATION AT TIME OF CRASH equal to 24, 25.
4A0F	FIRST HARMFUL EVENT is 08, 09, 15, or 49 and RELATION TO TRAFFICWAY is 12,	at least one NON-MOTORIST LOCATION AT TIME OF CRASH must equal 22 or 28.
530F	FIRST HARMFUL EVENT equals 08, 09, 15, and RELATION TO TRAFFICWAY equals 99,	there must be at least one Person Level (Not a MV Occupant) form with NON-MOTORIST LOCATION AT TIME OF CRASH equal to 09, 98, 99.
531F	FIRST HARMFUL EVENT equals 08, 09, 15, and RELATION TO TRAFFICWAY equals 11,	there must be at least one Person Level (Not a MV Occupant) form with NON-MOTORIST LOCATION AT TIME OF CRASH equal to 11.
532F	FIRST HARMFUL EVENT equals 14, and RELATION TO TRAFFICWAY equals 07,	at least one previous CRASH EVENTS- SEQUENCE OF EVENTS should equal 63, 64, 71, or 79 for the motor vehicle in transport involved in the FIRST HARMFUL EVENT.
580F	FIRST HARMFUL EVENT equals 14, and RELATED FACTORS - PERSON (MV OCCUPANT) LEVEL does not equal 032, 089 for at least one occupant in the not in-transport motor vehicle involved in the FIRST HARMFUL EVENT,	RELATION TO TRAFFICWAY should not equal 01.
770P	RELATION TO TRAFFICWAY equals 07,	RELATION TO JUNCTION (b) must equal 01, 03, 08, 19, 98, 99.
772P	RELATION TO TRAFFICWAY equals 07,	RELATION TO JUNCTION (a) must not equal 1.
77DP	RELATION TO TRAFFICWAY equals 07, and RELATION TO JUNCTION (a) equals 1,	RELATION TO JUNCTION (b) should not equal 03, 08.
780P	RELATION TO TRAFFICWAY equals 10,	RELATION TO JUNCTION (b) must not equal 02, 04, 08.
881P	RELATED FACTOR - CRASH LEVEL equals 0 24,	RELATION TO TRAFFICWAY must not equal 01 or 11.
A131	RELATION TO JUNCTION (b) equals 02, 04, 06, 16, 17, or 20,	RELATION TO TRAFFICWAY must equal 01.
A141	RELATION TO JUNCTION (b) equals 18,	RELATION TO TRAFFICWAY must equal 01 or 11.
A1E0	RELATION TO JUNCTION (b) equals 19,	RELATION TO TRAFFICWAY must not equal 01, 11, 98, <i>or</i> 99.

Error ID	IF	THEN
A380	FIRST HARMFUL EVENT equals 01 and this vehicle is involved in the FIRST HARMFUL EVENT and vPIC BODY CLASS does not equal 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring / Sport Touring), 082 (Motorcycle - Cruiser), 084 Offroad Vehicle - Dirt Bike / Off-Road), 085 (Motorcycle - Dual Sport / Adventure / Supermoto / On/Off-Road), 086 (Off-road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small / Minibike), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 104 (Motorcycle - Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motocross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle), for this vehicle, and RELATION TO TRAFFICWAY equals,	LOCATION OF ROLLOVER should equal respectively.
A390	FIRST HARMFUL EVENT equals 17, 19-21, 23-26, 30-35, 38-43, 52, 53, 57, 58 , 93,	RELATION TO TRAFFICWAY should not equal 01, 02, 07, 11.
A421	FIRST HARMFUL EVENT equals 20 , 21 , 23 , 24, 25, 26 , 30, 32 , 33, 34, 35, 40, 46, 52, 53 , 57, 59,	RELATION TO TRAFFICWAY should equal 03, 04, 08, 10, or 12.
A4B0	CRASH TYPE equals 01-10 or 14,	RELATION TO TRAFFICWAY must not equal 01, 02, 07, or 11. If the first harmful event occurs on a different road than the road it departed, see 98 (Other Crash Type).
A4B2	CRASH TYPE equals 11,	RELATION TO TRAFFICWAY must not equal 01, 03, 04, 05, 08, 10, 11, or 12.
A4B3	CRASH TYPE equals 12 or 13,	RELATION TO TRAFFICWAY must not equal 03, 05, 08, 10, or 12.
A4B4	CRASH TYPE equals 12 (Stationary Object on Road) or 13 (Pedestrian/Animal on Road),	RELATION TO TRAFFICWAY should not equal 4 (On Roadside) unless the FIRST HARMFUL EVENT occurs in a bicycle lane.
A610	RELATION TO TRAFFICWAY equals 01, and RELATION TO JUNCTION (b) equals 05,	TRAFFICWAY DESCRIPTION should equal 6 for at least one vehicle involved in the FIRST HARMFUL EVENT.

Error ID	IF	THEN
A61F	FIRST HARMFUL EVENT equals 08, 09, 11, 15, 49, and RELATION TO TRAFFICWAY equals 01, 02, 07, 11, and PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) is not equal to 00, 13 for the vehicle involved in the FIRST HARMFUL EVENT,	CRASH TYPE should equal 13 for the vehicle involved in the FIRST HARMFUL EVENT.
A620	CRASH TYPE equals 06-10, and TRAFFICWAY DESCRIPTION equals 3,	RELATION TO TRAFFICWAY should equal 03 or 12.
A62F	FIRST HARMFUL EVENT equals 18, 43, 73, 91, or 93, and RELATION TO TRAFFICWAY equals 01, 02, or 11,	CRASH TYPE should equal 12 or 15 for the vehicle involved in the FIRST HARMFUL EVENT.
A62G	FIRST HARMFUL EVENT equals 98 and RELATION TO TRAFFICWAY equals 01, 02, or 11,	CRASH TYPE must equal 16 for the vehicle involved in the FIRST HARMFUL EVENT.
A800	FIRST HARMFUL EVENT equals 46,	RELATION TO TRAFFICWAY should not equal 01, 02, 05, 07, 11.
A801	FIRST HARMFUL EVENT equals 12,	RELATION TO TRAFFICWAY must not equal 5.
A881	RELATION TO TRAFFICWAY equals 11,	TRAFFICWAY DESCRIPTION should equal 5 for at least one vehicle.
PB05	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN for a person involved in the FIRST HARMFUL EVENT equals 311, 312, or 313,	RELATION TO TRAFFICWAY must equal 01 or 11. Note: this edit is restricted to vehicles which are involved in only one event with pedestrian(s).
PB12	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN for a person involved in the FIRST HARMFUL EVENT equals 510, 520, or 590,	RELATION TO TRAFFICWAY must not equal 01 or 11. Note: this edit is restricted to vehicles which are involved in only one event with pedestrian(s).
PC20	RELATION TO TRAFFICWAY equals 02-08, 10, or 12,	PRE-IMPACT LOCATION of the vehicle(s) involved in the FIRST HARMFUL EVENT should equal 0, 4, 5, or 9.
PC30	PRE-IMPACT LOCATION for a vehicle involved in the FIRST HARMFUL EVENT equals 4, 5, and RELATION TO JUNCTION (b) does not equal 04, 05,	RELATION TO TRAFFICWAY should not equal 01 or 11.
PC40	PRE-IMPACT LOCATION for a vehicle involved in the FIRST HARMFUL EVENT equals 1-3, 6,	RELATION TO TRAFFICWAY should equal 01 or 11.

Consistency Checks (FARS Only) (See Section 400):

Error ID	IF	THEN
A882	RELATION TO TRAFFICWAY equals 07,	ROUTE SIGNING should not equal 1.
A883	RELATION TO TRAFFICWAY equals 07,	LAND USE AND FUNCTIONAL SYSTEM (b) should not equal 01.

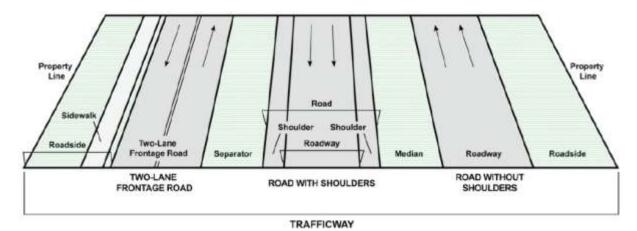


Figure 8: Trafficway

(See ANSI D16.1 - 2017, 8th Edition)

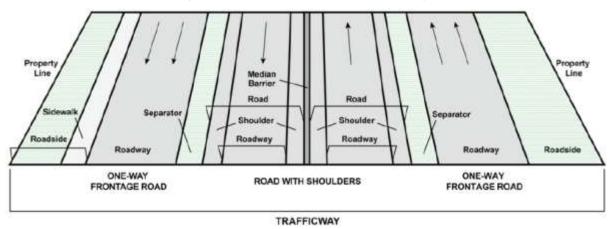


Figure 9: Trafficway Including Frontage Road

(See ANSI D16.1 - 2017, 8th Edition)

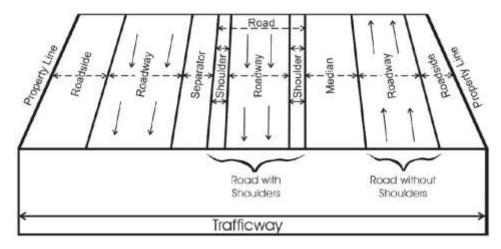
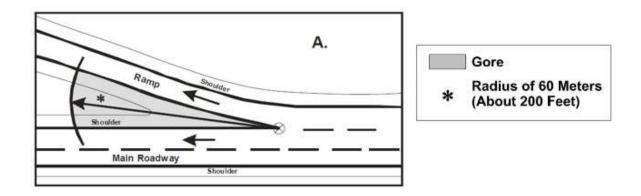
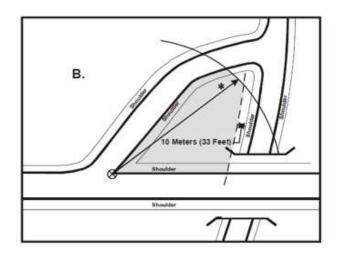
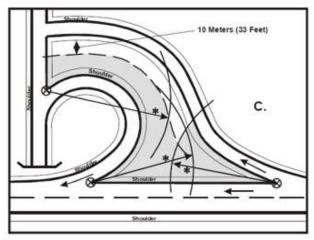


Figure 10: Trafficway with Multiple Roadways in the Same Direction (See ANSI D16.1 - 2017, 8th Edition)







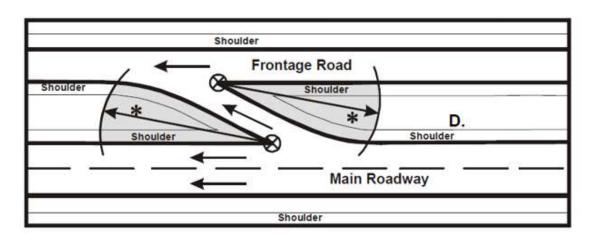


Figure 11: Four Examples of Gores (See ANSI D16.1 - 2017, 8th Edition)

C24 - Work Zone

FORMAT: 1 numeric

SAS NAME: Accident.WRK_ZONE

ELEMENT VALUES:

Codes	Attributes
0	<u>None</u>
1	Construction
2	<u>Maintenance</u>
3	<u>Utility</u>
4	Work Zone, Type Unknown

Definition: This data element captures that this was a "Work Zone Crash" as defined in <u>ANSI D16.1, 8th Edition</u>. If the crash qualifies as a "Work Zone Crash" then the type of work activity is identified.

Remarks: If the crash is a work zone crash, work zone type must be clearly distinguished within the case material; otherwise **4** (**Work Zone**, **Type Unknown**) should be used.

The use of these codes does not imply that the crash was caused by the construction, maintenance, or utility activity.

Work Zone:

A work zone is defined as an area of a trafficway where construction, maintenance, or utility work activities are identified by warning signs/signals/ indicators, including those on transport devices (e.g., signs, flashing lights, channelizing devices, barriers, pavement markings, flagmen, warning signs, and arrow boards mounted on the vehicles in a mobile maintenance activity) that mark the beginning and end of a construction, maintenance, or utility work activity. It extends from the first warning sign, signal, or flashing lights to the END ROAD WORK sign or the last traffic control device pertinent for that work activity. Work zones also include roadway sections where there is ongoing, moving (mobile) work activity such as lane line painting or roadside mowing only if the beginning of the ongoing, moving (mobile) work activity is designated by warning signs or signals.

Work Zone Crash:

A work zone crash is a motor vehicle traffic crash in which the <u>FIRST HARMFUL EVENT</u> occurs within the boundaries of a work zone or on an approach to or exit from a work zone, resulting from an activity, behavior, or control related to the movement of the traffic units through the work zone.

See the <u>8th Edition of ANSI D16.1</u> definitions of "Work Zone" and "Work Zone Crash" for inclusions and exclusions.

To determine which attribute is appropriate, the duration of the work must be considered. If the work is short-term (i.e., takes less than one period of daylight and is not performed during hours

of darkness), **2** (Maintenance) or **3** (Utility) are applicable. If the maintenance or utility work is long-term, **1** (Construction) must be used.

0 (None) is used when there is no indication that the crash is a work zone crash as defined above.

- **1** (**Construction**) is used when the available information indicates that there is long-term stationary construction such as building a new bridge, adding travel lanes to the roadway, extending an existing trafficway, etc. Highway construction includes construction of appurtenances such as guardrails or ditches, surveying activity, installation of utilities within the right-of-way, etc.
- **2** (**Maintenance**) is used when the available information indicates that there are work activities, including moving work activities, such as striping the roadway, median and roadside grass mowing/landscaping, pothole repair, snowplowing, etc., where there are warning signs or signals marking the beginning of the moving work area.
- **3 (Utility)** is used when the available information indicates that there is short-term stationary work such as repairing/maintaining electric, gas, water lines, or traffic signals. The utility company must perform the work.
- **4 (Work Zone, Type Unknown)** is used when there is insufficient information to distinguish between

1 (Construction), 2 (Maintenance), or 3 (Utility).

Error ID	IF	THEN
A293	WORK ZONE equals 1-3, and RELATION TO JUNCTION (b) equals 02, 03,	TRAFFIC CONTROL DEVICE should equal 01-03, 20, 40, 97, or 98 for the vehicle(s) involved in the FIRST HARMFUL EVENT.
A294	WORK ZONE equals 1-3, and RELATION TO JUNCTION (b) equals 01, 04, 05, 08, 17-19,	TRAFFIC CONTROL DEVICE should equal 00, 21, 28, 40, 50, 97, or 98 for the vehicle(s) involved in the FIRST HARMFUL EVENT.
A470	WORK ZONE equals 0, and TRAFFICWAY DESCRIPTION equals 1-3, 5,	TOTAL LANES IN ROADWAY should not equal 1.
AL2P	SEQUENCE OF EVENTS equals 45,	WORK ZONE should equal 1-4.

C25 - Light Condition

FORMAT: 1 numeric

SAS NAME: Accident.LGT_COND

ELEMENT VALUES:

Codes	Attributes
1	<u>Daylight</u>
2	Dark - Not Lighted
3	Dark - Lighted
6	Dark - Unknown Lighting
4	<u>Dawn</u>
5	<u>Dusk</u>
7	<u>Other</u>
8	Not Reported
9	Reported as Unknown

Definition: This element records the type/level of light that existed at the time of the crash as reported in the case material.

Remarks:

- **1** (**Daylight**) is used when the available information describes the crash conditions occurring while natural light is the main source of lighting and it is not $\frac{4 \text{ (Dawn)}}{4 \text{ (Dawn)}}$ or $\frac{5 \text{ (Dusk)}}{4 \text{ (Dawn)}}$. If the crash occurs within a tunnel, code the lighting described for the tunnel.
- **2** (**Dark Not Lighted**) is used when the available information describes a condition where no "natural" light exists, and no overhead "man-made" lighting is present on the roadway where the crash occurs.
- **3 (Dark Lighted)** is used when the available information describes a condition where no "natural" light exists but there is overhead "man-made" lighting on the roadway where the crash occurs. Lighted areas will generally include streets within cities or towns and some interchange areas. This does not include lighting from store fronts, houses, parking lots, etc.
- 6 (Dark Unknown Lighting) is used if it cannot be determined if 2 (Dark Not Lighted) or 3 (Dark Lighted) applies.

Sometimes the case material will have conflicting information because more than one light condition is indicated in the coded boxes and/or the narrative or the coded box is blank. If necessary, use the <u>CRASH TIME</u> to aid in determing the "best" attribute.

- **4 (Dawn)** describes the transition period going from "dark of night" to a daylight condition. This is typically the 30-minute period before the sun rises.
- **5 (Dusk)** describes the transition period going from a daylight condition to the "dark of night." This is typically the 30-minute period after the sun sets.

Rules for determining applicable attribute:

- 1. If **4 (Dawn)** or **5 (Dusk)** are marked, use the <u>CRASH TIME</u> to select either <u>**4 (Dawn)**</u> or <u>**5 (Dusk)**</u>.
- 2. If **3 (Dark Lighted)** and **4 (Dawn)** are marked, use **4 (Dawn)**.
- 3. If 3 (Dark Lighted) and 5 (Dusk) are marked, use 5 (Dusk).
- 4. If **Dark** and **5** (**Dusk**) are marked, use **5** (**Dusk**).
- 5. If **Dark** and **4** (**Dawn**) are marked, use **4** (**Dawn**).
- 6. If more than 2 attributes are checked, use 8 (Not Reported).
- **7 (Other)** is used when the conditions above do not apply.

If a police crash report data element is coded with the attribute "Other" but the officer does not specify what this refers to:

- 1. Code **7** (**Other**) if the police crash report attribute choices can be matched to or include all the attributes in FARS/CRSS.
- 2. Code **8** (**Not Reported**) if the police crash report choices cannot be matched to or include all the attributes in FARS/CRSS.

8 (Not Reported) *Check to see if* <u>9 (Reported as Unknown)</u> is more appropriate for the *situation*. If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks is NOT considered "**Not Reported**."

Code **8** (**Not Reported**) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).

9 (Reported as Unknown) is used when the investigating officer indicates that the lighting condition was unknown.

Error ID	IF	THEN
220P	LIGHT CONDITION equals 4, and STATE is not equal to 02,	CRASH TIME must equal 0300-0900, 9999.
2300	LIGHT CONDITION equals 5, and STATE is not equal to 02,	CRASH TIME should equal 1600-2200, 9999.
A010	STATE equals 02, and LIGHT CONDITION equals 4,	CRASH TIME should equal 0300-1000, 9999.
A020	STATE equals 02, and LIGHT CONDITION equals 5,	CRASH TIME should equal 1500-2359, 9999.
A050	CRASH TIME equals 0900-1600,	LIGHT CONDITION should not equal 2-6.
A060	CRASH TIME equals 2300-0400,	LIGHT CONDITION should not equal 1, 4, 5, 9.
U390	UNLIKELY: LIGHT CONDITION equals 8.	

C26 - Atmospheric Conditions

FORMAT: 2 numeric. Select All That Apply.

SAS NAME: Weather. WEATHER

ELEMENT VALUES:

Codes	Attributes
01	Clear
10	Cloudy
02	Rain
03	Sleet or Hail
12	Freezing Rain or Drizzle
04	Snow
11	Blowing Snow
05	Fog, Smog, Smoke
06	Severe Crosswinds
07	Blowing Sand, Soil, Dirt
08	<u>Other</u>
98	Not Reported
99	Reported as Unknown

Definition: This element identifies the prevailing atmospheric conditions that existed at the time of the crash as recorded on the police crash report.

Remarks: *If* the case material attributes are a combination of the above attributes (e.g., Clear/Cloudy, Clear or Cloudy, Sleet/Hail/Freezing Rain, Snow/Sleet/Hail), and you cannot determine which was the prevalent weather condition, then code **98** (**Not Reported**).

Temperature is not an atmospheric condition for the purposes of this element.

When coding this element, do not interpret indication of Rain, Sleet, or Snow as also Cloudy. Cloudy must be explicitly stated in the case material.

01 (**Clear**) includes partial cloudiness if sunlight is not diminished. If your case material provide the attribute "no adverse condition," use **98** (**Not Reported**) unless there is sufficient detail to establish that **01** (**Clear**) or **10** (**Cloudy**) applies.

- 10 (Cloudy) usually refers to "overcast" but may include partial cloudiness if light is diminished.
- **02** (Rain) refers to precipitation other than snow, hail, or sleet.
- **03** (Sleet or Hail) would apply to conditions where precipitation is falling as ice (sleet or hail)

- **12** (**Freezing Rain or Drizzle**) would apply when precipitation is falling as liquid (rain) and then freezing on the roadway.
- **04** (Snow) is used when precipitation is falling as frozen flakes at the time of the crash.
- 11 (Blowing Snow) applies to snow that is falling and/or to snow that has fallen to the ground and is set aloft by wind.
- **05** (Fog. Smog. Smoke) refers to a natural or man-made condition that causes reduced visibility.
- **06** (**Severe Crosswinds**) refers to winds traveling at an angle with respect to the travel lanes at velocities significant enough to create a risk that vehicles could be diverted from their path or high-profile vehicles could be blown over. These are winds that are strong enough to affect vehicle stability.
- **07** (**Blowing Sand, Soil, Dirt**) refers to particulate matter set aloft by winds creating a condition of reduced visibility that constitutes a hazard for vehicles operating in the area. This attribute should be used for "dust storms." This attribute should not be used in conjunction with <u>06</u> (Severe Crosswinds) unless the winds are affecting vehicle stability in addition to reducing visibility.
- **08** (Other) atmospheric conditions not described above.

If a police crash report data element is coded with the attribute "Other" but the officer does not specify what this refers to:

- 1. Code **08** (**Other**) if the police crash report attribute choices can be matched to or include all the attributes in FARS/CRSS.
- 2. Code **98** (**Not Reported**) if the police crash report choices cannot be matched to or include all the attributes in FARS/CRSS.

98 (Not Reported) Check to see if <u>99 (Reported as Unknown)</u> is more appropriate for the situation.

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**."

Code **98** (**Not Reported**) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 99 (Reported as Unknown) is used when police indicate unknown.

Error ID	IF	THEN		
A030	CRASH MONTH equals 05-09,	ATMOSPHERIC CONDITIONS should not equal 03, 04, 11, 12.		
A1A0	ROADWAY SURFACE CONDITIONS equals 01 for a vehicle involved in the FIRST HARMFUL EVENT,	s ATMOSPHERIC CONDITIONS should not equal 02-04, 11, 12.		
A510	any ATMOSPHERIC CONDITIONS equals 02-04, 11, 12,	ROADWAY SURFACE CONDITIONS shou not equal 01, 07, 08, 99 for any vehicle.		
AT00	Any ATMOSPHERIC CONDITIONS 01-08, 10-12, 98, 99 can be used only once per crash.			
AT01	Any ATMOSPHERIC CONDITIONS can be used only once per crash.			
AT20	<i>any</i> ATMOSPHERIC CONDITIONS equals 01-08, 10-12,	ATMOSPHERIC CONDITIONS must not <i>also</i> equal 99.		
AT40	any ATMOSPHERIC CONDITIONS equals 01, 98, or 99,	only that one code and no other must be coded.		

C27 - School Bus Related

FORMAT: 1 numeric

SAS NAME: Accident.SCH_BUS, Person.SCH_BUS

ELEMENT VALUES:

Codes	Attributes
0	<u>No</u>
1	Yes

Definition: This data element indicates if a school bus, or motor vehicle functioning as a school bus, is related to the crash.

Remarks:

The "school bus" can be:

- with or without a passenger(s) on board
- involved as a contact motor vehicle, or
- indirectly involved as a non-contact motor vehicle

A school bus is a motor vehicle used for the transportation of any school pupil at or below the 12th-grade level to or from a public or private school or school-related activity. A motor vehicle is not a school bus while on trips that involve the transportation exclusively of other passengers or exclusively for other purposes.

A motor vehicle is a school bus only if it is externally identifiable by the following characteristics:

- 1. Its color is yellow
- 2. The words "school bus" appear on the front and rear
- 3. Flashing red lights are located on the front and rear
- 4. Lettering on both sides identifies the school or school district served, or the company operating the bus

0 (No) is used when there is no indication of a school bus, or motor vehicle functioning as a school bus, being involved in the crash.

1 (Yes) is used when there is any indication that a school bus, or vehicle functioning as a school bus, is involved in any component of the crash.

For directly involved or contacted vehicles, **1** (**Yes**) must be selected if the **SPECIAL USE** data element equals **02** (**Vehicle Used for School Transport**).

To capture those instances where the vehicle is involved indirectly (non-contact vehicle) the following rules apply:

- If the case material indicate "School Bus," the assumption is that the law enforcement agency conformed to the definition of school bus; thus 1 (Yes) School Bus Related.
- If there is no indication that a school bus was indirectly involved, **0** (No) must be selected.

Examples of School Bus Related (indirectly):

- 1. A police-reported "school bus" stops on the roadway. Subsequently an approaching motor vehicle swerves to avoid the stopped bus and contacts another motor vehicle head-on.
- 2. A police report indicates that a "child" exited a "school bus" and was crossing in front of the stopped bus when a vehicle passed the bus on the left side and struck the child.
- 3. A line of cars is stopped for a school bus that is discharging passengers. A motor vehicle approaches and is unable to stop in time and strikes the last stopped motor vehicle in the line.

Examples of NOT School Bus Related:

- 1. An empty school bus, having completed its route, is parked alongside the road. A motor vehicle approaching from the rear loses control and strikes the bus.
- 2. A "Bus" is reported as stopped in traffic and a vehicle swerves to avoid the bus and contacts another vehicle. In this example, there is no positive indication of a "school bus" being involved.

Error ID	IF	THEN	
1L6P	RELATED FACTORS-DRIVER equals 33	SCHOOL BUS RELATED should equal 1.	
3D0P	SPECIAL USE for any vehicle equals 02,	SCHOOL BUS RELATED must equal 1.	
D660	VIOLATIONS equals 55,	SCHOOL BUS RELATED must equal 1.	
PB22	SCHOOL BUS RELATED equals 1, and PERSON TYPE equals 05, 11, 12, or 13,	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 342.	
PB23	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 342, and PERSON TYPE equals 05, 11, 12, or 13,	SCHOOL BUS RELATED should equal 1.	
V330	SCHOOL BUS RELATED equals 1,	vPIC BODY CLASS or FINAL STAGE BODY CLASS of at least one of the involved vehicles should equal 073 (Bus - School Bus), or SPECIAL USE for at least one involved vehicle should equal 02, or BUS USE for at least one vehicle should equal 01.	

Error ID	IF	THEN
V440	vPIC BODY CLASS or FINAL STAGE BODY CLASS equals 073 (Bus - School Bus),	SCHOOL BUS RELATED should equal 1.

C28 - Rail Grade Crossing Identifier - FARS Only

FORMAT: 6 numeric followed by 1 alphabetic

SAS NAME: Accident.RAIL

ELEMENT VALUES:

Codes	Attributes
0000000	Not Applicable
nnnnnnA	Six Numeric, Followed by One Alphabetic Valid F.R.A. Code
9999999	Unknown

Definition: This element identifies if the crash occurred in or near a Rail Grade Crossing.

Remarks: Code complete identifier. The format must always be six numbers followed by a letter. (Two exceptions: **0000000** (**Not Applicable**) and **9999999** (**Unknown**).)

Identifiers are obtainable from your Federal Railroad Administration representative or by accessing the **Federal Railroad Administration Office of Safety Analysis**.

0000000 (Not Applicable) is used for a crash that does not involve a rail grade crossing.

Code when any part of the crash occurs at a rail grade crossing. Include a crash in which a vehicle is waiting at a rail grade crossing but does not necessarily travel over the tracks.

Inform NHTSA if you have any problems obtaining identifiers.

Error ID	IF	THEN
1Y0P	RELATION TO JUNCTION(b) equals 06,	RAIL GRADE CROSSING IDENTIFIER must not equal 0000000.
650P	TRAFFIC CONTROL DEVICE equals 65 for any vehicle,	RAIL GRADE CROSSING IDENTIFIER must not equal 0000000.
651P	RAIL GRADE CROSSING IDENTIFIER must equal BLANKS, 0000000, 9999999, or nnnnnnA; where n is a numeric character and A is an uppercase alphabetic character.	
750P	RELATION TO JUNCTION(b) equals 07,	RAIL GRADE CROSSING IDENTIFIER must equal 0000000.

C29 - Notification Time EMS - FARS Only

FORMAT: 4 numeric

SAS NAME: Accident.NOT_HOUR, Accident.NOT_MIN

ELEMENT VALUES:

Codes	Attributes
8888	Not Applicable (Not Notified)
0000-2359	<u>Valid Military Times</u>
0099-2399	Known Hours but Unknown Minutes
9998	<u>Unknown if Notified</u>
9999	<u>Unknown EMS Notification Time</u>

Definition: NOTIFICATION TIME EMS is the time emergency medical service was notified.

Remarks: Every effort should be made to determine the NOTIFICATION TIME EMS, ARRIVAL TIME EMS, and EMS TIME AT HOSPITAL. See tables below for Example Coding Scenarios for Different EMS Times.

See the <u>Coding Guide: TIME: Crash Times, EMS Times, Death Times</u> for helpful information.

Code the official EMS times in military times as received. **Do not alter the times because of discrepancies with the <u>CRASH TIME</u>.** Code Notification Time of the first EMS unit to arrive on the scene.

All EMS time formats are in hours and minutes. If you receive an EMS time that includes the seconds' position, truncate to the reported minutes. Example: 10:51:35 would be 10:51.

If the day of the crash and the day of EMS Notification have different dates, then be sure to use the <u>018 (Date of Crash and Date of EMS Notification Were Not the Same Day)</u> in <u>RELATED FACTORS-CRASH LEVEL</u>. Code NOTIFICATION TIME EMS and <u>ARRIVAL TIME EMS</u> no matter how much time has elapsed since the <u>CRASH TIME</u>.

8888 (Not Applicable [Not Notified])

Enter this code only if EMS was never notified as part of an emergency transport.

- If it is known that EMS transport was called for non-emergency transport purposes (e.g., to transport a body to the morgue) then use this code.
- DO NOT use this code if the EMS was officially canceled. Cancellation is coded under ARRIVAL TIME EMS and EMS TIME AT HOSPITAL.
- If the EMS was notified then canceled, code the actual notification time and <u>9997</u> (Officially Canceled) under ARRIVAL TIME EMS and EMS TIME AT HOSPITAL.

0000 - 2359 (Valid Military Times), 0099 - 2399 (Known Hours but Unknown Minutes)

Code Notification Time of the first EMS unit to arrive on the scene. If unknown minutes, code the actual hour and "99" for the minutes. Code midnight as "0000." One minute after midnight is coded "0001." See remarks "How to Code Midnight" under **CRASH TIME**.

9998 (Unknown if Notified)

Enter this attribute if you cannot determine whether any EMS was ever notified or not.

9999 (Unknown EMS Notification Time)

Enter this attribute if EMS was notified but the time of notification is unknown.

Helicopters that transport victims to treatment facilities are coded as EMS units, but not police who may be trained to render emergency aid. This guidance is not meant to exclude helicopters that are used to transport victims for treatment that may be owned by police departments.

Example Coding Scenarios for Different EMS Times

Scenario 1: Same EMS unit is first on scene and also transports the most severely injured person, known times for all three elements

First on Scene	Transported most Severely Injured Person	Notification Time EMS	Arrival Time EMS	EMS Time at Hospital
EMS Air with Known times	EMS Air with known times	Code known time for EMS Air	Code known time for EMS Air	Code known time for EMS Air
EMS Ground with Known times	EMS Ground with Known times	Code known time for EMS Ground	Code known time for EMS Ground	Code known time for EMS Ground
EMS Unk Type with Known times	EMS Unk Type with Known times	Code known time for EMS Unk Type	Code known time for EMS Unk Type	Code known time for EMS Unk Type

Scenario 2: Same EMS unit is first on scene and also transports the most severely injured person, unknown times for all three elements

First on Scene	Transported most Severely Injured Person	Notification Time EMS	Arrival Time EMS	EMS Time at Hospital
EMS Air with Unknown times	EMS Air with Unknown times	9999 (Unknown EMS Notification Time)	9999 (Unknown EMS Scene Arrival Time)	9999 (Unknown EMS Hospital Arrival Time)
EMS Ground with Unknown times	EMS Ground with Unknown times	9999 (Unknown EMS Notification Time)	9999 (Unknown EMS Scene Arrival Time)	9999 (Unknown EMS Hospital Arrival Time)
EMS Unk Type with Unknown times	EMS Unk Type with Unknown times	9999 (Unknown EMS Notification Time)	9999 (Unknown EMS Scene Arrival Time)	9999 (Unknown EMS Hospital Arrival Time)

Scenario 3: Different EMS units first on scene and transporting the most severely injured person, known times for all three elements

First on Scene	Transported most Severely Injured Person	Notification Time EMS	Arrival Time EMS	EMS Time at Hospital
EMS Ground with Known times	EMS Air with known times	Code known time for EMS Ground	Code known time for EMS Ground	Code known time for EMS Air
EMS Ground # 1 with Known times	EMS Ground # 2 with Known times	Code known time for EMS Ground # 1	Code known time for EMS Ground # 1	Code known time for EMS Ground # 2

Scenario 4: Different EMS units first on scene and transporting the most severely injured person, unknown times for all three elements

First on Scene	Transported most Severely Injured Person	Notification Time EMS	Arrival Time EMS	EMS Time at Hospital
EMS Ground with Unknown times	EMS Air with Unknown times	9999 (Unknown EMS Notification Time)	9999 (Unknown EMS Scene Arrival Time)	9999 (Unknown EMS Hospital Arrival Time)
EMS Ground # 1 with unknown times	EMS Ground # 2 with unknown times	9999 (Unknown EMS Notification Time)	9999 (Unknown EMS Scene Arrival Time)	9999 (Unknown EMS Hospital Arrival Time)

Scenario 5: Different EMS units first on scene and transporting the most severely injured person, mix of known and unknown times for all three elements

First on Scene	Transported most Severely Injured Person	Notification Time EMS	Arrival Time EMS	EMS Time at Hospital
EMS Ground with Unknown times	EMS Air with known times	9999 (Unknown EMS Notification Time)	9999 (Unknown EMS Scene Arrival Time)	Code known time for EMS Air
EMS Ground with Known times	EMS Air with Unknown times	Code known time for EMS Ground	Code known time for EMS Ground	9999 (Unknown EMS Hospital Arrival Time)
EMS Ground # 1 with unknown times	EMS Ground # 2 with known times	9999 (Unknown EMS Notification Time)	9999 (Unknown EMS Scene Arrival Time)	Code known time for EMS Ground # 2
EMS Ground # 1 with known times	EMS Ground # 2 with unknown times	Code known time for EMS Ground # 1	Code known time for EMS Ground # 1	9999 (Unknown EMS Hospital Arrival Time)

Error ID	IF	THEN
A070	NOTIFICATION TIME EMS is not 8888, 9998, or 9999,	NOTIFICATION TIME EMS should not be more than 120 minutes later than CRASH TIME.
A540	NOTIFICATION TIME EMS is not 8888, 9998, or 9999, and ARRIVAL TIME EMS is not 8888, 9997, 9998, 9999,	ARRIVAL TIME EMS should not be more than 120 minutes later than NOTIFICATION TIME EMS.
A560	NOTIFICATION TIME EMS is not 8888, 9998, or 9999, and EMS TIME AT HOSPITAL is not 8888, 9997, 9998, 9999,	EMS TIME AT HOSPITAL should not be more than 180 minutes later than NOTIFICATION TIME EMS.
E01P	NOTIFICATION TIME EMS equals 9998,	ARRIVAL TIME EMS must equal 9998, and EMS TIME AT HOSPITAL must equal 8888 or 9998.
E03P	ARRIVAL TIME EMS equals 8888,	NOTIFICATION TIME EMS and EMS TIME AT HOSPITAL must equal 8888.
E04P	NOTIFICATION TIME EMS equals 8888,	ARRIVAL TIME EMS and EMS TIME AT HOSPITAL must equal 8888.
E07P	ARRIVAL TIME EMS equals 9997,	NOTIFICATION TIME EMS must not equal 8888, 9998.
E08P	NOTIFICATION TIME EMS is not 8888, 9998, and EMS TIME AT HOSPITAL is not 8888, 9996, 9997, 9998,	ARRIVAL TIME EMS must not equal 9997 or 9998.
E09P	ARRIVAL TIME EMS equals 0000-2359, CRASH TIME-hour equals ARRIVAL TIME EMS-hour, and ARRIVAL TIME EMS-minute is greater than CRASH TIME-minute;	NOTIFICATION TIME EMS-hour should not equal 99.
P093	all persons TRANSPORTED TO FIRST MEDICAL FACILITY BY equals 2, or 6,	NOTIFICATION TIME EMS, ARRIVAL TIME EMS, EMS TIME AT HOSPITAL must equal 8888.
U750	UNLIKELY: EMS TIME AT HOSPITAL equals 8888,	NOTIFICATION TIME EMS is unlikely to equal 8888.

C30 - Arrival Time EMS - FARS Only

FORMAT: 4 numeric

SAS NAME: Accident.ARR_HOUR, Accident.ARR_MIN

ELEMENT VALUES:

Codes	Attributes
8888	Not Applicable (Not Notified)
0000-2359	<u>Valid Military Times</u>
0099-2399	Known Hours but Unknown Minutes
9997	Officially Canceled
9998	Unknown if Arrived
9999	Unknown EMS Scene Arrival Time

Definition: ARRIVAL TIME EMS is the time emergency medical service arrived on the crash scene.

Remarks: This excludes any transport by anyone other than EMS. (law enforcement, POV, etc.). Every effort should be made to determine the NOTIFICATION TIME EMS, ARRIVAL TIME EMS, and EMS TIME AT HOSPITAL. See tables under NOTIFICATION TIME EMS for Example Coding Scenarios for Different EMS Times. Code the official EMS times in military times as received. Code the arrival time of the first EMS unit to arrive on the scene. Do not alter the times because of discrepancies with the CRASH TIME.

See the <u>Coding Guide: TIME: Crash Times, EMS Times, Death Times</u> for helpful information.

All EMS time formats are in hours and minutes. If you receive an EMS time that includes the seconds' position, truncate to the reported minutes. Example: 10:51:35 would be 10:51.

Code <u>NOTIFICATION TIME EMS</u> and ARRIVAL TIME EMS no matter how much time has elapsed since the <u>CRASH TIME</u>.

8888 (Not Applicable [Not Notified])

Enter this attribute only if EMS was never notified. DO NOT use this code if the EMS was notified then canceled.

0000 - 2359 (Valid Military Times), 0099 - 2399 (Known Hours but Unknown Minutes)

Code the arrival time of the first EMS unit to arrive on the scene. If unknown minutes, code the actual hour and "99" for the minutes. Code midnight as "0000." One minute after midnight is coded "0001." See remarks "How to Code Midnight" under **CRASH TIME**.

9997 (Officially Canceled)

Enter this attribute if EMS was officially canceled.

9998 (Unknown if Arrived)

Enter this attribute if there is no indication of official cancellation, but there is uncertainty or doubt that EMS ever arrived on the scene or not.

9999 (Unknown EMS Scene Arrival Time)

Enter this code if EMS did arrive on scene, but the time of arrival is unknown.

Error ID	IF	THEN
A540	NOTIFICATION TIME EMS is not 8888, 9998, or 9999, and ARRIVAL TIME EMS is not 8888, 9997, 9998, 9999,	ARRIVAL TIME EMS should not be more than 120 minutes later than NOTIFICATION TIME EMS.
A550	ARRIVAL TIME EMS is not 8888, 9997, 9998, or 9999, and EMS TIME AT HOSPITAL is not 8888, 9997, 9998, 9999,	EMS TIME AT HOSPITAL should not be more than 60 minutes later than ARRIVAL TIME EMS.
E01P	NOTIFICATION TIME EMS equals 9998,	ARRIVAL TIME EMS must equal 9998, and EMS TIME AT HOSPITAL must equal 8888 or 9998.
E02P	ARRIVAL TIME EMS equals 9998,	EMS TIME AT HOSPITAL must equal 8888 or 9998.
E03P	ARRIVAL TIME EMS equals 8888,	NOTIFICATION TIME EMS and EMS TIME AT HOSPITAL must equal 8888.
E04P	NOTIFICATION TIME EMS equals 8888,	ARRIVAL TIME EMS and EMS TIME AT HOSPITAL must equal 8888.
E05P	EMS TIME AT HOSPITAL equals 9997,	ARRIVAL TIME EMS must equal 9997.
E06P	ARRIVAL TIME EMS equals 9997,	EMS TIME AT HOSPITAL must equal 9997.
E07P	ARRIVAL TIME EMS equals 9997,	NOTIFICATION TIME EMS must not equal 8888, 9998.
E08P	NOTIFICATION TIME EMS is not 8888, 9998, and EMS TIME AT HOSPITAL is not 8888, 9996, 9997, 9998,	ARRIVAL TIME EMS must not equal 9997 or 9998.
E09P	ARRIVAL TIME EMS equals 0000-2359, CRASH TIME-hour equals ARRIVAL TIME EMS-hour, and ARRIVAL TIME EMS-minute is greater than CRASH TIME-minute;	NOTIFICATION TIME EMS-hour should not equal 99.
P093	all persons TRANSPORTED TO FIRST MEDICAL FACILITY BY equals 2, or 6,	NOTIFICATION TIME EMS, ARRIVAL TIME EMS, EMS TIME AT HOSPITAL must equal 8888.
U760	UNLIKELY: EMS TIME AT HOSPITAL equals 8888,	ARRIVAL TIME EMS is unlikely to equal 8888.

C31 - EMS Time at Hospital - FARS Only

FORMAT: 4 numeric

SAS NAME: Accident.HOSP_HR, Accident.HOSP_MN

ELEMENT VALUES:

Codes	Attributes
8888	Not Applicable (Not Transported)
0000-2359	<u>Valid Military Times</u>
0099-2399	Known Hours but Unknown Minutes
9996	Terminated Transport
9997	Officially Canceled
9998	<u>Unknown if Transported</u>
9999	Unknown EMS Hospital Arrival Time

Definition: EMS TIME AT HOSPITAL is the time emergency medical service arrived at the treatment facility (hospital, clinic, trauma center, etc.) to which it was transporting victims of the crash.

Remarks: This excludes any transport by anyone other than EMS (law enforcement, POV, etc.). Every effort should be made to determine the <u>NOTIFICATION TIME EMS</u>, <u>ARRIVAL TIME EMS</u>, and EMS TIME AT HOSPITAL. *See tables under NOTIFICATION TIME EMS for Example Coding Scenarios for Different EMS Times*.

See the <u>Coding Guide: TIME: Crash Times, EMS Times, Death Times</u> for helpful information.

Code the official EMS times in military times as received. Code the EMS time at hospital of the unit transporting the most severely injured victim. The most severely injured victim includes (and usually is) the victim who dies en route to the treatment facility or later, but not the one who dies on-scene. **Do not alter the times because of discrepancies with the CRASH TIME.**

All EMS time formats are in hours and minutes. If you receive an EMS time that includes the seconds' position, truncate to the reported minutes. Example: 10:51:35 would be 10:51.

Questions arise when there is more than one EMS unit or when there is more than one injured person. Code EMS TIME AT HOSPITAL according to the following guidelines:

8888 (Not Applicable [Not Transported])

Use this attribute if all the injuries are on-scene fatalities (no one is transported for treatment.) Also use this attribute if there are live victims, but no one is transported to a treatment facility by EMS.

0000 - 2359 (Valid Military Time), 0099 - 2399 (Known Hours but Unknown Minutes)

Code the EMS time at hospital of the unit transporting the most severely injured victim. The most severely injured victim includes (and usually is) the victim who dies en route to the treatment facility or later, but not the one who dies on-scene.

If unknown minutes, code the actual hour and "99" for the minutes. Code midnight as "0000." One minute after midnight is coded "0001." See remarks "How to Code Midnight" under **CRASH TIME**.

9996 (Terminated Transport)

Enter this attribute if there is indication that EMS was notified, arrived at the scene but while in transit terminated the trip to hospital because the person died en route. This attribute should not be used when there is a hospital arrival time available for a person dead on arrival at the hospital.

9997 (Officially Canceled)

Enter this attribute if EMS was officially canceled before on scene.

9998 (Unknown if Transported)

Enter this attribute if there is no indication of official cancellation, but there is uncertainty or doubt that any victims were transported for treatment or not.

9999 (Unknown EMS Hospital Arrival Time)

Enter this attribute if EMS transported victims for treatment, but the time of arrival at the hospital or treatment facility is unknown.

Error ID	IF	THEN
A550	ARRIVAL TIME EMS is not 8888, 9997, 9998, or 9999, and EMS TIME AT HOSPITAL is not 8888, 9997, 9998, 9999,	EMS TIME AT HOSPITAL should not be more than 60 minutes later than ARRIVAL TIME EMS.
A551	EMS TIME AT HOSPITAL equals 8888, 9997, 9998,	TRANSPORTED TO FIRST MEDICAL FACILITY BY should not equal 1, 3, 5 for any person.
A560	NOTIFICATION TIME EMS is not 8888, 9998, or 9999, and EMS TIME AT HOSPITAL is not 8888, 9997, 9998, 9999,	EMS TIME AT HOSPITAL should not be more than 180 minutes later than NOTIFICATION TIME EMS.
E01P	NOTIFICATION TIME EMS equals 9998,	ARRIVAL TIME EMS must equal 9998, and EMS TIME AT HOSPITAL must equal 8888 or 9998.
E02P	ARRIVAL TIME EMS equals 9998,	EMS TIME AT HOSPITAL must equal 8888 or 9998.
E03P	ARRIVAL TIME EMS equals 8888,	NOTIFICATION TIME EMS and EMS TIME AT HOSPITAL must equal 8888.

Error ID	IF	THEN
E04P	NOTIFICATION TIME EMS equals 8888,	ARRIVAL TIME EMS and EMS TIME AT HOSPITAL must equal 8888.
E05P	EMS TIME AT HOSPITAL equals 9997,	ARRIVAL TIME EMS must equal 9997.
E06P	ARRIVAL TIME EMS equals 9997,	EMS TIME AT HOSPITAL must equal 9997.
E08P	NOTIFICATION TIME EMS is not 8888, 9998, and EMS TIME AT HOSPITAL is not 8888, 9996, 9997, 9998,	ARRIVAL TIME EMS must not equal 9997 or 9998.
P091	TRANSPORTED TO FIRST MEDICAL FACILITY BY equals 1, 3, 5,	EMS TIME AT HOSPITAL should not equal 8888, 9997, 9998.
P093	all persons TRANSPORTED TO FIRST MEDICAL FACILITY BY equals 2, or 6,	NOTIFICATION TIME EMS, ARRIVAL TIME EMS, EMS TIME AT HOSPITAL must equal 8888.
P095	TRANSPORTED TO FIRST MEDICAL FACILITY BY equals 0 for every person in the case,	EMS TIME AT HOSPITAL must not equal 0000-2399, 9999.
P510	EMS TIME AT HOSPITAL equals 8888, 9997, 9998,	DIED AT SCENE/EN ROUTE should not equal 8 for any PERSON.
P530	EMS TIME AT HOSPITAL equals 9996,	DIED AT SCENE/EN ROUTE must equal 8 for at least one person.
P54P	DIED AT SCENE/EN ROUTE equals 8,	EMS TIME AT HOSPITAL should not equal 8888, 9997, 9998.
U750	UNLIKELY: EMS TIME AT HOSPITAL equals 8888,	NOTIFICATION TIME EMS is unlikely to equal 8888.
U760	UNLIKELY: EMS TIME AT HOSPITAL equals 8888,	ARRIVAL TIME EMS is unlikely to equal 8888.

C32 - Related Factors - Crash Level

FORMAT: 3 numeric. Select All That Apply.

SAS NAME: CrashRF.CRASHRF

ELEMENT VALUES:

Codes	Attributes
0 00	None
* 0 01	Inadequate Warning of Exits, Lanes Narrowing, Traffic Controls, etc.
* 0 02	Shoulder Design or Condition
0 03	Other Maintenance or Construction-Created Condition
* 0 04	No or Obscured Pavement Marking
0 05	Surface Under Water
* 0 06	Inadequate Construction or Poor Design of Roadway, Bridge, etc.
0 07	Surface Washed Out (caved-in, road slippage)

Special Circumstances:

Codes	Attributes
0 12	Distracted Driver of a Non-Contact Vehicle
0 13	Aggressive Driving/Road Rage by Non-Contact Vehicle Driver
0 14	Motor Vehicle Struck by Falling Cargo, or Something That Came Loose from, or Something That was Set in Motion by a Vehicle.
0 15	Non-Occupant Struck by Falling Cargo, or Something That Came Loose from, or Something that was Set in Motion by a Vehicle
0 16	Non-Occupant Struck Vehicle
0 17	Vehicle Set in Motion by Non-Driver
* 0 18	Date of Crash and Date of EMS Notification Were Not the Same Day
0 20	Police Pursuit Involved
0 21	Within Designated School Zone
* 0 22	Speed Limit is a Statutory Limit as Recorded or was Determined as This State's "Basic Rule"
0 23	Indication of a Stalled/Disabled Vehicle
0 24	Unstabilized Situation Began and All Harmful Events Occurred Off of the Roadway
0 28	Regular Congestion
0 19	Recent Previous Crash Scene Nearby
0 27	Backup Due to Prior Crash
0 26	Prior Non-Recurring Incident

Codes	Attributes
0 25	Toll Booth/Plaza Related
0 30	Obstructed Crosswalks
0 31	Related to a Bus Stop
9 99	Reported as Unknown

* FARS ONLY ATTRIBUTES

Definition: This element identifies factors related to the crash expressed in the case material.

Remarks: Code information provided in the case material.

For attributes 001-007, if the officer states "the witness said," these should **NOT** be coded. Care must be used in coding these attributes. The police crash report should state that the environmental condition was a factor or existed at this location; cannot be inferred.

Attributes 012-031 - SPECIAL CIRCUMSTANCES, are exceptions to the prior remarks. These are codes for unusual factors that occurred during the crash. If you can determine that any of these factors did happen, then these codes should be used.

This element can be coded in conjunction with other elements even if similar information is identified. For example, if a traffic control is temporarily down, it can be coded under both <u>DEVICE FUNCTIONING</u> and RELATED FACTORS-CRASH LEVEL <u>001</u> (<u>Inadequate</u> Warning of Exits, Lanes Narrowing, Traffic Controls, etc.).

000 (None) is used when no applicable related factors are noted in the case material.

*001 (Inadequate Warning of Exits, Lanes Narrowing, Traffic Controls, etc.) is used when the case material identifies that there was inadequate warning provided to motorists associated with the trafficway. *Do* not use this attribute in situations that would include construction sites or work areas (see 003 (Other Maintenance or Construction-Created Condition)).

Examples include:

- Inadequate warning due to obscured signs.
- Inadequate warning because signs were temporarily down.
- Lack of necessary signage (e.g., merge or diverge warning, downhill grade).

*002 (Shoulder Design or Condition) is used when the case material identifies problem conditions pertaining to the actual design or condition of the *shoulder*.

Examples include:

- Soft or collapsing shoulders.
- Inadequate shoulder width.
- Shoulder is at a different level from the roadway (e.g., drop-off, lifted, not flat).

003 (Other Maintenance or Construction-Created Condition) is used when the case material identifies problem conditions pertaining to "inadequate maintenance" of the roadway (e.g., potholes, ruts in roadway) or conditions cited by the officer that are related to construction activity (addition of barricades, change in traffic patterns, merging lanes, etc.).

*004 (No or Obscured Pavement Marking) is used when the case material identifies problem conditions pertaining to any pavement marking *situations*.

Examples include:

- New asphalt that has covered old pavement markings.
- Areas where pavement marking has worn off.
- The case material mention ice/snow/mud was obscuring the pavement markings.

005 (Surface Under Water) is used when the case material identifies that the roadway surface is under water beyond normal accumulation (i.e., depth of water). Also use this attribute when the case material mention situations where the roadway is permanently under water (i.e., fords).

*006 (Inadequate Construction or Poor Design of Roadway, Bridge, etc.) is used when the case material identifies problems with the roadway design. This attribute does not include shoulder-related situations, pavement marking situations, or situations with inadequate warnings (see attributes 001 (Inadequate Warning of Exits, Lanes Narrowing, Traffic Controls, etc.), 002 (Shoulder Design or Condition), and 004 (No or Obscured Pavement Marking)).

Examples include:

- Original design of the trafficway (i.e., roadway bridges, medians, guardrails, traffic barriers) is poor.
- Blind intersections due to highway design, not due to visual obstructions (i.e., shrubbery) etc.
- Improper banking.
- Lack of a lane for merging.
- Inadequate road surface (dirt, gravel surfaces, etc.). However, this must not be inferred. It must be explicitly stated in the police report as a "factor."

007 (Surface Washed Out [caved-in, road slippage]) is used when the case material identifies the roadway was previously washed out, caved-in, or had slipped due to prior events associated with the environment (flooding, earthquakes, etc.).

012 (**Distracted Driver of a Non-Contact Vehicle**) is used for situations where the investigating officer indicates that the driver of a non-contact vehicle ("phantom vehicle") was distracted.

013 (Aggressive Driving/Road Rage by Non-Contact Vehicle Driver) is only used for situations where the investigating officer indicates that a non-contact vehicle ("phantom vehicle") was being operated aggressively. The officer must use the term "Aggressive" or "Road Rage" in describing a driver's behavior. This can be indicated in the case material under related/contributing factors/circumstances or in the narrative. For contact vehicles, see RELATED FACTORS - DRIVER LEVEL 008 (Aggressive Driving/Road Rage).

014 (Motor Vehicle Struck by Falling Cargo, or Something That Came Loose from, or Something that was Set in Motion by a Vehicle) is used when the case material identifies that a vehicle became a contact vehicle in the crash as a result of being struck by cargo or objects that fell from another vehicle or by something that was set in motion by another vehicle. The term

"set in motion" generally applies to non-fixed or fixed objects struck and propelled by a vehicle (including pedestrians or parked vehicles). This can also include a circumstance where one vehicle overrides another and then directs or controls the overridden vehicle's movement.

Examples include:

- Cargo falls from a truck (in-transport) and lands on another motor vehicle in-transport or a parked vehicle.
- A car runs off the roadway at an intersection, hits a stop sign and propels the stop sign into a vehicle traveling on the intersecting roadway.
- A motorcycle rider overturns in a curve, the rider is separated from the vehicle and the rider slides across the centerline into a vehicle traveling in the opposing lanes.
- A tractor trailer overrides a passenger car and with the car still pinned under the truck, the combined vehicles continue on to contact other objects.

015 (Non-Occupant Struck by Falling Cargo, or Something That Came Loose from, or Something that was Set in Motion by a Vehicle) is used when the case material identifies that a non-occupant (e.g., pedestrian, bicyclist, person on personal conveyance) was struck by cargo or objects that fell from a motor vehicle or by something that was set in motion by a motor vehicle. The term "set in motion" generally applies to non-fixed or fixed objects struck and propelled by a vehicle (including pedestrians or parked vehicles).

Examples include:

- Cargo falls from a truck (in-transport) and lands on a bicyclist on the shoulder.
- A car runs off the roadway at an intersection, hits a stop sign, and propels the stop sign into a skateboarder waiting to cross the intersection.
- A car strikes a deer in the roadway and propels the deer into a person jogging on the sidewalk.

016 (Non-Occupant Struck Vehicle) is used when the case material identifies that a non-occupant (e.g., pedestrian, bicyclist, person on personal conveyance) "struck" or "ran into" a motor vehicle (usually the side or back of the vehicle). This does not include non-occupants who are struck in the vehicle's path of travel.

Examples include:

- A bicyclist runs into the mirror of a parked car and falls into the path of a motor vehicle in-transport.
- A runner collides with the side of a vehicle that comes to a sudden stop and the runner is subsequently struck by another vehicle.

017 (Vehicle Set in Motion by Non-Driver) is used when the case material identifies the crash involved a passenger's action.

Examples include:

- Passenger shifting gears on the vehicle.
- Passenger hitting the accelerator.
- Passenger turning the ignition key or hitting the ignition button.

NOTE: This attribute is different from RELATED FACTORS-PERSON LEVEL <u>005</u> (Interfering with the Driver).

*018 (Date of Crash and Date of EMS Notification Were Not the Same Day) is used when the crash victim(s) is not discovered immediately or when the effects of the crash are not immediately known.

020 (**Police Pursuit Involved**) is used when the case material identifies a police pursuit had been initiated by the police and was active at the time of the crash. This attribute is also used when a pursuit had been initiated and terminated, but the pursuit action is still related to the crash. This applies for both air and ground pursuing vehicles. To identify the individual(s) involved in the pursuit, please see <u>RELATED FACTORS-DRIVER LEVEL</u> for <u>**037** (**Police Pursuing this Driver or Police Officer in Pursuit**).</u>

Definition of Police Pursuit: A pursuit is an event that is initiated when a law enforcement officer, operating an authorized emergency vehicle, gives notice to stop (either through the use of visual or audible emergency signals or a combination of emergency devices) to a motorist who the officer is attempting to apprehend, and that motorist fails to comply with the signal by either maintaining his/her speed, increasing speed, or taking other evasive action to elude the officer's continued attempts to stop the motorist. A pursuit is terminated when the motorist stops, or when the attempt to apprehend is discontinued by the officer or at the direction of a competent authority.

021 (Within Designated School Zone) is used when the case material identifies the crash occurred in an area signed or marked as a "School Zone." This may or may not be <u>SCHOOL BUS RELATED</u>. "School Zones" are zones near or at a school that exist during months and hours when zone signing is in effect.

*022 (Speed Limit is a Statutory Limit as Recorded or was Determined as This State's "Basic Rule") is used when the case material identifies there is no posted speed limit but the State law sets the maximum speed limit on a local road or street.

023 (Indication of a Stalled/Disabled Vehicle) is used when the case material identifies that a stalled or mechanically disabled vehicle was somehow related to the crash. It includes both contact and non-contact vehicles that are stalled/disabled for mechanical reasons not due to crash-related damage.

Examples include:

- A pedestrian is struck when walking from their stalled vehicle.
- A vehicle is stalled in the travel lanes causing another vehicle to lose control and crash.

024 (Unstabilized Situation Began and All Harmful Events Occurred Off the Roadway) is used when the case material identifies the unstabilized situation began within the trafficway but off the roadway and all harmful events occurred off the roadway.

Examples include:

- A vehicle stopped on the roadside begins to accelerate to re-enter the roadway and runs into a ditch and overturns.
- An ATV is driving along the roadside and strikes a tree stump.
- A vehicle strikes a pedestrian while driving down the road shoulder.

028 (Regular Congestion) is used when the case material identifies the crash occurred in or related to an area of trafficway where there was congestion due to *long term* heavy traffic. For example, during regular rush hour traffic or due to ongoing, long-term construction projects.

NOTE: A Secondary Crash occurs when this crash was within a traffic incident scene or within a traffic queue in either direction resulting from a <u>Recent Previous Crash</u>, a <u>Backup Due to a Prior Crash</u>, or a <u>Prior Non-Recurring Incident</u>. A traffic incident scene is the scene of any unplanned traffic event that adversely effects normal traffic operations. Examples include, but are not limited to, traffic crashes, disabled vehicles, traffic backups, or spilled cargo.

019 (Recent Previous Crash Scene Nearby) is used when the case material identifies that a previous crash somehow influenced or contributed to the occurrence of this crash.

Examples:

- A change in the traffic patterns.
- An obstruction on the roadway.
- A reduction in traffic speed.
- Occupants and/or vehicles on the roadway.
- Possible recent traffic crash scene.

027 (Backup Due to Prior Crash) is used when the case material identifies there was an accumulation of traffic caused by vehicles slowing or stopping due to traffic flow being impacted by a prior crash. The distance from the prior crash does not matter, only the relevance to this crash.

026 (**Prior Non-Recurring Incident**) is used when the case material identifies that the crash occurred in or related to an unusual and unplanned event.

Examples:

- A tractor trailer transporting a trailer designated as a Wide Load.
- Debris in the roadway causing a backup.
- Traffic going to or coming from a funeral procession, sporting event, parade, or traffic signal outage.

025 (Toll Booth/Plaza Related) is used when the case material identifies that the crash occurred at or in the vicinity of a toll booth (manned or unmanned) or a toll plaza. These are crashes that occur in the upstream approach to the toll booth/plaza area and continues as the approach area (where the toll road begins to widen) leading up to the toll booths and in the departure area where the road begins to narrow leading back to the normal number of lanes comprising the toll road downstream departure area. (See Figure 12.)

030 (Obstructed Crosswalks) is used when case material indicate that crosswalks were in the vicinity of the crash but were not available because they were somehow obstructed. For example, due to construction, people, stopped motor vehicles, or other objects preventing their use.

031 (Related to a Bus Stop) is used when the case material indicate the crash was related to the use of a location set aside for, or customarily used for, boarding and disembarking passengers onto or from a bus of any kind (e.g., pedestrian collisions involving vehicles maneuvering around a bus stopped for boarding or disembarking passengers, pedestrians walking to a bus stop, or pedestrians running across traffic lanes to a bus stop).

999 (**Reported as Unknown**) is used when the circumstances surrounding the crash are unknown and reported as "Unknown" by the investigating *officer*.

* FARS ONLY ATTRIBUTES

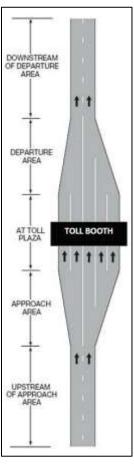


Figure 12: Toll Booth/Plaza Area (See MMUCC - 2012, 4th Edition)

Error ID	IF	THEN
1A0P	RELATED FACTORS-CRASH LEVEL equals 014,	NUMBER OF VEHICLE FORMS SUBMITTED must be greater than 001.
1A1P	RELATED FACTORS-CRASH LEVEL equals 005,	ROADWAY SURFACE CONDITIONS must equal 06 for at least one vehicle.
640F	TRAFFIC CONTROL DEVICE equals 23 for any vehicle,	RELATED FACTORS-CRASH LEVEL should equal 0 21.
641F	RELATED FACTORS-CRASH LEVEL equals 021,	TRAFFIC CONTROL DEVICE should not equal 00 for every vehicle.
642F	TRAFFIC CONTROL DEVICE equals 00 for any vehicle,	RELATED FACTORS-CRASH LEVEL should not equal <i>0</i> 21.
840P	any RELATED FACTORS-CRASH LEVEL equals <i>000 or 9</i> 99,	only that one code and no other must be coded.
870P	A RELATED FACTORS-CRASH LEVEL 001-007, 012-028 can be used only once per crash.	
880F	RELATED FACTORS-CRASH LEVEL equals θ 16,	there must be a Person Level (Not a MV Occupant) form with PERSON TYPE equal to 04-07, 11, 12, 13, or 19.
881P	RELATED FACTOR - CRASH LEVEL equals 024,	RELATION TO TRAFFICWAY must not equal 01 or 11.
890F	RELATED FACTORS-CRASH LEVEL equals θ 15,	there must be a Person Level (Not a MV Occupant) form with PERSON TYPE equal to 04-07, 10-13, or 19.
8L8S	AREAS OF IMPACT (THIS VEHICLE) equals 18, 19, or 20 in the CRASH EVENTS and the corresponding event in that row equals 14, 45, or 54,	RELATED FACTORS-CRASH LEVEL must equal θ 14.
8L8T	RELATED FACTORS-CRASH LEVEL equals $ heta$ 14,	there must exist at least one event in the CRASH EVENTS where AREAS OF IMPACT (THIS VEHICLE or OTHER VEHICLE) equals 18, 19, or 20 and the corresponding event in that row equals 14, 45, or 54.
8L8U	AREAS OF IMPACT (THIS VEHICLE) equals 18, 19, or 20 in the CRASH EVENTS and the corresponding event in that row equals 08, 09, 15, 49,	RELATED FACTORS-CRASH LEVEL must equal 015.

Error ID	IF	THEN
8L8V	RELATED FACTORS-CRASH LEVEL equals θ 15,	there must exist at least one event in the CRASH EVENTS where AREAS OF IMPACT (THIS VEHICLE) equals 18, 19, or 20, and the corresponding event in that row equals 08-10, 15, 18, 49, or 91.
AM1P	FIRST HARMFUL EVENT equals 54, or SEQUENCE OF EVENTS equals 54 for any vehicle,	one RELATED FACTORS-CRASH LEVEL must equal <i>0</i> 14.
D470	any RELATED FACTORS-DRIVER LEVEL equals 037,	at least one RELATED FACTORS-CRASH LEVEL should equal <i>0</i> 20.
D500	VIOLATIONS CHARGED equals 05,	at least one RELATED FACTORS-CRASH LEVEL should equal 0 20.
PB63	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 230,	at least one RELATED FACTORS - CRASH LEVEL should equal <i>0</i> 19 or <i>0</i> 23.
PBB3	PEDESTRIAN/BIKE TYPING-PEDESTRIAN CRASH TYPE equals 341 or 342,	RELATED FACTORS - CRASH LEVEL should equal 0 31.

C33 - Interstate Highway - CRSS Only

FORMAT: 1 numeric

SAS NAME: Accident.INT_HWY

ELEMENT VALUES:

Codes	Attributes
0	<u>No</u>
1	Yes
9	<u>Unknown</u>

Definition: This element identifies whether or not the crash occurred on an interstate highway. Interstate highway is a Federal Highway Administration classification.

Remarks: The Interstate Highway System includes those trafficways that are within the national system for interstate transport and defense purposes. Interstates typically have limited access and multiple lanes of travel.

Crashes that occur on ramps leading to or away from an Interstate should be coded 1 (Yes).

0 (No) is used when the police crash report indicates that the crash occurred on any of the following: US Highway, State Highway, County Road, Township Road, or Municipal Road.

1 (Yes) is used when the police crash report indicates the crash occurred on an interstate highway. Some police crash reports use a specific block to indicate interstate. Interstate can also be identified by the prefix "I" used in the roadway name.

9 (Unknown) is used when it cannot be determined whether the trafficway where the crash occurred was an interstate or not.

Error ID	IF	THEN
A3G0	INTERSTATE HIGHWAY equals 1, and RELATION TO JUNCTION (a) equals 1, and RELATION TO JUNCTION (b) is not equal to 03 or 05 or 20,	TOTAL LANES IN ROADWAY should not equal 1 for at least one vehicle involved in the FIRST HARMFUL EVENT.
А3Н0	INTERSTATE HIGHWAY equals 1, and RELATION TO JUNCTION (a) equals 1, and RELATION TO JUNCTION (b) is not equal to 03 or 05 or 20,	TRAFFICWAY DESCRIPTION should not equal 4 for at least one vehicle involved in the FIRST HARMFUL EVENT.
A3I0	INTERSTATE HIGHWAY equals 1,	RELATION TO JUNCTION (b) should not equal 02, 04, 06, 08, or 16.

Error ID	IF	THEN
A3J0	INTERSTATE HIGHWAY equals 1, and RELATION TO JUNCTION (a) equals 1, and RELATION TO JUNCTION (b) is not equal to 03 or 05 or 20,	SPEED LIMIT should not equal 01-40 for at least one vehicle involved in the FIRST HARMFUL EVENT.
A3K0	FIRST HARMFUL EVENT equals 10,	INTERSTATE HIGHWAY should not equal 1.
A930	INTERSTATE HIGHWAY equals 1, and RELATION TO JUNCTION (a) equals 1, and RELATION TO JUNCTION (b) is not equal to 03, 05, or 20,	TRAFFIC CONTROL DEVICE should not equal 01-03, 20, 23, or 65 for at least one vehicle involved in the FIRST HARMFUL EVENT.

C34 - Stratum - CRSS Only

FORMAT: 1 numeric

SAS NAME: Accident.STRATUM

ELEMENT VALUES:

Codes	Stratum Numbers
2	Stratum 2
3	Stratum 3
4	Stratum 4
5	Stratum 5
6	Stratum 6
7	Stratum 7
8	Stratum 8
9	Stratum 9
10	Stratum 10

Definition: The CRSS stratum applicable to this police crash report.

Remarks: Only motor vehicle traffic crashes are included in the CRSS. See the current **CRSS Sampling Manual**, for the definition of a CRSS crash.

CRSS Strata Definitions

Stratum #	Definition	
Stratum 2	Crashes involving at least one injured (A, B, C, or ISU*) or Killed (K) person who was not in a motor vehicle (i.e., non-motorist).	
Stratum 3	Crashes not qualifying for Stratum 2 involving at least one injured (A, B, C, or ISU*) or Killed (K) occupant of a motorcycle or moped.	
Stratum 4	Crashes not qualifying for Strata 2 or 3 involving at least one occupant of a late model year (LMY) passenger vehicle who was injured with a Suspected Serious Injury (A) or Killed (K).	
Stratum 5	Crashes not qualifying for Strata 2, 3, or 4 involving at least one occupant of a non-late model year (NLMY) passenger vehicle who was injured with a Suspected Serious Injury (A) or Killed (K).	
Stratum 6	Crashes not qualifying for Strata 2, 3, 4, or 5 involving at least one occupant of a late model year (LMY) passenger vehicle who was injured (B, C, or ISU*).	
Stratum 7	Crashes not qualifying for Strata 2, 3, 4, 5, or 6 involving at least one medium or heavy truck or bus (includes school bus, transit bus, and motor coach) with GVWR equal to or greater than 10,001 lbs.	
Stratum 8	Crashes not qualifying for Strata 2, 3, 4, 5, 6, or 7 involving at least one occupant of a non-late model year (NLMY) passenger vehicle who was injured (B, C, or ISU*).	

Stratum #	Definition
Stratum 9	Crashes not qualifying for Strata 2, 3, 4, 5, 6, 7, or 8 involving at least one late model year (LMY) passenger vehicle <u>AND</u> no one in the in-transport vehicle(s) were injured (A, B, C, or ISU*) or Killed (K).
Stratum 10	Crashes not qualifying for Strata 2, 3, 4, 5, 6, 7, 8, or 9.

*ISU = Injured, Severity Unknown

Important Notes:

- A. In stratum 2, non-motorist does not include occupants of a motor vehicle not in-transport.
- B. Only the contact motor vehicle(s) that are in-transport are considered in determining the applicable stratum. Therefore, injuries sustained by occupants of motor vehicles that are not in-transport are not considered for stratification.
- C. A motor vehicle with no occupants that is in-transport IS considered in the stratification.
- D. Late model year (LMY): the vehicle model year is equal to the crash year, the following year, or 4 prior years.
- E. Non-late model year (NLMY): the vehicle model year is older than 4 prior years or the model year of the vehicle is unknown.

Unstabilized Situations

As defined by <u>ANSI D-16 8th edition</u>, Section 2.4.4, "An unstabilized situation is a set of events not under human control. It originates when control is lost and terminates when control is regained or, in the absence of people who are able to regain control, when all people and property are at rest." "Property" can refer to the involved vehicles, separated components of the vehicles, cargo, or objects set in motion. The duration of an unstabilized situation establishes the beginning and end of an individual crash.

At times, one police crash report may contain more than one crash. This may happen when events constituting a crash have stabilized and units involved in the first sequence are subsequently involved in another crash sequence and recorded on the same police crash report. If more than one crash is recorded on a police crash report, ALL of the crashes are to be listed and stratified separately. This includes CRSS, NTS, and those that are Out-of-Scope. *If multiple crashes are not detected until the coding process, the crash that matches the stratum should be coded, as that is the anticipated crash selected by PARSE*. In a multi-vehicle crash, if it cannot be determined conclusively that all people and property had come to rest at some point prior to the involvement of all vehicles listed on the police crash report, the events would be part of a single unstabilized situation and thus considered one crash.

Consistency Check (CRSS Only) (See Section 400):

Error ID	Error Message
5AAP	The Final STRATUM should equal the Original STRATUM.

C35 - Police Jurisdiction - CRSS Only

FORMAT: 3 numeric

SAS NAME: Accident.PJ

ELEMENT VALUES:

Codes	Attributes
001-128	Range

Definition: The number of the police jurisdiction from which the police crash report was originally sampled.

Remarks: This is the police jurisdiction from which the police crash report is selected. It is written at the top of the police crash report and is prefaced by the character "PJ." The police jurisdiction may also be shown as the second of three numbers separated by -s. The first number in the set of three is the primary sampling unit, the second is the police jurisdiction, and the third is the police crash report number. The jurisdiction number written on the police crash report must match the number shown in the "CRSS Input Form" Police Crash Report/Jurisdiction field.

Additional State Information

FORMAT: Alphanumeric

SAS NAME: None

ELEMENT VALUES:

- Blanks
- Any Alphanumeric Characters

Remarks: This space is reserved for each individual State's use. Suggested uses depend on potential needs of the State. This space may contain:

- 1. Police crash report number.
- 2. Additional crash location information.

If HPMS number is available, it may be inserted here.

Vehicle Level Data Elements

V1 - State Number - FARS Only	V21 - Trailer Gross Vehicle Weight Rating
V2 - Consecutive Number - FARS Only	V22 - Jackknife
V3 - Vehicle Number - Vehicle Level	V23 - Motor Carrier Identification Number
V4 - Number of Occupants	V24 - Vehicle Configuration
<u>V5 - Unit Type</u>	V25 - Cargo Body Type
V6 - Hit-and-Run	V26 - Hazardous Materials Involvement /
<u>V7 - Registration State</u>	Placard
V8 - Registered Vehicle Owner - FARS	<u>V27 - Bus Use</u>
Only	V28 - Special Use
DICM-1- / DICM-1-1 / DIC D. L.	V29 - Emergency Motor Vehicle Use
vPIC Make / vPIC Model / vPIC Body Class Overview	V30 - Travel Speed
<u> </u>	V31 - Underride/Override - FARS Only
V9 - Vehicle Identification Number	<u>V32 - Rollover</u>
V10 - Vehicle Model Year	V33 - Location of Rollover
<u>V11 - vPIC Make</u>	V34 - Areas of Impact - Initial Contact Point
V12 - vPIC Model	/ Damaged Areas
V13 - vPIC Body Class	V35 - Extent of Damage
VI4 - NCSA Make	V36 - Vehicle Removal
V15 - NCSA Model	V37 - Sequence of Events
V16 - NCSA Body Type	V38 - Most Harmful Event
V17 - Final Stage Body Class	V39 - Fire Occurrence
V18 - Power Unit Gross Vehicle Weight	V40 - Motor Vehicle Automated Driving
Rating	System(s)
V19 - Vehicle Trailing	V41 - Related Factors - Vehicle Level
V20 - Trailer Vehicle Identification Number	

V3 - Vehicle Number - Vehicle Level

FORMAT: 3 numeric

SAS NAME: Vehicle.VEH_NO, Parkwork.VEH_NO

ELEMENT VALUES:

Codes	Attributes
001-999	Assigned Number

Definition: This element identifies the number assigned to this vehicle in the crash.

Remarks: Each motor vehicle in a crash must be assigned a unique number. The numbers assigned to vehicles must be consecutive, starting with "001" with no missing numbers.

Motor vehicles are assigned the police crash report's vehicle number unless a number is skipped because of a non-contact vehicle included on the police crash report with a vehicle number or a non-motorist included with a unit number.

Error ID	IF	THEN
060P	VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is not equal to 000,	the VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST must equal some VEHICLE NUMBER in the case, and the UNIT TYPE must equal 1.
CSI5	VEHICLE NUMBER at the Person Level is greater than 000,	VEHICLE NUMBER at the Person Level must equal a VEHICLE NUMBER at the Vehicle Level.
CSI6	For each VEHICLE NUMBER, PERSON NUMBERS must be consecutive, beginning with 001 and with no gaps.	
PBA0	PEDESTRIAN/ BIKE TYPING - CRASH TYPE - BICYCLE equals 111, 211, 212, and VEHICLE NUMBER - VEHICLE LEVEL equals VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 11.
PBA1	PEDESTRIAN/ BIKE TYPING - CRASH TYPE - BICYCLE equals 112, 151, 213, 214, 217, or 218, and VEHICLE NUMBER - VEHICLE LEVEL equals VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 10.

V4 - Number of Occupants

FORMAT: 2 numeric

SAS NAME: Vehicle.NUMOCCS, Parkwork.PNUMOCCS

ELEMENT VALUES:

Codes	Attributes
00	<u>None</u>
01-98	Actual Value* [if Total Known]
99	<u>Unknown</u>

Definition: This element identifies the number of occupants in each vehicle.

Remarks: This data element must be coded for each motor vehicle involved in the crash. Code the total number of occupants (**injured and uninjured**) in this motor vehicle. In bus crashes, the total number of occupants, including the driver, must be entered.

00 (None) is used when this motor vehicle is unoccupied.

01-98 (**Actual Value*** [**If Total Known**]) is used when the number of occupants in the vehicle is known. Person Level (MV Occupant) forms should be submitted for all known occupants (even if there is no information in the case material).

Buses are an exception. For buses (*NCSA* BODY TYPES 50-52, 55, 58,59), the total number of occupants, including the driver, should be recorded, but <u>Person Level (MV Occupant) forms</u> should only be submitted for occupants known to be injured and for the driver, whether the driver is known to be injured or not. **NOTE:** This does NOT apply to small van-based buses (*NCSA* BODY TYPE 21). Always submit a person level form for all occupants of van-based vehicles, including small van-based buses.

99 (**Unknown**) is used when the number of occupants for the motor vehicle is unknown. Unless evidence clearly establishes the number of occupants present, this code is used when this motor vehicle is a "hit-and-run" vehicle.

If the actual number of motor vehicle occupants is unknown, <u>Person Level (MV Occupant)</u> <u>forms</u> should be submitted for all known occupants (even if there is no information on the police crash report).

Buses are an exception. For buses (*NCSA* BODY TYPES 50-52, 55, 58, 59), if the total number of occupants is unknown, Person Level (MV Occupant) forms should be submitted for the driver (if there was one) and all occupants known to be injured. This does NOT apply to small van-based buses (*NCSA* BODY TYPE 21). If the total number of occupants is unknown for small van-based buses (*NCSA* BODY TYPE 21), always submit a person level form for all known occupants (even if there is no information in the case material).

Also use **99** (**Unknown**) when the State reports information only on drivers and INJURED passengers and the total number of occupants is unknown.

$\boldsymbol{*}$ Values greater than 30 are unlikely and will raise a "U" flag.

Error ID	IF	THEN
2F0F	NUMBER OF OCCUPANTS equals 00,	DRIVER PRESENCE must equal 0.
4F3P	NUMBER OF OCCUPANTS is 01-98, and <i>vPIC BODY CLASS</i> equals <i>117 (Limousine)</i> ,	NUMBER OF OCCUPANTS <i>should</i> not be greater than <i>16</i> .
5F0F	NUMBER OF OCCUPANTS equals 00-98, and vPIC BODY CLASS does not equal 016 (Bus), 068 (Streetcar / Trolley), or 73 (BusSchool Bus), and FINAL STAGE BODY CLASS does not equal 016 (Bus), 068 (Streetcar / Trolley), or 73 (Bus-School Bus),	the number of Person Level forms for that vehicle must be equal to the NUMBER OF OCCUPANTS.
622P	HIT-AND-RUN equals 1,	it is unlikely that NUMBER OF OCCUPANTS equals 0-98.
BJ4P	any DRIVER DISTRACTED BY equals 03,	NUMBER OF OCCUPANTS must be greater than 01.
V170	NUMBER OF OCCUPANTS equals 01-98, and vPIC BODY CLASS equals 001 (Convertible/Cabriolet), 003 (Coupe), 004 (Low Speed Vehicle (LSV) / Neighborhood Electric Vehicle (NEV)), 005 (Hatchback/Liftback/Notchback), 010 (Roadster), 013 (Sedan/Saloon), 060 (Pickup), 088 (Off-road Vehicle - Go Kart), 105 (Off-road Vehicle - Recreational Off-Road Vehicle (ROV)), 124 (Off-road Vehicle - Golf Cart), 126 (Off-road Vehicle - Farm Equipment), 127 (Off-road Vehicle - Construction Equipment), or 997 (Other), or FINAL STAGE BODY CLASS equals 004 (Low Speed Vehicle (LSV) / Neighborhood Electric Vehicle (NEV)) or 060 (Pickup),	NUMBER OF OCCUPANTS should not be greater than 6.
V190	NUMBER OF OCCUPANTS is 01-98, and <i>FINAL STAGE BODY CLASS</i> equals <i>117</i> (<i>Limousine</i>),	NUMBER OF OCCUPANTS should not be greater than 3θ .

Error ID	IF	THEN
V200	NUMBER OF OCCUPANTS is 01-98, and vPIC BODY CLASS equals a motorcycle (006, 012, 080, 081, 082, 083, 084, 085, 086, 087, 090, 094, 098, 104, 109, 110, 113, 114, 125, 996), 100 (Motorcycle - Enclosed Three Wheeled / Enclosed Autocycle), 103 (Motorcycle - Unenclosed Three Wheeled / Open Autocycle), 069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)), or 097 (Off-road Vehicle - Snowmobile),	NUMBER OF OCCUPANTS should not be greater than 15.
V210	NUMBER OF OCCUPANTS is 01-98, vPIC BODY CLASS equals 002 (Minivan), 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 008 (Crossover Utility Vehicle (CUV)), 009 (Van), 15 (Wagon), or 119 (Sport Utility Truck (SUT)), or FINAL STAGE BODY CLASS equals 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 008 (Crossover Utility Vehicle (CUV)), 15 (Wagon), or 119 (Sport Utility Truck),	NUMBER OF OCCUPANTS should not be greater than 15.
V220	NUMBER OF OCCUPANTS is 01-98, and vPIC BODY CLASS equals 011 (Truck), 066 (Truck-Tractor), 095 (Cargo Van), 111 (Step Van / Walk-in Van), or FINAL STAGE BODY CLASS equals 011 (Truck), 066 (Truck-Tractor), 095 (Cargo Van), or 111 (Step Van / Walk-in Van),	NUMBER OF OCCUPANTS should not be greater than 4.
V260	vPIC BODY CLASS equals 999 (Unknown),	NUMBER OF OCCUPANTS should equal 0-10 or 99.
V401	NUMBER OF OCCUPANTS is 01-98, and vPIC BODY CLASS equals 108 (Motorhome), or FINAL STAGE BODY CLASS equals 108 (Motorhome),	NUMBER OF OCCUPANTS should not be greater than 8.
V402	NUMBER OF OCCUPANTS is 01-98, and vPIC BODY CLASS equals 073 (Bus - School Bus), or FINAL STAGE BODY CLASS equals 073 (Bus - School Bus),	NUMBER OF OCCUPANTS should not be greater than 50.
V450	NUMBER OF OCCUPANTS is 01-98, and vPIC BODY CLASS equals equal 016 (Bus) or 068 (Streetcar / Trolley), or FINAL STAGE BODY CLASS equals 016 (Bus) or 068 (Streetcar / Trolley),	NUMBER OF OCCUPANTS should not be greater than 60.

V5 - Unit Type

FORMAT: 1 numeric

SAS NAME: Vehicle.UNITTYPE, Parkwork.PTYPE

ELEMENT VALUES:

Codes	Attributes
1	Motor Vehicle In-Transport (Inside or Outside the Trafficway)
2	Motor Vehicle Not In-Transport Within the Trafficway
3	Motor Vehicle Not In-Transport Outside the Trafficway
4	Working Motor Vehicle (Highway Construction, Maintenance, Utility Only)

Definition: This element identifies the type of unit that applies to this motor vehicle at the time it became an involved vehicle in the crash and was reported as a unit on the police crash report.

Remarks: IMPORTANT: Remember, you must have at least one Motor Vehicle In-Transport involved in the crash for this to be a reportable case. If a Working Motor Vehicle is parked while performing its work (e.g., a bucket truck is parked on the shoulder while a worker is working on utility lines) use code 4 (Working Motor Vehicle [Highway Construction, Maintenance, Utility Only]). If that same vehicle is not performing its work, then use code 2 (Motor Vehicle Not In-Transport Within the Trafficway) or code 3 (Motor Vehicle Not In-Transport Outside the Trafficway) depending upon the situation.

NOTE: For UNIT TYPE attributes "2-4," you must only submit selected elements on the Vehicle Level. The elements <u>JACKKNIFE</u>, <u>TRAVEL SPEED</u>, and <u>SEQUENCE OF EVENTS</u> are not coded. Also, all elements on the Driver level must be left blank, except <u>DRIVER PRESENCE</u> and <u>RELATED FACTORS-DRIVER LEVEL</u>. RELATED FACTORS-DRIVER LEVEL must be coded *000*.

1 (Motor Vehicle In-Transport [Inside or Outside the Trafficway]) is used to indicate that this is a motor vehicle in-transport. "In-Transport" means any part of the vehicle's primary outline as defined by the four sides of the vehicle (excluding open doors or mirrors) or load, if any, is within the roadway (travel lanes) or the vehicle is in motion anywhere within or outside the trafficway boundaries.

Examples:

- 1. Motor vehicle in traffic on the highway.
- 2. Motionless motor vehicle abandoned on the roadway travel lanes.
- 3. Motor vehicle on roadway stopped at traffic signal.
- 4. Motor vehicle driving or in motion on the shoulder, median, or roadside.
- 5. Motor vehicle driving down a private driveway.
- 6. Motor vehicle in motion, outside the trafficway boundaries (vehicle pulling up to a pump in a gas station, not within trafficway; vehicle in motion in a parking lot aisle; lawn

tractor driving in a field adjacent to the trafficway; ATV driving on a dirt track next to trafficway; etc.).

- 7. A tractor trailer with its load hanging over the roadway edge line.
- 8. A pickup truck on the shoulder with lumber extending into the travel lanes.
- **2** (**Motor Vehicle Not In-Transport Within the Trafficway**) is used to indicate that this is a motor vehicle **not** in-transport located **within** the trafficway boundaries when it became an involved unit. The trafficway boundaries are from property line to property line. If it can't be determined if a not in-transport, non-working motor vehicle is within or outside the trafficway, use code **3** (**Motor Vehicle Not In-Transport Outside the Trafficway**).

Examples:

- 1. Motor vehicle parked in designated curbside parking lane.
- 2. Motor vehicle parked in designated curbside parking lane with an open door crossing into the travel lane.
- 3. Motor vehicle stopped completely on the shoulder, median, or roadside.
- **3** (Motor Vehicle Not In-Transport Outside the Trafficway) is used to indicate that this is a motor vehicle **not** in-transport located **outside** the trafficway boundaries when it became an involved unit by being struck by a motor vehicle in-transport. If it can't be determined if a not intransport, non-working motor vehicle is within or outside the trafficway, use code **3** (Motor Vehicle Not In-Transport Outside the Trafficway).

Examples:

- 1. Motor vehicle parked in a private driveway, parking lot space, or other private property (outside the trafficway boundaries).
- 2. Any vehicle (not in motion) used for private construction occurring outside the trafficway boundaries.
- 4 (Working Motor Vehicle [Highway Construction, Maintenance, Utility Only]) is used to indicate that this is a motor vehicle that was in the act of performing highway construction, maintenance, or utility work related to the trafficway when it became an involved unit. The vehicle should be known to be in the act of performing work. This "work" may be located within open or closed portions of the trafficway and motor vehicles performing these activities can be within or outside the trafficway boundaries. This code does not include private construction/maintenance vehicles, or vehicles such as garbage trucks, delivery trucks, taxis, emergency vehicles (except example #8 below), tow trucks, etc. **DO NOT evaluate this attribute on** *NCSA* **Body Type alone.**

Examples:

- 1. Asphalt/steam roller working in a highway construction zone paving the roadway or flattening dirt.
- 2. State highway maintenance crew painting lane lines on the road, mowing grass on the roadside or median, repairing potholes, removing debris from the roadway, etc.
- 3. Utility truck or a "cherry picker," performing maintenance on power lines along the roadway or maintaining a traffic signal.

- 4. A private excavating company contracted by the State digging the foundation for a new overpass.
- 5. A State, county, or privately-owned snowplow, plowing ice/snow as part of a highway maintenance activity.
- 6. Street sweeper sweeping the street.
- 7. A vehicle in a mobile work convoy displaying arrow boards or other signaling devices warning motorists of the work activity.
- 8. A law enforcement vehicle that is participating strictly in a stationary construction or mobile maintenance activity as a traffic slowing, control, signaling, or calming influence.

When not in the act of performing "work," or it cannot be determined if the vehicle was in the act of performing "work," and involved in the crash, these highway construction, maintenance, or utility vehicles can be:

- 1. In-Transport when traveling from one construction site to the next (UNIT TYPE <u>1</u> (Motor Vehicle In-Transport [Inside or Outside the Trafficway]).
- 2. Not In-Transport Within the Trafficway when stopped on the shoulder (UNIT TYPE 2 (Motor Vehicle Not In-Transport Within the Trafficway)). Example: A dump truck is struck on the shoulder and it cannot be determined if it was in the act of performing "work."
- 3. Not In-Transport Outside the Trafficway when parked and refueling at a depot (UNIT TYPE 3 (Motor Vehicle Not In-Transport Outside the Trafficway)).
- 4. In-Transport Outside the Trafficway when relocating off the trafficway from a work activity area to another off-trafficway parking location.

Error ID	IF	THEN
060P	VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is not equal to 000,	the VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST must equal some VEHICLE NUMBER in the case, and the UNIT TYPE must equal 1.
1D1P	SPECIAL USE equals 24,	UNIT TYPE must equal 4.
252P	RELATION TO TRAFFICWAY equals 01, 02, 03, 04, 07, 08, 10, 11, 12, 98, or 99,	UNIT TYPE for VEHICLE NUMBER (OTHER VEHICLE) involved in the FIRST HARMFUL EVENT must not equal 3.
255P	RELATION TO TRAFFICWAY equals 01 or 11,	UNIT TYPE for VEHICLE NUMBER (THIS VEHICLE) involved in the FIRST HARMFUL EVENT must equal 1.
256P	RELATION TO TRAFFICWAY equals 01 or 11,	UNIT TYPE for VEHICLE NUMBER (OTHER VEHICLE) involved in the FIRST HARMFUL EVENT should equal 1 or 4.

Error ID	IF	THEN
257P	RELATION TO TRAFFICWAY equals 05,	UNIT TYPE for VEHICLE NUMBER (OTHER VEHICLE) involved in the FIRST HARMFUL EVENT must equal 1, 3, or 4.
2H1F	UNIT TYPE equals 1, and DRIVER PRESENCE equals 0 or 9,	DRIVER'S VISION OBSCURED BY must equal 95.
3BAP	UNIT TYPE equals 1, and DRIVER PRESENCE equals 0,	CRASH TYPE must equal 00, 04, 09, 15, 32, 42, 48, 52, 62, 66, 74, 84, 90, 93, or 98.
42BP	there is only one vehicle involved in the FIRST HARMFUL EVENT where UNIT TYPE equals 1,	the number of vehicles where CRASH TYPE is coded 00, 1-16, 92, 93, or 99 (excluding from the vehicles being counted, those where CRASH TYPE equals 98) must not equal 0 or be greater than 1.
4W6P	any RELATED FACTORS-PERSON LEVEL (MV Occupant) equals 0 21 or 0 89,	PERSON TYPE must equal 3, SEATING POSITION must equal 11, and UNIT TYPE must equal 2, 3, or 4.
4Z1P	UNIT TYPE equals 1, and FIRE OCCURRENCE equals 1,	at least one SEQUENCE OF EVENTS must equal 02.
4Z2P	UNIT TYPE equals 4,	there must be at least one record in CRASH EVENTS TABLE with SEQUENCE OF EVENT equal to 45 for that vehicle VEHICLE NUMBER (OTHER VEHICLE).
4Z3P	UNIT TYPE equals 2 or 3	there must be at least one record in CRASH EVENTS TABLE with SEQUENCE OF EVENT equal to 14 for that vehicle VEHICLE NUMBER (OTHER VEHICLE).

Error ID	IF	THEN
5A0P	vPIC BODY CLASS equals 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport / Adventure / Supermoto / On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 104 (Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle), and any RELATED FACTORS - VEHICLE LEVEL does not equal 030,	ROLLOVER must equal 0.
9A3P	UNIT TYPE equals 2-4,	DRIVER PRESENCE must equal 0.
9A5P	PERSON TYPE equals 03,	UNIT TYPE must equal 2-4.
9B7P	UNIT TYPE equals 2-4,	PERSON TYPE of all occupants of this vehicle must equal 03.
9B9P	any SEQUENCE OF EVENTS equals 55,	there must be at least one other vehicle with UNIT TYPE equal to 1.
9C0P	FIRST HARMFUL EVENT equals 55,	there must be at least one vehicle with UNIT TYPE equal to 1.
9C1P	UNIT TYPE equals 4,	RELATED FACTORS-VEHICLE LEVEL must not equal 0 39.
9C4P	UNIT TYPE equals 1, and DRIVER PRESENCE equals 0 or 9,	DRIVER MANEUVERED TO AVOID must only equal 95.
9C6P	UNIT TYPE equals 2-4,	RELATED FACTORS-DRIVER LEVEL must equal <i>00</i> 0.
A044	CRASH EVENTS TABLE - SEQUENCE OF EVENT equals 45,	the UNIT TYPE for VEHICLE NUMBER (OTHER VEHICLE) must equal 4.
A045	CRASH EVENTS TABLE - SEQUENCE OF EVENT equals 14,	the UNIT TYPE for VEHICLE NUMBER (OTHER VEHICLE) must equal 2 or 3.
A046	The UNIT TYPE for VEHICLE NUMBER (THIS VEHICLE) in the CRASH EVENTS must equal 1.	

Error ID	IF	THEN
A047	CRASH EVENTS TABLE - VEHICLE NUMBER (OTHER VEHICLE) UNIT TYPE is 1,	SEQUENCE OF EVENT must equal 12, 54, or 55 for that row.
AL3P	UNIT TYPE equals 2-4,	MOST HARMFUL EVENT must not equal 54 for this vehicle.
AL5P	UNIT TYPE equals 1,	at least one event in the SEQUENCE OF EVENTS must equal the MOST HARMFUL EVENT.
AL7P	UNIT TYPE equals 2-4,	MOST HARMFUL EVENT should not equal 04-07, 16, 51, 72.
AL9P	there is one and only one parked vehicle (UNIT TYPE equals 2 or 3) in the crash,	MOST HARMFUL EVENT for the parked vehicle must not equal 14.
AZ20	UNIT TYPE equals 1, and DRIVER PRESENCE equals 0 or 9,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 00.
BJ1P	UNIT TYPE equals 1, and DRIVER PRESENCE equals 0 or 9,	DRIVER DISTRACTED BY must equal 16.
BJ2P	UNIT TYPE equals 1, and DRIVER PRESENCE equals 1,	DRIVER DISTRACTED BY must not equal 16 or blank.
ВЈЗР	UNIT TYPE equals 1, and DRIVER DISTRACTED BY equals 16,	DRIVER PRESENCE must equal 0 or 9.
BJ5P	If UNIT TYPE equals 1 and HIT AND RUN equals 1,	then DRIVER PRESENCE should not equal 0.
FP2F	UNIT TYPE equals 1, and CRASH TYPE equals blank,	case status is flawed.
FP3F	UNIT TYPE is blank,	case status is flawed.
FP6F	UNIT TYPE equals 1, and CRITICAL EVENT - PRECRASH (CATEGORY) equals blank,	case status is flawed.
FP7F	UNIT TYPE equals 1, and CRITICAL EVENT - PRECRASH (EVENT) equals blank,	case status is flawed.
U690	UNLIKELY: UNIT TYPE equals 2-4 and HIT and RUN equals 1.	
V74P	UNIT TYPE equals 1, and ROLLOVER equals 1, 2, 9, or LOCATION OF ROLLOVER equals 1-7, 9,	at least one SEQUENCE OF EVENTS must equal 01 for this vehicle.
VH70	UNIT TYPE equals 2-4,	elements JACKKNIFE, TRAVEL SPEED, AND SEQUENCE OF EVENTS must all be left blank.

Error ID	IF	THEN
VH75	UNIT TYPE equals 4,	VEHICLE CONFIGURATION should not equal 05, 20, 21, 10.
VH80	UNIT TYPE equals 4,	CARGO BODY TYPE should not equal 06, 07, 11, 12, 22.

Consistency Checks (FARS Only) (See Section 400):

Error ID	IF	THEN
9A2P	UNIT TYPE equals 2, 3,	REGISTERED VEHICLE OWNER must equal 6.
9B3P	UNDERRIDE/OVERRIDE equals 7,	there must be at least one vehicle with UNIT TYPE equal to 1.
9B4P	UNDERRIDE/OVERRIDE equals 8,	there must at least one vehicle with UNIT TYPE equal 2-4.
9B5P	UNIT TYPE equals 2, 3,	UNDERRIDE/OVERRIDE must equal 0.
VH25	UNIT TYPE equals 4,	REGISTERED VEHICLE OWNER should not equal 6, 9.

V6 - Hit-and-Run

FORMAT: 1 numeric

SAS NAME: Vehicle.HIT_RUN, Parkwork.PHIT_RUN

ELEMENT VALUES:

Codes	Attributes
0	<u>No</u>
1	Yes

Definition: This element refers to cases where a vehicle is a contact vehicle in the crash and does not stop to render aid (this can include drivers who flee the scene on foot).

Remarks: In many States, the investigating officer will note this in the narrative or check the appropriate box on the police crash report. In some cases, the driver can be cited for failing to render assistance. Review the case material carefully for references to hit-and-run or failure to render aid.

It does not matter whether the hit-and-run vehicle was striking or struck. The hit-and-run vehicle(s) is (are) the one(s) that "departed prior to investigation by the police," or that vehicle that is "abandoned" at the scene when its occupant(s) fled from the area. If the police crash report indicates that the vehicle was involved in a collision that was investigated, but there is no information on that vehicle or the driver/owner because of departure prior to police arrival onscene, then hit-and-run is indicated.

0 (No) is used if there is no reason to believe a hit-and-run occurred involving this vehicle or its driver. Example: If a vehicle is involved in a multi-vehicle collision and one of the other contact vehicles leaves the scene.

Examples include:

- 1. if occupants of a vehicle are taken or go directly from the scene to a medical treatment facility or physician. However, if doubt exists concerning the departure for treatment, assume hit-and-run.
- 2. a driver who leaves the scene but furnishes name, address, vehicle make, model, and model year such that it is recorded in the available information and the available information does not indicate hit-and-run.
- 3. vehicles that set an object in motion such that (a) the object is contacted before it stabilizes by another in-transport motor vehicle, and (b) the vehicle that set the object in motion leaves the scene without providing the pertinent information (compare with exception two above), and (c) the available information does not indicate hit-and-run.

1 (Yes) is used when it has been determined that this vehicle's driver left the scene with or without their vehicle.

A hit-and-run occurred when this vehicle's driver left the scene after:

- striking a pedestrian or other type of non-motorist.
- striking a parked/stopped off roadway motor vehicle (with or without occupants).
- being struck while parked or in-transport.
- striking or being struck by an in-transport motor vehicle.

If HIT-AND-RUN is **1** (**Yes**), <u>Driver</u> and <u>Person Level (MV Occupant)</u> forms must be submitted for the driver and any known passengers of this vehicle involved in the crash regardless of the fact that it was a hit-and-run. When the presence of a hit-and-run vehicle is indicated and the available information does not provide the number of occupants, <u>NUMBER OF OCCUPANTS</u> must equal **99** (**Unknown**).

Error ID	IF	THEN
622P	HIT-AND-RUN equals 1,	it is unlikely that NUMBER OF OCCUPANTS equals 0-98.
8K0P	VIOLATIONS CHARGED equals 07, 08,	HIT-AND-RUN must not equal 0.
BJ5P	If UNIT TYPE equals 1 and HIT AND RUN equals 1,	then DRIVER PRESENCE should not equal 0.
U070	UNLIKELY: More than one vehicle with HIT-AND-RUN equal to 1.	
U340	UNLIKELY: HIT-AND-RUN equals 0, and SEX equals 9.	
U360	UNLIKELY: AGE equals 999 and HIT AND RUN is not equal to 1.	
U450	UNLIKELY: REGISTRATION STATE equals 91 if HIT AND RUN does not equal 1.	
U510	UNLIKELY: VEHICLE MODEL YEAR equals 9998 if HIT AND RUN does not equal 1.	
U520	UNLIKELY: RESTRAINT SYSTEM USE Subfield-1 Type of Restraint System in Use equals 98 <i>if not a Created Record and</i> HIT AND RUN does not equal 1.	
U690	UNLIKELY: UNIT TYPE equals 2-4 and HIT and RUN equals 1.	
V860	HIT-AND-RUN equals 0, and vPIC BODY CLASS equals 011 (Truck) or FINAL STAGE BODY CLASS equals 011 (Truck),	VEHICLE CONFIGURATION should equal 01, 02, <i>or</i> 04, and CARGO BODY TYPE should equal 01-10, 12, <i>or</i> 96-98.

Error ID	IF	THEN
V880	vPIC BODY CLASS equals 066 (Truck- Tractor), or FINAL STAGE BODY CLASS equals 066 (Truck-Tractor),	VEHICLE CONFIGURATION should equal 05-08 <i>or</i> 19, and CARGO BODY TYPE should equal 01-04, 06-12, 96-98.
V881	HIT AND RUN equals 1,	VEHICLE REMOVAL should not equal 8 or 9.
VH87	HIT-AND-RUN equals 0, and AREAS OF IMPACT-INITIAL CONTACT POINT equals 01-14,	the corresponding code should be included in DAMAGED AREAS or DAMAGED AREAS should equal 15.
VP07	UNLIKELY: vPIC MAKE equals 99998 if HIT AND RUN does not equal 1.	

Consistency Checks (FARS Only) (See Section 400):

Error ID	Error Message	
U410	UNLIKELY: DRIVER'S LICENSE STATE equals 98 if HIT AND RUN does not equal 1.	
U730	UNLIKELY: HELMET USE Subfield 1-Helmet Use equals 98 <i>if not a created record and</i> HIT AND RUN does not equal 1.	

Consistency Checks (CRSS Only) (See Section 400):

Error ID	Error Message
U361	UNLIKELY: HIT-AND-RUN equals 1, and vPIC BODY CLASS is not equal to 069, 084, 086, 088, 097, 105, 113, 124, 126, 127, and VEHICLE LICENSE PLATE NUMBER is equal to 0s.

V7 - Registration State (FARS ONLY)

FORMAT: 2 numeric

SAS NAME: Vehicle.REG_STAT, Parkwork.PREG_STAT

ELEMENT VALUES:

00 Not Applicable 34 New Jersey 01 Alabama 35 New Mexico 02 Alaska 36 New York 03 American Samoa 37 North Carolina 04 Arizona 38 North Dakota 05 Arkansas 39 Ohio 06 California 40 Oklahoma 08 Colorado 41 Oregon 09 Connecticut 42 Pennsylvania 10 Delaware 43 Puerto Rico 11 District of Columbia 44 Rhode Island 12 Florida 45 South Carolina 13 Georgia 46 South Dakota 14 Guam 47 Tennessee 15 Hawaii 48 Texas 16 Idaho 49 Utah 17 Illinois 50 Vermont 18 Indiana 51 Virginia	Codes	Attributes	Codes	Attributes
02 Alaska 36 New York 03 American Samoa 37 North Carolina 04 Arizona 38 North Dakota 05 Arkansas 39 Ohio 06 California 40 Oklahoma 08 Colorado 41 Oregon 09 Connecticut 42 Pennsylvania 10 Delaware 43 Puerto Rico 11 District of Columbia 44 Rhode Island 12 Florida 45 South Carolina 13 Georgia 46 South Dakota 14 Guam 47 Tennessee 15 Hawaii 48 Texas 16 Idaho 49 Utah 17 Illinois 50 Vermont 18 Indiana 51 Virginia 19 Iowa 52 Virginialsands 20 Kansas 53 Washington <	00	Not Applicable	34	New Jersey
03 American Samoa 37 North Carolina 04 Arizona 38 North Dakota 05 Arkansas 39 Ohio 06 California 40 Oklahoma 08 Colorado 41 Oregon 09 Connecticut 42 Pennsylvania 10 Delaware 43 Puerto Rico 11 District of Columbia 44 Rhode Island 12 Florida 45 South Carolina 13 Georgia 46 South Dakota 14 Guam 47 Tennessee 15 Hawaii 48 Texas 16 Idaho 49 Utah 17 Illinois 50 Vermont 18 Indiana 51 Virginia 19 Iowa 52 Virginia Islands 20 Kansas 53 Washington 21 Kentucky 54 West Virginia	01	Alabama	35	New Mexico
04 Arizona 38 North Dakota 05 Arkansas 39 Ohio 06 California 40 Oklahoma 08 Colorado 41 Oregon 09 Connecticut 42 Pennsylvania 10 Delaware 43 Puerto Rico 11 District of Columbia 44 Rhode Island 12 Florida 45 South Carolina 13 Georgia 46 South Dakota 14 Guam 47 Tennessee 15 Hawaii 48 Texas 16 Idaho 49 Utah 17 Illinois 50 Vermont 18 Indiana 51 Virgin Islands 20 Kansas 53 Washington 21 Kentucky 54 West Virginia 22 Louisiana 55 Wisconsin 23 Maine 56 Wyoming	02	Alaska	36	New York
05 Arkansas 39 Ohio 06 California 40 Oklahoma 08 Colorado 41 Oregon 09 Connecticut 42 Pennsylvania 10 Delaware 43 Puerto Rico 11 District of Columbia 44 Rhode Island 12 Florida 45 South Carolina 13 Georgia 46 South Dakota 14 Guam 47 Tennessee 15 Hawaii 48 Texas 16 Idaho 49 Utah 17 Illinois 50 Vermont 18 Indiana 51 Virginia 19 Iowa 52 Virgin Islands 20 Kansas 53 Washington 21 Kentucky 54 West Virginia 22 Louisiana 55 Wisconsin 23 Maine 56 Wyoming 24	03	American Samoa	37	North Carolina
06 California 40 Oklahoma 08 Colorado 41 Oregon 09 Connecticut 42 Pennsylvania 10 Delaware 43 Puerto Rico 11 District of Columbia 44 Rhode Island 12 Florida 45 South Carolina 13 Georgia 46 South Dakota 14 Guam 47 Tennessee 15 Hawaii 48 Texas 16 Idaho 49 Utah 17 Illinois 50 Vermont 18 Indiana 51 Virginia 19 Iowa 52 Virginia Islands 20 Kansas 53 Washington 21 Kentucky 54 West Virginia 22 Louisiana 55 Wisconsin 23 Maine 56 Wyoming 24 Maryland 91 Not Reported <	04	Arizona	38	North Dakota
08 Colorado 41 Oregon 09 Connecticut 42 Pennsylvania 10 Delaware 43 Puerto Rico 11 District of Columbia 44 Rhode Island 12 Florida 45 South Carolina 13 Georgia 46 South Dakota 14 Guam 47 Tennessee 15 Hawaii 48 Texas 16 Idaho 49 Utah 17 Illinois 50 Vermont 18 Indiana 51 Virginia 19 Iowa 52 Virgin Islands 20 Kansas 53 Washington 21 Kentucky 54 West Virginia 22 Louisiana 55 Wisconsin 23 Maine 56 Wyoming 24 Maryland 91 Not Registration 25 Massachusetts 92 No Registration <t< td=""><td>05</td><td>Arkansas</td><td>39</td><td>Ohio</td></t<>	05	Arkansas	39	Ohio
09 Connecticut 42 Pennsylvania 10 Delaware 43 Puerto Rico 11 District of Columbia 44 Rhode Island 12 Florida 45 South Carolina 13 Georgia 46 South Dakota 14 Guam 47 Tennessee 15 Hawaii 48 Texas 16 Idaho 49 Utah 17 Illinois 50 Vermont 18 Indiana 51 Virginia 19 Iowa 52 Virgin Islands 20 Kansas 53 Washington 21 Kentucky 54 West Virginia 22 Louisiana 55 Wisconsin 23 Maine 56 Wyoming 24 Maryland 91 Not Reported 25 Massachusetts 92 No Registration 26 Michigan 93 Multiple State Registration	06	California	40	Oklahoma
10 Delaware 43 Puerto Rico 11 District of Columbia 44 Rhode Island 12 Florida 45 South Carolina 13 Georgia 46 South Dakota 14 Guam 47 Tennessee 15 Hawaii 48 Texas 16 Idaho 49 Utah 17 Illinois 50 Vermont 18 Indiana 51 Virginia 19 Iowa 52 Virgin Islands 20 Kansas 53 Washington 21 Kentucky 54 West Virginia 22 Louisiana 55 Wisconsin 23 Maine 56 Wyoming 24 Maryland 91 Not Reported 25 Massachusetts 92 No Registration 26 Michigan 93 Multiple State Registration 27 Minnesota 94 US Government Tags	08	Colorado	41	Oregon
11 District of Columbia 44 Rhode Island 12 Florida 45 South Carolina 13 Georgia 46 South Dakota 14 Guam 47 Tennessee 15 Hawaii 48 Texas 16 Idaho 49 Utah 17 Illinois 50 Vermont 18 Indiana 51 Virginia 19 Iowa 52 Virgin Islands 20 Kansas 53 Washington 21 Kentucky 54 West Virginia 22 Louisiana 55 Wisconsin 23 Maine 56 Wyoming 24 Maryland 91 Not Reported 25 Massachusetts 92 No Registration 26 Michigan 93 Multiple State Registration 27 Minnesota 94 US Government Tags (includes military) 28 Missouri 96	09	Connecticut	42	Pennsylvania
12 Florida 45 South Carolina 13 Georgia 46 South Dakota 14 Guam 47 Tennessee 15 Hawaii 48 Texas 16 Idaho 49 Utah 17 Illinois 50 Vermont 18 Indiana 51 Virginia 19 Iowa 52 Virgin Islands 20 Kansas 53 Washington 21 Kentucky 54 West Virginia 22 Louisiana 55 Wisconsin 23 Maine 56 Wyoming 24 Maryland 91 Not Reported 25 Massachusetts 92 No Registration 26 Michigan 93 Multiple State Registration 27 Minnesota 94 US Government Tags (includes military) 28 Mississippi 95 Canada 29 Missouri 96 Mexico<	10	Delaware	43	Puerto Rico
13 Georgia 46 South Dakota 14 Guam 47 Tennessee 15 Hawaii 48 Texas 16 Idaho 49 Utah 17 Illinois 50 Vermont 18 Indiana 51 Virginia 19 Iowa 52 Virgin Islands 20 Kansas 53 Washington 21 Kentucky 54 West Virginia 22 Louisiana 55 Wisconsin 23 Maine 56 Wyoming 24 Maryland 91 Not Reported 25 Massachusetts 92 No Registration 26 Michigan 93 Multiple State Registration 27 Minnesota 94 US Government Tags (includes military) 28 Mississippi 95 Canada 29 Missouri 96 Mexico 30 Montana 97 Other Foreign C	11	District of Columbia	44	Rhode Island
14 Guam 47 Tennessee 15 Hawaii 48 Texas 16 Idaho 49 Utah 17 Illinois 50 Vermont 18 Indiana 51 Virginia 19 Iowa 52 Virgin Islands 20 Kansas 53 Washington 21 Kentucky 54 West Virginia 22 Louisiana 55 Wisconsin 23 Maine 56 Wyoming 24 Maryland 91 Not Reported 25 Massachusetts 92 No Registration 26 Michigan 93 Multiple State Registration 27 Minnesota 94 US Government Tags (includes military) 28 Mississisppi 95 Canada 29 Missouri 96 Mexico 30 Montana 97 Other Foreign Country* 31 Nebraska 98 Oth	12	Florida	45	South Carolina
15 Hawaii 48 Texas 16 Idaho 49 Utah 17 Illinois 50 Vermont 18 Indiana 51 Virginia 19 Iowa 52 Virgin Islands 20 Kansas 53 Washington 21 Kentucky 54 West Virginia 22 Louisiana 55 Wisconsin 23 Maine 56 Wyoming 24 Maryland 91 Not Reported 25 Massachusetts 92 No Registration 26 Michigan 93 Multiple State Registration 27 Minnesota 94 US Government Tags (includes military) 28 Mississippi 95 Canada 29 Missouri 96 Mexico 30 Montana 97 Other Foreign Country* 31 Nebraska 98 Other Registration 32 Nevada 99	13	Georgia	46	South Dakota
16 Idaho 49 Utah 17 Illinois 50 Vermont 18 Indiana 51 Virginia 19 Iowa 52 Virginia 20 Kansas 53 Washington 21 Kentucky 54 West Virginia 22 Louisiana 55 Wisconsin 23 Maine 56 Wyoming 24 Maryland 91 Not Reported 25 Massachusetts 92 No Registration 26 Michigan 93 Multiple State Registration 27 Minnesota 94 US Government Tags (includes military) 28 Mississippi 95 Canada 29 Missouri 96 Mexico 30 Montana 97 Other Foreign Country* 31 Nebraska 98 Other Registration 32 Nevada 99 Reported as Unknown	14	Guam	47	Tennessee
17 Illinois 50 Vermont 18 Indiana 51 Virginia 19 Iowa 52 Virgin Islands 20 Kansas 53 Washington 21 Kentucky 54 West Virginia 22 Louisiana 55 Wisconsin 23 Maine 56 Wyoming 24 Maryland 91 Not Reported 25 Massachusetts 92 No Registration 26 Michigan 93 Multiple State Registration 27 Minnesota 94 US Government Tags (includes military) 28 Mississippi 95 Canada 29 Missouri 96 Mexico 30 Montana 97 Other Foreign Country* 31 Nebraska 98 Other Registration 32 Nevada 99 Reported as Unknown	15	Hawaii	48	Texas
18 Indiana 51 Virginia 19 Iowa 52 Virgin Islands 20 Kansas 53 Washington 21 Kentucky 54 West Virginia 22 Louisiana 55 Wisconsin 23 Maine 56 Wyoming 24 Maryland 91 Not Reported 25 Massachusetts 92 No Registration 26 Michigan 93 Multiple State Registration 27 Minnesota 94 US Government Tags (includes military) 28 Mississisppi 95 Canada 29 Missouri 96 Mexico 30 Montana 97 Other Foreign Country* 31 Nebraska 98 Other Registration 32 Nevada 99 Reported as Unknown	16	Idaho	49	Utah
19 Iowa 52 Virgin Islands 20 Kansas 53 Washington 21 Kentucky 54 West Virginia 22 Louisiana 55 Wisconsin 23 Maine 56 Wyoming 24 Maryland 91 Not Reported 25 Massachusetts 92 No Registration 26 Michigan 93 Multiple State Registration 27 Minnesota 94 US Government Tags (includes military) 28 Mississippi 95 Canada 29 Missouri 96 Mexico 30 Montana 97 Other Foreign Country* 31 Nebraska 98 Other Registration 32 Nevada 99 Reported as Unknown	17	Illinois	50	Vermont
20Kansas53Washington21Kentucky54West Virginia22Louisiana55Wisconsin23Maine56Wyoming24Maryland91Not Reported25Massachusetts92No Registration26Michigan93Multiple State Registration27Minnesota94US Government Tags (includes military)28Mississisppi95Canada29Missouri96Mexico30Montana97Other Foreign Country*31Nebraska98Other Registration32Nevada99Reported as Unknown	18	Indiana	51	Virginia
20Kansas53Washington21Kentucky54West Virginia22Louisiana55Wisconsin23Maine56Wyoming24Maryland91Not Reported25Massachusetts92No Registration26Michigan93Multiple State Registration27Minnesota94US Government Tags (includes military)28Mississippi95Canada29Missouri96Mexico30Montana97Other Foreign Country*31Nebraska98Other Registration32Nevada99Reported as Unknown	19	Iowa	52	Virgin Islands
22Louisiana55Wisconsin23Maine56Wyoming24Maryland91Not Reported25Massachusetts92No Registration26Michigan93Multiple State Registration27Minnesota94US Government Tags (includes military)28Mississippi95Canada29Missouri96Mexico30Montana97Other Foreign Country*31Nebraska98Other Registration32Nevada99Reported as Unknown	20	Kansas	53	
23 Maine 56 Wyoming 24 Maryland 91 Not Reported 25 Massachusetts 92 No Registration 26 Michigan 93 Multiple State Registration 27 Minnesota 94 US Government Tags (includes military) 28 Mississisppi 95 Canada 29 Missouri 96 Mexico 30 Montana 97 Other Foreign Country* 31 Nebraska 98 Other Registration 32 Nevada 99 Reported as Unknown	21	Kentucky	54	West Virginia
24Maryland91Not Reported25Massachusetts92No Registration26Michigan93Multiple State Registration27Minnesota94US Government Tags (includes military)28Mississisppi95Canada29Missouri96Mexico30Montana97Other Foreign Country*31Nebraska98Other Registration32Nevada99Reported as Unknown	22	Louisiana	55	Wisconsin
25Massachusetts92No Registration26Michigan93Multiple State Registration27Minnesota94US Government Tags (includes military)28Mississippi95Canada29Missouri96Mexico30Montana97Other Foreign Country*31Nebraska98Other Registration32Nevada99Reported as Unknown	23	Maine	56	Wyoming
26Michigan93Multiple State Registration27Minnesota94US Government Tags (includes military)28Mississippi95Canada29Missouri96Mexico30Montana97Other Foreign Country*31Nebraska98Other Registration32Nevada99Reported as Unknown	24	Maryland	91	Not Reported
27Minnesota94US Government Tags (includes military)28Mississippi95Canada29Missouri96Mexico30Montana97Other Foreign Country*31Nebraska98Other Registration32Nevada99Reported as Unknown	25	Massachusetts	92	No Registration
28 Mississippi 95 Canada 29 Missouri 96 Mexico 30 Montana 97 Other Foreign Country* 31 Nebraska 98 Other Registration 32 Nevada 99 Reported as Unknown	26	Michigan	93	Multiple State Registration
29Missouri96Mexico30Montana97Other Foreign Country*31Nebraska98Other Registration32Nevada99Reported as Unknown	27	Minnesota	94	US Government Tags (includes military)
30Montana97Other Foreign Country*31Nebraska98Other Registration32Nevada99Reported as Unknown	28	Mississippi	95	Canada
31Nebraska98Other Registration32Nevada99Reported as Unknown	29		96	Mexico
31Nebraska98Other Registration32Nevada99Reported as Unknown	30		97	Other Foreign Country*
	31	Nebraska	98	
	32	Nevada	99	Reported as Unknown
	33	New Hampshire		

^{*}This value is an unlikely occurrence and will raise an error flag.

Definition: This element identifies the State in which this vehicle was registered.

Remarks: For a vehicle with an expired registration, code the State where the vehicle was registered at the time of expiration.

91 (Not Reported) Check to see if <u>92 (No Registration)</u>, <u>00 (Not Applicable)</u>, or <u>99 (Reported as Unknown)</u> are more appropriate for the situation.

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported.**"

Code **91** (**Not Reported**) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).

For combination vehicles, use the registration State of the power unit only.

00 (**Not Applicable**) is used for vehicles that are not required to be registered. This is Statespecific based on State vehicle registration requirements.

Use State codes for all State-registered vehicles, including State government vehicles. However, if your State does not register government-owned vehicles, use **00** (**Not Applicable**).

- **92** (**No Registration**) applies to vehicles that are required by State law to be registered and are NOT registered.
- **93** (**Multiple State Registration**) is used for commercial vehicles that are registered in more than one State under a valid reciprocal agreement (such as the International Registration Plan (IRP)).
- **94** (**US Government Tags**) is used to indicate the license was issued by the U.S. Government, such as military or State Department Foreign Service.

If a police crash report data element is coded with the attribute "Other" but the officer does not specify what this refers to:

- 1. Code <u>98 (Other Registration)</u> if the police crash report attribute choices can be matched to or include all the attributes in FARS/CRSS.
- 2. Code <u>91 (Not Reported)</u> if the police crash report choices cannot be matched to or include all the attributes in FARS/CRSS.

98 (Other Registration) is used for other registrations that are not identified by their own attribute (e.g., Native American Indian Nations, Other U.S. Territories, or U.S. owned outlying areas such as Northern Marianas Islands, Wake Islands, etc.).

99 (**Reported as Unknown**) is used when the registration information for a vehicle cannot be identified. Example unidentified hit-and-run vehicle's registration reported as "Unknown" by police.

Consistency Checks (See Section 400):

Error ID	IF	THEN
9K0P	HM2 equals 2,	REGISTRATION STATE must not equal 00.
U040	UNLIKELY: REGISTRATION STATE equals 97.	
V060	SPECIAL USE equals 04,	REGISTRATION STATE should equal 94.
V070	HM1 equals 2,	REGISTRATION STATE should not equal 92.

Consistency Checks (FARS Only) (See Section 400):

Error ID	IF	THEN
6G0P	RELATED FACTORS-VEHICLE LEVEL equals 032,	REGISTRATION STATE must not equal 00, 92.
AQ0P	REGISTRATION STATE equals 00, 92,	REGISTERED VEHICLE OWNER must equal 0, 5, 6.
AV0P	REGISTERED VEHICLE OWNER equals 3, 4,	REGISTRATION STATE must not equal 99.
D330	DRIVER PRESENCE equals 0, and REGISTRATION STATE is not equal to 00, 92, 99,	REGISTERED VEHICLE OWNER should equal 3-6.
U450	UNLIKELY: REGISTRATION STATE equals 91 if HIT AND RUN does not equal 1.	
U770	UNLIKELY: REGISTRATION STATE equals 98.	
V550	REGISTRATION STATE equals 93, 94,	REGISTERED VEHICLE OWNER should equal 3, 4.
V560	SPECIAL USE equals 04,	REGISTERED VEHICLE OWNER should equal 3, and REGISTRATION STATE should equal 94.
V592	RELATED FACTORS-VEHICLE LEVEL equals 037,	REGISTRATION STATE should not equal 00, 92.
V600	REGISTERED VEHICLE OWNER equals 9,	REGISTRATION STATE should equal 99.
V630	REGISTRATION STATE equals 00, 92,	REGISTERED VEHICLE OWNER should NOT equal 5.

Error ID	IF	THEN
V670	REGISTERED VEHICLE OWNER equals 1, 2,	REGISTRATION STATE should NOT equal 99.
V960	REGISTRATION STATE equals 99,	REGISTERED VEHICLE OWNER should equal 5, 6, 9.

V8 - Registered Vehicle Owner - FARS Only

FORMAT: 1 numeric

SAS Name: Vehicle.OWNER, Parkwork.POWNER

ELEMENT VALUES:

Codes	Attributes
0	Not Applicable, Vehicle Not Registered
1	Driver (in this crash) Was Registered Owner
2	Driver (in this crash) Not Registered Owner (other private owner listed)
3	Vehicle Registered as Commercial/Business/Company/Government Vehicle
4	Vehicle Registered as Rental Vehicle
5	Vehicle Was Stolen (reported by police)
6	Driverless/Motor Vehicle Parked/Stopped Off Roadway
9	<u>Unknown</u>

Definition: This element is used to determine the type of registered owner of the vehicle.

Remarks: The type of ownership, "loan vs. lease," does not change the coding. An individual or company should be the Registered Vehicle Owner, regardless of the bank holding the loan or lease. Banks and leasing companies should be the Registered Vehicle Owner for their own fleets only. In instances when both an individual and a Commercial/Business/Company/
Government are listed as the REGISTERED VEHICLE OWNER, use code 3 (Vehicle Registered as Commercial/Business/Company/Government Vehicle). For example, the driver in a crash owns a truck tractor and uses it in his trucking business.

In the case of a conflict between the two, Vehicle Registration data takes precedence over police reported information. If you are unable to access the vehicle registration data, use what is on the police report.

- **0** (**Not Applicable, Vehicle Not Registered**) applies to vehicles that are not registered, both not required to be registered (state specific based on State vehicle registration requirements) and illegally not registered. (See **5** (**Vehicle Was Stolen [reported by police]**) for stolen vehicles.) For plated Business/Company/Government Vehicles that are exempt from normal registration see **3** (**Vehicle Registered as** *Commercial/Business/* **Company/ Government Vehicle**).
- **2** (**Driver** (in this crash) Not Registered Owner [other private owner listed]) is used for private owners other than the driver. Also, this includes when the driver is a spouse of the owner but is not a co-owner.
- **3 (Vehicle Registered as** *Commercial/***Business/Company/Government Vehicle)** is used for vehicles that are registered in a *Commercial,* Business, or Company name, or as a local, county, State, or Federal Government Vehicle. Use this attribute even if the Government vehicle is exempt from normal registration. Example: city owned police cruisers.

- **4 (Vehicle Registered as Rental Vehicle)** applies for rental vehicles, such as: Hertz, Ryder trucks, etc.
- **5 (Vehicle Was Stolen [reported by police])** takes precedence over codes "0, 2, 3, 4, 6," when multiple conditions exist.
- **6** (**Driverless/Motor Vehicle Parked/Stopped Off Roadway**) is used for both in-transport and not in-transport motor vehicles. This attribute should always be used if <u>UNIT TYPE</u> is coded as "2" or "3," even if other applicable conditions exist. This attribute is also used to indicate that this is a "driverless" motor vehicle in-transport (e.g., driverless vehicle stopped in a travel lane). If indicating this is a "driverless" motor vehicle in-transport, this attribute does not take precedence over codes "0, 3, 4, 5," when multiple conditions exist.
- **9 (Unknown)** is used when information on the registered owner is unknown or unclear; and in certain cases when the driver cannot be determined, but the registered owner is known.

Error ID	IF	THEN
1D0R	SPECIAL USE equals 23,	REGISTERED VEHICLE OWNER should equal 4.
1D0S	SPECIAL USE equals 10, 11, 12, 21, 22, or 24,	REGISTERED VEHICLE OWNER should equal 3.
1D0T	SPECIAL USE equals 19,	REGISTERED VEHICLE OWNER must not equal 1.
9A2P	UNIT TYPE equals 2, 3,	REGISTERED VEHICLE OWNER must equal 6.
AQ0P	REGISTRATION STATE equals 00, 92,	REGISTERED VEHICLE OWNER must equal 0, 5, 6.
AR0P	SPECIAL USE equals 04,	REGISTERED VEHICLE OWNER must not equal 0, 1, 2, 4.
ASOP)	RELATED FACTORS-VEHICLE LEVEL equals 032,	REGISTERED VEHICLE OWNER must not equal 0.
AV0P	REGISTERED VEHICLE OWNER equals 3, 4,	REGISTRATION STATE must not equal 99.
CB0P	REGISTERED VEHICLE OWNER equals 6,	DRIVER PRESENCE must equal 0.
D330	DRIVER PRESENCE equals 0, and REGISTRATION STATE is not equal to 00, 92, 99,	REGISTERED VEHICLE OWNER should equal 3-6.
V550	REGISTRATION STATE equals 93, 94,	REGISTERED VEHICLE OWNER should equal 3, 4.
V560	SPECIAL USE equals 04,	REGISTERED VEHICLE OWNER should equal 3, and REGISTRATION STATE should equal 94.

Error ID	IF	THEN
V570	HM1 equals 2,	REGISTERED VEHICLE OWNER should not equal 0, 1, 2, 4.
V580	HM1 equals 2,	REGISTERED VEHICLE OWNER should equal 3.
V590	RELATED FACTORS-VEHICLE LEVEL equals 032,	REGISTERED VEHICLE OWNER should equal 1-3.
V593	RELATED FACTORS-VEHICLE LEVEL equals 037,	REGISTERED VEHICLE OWNER should not equal 0.
V600	REGISTERED VEHICLE OWNER equals 9,	REGISTRATION STATE should equal 99.
V630	REGISTRATION STATE equals 00, 92,	REGISTERED VEHICLE OWNER should NOT equal 5.
V670	REGISTERED VEHICLE OWNER equals 1, 2,	REGISTRATION STATE should NOT equal 99.
V960	REGISTRATION STATE equals 99,	REGISTERED VEHICLE OWNER should equal 5, 6, 9.
VH25	UNIT TYPE equals 4,	REGISTERED VEHICLE OWNER should not equal 6, 9.

vPIC Make/vPIC Model /vPIC Body Class Overview

Prior to 2020, VEHICLE MAKE, VEHICLE MODEL, AND BODY TYPE were coded based on the Vehicle Make/Model/Body Type table in this manual. This table will no longer be updated starting in the data collection year 2020.

VEHICLE MAKE, VEHICLE MODEL, and BODY TYPE have been renamed as follows:

- VEHICLE MAKE is now NCSA MAKE
- VEHICLE MODEL is now NCSA MODEL
- BODY TYPE is now NCSA BODY TYPE

Starting from 2020 data collection year, NHTSA has added a new set of data elements based on VIN decoding using NHTSA's tool, Product Information Catalog and Vehicle Listing (vPIC). These new data elements are:

- <u>VPIC MAKE</u>: populated with vPIC data, derived from the VIN decoding.
- <u>VPIC MODEL</u>: populated with vPIC data, derived from the VIN decoding.
- <u>VPIC BODY CLASS</u>: populated with vPIC data, derived from the VIN decoding.
- FINAL STAGE BODY CLASS: this data element will be captured only for vehicles that are "incomplete." These vehicles are completed after the VIN has been assigned. For these types of vehicles, NHTSA would like to capture the final (i.e., completed) vehicle body class. This data element should be filled based on the body class indicated on the police crash report or vehicle registration. Please note that this is not populated based on vPIC data.
- <u>POWER UNIT GVWR</u>: populated with vPIC data, derived from the VIN decoding when available.
- <u>TRAILER GVWR</u>: populated with vPIC data, derived from the VIN decoding when available. This element only captures the GVWR for the trailing unit of a combination vehicle.

The following data element has been removed:

• GVWR/GCWR: NHTSA decided to remove this element because GVWR and GCWR are two different specifications of a vehicle. Storing two values into one data element can cause confusion. Therefore, starting data collection year 2020, this element is removed. The GVWR for powering unit is stored in the new data element POWER UNIT GVWR.

Users are required to decode the <u>VIN</u> first. The data elements <u>vPIC MAKE</u>, <u>vPIC MODEL</u>, <u>vPIC BODY CLASS</u>, <u>POWER UNIT GVWR</u>, <u>NCSA MAKE</u>, <u>NCSA MODEL</u>, and <u>NCSA BODY TYPE</u> are automatically populated with the decoded data if there is a VIN and the VIN decodes without any error.

If the <u>VIN</u> decodes with errors or the VIN is not available/applicable, the data elements <u>vPIC</u> <u>MAKE</u>, <u>vPIC MODEL</u>, <u>vPIC BODY CLASS</u>, <u>POWER UNIT GVWR</u>, <u>NCSA MAKE</u>, <u>NCSA MODEL</u>, and <u>NCSA BODY TYPE</u> may need to be manually filled based on the information from the PCR (FARS and CRSS) and vehicle registration (FARS only).

Reconstructed/Altered Vehicles: In case of "homemade" vehicles made from drastically mixed parts, there may be no clear MAKE or MODEL. In addition, the State may issue an Identification Number in place of the Standard VIN. In such cases, code the vPIC MAKE, vPIC MODEL, NCSA MAKE, NCSA MODEL, and VEHICLE MODEL YEAR as "9s" (Unknown). Code the vPIC BODY CLASS and NCSA BODY TYPE as appropriate. Be sure to use RELATED FACTORS-VEHICLE LEVEL code 035 (Reconstructed/Altered Vehicle).

In reconstructed/altered vehicles where the modifications are less drastic and you can determine the VIN, decode the <u>VIN</u>. If the VIN decodes cleanly, use the VIN decode information to code <u>vPIC MAKE</u>, <u>vPIC MODEL</u>, <u>NCSA MAKE</u>, <u>NCSA MODEL</u>, <u>vPIC BODY CLASS</u>, and <u>NCSA BODY TYPE</u>. In this situation, there might be a discrepancy between the decoded information and the information on the PCR. If the VIN is not available or does not decode cleanly, but the Make and Model can be determined, code these elements appropriately. Be sure to use the RELATED FACTORS-VEHICLE LEVEL code for 035 (Reconstructed/Altered Vehicle).

If any detail is known regarding the vehicle's Make/Model/Body/*Model* Year, code what is known and then code the other elements as unknown. For example, *if* you know it's a Ford 4-door passenger car but the specific model and year are not reported, *please do the following:*

- **VPIC MAKE**: choose "Ford" from the dropdown list;
- <u>NCSA MAKE</u>: this field will be automatically mapped to 12 (Ford);
- **VPIC MODEL**: choose "Unknown" from the dropdown list;
- *NCSA MODEL*: choose 399 (Unknown (Automobile));
- **VPIC BODY CLASS**: choose "Sedan;"
- NCSA BODY TYPE: choose 04 (4-Door Sedan, Hard Top);
- **VEHICLE MODEL YEAR**: choose 9999 (Unknown)

Code **Not Reported** only when *vPIC MAKE*, *vPIC MODEL*, *vPIC BODY CLASS*, *NCSA* MAKE, *NCSA* MODEL, *NCSA* BODY TYPE, and VEHICLE MODEL YEAR are all **Not Reported**.

Not Reported

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "Not Reported."

Code **Not Reported** in these situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).

V9 - Vehicle Identification Number

FORMAT: 17 alphanumeric

SAS NAME: Vehicle.VIN, Parkwork.PVIN

ELEMENT VALUES:

Codes	Attributes
00000000000000000	No VIN Required
	Any Alphanumeric Characters - Actual VIN number
888888888888888	Not Reported
999999999999999	Reported as Unknown
*	VIN Character Missing or Not Decipherable

Definition: This element records the Vehicle Identification Number (VIN) or alphanumeric identifier in the case material of a single vehicle or the power unit of a combination vehicle.

Remarks: SEE ADDITIONAL REMARKS UNDER <u>vPIC MAKE / vPIC MODEL / vPIC BODY CLASS OVERVIEW</u>.

Code the complete VIN of the single vehicle or the power unit of a combination vehicle. The VIN is always left-justified. Trailer VINs are not coded in this element. See <u>TRAILER</u> <u>VEHICLE IDENTIFICATION NUMBER</u> to record the VIN on any trailer. If the VIN for the power unit of a combination vehicle is not available, code <u>8s (Not Reported)</u> for this element, rather than the trailer VIN.

The Vehicle Identification Number (VIN) standards are described in 49 CFR Part 565. This standard requires that each VIN have 17 characters, not contain the letter "I," "O," or "Q," and pass a mathematical test (check digit). This data element may also be used to record non-standard VINs. See instruction under * (VIN Character Missing or Not Decipherable) for missing or illegible characters.

For a 17-character VIN that produces check digit errors, first attempt to resolve the error. If it cannot be resolved, record the VIN as provided and override any edit checks with explanation. See instruction under * (VIN Character Missing or Not Decipherable) for missing or illegible characters.

Only enter <u>8s (Not Reported)</u> or <u>9s (Reported as Unknown)</u> when the **entire** VIN is missing or unknown.

Enter all **0s** (**No VIN Required**) if the vehicle is not required to have a VIN as per <u>49 CFR Part</u> <u>565</u> (e.g., ATVs, off-road motorcycles, farm tractors, go-carts) AND there is no VIN data available. If VIN data is available enter the VIN as provided in the case material.

NOTE for pre-1981 vehicles:

If the vehicle is manufactured by the Ford Motor Company and the VIN begins or ends with a script "f," the script "f" is not entered. Proceed to the next character, as in the example below.

Example:

VIN: f3U62S100932f ENTER: 3U62S100932

In addition, if any hyphens or periods are contained in the string of alphanumeric characters, ignore them as in the example below.

Example:

VIN: SM-E.3076421 ENTER: SME3076421

8s (Not Reported) Check to see if <u>0s (No VIN Required)</u> or <u>9s (Reported as Unknown)</u> are more appropriate for the situation.

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**."

Code **8s** (**Not Reported**) in these three situations:

- 1. no field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material), or
- 2. a field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material), or
- 3. information on the police crash report has been sanitized/redacted and no other information is available in the case material.

9s (**Reported as Unknown**) is used when the entire power unit VIN is reported as Unknown with no information available.

* (VIN Character Missing or Not Decipherable) is used for any VIN character(s) that is (are) missing or not decipherable and the correct character(s) cannot be identified to resolve the VIN for the specific position(s).

Notes regarding VINs with less than 17 digits:

- Some vehicles (e.g., custom, pre-1981, imported, or rebuilt vehicles) may have been assigned identification numbers that are less than 17 digits. These should be entered as reported. Do not fill the remaining positions with asterisks "*." For example, 1102112486.
- If a VIN is reported as less than 17 digits for a vehicle that would normally have 17 digits, and all characters are legible, fill with asterisks "*" at the end for the missing character(s). For example, JM2UF1114G0*****.

FARS SPECIAL INSTRUCTION:

If the State will not allow transmittal of a complete standard VIN, such as the State only allows transmitting the left-most 13 digits, code the right-most four characters with asterisks "*". In the

case of errors, character omissions, or inconsistencies between the decoded values and the crash report Make/Model/Body Type, the vehicle registration file must be used to verify the VIN.

If the information from a cleanly decoded VIN (VIN decodes with no error) and the police crash report are inconsistent, try to resolve the conflict using other information in the case material including the vehicle registration. For example, if the VINs are accidentally switched between the vehicles by the police officer on the PCR, try to re-order the VINs to see if the conflict is resolved. If the conflict cannot be resolved, submit a VIN request to confirm the accuracy of the VIN decode information. If the VIN accuracy is confirmed and the conflict cannot be resolved, VIN decode results take precedence over PCR.

CRSS SPECIAL INSTRUCTION:

If the information from a cleanly decoded VIN (VIN decodes with no error) and the police crash report are inconsistent, try to resolve the conflict using other information in the case material. For example, if the VINs are accidentally switched between the vehicles by the police officer on the PCR, try to re-order the VINs to see if the conflict is resolved. If the conflict cannot be resolved, submit a VIN request to confirm the accuracy of the VIN decode information. If the VIN accuracy is confirmed and the conflict cannot be resolved, VIN decode results take precedence over PCR.

If there is no VIN and the information about Make and Model on the police crash report is inconsistent, Model takes precedence over the Make.

Error ID	IF	THEN
900P	VEHICLE IDENTIFICATION NUMBER (VIN) does not equal 0s, 8s, or 9s and VEHICLE MODEL YEAR is a valid year and greater than or equal to 1980 and VEHICLE MODEL YEAR equals,	the 10th digit of the valid VEHICLE IDENTIFICATION NUMBER (VIN) should equal (contact NHTSA Headquarters for VIN Assistance).
902P	VEHICLE MODEL YEAR > 1980, VEHICLE MODEL YEAR is not equal to 9998 or 9999, and VEHICLE IDENTIFICATION NUMBER is not equal to all 0s, 8s, or 9s;	VEHICLE IDENTIFICATION NUMBER positions 1-8, 11-14 should equal A-H, J-N, P, R-Z, 0-9, or *; VEHICLE IDENTIFICATION NUMBER position 9 should equal 0-9, X, or *; VEHICLE IDENTIFICATION NUMBER position 10 should equal A-H, J-N, P, R-T, V-Y, 1-9, or *; VEHICLE IDENTIFICATION NUMBER positions 15-17 should equal 0-9 or *.

Error ID	IF	THEN
903P	VEHICLE MODEL YEAR > 1980, VEHICLE MODEL YEAR is not equal to 9998 or 9999, and VEHICLE IDENTIFICATION NUMBER is not equal to all 0s, 8s, or 9s,	VEHICLE IDENTIFICATION NUMBER positions 1-8, 11 should equal A-H, J-N, P, R-Z, or 0-9; VEHICLE IDENTIFICATION NUMBER position 9 should equal 0-9, or X; VEHICLE IDENTIFICATION NUMBER position 10 should equal A-H, J-N, P, R-T, V-Y, or 1-9; VEHICLE IDENTIFICATION NUMBER positions 12-14 should equal A-H, J-N, P, R-Z, 0-9, or *; VEHICLE IDENTIFICATION NUMBER positions 15-17 should equal 0-9 or *.
907P	VEHICLE IDENTIFICATION NUMBER (VIN) does not equal 0s, 8s, or 9s,	vPIC Body Class must not equal "Trailer" or "Incomplete - Trailer Chassis."
909P	STATE or PSU_STATE is equal to GA, and any VEHICLE IDENTIFICATION NUMBER (VIN) does not equal 0s, 8s, or 9s,	VEHICLE IDENTIFICATION NUMBER (VIN) should be unique within a crash.
U490	UNLIKELY: <i>POWER UNIT</i> GVWR_ <i>from</i> and <i>GVWR_to</i> equals 98 or 99 and VEHICLE MODEL YEAR is greater than 1980 and not equal to 9998 or 9999, and VIN is not equal to 000000000000000000, 888888888888888, or 9999999999999999, and VIN passes the check digit check (i.e., VIN is a Valid VIN).	
V011	VEHICLE MODEL YEAR is less than 1950,	VEHICLE IDENTIFICATION NUMBER must equal 0s.
V300	Possible error in VIN Production Number.	
V62P	VEHICLE TRAILING equals 0 and CARGO BODY TYPE equals 01-08, 97, 98, and VEHICLE IDENTIFICATION NUMBER does not equal 8s or 9s,	POWER UNIT GVWR_from and GVWR_to must equal 13, 14, 15, 16, 17, or 18.
VP01	VEHICLE IDENTIFICATION NUMBER is not equal to 00000000000000000, 88888888888888888, or 99999999999999999999999999999999999	vPIC BODY CLASS must not equal 61 (Trailer) or 116 (Incomplete Trailer Chassis).
VP02	VEHICLE IDENTIFICATION NUMBER is not equal to 000000000000000000, 88888888888888888, or 99999999999999999999999999999999999	vPIC MAKE must not equal to a Trailer Make.
VP03	VEHICLE IDENTIFICATION NUMBER decodes with error code only in (1, 400),	vPIC MAKE, vPIC MODEL, vPIC BODY CLASS, NCSA MAKE, NCSA MODEL, and NCSA BODY TYPE must equal the corresponding decoded data values.

Consistency Checks (CRSS Only) (See Section 400):

Error ID	IF	THEN
V271	MODEL YEAR is greater than 1980 and PSU_STATE is equal to GA,	the first 11 characters of VEHICLE IDENTIFICATION NUMBER should be alphanumeric (A-Z, a-z, 0-9), and no characters should equal I, O, or Q.
V272	MODEL YEAR is greater than 1980 and PSU_STATE is not equal to GA <i>or MN</i> ,	the VEHICLE IDENTIFICATION NUMBER should be 17 characters, all characters should be alphanumeric (A-Z, a-z, 0-9), and no characters should equal I, O, or Q.
V281	MODEL YEAR is greater than 1980 and VEHICLE IDENTIFICATION NUMBER is 17 characters and PSU_STATE is not equal to GA, all characters are alphanumeric (A-Z, a-z, 0-9), and no characters are I, O, or Q,	the VEHICLE IDENTIFICATION NUMBER should pass check digit calculation.

Consistency Checks (FARS Only) (See Section 400):

Error ID	IF	THEN
V270	MODEL YEAR is greater than 1980,	the VIN should be 17 characters, all characters should be alphanumeric (A-Z, a-z, 0-9), and no characters should equal I, O, or Q.
V280	MODEL YEAR is greater than 1980 and VEHICLE IDENTIFICATION NUMBER is 17 characters, all characters are alphanumeric (A-Z, a-z, 0-9), and no characters are I, O, or Q,	the VIN should pass check digit calculation.

V10 - Vehicle Model Year

FORMAT: 4 numeric

SAS NAME: Vehicle.MOD_YEAR, Person.MOD_YEAR, Parkwork.PMODYEAR

ELEMENT VALUES:

Codes	Attributes
	Actual Four Digit Model Year
9998	Not Reported
9999	<u>Unknown</u>

Definition: This element identifies the manufacturer's model year of this vehicle.

Remarks: SEE ADDITIONAL REMARKS UNDER <u>vPIC MAKE / vPIC MODEL / vPIC BODY CLASS OVERVIEW</u>.

9998 (Not Reported)

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**."

Code 9998 (Not Reported) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).

Code all four digits of the model year for which the vehicle was manufactured as shown on the PCR. For an example, if a vehicle model year is shown on the PCR as "85," Model Year field should be coded as "1985."

Error ID	IF	THEN
1C0P	the VEHICLE MODEL YEAR is not equal to 9998 or 9999,	the VEHICLE MODEL YEAR must not be greater than CRASH YEAR plus ONE.

Error	IF	THEN
ID		
1C1P	[[VEHICLE MODEL YEAR is greater than or	MOTOR VEHICLE AUTOMATED DRIVING
	equal to 2000 and vPIC BODY CLASS does	SYSTEM(S) Subfield 1 should not equal 00 or
	not equal 004 (Low Speed Vehicle (LSV) /	99.
	Neighborhood Electric Vehicle (NEV)), 006	
	(Motorcycle - Standard), 012 (Motorcycle -	
	Scooter), 069 (Off-road Vehicle - All Terrain	
	Vehicle (ATV) (Motorcycle-style)), 080	
	(Motorcycle - Sport), 081 (Motorcycle -	
	Touring / Sport Touring), 082 (Motorcycle -	
	Cruiser), 083 (Motorcycle - Trike), 084 (Off-	
	Road Vehicle - Dirt Bike / Off-Road), 085	
	(Motorcycle - Dual Sport / Adventure /	
	Supermoto / On/Off-Road), 086 (Off-Road	
	Vehicle - Enduro (Off-road long-distance	
	racing)), 087 (Motorcycle - Small / Minibike),	
	088 (Off-road Vehicle - Go Kart), 090	
	(Motorcycle - Side Car), 094 (Motorcycle -	
	Custom), 097 (Off-road Vehicle -	
	Snowmobile), 098 (Motorcycle - Street), 100	
	(Motorcycle - Enclosed Three Wheeled /	
	Enclosed Autocycle), 103 (Motorcycle -	
	Unenclosed Three Wheeled / Open Autocycle),	
	104 (Motorcycle - Moped), 105 (Off-road	
	Vehicle - Recreational Off-Road Vehicle	
	(ROV)), 109 (Motorcycle - Cross Country),	
	110 (Motorcycle - Underbone), 113 (Off-road	
	Vehicle - Motorcross (Off-road short distance,	
	closed track racing)), 114 (Motorcycle -	
	Competition), 124 (Off-road Vehicle - Golf	
	Cart), 125 (Motorcycle - Unknown Body	
	Type), 126 (Off-road Vehicle - Farm	
	Equipment), 127 (Off-road Vehicle -	
	Construction Equipment), 996 (Motorized	
	Bicycle), or 997 (Other)], or [vPIC BODY	
	CLASS equals 006 (Motorcycle - Standard),	
	080 (Motorcycle - Sport), 081 (Motorcycle -	
	Touring/Sport Touring), 082 (Motorcycle -	
	Cruiser), 083 (Motorcycle - Trike), 085	
	(Motorcycle - Dual Sport / Adventure /	
	Supermoto / On/Off-Road), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 109	
	(Motorcycle - Cross Country), or 125	
	(Motorcycle - Cross Country), or 123 (Motorcycle - Unknown Body Type), and	
	7 7 7	
	VEHICLE MODEL YEAR is greater than	
	2020]], and STATE NUMBER does not equal 8 (CO), 17 (IL), 23 (ME), 26 (MI), or 28 (MS),	
	0 (CO), 17 (1L), 23 (ME), 20 (MI), 07 28 (MS),	

Error ID	IF	THEN
900P	VEHICLE IDENTIFICATION NUMBER (VIN) does not equal 0s, 8s, or 9s and VEHICLE MODEL YEAR is a valid year and greater than or equal to 1980 and VEHICLE MODEL YEAR equals	the 10th digit of the valid VEHICLE IDENTIFICATION NUMBER (VIN) should equal (contact NHTSA Headquarters for VIN Assistance).
902P	VEHICLE MODEL YEAR > 1980, VEHICLE MODEL YEAR is not equal to 9998 or 9999, and VEHICLE IDENTIFICATION NUMBER is not equal to all 0s, 8s, or 9s;	VEHICLE IDENTIFICATION NUMBER positions 1-8, 11-14 should equal A-H, J-N, P, R-Z, 0-9, or *; VEHICLE IDENTIFICATION NUMBER position 9 should equal 0-9, X, or *; VEHICLE IDENTIFICATION NUMBER position 10 should equal A-H, J-N, P, R-T, V-Y, 1-9, or *; VEHICLE IDENTIFICATION NUMBER positions 15-17 should equal 0-9 or *.
903P	VEHICLE MODEL YEAR > 1980, VEHICLE MODEL YEAR is not equal to 9998 or 9999, and VEHICLE IDENTIFICATION NUMBER is not equal to all 0s, 8s, or 9s,	VEHICLE IDENTIFICATION NUMBER positions 1-8, 11 should equal A-H, J-N, P, R-Z, or 0-9; VEHICLE IDENTIFICATION NUMBER position 9 should equal 0-9, or X; VEHICLE IDENTIFICATION NUMBER position 10 should equal A-H, J-N, P, R-T, V-Y, or 1-9; VEHICLE IDENTIFICATION NUMBER positions 12-14 should equal A-H, J-N, P, R-Z, 0-9, or *; VEHICLE IDENTIFICATION NUMBER positions 15-17 should equal 0-9 or *.
920P	any one of the fields <i>NCSA</i> MAKE, <i>NCSA</i> MODEL, <i>NCSA</i> BODY TYPE, and <i>VEHICLE</i> MODEL YEAR, equals Not Reported [<i>NCSA</i> MAKE (97), <i>NCSA</i> MODEL (997), <i>NCSA</i> BODY TYPE (98), and <i>VEHICLE</i> MODEL YEAR (9998)],	the other three must also equal Not Reported.
921P	NCSA MAKE is not 97, 98, 99, and equals, and NCSA MODEL equals,	VEHICLE MODEL YEAR must equal, or CRASH YEAR plus 1.
930P	any one of the fields <i>NCSA</i> MAKE, <i>NCSA</i> MODEL, <i>NCSA</i> BODY TYPE, and <i>VEHICLE</i> MODEL YEAR, does not equal Not Reported [<i>NCSA</i> MAKE (97), <i>NCSA</i> MODEL (997), <i>NCSA</i> BODY TYPE (98), and <i>VEHICLE</i> MODEL YEAR (9998)],	the other three must also not be coded as Not Reported.

Error ID	IF	THEN
P290	AIR BAG DEPLOYED equals 01-03, 07-09, and vPIC BODY CLASS equals 001 (Convertible/Cabriolet), 002 (Minivan), 003 (Coupe), 005 (Hatchback/Liftback/Notchback), 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 008 (Crossover Utility Vehicle (CUV)), 009 (Van), 010 (Roadster), 011 (Truck), 013 (Sedan/Saloon), 015 (Wagon), 060 (Pickup), 117 (Limousine), 119 (Sport Utility Truck (SUT)), or FINAL STAGE BODY CLASS equals 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 008 (Crossover Utility Vehicle (CUV)), 009 (Van), 011 (Truck), 015 (Wagon), 060 (Pickup), 117 (Limousine), or 119 (Sport Utility Truck (SUT)), and VEHICLE MODEL YEAR equals 1998 or newer,	SEATING POSITION should equal 11, 13, 21, 23, 31, or 33.
U490	UNLIKELY: <i>POWER UNIT</i> GVWR_ <i>from</i> and <i>GVWR_to</i> equals 98 or 99 and VEHICLE MODEL YEAR is greater than 1980 and not equal to 9998 or 9999, and VIN is not equal to 00000000000000000, 888888888888888, or 9999999999999999, and VIN passes the check digit check (i.e., VIN is a Valid VIN).	
U510	UNLIKELY: VEHICLE MODEL YEAR equals 9998 if HIT AND RUN does not equal 1.	
U710	UNLIKELY: MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S)- Subfield 1 equals 01 and VEHICLE MODEL YEAR is between 2000 and 2012.	
V010	MODEL YEAR should not be less than 1940.	
V011	VEHICLE MODEL YEAR is less than 1950,	VEHICLE IDENTIFICATION NUMBER must equal 0s.
V620	CRASH MONTH is between January and March,	the VEHICLE MODEL YEAR should NOT be greater than the CRASH YEAR unless it equals 9998 or 9999 (contact Coding Assistance through the CDAN Helpdesk).
V922	NCSA MAKE equals 98, 99, and NCSA MODEL equals,	VEHICLE MODEL YEAR should equal (NCSA MODEL and VEHICLE MODEL YEAR should be valid according to Vehicle Tables).

Error ID	IF	THEN
VA95	VEHICLE MODEL YEAR is less than 2000,	MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S) Subfield 1 must equal 00.
VA96	VEHICLE MODEL YEAR is between 2000 and 2012 and MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S)-Subfield 1 equals 01,	MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S)-Subfield 2 must equal 01.
VA98	vPIC BODY CLASS equals 006 (Motorcycle - Standard), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring / Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 085 (Motorcycle - Dual Sport / Adventure / Supermoto / On/Off-Road), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 109 (Motorcycle - Cross Country), or 125 (Motorcycle - Unknown Body Type), and VEHICLE MODEL YEAR is less than 2021,	MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S) Subfield 1 must equal 00.
VP04	any one of the fields vPIC MAKE, vPIC MODEL, vPIC BODY CLASS, VEHICLE MODEL YEAR, NCSA MAKE, NCSA MODEL, and NCSA BODY TYPE equals Not Reported (vPIC MAKE [99998], vPIC MODEL [99998], vPIC BODY CLASS [998], VEHICLE MODEL YEAR [9998], NCSA MAKE [97], NCSA MODEL [997], NCSA BODY TYPE [98])	the other six must also equal Not Reported (vPIC MAKE [99998], vPIC MODEL [99998], vPIC BODY CLASS [998], VEHICLE MODEL YEAR [9998], NCSA MAKE [97], NCSA MODEL [997], NCSA BODY TYPE [98]).
VP05	vPIC MAKE is not 99997, 99998, 99999, and equals, and vPIC MODEL equals,	VEHICLE MODEL YEAR must equal, or CRASH YEAR plus 1.
VP06	any one of the fields vPIC MAKE, vPIC MODEL, vPIC BODY CLASS, VEHICLE MODEL YEAR, NCSA MAKE, NCSA MODEL and NCSA BODY TYPE does not equal Not Reported (vPIC MAKE [99998], vPIC MODEL [99998], vPIC BODY CLASS [998], VEHICLE MODEL YEAR [9998], NCSA MAKE [97], NCSA MODEL [997], NCSA BODY TYPE [98])	the other six must also not be coded as Not Reported (vPIC MAKE [99998], vPIC MODEL [99998], vPIC BODY CLASS [998], VEHICLE MODEL YEAR [9998], NCSA MAKE [97], NCSA MODEL [997], NCSA BODY TYPE [98]).

Consistency Checks (CRSS Only) (See Section 400):

Error ID	IF	THEN
V271	VEHICLE MODEL YEAR is greater than 1980 and PSU_STATE is equal to GA,	the first 11 characters of VEHICLE IDENTIFICATION NUMBER should be alphanumeric (A-Z, a-z, 0-9), and no characters should equal I, O, or Q.
V272	VEHICLE MODEL YEAR is greater than 1980 and PSU_STATE is not equal to GA or MN,	the VEHICLE IDENTIFICATION NUMBER should be 17 characters, all characters should be alphanumeric (A-Z, a-z, 0-9), and no characters should equal I, O, or Q.
V281	VEHICLE MODEL YEAR is greater than 1980 and VEHICLE IDENTIFICATION NUMBER is 17 characters and PSU_STATE is not equal to GA, all characters are alphanumeric (A-Z, a-z, 0-9), and no characters are I, O, or Q,	the VEHICLE IDENTIFICATION NUMBER should pass check digit calculation.

Consistency Checks (FARS Only) (See Section 400):

Error ID	IF	THEN
V270	VEHICLE MODEL YEAR is greater than 1980,	the VIN should be 17 characters, all characters should be alphanumeric (A-Z, a-z, 0-9), and no characters should equal I, O, or Q.
V280	VEHICLE MODEL YEAR is greater than 1980 and VEHICLE IDENTIFICATION NUMBER is 17 characters, all characters are alphanumeric (A-Z, a-z, 0-9), and no characters are I, O, or Q,	the VIN should pass check digit calculation.

V11 - vPIC Make

FORMAT: 5 numeric

SAS NAME: Vehicle.vPICMAKE, Person.vPICMAKE, Parkwork. PvPICMAKE

ELEMENT VALUES:

Codes	Attributes	
	Use this URL to get the list of the latest vPIC Make: https://vpic.nhtsa.dot.gov/api/vehicles/getallmakes?format=csv	
99997	<u>Other</u>	
99998	Not Reported	
99999	<u>Unknown</u>	

Definition: This element identifies the Make (manufacturer brand name) of this vehicle as per NHTSA vPIC submissions.

Remarks: SEE ADDITIONAL REMARKS UNDER <u>vPIC MAKE / vPIC MODEL / vPIC BODY CLASS OVERVIEW.</u>

Because the vPIC dataset is updated frequently when new or updated VIN decode information are submitted by vehicle manufacturers, the following URL is provided to retrieve the most upto-date vPIC Make for reference:

https://vpic.nhtsa.dot.gov/api/vehicles/getallmakes?format=csv.

If there is a VIN that can be cleanly decoded, vPIC Make is automatically populated in the coding software. If there is no VIN or the VIN is decoded with error, i.e., manual coding is required, the most up-to-date list of vPIC Make is made available in the coding software for selection. Note that for both vPIC MAKE and vPIC MODEL, the use of the terms "Other" and "Unknown" have very specific meanings. "Other" refers to a Make or Model that is known but is not explicitly listed. "Unknown" refers to the situation where no specific make or model is known.

99997 (Other) is used when the make or model is known, but it is not explicitly listed Makes.

99998 (Not Reported)

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "Not Reported."

Code 99998 (Not Reported) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS

attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).

99999 (Unknown) is used when the vehicle is reported as Unknown unless reliable evidence indicates the vehicle's make. If any detail is known regarding the vehicle's MAKE/MODEL/BODY/MODEL YEAR, code what is known and then code the other elements as Unknown. If a vehicle Make or vehicle Model is encountered that is not listed, NHTSA headquarters is notified.

Error ID	IF	THEN
VP02	VEHICLE IDENTIFICATION NUMBER is not equal to 000000000000000000, 88888888888888888, or 99999999999999999999999999999999999	vPIC MAKE must not equal to a Trailer Make.
VP03	VEHICLE IDENTIFICATION NUMBER is valid and decodes with error code only in 0, 1, 10, 400, and vPIC Body Class is not 62-65, 67, 70-72, 74-78, 107, 112,	vPIC MAKE, vPIC MODEL, vPIC BODY CLASS, NCSA MAKE, NCSA MODEL, and NCSA BODY TYPE must equal the corresponding decoded data values.
VP04	any one of the fields vPIC MAKE, vPIC MODEL, vPIC BODY CLASS, VEHICLE MODEL YEAR, NCSA MAKE, NCSA MODEL, and NCSA BODY TYPE equals Not Reported (vPIC MAKE [99998], vPIC MODEL [99998], vPIC BODY CLASS [998], VEHICLE MODEL YEAR [9998], NCSA MAKE [97], NCSA MODEL [997], NCSA BODY TYPE [98])	the other six must also equal Not Reported (vPIC MAKE [99998], vPIC MODEL [99998], vPIC BODY CLASS [998], VEHICLE MODEL YEAR [9998], NCSA MAKE [97], NCSA MODEL [997], NCSA BODY TYPE [98]).
VP05	vPIC MAKE is not 99997, 99998, 99999, and equals, and vPIC MODEL equals,	VEHICLE MODEL YEAR must equal, or CRASH YEAR plus 1.
VP06	any one of the fields vPIC MAKE, vPIC MODEL, vPIC BODY CLASS, VEHICLE MODEL YEAR, NCSA MAKE, NCSA MODEL and NCSA BODY TYPE does not equal Not Reported (vPIC MAKE [99998], vPIC MODEL [99998], vPIC BODY CLASS [998], VEHICLE MODEL YEAR [9998], NCSA MAKE [97], NCSA MODEL [997], NCSA BODY TYPE [98])	the other six must also not be coded as Not Reported (vPIC MAKE [99998], vPIC MODEL [99998], vPIC BODY CLASS [998], VEHICLE MODEL YEAR [9998], NCSA MAKE [97], NCSA MODEL [997], NCSA BODY TYPE [98]).
VP07	UNLIKELY: vPIC MAKE equals 99998 if HIT AND RUN does not equal 1.	
VP08	vPIC MAKE equals 99999,	vPIC MODEL must equal 99999.
VP09	vPIC MAKE equals 99997	vPIC MODEL must equal 99997.
VP10	vPIC MAKE equals 99997	NCSA MAKE must equal 98 (Other Make).

VP11	vPIC MAKE equals 99999	NCSA MAKE must equal 99 (Unknown Make).
VP13	UNLIKELY: vPIC MAKE equals 99997.	
VP14	UNLIKELY: vPIC MODEL equals 99997 and vPIC MAKE does not equal 99997, 99998, or 99999.	

V12 - vPIC Model

FORMAT: 5 numeric

SAS NAME: Vehicle.vPICMODEL, Person.vPICMODEL, Parkwork.PvPICMODEL

ELEMENT VALUES:

Codes	Attributes	
	Use the following URL to get the list of vPIC Model for a specific vPIC Make (see examples below):	
	https://vpic.nhtsa.dot.gov/api/vehicles/GetModelsForMakeId/*?format=csv	
	https://vpic.nhtsa.dot.gov/api/vehicles/getmodelsformake/*?format=csv	
99997	<u>Other</u>	
99998	Not Reported	
99999	<u>Unknown</u>	

Definition: This element identifies the Model of this vehicle using NHTSA's VIN decoder application, vPIC.

Remarks: SEE ADDITIONAL REMARKS UNDER <u>vPIC MAKE / vPIC MODEL / vPIC BODY CLASS OVERVIEW</u>.

If there is a VIN that can be decoded cleanly, vPIC Model is automatically populated in the coding software. If there is no VIN or the VIN decodes with error, this value should be manually coded. Based on the vPIC Make selected, the most up-to-date list of vPIC Model is made available for selection in the coding software. Without a VIN or a VIN with decode error, the selection of the Model should be based on the information from the Vehicle Registration (FARS Only) or PCR.

For reference, to look up the vPIC Models for a given vPIC Make, please pass a valid Make ID or Make Name in the URLs as follows:

- Replace * in the URL with vPIC Make ID (see examples below): https://vpic.nhtsa.dot.gov/api/vehicles/GetModelsForMakeId/*?format=csv
- Replace * in the URL with vPIC Make Name (see examples below): https://vpic.nhtsa.dot.gov/api/vehicles/getmodelsformake/*?format=csv

Example 1: Use the following URL to see all the Models for Buick:

Use Buick Make ID 468 as parameter:

https://vpic.nhtsa.dot.gov/api/vehicles/GetModelsForMakeId/468?format=csv

Use the Make Name "Buick" as parameter:

https://vpic.nhtsa.dot.gov/api/vehicles/getmodelsformake/Buick?format=csv

Example 2: Use the following URL to see all the Models for Toyota

Use Toyota Make ID 448 as parameter:

https://vpic.nhtsa.dot.gov/api/vehicles/GetModelsForMakeId/448?format=csv

Use the Make Name "Toyota" as parameter:

https://vpic.nhtsa.dot.gov/api/vehicles/getmodelsformake/Toyota?format=csv

Note that for both vPIC MAKE and vPIC MODEL, the use of the terms "Other" and "Unknown" have very specific meanings. "Other" refers to a Make or Model that is known but is not explicitly listed. "Unknown" refers to the situation where no specific Make or Model is known.

99997 (Other) is used when the make or model is known, but it is not explicitly listed Models. 99998 (Not Reported)

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "Not Reported."

Code 99998 (Not Reported) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).

99999 (Unknown) is used when the vehicle is reported as Unknown unless reliable evidence indicates the vehicle's make. If any detail is known regarding the vehicle's MAKE/MODEL/BODY/MODEL YEAR, code what is known and then code the other elements as Unknown.

If a vehicle Make or vehicle Model is encountered that is not listed, NHTSA headquarters is notified.

Error ID	IF	THEN
VP03	VEHICLE IDENTIFICATION NUMBER decodes with error code only in (1, 400),	VPIC MAKE, VPIC MODEL, VPIC BODY CLASS, NCSA MAKE, NCSA MODEL, and NCSA BODY TYPE must equal the corresponding decoded data values.

Error ID	<i>IF</i>	THEN
VP04	any one of the fields vPIC MAKE, vPIC MODEL, vPIC BODY CLASS, VEHICLE MODEL YEAR, NCSA MAKE, NCSA MODEL, and NCSA BODY TYPE equals Not Reported (vPIC MAKE [99998], vPIC MODEL [99998], vPIC BODY CLASS [998], VEHICLE MODEL YEAR [9998], NCSA MAKE [97], NCSA MODEL [997], NCSA BODY TYPE [98])	the other six must also equal Not Reported (vPIC MAKE [99998], vPIC MODEL [99998], vPIC BODY CLASS [998], VEHICLE MODEL YEAR [9998], NCSA MAKE [97], NCSA MODEL [997], NCSA BODY TYPE [98]).
VP05	vPIC MAKE is not 99997, 99998, 99999, and equals, and vPIC MODEL equals,	VEHICLE MODEL YEAR must equal, or CRASH YEAR plus 1.
VP06	any one of the fields vPIC MAKE, vPIC MODEL, vPIC BODY CLASS, VEHICLE MODEL YEAR, NCSA MAKE, NCSA MODEL and NCSA BODY TYPE does not equal Not Reported (vPIC MAKE [99998], vPIC MODEL [99998], vPIC BODY CLASS [998], VEHICLE MODEL YEAR [9998], NCSA MAKE [97], NCSA MODEL [997], NCSA BODY TYPE [98])	the other six must also not be coded as Not Reported (vPIC MAKE [99998], vPIC MODEL [99998], vPIC BODY CLASS [998], VEHICLE MODEL YEAR [9998], NCSA MAKE [97], NCSA MODEL [997], NCSA BODY TYPE [98]).
VP08	vPIC MAKE equals 99999,	vPIC MODEL must equal 99999.
VP09	vPIC MAKE equals 99997	vPIC MODEL must equal 99997.
VP14	UNLIKELY: vPIC MODEL equals 99997 and vPIC MAKE does not equal 99997, 99998, or 99999.	
VP15	UNLIKELY: vPIC MODEL equals 99997 and NCSA MODEL does not equal 398 (Other (Automobile)), 498 (Other (Light Trucks)), 598 (Other (Low Speed Vehicle (LSV)/Neighborhood Electric Vehicle (NEV))), 709 (Unknown cc (Motorcycles)), 739 (Unknown cc (ATV)), 898 (Other (Medium/Heavy Trucks)), 988 (Other (Bus)), or 998 (Other (Vehicle)).	

Error ID	IF	THEN
VP16	UNLIKELY: vPIC MODEL equals 99999 and NCSA MODEL does not equal 399 (Unknown (Automobile)), 499 (Unknown (Light Trucks)), 599 (Unknown (Low Speed Vehicle (LSV)/Neighborhood Electric Vehicle (NEV))), 709 (Unknown cc (Motorcycles)), 739 (Unknown cc (ATV)), 884 (Medium/Heavy Trucks - Unknown engine location), 898 (Other, Unknown, truck over 10,000 lbs. GVWR), 989 (Unknown (Bus)), or 999 (Unknown).	
VP82	UNLIKELY: vPIC MODEL equals 99997.	

V13 - vPIC Body Class

FORMAT: 3 numeric

$SAS\ NAME:\ Vehicle.vPICBODYCLASS,\ Person.vPICBODYCLASS,$

Parkwork.PvPICBODYClass

ELEMENT VALUES:

Codes	Attributes
016	<u>Bus</u>
073	<u>Bus - School Bus</u>
095	<u>Cargo Van</u>
001	<u>Convertible/Cabriolet</u>
003	<u>Coupe</u>
008	Crossover Utility Vehicle (CUV)
005	Hatchback/Liftback/Notchback
065	Incomplete
107	Incomplete - Bus Chassis
070	Incomplete - Chassis Cab (Double Cab)
074	Incomplete - Chassis Cab (Number of Cab Unknown)
063	Incomplete - Chassis Cab (Single Cab)
072	Incomplete - Commercial Bus Chassis
112	Incomplete - Commercial Chassis
062	Incomplete - Cutaway
064	Incomplete - Glider
076	Incomplete - Motor Coach Chassis
078	Incomplete - Motor Home Chassis
071	Incomplete - School Bus Chassis
077	Incomplete - Shuttle Bus Chassis
067	Incomplete - Stripped Chassis
075	Incomplete - Transit Bus Chassis
117	<u>Limousine</u>
004	Low Speed Vehicle (LSV) / Neighborhood Electric Vehicle (NEV)
002	<u>Minivan</u>
125	Motorcycle - Unknown Body Type
114	Motorcycle - Competition

Codes	Attributes
109	Motorcycle - Cross Country
082	Motorcycle - Cruiser
094	Motorcycle - Custom
085	Motorcycle - Dual Sport / Adventure / Supermoto / On/Off-road
100	Motorcycle - Enclosed Three Wheeled / Enclosed Autocycle
104	Motorcycle - Moped
012	Motorcycle - Scooter
090	Motorcycle - Side Car
087	Motorcycle - Small / Minibike
080	Motorcycle - Sport
006	Motorcycle - Standard
098	Motorcycle - Street
081	Motorcycle - Touring / Sport Touring
083	Motorcycle - Trike
110	Motorcycle - Underbone
103	Motorcycle - Unenclosed Three Wheeled / Open Autocycle
108	<u>Motorhome</u>
069	Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)
127	Off-road Vehicle - Construction Equipment
084	Off-road Vehicle - Dirt Bike / Off-Road
086	Off-road Vehicle - Enduro (Off-road long-distance racing)
126	Off-road Vehicle - Farm Equipment
088	Off-road Vehicle - Go Kart
124	Off-road Vehicle - Golf Cart
113	Off-road Vehicle - Motocross (Off-road short distance, closed track racing)
105	Off-road Vehicle - Recreational Off-Road Vehicle (ROV)
097	Off-road Vehicle - Snowmobile
060	<u>Pickup</u>
010	<u>Roadster</u>
013	<u>Sedan/Saloon</u>
119	Sport Utility Truck (SUT)
007	Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)

Codes	Attributes
111	Step Van / Walk-in Van
068	Streetcar / Trolley
011	<u>Truck</u>
066	<u>Truck-Tractor</u>
009	<u>Van</u>
015	<u>Wagon</u>
996	Motorized Bicycle
997	<u>Other</u>
998	Not Reported
999	<u>Unknown</u>

Definition: This element identifies a classification of this vehicle based on its general body configuration, size, shape, doors, etc. as defined by the manufacturer.

Remarks: SEE ADDITIONAL REMARKS UNDER <u>vPIC MAKE/vPIC MODEL/vPIC</u> BODY CLASS OVERVIEW

vPIC BODY CLASS is what vehicle manufacturers are required to report to NHTSA through 49 CFR Part 565 submissions except in the case of off-road vehicles. Off-road vehicles are not required to be reported to NHTSA and any information should be considered provided in a voluntary sense, which may not cover all off-road vehicles. The following definitions are guidelines to code this data element manually when the VIN is unknown or cannot be decoded cleanly.

If the vehicle is an <u>Incomplete vehicle</u> and its vPIC BODY CLASS belongs to one of the Incomplete Vehicle codes, enter the completed body class for this vehicle under <u>FINAL</u> <u>STAGE BODY CLASS</u>.

001 (Convertible/Cabriolet) refers to a passenger car equipped with a removable or retractable roof. To qualify for this code, the entire roof must open. Convertible roofs are generally fabric; however, removable hardtops are also included.

002 (Minivan) refers to down-sized cargo or passenger unibody vans.

003 (Coupe) refers to a passenger car equipped usually with two/three doors for ingress/egress and a separate trunk area for cargo (e.g., trunk lid hinged below the backlight). Folding rear seats do not necessarily violate the separate "trunk area" concept. These cars have a sporty flair and can also come with 4 doors.

004 (Low Speed Vehicle (LSV)/Neighborhood Electric Vehicle (NEV)) refers to a vehicle that is designed for travel on secondary roads with speed limits equal to or less than 35 mph. LSVs can sometimes resemble golf carts but differ in that they must adhere to Federal Motor Vehicle Safety Standard (FMVSS) 500. Provisions of FMVSS 500 include the following.

The Vehicle must have:

- Four wheels
- Top speed of at least 20 mph, but it cannot exceed 25 mph
- GVWR_to and GVWR_from less than 3,001 pounds
- Head, turn signal, and tail lamps
- Reflex reflectors
- Parking brake
- Rear view mirrors
- Windshield
- Safety belts
- Seventeen (17) character VIN

005 (Hatchback/Liftback/Notchback) refers to a passenger car equipped with two/four doors for ingress/egress and a rear hatch opening for cargo (e.g., hinged above the backlight). The cargo area is not permanently partitioned from the passenger compartment area.

006 (Motorcycle - Standard) is used when a motor vehicle having a seat or saddle for the use of its operator is a two-wheeled open (e.g., no enclosed body) vehicle propelled by a motor. Motorcycles equipped with a side car should use the code 090 (Motorcycle-Side car).

007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)) refers to a passenger motor vehicle constructed either on a truck chassis or with special features for occasional off-road operation.

008 (Crossover Utility Vehicle (CUV)) refers to a type of sports utility vehicle often built on the same platform as passenger cars. Therefore, these CUVs often have less off-road capability than truck-based SUVs.

009 (Van) Van means a vehicle with a body that fully encloses the driver and a cargo carrying or work performing compartment. The distance from the leading edge of the windshield to the foremost body section of vans is typically shorter than that of pickup trucks and sport utility vehicles per 49 CFR § 523.2. This attribute applies in case it is not clear if it is a 002 (Minivan) or 095 (Cargo Van).

010 (Roadster) refers to an open two-seat passenger car with emphasis on sporting appearance or character.

011 (Truck) A truck is a motor vehicle designed to transport cargo. 011 (Truck) includes light, medium, and heavy truck body styles.

012 (Motorcycle - Scooter) refers to a light, two-wheeled, open motor vehicle on which the driver sits over an enclosed engine with legs together and feet resting on a floorboard.

013 (Sedan/Saloon) refers to a passenger car equipped usually with four doors for ingress/egress and a separate trunk area for cargo (e.g., trunk lid hinged below the backlight). Folding rear seats do not necessarily violate the separate "trunk area" concept. Sedan/Saloon

can sometimes have only 2-doors. If it is not clear whether the vehicle is a <u>003 (Coupe)</u> or 013 (Sedan/Saloon), code as 013 (Sedan/Saloon).

015 (Wagon) refers to a passenger car with an enlarged cargo area. The entire roof covering the cargo area is generally equal in height from front to rear and full height side glass is installed between the C and D-pillars. The rearmost area is not permanently partitioned from the forward passenger compartment area (e.g., "horizontal window shades" to hide cargo do not constitute partitions).

016 (Bus) means a motor vehicle with motive power, except a trailer, designed for carrying more than 10 people per 49 CFR§ 571.3. <u>068 (Streetcar / Trolley)</u> or <u>73 (Bus - School Bus)</u> are categorized separately.

060 (Pickup) is a single unit straight truck with a pickup body style. The pickup truck may be equipped with a removable or retractable roof. 060 (Pickup) includes light, medium, and heavy pickup body styles.

066 (Truck-Tractor) describes a fifth wheel equipped tractor-trailer power unit. The number of trailing units is not a consideration. Without trailers, it is sometimes called a Bobtail.

068 (Streetcar / Trolley) A vehicle used primarily for transporting passengers and typically operating on city streets. This vehicle must have tires. Do NOT use this attribute for street cars/trolleys operating on rails. See <u>Section 203. How to Structure a Case, Step 1: Number of Persons Not in Motor Vehicles</u>.

069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)) is used for off-road recreational vehicles. ATV/ATCs have 3 or 4 wheels, a saddle type seat, and handlebars for steering (no steering wheel). Does not include 105 (Off-road Vehicle - Recreational Off-Highway Vehicles (ROV)).

073 (Bus - School Bus) (designed to carry students, not cross -country or transit) is a bus designed to carry passengers to and from educational facilities and/or related functions. Use this code regardless of whether the vehicle is owned by a school system or a private company. School buses converted for other uses (e.g., church bus) also take this code.

080 (Motorcycle - Sport) is used when a motor vehicle having a seat or saddle for the use of its operator is a two-wheeled open (e.g., no enclosed body) vehicle propelled by a motor specifically optimized for speed, acceleration, braking, and cornering on paved roads.

081 (Motorcycle - Touring / Sport Touring) are specifically designed to excel at covering long distances. They have large-displacement engines, fairings and screens that offer good weather and wind protection, large-capacity fuel tanks for long ranges between fill-ups, and a relaxed, upright seating position.

082 (Motorcycle - Cruiser) are motorcycles usually with large-displacement V-twin engines with a riding position that places the feet forward and the hands relatively high.

083 (Motorcycle - Trike) is used when the vehicle is a three-wheeled open vehicle propelled by a motor, or a three-wheeled motorized bicycle capable of moving either by pedaling or by a motor.

084 (Off-road Vehicle - Dirt Bike / Off-Road) is used when the vehicle is a two-wheeled open vehicle propelled by a motor designed or built for off-road use only.

085 (Motorcycle - Dual Sport / Adventure / Supermoto / On/Off-Road) are street legal machines that are also designed to enter off-road situations. Typically based on a dirt bike chassis, they have added lights, mirrors, signals, and instruments that allow them to be licensed for public roads.

086 (Off-road Vehicle - Enduro (Off-road long-distance racing)) are off-road motorcycles that are modified for riders to compete over a longer course.

087 (Motorcycle - Small / Minibike) A minibike is a miniature motorcycle. Most minibikes have a four-stroke engine and are chain driven. This includes Pocketbike, Mini Choppers, etc.

088 (Off-road Vehicle - Go Kart) is a type of open-wheel car built for off-road use only.

090 (Motorcycle - Side Car) is used when a motor vehicle having a seat or saddle for the use of its operator is a two-wheeled open (e.g., no enclosed body) vehicle propelled by a motor and equipped with a side car. Only motorcycles equipped with a side car should use this code.

094 (Motorcycle - Custom) A custom motorcycle is a motorcycle with stylistic and/or structural changes to the "standard" mass-produced machine offered by major manufacturers. Custom motorcycles might be unique or built in limited quantities. Bobber, Chopper, Scrambler, Cafe Racer, Streetfighter are examples of custom motorcycles.

095 (Cargo Van) refers to a standard van specifically used for cargo.

097 (Off-road Vehicle - Snowmobile) refers to a vehicle designed to be operated over snow propelled by a motor.

098 (Motorcycle - Street) are motorcycles designed to be ridden on paved roads. They have smooth tires with a light tread pattern and engines generally in the 125 cc (7.6 cu in) and over range. Most are capable of speeds up to 100 mph (160 km/h), and many of speeds in excess of 125 mph (201 km/h).

100 (Motorcycle - Enclosed Three Wheeled / Enclosed Autocycle) A large motorcycle with three wheels, configured with two front wheels, a seat(s), and steering wheel and is completely enclosed.

103 (Motorcycle - Unenclosed Three Wheeled / Open Autocycle) A large motorcycle with three wheels, configured with two front wheels and a saddle with handlebars, or seat(s) and a steering wheel, but not completely enclosed.

104 (Motorcycle - Moped) is used when the vehicle is a speed-limited motor-driven cycle capable of moving either by pedaling or by a motor. Note: In the circumstance that a person operating a motorized bicycle is classified as a non-motorist on the police crash report, this person should be coded as a motor vehicle occupant rather than a non-motorist in FARS/CRSS.

105 (Off-road Vehicle - Recreational Off-Road Vehicle (ROV)) ROVs are intended to be used on terrain similar to that on which all-terrain vehicles (ATVs) are used. ROVs are distinguished from ATVs by the presence of a steering wheel instead of a handlebar for steering, bench or bucket seats for the driver and passenger(s) instead of straddle seating, and foot controls for throttle and braking instead of levers located on the handlebar. In addition, ROVs have a rollover protective system (ROPS), restraint systems, and a maximum speed greater than 30 mph.

- 108 (Motorhome) is used when it is known the vehicle is a motor home. This includes light vehicle-based motor homes (chassis mounted), medium/heavy vehicle-based motor homes, and campers or motor homes with unknown GVWR.
- 109 (Motorcycle Cross Country) Cross-country motorcycles are used for cross-country racing.
- 110 (Motorcycle Underbone) is a motorcycle that uses structural tube framing with an overlay of plastic or non-structural body panels and contrasts with monocoque or unibody designs where pressed steel serves both as the vehicle's structure and bodywork.
- 111 (Step Van / Walk-in Van) refers to a multi-stop delivery vehicle. Examples are the Grumman LLV used by the U.S. Postal Service or the Aeromate manufactured by Utilimaster Motor Corporation.
- 113 (Off-road Vehicle Motocross (Off-road, short-distance, closed track racing)) Motocross is a form of off-road motorcycle racing held on enclosed off-road circuits.
- 114 (Motorcycle Competition) the classification simply designates these motorcycles as being used in some sort of racing or competition.
- 117 (Limousine) A limousine is a luxury vehicle typically driven by a chauffeur with a partition between the driver's compartment and the passenger's compartment. Stretch limos, limo buses (also known as party buses), sedan limos, SUV limos, convertible limos, and all other types of limos would also be coded as 117 (Limousine).
- 119 (Sport Utility Truck (SUT)) General Motors labels several of its vehicles as SUTs. These vehicles include Cadillac Escalade, Chevrolet Avalanche, Hummer Pickup Truck. The common features of these vehicles are that they are pickup-truck-based sport utility vehicles with 4 doors and a pickup truck beds.
- 124 (Off-road Vehicle Golf Cart) is a motor vehicle that is designed and manufactured for operation on a golf course for sporting or recreational purposes. Golf carts or golf cars are different from code 004 (Low speed vehicle (LSV)/ Neighborhood Electric Vehicle (NEV)) in that if they are manufactured to go less than 20 mph, they are not subject to the Federal Motor Vehicle Safety Standard (FMVSS) 500. Thus, golf carts will not have a 17-digit VIN. Golf carts will have a nonstandard serial number that may be reported in the case material. Also, typically golf carts will not have safety features required of LSVs/NEVs under the FMVSS like safety belts, head lights, turn signal and tail lamps, rear view mirrors, etc., but may if made to be street legal.
- 125 (Motorcycle Unknown Body Type) Use this code if you are unable to determine the specific type of Motorcycle (i.e., one of the other motorcycle attributes).
- 126 (Off-road Vehicle Farm Equipment) This attribute is not under 49 CFR Part 565 regulation. Farm equipment is an off-road vehicle and does not require a VIN. This attribute is added so that the user can manually code farm equipment related crashes. Farm equipment refers to farming implements other than trucks propelled by a motor (farm tractors, combines, etc.).
- 127 (Off-road Vehicle Construction Equipment) This attribute is not under 49 CFR Part 565 regulation. Construction equipment is an off-road vehicle and does not require a VIN. This attribute is added so that the user can manually code construction equipment related crashes.

Construction equipment refers to construction equipment other than trucks propelled by a motor (bulldozer, road grader, etc.).

Incomplete Vehicles

If any of these attributes are used, <u>FINAL STAGE BODY CLASS</u> must also be completed.

- 062 (Incomplete Cutaway)
- 063 (Incomplete Chassis Cab (Single Cab))
- 064 (Incomplete Glider)
- 065 (Incomplete)
- 067 (Incomplete Stripped Chassis)
- 070 (Incomplete Chassis Cab (Double Cab))
- 071 (Incomplete School Bus Chassis)
- 072 (Incomplete Commercial Bus Chassis)
- 074 (Incomplete Chassis Cab (Number of Cab Unknown))
- 075 (Incomplete Transit Bus Chassis)
- 076 (Incomplete Motor Coach Chassis)
- 077 (Incomplete Shuttle Bus Chassis)
- 078 (Incomplete Motor Home Chassis)
- 107 (Incomplete Bus Chassis)
- 112 (Incomplete Commercial Chassis)

997 (Other) is used when the motorized vehicle in question does not qualify for any of the above listed body classes.

998 (Not Reported)

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "Not Reported."

Code 998 (Not Reported) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).

999 (Unknown) is used when the available information regarding the type of vehicle is reported as Unknown.

Error ID	IF	THEN
440P	UNDERRIDE/OVERRIDE equals 7,	VEHICLE SEQUENCE OF EVENTS must not equal 12, 14, 45, or 55, or CRASH EVENTS equals 12, 14, 45, or 55 for that vehicle, AND the vPIC BODY CLASS for at least one of the corresponding vehicles (THIS VEHICLE or OTHER VEHICLE) in that row equals 006 (Motorcycle – Standard), 012 (Motorcycle – Scooter), 069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcyclestyle)), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring / Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle – Trike), 084 (Off-road Vehicle - Dirt Bike / Off-Road), 085 (Motorcycle - Dual Sport / Adventure / Supermoto / On/Off-Road), 086 (Off-road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small / Minibike), 088 (Off-road Vehicle - Go Kart), 090 (Motorcycle - Side Car), 094 (Motorcycle - Snowmobile), 098 (Motorcycle - Street), 104 (Motorcycle - Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motocross (Off-road short distance, closed track racing)), 114 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle).
907P	VEHICLE IDENTIFICATION NUMBER (VIN) does not equal 0s, 8s, or 9s,	vPIC Body Class must not equal "Trailer" or "Incomplete - Trailer Chassis."
908P	TRAILER VEHICLE IDENTIFICATION NUMBER (VIN) does not equal 0s, 7s, 8s, or 9s,	the trailer VIN decode VPIC BODY CLASS must equal "Trailer" or "Incomplete - Trailer Chassis."
V401	NUMBER OF OCCUPANTS is 01-98, and vPIC BODY CLASS equals 108 (Motorhome), or FINAL STAGE BODY CLASS equals 108 (Motorhome),	NUMBER OF OCCUPANTS should not be greater than 8.
V402	NUMBER OF OCCUPANTS is 01-98, and vPIC BODY CLASS equals 073 (Bus - School Bus), or FINAL STAGE BODY CLASS equals 073 (Bus - School Bus),	NUMBER OF OCCUPANTS should not be greater than 50.

Error ID	IF	THEN
V450	NUMBER OF OCCUPANTS is 01-98, and vPIC BODY CLASS equals equal 016 (Bus) or 068 (Streetcar / Trolley), or FINAL STAGE BODY CLASS equals 016 (Bus) or 068 (Streetcar / Trolley),	NUMBER OF OCCUPANTS should not be greater than 60.
VP01	VEHICLE IDENTIFICATION NUMBER is not equal to 00000000000000000, 8888888888888888888	vPIC BODY CLASS must not equal 61 (Trailer) or 116 (Incomplete Trailer Chassis).
VP03	VEHICLE IDENTIFICATION NUMBER decodes with error code only in (1, 400),	VPIC MAKE, VPIC MODEL, VPIC BODY CLASS, NCSA MAKE, NCSA MODEL, and NCSA BODY TYPE must equal the corresponding decoded data values.
VP04	any one of the fields vPIC MAKE, vPIC MODEL, vPIC BODY CLASS, VEHICLE MODEL YEAR, NCSA MAKE, NCSA MODEL, and NCSA BODY TYPE equals Not Reported (vPIC MAKE [99998], vPIC MODEL [99998], vPIC BODY CLASS [998], VEHICLE MODEL YEAR [9998], NCSA MAKE [97], NCSA MODEL [997], NCSA BODY TYPE [98])	the other six must also equal Not Reported (vPIC MAKE [99998], vPIC MODEL [99998], vPIC BODY CLASS [998], VEHICLE MODEL YEAR [9998], NCSA MAKE [97], NCSA MODEL [997], NCSA BODY TYPE [98]).
VP06	any one of the fields vPIC MAKE, vPIC MODEL, vPIC BODY CLASS, VEHICLE MODEL YEAR, NCSA MAKE, NCSA MODEL and NCSA BODY TYPE does not equal Not Reported (vPIC MAKE [99998], vPIC MODEL [99998], vPIC BODY CLASS [998], VEHICLE MODEL YEAR [9998], NCSA MAKE [97], NCSA MODEL [997], NCSA BODY TYPE [98])	the other six must also not be coded as Not Reported (vPIC MAKE [99998], vPIC MODEL [99998], vPIC BODY CLASS [998], VEHICLE MODEL YEAR [9998], NCSA MAKE [97], NCSA MODEL [997], NCSA BODY TYPE [98]).
VP17	vPIC BODY CLASS equals 104 (Motorcycle - Moped),	NCSA BODY TYPE must equal 81 (Moped or Motorized Bicycle).
VP18	vPIC BODY CLASS equals 012 (Motorcycle - Scooter),	NCSA BODY TYPE must equal 84 (Motor Scooter).
VP19	vPIC BODY CLASS equals 103 (Motorcycle - Unenclosed Three Wheeled/Open Autocycle),	NCSA BODY TYPE must equal 85 (Unenclosed Three Wheel Motorcycle/Unenclosed Autocycle (1 Rear Wheel)).
VP20	vPIC BODY CLASS equals 100 (Motorcycle - Enclosed Three Wheeled/Enclosed Autocycle),	NCSA BODY TYPE must equal 86 (Enclosed Three Wheel Motorcycle/Enclosed Autocycle (1 Rear Wheel)).

Error ID	IF	THEN
VP21	vPIC BODY CLASS equals 105 (Off-road Vehicle - Recreational Off-Road Vehicle (ROV)),	NCSA BODY TYPE must equal 96 (Recreational Off-Highway Vehicle (ROV)).
VP22	vPIC BODY CLASS equals 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), or 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)),	NCSA BODY TYPE must equal 83 (Off-Road Motorcycle).
VP23	vPIC BODY CLASS equals 088 (Off-road Vehicle - Go Kart),	NCSA BODY TYPE must equal 97 (Other Vehicle Type).
VP24	vPIC BODY CLASS equals 069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)),	NCSA BODY TYPE must equal 90 (ATV/ATC (All-Terrain Cycle)).
VP25	vPIC BODY CLASS equals 006 (Motorcycle - Standard), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 085 (Motorcycle - Dual Sport/Adventure/Supermoto/On/Off-Road), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 114 (Motorcycle - Competition), or 125 (Motorcycle - Unknown Body Type),	NCSA BODY TYPE must equal 80 (Two Wheel Motorcycle (excluding motor scooters)) or 89 (Unknown Motored Cycle Type).
VP26	vPIC BODY CLASS equals 087 (Motorcycle - Small/Minibike),	NCSA BODY TYPE must equal 88 (Other Motored Cycle (mini-bike, pocket motorcycles ''pocket bikes'')).
VP27	vPIC BODY CLASS equals 083 (Motorcycle - Trike),	NCSA BODY TYPE must equal 82 (Three- Wheeled Motorcycle (2 Rear Wheels)) or 87 (Unknown Three Wheel Motorcycle Type).
VP28	vPIC BODY CLASS equals 097 (Off-road Vehicle - Snowmobile),	NCSA BODY TYPE must equal 91 (Snowmobile).
VP29	vPIC BODY CLASS equals 004 (Low Speed Vehicle (LSV)/Neighborhood Electric Vehicle (NEV)),	NCSA BODY TYPE must equal 94 (Low Speed Vehicle (LSV)/Neighborhood Electric Vehicle (NEV)).
VP30	vPIC BODY CLASS equals 124 (Off-road Vehicle - Golf Cart),	NCSA BODY TYPE must equal 95 (Golf Cart).
VP31	vPIC BODY CLASS equals 998 (Not Reported),	NCSA BODY TYPE must equal 98 (Not Reported).

Error ID	IF	THEN
VP32	vPIC BODY CLASS equals 999 (Unknown),	NCSA BODY TYPE must equal 09 (Other or Unknown Automobile Type), 19 (Utility Vehicle, Unknown Body Type), 29 (Unknown van type), 39 (Unknown (pickup style)), 48 (Unknown light truck type), 49 (Unknown light vehicle type), 59 (Unknown Bus Type), 78 (Unknown medium/heavy truck type), 79 (Unknown truck type (light/medium/heavy), 87 (Unknown Three Wheel Motorcycle Type), 89 (Unknown motored cycle type), or 99 (Unknown Body Type).
VP33	vPIC BODY CLASS equals 108 (Motorhome) or 078 (Incomplete - Motor Home Chassis) and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 13-18,	NCSA BODY TYPE must equal 65 (Medium/Heavy Vehicle Based Motor Home) or 58 (Other Bus Type).
VP34	vPIC BODY CLASS equals 108 (Motorhome) or 078 (Incomplete - Motor Home Chassis) and POWER UNIT GVWR_From and POWER UNIT GVWR_To equal 11 or 12,	NCSA BODY TYPE must equal 42 (Light Vehicle Based Motor Home (chassis mounted)).
VP35	vPIC BODY CLASS equals 066 (Truck-Tractor),	NCSA BODY TYPE must equal 66 (Truck- Tractor (Cab only or with any number of trailing units; any weight)).
VP36	vPIC BODY CLASS equals 111 (Step Van/Walk-in Van) and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 13-18,	NCSA BODY TYPE must equal 60 (Step Van (GVWR Greater than 10,000 lbs.)).
VP37	vPIC BODY CLASS equals 111 (Step Van/Walk-in Van) and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 11 or 12,	NCSA BODY TYPE must equal 22 (Step Van or Walk-In Van (GVWR less than or equal to 10,000 lbs.)).
VP38	vPIC BODY CLASS equals 011 (Truck), and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 13-18,	NCSA BODY TYPE must equal 61 (Single-Unit Straight Truck or Cab-chassis (GVWR range 10,001 to 19,500 lbs.)), 62 (Single-Unit Straight Truck or Cab-chassis (GVWR range 19,501 to 26,000 lbs.)), 63 (Single-Unit Straight Truck or Cab-chassis (GVWR greater than 26,000 lbs.)), 64 (Single-Unit Straight Truck or Cab-Chassis (GVWR unknown)), 67 (Medium/Heavy Pickup (GVWR greater than 10,000 lbs.)), 71 (Unknown if single-unit or combination unit Medium Truck (GVWR range 10,001 lbs. to 26,000 lbs.), 72 (Unknown if single-unit or combination unit Heavy Truck (GVWR greater than 26,000 lbs.), or 78 (Unknown medium/heavy truck type).

Error ID	IF	THEN		
VP39	vPIC BODY CLASS equals 074 (Incomplete - Chassis Cab (Number of Cab Unknown)), 070 (Incomplete - Chassis Cab (Double Cab)), 063 (Incomplete - Chassis Cab (Single Cab)), 112 (Incomplete - Commercial Chassis), 067 (Incomplete - Stripped Chassis), 065 (Incomplete), 064 (Incomplete - Glider), 062 (Incomplete - Cutaway) and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 13-18,	NCSA BODY TYPE must equal 50 (School Bus), 51 (Cross Country/Intercity Bus), 52 (Transit Bus (City Bus)), 55 (Van-Based Bus GVWR greater than 10,000 lbs.), 58 (Other Bus Type), 59 (Unknown Bus Type), 60 (Step Van (GVWR greater than 10,000 lbs.)), 61 (Single-Unit Straight Truck or Cab-chassis (GVWR range 10,001 to 19,500 lbs.)), 62 (Single-Unit Straight Truck or Cab-chassis (GVWR range 19,501 to 26,000 lbs.)), 63 (Single-Unit Straight Truck or Cab-chassis (GVWR greater than 26,000 lbs.)), 64 (Single-Unit Straight Truck or Cab-Chassis (GVWR unknown)), 65 (Medium/Heavy Vehicle Based Motor Home), 66 (Truck-tractor (Cab only or with any number of trailing units; any weight)), 67 (Medium/Heavy Pickup (GVWR greater than 10,000 lbs.)), 71 (Unknown if single-unit or combination unit Medium Truck (GVWR range 10,001 lbs. to 26,000 lbs.), 72 (Unknown if single-unit or combination unit Heavy Truck (GVWR greater than 26,000 lbs.), 78 (Unknown medium/heavy truck type), or 99 (Unknown Body Type).		

Error ID	IF	NCSA BODY TYPE must equal 01 (Convertible (excludes sunroof, t-bar)), 02 (2-Door Sedan, Hardtop, Coupe), 03 (3-Door/2-Door Hatchback), 04 (4-Door Sedan, Hardtop), 05 (5-Door/4-Door Hatchback), 06 (Station Wagon (excluding van and truck based), 07 (Hatchback, Number of Doors Unknown), 08 (Sedan/Hardtop, Number of Doors Unknown), 09 (Other or Unknown Automobile Type), 10 (Auto-Based Pickup), 11 (Auto-Based Panel), 12 (Large Limousine), 13 (Three-Wheel Automobile or Automobile Derivative), 14 (Compact Utility), 15 (Large Utility), 16 (Utility Station Wagon), 17 (3-Door Coupe), 19 (Utility Vehicle, Unknown Body Type), 20 (Minivan), 21 (Large Van), 22 (Stepvan or walk-in van (GVWR less than or equal to 10,000 lbs.)), 28 (Other van type), 29 (Unknown Van Type), 33 (Convertible pickup), 34 (Light Pickup), 39 (Unknown (pickup style) light conventional truck type), 40 (Cab Chassis Based), 41 (Truck Based Panel), 45 (Other light conventional truck type), 48 (Unknown light truck type), 49 (Unknown light vehicle type).		
VP40	vPIC BODY CLASS equals 074 (Incomplete - Chassis Cab (Number of Cab Unknown)), 070 (Incomplete - Chassis Cab (Double Cab)), 063 (Incomplete - Chassis Cab (Single Cab)), 112 (Incomplete - Commercial Chassis), 067 (Incomplete - Stripped Chassis), 065 (Incomplete), 064 (Incomplete - Glider), 062 (Incomplete - Cutaway) and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 11-12,			
VP41	vPIC BODY CLASS equals 011 (Truck), and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 11-12,	NCSA BODY TYPE must equal 40 (Cab Chassis Based), 41 (Truck Based Panel), 45 (Other light conventional truck type), 48 (Unknown light truck type), or 49 (Unknown light vehicle type).		
VP42	vPIC BODY CLASS equals 060 (Pickup) and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 13-18,	NCSA BODY TYPE should equal 67 (Medium/Heavy Pickup (GVWR greater than 10,000 lbs.)).		
VP43	vPIC BODY CLASS equals 060 (Pickup) and POWER UNIT GVWR_From and POWER UNIT GVWR_To equals 11 or 12,	NCSA BODY TYPE must equal 10 (Auto- Based Pickup), 33 (Convertible pickup), 34 (Light Pickup), or 39 (Unknown (pickup style) light conventional truck type).		
VP44 vPIC BODY CLASS equals 071 (Incomplete School Bus Chassis) or 073 (Bus - School Bus),		NCSA BODY TYPE must equal 50 (School Bus).		

Error ID	IF	NCSA BODY TYPE must equal 55 (Van-Based Bus GVWR greater than 10,000 lbs.) or 61 (Single-Unit Straight Truck or Cab-chassis (GVWR range 10,001 to 19,500 lbs.)), 62 (Single-Unit Straight Truck or Cab-chassis (GVWR range 19,501 to 26,000 lbs.)), 63 (Single-Unit Straight Truck or Cab-chassis (GVWR greater than 26,000 lbs.)), or 64 (Single-Unit Straight Truck or Cab-Chassis (GVWR unknown)).		
VP45	vPIC BODY CLASS equals 009 (Van), 095 (Cargo Van), or 015 (Wagon), and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 13-18,			
VP46	vPIC BODY CLASS equals 009 (Van) or 095 (Cargo Van) and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 11 or 12,	NCSA BODY TYPE must equal 06 (Station Wagon [excluding van and truck based]), 14 (Compact Utility), 20 (Minivan), 21 (Large Van), 28 (Other van type), or 29 (Unknown van type).		
VP47	vPIC BODY CLASS equals 016 (Bus), 107 (Incomplete - Bus Chassis), 076 (Incomplete - Motor Coach Chassis), 077 (Incomplete - Shuttle Bus Chassis), 072 (Incomplete - Commercial Bus Chassis), 075 (Incomplete - Transit Bus Chassis), or 068 (Streetcar/Trolley) and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 13-18,	NCSA BODY TYPE must equal 51 (Cross Country/Intercity Bus), 52 (Transit Bus (City Bus)), 55 (Van-Based Bus GVWR greater than 10,000 lbs.), 58 (Other Bus Type), or 59 (Unknown Bus Type).		
VP48	vPIC BODY CLASS equals 002 (Minivan),	NCSA BODY TYPE must equal 20 (Minivan).		
VP49	vPIC BODY CLASS equals 001 (Convertible/Cabriolet), 003 (Coupe), 013 (Sedan/Saloon), or 010 (Roadster),	NCSA BODY TYPE should equal 01 (Convertible (excludes sunroof, t-bar)), 02 (2-Door Sedan, Hardtop, Coupe), 03 (3-Door/2-Door Hatchback), 04 (4-Door Sedan, Hardtop), 05 (5-Door/4-Door Hatchback), 06 (Station Wagon (excluding van and truck based), 07 (Hatchback, Number of Doors Unknown), 08 (Sedan/Hardtop, Number of Doors Unknown), 09 (Other or Unknown Automobile Type), 11 (Auto-Based Panel), 13 (Three-Wheel Automobile or Automobile Derivative), or 17 (3-Door Coupe).		
VP50	vPIC BODY CLASS equals 117 (Limousine) and POWER UNIT GVWR_From and POWER UNIT GVWR_To equals 11 or 12,	NCSA BODY TYPE must equal 12 (Large Limousine) or 09 (Other or Unknown Automobile Type).		

Error ID	IF	THEN		
VP51	vPIC BODY CLASS equals 005 (Hatchback/Liftback/Notchback),	NCSA BODY TYPE must equal 03 (3-Door/2-Door Hatchback), 05 (5-Door/4-Door Hatchback), 06 (Station Wagon (excluding van and truck based), 07 (Hatchback, Number of Doors Unknown), 09 (Other or Unknown Automobile Type), 14 (Compact Utility), 19 (Utility Vehicle, Unknown Body Type), 20 (Minivan), 21 (Large Van), 48 (Unknown light truck type), or 49 (Unknown light vehicle type).		
VP52	vPIC BODY CLASS equals 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 008 (Crossover Utility Vehicle (CUV)), or 119 (Sport Utility Truck (SUT)) and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 11 or 12,	NCSA BODY TYPE must equal 05 (5-Door/4-Door Hatchback), 06 (Station Wagon (excluding van and truck based)), 14 (Compact Utility), 15 (Large Utility), 16 (Utility Station Wagon), 19 (Utility Vehicle, Unknown Body Type), 34 (Light Pickup), 48 (Unknown light truck type), or 49 (Unknown light vehicle type [automobile, utility, van, or light truck]).		
VP53	NCSA BODY TYPE equals 92 (Farm Equipment Other Than Trucks),	vPIC BODY CLASS must equal 126 (Off-road Vehicle - Farm Equipment).		
VP54	NCSA BODY TYPE equals 93 (Construction Equipment Other Than Trucks),	vPIC BODY CLASS must equal 127 (Off-road Vehicle - Construction Equipment).		
VP55	vPIC BODY CLASS equals 062 (Incomplete - Cutaway), 063 (Incomplete - Chassis Cab (Single Cab)), 064 (Incomplete - Glider), 065 (Incomplete), 067 (Incomplete - Stripped Chassis), 070 (Incomplete - Chassis Cab (Double Cab), 071 (Incomplete - School Bus Chassis), 072 (Incomplete - Commercial Bus Chassis), 074 (Incomplete - Chassis Cab (Number of Cab Unknown)), 075 (Incomplete - Transit Bus Chassis), 076 (Incomplete - Motor Coach Chassis), 077 (Incomplete - Shuttle Bus Chassis), 078 (Incomplete - Motor Home Chassis), 107 (Incomplete - Bus Chassis), or 112 (Incomplete - Commercial Chassis),	FINAL STAGE BODY CLASS must not equal 000 (Not Applicable).		

Error ID	IF	THEN		
VP56	vPIC BODY CLASS equals 016 (Bus), 107 (Incomplete - Bus Chassis), 076 (Incomplete - Motor Coach Chassis), 077 (Incomplete - Shuttle Bus Chassis), 072 (Incomplete - Commercial Bus Chassis), 075 (Incomplete - Transit Bus Chassis), or 068 (Streetcar/Trolley) and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 11-12,	NCSA BODY TYPE must equal 21 (Large Van).		
VP57	vPIC BODY CLASS equals 117 (Limousine) and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 13-18,	NCSA BODY TYPE must equal 50 (School Bus), 51 (Cross Country/Intercity Bus), 52 (Transit Bus (City Bus)), 55 (Van-Based Bus GVWR greater than 10,000 lbs.), 58 (Other Bus Type), 59 (Unknown Bus Type), 60 (Step Van (GVWR greater than 10,000 lbs.)), 61 (Single-Unit Straight Truck or Cab-chassis (GVWR range 10,001 to 19,500 lbs.)), 62 (Single-Unit Straight Truck or Cab-chassis (GVWR range 19,501 to 26,000 lbs.)), 63 (Single-Unit Straight Truck or Cab-chassis (GVWR greater than 26,000 lbs.)), 64 (Single-Unit Straight Truck or Cab-Chassis (GVWR unknown)), 66 (Truck-tractor (Cab only or with any number of trailing units; any weight)), 67 (Medium/Heavy Pickup (GVWR greater than 10,000 lbs.)), 71 (Unknown if single-unit or combination unit Medium Truck (GVWR range 10,001 lbs. to 26,000 lbs.), 72 (Unknown if single-unit or combination unit Heavy Truck (GVWR greater than 26,000 lbs.), 78 (Unknown medium/heavy truck type), 79 (Unknown truck type (light/medium/heavy).		

Error ID	IF	THEN		
VP58	vPIC BODY CLASS equals 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 008 (Crossover Utility Vehicle (CUV), or 119 (Sport Utility Truck (SUT) and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 13-18,	(Transit Bus (City Bus)), 55 (Van-Based Bus		
VP59	vPIC BODY CLASS equals 072 (Incomplete - Commercial Bus Chassis), 075 (Incomplete - Transit Bus Chassis), 076 (Incomplete - Motor Coach Chassis), 077 (Incomplete - Shuttle Bus Chassis), or 107 (Incomplete - Bus Chassis),	FINAL STAGE BODY CLASS must equal 016 (Bus), 073 (Bus-School Bus), 997 (Other (Specify:)), 998 (Not Reported), or 999 (Unknown).		
VP60	vPIC BODY CLASS equals 071 (Incomplete - School Bus Chassis),	FINAL STAGE BODY CLASS must equal 073 (Bus-School Bus), 997 (Other (Specify:)), 998 (Not Reported), or 999 (Unknown).		
VP61	vPIC BODY CLASS equals 078 (Incomplete - Motor Home Chassis),	FINAL STAGE BODY CLASS must equal 108 (Motorhome), 997 (Other (Specify:)), 998 (Not Reported), or 999 (Unknown).		
VP62	FINAL STAGE BODY CLASS equals 011 (Truck), 060 (Pickup), or 066 (Truck-Tractor),	vPIC BODY CLASS must equal 062 (Incomplete - Cutaway), 063 (Incomplete - Chassis Cab (Single Cab)), 064 (Incomplete - Glider), 065 (Incomplete), 067 (Incomplete - Stripped Chassis), 070 (Incomplete - Chassis Cab (Double Cab)), 074 (Incomplete - Chassis Cab (Number of Cab Unknown)), or 112 (Incomplete - Commercial Chassis).		

Error IF ID		THEN		
VP63	FINAL STAGE BODY CLASS equals 004 (Low Speed Vehicle (LSV)),	vPIC BODY CLASS should not equal 063 (Incomplete - Chassis Cab (Single Cab)), 070 (Incomplete - Chassis Cab (Double Cab)), 071 (Incomplete - School Bus Chassis), 074 (Incomplete - Chassis Cab (Number of Cab Unknown)), 076 (Incomplete - Motor Coach Chassis).		
VP64	FINAL STAGE BODY CLASS equals 009 (Van), 015 (Wagon), 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 008 (Crossover Utility Vehicle (CUV)), 068 (Streetcar/Trolley), 095 (Cargo Van), 111 (Step Van/Walk-in Van),	vPIC BODY CLASS should not equal 071 (Incomplete - School Bus Chassis), 076 (Incomplete - Motor Coach Chassis), or 078 (Incomplete - Motor Home Chassis).		
VP65	FINAL STAGE BODY CLASS equals 117 (Limousine),	vPIC BODY CLASS should not equal 063 (Incomplete - Chassis Cab (Single Cab)), 070 (Incomplete - Chassis Cab (Double Cab)), 071 (Incomplete - School Bus Chassis), 074 (Incomplete - Chassis Cab (Number of Cab Unknown)), 075 (Incomplete - Transit Bus Chassis), or 077 (Incomplete - Shuttle Bus Chassis).		

Error ID	IF THEN	
VP66	vPIC BODY CLASS equals 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 (Off-road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport/Adventure/Supermoto/On/Off-Road), 086 (Off-road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 088 (Off-road Vehicle - Go Kart), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 097 (Off-road Vehicle - Snowmobile), 098 (Motorcycle - Street), 100 (Motorcycle - Enclosed Three Wheeled/Enclosed Autocycle), 103 (Motorcycle - Unenclosed Three Wheeled/Open Autocycle), 104 (Motorcycle - Moped), 105 (Off-road Vehicle - Recreational Off-Road Vehicle (ROV)), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motocross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 124 (Off-road Vehicle - Golf Cart), or 125 (Motorcycle - Unknown Body Type),	POWER UNIT GVWR_From and POWER UNIT GVWR_To must equal 11 or 99.
VP67	vPIC BODY CLASS equals 001 (Convertible/Cabriolet), 003 (Coupe), 005 (Hatchback/Liftback/Notchback), 010 (Roadster), or 013 (Sedan/Saloon)	POWER UNIT GVWR_From and POWER UNIT GVWR_To must equal 11 or 12.
VP68	vPIC BODY CLASS equals 002 (Minivan), 008 (Crossover Utility Vehicle (CUV)), or 119 (Sport Utility Truck (SUT)),	POWER UNIT GVWR_From and POWER UNIT GVWR_To must equal 11, 12, 98, or 99.
VP69	vPIC BODY CLASS equals 060 (Pickup) or 095 (Cargo Van),	POWER UNIT GVWR_From and POWER UNIT GVWR_To should equal 11, 12, 13, 14, 98, or 99.
VP70	TRAILER VEHICLE IDENTIFICATION NUMBER is valid and decodes with error code only in 0, 1, or 400,	TRAILER VEHICLE IDENTIFICATION NUMBER decoded vPIC BODY CLASS must equal 061 (Trailer), 116 (Incomplete - Trailer Chassis), or 065 (Incomplete).
VP84	vPIC BODY CLASS equals 073, 066, or 068	MOTOR CARRIER IDENTIFICATION NUMBER, VEHICLE CONFIGURATION, and CARGO BODY TYPE must not equal 00.

Error ID	IF	THEN			
ID VP87	vPIC BODY CLASS equals 006 (Motorcycle – Standard), 012 (Motorcycle – Scooter), 069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring / Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle – Trike), 084 (Off-road Vehicle - Dirt Bike / Off-Road), 085 (Motorcycle - Dual Sport / Adventure / Supermoto / On/Off-Road), 086 (Off-road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small / Minibike), 088 (Off-road Vehicle - Go Kart), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 097 (Off-road Vehicle - Snowmobile), 098 (Motorcycle - Street), 104 (Motorcycle - Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motocross (Off-road short distance, closed track racing)), 114 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle),				
VP88	UNDERRIDE/OVERRIDE equals 1 or 2,	vPIC BODY CLASS must not equal 006 (Motorcycle – Standard), 012 (Motorcycle – Scooter), 069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring / Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle – Trike), 084 (Off- road Vehicle - Dirt Bike / Off-Road), 085 (Motorcycle - Dual Sport / Adventure / Supermoto / On/Off-Road), 086 (Off-road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small / Minibike), 088 (Off-road Vehicle - Go Kart), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 097 (Off-road Vehicle - Snowmobile), 098 (Motorcycle - Street), 104 (Motorcycle - Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motocross (Off-road short distance, closed track racing)), 114 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle).			
VP89	VPIC BODY CLASS equals 997,	NCSA BODY TYPE should be 09 or 97.			

Error ID	IF	THEN
VP90	vPIC BODY CLASS equals 015 (Wagon), and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 11 or 12,	NCSA BODY TYPE must equal code 03 (3-Door/2-Door Hatchback), 05 (5-Door/4-Door Hatchback), 06 (Station Wagon (excluding van and truck based)), 09 (Other or Unknown Automobile Type), 14 (Compact Utility), 15 (Large Utility), 16 (Utility Station Wagon), 20 (Minivan), 19 (Utility Vehicle, Unknown Body Type), 21 (Large Van), 28 (Other van type), 29 (Unknown van type), 48 (Unknown light truck type), or 49 (Unknown light vehicle type).

Consistency Checks (CRSS Only) (See Section 400):

Error ID	IF	THEN
U361	UNLIKELY: HIT-AND-RUN equals 1, and vPIC BODY CLASS is not equal to 069, 084, 086, 088, 097, 105, 113, 124, 126, 127, and VEHICLE LICENSE PLATE NUMBER is equal to 0s.	

V14 - NCSA Make

FORMAT: 2 numeric

SAS NAME: Vehicle.MAKE, Person.MAKE, Parkwork.PMAKE

ELEMENT VALUES:

Codes	Attributes	Codes	Attributes	Codes	Attributes
01	American Motors	47	<u>Saab</u>	89	White/Autocar White/GMC
02	Jeep/Kaiser-Jeep/Willys-	48	<u>Subaru</u>	90	Bluebird
	<u>Jeep</u>				
03	AM General	49	<u>Toyota</u>	91	Eagle Coach
06	<u>Chrysler</u>	50	<u>Triumph</u>	92	<u>Gillig</u>
07	Dodge	51	<u>Volvo</u>	93	<u>MCI</u>
08	<u>Imperial</u>	52	<u>Mitsubishi</u>	94	Thomas Built
09	<u>Plymouth</u>	53	<u>Suzuki</u>	97	Not Reported
10	<u>Eagle</u>	54	<u>Acura</u>	98	Other Make
12	<u>Ford</u>	55	<u>Hyundai</u>	99	<u>Unknown Make</u>
13	<u>Lincoln</u>	56	<u>Merkur</u>		
14	<u>Mercury</u>	57	<u>Yugo</u>		
18	Buick/Opel	58	<u>Infiniti</u>		
19	Cadillac	59	Lexus		
20	Chevrolet	60	Daihatsu		
21	Oldsmobile	61	Sterling		
22	Pontiac	62	Land Rover		
23	GMC	63	Kia		
24	Saturn	64	Daewoo		
25	Grumman	65	Smart		
26	Coda	67	Scion		
29	Other Domestic	69	Other Import		
	Manufacturers				
30	Volkswagen	70	BSA		
31	Alfa Romeo	71	Ducati		
32	Audi	72	Harley-Davidson		
33	Austin/Austin Healey	73	Kawasaki		
34	BMW	74	Moto-Guzzi		
35	Nissan/Datsun	75	Norton		
36	Fiat Fiat	76	Yamaha		
37	Honda	77	Victory		
38	Isuzu	80	Brockway		
39		81	Diamond Reo/Reo		
40	<u>Jaguar</u> <u>Lancia</u>	82	Freightliner		
41	Mazda	83	FWD		
41 42					
42	Mercedes-Benz	84	International Harvester/Navistar		
43	MG	85	Kenworth		
43		86			
	Peugeot Persohe		Mack Patarbilt		
45	Porsche	87	Peterbilt		
46	Renault	88	<u>Iveco/Magirus</u>		

Definition: This element identifies the make (manufacturer) of this vehicle **by NHTSA historically**.

Remarks: SEE ADDITIONAL REMARKS UNDER <u>vPIC MAKE / vPIC MODEL / vPIC BODY CLASS OVERVIEW</u>.

Historically NCSA MAKE attributes are organized into general groups. These groups are:

Codes	Attributes	
01-28	Domestic Passenger Car	
29	Other Domestic Passenger Car	
30-67	Import Passenger Car	
69	Other Import Passenger Car	
70-77	Motored Cycle/Moped	
80-89	Truck/Bus	
90-94	Bus	
97	Not Reported	
98	Other Make (where MAKE "29" or "69" are not applicable)	
99	Unknown Make	

Note that for both *NCSA* MAKE and *NCSA* MODEL, the use of the terms "other" and "unknown" have very specific meanings. "Other" refers to a make or model that is known but is not explicitly listed. "Unknown" refers to the situation where no specific make or model is known. Examples: 399 (Unknown (Automobile)), 499 (Unknown (Light Truck)), 739 (Unknown cc (ATV)), 884 (Medium/Heavy Truck - Unknown Engine Location), 999 (Unknown).

Selection of the proper "other" or "unknown" code can only be made with consideration of the vehicle's <u>NCSA BODY TYPE</u>. For example, if a medium/heavy truck or bus make is known and is not listed, *NCSA* MAKE is coded **Other Make (med/heavy truck/bus or "other")** and the appropriate model code is used. If the make is unknown but the body type is known as a "school bus," for instance, *NCSA* MAKE is coded **99 (Unknown Make)** and *NCSA* MODEL is coded **989 (Unknown (Bus)**.

97 (Not Reported) Code Not Reported only when vPIC MAKE, vPIC MODEL, vPIC BODY CLASS, NCSA MAKE, NCSA MODEL, NCSA BODY TYPE, and VEHICLE MODEL YEAR are ALL Not Reported. If you have partial information, see 99 (Unknown Make).

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported.**"

Code **97** (**Not Reported**) in these two situations:

1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).

2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).

99 (Unknown Make) is used when the vehicle is reported as Unknown unless reliable evidence indicates the vehicle's make. If any detail is known regarding the vehicle's MAKE / MODEL/BODY / MODEL YEAR, code what is known and then code the other elements as Unknown.

Please refer to the Appendix Alphabetical Listing of NCSA Makes;

Please refer to the Appendix <u>Numerical Listing of NCSA Makes</u>.

Error ID	IF	THEN
920P	any one of the fields <i>NCSA</i> MAKE, <i>NCSA</i> MODEL, <i>NCSA</i> BODY TYPE, and <i>VEHICLE</i> MODEL YEAR, equals Not Reported [<i>NCSA</i> MAKE (97), <i>NCSA</i> MODEL (997), <i>NCSA</i> BODY TYPE (98), and <i>VEHICLE</i> MODEL YEAR (9998)],	the other three must also equal Not Reported.
921P	NCSA MAKE is not 97, 98, 99, and equals, and NCSA MODEL equals,	VEHICLE MODEL YEAR must equal, or CRASH YEAR plus 1.
930P	any one of the fields <i>NCSA</i> MAKE, <i>NCSA</i> MODEL, <i>NCSA</i> BODY TYPE, and <i>VEHICLE</i> MODEL YEAR, does not equal Not Reported [<i>NCSA</i> MAKE (97), <i>NCSA</i> MODEL (997), <i>NCSA</i> BODY TYPE (98), and <i>VEHICLE</i> MODEL YEAR (9998)],	the other three must also not be coded as Not Reported.
960P	NCSA MAKE is not 98, 99, and equals, and NCSA MODEL equals,	NCSA BODY TYPE must equal (NCSA MAKE, NCSA MODEL, and NCSA BODY TYPE must be valid according to Vehicle Tables).
V922	NCSA MAKE equals 98, 99, and NCSA MODEL equals,	VEHICLE MODEL YEAR should equal (NCSA MODEL and VEHICLE MODEL YEAR should be valid according to Vehicle Tables).
V961	NCSA MAKE equals 98, 99, and NCSA MODEL equals,	NCSA BODY TYPE should equal (NCSA MODEL and NCSA BODY TYPE should be valid according to the Vehicle Tables).
VP03	VEHICLE IDENTIFICATION NUMBER decodes with error code only in (1, 400),	VPIC MAKE, VPIC MODEL, VPIC BODY CLASS, NCSA MAKE, NCSA MODEL, and NCSA BODY TYPE must equal the corresponding decoded data values.

Error ID	IF	THEN
VP04	any one of the fields vPIC MAKE, vPIC MODEL, vPIC BODY CLASS, VEHICLE MODEL YEAR, NCSA MAKE, NCSA MODEL, and NCSA BODY TYPE equals Not Reported (vPIC MAKE [99998], vPIC MODEL [99998], vPIC BODY CLASS [998], VEHICLE MODEL YEAR [9998], NCSA MAKE [97], NCSA MODEL [997], NCSA BODY TYPE [98])	the other six must also equal Not Reported (vPIC MAKE [99998], vPIC MODEL [99998], vPIC BODY CLASS [998], VEHICLE MODEL YEAR [9998], NCSA MAKE [97], NCSA MODEL [997], NCSA BODY TYPE [98]).
VP06	any one of the fields vPIC MAKE, vPIC MODEL, vPIC BODY CLASS, VEHICLE MODEL YEAR, NCSA MAKE, NCSA MODEL and NCSA BODY TYPE does not equal Not Reported (vPIC MAKE [99998], vPIC MODEL [99998], vPIC BODY CLASS [998], VEHICLE MODEL YEAR [9998], NCSA MAKE [97], NCSA MODEL [997], NCSA BODY TYPE [98])	the other six must also not be coded as Not Reported (vPIC MAKE [99998], vPIC MODEL [99998], vPIC BODY CLASS [998], VEHICLE MODEL YEAR [9998], NCSA MAKE [97], NCSA MODEL [997], NCSA BODY TYPE [98]).
VP10	vPIC MAKE equals 99997	NCSA MAKE must equal 98 (Other Make).
VP11	vPIC MAKE equals 99999	NCSA MAKE must equal 99 (Unknown Make).

V15 - NCSA Model

FORMAT: 3 numeric

SAS NAME: Vehicle.MODEL, Person.MODEL, Parkwork.PMODEL

ELEMENT VALUES:

Codes	Attributes	
001-397	Automobiles	
398	Other (Automobile)	
399	Unknown (Automobile)	
401-497	Light Trucks	
498	Other (Light Trucks)	
499	Unknown (Light Trucks)	
598	Other (Low Speed Vehicle (LSV) / Neighborhood Electric Vehicle (NEV))	
599	Unknown (Low Speed Vehicle (LSV) / Neighborhood Electric Vehicle (NEV))	
701-706	Motorcycles	
707	Electric Motorcycle	
709	Unknown cc (Motorcycles)	
731-734	All-Terrain Vehicles	
739	Unknown cc (ATV)	
801-809	Other Make (Medium/Heavy Trucks)	
850	Motor Home	
870	Medium/Heavy Van-Based Vehicle	
880	Medium/Heavy Pickup (pickup-style only - over 10,000 lbs.)	
881	Medium/Heavy Trucks - CBE	
882	Medium/Heavy Trucks - COE (low entry)	
883	Medium/Heavy Trucks - COE (high entry)	
884	Medium/Heavy Trucks - Unknown engine location	
890	Medium/Heavy Trucks - COE (entry position unknown)	
898	Other (Medium/Heavy Trucks)	
901-908	Other Make (Buses)	
981-987	Buses	
988	Other (Bus)	
989	Unknown (Bus)	
997	Not Reported	

Codes	Attributes
998	Other (Vehicle)
999	<u>Unknown</u>

Definition: This element identifies the *NCSA* model of this vehicle within a given *NCSA* make.

Remarks: SEE ADDITIONAL REMARKS UNDER <u>vPIC MAKE / vPIC MODEL / vPIC BODY CLASS OVERVIEW</u>.

NCSA MODEL refers to the series of vehicles for a make (e.g., Pintos, Galaxies, Mustangs are Models of Ford). It does not refer to the various styles within a model unless they are listed in the codes for NCSA MODEL.

NCSA MODEL attributes are organized into general groups. These groups are:

Codes	Attributes	
001-399	Passenger Car (automobile)	
400-499	Light Trucks (including truck-based utility vehicles, light duty pickup trucks, standard pickup trucks, vans, mini vans, van-based station wagons, van-based buses, van derivatives, and truck-based station wagons).	
598	Low Speed Vehicle (LSV) / Neighborhood Electric Vehicle (NEV)	
700-739	Motored Cycles (including motorcycles, mini-bikes, motor scooters, dirt bikes, and mopeds).	
850	Motor Home	
870	Medium/Heavy Van-Based Vehicle	
880-897	Trucks (including all trucks over 10,000 lbs. GVWR except those pickup type trucks mentioned under NCSA BODY TYPE code 34 (Light Pickup)).	
898	Other, Unknown, truck over 10,000 lbs. GVWR.	
980-996	All buses except those that are van-based.	
988	Other bus over 10,000 lbs. GVWR.	
989	Unknown Bus	
997	Not Reported	
998	Other Vehicle	
999	Unknown Vehicle	

Note that for both *NCSA* MAKE and *NCSA* MODEL, the use of the terms "other" and "unknown" have very specific meanings. "Other" refers to a make or model that is known but is not explicitly listed. "Unknown" refers to the situation where no specific make or model is known. Examples: **399** (Unknown (Automobile)), **499** (Unknown (Light Trucks)), **739** (Unknown cc (ATV)), **884** (Medium/Heavy Trucks - Unknown Engine Location), **999** (Unknown).

Selection of the proper "other" or "unknown" code can only be made with consideration of the vehicle's <u>NCSA BODY TYPE</u>. For example, if a medium/heavy truck or bus make is known and is not listed, *NCSA* MAKE is coded **Other Make (med/heavy truck/bus or "other")** and the appropriate model code is used. If the make is unknown but the body type is known as a "school bus," for instance, *NCSA* MAKE is coded **99 (Unknown Make)** and *NCSA* MODEL is coded **989 (Unknown (Bus)**.

997 (Not Reported) Code Not Reported only when vPIC MAKE, vPIC MODEL, vPIC BODY CLASS, NCSA MAKE, NCSA MODEL, NCSA BODY TYPE, and VEHICLE MODEL YEAR are ALL Not Reported. If you have partial information, see 999 (Unknown).

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**."

Code **997** (**Not Reported**) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).

999 (Unknown) is used when the vehicle is reported as unknown unless reliable evidence indicates the vehicle's model. If any detail is known regarding the vehicle's NCSA MAKE / NCSA MODEL / NCSA BODY TYPE / VEHICLE MODEL YEAR, code what is known and then code the other elements as Unknown.

Error ID	IF	THEN
920P	any one of the fields <i>NCSA</i> MAKE, <i>NCSA</i> MODEL, <i>NCSA</i> BODY TYPE, and <i>VEHICLE</i> MODEL YEAR, equals Not Reported [<i>NCSA</i> MAKE (97), <i>NCSA</i> MODEL (997), <i>NCSA</i> BODY TYPE (98), and <i>VEHICLE</i> MODEL YEAR (9998)],	the other three must also equal Not Reported.
921P	NCSA MAKE is not 97, 98, 99, and equals, and NCSA MODEL equals,	VEHICLE MODEL YEAR must equal, or CRASH YEAR plus 1.
930P	any one of the fields <i>NCSA</i> MAKE, <i>NCSA</i> MODEL, <i>NCSA</i> BODY TYPE, and <i>VEHICLE</i> MODEL YEAR, does not equal Not Reported [<i>NCSA</i> MAKE (97), <i>NCSA</i> MODEL (997), <i>NCSA</i> BODY TYPE (98), and <i>VEHICLE</i> MODEL YEAR (9998)],	the other three must also not be coded as Not Reported.

Error ID	IF	THEN
960P	NCSA MAKE is not 98, 99, and equals, and NCSA MODEL equals,	NCSA BODY TYPE must equal (NCSA MAKE, NCSA MODEL, and NCSA BODY TYPE must be valid according to Vehicle Tables).
V922	NCSA MAKE equals 98, 99, and NCSA MODEL equals,	VEHICLE MODEL YEAR should equal (NCSA MODEL and VEHICLE MODEL YEAR should be valid according to Vehicle Tables).
V961	NCSA MAKE equals 98, 99, and NCSA MODEL equals,	NCSA BODY TYPE should equal (NCSA MODEL and NCSA BODY TYPE should be valid according to the Vehicle Tables).
VP03	VEHICLE IDENTIFICATION NUMBER decodes with error code only in (1, 400),	VPIC MAKE, VPIC MODEL, VPIC BODY CLASS, NCSA MAKE, NCSA MODEL, and NCSA BODY TYPE must equal the corresponding decoded data values.
VP04	any one of the fields vPIC MAKE, vPIC MODEL, vPIC BODY CLASS, VEHICLE MODEL YEAR, NCSA MAKE, NCSA MODEL, and NCSA BODY TYPE equals Not Reported (vPIC MAKE [99998], vPIC MODEL [99998], vPIC BODY CLASS [998], VEHICLE MODEL YEAR [9998], NCSA MAKE [97], NCSA MODEL [997], NCSA BODY TYPE [98])	the other six must also equal Not Reported (vPIC MAKE [99998], vPIC MODEL [99998], vPIC BODY CLASS [998], VEHICLE MODEL YEAR [9998], NCSA MAKE [97], NCSA MODEL [997], NCSA BODY TYPE [98]).
VP06	any one of the fields vPIC MAKE, vPIC MODEL, vPIC BODY CLASS, VEHICLE MODEL YEAR, NCSA MAKE, NCSA MODEL and NCSA BODY TYPE does not equal Not Reported (vPIC MAKE [99998], vPIC MODEL [99998], vPIC BODY CLASS [998], VEHICLE MODEL YEAR [9998], NCSA MAKE [97], NCSA MODEL [997], NCSA BODY TYPE [98])	the other six must also not be coded as Not Reported (vPIC MAKE [99998], vPIC MODEL [99998], vPIC BODY CLASS [998], VEHICLE MODEL YEAR [9998], NCSA MAKE [97], NCSA MODEL [997], NCSA BODY TYPE [98]).
VP15	UNLIKELY: vPIC MODEL equals 99997 and NCSA MODEL does not equal 398 (Other (Automobile)), 498 (Other (Light Trucks)), 598 (Other (Low Speed Vehicle (LSV)/Neighborhood Electric Vehicle (NEV))), 709 (Unknown cc (Motorcycles)), 739 (Unknown cc (ATV)), 898 (Other (Medium/Heavy Trucks)), 988 (Other (Bus)), or 998 (Other (Vehicle)).	

Error ID	IF	THEN
VP16	UNLIKELY: vPIC MODEL equals 99999 and NCSA MODEL does not equal 399 (Unknown (Automobile)), 499 (Unknown (Light Trucks)), 599 (Unknown (Low Speed Vehicle (LSV)/Neighborhood Electric Vehicle (NEV))), 709 (Unknown cc (Motorcycles)), 739 (Unknown cc (ATV)), 884 (Medium/Heavy Trucks - Unknown engine location), 898 (Other, Unknown, truck over 10,000 lbs. GVWR), 989 (Unknown (Bus)), or 999 (Unknown).	

V16 - NCSA Body Type

FORMAT: 2 numeric

 $SAS\ NAME:\ Vehicle.BODY_TYP,\ Person.BODY_TYP,\ Parkwork.PBODY_TYP$

ELEMENT VALUES:

Automobiles

Codes	Attributes
01	Convertible (excludes sunroof, t-bar)
02	2-Door Sedan, Hardtop, Coupe
03	3-Door/2-Door Hatchback
04	4-Door Sedan, Hardtop
05	5-Door/4-Door Hatchback
06	Station Wagon (excluding van and truck based)
07	Hatchback, Number of Doors Unknown
17	3-Door Coupe
08	Sedan/Hardtop, Number of Doors Unknown
09	Other or Unknown Automobile Type

Automobile Derivatives

Codes	Attributes
10	<u>Auto-Based Pickup</u> (includes Chevrolet - El Camino, GMC -Caballero, Ford - Ranchero, Chevrolet - SSR; Subaru-Baha, Brat, and Volkswagen - Rabbit Pickup)
11	Auto-Based Panel (Cargo Station Wagon, auto-based Ambulance/Hearse)
12	<u>Large Limousine</u> (More than four side doors or stretched chassis)
13	Three-Wheel Automobile or Automobile Derivative

Utility Vehicles

Codes	Attributes
14	Compact Utility (ANSI D16.1 Utility Vehicle Categories "Small" and "Midsize"):
	Small: Chevy-Tracker; GMC- Jimmy/Typhoon; Isuzu - Trooper II; Oldsmobile - Bravada (1991-94); Suzuki - Samurai, Sidekick.
	Midsize: Acura - SLX, RDX; Alfa Romeo - Stelvio; AM General - Dispatcher, H3; Audi - Q3, Q5, Q7, Allroad, SQ5; BMW - X1, X2, X3, X5, X6; Buick - Rendezvous, Rainier, Encore, Envision; Cadillac - XT5; Chevrolet - Captiva, S10-Blazer/TrailBlazer, Tracker (1999 on), TrailBlazer (2003 on), Trax, Equinox; Daihatsu - Rocky; Dodge - Durango (1998-2003), Nitro, Raider; Fiat - 500L, 500X; Ford - Bronco II (1984 on), Escape, Explorer, Explorer Sport, EcoSport; GMC - Jimmy (1995 on), Envoy, Terrain; Honda - CRV, Passport, Element, HR-V; Hyundai - Santa Fe, Tucson, Veracruz (2007 only), Kona; Infiniti - QX4, JX35, QX60, QX70; Isuzu - Amigo, Axiom, Rodeo, Rodeo Sport, Vehicross, Trooper, Hombre; Jaguar - E-Pace, F-Pace, I-Pace; Jeep - Cherokee (1984 on), Commander, Grand Cherokee, Liberty, Patriot, Renegade, Wagoneer, Wrangler; Kia - Sportage, Sorrento, Niro; Land Rover - Defender (1993, 1995-1997), Discovery, Discovery Sport, Freelander (2002-2003) Evogue; Lamborghini - Urus; Lexus - RX300, RX330, GX470, GX460, NX; Lincoln - Aviator, MKC; Mazda - CX-5, Navajo, Tribute; Maserati - Levante; Mercedes - M, ML, G, GLK, GLE, GLC; Mercury - Mariner, Mountaineer; Mitsubishi - Montero, Montero Sport, Endeavor, Eclipse Cross; Nissan - Juke, Pathfinder, Xterra; Oldsmobile - Bravada (1996 on); Pontiac - Aztek, Torrent; Porsche - Macan; Saab - 9-7x; Saturn - Vue; Subaru - B9 Tribeca, Forester, XV Crosstrek, Ascent; Suzuki - Vitara, Vitara V6, Grand Vitara, X-90, XL7; Tesla - Model X; Toyota - 4-Runner, FJ Cruiser, Highlander, RAV4, C-HR; Volkswagen - Tiguan, The Thing, Atlas; Volvo - XC70, XC90, XC40.
15	<u>Large utility</u> (ANSI D16.1 Utility Vehicle Categories and "Full Size" and "Large")
	Full Size: Acura - MDX; AMC - Hummer; BMW - X5; Buick - Enclave (2013 on), Cadillac - Escalade; Chevrolet - Full-size Blazer, Suburban, Tahoe, Traverse (2013 on); Chrysler - Aspen, Dodge - Durango (2004 on), Ramcharger; Ford - Full-size Bronco (78 and after), Expedition; GMC - Full-size Jimmy/Yukon, Suburban/ Yukon XL, Acadia; Honda - Pilot; Hyundai - Veracruz (2008 on); Infiniti - QX56, QX80; Isuzu - Ascender; Jeep - Cherokee (83 and before); Kia Borrego; Land Rover - LR2, LR3, LR4, Freelander (2004 on), Range Rover, Discovery, Velar; Lexus - LX450/470/570; Lincoln - Navigator; Mazda - CX-9, Mercedes Benz - GL, GLS; Nissan - Armada; Plymouth - Trailduster; Porsche - Cayenne; Toyota - Land Cruiser, Sequoia; Volkswagen - Touareg.
	Large: Avanti - Studebaker XUV; AMC -Hummer (H1, H2)
16	<u>Utility station wagon</u> (includes suburban limousines), Cadillac - Escalade ESV; Chevrolet - Suburban (Yukon XL (2000 on), Travellall, Ford - Excursion, Jeep - Grand Wagoneer)
19	<u>Utility Vehicle, Unknown Body Type</u>

Van-Based Light Trucks (GVWR less than or equal to 10,000 lbs)

Codes	Attributes
20	Minivan (AM General - MV-1; Buick - Terraza; Chevrolet - Astro, City Express, Lumina, Uplander, Venture; Chrysler - Town and Country, Voyager, Pacifica; Dodge - Vista Van, Caravan, Grand Caravan, RAM-C/V, Promater City; Ford - Aerostar, Windstar, Freestar, Transit Connect; GMC - Safari, Savana; Honda - Odyssey; Hyundai - Entourage; Isuzu - Oasis; Kia - Sedona; Mazda - MPV; Mercedes - Metris; Mercury - Monterey, Villager; Mitsubishi - Minivan; Nissan - Altra EV, Axxess, Quest, Van, NV200; Oldsmobile - Silhouette; Plymouth - Voyager, Grand Voyager, Vista; Pontiac - Transport, Montana; Saturn - Relay; Toyota - Minivan, Previa, Sienna; Volkswagen - Camper, Eurovan, Routan, Vanagon.)
21	Large Van Includes van-based buses (B150-B350, Sportsman, Royal Maxiwagon, Ram, Tradesman, Voyager [83 and before], E150-E350, Econoline, Clubwagon, Chateau, G10-G30, Chevy Van, Beauville, Sport Van, G15-G35, Rally Van, Vandura, Ford - Transit, Freightliner - Sprinter/Advantage, Mercedes Benz -Sprinter, Dodge - Sprinter, RAM-Promaster, Nissan - NV, Ford - Transit)
22	Step-van or walk-in van (GVWR less than or equal to 10,000 lbs.)
28	Other van type (Hi-Cube Van, Kary)
29	Unknown van type

Light Conventional Trucks (Pickup style cab, GVWR less than or equal to 10,000 lbs)

Codes	Attributes
33	Convertible pickup
34	Light Pickup
39	<u>Unknown (pickup style)</u> light conventional truck type

Other Light Trucks (GVWR less than or equal to 10,000 lbs)

Codes	Attributes
40	Cab Chassis Based (includes Rescue Vehicle, Light Stake, Dump, and Tow Truck)
41	Truck Based Panel
45	Other light conventional truck type
48	<u>Unknown light truck type</u>
49	<u>Unknown light vehicle type</u> (automobile, utility vehicle, van, light truck)

Buses (excludes van-based buses with a GVWR less than or equal to 10,000 lbs)

Codes	Attributes
50	School Bus
51	Cross Country/Intercity Bus
52	Transit Bus (City Bus)
55	Van-Based Bus GVWR greater than 10,000 lbs.
58	Other Bus Type
59	Unknown Bus Type

Medium/Heavy Trucks (GVWR greater than 10,000 lbs)

Codes	Attributes
60	Step Van (GVWR greater than 10,000 lbs.)
61	Single-unit straight truck or Cab-Chassis (GVWR range 10,001 to 19,500 lbs.)
62	Single-unit straight truck or Cab-Chassis (GVWR range 19,501 to 26,000 lbs.)
63	Single-unit straight truck or Cab-Chassis (GVWR greater than 26,000 lbs.)
64	Single-unit straight truck or Cab-Chassis (GVWR unknown)
66	Truck-tractor (Cab only, or with any number of trailing units; any weight)
67	Medium/Heavy Pickup (GVWR greater than 10,000 lbs.)
71	Unknown if single-unit or combination unit Medium Truck (GVWR range 10,001 lbs. to 26,000 lbs.)
72	Unknown if single-unit or combination unit Heavy Truck (GVWR greater than 26,000 lbs.)
78	Unknown medium/heavy truck type
79	Unknown truck type (light/medium/heavy)

Motor Homes

Codes	Attributes
42	<u>Light Vehicle Based Motor home</u> (Chassis Mounted)
65	Medium/Heavy Vehicle Based Motor Home
73	Camper or Motor Home, Unknown GVWR

Motorcycles, Mopeds, All-Terrain Vehicles; All-Terrain Cycles

Codes	Attributes
80	Two Wheel Motorcycle (excluding motor scooters)
81	Moped or motorized bicycle
82	Three-wheel Motorcycle (2 Rear Wheels)
83	Off-Road Motorcycle
84	Motor Scooter
85	<u>Unenclosed Three Wheel Motorcycle / Unenclosed Autocycle</u> (1 Rear Wheel)
86	Enclosed Three Wheel Motorcycle / Enclosed Autocycle (1 Rear Wheel)
87	<u>Unknown Three Wheel Motorcycle Type</u>
88	Other motored cycle type (mini-bikes, pocket motorcycles "pocket bikes")
89	<u>Unknown motored cycle type</u>
90	ATV/ATC (All-Terrain Cycle)

Other Vehicles

Codes	Attributes
91	Snowmobile
92	Farm equipment other than trucks
93	Construction equipment other than trucks (includes graders)
94	Low Speed Vehicle (LSV) / Neighborhood Electric Vehicle (NEV)
95	Golf Cart
96	Recreational Off-Highway Vehicle (ROV)
97	Other vehicle type (includes go-cart, fork-lift, city street sweeper)

Not Reported and Unknown Body Type

Codes	Attributes
98	Not Reported
99	Unknown Body Type

Definition: This element identifies a classification of this vehicle based on its general body configuration, size, shape, doors, etc.

Remarks: SEE ADDITIONAL REMARKS UNDER $\underline{vPIC\ MAKE\ /\ vPIC\ MODEL\ /\ vPIC}$ BODY CLASS OVERVIEW.

AUTOMOBILES

These attributes are used to classify different types of passenger cars. These types of light vehicles, referred to as automobiles, are designed primarily to transport eight or fewer people.

- **01** (**Convertible** [excludes sunroof and t-bar]) refers to a passenger car equipped with a removable or retractable roof. To qualify for this code, the entire roof must open. Convertible roofs are generally fabric; however, removable hardtops are also included. This attribute takes priority over 2-door or 4-door codes.
- **02** (**2-Door Sedan, Hardtop, Coupe**) refers to a passenger car equipped with two doors for ingress/egress and a separate trunk area for cargo (e.g., trunk lid hinged below the backlight). Folding rear seats do not necessarily violate the separate "trunk area" concept.
- **03** (**3-Door/2-Door Hatchback**) refers to a passenger car equipped with two doors for ingress/egress and a rear hatch opening for cargo (e.g., hinged above the backlight). The cargo area is not permanently partitioned from the passenger compartment area.
- **04** (**4-Door Sedan**, **Hardtop**) refers to a passenger car equipped with four doors for ingress/egress and a separate trunk area for cargo (e.g., trunk lid hinged below the backlight). Folding rear seats do not necessarily violate the separate "trunk area" concept.
- **05** (**5-Door/4-Door Hatchback**) refers to a passenger car equipped with four doors for ingress/egress and a rear hatch opening for cargo (e.g., hinged above the backlight). The cargo area is not permanently partitioned from the passenger compartment area.
- **06** (Station Wagon [excluding van and truck based]) refers to a passenger car with an enlarged cargo area. The entire roof covering the cargo area is generally equal in height from front to rear and full height side glass is installed between the C and D-pillars. The rearmost area is not permanently partitioned from the forward passenger compartment area (e.g., "horizontal window shades" to hide cargo do not constitute partitions).
- **07** (**Hatchback**, **Number of Doors Unknown**) refers to a passenger car with an unknown number of doors for ingress/egress and a rear hatch opening for cargo (e.g., hinged above the backlight). The cargo area is not permanently partitioned from the passenger compartment area.
- **17 (3-Door Coupe)** refers to a passenger car equipped with three doors for ingress/egress in which 2 of the doors are located on the driver's side and a separate trunk area for cargo (e.g., trunk lid hinged below the backlight). Folding rear seats do not necessarily violate the separate "trunk area" concept.
- **08** (**Sedan/Hardtop**, **Number of Doors Unknown**) refers to a passenger car equipped with an unknown number of doors for ingress/egress and a separate trunk area for cargo (e.g., trunk lid hinged below the backlight). Folding rear seats do not necessarily violate the separate "trunk area" concept.
- **09** (Other or Unknown Automobile Type) is used for any passenger car that cannot be described by the other automobile codes OR when it is known that the vehicle is a passenger car, but there is insufficient data to determine the type. Do not use this attribute if the police crash report alone or in combination with other information gives sufficient detail to identify a more specific attribute.

- Example #1: If the possible choices are codes "01," "02," or "09," but there is enough detail to identify that it is a 2-door and that it is NOT a convertible, then use <u>02 (2-Door Sedan, Hardtop, Coupe</u>).
- Example #2: If there is information that it is a 4-door and the police crash report eliminates the possibility of a hatchback or station wagon, then use 04 (4-Door Sedan, Hardtop).

AUTOMOBILE DERIVATIVES

This describes certain passenger cars that have been modified to perform cargo-related tasks.

- **10** (**Auto-Based Pickup**) refers to a passenger car based, pickup type vehicle. The roof area (and side glass) rearward of the front seats on a station wagon have been removed and converted into a pickup-type cargo box.
- 11 (Auto-Based Panel (Cargo Station Wagon, auto-based Ambulance/Hearse) refers to an automotive station wagon that may have sheet metal rearward of the B-pillar rather than glass.
- **12** (**Large Limousine**) more than four side doors or stretched chassis refers to an automobile that has sections added within its wheelbase to increase length and passenger/cargo carrying capacity.
- 13 (Three-Wheel Automobile or Automobile Derivative) refers to three-wheel vehicles with an enclosed passenger compartment not including 82 (Three-Wheeled Motorcycle (2 Rear Wheels)) or 86 (Enclosed Three Wheel Motorcycle/Enclosed Autocycle (1 Rear Wheel)).

UTILITY VEHICLES (Less than or equal to 10,000 lbs GVWR)

Utility Vehicles are designed for carrying people, and generally considered a multi-purpose vehicle that is designed to have off-road capabilities. These vehicles are generally four-wheel drive (4 x 4), have increased ground clearance, and are equipped with a strong frame. Four-wheel drive automobiles are not considered utility vehicles.

- **14** (**Compact Utility**) refers to a short wheelbase and narrow tracked multi-purpose vehicle designed to operate in rugged terrain.
- **15** (**Large Utility**) refers to full-size multi-purpose vehicles primarily designed around a shortened pickup truck chassis. Generally, a station wagon style body, some models are equipped with a removable top.
- **16** (**Utility Station Wagon**) refers primarily to a pickup truck-based chassis enlarged to a station wagon.
- **19** (**Utility Vehicle**, **Unknown Body Type**) is used when it is known that the vehicle is a utility vehicle, but there is insufficient data to determine the specific type.

VAN-BASED LIGHT TRUCKS (GVWR less than or equal to 10,000 lbs)

Van-Based Light Trucks (less than or equal to 10,000 lbs GVWR) are designed to maximize cargo/passenger area versus overall length. Basically a "box on wheels," these vehicles are identifiable by their enclosed cargo/passenger area and relatively short (or non-existent) hood.

- **20** (Minivan) refers to down-sized cargo or passenger unibody vans.
- **21** (**Large Van**) refers to a standard cargo or passenger van and includes van-based buses less than 10,001 lbs GVWR. These vans will generally have a larger capacity in both volume and GVWR.
- **22** (**Step Van or Walk-In Van [less than or equal to 10,000 lbs. GVWR]**) refers to a multistop delivery vehicle with a GVWR less than or equal to 10,000 lbs Examples are the Grumman LLV used by the U.S. Postal Service or the Aeromate manufactured by Utilimaster Motor Corporation.
- **28** (**Other Van Type**) refers to a cargo or delivery van where the chassis and cab portions from the B-pillar forward of this vehicle are the same as in Minivans or Large Vans with a frame mounted cargo area unit added behind the driver/cab area or if the van cannot be described as a Minivan, Large Van, Step-van, or a Van-based motor home. Annotate the van type when using this code. This code takes priority over Minivans and Large Vans.
- **29** (Unknown Van Type) is used when it is known that this vehicle is a light van, but its specific type cannot be determined.

LIGHT CONVENTIONAL TRUCKS (Pickup Style Cab, GVWR less than or equal to 10,000 lbs)

Light Conventional Trucks are used to describe vehicles commonly referred to as pickup trucks and some of their derivatives. These light trucks are characteristically designed with a small cab containing a single row of seats (extended cabs with additional seats are available for some models), a large hood covering a conventional engine placement, and a separate open box area (approximately 180 to 240 centimeters long) for cargo.

- **33** (**Convertible Pickup**) refers to a pickup truck equipped with a removable or retractable roof. To qualify for this code, the entire roof must open. Convertible roofs are generally fabric; however, removable hardtops are also included. This code takes priority over compact and large pickups.
- **34** (**Light Pickup**) is a single unit straight truck with a pickup body style and a GVWR of 10,000 lbs or less.
- **39** (Unknown (Pickup Style) Light Conventional Truck Type) is used when this vehicle is a Light Conventional Truck, but there is insufficient data to determine the specific code.

OTHER LIGHT TRUCKS (GVWR less than or equal to 10,000 lbs.)

Other Light Trucks are used to describe vehicles that are based upon a conventional light pickup frame, but a commercial or recreational body has been affixed to the frame rather than a pickup box.

- **40** (Cab Chassis Based [includes rescue vehicles, light stake, dump, and tow truck]) is used to describe a light vehicle with a pickup style cab and a commercial (non-pickup) body attached to the frame. Included are pickup based ambulances and tow trucks.
- **41** (**Truck Based Panel**) is used to describe a truck-based station wagon that has sheet metal rather than glass above the beltline rearward of the B-pillars.
- **45** (Other Light Conventional Truck Type) is used for light conventional trucks that cannot be described elsewhere.
- **48** (Unknown Light Truck Type) is used when it is known that the vehicle is a light truck but further classification into one of the more detailed light truck categories (utility, van, pickup, or other light trucks) is not possible. Example: It is known the light vehicle is a utility vehicle or van, but it can't be determined which one.
- **49** (Unknown Light Vehicle Type [automobile, utility, van, or light truck]) is used when it is known that the vehicle is a light vehicle, but insufficient data exists to specify what type of light vehicle it is.

BUSES (excludes van-based buses with GVWR less than or equal to 10,000 lbs)

Buses are defined as any motor vehicle designed primarily to transport large groups of passengers (nine or more people, including the driver).

- **50** (**School Bus**) (designed to carry students; not cross-country or transit) is a bus designed to carry passengers to and from educational facilities and/or related functions. The vehicles are characteristically painted yellow and clearly identified as school buses. Use this code regardless of whether the vehicle is owned by a school system or a private company. School buses converted for other uses (e.g., church bus) also take this code.
- **51** (**Cross Country/Intercity Bus**) describes a bus body type designed to travel long distances between cities (e.g., Greyhound).
- **52** (**Transit Bus [City Bus]**) describes a bus body type designed for public transportation typically within a city.
- **55** (Van-Based Bus GVWR greater than 10,000 lbs.) describes a bus body type built on a van-based chassis.
- **58** (**Other Bus Type**) is a vehicle designed/converted to carry nine or more people, including the driver, not described by the attributes **50** (**School Bus**), **51** (**Cross Country/Intercity Bus**), **52** (**Transit Bus**), or **55** (**Van-Based Bus**). Examples include a specialized tour bus or bus-based motor home.
- **59** (Unknown Bus Type) is used when it is known the transport device is a bus but there is insufficient data to choose between the bus attributes.

MEDIUM/HEAVY TRUCKS (GVWR greater than 10,000 lbs)

Medium/Heavy Trucks describe a single-unit truck specifically designed for carrying cargo on the same chassis as the cab. They pertain to a truck-tractor designed for towing trailers or semi-trailers. Although towing is their primary purpose, some truck-tractors are equipped with cargo areas located rearward of the cab.

- **60** (**Step Van [Greater than 10,000 lbs. GVWR]**) defines a single-unit, enclosed body with a GVWR greater than 10,000 lbs and an integral driver's compartment and cargo area. Step vans are generally equipped with a folding driver seat mounted on a pedestal and a sliding door for easy ingress/egress.
- **61-63** (Single-Unit Straight Truck or Cab-chassis) describes a non-articulated truck designed to carry cargo. The attribute selected is based on the applicable GVWR range for the vehicle. Includes "incomplete" or "cutaway."
- **64** (Single-Unit Straight Truck or Cab-chassis [GVWR unknown]) describes a medium/heavy non-articulated truck designed to carry cargo. It is known not to be a step van, van, or pickup truck, but its GVWR is unknown. Includes "incomplete" or "cutaway."
- **66** (**Truck-Tractor** [**Cab only or with any number of trailing units**]) describes a fifth wheel equipped tractor-trailer power unit. The number of trailing units is not a consideration.
- **67** (**Medium/Heavy Pickup [GVWR greater than 10,000 lbs.]**) is a single-unit straight truck with a pickup body style with a GVWR greater than 10,000 lbs Examples include the Ford Super Duty 350, 450, or 550.
- **78** (Unknown Medium/Heavy Truck Type) is used when it is unknown whether the medium/heavy truck is a single-unit truck or a truck-tractor and/or trailer combination and it is known that the vehicle is either a medium or heavy truck with GVWR greater than 10,000 lbs
- **79** (Unknown Truck Type [light/medium/heavy]) is used when it is known that this vehicle is a truck, but there is insufficient data to classify the vehicle further.

MOTOR HOMES

Motor Homes are recreational vehicles mounted on an incomplete vehicle chassis that is suitable to live in and drive across the country.

- **42** (**Light** *Vehicle* **Based Motor Home** [**chassis mounted**]) is used to describe a frame mounted recreational unit attached to a light van or conventional chassis.
- **65** (**Medium/Heavy** *Vehicle* **Based Motor Home**) describes a recreational vehicle mounted on a single unit medium/heavy truck chassis, *van-based cutaway*, *bus chassis*, *or motorhome strip chassis*.
- 73 (Camper or Motor Home, Unknown GVWR) is used when it is known the vehicle is a camper or motor home, but it is unknown if it is a 42 (Light Vehicle Based Motor Home [chassis mounted]) or a 65 (Medium/Heavy Vehicle Based Motor Home).

MOTORCYCLES, MOPEDS, ALL-TERRAIN VEHICLES, ALL-TERRAIN CYCLES

- **80** (Two Wheel Motorcycle (excluding motor scooters)) is used when a motor vehicle having a seat or saddle for the use of its operator is a two-wheeled open (e.g., no enclosed body) vehicle propelled by a motor. Motorcycles equipped with a side car also use this code.
- **81** (**Moped or Motorized Bicycle**) is used when the vehicle is a speed-limited motor-driven cycle capable of moving either by pedaling or by a motor. **Note:** In the circumstance that a person operating a motorized bicycle is classified as a non-motorist on the police crash report, this person should be coded as a motor vehicle occupant rather than a non-motorist in FARS/CRSS.
- **82** (**Three-Wheeled Motorcycle** (**2 Rear Wheels**)) is used when the vehicle is a three-wheeled open vehicle propelled by a motor, or a three-wheeled motorized bicycle capable of moving either by pedaling or by a motor.
- **83** (**Off-Road Motorcycle**) is used when the vehicle is a two-wheeled open vehicle propelled by a motor designed or built for off-road use only.
- **84** (**Motor Scooter**) a light, two-wheeled, open motor vehicle on which the driver sits over an enclosed engine with legs together and feet resting on a floorboard.
- **85** (Unenclosed Three Wheel Motorcycle/Unenclosed Autocycle (1 Rear Wheel)) A large motorcycle with three wheels, configured with two front wheels and a saddle with handlebars, or seat(s) and a steering wheel, but not completely enclosed.
- **86** (Enclosed Three Wheel Motorcycle/Enclosed Autocycle (1 Rear Wheel)) A large motorcycle with three wheels, configured with two front wheels, a seat(s), and steering wheel and is completely enclosed.
- 87 (Unknown Three Wheel Motorcycle Type) is used when the vehicle is known to be a three-wheel motorcycle, but it is not known if attribute 82 (Three-wheel Motorcycle (2 Rear Wheels)), 85 (Unenclosed Three Wheel Motorcycle / Unenclosed Autocycle (1 Rear Wheel)), or 86 (Enclosed Three Wheel Motorcycle / Enclosed Autocycle (1 Rear Wheel)) applies.
- **88** (Other Motored Cycle [mini-bike, pocket motorcycles "pocket bikes"]) is used when the vehicle in question does not qualify for attributes 80-87.
- **89** (Unknown Motored Cycle Type) is used when it is known that the vehicle is a motored cycle, but no further data is available.
- **90** (ATV/ATC [All-Terrain Cycle]) is used for off-road recreational vehicles. ATV/ATCs have 3 or 4 wheels, a saddle type seat, and handlebars for steering (no steering wheel). Does not include **96** (Recreational Off-Highway Vehicles (ROV)) (automobile type seats and steering wheel).

OTHER VEHICLES

Other Vehicles describes all motored vehicles that are designed primarily for off-road use.

- **91** (Snowmobile) refers to a vehicle designed to be operated over snow propelled by a motor.
- **92** (Farm Equipment Other Than Trucks) refers to farming implements other than trucks propelled by a motor (farm tractors, combines, etc.).
- **93** (Construction Equipment Other Than Trucks) refers to construction equipment other than trucks propelled by a motor (bulldozer, road grader, etc.).
- **94** (**Low speed vehicle** (**LSV**)/**Neighborhood Electric Vehicle** (**NEV**)) refers to a vehicle that is designed for travel on secondary roads with speed limits equal to or less than 35 mph. LSVs can sometimes resemble golf carts but differ in that they must adhere to Federal Motor Vehicle Safety Standard (FMVSS) 500. Provisions of FMVSS 500 include the following.

The Vehicle must have:

- Four wheels
- Top speed of at least 20 mph, but it cannot exceed 25 mph
- GVWR less than 3,001 pounds
- Head, turn signal, and tail lamps
- Reflex reflectors
- Parking brake
- Rear view mirrors
- Windshield
- Safety belts
- Seventeen (17) character VIN
- 95 (Golf Cart) is a motor vehicle that is designed and manufactured for operation on a golf course for sporting or recreational purposes. Golf carts or golf cars are different from code 94 (Low speed vehicle (LSV)/ Neighborhood Electric Vehicle (NEV)) in that if they are manufactured to go less than 20 mph, they are not subject to the Federal Motor Vehicle Safety Standard (FMVSS) 500. As a result, golf carts will not have a 17-digit VIN. Golf carts will have a nonstandard serial number that may be reported in the case material. Also, typically golf carts will not have safety features required of LSVs/NEVs under the FMVSS like safety belts, head lights, turn signal and tail lamps, rear view mirrors, etc.
- **96** (**Recreational Off-Highway Vehicle [ROV]**) ROVs are intended to be used on terrain similar to that on which all-terrain vehicles (ATVs) are used. ROVs are distinguished from ATVs by the presence of a steering wheel instead of a handlebar for steering, bench or bucket seats for the driver and passenger(s) instead of straddle seating, and foot controls for throttle and braking instead of levers located on the handlebar. In addition, ROVs have a rollover protective system (ROPS), restraint systems, and a maximum speed greater than 30 mph.

97 (Other Vehicle Type) is used when the motorized vehicle in question does not qualify for 93 (Construction equipment other than trucks), 92 (Farm equipment other than trucks), or 91 (Snowmobile). Examples of Other Vehicle Types are fork-lifts, city street sweepers, go-karts, "kit" cars, riding lawn mowers, etc.

NOT REPORTED AND UNKNOWN BODY TYPE

98 (Not Reported) Code Not Reported only when NCSA MAKE, NCSA MODEL, NCSA BODY TYPE, and VEHICLE MODEL YEAR are ALL Not Reported. If you have partial information, see 99 (Unknown Body Type).

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**."

Code **98** (**Not Reported**) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).

99 (Unknown Body Type) is used when the available information regarding the type of vehicle is reported as Unknown. If any detail is known regarding the vehicle's Make/Model/Body/Year, code what is known and then code the other elements as Unknown.

Consistency Checks (See Section 400):

Error ID	IF	THEN
	MACHINE HODEL VELD	MOTOR VEHICLE ATTOMATER
1C1P	[[VEHICLE MODEL YEAR is greater than or	MOTOR VEHICLE AUTOMATED
	equal to 2000 and vPIC BODY CLASS does	DRIVING SYSTEM(S) Subfield 1 should not
	not equal 004 (Low Speed Vehicle (LSV) /	equal 00 or 99.
	Neighborhood Electric Vehicle (NEV)), 006	
	(Motorcycle - Standard), 012 (Motorcycle -	
	Scooter), 069 (Off-road Vehicle - All Terrain	
	Vehicle (ATV) (Motorcycle-style)), 080	
	(Motorcycle - Sport), 081 (Motorcycle -	
	Touring / Sport Touring), 082 (Motorcycle -	
	Cruiser), 083 (Motorcycle - Trike), 084 (Off-	
	Road Vehicle - Dirt Bike / Off-Road), 085	
	(Motorcycle - Dual Sport / Adventure /	
	Supermoto / On/Off-Road), 086 (Off-Road	
	Vehicle - Enduro (Off-road long-distance	
	racing)), 087 (Motorcycle - Small / Minibike),	
	088 (Off-road Vehicle - Go Kart), 090	
	(Motorcycle - Side Car), 094 (Motorcycle -	
	Custom), 097 (Off-road Vehicle -	
	Snowmobile), 098 (Motorcycle - Street), 100 (Motorcycle - Enclosed Three Wheeled /	
	Enclosed Autocycle), 103 (Motorcycle -	
	Unenclosed Three Wheeled / Open Autocycle),	
	104 (Motorcycle - Moped), 105 (Off-road	
	Vehicle - Recreational Off-Road Vehicle	
	(ROV)), 109 (Motorcycle - Cross Country), 110	
	(Motorcycle - Underbone), 113 (Off-road	
	Vehicle - Motorcross (Off-road short distance,	
	closed track racing)), 114 (Motorcycle -	
	Competition), 124 (Off-road Vehicle - Golf	
	Cart), 125 (Motorcycle - Unknown Body Type),	
	126 (Off-road Vehicle - Farm Equipment), 127	
	(Off-road Vehicle - Construction Equipment),	
	996 (Motorized Bicycle), or 997 (Other)], or	
	[vPIC BODY CLASS equals 006 (Motorcycle -	
	Standard), 080 (Motorcycle - Sport), 081	
	(Motorcycle - Touring/Sport Touring), 082	
	(Motorcycle - Cruiser), 083 (Motorcycle -	
	Trike), 085 (Motorcycle - Dual Sport /	
	Adventure / Supermoto / On/Off-Road), 094	
	(Motorcycle - Custom), 098 (Motorcycle -	
	Street), 109 (Motorcycle - Cross Country), or	
	125 (Motorcycle - Unknown Body Type), and	
	VEHICLE MODEL YEAR is greater than	
	2020]], and STATE NUMBER does not equal	
	8 (CO), 17 (IL), 23 (ME), 26 (MI), or 28 (MS),	

Error ID	IF	THEN
1D0P	SPECIAL USE equals 01 or 20,	vPIC Body Class should equal 002 (Minivan), 003 (Coupe), 005 (Hatchback/Liftback/Notchback), 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 008 (Crossover Utility Vehicle (CUV)), 09 (Van), 013 (Sedan/Saloon), 015 (Wagon), 060 (Pickup), or 119 (Sport Utility Truck (SUT)).
1E0P	SPECIAL USE equals 19,	vPIC Body Class must not equal a 011 (Truck), 016 (Bus), 066 (Truck-Tractor), 068 (Streetcar / Trolley), 073 (Bus - School Bus), 095 (Cargo Van), 111 (Step Van / Walk-in Van), 117 (Limousine), 126 (Off-road Vehicle - Farm Equipment), or 127 (Off-road Vehicle - Construction Equipment), and FINAL STAGE BODY CLASS must not equal 011 (Truck), 016 (Bus), 066 (Truck-Tractor), 068 (Streetcar / Trolley), 073 (Bus - School Bus), 095 (Cargo Van), 111 (Step Van / Walk-in Van), or 117 (Limousine).
1Q0F	PERSON TYPE equals 01, and vPIC BODY CLASS equals 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 69 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 (Off-Road Vehicle - Dirt Bike/Off- Road), 085 (Motorcycle - Dual Sport/Adventure/Supermoto/On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 90 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 104 (Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle),	SEATING POSITION must not equal 12-56, 99.

Error ID	IF	THEN
1R0P	SEATING POSITION equals 51, and vPIC BODY CLASS equals 016 (Bus), 068 (Streetcar / Trolley), or 73 (Bus-School Bus), or FINAL STAGE BODY CLASS equals 016 (Bus), 068 (Streetcar / Trolley), or 73 (Bus- School Bus),	INJURY SEVERITY must not equal 0, 9.
1Z2P	any SEQUENCE OF EVENTS equals 01, and vPIC BODY CLASS does not equal 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport / Adventure / Supermoto / On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 104 (Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle), or any RELATED FACTORS-VEHICLE LEVEL equals 030,	ROLLOVER must equal 1, 2, or 9.
2D0P	SPECIAL USE equals 02,	vPIC Body Class should equal 002 (Minivan), 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 008 (Crossover Utility Vehicle (CUV)), 009 (Van), 016 (Bus), 073 (Bus - School Bus), or 119 (Sport Utility Truck (SUT)), or FINAL STAGE BODY CLASS should equal 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 008 (Crossover Utility Vehicle (CUV)), 009 (Van), 016 (Bus), or 073 (Bus - School Bus).

Error ID	IF	THEN
2Q0F	PERSON TYPE equals 02 or 03, and vPIC BODY CLASS equals 001 (Convertible/Cabriolet), 003 (Coupe), 005 (Hatchback/Liftback/Notchback), 010 (Roadster), 013 (Sedan/Saloon), 060 (Pickup), 095 (Cargo Van), 105 (Off-road Vehicle - Recreational Off-Road Vehicle (ROV)), 108 (Motorhome), 111 (Step Van / Walk-in Van), 117 (Limousine), 126 (Off-road Vehicle - Farm Equipment), or 127 (Off-road Vehicle - Construction Equipment), or FINAL STAGE BODY CLASS equals 060 (Pickup) 095 (Cargo Van), 108 (Motorhome), 111 (Step Van / Walk- in Van), or 117 (Limousine),	SEATING POSITION must not equal 31-50.
2R0P	RESTRAINT SYSTEM USE Subfield 1 Type of Restraint System in Use equals 01-06 or 08-12,	vPIC BODY CLASS must not equal 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 (Off- Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport/Adventure/Supermoto/On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 097 (Off-road Vehicle - Snowmobile), 098 (Motorcycle - Street), 104 (Motorcycle - Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle).

Error ID	IF	THEN
2U0P	vPIC BODY CLASS equals 004 (Low Speed Vehicle (LSV)/Neighborhood Electric Vehicle (NEV)), 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport/Adventure/Supermoto/On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 088 (Off-road Vehicle - Go Kart), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 097 (Off-road Vehicle - Snowmobile), 098 (Motorcycle - Street), 100 (Motorcycle - Enclosed Three Wheeled / Enclosed Autocycle), 103 (Motorcycle - Unenclosed Three Wheeled / Open Autocycle), 104 (Motorcycle - Moped), 105 (Off-road Vehicle - Recreational Off-Road Vehicle (ROV)), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcycle - Underbone) (113 (Off-road Vehicle - Motorcycle - Unknown Body Type), 126 (Off-road Vehicle - Farm Equipment), 127 (Off-road Vehicle - Construction Equipment), 996 (Motorized Bicycle), or 997 (Other), or FINAL STAGE BODY CLASS equals 004 (Low Speed Vehicle (LSV)/Neighborhood Electric Vehicle (NEV)),	AIR BAG DEPLOYED should equal 20 or 98.

Error ID	IF	THEN
2U0Q	vPIC BODY CLASS equals 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport / Adventure / Supermoto / On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small / Minibike), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 104 (Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle),	AREAS OF IMPACT - INITIAL CONTACT POINT should not equal 14.
3A0P	SPECIAL USE equals 07,	vPIC BODY CLASS must equal 011 (Truck), or FINAL STAGE BODY CLASS must equal 997 (Other (Specify:)).
3Q0F	SEATING POSITION equals 50 (Sleeper Section of Cab [Truck]),	vPIC BODY CLASS should equal 011 (Truck) or 066 (Truck-Tractor), or FINAL STAGE BODY CLASS should equal 011 (Truck) or 066 (Truck-Tractor), and POWER UNIT GVWR_FROM and POWER UNIT GVWR_To should equal 13-18.

Error ID	IF	THEN
4A0P	vPIC BODY CLASS equals 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport / Adventure / Supermoto / On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 097 (Off-road Vehicle - Snowmobile), 098 (Motorcycle - Street), 100 (Motorcycle - Enclosed Three Wheeled / Enclosed Autocycle), 103 (Motorcycle - Unenclosed Three Wheeled / Open Autocycle), 104 (Moped), 105 (Off-road Vehicle - Recreational Off-Road Vehicle (ROV)), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 124 (Off-road Vehicle - Golf Cart), 125 (Motorcycle - Unknown Body Type), 126 (Off-road Vehicle - Farm Equipment), 127 (Off-road Vehicle - Construction Equipment), or 996 (Motorized Bicycle),	SPECIAL USE must not equal 01-03, 06, 07, 12, or 20-24.
4D0P	SPECIAL USE equals 03,	vPIC BODY CLASS must equal 009 (Van), 016 (Bus), 068 (Streetcar / Trolley), 073 (Bus- School Bus), or 117 (Limousine), or FINAL STAGE BODY CLASS must equal 009 (Van), 016 (Bus), 068 (Streetcar / Trolley), 073 (Bus- School Bus), or 117 (Limousine).
4F3P	NUMBER OF OCCUPANTS is 01-98, and <i>vPIC BODY CLASS</i> equals <i>117 (Limousine)</i> ,	NUMBER OF OCCUPANTS <i>should</i> not be greater than <i>16</i> .
4N4P	MOTOR CARRIER IDENTIFICATION NUMBER does not equal 00-000000000 or 99- 999999999,	POWER UNIT GVWR_From and POWER UNIT GVWR_To must equal 13-18, or VEHICLE TRAILING must equal 1-6, or CARGO BODY TYPE must equal 22, or HM2 must equal 2.
4N5P	POWER UNIT GVWR_From and POWER UNIT GVWR_To do not equal 13-18, and VEHICLE TRAILING does not equal 1-6, and CARGO BODY TYPE does not equal 22, and HM2 does not equal 2,	MOTOR CARRIER IDENTIFICATION NUMBER must equal 00-000000000, 99- 999999999.

Error ID	IF	THEN
4Q0F	PERSON TYPE equals 02, and vPIC BODY CLASS equals 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport/Adventure/Supermoto/On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 90 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 100 (Motorcycle - Enclosed Three Wheeled / Enclosed Autocycle), 103 (Motorcycle - Unenclosed Three Wheeled / Open Autocycle), 104 (Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle),	SEATING POSITION should equal 13, 21, 54, 55, or 56.
4S0P	vPIC BODY CLASS equals 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport/Adventure/Supermoto/On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 104 (Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle),	EJECTION must equal 8.

Error ID	IF	THEN
5A0P	vPIC BODY CLASS equals 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport / Adventure / Supermoto / On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 104 (Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle), and any RELATED FACTORS - VEHICLE LEVEL does not equal 030,	ROLLOVER must equal 0.
5D0P	SPECIAL USE equals 04,	vPIC BODY CLASS should equal 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 009 (Van), 011 (Truck), 016 (Bus), 060 (Pickup), 066 (Truck-Tractor), 095 (Cargo Van), 119 (Sport Utility Truck (SUT)), 997 (Other (Specify:)), or 999 (Unknown), or FINAL STAGE BODY CLASS should equal 009 (Van), 011 (Truck), 016 (Bus), 060 (Pickup), 066 (Truck-Tractor), 095 (Cargo Van), 119 (Sport Utility Truck (SUT)), 997 (Other (Specify:)), or 999 (Unknown).
5F0F	NUMBER OF OCCUPANTS equals 00-98, and vPIC BODY CLASS does not equal 016 (Bus), 068 (Streetcar / Trolley), or 73 (Bus-School Bus), and FINAL STAGE BODY CLASS does not equal 016 (Bus), 068 (Streetcar / Trolley), or 73(Bus-School Bus),	the number of Person Level forms for that vehicle must be equal to the NUMBER OF OCCUPANTS.
5Q0F	PERSON TYPE equals 02, and vPIC BODY CLASS equals 016 (Bus), 068 (Streetcar / Trolley), or 73 (Bus-School Bus), or FINAL STAGE BODY CLASS equals 016 (Bus), 068 (Streetcar / Trolley), or 73 (Bus-School Bus),	SEATING POSITION must equal 12-18, 51, 52, 54, 55, 56, 98, or 99.

Error ID	IF	THEN
6D0P	SPECIAL USE equals 05,	vPIC BODY CLASS should equal 006 (Motorcycle - Standard), 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 008 (Crossover Utility Vehicle (CUV)), 009 (Van), 013 (Sedan/Saloon), 015 (Wagon), 060 (Pickup), 081 (Motorcycle - Touring / Sport Touring), 082 (Motorcycle - Cruiser), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 119 (Sport Utility Truck (SUT)), or 125 (Motorcycle - Unknown Body Type).
6G0Q	any RELATED FACTORS - VEHICLE LEVEL equals 030,	vPIC BODY CLASS must equal 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport / Adventure / Supermoto / On/Off- Road), 086 (Off-Road Vehicle - Enduro (Off- road long-distance racing)), 087 (Motorcycle - Small/Minibike), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 104 (Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle) for this vehicle.
6Q0F	PERSON TYPE equals 02 or 03, and vPIC BODY CLASS equals 011 (Truck) or 066 (Truck-Tractor), or FINAL STAGE BODY CLASS equals 011 (Truck) or 066 (Truck- Tractor),	SEATING POSITION must not equal 31-49.
7D0P	SPECIAL USE equals 06,	NCSA BODY TYPE must equal 11, 14-17, 19, 21, 22, 28, 29, 40, 41, 45, 48, 49, 61, 62, 64, 79, 98, 99.
7Q0F	PERSON TYPE equals 09,	SEATING POSITION must equal 19, 98, or 99.

Error ID	IF	THEN
8D0P	SPECIAL USE equals 08,	vPIC BODY CLASS should equal 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 011 (Truck), 060 (Pickup), or 119 (Sport Utility Truck (SUT)), or FINAL STAGE BODY CLASS should equal vPIC BODY CLASS should equal 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 011 (Truck), 060 (Pickup), or 119 (Sport Utility Truck (SUT)), and POWER UNIT GVWR_FROM and POWER UNIT GVWR_TO should be in 11-12.
8L9P	vPIC BODY CLASS does not equal 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring / Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 Off- road Vehicle - Dirt Bike / Off-Road), 085 (Motorcycle - Dual Sport / Adventure / Supermoto / On/Off-Road), 086 (Off-road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small / Minibike), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 097 (Off-road Vehicle - Snowmobile), 098 (Motorcycle - Street), 104 (Motorcycle - Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motocross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle), and the CRASH EVENTS event equals 54, and the corresponding AREAS OF IMPACT (THIS VEHICLE) equals 19 or 20 in that row,	there should be a previous event with CRASH EVENTS event equal to 18, 73, 91, or 98 involving that vehicle.

Error ID	IF	THEN
8P0P	PERSON TYPE equals 01, and AGE is less than 008,	vPIC BODY CLASS must equal 4 (Low Speed Vehicle (LSV) / Neighborhood Electric Vehicle (NEV)), 12 (Motorcycle - Scooter), 87 (Motorcycle - Small / Minibike), 88 (Off-road Vehicle - Go Kart), 97 (Off-road Vehicle - Snowmobile), 069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)) and 105 (Off-road Vehicle - Recreational Off-Road Vehicle (ROV)), 124 (Off-road Vehicle - Golf Cart), 125 (Motorcycle - Unknown Body Type), 997 (Other), 998 (Not Reported), or 999 (Unknown).
920P	any one of the fields <i>NCSA</i> MAKE, <i>NCSA</i> MODEL, <i>NCSA</i> BODY TYPE, and <i>VEHICLE</i> MODEL YEAR, equals Not Reported [<i>NCSA</i> MAKE (97), <i>NCSA</i> MODEL (997), <i>NCSA</i> BODY TYPE (98), and <i>VEHICLE</i> MODEL YEAR (9998)],	the other three must also equal Not Reported.
930P	any one of the fields <i>NCSA</i> MAKE, <i>NCSA</i> MODEL, <i>NCSA</i> BODY TYPE, and <i>VEHICLE</i> MODEL YEAR, does not equal Not Reported [<i>NCSA</i> MAKE (97), <i>NCSA</i> MODEL (997), <i>NCSA</i> BODY TYPE (98), and <i>VEHICLE</i> MODEL YEAR (9998)],	the other three must also not be coded as Not Reported.
960P	NCSA MAKE is not 98, 99, and equals, and NCSA MODEL equals,	NCSA BODY TYPE must equal (NCSA MAKE, NCSA MODEL, and BODY TYPE must be valid according to Vehicle Tables).

Error ID	IF	THEN
	DIC DODY CLASS 1 000 /M / 1	HELMET LIGE C 1 C 11 1 1 1 1 1 1 1
981P	vPIC BODY CLASS equals 006 (Motorcycle -	HELMET USE Subfield 1 Helmet Use must
	Standard), 012 (Motorcycle - Scooter), 069	equal 05, 16, 17, 19, 98, or 99.
	(Off-road Vehicle - All Terrain Vehicle (ATV)	
	(Motorcycle-style)), 080 (Motorcycle - Sport),	
	081 (Motorcycle - Touring/Sport Touring), 082	
	(Motorcycle - Cruiser), 083 (Motorcycle -	
	Trike), 084 (Off-Road Vehicle - Dirt Bike/Off-	
	Road), 085 (Motorcycle - Dual	
	Sport/Adventure/Supermoto/On/Off-Road),	
	086 (Off-Road Vehicle - Enduro (Off-road	
	long-distance racing)), 087 (Motorcycle -	
	Small/Minibike), 090 (Motorcycle - Side Car),	
	094 (Motorcycle - Custom), 097 (Off-road	
	Vehicle - Snowmobile), 098 (Motorcycle -	
	Street), 104 (Moped), 105 (Off-road Vehicle -	
	Recreational Off-Road Vehicle (ROV)), 109	
	(Motorcycle - Cross Country), 110 (Motorcycle	
	- Underbone), 113 (Off-road Vehicle -	
	Motorcross (Off-road short distance, closed	
	track racing)), 114 (Motorcycle - Competition),	
	125 (Motorcycle - Unknown Body Type), or	
	996 (Motorized Bicycle),	

Error ID	IF	THEN
982P	vPIC BODY CLASS does not equal 006	HELMET USE Subfield 1 Helmet Use must
	(Motorcycle - Standard), 012 (Motorcycle -	equal 20 and HELMET USE Subfield 2 Any
	Scooter), 069 (Off-road Vehicle - All Terrain	Indication of Mis-Use must equal 7.
	Vehicle (ATV) (Motorcycle-style)), 080	•
	(Motorcycle - Sport), 081 (Motorcycle -	
	Touring/Sport Touring), 082 (Motorcycle -	
	Cruiser), 083 (Motorcycle - Trike), 084 (Off-	
	Road Vehicle - Dirt Bike/Off-Road), 085	
	(Motorcycle - Dual	
	Sport/Adventure/Supermoto/On/Off-Road),	
	086 (Off-Road Vehicle - Enduro (Off-road	
	long-distance racing)), 087 (Motorcycle -	
	Small/Minibike), 090 (Motorcycle - Side Car),	
	094 (Motorcycle - Custom), 097 (Off-road	
	Vehicle - Snowmobile), 098 (Motorcycle -	
	Street), 100 (Motorcycle - Enclosed Three	
	Wheeled / Enclosed Autocycle), 103	
	(Motorcycle - Unenclosed Three Wheeled /	
	Open Autocycle), 104 (Moped), 105 (Off-road	
	Vehicle - Recreational Off-Road Vehicle	
	(ROV)), 109 (Motorcycle - Cross Country), 110	
	(Motorcycle - Underbone), 113 (Off-road	
	Vehicle - Motorcross (Off-road short distance,	
	closed track racing)), 114 (Motorcycle -	
	Competition), 124 (Off-road Vehicle - Go	
	Kart), 125 (Motorcycle - Unknown Body Type),	
	or 996 (Motorized Bicycle),	

Error ID	IF	THEN
A380	FIRST HARMFUL EVENT equals 01 and this vehicle is involved in the FIRST HARMFUL EVENT and vPIC BODY CLASS does not equal 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring / Sport Touring), 082 (Motorcycle - Cruiser), 084 Offroad Vehicle - Dirt Bike / Off-Road), 085 (Motorcycle - Dual Sport / Adventure / Supermoto / On/Off-Road), 086 (Off-road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small / Minibike), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 104 (Motorcycle - Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motocross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle), for this vehicle, and RELATION TO TRAFFICWAY equals,	LOCATION OF ROLLOVER should equal respectively.
AE1P	VEHICLE CONFIGURATION equals 05-08,	vPIC BODY CLASS must equal 066 (Truck- Tractor), or FINAL STAGE BODY CLASS must equal 066 (Truck-Tractor).
AF2P	VEHICLE CONFIGURATION equals 20, 21,	vPIC BODY CLASS must equal 009 (Van), 016 (Bus), 068 (Streetcar / Trolley), 073 (Bus- School Bus), 117 (Limousine), or FINAL STAGE BODY CLASS must equal 009 (Van), 016 (Bus), 068 (Streetcar / Trolley), 073 (Bus- School Bus), or 117 (Limousine).
AH0P	VEHICLE CONFIGURATION does not equal 00 or 99,	vPIC BODY CLASS should equal 009 (Van), 011 (Truck), 016 (Bus), 060 (Pickup), 066 (Truck-Tractor), 068 (Streetcar / Trolley), 073 (Bus - School Bus), 095 (Cargo Van), 108 (Motorhome), 111 (Step Van / Walk-in Van), 117 (Limousine), 126 (Off-road Vehicle - Farm Equipment), 127 (Off-road Vehicle - Construction Equipment), or FINAL STAGE BODY CLASS should equal 009 (Van), 011 (Truck), 016 (Bus), 060 (Pickup), 066 (Truck-Tractor), 068 (Streetcar / Trolley), 073 (Bus-School Bus), 095 (Cargo Van), 108 (Motorhome), 111 (Step Van / Walk-in Van), 117 (Limousine), or 997 Other (Specify:), or HM2 should equal 2.

Error ID	IF	THEN
AH1P	BUS USE equals 08,	vPIC BODY CLASS must equal 009 (Van), 016 (Bus), or 073 (Bus - School Bus), or FINAL STAGE BODY CLASS must equal 009 (Van), 016 (Bus), 073 (Bus - School Bus), 108 (Motorhome), or 997 Other (Specify:).
АН2Р	BUS USE equals 06,	vPIC BODY CLASS should equal 009 (Van) or 016 (Bus), or FINAL STAGE BODY CLASS should equal 009 (Van) or 016 (Bus).
AL0P	CARGO BODY TYPE equals 22,	vPIC BODY CLASS must equal 009 (Van), 016 (Bus), 068 (Streetcar / Trolley), 073 (Bus- School Bus), or 117 (Limousine), or FINAL STAGE BODY CLASS must equal 009 (Van), 016 (Bus), 068 (Streetcar / Trolley), 073 (Bus- School Bus), or 117 (Limousine).
AM0P	CARGO BODY TYPE does not equal 00 or 99,	vPIC BODY CLASS should equal 009 (Van), 011 (Truck), 016 (Bus), 060 (Pickup), 066 (Truck-Tractor), 068 (Streetcar / Trolley), 073 (Bus - School Bus), 095 (Cargo Van), 108 (Motorhome), 111 (Step Van / Walk-in Van), 117 (Limousine), 126 (Off-road Vehicle - Farm Equipment), 127 (Off-road Vehicle - Construction Equipment), or FINAL STAGE BODY CLASS should equal 009 (Van), 011 (Truck), 016 (Bus), 060 (Pickup), 066 (Truck-Tractor), 068 (Streetcar / Trolley), 073 (Bus-School Bus), 095 (Cargo Van), 108 (Motorhome), 111 (Step Van / Walk-in Van), or 117 (Limousine), or 997 Other (Specify:), or HM2 should equal 2.

Error ID	IF	THEN
D560	VIOLATIONS CHARGED equals 66,	vPIC BODY CLASS should equal 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport/Adventure/Supermoto/On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 104 (Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle).
P01F	RESTRAINT SYSTEM USE Subfield-1 Type of Restraint System in Use equals 01-06, 08, <i>or</i> 10-12,	EJECTION should equal 0 or 7.
P094	EJECTION equals 8,	SEATING POSITION must equal 55 or 56, or vPIC BODY CLASS must equal 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport/Adventure/Supermoto/On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 104 (Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle).

Error ID	IF	THEN
P290	AIR BAG DEPLOYED equals 01-03, 07-09, and vPIC BODY CLASS equals 001 (Convertible/Cabriolet), 002 (Minivan), 003 (Coupe), 005 (Hatchback/Liftback/Notchback), 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 008 (Crossover Utility Vehicle (CUV)), 009 (Van), 010 (Roadster), 011 (Truck), 013 (Sedan/Saloon), 015 (Wagon), 060 (Pickup), 117 (Limousine), 119 (Sport Utility Truck (SUT)), or FINAL STAGE BODY CLASS equals 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 008 (Crossover Utility Vehicle (CUV)), 009 (Van), 011 (Truck), 015 (Wagon), 060 (Pickup), 117 (Limousine), or 119 (Sport Utility Truck (SUT)), and VEHICLE MODEL YEAR equals 1998 or newer,	SEATING POSITION should equal 11, 13, 21, 23, 31, or 33.
U080	vPIC BODY CLASS does not equal 009 (Van), 016 (Bus), 068 (Streetcar / Trolley), or 073 (Bus-School Bus), and FINAL STAGE BODY CLASS does not equal 009 (Van), 016 (Bus), 068 (Streetcar / Trolley), or 073 (Bus-School Bus),	UNLIKELY: SPECIAL USE equals 02 or 03.

Error ID	IF	THEN
V020	VEHICLE TRAILING equals 1,	vPIC BODY CLASS should not equal 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 016 (Bus), 073 (Bus-School Bus), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring / Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 Off- road Vehicle - Dirt Bike / Off-Road), 085 (Motorcycle - Dual Sport / Adventure / Supermoto / On/Off-Road), 086 (Off-road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small / Minibike), 088 (Off-road Vehicle - Go Kart), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 097 (Off-road Vehicle - Snowmobile), 098 (Motorcycle - Street), 100 (Motorcycle - Enclosed Three Wheeled / Enclosed Autocycle), 103 (Motorcycle - Unenclosed Three Wheeled / Open Autocycle), 104 (Motorcycle - Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motocross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle), and FINAL STAGE BODY CLASS should not equal 016 (Bus) or 073 (Bus-School Bus).
V031	RELATED FACTORS-VEHICLE LEVEL equals 039,	vPIC BODY CLASS should equal 011 (Truck), 060 (Pickup), 66 (Truck-Tractor), 095 (Cargo Van), 111 (Step Van / Walk-in Van), 127 (Off-road Vehicle - Construction Equipment), or 997 (Other), or FINAL STAGE BODY CLASS should equal 011 (Truck), 060 (Pickup), 66 (Truck-Tractor), 095 (Cargo Van), 111 (Step Van/Walk-in Van), or 997 (Other (Specify:)).
V032	SPECIAL USE equals 10, 11, or 12,	vPIC BODY CLASS should equal 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 009 (Van), 011 (Truck), 060 (Pickup), or 119 (Sport Utility Truck (SUT)), or FINAL STAGE BODY CLASS should equal 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 009 (Van), 011 (Truck), 060 (Pickup), or 119 (Sport Utility Truck (SUT)).

Error ID	IF	THEN
V033	RELATED FACTORS-VEHICLE LEVEL equals θ 45,	vPIC BODY CLASS must equal 060 (Pickup), or FINAL STAGE BODY CLASS must equal 060 (Pickup).
V050	HELMET USE Subfield 1 Helmet Use equals 05, 16, 17, 19, or 99,	vPIC BODY CLASS must equal 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 (Off- Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport/Adventure/Supermoto/On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 097 (Off-road Vehicle - Snowmobile), 098 (Motorcycle - Street), 100 (Motorcycle - Enclosed Three Wheeled / Enclosed Autocycle), 103 (Motorcycle - Unenclosed Three Wheeled / Open Autocycle), 104 (Moped), 105 (Off-road Vehicle - Recreational Off-Road Vehicle (ROV)), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 124 (Off-road Vehicle - Go Kart), 125 (Motorcycle - Unknown Body Type), 996 (Motorized Bicycle), or 997 (Other).
V051	BUS USE equals 01,	vPIC BODY CLASS should equal 009 (Van), 016 (Bus), or 073 (Bus - School Bus), or FINAL STAGE BODY CLASS should equal 009 (Van), 016 (Bus), or 073 (Bus - School Bus).
V052	BUS USE equals 04,	vPIC BODY CLASS should equal 016 (Bus), or FINAL STAGE BODY CLASS should equal 016 (Bus).
V053	BUS USE equals 05,	vPIC BODY CLASS should equal 009 (Van), 016 (Bus), or 117 (Limousine), or FINAL STAGE BODY CLASS should equal 009 (Van), 016 (Bus), or 117 (Limousine).

Error ID	IF	THEN
V054	BUS USE equals 07,	vPIC BODY CLASS must equal 009 (Van), 016 (Bus), 068 (Streetcar / Trolley), or 073 (Bus-School Bus), or FINAL STAGE BODY CLASS must equal 009 (Van), 016 (Bus), 068 (Streetcar / Trolley), or 073 (Bus-School Bus).
V055	BUS USE equals 00,	vPIC BODY CLASS must not equal 016 (Bus) or 073 (Bus - School Bus), and FINAL STAGE BODY CLASS must not equal 016 (Bus) or 073 (Bus - School Bus).
V170	NUMBER OF OCCUPANTS equals 01-98, and vPIC BODY CLASS equals 001 (Convertible/Cabriolet), 003 (Coupe), 004 (Low Speed Vehicle (LSV) / Neighborhood Electric Vehicle (NEV)), 005 (Hatchback/Liftback/Notchback), 010 (Roadster), 013 (Sedan/Saloon), 060 (Pickup), 088 (Off-road Vehicle - Go Kart), 105 (Off-road Vehicle - Recreational Off-Road Vehicle (ROV)), 124 (Off-road Vehicle - Golf Cart), 126 (Off-road Vehicle - Farm Equipment), 127 (Off-road Vehicle - Construction Equipment), or 997 (Other), or FINAL STAGE BODY CLASS equals 004 (Low Speed Vehicle (LSV) / Neighborhood Electric Vehicle (NEV)) or 060 (Pickup),	NUMBER OF OCCUPANTS should not be greater than 6.
V190	NUMBER OF OCCUPANTS is 01-98, and <i>FINAL STAGE BODY CLASS</i> equals <i>117</i> (<i>Limousine</i>),	NUMBER OF OCCUPANTS should not be greater than 3θ .
V200	NUMBER OF OCCUPANTS is 01-98, and vPIC BODY CLASS equals a motorcycle (006, 012, 080, 081, 082, 083, 084, 085, 086, 087, 090, 094, 098, 104, 109, 110, 113, 114, 125, 996), 100 (Motorcycle - Enclosed Three Wheeled / Enclosed Autocycle), 103 (Motorcycle - Unenclosed Three Wheeled / Open Autocycle), 069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)), or 097 (Off-road Vehicle - Snowmobile),	NUMBER OF OCCUPANTS should not be greater than 15.

Error ID	IF	THEN
V210	NUMBER OF OCCUPANTS is 01-98, vPIC BODY CLASS equals 002 (Minivan), 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 008 (Crossover Utility Vehicle (CUV)), 009 (Van), 15 (Wagon), or 119 (Sport Utility Truck (SUT)), or FINAL STAGE BODY CLASS equals 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 008 (Crossover Utility Vehicle (CUV)), 15 (Wagon), or 119 (Sport Utility Truck),	NUMBER OF OCCUPANTS should not be greater than 15.
V220	NUMBER OF OCCUPANTS is 01-98, and vPIC BODY CLASS equals 011 (Truck), 066 (Truck-Tractor), 095 (Cargo Van), 111 (Step Van / Walk-in Van), or FINAL STAGE BODY CLASS equals 011 (Truck), 066 (Truck-Tractor), 095 (Cargo Van), or 111 (Step Van / Walk-in Van),	NUMBER OF OCCUPANTS should not be greater than 4.
V260	vPIC BODY CLASS equals 999 (Unknown),	NUMBER OF OCCUPANTS should equal 0-10 or 99.
V320	vPIC BODY CLASS equals 011 (Truck), 016 (Bus), 066 (Truck-Tractor), 068 (Streetcar / Trolley), 73 (Bus-School Bus), 95 (Cargo Van), 108 (Motorhome), or 111 (Step Van / Walk-in Van), or FINAL STAGE BODY CLASS equals 011 (Truck), 016 (Bus), 066 (Truck-Tractor), 068 (Streetcar / Trolley), 73 (Bus-School Bus), 95 (Cargo Van), 108 (Motorhome), or 111 (Step Van / Walk-in Van), and POWER UNIT GVWR_from and GVWR_to equals 13 to 18, and SEATING POSITION does not equal 11, 13, or 98,	AIR BAG DEPLOYED should equal 20 or 98.
V330	SCHOOL BUS RELATED equals 1,	vPIC BODY CLASS or FINAL STAGE BODY CLASS of at least one of the involved vehicles should equal 073 (Bus - School Bus), or SPECIAL USE for at least one involved vehicle should equal 02, or BUS USE for at least one vehicle should equal 01.
V440	vPIC BODY CLASS or FINAL STAGE BODY CLASS equals 073 (Bus - School Bus),	SCHOOL BUS RELATED should equal 1.
V46P	VEHICLE CONFIGURATION equals 21,	vPIC BODY CLASS must equal 009 (Van), 016 (Bus), 068 (Streetcar / Trolley), or 073 (Bus-School Bus), or FINAL STAGE BODY CLASS must equal 016 (Bus), 068 (Streetcar / Trolley), or 073 (Bus-School Bus).

Error ID	IF	THEN
V504	POWER UNIT GVWR equals 11 or 12,	NCSA BODY TYPE must equal 01-22, 28-49, 80-90, 91, 94-96 or 97.
V507	NCSA BODY TYPE equals 01-22, 28-49, 80-90, 91, or 94-96,	POWER UNIT GVWR_From and Power Unit GVWR_To MUST be 11 or 12.
V509	NCSA BODY TYPE equals 50-78,	POWER UNIT GVWR_FROM and POWER UNIT GVWR_TO must be in 13-18.
V56P	VEHICLE CONFIGURATION equals 10,	POWER UNIT GVWR must equal 11-12, and HM1 must equal 2.
V57P	VEHICLE CONFIGURATION equals 05,	CARGO BODY TYPE must equal 12 or 96.
V58P	VEHICLE CONFIGURATION equals 04,	vPIC BODY CLASS must not equal 066 (Truck-Tractor), and FINAL STAGE BODY CLASS must not equal 066 (Truck-Tractor).
V596	SPECIAL USE equals 23,	POWER UNIT GVWR_FROM and POWER UNIT GVWR_TO must be in 13-18, and vPIC BODY CLASS must equal 009 (Van), 011 (Truck), 060 (Pickup), or 095 (Cargo Van), or FINAL STAGE BODY CLASS must equal 009 (Van), 011 (Truck), 060 (Pickup), or 095 (Cargo Van).
V59P	VEHICLE CONFIGURATION equals 06,	vPIC BODY CLASS must equal 066 (Truck- Tractor), or FINAL STAGE BODY CLASS must equal 066 (Truck-Tractor), and VEHICLE TRAILING must equal 1.
V60P	VEHICLE CONFIGURATION equals 07,	vPIC BODY CLASS must equal 066 (Truck- Tractor), or FINAL STAGE BODY CLASS must equal 066 (Truck-Tractor), and VEHICLE TRAILING must equal 2.
V61P	VEHICLE CONFIGURATION equals 08,	vPIC BODY CLASS must equal 066 (Truck- Tractor), or FINAL STAGE BODY CLASS must equal 066 (Truck-Tractor), and VEHICLE TRAILING must equal 3.
V790	vPIC BODY CLASS equals 002 (Minivan), and HM1 equals 1,	VEHICLE CONFIGURATION should equal 00, and CARGO BODY TYPE should equal 00.
V791	vPIC BODY CLASS equals 998 or 999 and POWER UNIT GVWR_From is equal to 98 or 99, AND POWER UNIT GVWR_To equals 98 or 99,	VEHICLE CONFIGURATION must equal 99 and CARGO BODY TYPE must equal 99.
V800	NCSA BODY TYPE equals 21, 22, 28, 29,	VEHICLE CONFIGURATION should equal 00, 04, 10, 20, 21, 99, and CARGO BODY TYPE should equal 00, 01, 22, 99.

Error ID	IF	THEN
V810	vPIC BODY CLASS equals 060 (Pickup), or FINAL STAGE BODY CLASS equals 060 (Pickup), and POWER UNIT GVWR_From equals 13, 14, or 15, and POWER UNIT GVWR_To equals 13, 14, or 15, and VEHICLE TRAILING equals 1-4,	VEHICLE CONFIGURATION should equal 04, and CARGO BODY TYPE should equal 01, 03, 04, 09.
V840	vPIC BODY CLASS equals 016 (Bus), 068 (Streetcar / Trolley), or 073 (Bus-School Bus), or FINAL STAGE BODY CLASS equals 016 (Bus), 068 (Streetcar / Trolley), or 073 (Bus- School Bus), and POWR UNIT GVWR From_ and GVWR_To equals 13-18,	VEHICLE CONFIGURATION should equal 21, and CARGO BODY TYPE should equal 22.
V850	vPIC BODY CLASS equals 111 (Step Van / Walk-in Van), or FINAL STAGE BODY CLASS equals 111 (Step Van / Walk-in Van), and POWER UNIT GVWR From_ and GVWR_To equals 13-18,	VEHICLE CONFIGURATION should equal 01 or 04, and CARGO BODY TYPE should equal 01.
V860	HIT-AND-RUN equals 0, and vPIC BODY CLASS equals 011 (Truck) or FINAL STAGE BODY CLASS equals 011 (Truck),	VEHICLE CONFIGURATION should equal 01, 02, <i>or</i> 04, and CARGO BODY TYPE should equal 01-10, 12, <i>or</i> 96-98.
V870	vPIC BODY CLASS equals 108 (Motorhome), or FINAL STAGE BODY CLASS equals 108 (Motorhome), and POWER UNIT GVWR From_and GVWR_To equals 13-18,	VEHICLE CONFIGURATION should equal 19, and CARGO BODY TYPE should equal 97.
V880	vPIC BODY CLASS equals 066 (Truck- Tractor), or FINAL STAGE BODY CLASS equals 066 (Truck-Tractor),	VEHICLE CONFIGURATION should equal 05-08 <i>or</i> 19, and CARGO BODY TYPE should equal 01-04, 06-12, 96-98.
V900	vPIC BODY CLASS equals 108 (Motorhome), or FINAL STAGE BODY CLASS equals 108 (Motorhome), and POWER UNIT GVWR equals 98 or 99,	VEHICLE CONFIGURATION should equal 99, and CARGO BODY TYPE should equal 99.
V910	vPIC BODY CLASS equals 99 (Unknown), and POWER UNIT GVWR From_ and GVWR_To equals 13-18,	VEHICLE CONFIGURATION should equal 19, and CARGO BODY TYPE should equal 98.
V915	vPIC BODY CLASS equals 060 (Pickup), or FINAL STAGE BODY CLASS equals 060 (Pickup), and POWER UNIT GVWR From_and GVWR_To equals 13-18, and VEHICLE TRAILING equals 0,	VEHICLE CONFIGURATION should equal 01, and CARGO BODY TYPE should equal 97.

Error ID	IF	THEN
V920	vPIC BODY CLASS equals 011 (Truck) or 060 (Pickup), or FINAL STAGE BODY CLASS equals 011 (Truck) or 060 (Pickup), and POWER UNIT GVWR From_ and GVWR_To equals 98 or 99,	VEHICLE CONFIGURATION should equal 04, 99, and CARGO BODY TYPE should equal 98 <i>or</i> 99.
V930	VEHICLE CONFIGURATION equals 00, or CARGO BODY TYPE equals 00,	POWER UNIT GVWR From_ and GVWR_To must not equal 13-18.
V951	vPIC BODY CLASS equals 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport/Adventure/Supermoto/On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 097 (Off-road Vehicle - Snowmobile), 098 (Motorcycle - Street), 104 (Motorcycle - Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle),	RESTRAINT SYSTEM USE Subfield 1-Type of Restraint System in Use must equal 20 and Subfield 2 - Any Indication of Mis-Use must equal 7.
V961	NCSA MAKE equals 98, 99, and NCSA MODEL equals,	NCSA BODY TYPE should equal (NCSA MODEL and NCSA BODY TYPE should be valid according to the Vehicle Tables).
V980	POWER UNIT GVWR_From and POWER UNIT GVWR_To equals 13-18, or VEHICLE CONFIGURATION equals 20 or 21, or HM1 equals 2,	MOTOR CARRIER IDENTIFICATION NUMBER must not equal 00-000000000 or 99-999999999999999999999999999999999
V987	vPIC MAKE equals 99998 (Not Reported) or 99999 (Unknown) and vPIC MODEL equals 99998 (Not Reported) or 99999 (Unknown) and vPIC BODY CLASS equals 998 (Not Reported) or 999 (Unknown),	MOTOR CARRIER IDENTIFICATION NUMBER <i>should</i> equal 99-9999999999999999999999999999999999
V989	vPIC MAKE equals 99998 (Not Reported) or 99999 (Unknown), and vPIC MODEL equals 99998 (Not Reported) or 99999 (Unknown), and vPIC BODY CLASS equals 998 (Not Reported) or 999 (Unknown),	BUS USE should equal 99.

Error ID	IF	THEN
VA98	vPIC BODY CLASS equals 006 (Motorcycle - Standard), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring / Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 085 (Motorcycle - Dual Sport / Adventure / Supermoto / On/Off-Road), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 109 (Motorcycle - Cross Country), or 125 (Motorcycle - Unknown Body Type), and VEHICLE MODEL YEAR is less than 2021,	MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S) Subfield 1 must equal 00.
VA99	vPIC BODY CLASS equals 04 (Low Speed Vehicle (LSV) / Neighborhood Electric Vehicle (NEV)), 012 (Motorcycle - Scooter), 069 (Offroad Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 088 (Off-road Vehicle - Go Kart), 097 (Off-road Vehicle - Snowmobile), 104 (Moped), 105 (Off-road Vehicle - Recreational Off-Road Vehicle (ROV)), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 124 (Off-road Vehicle - Farm Equipment), 127 (Off-road Vehicle - Construction Equipment), 996 (Motorized Bicycle), or 997 (Other),	MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S) Subfield 1 must equal 00.
VH06	vPIC BODY CLASS equals 083 (Motorcycle - Trike), 100 (Motorcycle - Enclosed Three Wheeled / Enclosed Autocycle), or 103 (Motorcycle - Unenclosed Three Wheeled / Open Autocycle),	RELATED FACTORS-VEHICLE LEVEL must not equal 030.
VP03	VEHICLE IDENTIFICATION NUMBER decodes with error code only in (1, 400),	VPIC MAKE, VPIC MODEL, VPIC BODY CLASS, NCSA MAKE, NCSA MODEL, and NCSA BODY TYPE must equal the corresponding decoded data values.

Error ID	IF	THEN
VP04	any one of the fields vPIC MAKE, vPIC MODEL, vPIC BODY CLASS, VEHICLE MODEL YEAR, NCSA MAKE, NCSA MODEL, and NCSA BODY TYPE equals Not Reported (vPIC MAKE [99998], vPIC MODEL [99998], vPIC BODY CLASS [998], VEHICLE MODEL YEAR [9998], NCSA MAKE [97], NCSA MODEL [997], NCSA BODY TYPE [98])	the other six must also equal Not Reported (vPIC MAKE [99998], vPIC MODEL [99998], vPIC BODY CLASS [998], VEHICLE MODEL YEAR [9998], NCSA MAKE [97], NCSA MODEL [997], NCSA BODY TYPE [98]).
VP06	any one of the fields vPIC MAKE, vPIC MODEL, vPIC BODY CLASS, VEHICLE MODEL YEAR, NCSA MAKE, NCSA MODEL and NCSA BODY TYPE does not equal Not Reported (vPIC MAKE [99998], vPIC MODEL [99998], vPIC BODY CLASS [998], VEHICLE MODEL YEAR [9998], NCSA MAKE [97], NCSA MODEL [997], NCSA BODY TYPE [98])	the other six must also not be coded as Not Reported (vPIC MAKE [99998], vPIC MODEL [99998], vPIC BODY CLASS [998], VEHICLE MODEL YEAR [9998], NCSA MAKE [97], NCSA MODEL [997], NCSA BODY TYPE [98]).
VP17	vPIC BODY CLASS equals 104 (Motorcycle - Moped),	NCSA BODY TYPE must equal 81 (Moped or Motorized Bicycle).
VP18	vPIC BODY CLASS equals 012 (Motorcycle - Scooter),	NCSA BODY TYPE must equal 84 (Motor Scooter).
VP19	vPIC BODY CLASS equals 103 (Motorcycle - Unenclosed Three Wheeled/Open Autocycle),	NCSA BODY TYPE must equal 85 (Unenclosed Three Wheel Motorcycle/Unenclosed Autocycle (1 Rear Wheel)).
VP20	vPIC BODY CLASS equals 100 (Motorcycle - Enclosed Three Wheeled/Enclosed Autocycle),	NCSA BODY TYPE must equal 86 (Enclosed Three Wheel Motorcycle/Enclosed Autocycle (1 Rear Wheel)).
VP21	vPIC BODY CLASS equals 105 (Off-road Vehicle - Recreational Off-Road Vehicle (ROV)),	NCSA BODY TYPE must equal 96 (Recreational Off-Highway Vehicle (ROV)).
VP22	vPIC BODY CLASS equals 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), or 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)),	NCSA BODY TYPE must equal 83 (Off-Road Motorcycle).
VP23	vPIC BODY CLASS equals 088 (Off-road Vehicle - Go Kart),	NCSA BODY TYPE must equal 97 (Other Vehicle Type).
VP24	vPIC BODY CLASS equals 069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)),	NCSA BODY TYPE must equal 90 (ATV/ATC (All-Terrain Cycle)).

Error ID	IF	THEN
VP25	vPIC BODY CLASS equals 006 (Motorcycle - Standard), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 085 (Motorcycle - Dual Sport/Adventure/Supermoto/On/Off-Road), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 114 (Motorcycle - Competition), or 125 (Motorcycle - Unknown Body Type),	NCSA BODY TYPE must equal 80 (Two Wheel Motorcycle (excluding motor scooters)) or 89 (Unknown Motored Cycle Type).
VP26	vPIC BODY CLASS equals 087 (Motorcycle - Small/Minibike),	NCSA BODY TYPE must equal 88 (Other Motored Cycle (mini-bike, pocket motorcycles ''pocket bikes'')).
VP27	vPIC BODY CLASS equals 083 (Motorcycle - Trike),	NCSA BODY TYPE must equal 82 (Three- Wheeled Motorcycle (2 Rear Wheels)) or 87 (Unknown Three Wheel Motorcycle Type).
VP28	vPIC BODY CLASS equals 097 (Off-road Vehicle - Snowmobile),	NCSA BODY TYPE must equal 91 (Snowmobile).
VP29	vPIC BODY CLASS equals 004 (Low Speed Vehicle (LSV)/Neighborhood Electric Vehicle (NEV)),	NCSA BODY TYPE must equal 94 (Low Speed Vehicle (LSV)/Neighborhood Electric Vehicle (NEV)).
VP30	vPIC BODY CLASS equals 124 (Off-road Vehicle - Golf Cart),	NCSA BODY TYPE must equal 95 (Golf Cart).
VP31	vPIC BODY CLASS equals 998 (Not Reported),	NCSA BODY TYPE must equal 98 (Not Reported).
VP32	vPIC BODY CLASS equals 999 (Unknown),	NCSA BODY TYPE must equal 09 (Other or Unknown Automobile Type), 19 (Utility Vehicle, Unknown Body Type), 29 (Unknown van type), 39 (Unknown (pickup style)), 48 (Unknown light truck type), 49 (Unknown light vehicle type), 59 (Unknown Bus Type), 78 (Unknown medium/heavy truck type), 79 (Unknown truck type (light/medium/heavy), 87 (Unknown Three Wheel Motorcycle Type), 89 (Unknown motored cycle type), or 99 (Unknown Body Type).
VP33	vPIC BODY CLASS equals 108 (Motorhome) or 078 (Incomplete - Motor Home Chassis) and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 13-18,	NCSA BODY TYPE must equal 65 (Medium/Heavy Vehicle Based Motor Home) or 58 (Other Bus Type).

Error ID	IF	THEN
VP34	vPIC BODY CLASS equals 108 (Motorhome) or 078 (Incomplete - Motor Home Chassis) and POWER UNIT GVWR_From and POWER UNIT GVWR_To equal 11 or 12,	NCSA BODY TYPE must equal 42 (Light Vehicle Based Motor Home (chassis mounted)).
VP35	vPIC BODY CLASS equals 066 (Truck-Tractor),	NCSA BODY TYPE must equal 66 (Truck- Tractor (Cab only or with any number of trailing units; any weight)).
VP36	vPIC BODY CLASS equals 111 (Step Van/Walk-in Van) and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 13-18,	NCSA BODY TYPE must equal 60 (Step Van (GVWR Greater than 10,000 lbs.)).
VP37	vPIC BODY CLASS equals 111 (Step Van/Walk-in Van) and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 11 or 12,	NCSA BODY TYPE must equal 22 (Step Van or Walk-In Van (GVWR less than or equal to 10,000 lbs.)).
VP38	vPIC BODY CLASS equals 011 (Truck), and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 13-18,	NCSA BODY TYPE must equal 61 (Single-Unit Straight Truck or Cab-chassis (GVWR range 10,001 to 19,500 lbs.)), 62 (Single-Unit Straight Truck or Cab-chassis (GVWR range 19,501 to 26,000 lbs.)), 63 (Single-Unit Straight Truck or Cab-chassis (GVWR greater than 26,000 lbs.)), 64 (Single-Unit Straight Truck or Cab-Chassis (GVWR unknown)), 67 (Medium/Heavy Pickup (GVWR greater than 10,000 lbs.)), 71 (Unknown if single-unit or combination unit Medium Truck (GVWR range 10,001 lbs. to 26,000 lbs.), 72 (Unknown if single-unit or combination unit Heavy Truck (GVWR greater than 26,000 lbs.), or 78 (Unknown medium/heavy truck type).

Error ID	IF	THEN
VP39	vPIC BODY CLASS equals 074 (Incomplete - Chassis Cab (Number of Cab Unknown)), 070 (Incomplete - Chassis Cab (Double Cab)), 063 (Incomplete - Chassis Cab (Single Cab)), 112 (Incomplete - Commercial Chassis), 067 (Incomplete - Stripped Chassis), 065 (Incomplete), 064 (Incomplete - Glider), 062 (Incomplete - Cutaway) and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 13-18,	NCSA BODY TYPE must equal 50 (School Bus), 51 (Cross Country/Intercity Bus), 52 (Transit Bus (City Bus)), 55 (Van-Based Bus GVWR greater than 10,000 lbs.), 58 (Other Bus Type), 59 (Unknown Bus Type), 60 (Step Van (GVWR greater than 10,000 lbs.)), 61 (Single-Unit Straight Truck or Cab-chassis (GVWR range 10,001 to 19,500 lbs.)), 62 (Single-Unit Straight Truck or Cab-chassis (GVWR range 19,501 to 26,000 lbs.)), 63 (Single-Unit Straight Truck or Cab-chassis (GVWR greater than 26,000 lbs.)), 64 (Single-Unit Straight Truck or Cab-Chassis (GVWR unknown)), 65 (Medium/Heavy Vehicle Based Motor Home), 66 (Truck-tractor (Cab only or with any number of trailing units; any weight)), 67 (Medium/Heavy Pickup (GVWR greater than 10,000 lbs.)), 71 (Unknown if single-unit or combination unit Medium Truck (GVWR range 10,001 lbs. to 26,000 lbs.), 72 (Unknown if single-unit or combination unit Heavy Truck (GVWR greater than 26,000 lbs.), 78 (Unknown medium/heavy truck type), or 99 (Unknown Body Type).

Error ID	IF	THEN
VP40	vPIC BODY CLASS equals 074 (Incomplete - Chassis Cab (Number of Cab Unknown)), 070 (Incomplete - Chassis Cab (Double Cab)), 063 (Incomplete - Chassis Cab (Single Cab)), 112 (Incomplete - Commercial Chassis), 067 (Incomplete - Stripped Chassis), 065 (Incomplete), 064 (Incomplete - Glider), 062 (Incomplete - Cutaway) and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 11-12,	NCSA BODY TYPE must equal 01 (Convertible (excludes sunroof, t-bar)), 02 (2-Door Sedan, Hardtop, Coupe), 03 (3-Door/2-Door Hatchback), 04 (4-Door Sedan, Hardtop), 05 (5-Door/4-Door Hatchback), 06 (Station Wagon (excluding van and truck based), 07 (Hatchback, Number of Doors Unknown), 08 (Sedan/Hardtop, Number of Doors Unknown), 09 (Other or Unknown Automobile Type), 10 (Auto-Based Pickup), 11 (Auto-Based Panel), 12 (Large Limousine), 13 (Three-Wheel Automobile or Automobile Derivative), 14 (Compact Utility), 15 (Large Utility), 16 (Utility Station Wagon), 17 (3-Door Coupe), 19 (Utility Vehicle, Unknown Body Type), 20 (Minivan), 21 (Large Van), 22 (Step-van or walk-in van (GVWR less than or equal to 10,000 lbs.)), 28 (Other van type), 29 (Unknown Van Type), 33 (Convertible pickup), 34 (Light Pickup), 39 (Unknown (pickup style) light conventional truck type), 40 (Cab Chassis Based), 41 (Truck Based Panel), 45 (Other light conventional truck type), 49 (Unknown light vehicle type).
VP41	vPIC BODY CLASS equals 011 (Truck), and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 11-12,	NCSA BODY TYPE must equal 40 (Cab Chassis Based), 41 (Truck Based Panel), 45 (Other light conventional truck type), 48 (Unknown light truck type), or 49 (Unknown light vehicle type).
VP42	vPIC BODY CLASS equals 060 (Pickup) and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 13-18,	NCSA BODY TYPE should equal 67 (Medium/Heavy Pickup (GVWR greater than 10,000 lbs.)).
VP43	vPIC BODY CLASS equals 060 (Pickup) and POWER UNIT GVWR_From and POWER UNIT GVWR_To equals 11 or 12,	NCSA BODY TYPE must equal 10 (Auto-Based Pickup), 33 (Convertible pickup), 34 (Light Pickup), or 39 (Unknown (pickup style) light conventional truck type).
VP44	vPIC BODY CLASS equals 071 (Incomplete - School Bus Chassis) or 073 (Bus - School Bus),	NCSA BODY TYPE must equal 50 (School Bus).

Error ID	IF	THEN
VP45	vPIC BODY CLASS equals 009 (Van), 095 (Cargo Van), or 015 (Wagon), and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 13-18,	NCSA BODY TYPE must equal 55 (Van-Based Bus GVWR greater than 10,000 lbs.) or 61 (Single-Unit Straight Truck or Cab-chassis (GVWR range 10,001 to 19,500 lbs.)), 62 (Single-Unit Straight Truck or Cab-chassis (GVWR range 19,501 to 26,000 lbs.)), 63 (Single-Unit Straight Truck or Cab-chassis (GVWR greater than 26,000 lbs.)), or 64 (Single-Unit Straight Truck or Cab-Chassis (GVWR unknown)).
VP46	vPIC BODY CLASS equals 009 (Van) or 095 (Cargo Van) and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 11 or 12,	NCSA BODY TYPE must equal 06 (Station Wagon [excluding van and truck based]), 14 (Compact Utility), 20 (Minivan), 21 (Large Van), 28 (Other van type), or 29 (Unknown van type).
VP47	vPIC BODY CLASS equals 016 (Bus), 107 (Incomplete - Bus Chassis), 076 (Incomplete - Motor Coach Chassis), 077 (Incomplete - Shuttle Bus Chassis), 072 (Incomplete - Commercial Bus Chassis), 075 (Incomplete - Transit Bus Chassis), or 068 (Streetcar/Trolley) and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 13-18,	NCSA BODY TYPE must equal 51 (Cross Country/Intercity Bus), 52 (Transit Bus (City Bus)), 55 (Van-Based Bus GVWR greater than 10,000 lbs.), 58 (Other Bus Type), or 59 (Unknown Bus Type).
VP48	vPIC BODY CLASS equals 002 (Minivan),	NCSA BODY TYPE must equal 20 (Minivan).
VP49	vPIC BODY CLASS equals 001 (Convertible/Cabriolet), 003 (Coupe), 013 (Sedan/Saloon), or 010 (Roadster),	NCSA BODY TYPE should equal 01 (Convertible (excludes sunroof, t-bar)), 02 (2-Door Sedan, Hardtop, Coupe), 03 (3-Door/2-Door Hatchback), 04 (4-Door Sedan, Hardtop), 05 (5-Door/4-Door Hatchback), 06 (Station Wagon (excluding van and truck based), 07 (Hatchback, Number of Doors Unknown), 08 (Sedan/Hardtop, Number of Doors Unknown), 09 (Other or Unknown Automobile Type), 11 (Auto-Based Panel), 13 (Three-Wheel Automobile or Automobile Derivative), or 17 (3-Door Coupe).
VP50	vPIC BODY CLASS equals 117 (Limousine) and POWER UNIT GVWR_From and POWER UNIT GVWR_To equals 11 or 12,	NCSA BODY TYPE must equal 12 (Large Limousine) or 09 (Other or Unknown Automobile Type).

Error ID	IF	THEN
VP51	vPIC BODY CLASS equals 005 (Hatchback/Liftback/Notchback),	NCSA BODY TYPE must equal 03 (3-Door/2-Door Hatchback), 05 (5-Door/4-Door Hatchback), 06 (Station Wagon (excluding van and truck based), 07 (Hatchback, Number of Doors Unknown), 09 (Other or Unknown Automobile Type), 14 (Compact Utility), 19 (Utility Vehicle, Unknown Body Type), 20 (Minivan), 21 (Large Van), 48 (Unknown light truck type), or 49 (Unknown light vehicle type).
VP52	vPIC BODY CLASS equals 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 008 (Crossover Utility Vehicle (CUV)), or 119 (Sport Utility Truck (SUT)) and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 11 or 12,	NCSA BODY TYPE must equal 05 (5-Door/4-Door Hatchback), 06 (Station Wagon (excluding van and truck based)), 14 (Compact Utility), 15 (Large Utility), 16 (Utility Station Wagon), 19 (Utility Vehicle, Unknown Body Type), 34 (Light Pickup), 48 (Unknown light truck type), or 49 (Unknown light vehicle type [automobile, utility vehicle, van, or light truck]).
VP53	NCSA BODY TYPE equals 92 (Farm Equipment Other Than Trucks),	vPIC BODY CLASS must equal 126 (Off- road Vehicle - Farm Equipment).
VP54	NCSA BODY TYPE equals 93 (Construction Equipment Other Than Trucks),	vPIC BODY CLASS must equal 127 (Off-road Vehicle - Construction Equipment).
VP56	vPIC BODY CLASS equals 016 (Bus), 107 (Incomplete - Bus Chassis), 076 (Incomplete - Motor Coach Chassis), 077 (Incomplete - Shuttle Bus Chassis), 072 (Incomplete - Commercial Bus Chassis), 075 (Incomplete - Transit Bus Chassis), or 068 (Streetcar/Trolley) and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 11-12,	NCSA BODY TYPE must equal 21 (Large Van).

Error ID	IF	THEN
VP57	vPIC BODY CLASS equals 117 (Limousine) and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 13-18,	NCSA BODY TYPE must equal 50 (School Bus), 51 (Cross Country/Intercity Bus), 52 (Transit Bus (City Bus)), 55 (Van-Based Bus GVWR greater than 10,000 lbs.), 58 (Other Bus Type), 59 (Unknown Bus Type), 60 (Step Van (GVWR greater than 10,000 lbs.)), 61 (Single-Unit Straight Truck or Cab-chassis (GVWR range 10,001 to 19,500 lbs.)), 62 (Single-Unit Straight Truck or Cab-chassis (GVWR range 19,501 to 26,000 lbs.)), 63 (Single-Unit Straight Truck or Cab-chassis (GVWR greater than 26,000 lbs.)), 64 (Single-Unit Straight Truck or Cab-Chassis (GVWR unknown)), 66 (Truck-tractor (Cab only or with any number of trailing units; any weight)), 67 (Medium/Heavy Pickup (GVWR greater than 10,000 lbs.)), 71 (Unknown if single-unit or combination unit Medium Truck (GVWR range 10,001 lbs. to 26,000 lbs.), 72 (Unknown if single-unit or combination unit Heavy Truck (GVWR greater than 26,000 lbs.), 78 (Unknown medium/heavy truck type), 79 (Unknown truck type (light/medium/heavy).

Error ID	IF	THEN
VP58	vPIC BODY CLASS equals 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 008 (Crossover Utility Vehicle (CUV), or 119 (Sport Utility Truck (SUT) and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 13-18,	NCSA BODY TYPE must equal 50 (School Bus), 51 (Cross Country/Intercity Bus), 52 (Transit Bus (City Bus)), 55 (Van-Based Bus GVWR greater than 10,000 lbs.), 58 (Other Bus Type), 59 (Unknown Bus Type), 60 (Step Van (GVWR greater than 10,000 lbs.)), 61 (Single-Unit Straight Truck or Cab-chassis (GVWR range 10,001 to 19,500 lbs.)), 62 (Single-Unit Straight Truck or Cab-chassis (GVWR range 19,501 to 26,000 lbs.)), 63 (Single-Unit Straight Truck or Cab-chassis (GVWR greater than 26,000 lbs.)), 64 (Single-Unit Straight Truck or Cab-Chassis (GVWR unknown)), 66 (Truck-tractor (Cab only or with any number of trailing units; any weight)), 67 (Medium/Heavy Pickup (GVWR greater than 10,000 lbs.)), 71 (Unknown if single-unit or combination unit Medium Truck (GVWR range 10,001 lbs. to 26,000 lbs.), 72 (Unknown if single-unit or combination unit Heavy Truck (GVWR greater than 26,000 lbs.), 78 (Unknown medium/heavy truck type), 79 (Unknown truck type (light/medium/heavy), or 99 (Unknown Body Type).
VP89	VPIC BODY CLASS equals 997,	NCSA BODY TYPE should be 09 or 97.
VP90	vPIC BODY CLASS equals 015 (Wagon), and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 11 or 12,	NCSA BODY TYPE must equal code 03 (3-Door/2-Door Hatchback), 05 (5-Door/4-Door Hatchback), 06 (Station Wagon (excluding van and truck based)), 09 (Other or Unknown Automobile Type), 14 (Compact Utility), 15 (Large Utility), 16 (Utility Station Wagon), 20 (Minivan), 19 (Utility Vehicle, Unknown Body Type), 21 (Large Van), 28 (Other van type), 29 (Unknown van type), 48 (Unknown light truck type), or 49 (Unknown light vehicle type).

Consistency Checks (CRSS Only) (See Section 400):

Error ID	IF	THEN
V941	vPIC BODY CLASS equals 069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)), 084 (Off-road Vehicle - Dirt Bike / Off-Road), 086 (Off-road Vehicle - Enduro (Off-road long-distance racing)), 088 (Off-road Vehicle - Go Kart), 097 (Off-road Vehicle - Snowmobile), 113 (Off-road Vehicle - Motocross (Off-road, short-distance, closed track racing)), 126 (Off-road Vehicle - Farm Equipment), 127 (Off-road Vehicle - Construction Equipment),	VEHICLE LICENSE PLATE NUMBER should equal 00000000000.

Consistency Checks (FARS Only) (See Section 400):

Error ID	IF	THEN
4S1P	vPIC BODY CLASS does equal 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport/Adventure/Supermoto/On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 100 (Motorcycle - Enclosed Three Wheeled / Enclosed Autocycle), 103 (Motorcycle - Unenclosed Three Wheeled / Open Autocycle), 104 (Moped), 105 (Off-road Vehicle - Recreational Off-Road Vehicle (ROV)), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle), and HM1 does not equal 1,	COMPLIANCE WITH CDL ENDORSEMENTS MUST equal 0.
5SOP	vPIC BODY CLASS equals 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport/Adventure/Supermoto/On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 104 (Motorcycle - Moped), 109 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle),	EXTRICATION must equal 0.
6A1P	UNDERRIDE/OVERRIDE equals 1-8,	NCSA BODY TYPE must not equal 80-84, 88-91.

Error ID	IF	THEN
D270	POWER UNIT GVWR_From and POWER UNIT GVWR_To equals 17-18, or VEHICLE CONFIGURATION equals 21, or HM2 equals 2,	COMMERCIAL MOTOR VEHICLE LICENSE STATUS should not equal 00.
D440	COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 00,	POWER UNIT GVWR_From and POWER UNIT GVWR_To should not be in 17-18, VEHICLE CONFIGURATION should not equal 21, and HM2 should not equal 2.
P130	vPIC BODY CLASS equals 011 (Truck), 016 (Bus), 068 (Streetcar / Trolley), 73 (Bus-School Bus), 066 (Truck-Tractor), 095 (Cargo Van), 111 (Step Van / Walk-in Van), 117 (Limousine), 126 (Off-road Vehicle - Farm Equipment), 127 (Off-road Vehicle - Construction Equipment), or FINAL STAGE BODY CLASS equals 011 (Truck), 016 (Bus), 068 (Streetcar / Trolley), 73 (Bus-School Bus), 066 (Truck-Tractor), 095 (Cargo Van), 111 (Step Van / Walk-in Van), or 117 (Limousine), and POWER UNIT GVWR_from and GVWR_to equals 13, 14, 15, 16, 17, or 18, and PERSON TYPE equals 01 or 03, and INJURY SEVERITY equals 4,	FATAL INJURY AT WORK should equal 1.

V17 - Final Stage Body Class

FORMAT: 3 numeric

SAS NAME: Vehicle.ICFinalBody, Person.ICFinalBody, Parkwork.PICFinalBody

ELEMENT VALUES:

Codes	Attributes
000	Not Applicable
002	<u>Minivan</u>
004	Low Speed Vehicle (LSV)
007	Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)
008	Crossover Utility Vehicle (CUV)
009	<u>Van</u>
011	<u>Truck</u>
015	Wagon
016	<u>Bus</u>
060	<u>Pickup</u>
066	<u>Truck-Tractor</u>
068	Streetcar / Trolley
073	Bus-School Bus
095	<u>Cargo Van</u>
108	<u>Motorhome</u>
111	Step Van / Walk-in Van
117	Limousine
119	Sport Utility Truck
997	Other (Specify:)
998	Not Reported
999	<u>Unknown</u>

Definition: This element captures the completed/finished body class for an <u>Incomplete Vehicle</u>. An incomplete vehicle is completed by a final stage manufacturer. The intent of this data element is to capture the body class for incomplete vehicles when they are finished for road-use.

Remarks: SEE ADDITIONAL REMARKS UNDER <u>VPIC MAKE / VPIC MODEL / VPIC BODY CLASS OVERVIEW</u>.

This data element is only applicable to <u>Incomplete Vehicles</u> under vPIC BODY CLASS. The attributes used for this data element is a subset of the vPIC Body Class. Please refer to the descriptions under vPIC BODY CLASS for detailed information.

This data element should be coded using all the available sources.

000 (Not Applicable) is used when this vehicle is not an <u>Incomplete Vehicle</u> under vPIC BODY CLASS. For the completed vehicle or if the VPIC BODY CLASS is Other/Unknown/Not Reported, this field will be automatically populated as Not Applicable after the VPIC BODY CLASS is populated.

997 Other (Specify:) is used when the motor vehicle in question does not qualify for any of the above listed body classes. Specify using information on PCR or Vehicle Registration (FARS Only).

*Note: For attributes with a "Specify:" designation, a fill-in text box will open in RBIS. This text box should be used to provide additional detail about the attribute selection. Please include a specific reason for this selection.

998 (Not Reported)

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "Not Reported."

Code 998 (Not Reported) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).

999 (Unknown) is used when the available information on PCR regarding the type of vehicle's final stage body class is Unknown.

Consistency Checks (See Section 400):

Error ID	IF	THEN
V401	NUMBER OF OCCUPANTS is 01-98, and vPIC BODY CLASS equals 108 (Motorhome), or FINAL STAGE BODY CLASS equals 108 (Motorhome),	NUMBER OF OCCUPANTS should not be greater than 8.
V402	NUMBER OF OCCUPANTS is 01-98, and vPIC BODY CLASS equals 073 (Bus - School Bus), or FINAL STAGE BODY CLASS equals 073 (Bus - School Bus),	NUMBER OF OCCUPANTS should not be greater than 50.
V450	NUMBER OF OCCUPANTS is 01-98, and vPIC BODY CLASS equals equal 016 (Bus) or 068 (Streetcar / Trolley), or FINAL STAGE BODY CLASS equals 016 (Bus) or 068 (Streetcar / Trolley),	NUMBER OF OCCUPANTS should not be greater than 60.

Error ID	IF	THEN
VP12	UNLIKELY: FINAL STAGE BODY CLASS equals 997.	
VP55	vPIC BODY CLASS equals 062 (Incomplete - Cutaway), 063 (Incomplete - Chassis Cab (Single Cab)), 064 (Incomplete - Glider), 065 (Incomplete), 067 (Incomplete - Stripped Chassis), 070 (Incomplete - Chassis Cab (Double Cab), 071 (Incomplete - School Bus Chassis), 072 (Incomplete - Commercial Bus Chassis), 074 (Incomplete - Chassis Cab (Number of Cab Unknown)), 075 (Incomplete - Transit Bus Chassis), 076 (Incomplete - Motor Coach Chassis), 077 (Incomplete - Shuttle Bus Chassis), 078 (Incomplete - Motor Home Chassis), 107 (Incomplete - Bus Chassis), or 112 (Incomplete - Commercial Chassis),	FINAL STAGE BODY CLASS must not equal 000 (Not Applicable).
VP59	vPIC BODY CLASS equals 072 (Incomplete - Commercial Bus Chassis), 075 (Incomplete - Transit Bus Chassis), 076 (Incomplete - Motor Coach Chassis), 077 (Incomplete - Shuttle Bus Chassis), or 107 (Incomplete - Bus Chassis),	FINAL STAGE BODY CLASS must equal 016 (Bus), 073 (Bus-School Bus), 997 (Other (Specify:)), 998 (Not Reported), or 999 (Unknown).
VP60	vPIC BODY CLASS equals 071 (Incomplete - School Bus Chassis),	FINAL STAGE BODY CLASS must equal 073 (Bus-School Bus), 997 (Other (Specify:)), 998 (Not Reported), or 999 (Unknown).
VP61	vPIC BODY CLASS equals 078 (Incomplete - Motor Home Chassis),	FINAL STAGE BODY CLASS must equal 108 (Motorhome), 997 (Other (Specify:)), 998 (Not Reported), or 999 (Unknown).
VP62	FINAL STAGE BODY CLASS equals 011 (Truck), 060 (Pickup), or 066 (Truck-Tractor),	vPIC BODY CLASS must equal 062 (Incomplete - Cutaway), 063 (Incomplete - Chassis Cab (Single Cab)), 064 (Incomplete - Glider), 065 (Incomplete), 067 (Incomplete - Stripped Chassis), 070 (Incomplete - Chassis Cab (Double Cab)), 074 (Incomplete - Chassis Cab (Number of Cab Unknown)), or 112 (Incomplete - Commercial Chassis).
VP63	FINAL STAGE BODY CLASS equals 004 (Low Speed Vehicle (LSV)),	vPIC BODY CLASS should not equal 063 (Incomplete - Chassis Cab (Single Cab)), 070 (Incomplete - Chassis Cab (Double Cab)), 071 (Incomplete - School Bus Chassis), 074 (Incomplete - Chassis Cab (Number of Cab Unknown)), 076 (Incomplete - Motor Coach Chassis).

Error ID	IF	THEN
VP64	FINAL STAGE BODY CLASS equals 009 (Van), 015 (Wagon), 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 008 (Crossover Utility Vehicle (CUV)), 068 (Streetcar/Trolley), 095 (Cargo Van), 111 (Step Van/Walk-in Van),	vPIC BODY CLASS should not equal 071 (Incomplete - School Bus Chassis), 076 (Incomplete - Motor Coach Chassis), or 078 (Incomplete - Motor Home Chassis).
VP65	FINAL STAGE BODY CLASS equals 117 (Limousine),	vPIC BODY CLASS should not equal 063 (Incomplete - Chassis Cab (Single Cab)), 070 (Incomplete - Chassis Cab (Double Cab)), 071 (Incomplete - School Bus Chassis), 074 (Incomplete - Chassis Cab (Number of Cab Unknown)), 075 (Incomplete - Transit Bus Chassis), or 077 (Incomplete - Shuttle Bus Chassis).

V18 - Power Unit Gross Vehicle Weight Rating

FORMAT: 2 numeric occurring 1 time, 2 numeric occurring 1 time

SAS NAME: Vehicle.GVWR_From, Vehicle.GVWR_To, Parkwork.PGVWR_From, Parkwork.PGVWR To

ELEMENT VALUES:

Subfield 1: GVWR_From

Subfield 2: GVWR_To

Codes	Attributes
11	Class 1: 6,000 lbs. or less (2,722 kg or less)
12	Class 2: 6,001 - 10,000 lbs. (2,722 - 4,536 kg)
13	Class 3: 10,001 - 14,000 lbs. (4,536 - 6,350 kg)
14	Class 4: 14,001 - 16,000 lbs. (6,350 - 7,258 kg)
15	Class 5: 16,001 - 19,500 lbs. (7,258 - 8,845 kg)
16	Class 6: 19,501 - 26,000 lbs. (8,845 - 11,794 kg)
17	Class 7: 26,001 - 33,000 lbs. (11,794 - 14,969 kg)
18	Class 8: 33,001 lbs. and above (14,969 kg and above)
98	Not Reported
99	Reported as Unknown

Definition: This element identifies the range of Gross Vehicle Weight Rating (GVWR) of the power unit as identified by the manufacturer through the vehicle's VIN submission.

Subfield 1: GVWR_From: This field defines the lowest value for the range of the GVWR specified by the manufacturer as recommended loaded weight for a vehicle.

Subfield 2: GVWR_To: This field defines the highest value for the range of the GVWR specified by the manufacturer as recommended loaded weight for a vehicle.

Remarks: SEE ADDITIONAL REMARKS in <u>vPIC MAKE / vPIC MODEL / vPIC BODY</u> CLASS OVERVIEW.

This data element records the range of the power unit's GVWR. If the power unit's GVWR is within the same range, the GVWR_From and GVWR_To values should be coded the same.

For Truck/Trailer Combinations: Be sure to code the POWER UNIT GVWR in this data element and the trailer(s) GVWR in <u>TRAILER GVWR</u>.

If there is a VIN, GVWR_From and GVWR_To are derived from VIN decoding when available. If the value cannot be obtained from VIN decode, use PCR, vehicle registration (FARS Only), or truck and bus supplement (FARS Only) to code this data element.

Examples:

- 10,000 lbs or less: Code GVWR_From = 11; GVWR_To = 12.
- 10,001 lbs to 26,000 lbs: Code GVWR_From = 13; GVWR_To = 16.
- 26,001 lbs or more: Code GVWR_From = 17; GVWR_To = 18.
- 6,001 lbs to 10,000 lbs: Code GVWR_From = 12; GVWR_To = 12.
- 33,001 lbs and above: Code GVWR_From = 18; GVWR_To = 18.

98 (Not Reported)

Code 98 (Not Reported) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material). As an example, if the PCR reports the GCWR for combined power unit and trailer instead of GVWR for power unit, this should be coded as Not Reported
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "Not Reported."

99 (Reported as Unknown) should be used when GVWR information is reported as "Unknown" on your police crash report or truck/bus supplement and the decoded VIN is unable to return a value.

Consistency Checks (See Section 400):

Error ID	IF	THEN
V504	POWER UNIT GVWR equals 11 or 12,	NCSA BODY TYPE must equal 01-22, 28-49, 80-90, 91, 94-96 or 97.
V507	NCSA BODY TYPE equals 01-22, 28-49, 80-90, 91, or 94-96,	POWER UNIT GVWR_From and Power Unit GVWR_To MUST be 11 or 12.
V509	NCSA BODY TYPE equals 50-78,	POWER UNIT GVWR_FROM and POWER UNIT GVWR_TO must be in 13-18.
VP33	vPIC BODY CLASS equals 108 (Motorhome) or 078 (Incomplete - Motor Home Chassis) and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 13-18,	NCSA BODY TYPE must equal 65 (Medium/Heavy Vehicle Based Motor Home) or 58 (Other Bus Type).

Error ID	IF	THEN
VP34	vPIC BODY CLASS equals 108 (Motorhome) or 078 (Incomplete - Motor Home Chassis) and POWER UNIT GVWR_From and POWER UNIT GVWR_To equal 11 or 12,	NCSA BODY TYPE must equal 42 (Light Vehicle Based Motor Home (chassis mounted)).
VP36	vPIC BODY CLASS equals 111 (Step Van/Walk-in Van) and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 13-18,	NCSA BODY TYPE must equal 60 (Step Van (GVWR Greater than 10,000 lbs.)).
VP37	vPIC BODY CLASS equals 111 (Step Van/Walk-in Van) and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 11 or 12,	NCSA BODY TYPE must equal 22 (Step Van or Walk-In Van (GVWR less than or equal to 10,000 lbs.)).
VP38	vPIC BODY CLASS equals 011 (Truck), and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 13-18,	NCSA BODY TYPE must equal 61 (Single-Unit Straight Truck or Cab-chassis (GVWR range 10,001 to 19,500 lbs.)), 62 (Single-Unit Straight Truck or Cab-chassis (GVWR range 19,501 to 26,000 lbs.)), 63 (Single-Unit Straight Truck or Cab-chassis (GVWR greater than 26,000 lbs.)), 64 (Single-Unit Straight Truck or Cab-Chassis (GVWR unknown)), 67 (Medium/Heavy Pickup (GVWR greater than 10,000 lbs.)), 71 (Unknown if single-unit or combination unit Medium Truck (GVWR range 10,001 lbs. to 26,000 lbs.), 72 (Unknown if single-unit or combination unit Heavy Truck (GVWR greater than 26,000 lbs.), or 78 (Unknown medium/heavy truck type).

Error	IF	THEN
Error ID VP39	vPIC BODY CLASS equals 074 (Incomplete - Chassis Cab (Number of Cab Unknown)), 070 (Incomplete - Chassis Cab (Double Cab)), 063 (Incomplete - Chassis Cab (Single Cab)), 112 (Incomplete - Commercial Chassis), 067 (Incomplete - Stripped Chassis), 065 (Incomplete), 064 (Incomplete - Glider), 062 (Incomplete - Cutaway) and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 13-18,	NCSA BODY TYPE must equal 50 (School Bus), 51 (Cross Country/Intercity Bus), 52 (Transit Bus (City Bus)), 55 (Van-Based Bus GVWR greater than 10,000 lbs.), 58 (Other Bus Type), 59 (Unknown Bus Type), 60 (Step Van (GVWR greater than 10,000 lbs.)), 61 (Single-Unit Straight Truck or Cab-chassis (GVWR range 10,001 to 19,500 lbs.)), 62 (Single-Unit Straight Truck or Cab-chassis (GVWR range 19,501 to 26,000 lbs.)), 63 (Single-Unit Straight Truck or Cab-chassis (GVWR greater than 26,000 lbs.)), 64 (Single-Unit Straight Truck or Cab-Chassis (GVWR unknown)), 65 (Medium/Heavy Vehicle Based Motor Home), 66 (Truck-tractor (Cab only or with any number of trailing units; any weight)), 67 (Medium/Heavy Pickup (GVWR greater than 10,000 lbs.)), 71 (Unknown if single-unit or combination unit Medium Truck (GVWR range 10,001 lbs. to 26,000 lbs.), 72 (Unknown if single-unit or combination unit Heavy Truck (GVWR greater than 26,000 lbs.), 78 (Unknown medium/heavy truck type), or 99 (Unknown medium/heavy truck type), or 99 (Unknown

Error ID	IF	THEN
VP40	vPIC BODY CLASS equals 074 (Incomplete - Chassis Cab (Number of Cab Unknown)), 070 (Incomplete - Chassis Cab (Double Cab)), 063 (Incomplete - Chassis Cab (Single Cab)), 112 (Incomplete - Commercial Chassis), 067 (Incomplete - Stripped Chassis), 065 (Incomplete), 064 (Incomplete - Glider), 062 (Incomplete - Cutaway) and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 11-12,	NCSA BODY TYPE must equal 01 (Convertible (excludes sunroof, t-bar)), 02 (2-Door Sedan, Hardtop, Coupe), 03 (3-Door/2-Door Hatchback), 04 (4-Door Sedan, Hardtop), 05 (5-Door/4-Door Hatchback), 06 (Station Wagon (excluding van and truck based), 07 (Hatchback, Number of Doors Unknown), 08 (Sedan/Hardtop, Number of Doors Unknown), 09 (Other or Unknown Automobile Type), 10 (Auto-Based Pickup), 11 (Auto-Based Panel), 12 (Large Limousine), 13 (Three-Wheel Automobile or Automobile Derivative), 14 (Compact Utility), 15 (Large Utility), 16 (Utility Station Wagon), 17 (3-Door Coupe), 19 (Utility Vehicle, Unknown Body Type), 20 (Minivan), 21 (Large Van), 22 (Stepvan or walk-in van (GVWR less than or equal to 10,000 lbs.)), 28 (Other van type), 29 (Unknown Van Type), 33 (Convertible pickup), 34 (Light Pickup), 39 (Unknown (pickup style) light conventional truck type), 40 (Cab Chassis Based), 41 (Truck Based Panel), 45 (Other light conventional truck type), 48 (Unknown light truck type), 49 (Unknown light vehicle type).
VP41	vPIC BODY CLASS equals 011 (Truck), and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 11-12,	NCSA BODY TYPE must equal 40 (Cab Chassis Based), 41 (Truck Based Panel), 45 (Other light conventional truck type), 48 (Unknown light truck type), or 49 (Unknown light vehicle type).
VP42	vPIC BODY CLASS equals 060 (Pickup) and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 13-18,	NCSA BODY TYPE should equal 67 (Medium/Heavy Pickup (GVWR greater than 10,000 lbs.)).
VP43	vPIC BODY CLASS equals 060 (Pickup) and POWER UNIT GVWR_From and POWER UNIT GVWR_To equals 11 or 12,	NCSA BODY TYPE must equal 10 (Auto-Based Pickup), 33 (Convertible pickup), 34 (Light Pickup), or 39 (Unknown (pickup style) light conventional truck type).

Error ID	IF .	THEN
VP45	vPIC BODY CLASS equals 009 (Van), 095 (Cargo Van), or 015 (Wagon), and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 13-18,	NCSA BODY TYPE must equal 55 (Van-Based Bus GVWR greater than 10,000 lbs.) or 61 (Single-Unit Straight Truck or Cab-chassis (GVWR range 10,001 to 19,500 lbs.)), 62 (Single-Unit Straight Truck or Cab-chassis (GVWR range 19,501 to 26,000 lbs.)), 63 (Single-Unit Straight Truck or Cab-chassis (GVWR greater than 26,000 lbs.)), or 64 (Single-Unit Straight Truck or Cab-Chassis (GVWR unknown)).
VP46	vPIC BODY CLASS equals 009 (Van) or 095 (Cargo Van) and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 11 or 12,	NCSA BODY TYPE must equal 06 (Station Wagon [excluding van and truck based]), 14 (Compact Utility), 20 (Minivan), 21 (Large Van), 28 (Other van type), or 29 (Unknown van type).
VP47	vPIC BODY CLASS equals 016 (Bus), 107 (Incomplete - Bus Chassis), 076 (Incomplete - Motor Coach Chassis), 077 (Incomplete - Shuttle Bus Chassis), 072 (Incomplete - Commercial Bus Chassis), 075 (Incomplete - Transit Bus Chassis), or 068 (Streetcar/Trolley) and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 13-18,	NCSA BODY TYPE must equal 51 (Cross Country/Intercity Bus), 52 (Transit Bus (City Bus)), 55 (Van-Based Bus GVWR greater than 10,000 lbs.), 58 (Other Bus Type), or 59 (Unknown Bus Type).
VP50	vPIC BODY CLASS equals 117 (Limousine) and POWER UNIT GVWR_From and POWER UNIT GVWR_To equals 11 or 12,	NCSA BODY TYPE must equal 12 (Large Limousine) or 09 (Other or Unknown Automobile Type).
VP52	vPIC BODY CLASS equals 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 008 (Crossover Utility Vehicle (CUV)), or 119 (Sport Utility Truck (SUT)) and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 11 or 12,	NCSA BODY TYPE must equal 05 (5-Door/4-Door Hatchback), 06 (Station Wagon (excluding van and truck based)), 14 (Compact Utility), 15 (Large Utility), 16 (Utility Station Wagon), 19 (Utility Vehicle, Unknown Body Type), 34 (Light Pickup), 48 (Unknown light truck type), or 49 (Unknown light vehicle type [automobile, utility, van, or light truck]).
VP56	vPIC BODY CLASS equals 016 (Bus), 107 (Incomplete - Bus Chassis), 076 (Incomplete - Motor Coach Chassis), 077 (Incomplete - Shuttle Bus Chassis), 072 (Incomplete - Commercial Bus Chassis), 075 (Incomplete - Transit Bus Chassis), or 068 (Streetcar/Trolley) and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 11-12,	NCSA BODY TYPE must equal 21 (Large Van).

Error ID	IF	THEN
VP57	vPIC BODY CLASS equals 117 (Limousine) and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 13-18,	NCSA BODY TYPE must equal 50 (School Bus), 51 (Cross Country/Intercity Bus), 52 (Transit Bus (City Bus)), 55 (Van-Based Bus GVWR greater than 10,000 lbs.), 58 (Other Bus Type), 59 (Unknown Bus Type), 60 (Step Van (GVWR greater than 10,000 lbs.)), 61 (Single-Unit Straight Truck or Cab-chassis (GVWR range 10,001 to 19,500 lbs.)), 62 (Single-Unit Straight Truck or Cab-chassis (GVWR range 19,501 to 26,000 lbs.)), 63 (Single-Unit Straight Truck or Cab-chassis (GVWR greater than 26,000 lbs.)), 64 (Single-Unit Straight Truck or Cab-Chassis (GVWR unknown)), 66 (Truck-tractor (Cab only or with any number of trailing units; any weight)), 67 (Medium/Heavy Pickup (GVWR greater than 10,000 lbs.)), 71 (Unknown if single-unit or combination unit Medium Truck (GVWR range 10,001 lbs. to 26,000 lbs.), 72 (Unknown if single-unit or combination unit Heavy Truck (GVWR greater than 26,000 lbs.), 78 (Unknown medium/heavy truck type), 79 (Unknown truck type (light/medium/heavy).

Error ID	IF	THEN
VP58	vPIC BODY CLASS equals 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 008 (Crossover Utility Vehicle (CUV), or 119 (Sport Utility Truck (SUT) and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 13-18,	NCSA BODY TYPE must equal 50 (School Bus), 51 (Cross Country/Intercity Bus), 52 (Transit Bus (City Bus)), 55 (Van-Based Bus GVWR greater than 10,000 lbs.), 58 (Other Bus Type), 59 (Unknown Bus Type), 60 (Step Van (GVWR greater than 10,000 lbs.)), 61 (Single-Unit Straight Truck or Cab-chassis (GVWR range 10,001 to 19,500 lbs.)), 62 (Single-Unit Straight Truck or Cab-chassis (GVWR range 19,501 to 26,000 lbs.)), 63 (Single-Unit Straight Truck or Cab-chassis (GVWR greater than 26,000 lbs.)), 64 (Single-Unit Straight Truck or Cab-Chassis (GVWR unknown)), 66 (Truck-tractor (Cab only or with any number of trailing units; any weight)), 67 (Medium/Heavy Pickup (GVWR greater than 10,000 lbs.)), 71 (Unknown if single-unit or combination unit Medium Truck (GVWR range 10,001 lbs. to 26,000 lbs.), 72 (Unknown if single-unit or combination unit Heavy Truck (GVWR greater than 26,000 lbs.), 78 (Unknown medium/heavy truck type), 79 (Unknown truck type (light/medium/heavy), or 99 (Unknown Body Type).

Error ID	IF	THEN
VP66	vPIC BODY CLASS equals 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 (Off-road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport/Adventure/Supermoto/On/Off-Road), 086 (Off-road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 088 (Off-road Vehicle - Go Kart), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 097 (Off-road Vehicle - Snowmobile), 098 (Motorcycle - Street), 100 (Motorcycle - Enclosed Three Wheeled/Enclosed Autocycle), 103 (Motorcycle - Unenclosed Three Wheeled/Open Autocycle), 104 (Motorcycle - Moped), 105 (Off-road Vehicle - Recreational Off-Road Vehicle (ROV)), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motocross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 124 (Off-road Vehicle - Golf Cart), or 125 (Motorcycle - Unknown Body Type),	POWER UNIT GVWR_From and POWER UNIT GVWR_To must equal 11 or 99.
VP67	vPIC BODY CLASS equals 001 (Convertible/Cabriolet), 003 (Coupe), 005 (Hatchback/Liftback/Notchback), 010 (Roadster), or 013 (Sedan/Saloon)	POWER UNIT GVWR_From and POWER UNIT GVWR_To must equal 11 or 12.
VP68	vPIC BODY CLASS equals 002 (Minivan), 008 (Crossover Utility Vehicle (CUV)), or 119 (Sport Utility Truck (SUT)),	POWER UNIT GVWR_From and POWER UNIT GVWR_To must equal 11, 12, 98, or 99.
VP69	vPIC BODY CLASS equals 060 (Pickup) or 095 (Cargo Van),	POWER UNIT GVWR_From and POWER UNIT GVWR_To should equal 11, 12, 13, 14, 98, or 99.
VP83	POWER UNIT GVWR_From and POWER UNIT GVWR_To equal 13-18	MOTOR CARRIER IDENTIFICATION NUMBER, VEHICLE CONFIGURATION, and CARGO BODY TYPE must not equal 00.
VP85	VEHICLE TRAILING equals 0 and POWER UNIT GVWR_From and POWER UNIT GVWR_To are either 11 or 12 and HM2 does not equal 2	VEHICLE CONFIGURATION must equal 00, 20, or 99, and CARGO BODY TYPE must equal 00 or 22.

Error ID	IF	THEN
VP90	vPIC BODY CLASS equals 015 (Wagon), and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 11 or 12,	NCSA BODY TYPE must equal code 03 (3-Door/2-Door Hatchback), 05 (5-Door/4-Door Hatchback), 06 (Station Wagon (excluding van and truck based)), 09 (Other or Unknown Automobile Type), 14 (Compact Utility), 15 (Large Utility), 16 (Utility Station Wagon), 20 (Minivan), 19 (Utility Vehicle, Unknown Body Type), 21 (Large Van), 28 (Other van type), 29 (Unknown van type), 48 (Unknown light truck type), or 49 (Unknown light vehicle type).

V19 - Vehicle Trailing

FORMAT: 1 numeric

SAS NAME: Vehicle.TOW_VEH, Person.TOW_VEH, Parkwork.PTRAILER

ELEMENT VALUES:

Codes	Attributes
0	No Trailing Units
1	One Trailing Unit
2	Two Trailing Units
3	Three or more Trailing Units
4	Yes, Number of Trailing Units Unknown
5	Vehicle Towing Another Motor Vehicle - Fixed Linkage
6	Vehicle Towing Another Motor Vehicle - Non-Fixed Linkage
9	<u>Unknown</u>

Definition: This element identifies whether *this* vehicle had any attached trailing units or was towing another motor vehicle.

Remarks: Trailing unit applies to any device connected to a motor vehicle by a hitch, including tractor-trailer combinations, a single-unit truck pulling a trailer (truck trailer), a boat trailer hitched onto a motor vehicle, etc. If the case material does not provide sufficient information if the linkage was fixed or not, consider the linkage as fixed.

A vehicle towing another motor vehicle is not considered to be a trailer but is considered to be a towed vehicle (see <u>5 (Vehicle Towing Another Motor Vehicle - Fixed Linkage)</u> or <u>6 (Vehicle Towing Another Motor Vehicle - Non-Fixed Linkage)</u>). A converter dolly is a device used to hitch a trailer to another semi-trailer or straight truck and is not counted as a separate trailing unit. For combination vehicles (medium/heavy trucks), count only the cargo-carrying units.

- **0** (No Trailing Units) is used when this vehicle was not pulling or towing a wheeled unit.
- 1 (One Trailing Unit) is used when one trailer was being pulled by this vehicle.
- **2 (Two Trailing Units)** is used when this vehicle was pulling two trailers.
- **3** (Three or More Trailing Units) is used when this vehicle was pulling three or more trailers.
- **4 (Yes, Number of Trailing Units Unknown)** is used when it is known that there was a trailer(s), but the number of trailers cannot be determined.
- **5** (Vehicle Towing Another Motor Vehicle Fixed Linkage) is used to identify that a vehicle was towing another motor vehicle(s) connected by a fixed linkage. The towed vehicle will have two or more wheels on the ground. This will most commonly apply to drive-away/tow-away tow trucks. These are vehicles equipped with a mechanism designed to be attached to a towed vehicle (e.g., hoist). This attribute would also be used for saddle-mounted towed vehicles. An example

of a saddle-mount unit would be a bobtail towing one or more other bobtails. This attribute does not apply to vehicles towed by being loaded on a flatbed or auto transporter.

6 (Vehicle Towing Another Motor Vehicle - Non-Fixed Linkage) is used to identify that a vehicle was towing another motor vehicle(s) connected by a non-fixed linkage. A non-fixed linkage includes ropes, chains, or cables.

9 (Unknown) is used when it cannot be determined from any information if a unit was being pulled or towed.

FARS SPECIAL INSTRUCTION:

For vehicles being towed by an illegal hitch (rope, chain, cable), use the <u>022 (Towing or Pushing Improperly)</u> in the data element <u>RELATED FACTORS-DRIVER LEVEL</u>.

Consistency Checks (See Section 400):

Error ID	IF	THEN
2B0P	JACKKNIFE equals 1-3,	VEHICLE TRAILING must not equal 0, 9.
4E1P	VEHICLE TRAILING equals 4,	TRAILER VEHICLE IDENTIFICATION NUMBER must not equal 7s for any of the three sets.
4F3P	NUMBER OF OCCUPANTS is 01-98, and <i>vPIC BODY CLASS</i> equals <i>117 (Limousine)</i> ,	NUMBER OF OCCUPANTS <i>should</i> not be greater than <i>16</i> .
4R0P	SEATING POSITION equals 54,	VEHICLE TRAILING must not equal 0 or 9.
5B0Q	JACKKNIFE equals 0,	VEHICLE TRAILING must equal 0, 5, 6, or 9.
AD0P	VEHICLE CONFIGURATION equals 04, 06-08,	VEHICLE TRAILING must not equal 0.
AE0P	VEHICLE CONFIGURATION equals 05, and CARGO BODY TYPE does not equal 12,	VEHICLE TRAILING must equal 0.
AL1P	SEQUENCE OF EVENTS equals 51, 62, 70,	VEHICLE TRAILING must not equal 0.
CI0P	VEHICLE TRAILING equals 1-4,	JACKKNIFE must not equal 0.

Error ID	IF	THEN
V020	VEHICLE TRAILING equals 1,	vPIC BODY CLASS should not equal 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 016 (Bus), 073 (Bus-School Bus), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring / Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 Off- road Vehicle - Dirt Bike / Off-Road), 085 (Motorcycle - Dual Sport / Adventure / Supermoto / On/Off-Road), 086 (Off-road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small / Minibike), 088 (Off-road Vehicle - Go Kart), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 097 (Off-road Vehicle - Snowmobile), 098 (Motorcycle - Street), 100 (Motorcycle - Enclosed Three Wheeled / Enclosed Autocycle), 103 (Motorcycle - Unenclosed Three Wheeled / Open Autocycle), 104 (Motorcycle - Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motocross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle), and FINAL STAGE BODY CLASS should not equal 016 (Bus) or 073 (Bus-School Bus).
V170	NUMBER OF OCCUPANTS equals 01-98, and vPIC BODY CLASS equals 001 (Convertible/Cabriolet), 003 (Coupe), 004 (Low Speed Vehicle (LSV) / Neighborhood Electric Vehicle (NEV)), 005 (Hatchback/Liftback/Notchback), 010 (Roadster), 013 (Sedan/Saloon), 060 (Pickup), 088 (Off-road Vehicle - Go Kart), 105 (Off-road Vehicle - Recreational Off-Road Vehicle (ROV)), 124 (Off-road Vehicle - Golf Cart), 126 (Off-road Vehicle - Farm Equipment), 127 (Off-road Vehicle - Construction Equipment), or 997 (Other), or FINAL STAGE BODY CLASS equals 004 (Low Speed Vehicle (LSV) / Neighborhood Electric Vehicle (NEV)) or 060 (Pickup),	NUMBER OF OCCUPANTS should not be greater than 6.
V190	NUMBER OF OCCUPANTS is 01-98, and FINAL STAGE BODY CLASS equals 117 (Limousine),	NUMBER OF OCCUPANTS should not be greater than 30.

Error ID	IF	THEN
V200	NUMBER OF OCCUPANTS is 01-98, and vPIC BODY CLASS equals a motorcycle (006, 012, 080, 081, 082, 083, 084, 085, 086, 087, 090, 094, 098, 104, 109, 110, 113, 114, 125, 996), 100 (Motorcycle - Enclosed Three Wheeled / Enclosed Autocycle), 103 (Motorcycle - Unenclosed Three Wheeled / Open Autocycle), 069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)), or 097 (Off-road Vehicle - Snowmobile),	NUMBER OF OCCUPANTS should not be greater than 15.
V210	NUMBER OF OCCUPANTS is 01-98, vPIC BODY CLASS equals 002 (Minivan), 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 008 (Crossover Utility Vehicle (CUV)), 009 (Van), 15 (Wagon), or 119 (Sport Utility Truck (SUT)), or FINAL STAGE BODY CLASS equals 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 008 (Crossover Utility Vehicle (CUV)), 15 (Wagon), or 119 (Sport Utility Truck),	NUMBER OF OCCUPANTS should not be greater than 15.
V220	NUMBER OF OCCUPANTS is 01-98, and vPIC BODY CLASS equals 011 (Truck), 066 (Truck-Tractor), 095 (Cargo Van), 111 (Step Van / Walk-in Van), or FINAL STAGE BODY CLASS equals 011 (Truck), 066 (Truck-Tractor), 095 (Cargo Van), or 111 (Step Van / Walk-in Van),	NUMBER OF OCCUPANTS should not be greater than 4.
V260	vPIC BODY CLASS equals 999 (Unknown),	NUMBER OF OCCUPANTS should equal 0-10 or 99.
V310	SEATING POSITION equals 54 and VEHICLE TRAILING equals 1-4,	AIR BAG DEPLOYED must equal 20.
V59P	VEHICLE CONFIGURATION equals 06,	vPIC BODY CLASS must equal 066 (Truck- Tractor), or FINAL STAGE BODY CLASS must equal 066 (Truck-Tractor), and VEHICLE TRAILING must equal 1.
V60P	VEHICLE CONFIGURATION equals 07,	vPIC BODY CLASS must equal 066 (Truck- Tractor), or FINAL STAGE BODY CLASS must equal 066 (Truck-Tractor), and VEHICLE TRAILING must equal 2.
V61P	VEHICLE CONFIGURATION equals 08,	vPIC BODY CLASS must equal 066 (Truck- Tractor), or FINAL STAGE BODY CLASS must equal 066 (Truck-Tractor), and VEHICLE TRAILING must equal 3.

Error ID	IF	THEN
V68P	CARGO BODY TYPE equals 12,	VEHICLE TRAILING must equal 5.
V810	vPIC BODY CLASS equals 060 (Pickup), or FINAL STAGE BODY CLASS equals 060 (Pickup), and POWER UNIT GVWR_From equals 13, 14, or 15, and POWER UNIT GVWR_To equals 13, 14, or 15, and VEHICLE TRAILING equals 1-4,	VEHICLE CONFIGURATION should equal 04, and CARGO BODY TYPE should equal 01, 03, 04, 09.
V915	vPIC BODY CLASS equals 060 (Pickup), or FINAL STAGE BODY CLASS equals 060 (Pickup), and POWER UNIT GVWR From_and GVWR_To equals 13-18, and VEHICLE TRAILING equals 0,	VEHICLE CONFIGURATION should equal 01, and CARGO BODY TYPE should equal 97.
V985	VEHICLE TRAILING equals 5,	VEHICLE CONFIGURATION should not equal 00, 10, 19-21.
V991	VEHICLE TRAILING equals 0,	VEHICLE CONFIGURATION must not equal 04, 06-08.
V992	VEHICLE TRAILING equals 1,	VEHICLE CONFIGURATION must not equal 01, 02, 05, 07, or 08.
V993	VEHICLE TRAILING equals 2,	VEHICLE CONFIGURATION must not equal 01, 02, 05, 06, or 08.
V994	VEHICLE TRAILING equals 3,	VEHICLE CONFIGURATION must not equal 01, 02, 05-07.
V995	VEHICLE TRAILING equals 4,	VEHICLE CONFIGURATION must not equal 01, 02, 05-08.
V997	VEHICLE TRAILING equals 6,	VEHICLE CONFIGURATION must not equal 04, 06-08.
V998	VEHICLE TRAILING equals 9,	VEHICLE CONFIGURATION must not equal 04-07 or 08.
VP79	VEHICLE TRAILING equals 1,	TRAILER VEHICLE IDENTIFICATION NUMBER must equal 7s for only two sets.
VP80	VEHICLE TRAILING equals 2,	TRAILER VEHICLE IDENTIFICATION NUMBER must equal 7s for only one set.
VP81	VEHICLE TRAILING equals 3,	TRAILER VEHICLE IDENTIFICATION NUMBER must not equal to 7s for any set.
VP85	VEHICLE TRAILING equals 0 and POWER UNIT GVWR_From and POWER UNIT GVWR_To are either 11 or 12 and HM2 does not equal 2	VEHICLE CONFIGURATION must equal 00, 20, or 99, and CARGO BODY TYPE must equal 00 or 22.

Consistency Check (CRSS Only) (See Section 400):

Error ID	IF	THEN
V986	VEHICLE TRAILING equals 3,	PSU should equal OH, OK, SD, UT.

Consistency Checks (FARS Only) (See Section 400):

Error ID	IF	THEN
V16P	RELATED FACTORS-DRIVER LEVEL equals 088,	VEHICLE TRAILING must not equal 0, 9.
V983	VEHICLE TRAILING equals 3,	STATE should equal 04, 08, 16, 18, 20, 30-32, 38-41, 46, 49.
V984	STATE does not equal 04, 08, 16, 18, 20, 30-32, 38-41, 46, 49,	VEHICLE TRAILING should not equal 3.

V20 - Trailer Vehicle Identification Number

FORMAT: 3 sets, 17 alphanumeric

SAS NAME: Vehicle.TRLR1VIN, Vehicle.TRLR2VIN, Vehicle.TRLR3VIN, PTRLR1VIN,

PTRLT2VIN, PTRLT3VIN

ELEMENT VALUES:

Codes	Attributes
00000000000000000	No VIN Required
	Any Alphanumeric Characters - Actual VIN
77777777777777777	No Trailing Units
8888888888888888	Not Reported
999999999999999	Reported as Unknown
*	VIN Character Missing or Not Decipherable

Definition: This element records the vehicle identification number (VIN) or alphanumeric identifier in the case material of any trailing units of a combination vehicle.

Remarks: SEE ADDITIONAL REMARKS UNDER <u>vPIC MAKE / vPIC MODEL / vPIC BODY CLASS OVERVIEW</u>.

VINs for the power unit are not coded in this element. See <u>VEHICLE IDENTIFICATION</u> <u>NUMBER</u> to record the VIN of the power unit.

Code the complete VIN of any trailing units of a combination vehicle (up to three trailing units). The number of VIN fields available to code is system-generated based on the presence of a trailer or trailers in the element VEHICLE TRAILING. For example, if VEHICLE TRAILING equals Q (No Trailing Units), S (Vehicle Towing Another Motor Vehicle - Fixed Linkage), or Q (Unknown) then TRAILER VEHICLE IDENTIFICATION NUMBER is auto-filled with 7s (No Trailing Units). If VEHICLE TRAILING equals Q (One Trailing Unit) then one TRAILER VEHICLE IDENTIFICATION NUMBER set of 17 alphanumeric characters is available to code and the remaining two are 7-filled by the system.

The VIN is always left-justified.

If the VIN for any trailing unit of a combination vehicle is not available, code <u>8s (Not Reported)</u> here. For example, if a truck tractor semi-trailer combination has no VIN information for the trailer, code <u>8s (Not Reported)</u> in the available field. If a truck tractor double-trailer combination has VIN information for only one of the two trailers, code the known VIN in the first field and <u>8s (Not Reported)</u> in the second TRAILER VEHICLE IDENTIFICATION NUMBER field.

The Vehicle Identification Number (VIN) standards are described in 49 CFR Part 565. This standard requires that each VIN have 17 characters, not contain the letter "I," "O," or "Q," and pass a mathematical test (check digit). This data element may also be used to record non-

standard VINs. See instruction under * (VIN Character Missing or Not Decipherable) for missing or illegible characters.

For a 17-character VIN that produces check digit errors, first attempt to resolve the error. If it cannot be resolved, record the VIN as provided and override any edit checks with explanation. See instruction under * (VIN Character Missing or Not Decipherable) for missing or illegible characters.

Only enter <u>8s (Not Reported)</u> or <u>9s (Reported as Unknown)</u> when the entire VIN is missing or reported unknown.

Enter all **0s** (**No VIN Required**) if the vehicle has a trailer but the trailer is not required to have a VIN as per 49 CFR Part 565 Requirements for Trailer Manufacturers. This attribute should only be used for homemade or custom trailers not manufactured for sale to the public.

NOTE for pre-1981 vehicles:

If the vehicle is manufactured by the Ford Motor Company and the VIN begins or ends with a script "f," the script "f" is not entered. Proceed to the next character, as in the example below.

VIN: f3U62S100932f **ENTER:** 3U62S100932

In addition, if any hyphens or periods are contained in the string of alphanumeric characters, ignore them as in the example below.

VIN: SM-E.3076421 **ENTER:** SME3076421

8s (Not Reported) Check to see if 0s (No VIN Required) or 9s (Reported as Unknown) are more appropriate for the situation.

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "Not Reported."

Code **8s** (**Not Reported**) in these three situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material), or
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material), or
- 3. Information on the police crash report has been sanitized/redacted and no other information is available in the case material.

9s (**Reported as Unknown**) is used when the entire trailing unit VIN is reported as Unknown. For example, the police report the vehicle information is unknown for hit-and-run vehicle known to have a trailer(s).

* (VIN Character Missing or Not Decipherable) is used for any VIN character(s) that is (are) missing or not decipherable and the correct character(s) cannot be identified to resolve the VIN for the specific position(s).

Notes regarding VINs with less than 17 digits:

- Some vehicles (e.g., custom, pre-1981, imported, or rebuilt vehicles) may have been assigned identification numbers that are less than 17 digits. These should be entered as reported. Do not fill the remaining positions with asterisks "*." For example, 8675309.
- If a VIN is reported as less than 17 digits for a vehicle that would normally have 17 digits, and all characters are legible, fill with asterisks "*" at the end for the missing character(s). For example, 558MEBM23FB*****.

FARS SPECIAL INSTRUCTION:

If the State will not allow transmittal of a complete standard VIN, code the right-most four characters with asterisks "*." The vehicle registration file must be used to verify the VIN.

Error ID	IF	THEN
4E1P	VEHICLE TRAILING equals 4,	TRAILER VEHICLE IDENTIFICATION NUMBER must not equal 7s for any of the three sets.
904P	TRAILER VEHICLE IDENTIFICATION NUMBER is not equal to all 0s, 7s, 8s, or 9s,	TRAILER VEHICLE IDENTIFICATION NUMBER positions 1-8, 11-14 should equal A-H, J-N, P, R-Z, 0-9, or *; TRAILER VEHICLE IDENTIFICATION NUMBER position 9 should equal 0-9, X, or *; TRAILER VEHICLE IDENTIFICATION NUMBER position 10 should equal A-H, J-N, P, R-T, V-Y, 1-9, or *; TRAILER VEHICLE IDENTIFICATION NUMBER positions 15-17 should equal 0-9 or *.
905P	TRAILER VEHICLE IDENTIFICATION NUMBER is not equal to all 0s, 7s, 8s, or 9s,	TRAILER VEHICLE IDENTIFICATION NUMBER positions 1-8, 11 should equal A-H, J-N, P, R-Z, 0-9, or *; TRAILER VEHICLE IDENTIFICATION NUMBER position 9 should equal 0-9, X, or *; TRAILER VEHICLE IDENTIFICATION NUMBER position 10 should equal A-H, J-N, P, R-T, V-Y, 1-9, or *; TRAILER VEHICLE IDENTIFICATION NUMBER positions 12-14 should equal A-H, J-N, P, R-Z, 0-9, or *; TRAILER VEHICLE IDENTIFICATION NUMBER positions 15-17 should equal 0-9 or *.

Error ID	IF	THEN
908P	TRAILER VEHICLE IDENTIFICATION NUMBER (VIN) does not equal 0s, 7s, 8s, or 9s,	the trailer VIN decode VPIC BODY CLASS must equal "Trailer" or "Incomplete - Trailer Chassis."
U687	UNLIKELY: TRAILER VEHICLE IDENTIFICATION NUMBER equals 0s for any of the three sets.	
VP70	TRAILER VEHICLE IDENTIFICATION NUMBER is valid and decodes with error code only in 0, 1, or 400,	TRAILER VEHICLE IDENTIFICATION NUMBER decoded vPIC BODY CLASS must equal 061 (Trailer), 116 (Incomplete - Trailer Chassis), or 065 (Incomplete).
VP74	TRAILER VEHICLE IDENTIFICATION NUMBER equals 7s,	TRAILER GVWR must equal 77.
VP75	TRAILER VEHICLE IDENTIFICATION NUMBER equals 0s,	TRAILER GVWR must equal 00.
VP76	TRAILER VEHICLE IDENTIFICATION NUMBER equals 8s,	TRAILER GVWR should equal 98.
VP77	TRAILER VEHICLE IDENTIFICATION NUMBER equals 9s,	TRAILER GVWR should equal 99.
VP78	TRAILER VEHICLE IDENTIFICATION NUMBER is not equal to 0s, 7s, 8s or 9s,	TRAILER GVWR must equal 11-18 or 98.
VP79	VEHICLE TRAILING equals 1,	TRAILER VEHICLE IDENTIFICATION NUMBER must equal 7s for only two sets.
VP80	VEHICLE TRAILING equals 2,	TRAILER VEHICLE IDENTIFICATION NUMBER must equal 7s for only one set.
VP81	VEHICLE TRAILING equals 3,	TRAILER VEHICLE IDENTIFICATION NUMBER must not equal to 7s for any set.

V21 - Trailer Gross Vehicle Weight Rating

FORMAT: 3 sets, 2 alphanumeric

SAS NAME: Vehicle.TRLR1GVWR, Vehicle.TRLR2GVWR, Vehicle.TRLR3GVWR, Parkwork.PTRLR1GVWR, Parkwork.PTRLR3GVWR

ELEMENT VALUES:

Codes	Attributes
00	No Trailer GVWR Required
11	Class 1: 6,000 lbs. or less (2,722 kg or less)
12	Class 2: 6,001 - 10,000 lbs. (2,722 - 4,536 kg)
13	Class 3: 10,001 - 14,000 lbs. (4,536 - 6,350 kg)
14	Class 4: 14,001 - 16,000 lbs. (6,350 - 7,258 kg)
15	Class 5: 16,001 - 19,500 lbs. (7,258 - 8,845 kg)
16	Class 6: 19,501 - 26,000 lbs. (8,845 - 11,794 kg)
17	Class 7: 26,001 - 33,000 lbs. (11,794 - 14,969 kg)
18	Class 8: 33,001 lbs. and above (14,969 kg and above)
77	No Trailing Units
98	Not Reported
99	Reported as Unknown

Definition: This element identifies the GVWR of a trailing unit as identified by the manufacturer in the vehicle's VIN.

Remarks: SEE ADDITIONAL INFORMATION IN <u>vPIC MAKE / vPIC MODEL / vPIC BODY CLASS OVERVIEW.</u>

TRAILER GVWR records the applicable weight range for the trailing unit's GVWR.

If you have the trailer VIN, decode the VIN to obtain the GVWR information.

GVWR is the value specified by the manufacturer as the recommended maximum loaded weight of a trailer. If your State records the GVWR of the power unit and trailer(s) in separate fields, be sure to capture the GVWR of trailers in this element.

00 (No Trailer GVWR Required) should be used if the vehicle has a trailer but the trailer is not required to have a VIN as per 49 CFR Part 565 Requirements for Trailer Manufacturers. This attribute should only be used for homemade or custom trailers not manufactured for sale to the public.

77 (No Trailing Units) should be used if the vehicle has no trailing units. This is populated by the RBIS application based on the coding of the VEHICLE TRAILING data element.

98 (Not Reported)

Code 98 (Not Reported) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "Not Reported."

99 (Reported as Unknown) should be used when GVWR information is reported as "Unknown" on your police crash report or truck/bus supplement and the decoded VIN is unable to return a value.

Error ID	IF	THEN
VP73	UNLIKELY: TRAILER GVWR equals 0s for any of the three sets.	
VP74	TRAILER VEHICLE IDENTIFICATION NUMBER equals 7s,	TRAILER GVWR must equal 77.
VP75	TRAILER VEHICLE IDENTIFICATION NUMBER equals 0s,	TRAILER GVWR must equal 00.
VP76	TRAILER VEHICLE IDENTIFICATION NUMBER equals 8s,	TRAILER GVWR should equal 98.
VP77	TRAILER VEHICLE IDENTIFICATION NUMBER equals 9s,	TRAILER GVWR should equal 99.
VP78	TRAILER VEHICLE IDENTIFICATION NUMBER is not equal to 0s, 7s, 8s or 9s,	TRAILER GVWR must equal 11-18 or 98.

V22 - Jackknife

FORMAT: 1 numeric

SAS NAME: Vehicle.J_KNIFE

ELEMENT VALUES:

Codes	Attributes
0	Not an Articulated Vehicle
1	<u>No</u>
2	Yes - First Event
3	Yes - Subsequent Event

Definition: This element identifies if this vehicle experienced a "jackknife" anytime during the unstabilized situation.

Remarks: A jackknife can occur at any time during the crash sequence. This element is applicable for all power unit/trailing unit combinations (truck tractor or single-unit truck with one or more trailers, articulated bus, car pulling a boat on a trailer, light utility vehicle/trailing unit combination, etc.).

Jackknife applies to a condition that occurs to an articulated vehicle; any vehicle with a trailing unit connected by a hitch (fixed linkage) while in motion. A jackknife occurs when there is an uncontrolled articulation between the power unit and the trailing unit in which the trailing unit does not follow directly behind the power unit (tracking), and the driver did not initiate the non-tracking situation. The condition reflects a loss of control of the vehicle by the driver in which the trailing units' normal straight-line path behind the power unit is not maintained.

If the final resting configuration of the vehicle in the police crash report diagram is in a jackknife position, it does not necessarily mean that the vehicle has jackknifed. Turning and backing are examples of driver initiated non-tracking-controlled articulation and are not coded as a jackknife.

In the case material, the terms "tractor jackknife" or "trailer swing" may be used to describe particular incidences of uncontrolled articulation. Either incident shall be coded as JACKKNIFE.

A jackknife is not likely to be a harmful event but may be part of an unstabilized condition just before the FIRST HARMFUL EVENT.

- **0** (**Not an Articulated Vehicle**) is used when this vehicle is not a vehicle-trailing unit combination. This attribute can also be used when coding a hit-and-run vehicle when there is not an indication in the case material that the hit-and-run vehicle had a trailer.
- 1 (No) is used when no uncontrolled articulation was reported between a vehicle and a trailing unit.
- 2 (Yes First Event) is used when an uncontrolled articulation was reported as occurring before or as part of the first injury or damage producing event for this vehicle.
- **3 (Yes Subsequent Event)** is used when an uncontrolled articulation occurs after the first injury or damage producing event for this vehicle.

Error ID	IF	THEN
2B0P	JACKKNIFE equals 1-3,	VEHICLE TRAILING must not equal 0, 9.
3B0P	JACKKNIFE equals 2, 3,	TRAVEL SPEED must not equal 000.
5B0Q	JACKKNIFE equals 0,	VEHICLE TRAILING must equal 0, 5, 6, or 9.
7B0F	JACKKNIFE equals 2, 3,	DRIVER PRESENCE must equal 1.
AK00	CARGO BODY TYPE equals 22, 96,	JACKKNIFE should equal 0.
AL8P	SEQUENCE OF EVENTS equals 51, 70,	JACKKNIFE must equal 2, 3.
CI0P	VEHICLE TRAILING equals 1-4,	JACKKNIFE must not equal 0.
V538	JACKKNIFE equals 2,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must not equal 04, 05, 07-09, or 13 for this vehicle.
VH70	UNIT TYPE equals 2-4,	elements JACKKNIFE, TRAVEL SPEED, AND SEQUENCE OF EVENTS must all be left blank.

V23 - Motor Carrier Identification Number

FORMAT: 1 set 2 numeric, 1 set 9 alphanumeric

SAS NAME: Vehicle.MCARR_ID, Parkwork.PMCARR_ID, Vehicle.MCARR_I1,

Parkwork.PMCARR_I1, Vehicle.MCARR_I2, Parkwork.PMCARR_I2

ELEMENT VALUES:

Issuing Authority:

Codes	Attributes
00	Not Applicable
01-56	State Code
57	<u>US DOT</u>
58	MC/MX (ICC)
95	<u>Canada</u>
96	<u>Mexico</u>
88	None
77	Not Reported
99	<u>Unknown</u>

Identification Number:

Codes	Attributes
	Actual Number
Os	Not Applicable
8s	None
7s	Not Reported
9s	Unknown

Definition: This element records the issuing authority and motor carrier identification number if applicable to this vehicle.

Remarks: The motor carrier identification number is recorded on the truck supplement or police crash report next to the appropriate Source (Issuing Authority). This information should be available on your police crash report or truck and bus supplement with other elements required by the Federal Motor Carrier Safety Administration (FMCSA). *See the Coding Guide: Qualifying Vehicles for Elements V23-V25 for helpful information.*

The following are qualifying motor vehicles for this data element:

- 1. *A vehicle* pulling a trailer with gross combination weight rating (GCWR) greater than 10,000 lbs.
- 2. A single vehicle with a GVWR greater than 10,000 lbs.
- 3. A Vehicle with 9 or more seats (including the driver).
- 4. A Vehicle displaying a hazardous materials placard.

00/0s (Not Applicable) is used when none of the qualifying criteria above apply to this vehicle. When this attribute is used, <u>VEHICLE CONFIGURATION</u> and <u>CARGO BODY TYPE</u> must also be Not Applicable.

FARS SPECIAL INSTRUCTION:

If your State uses separate truck/bus supplements, you should seek help to get routine access to them, just as with your State's police crash report. Your State's SAFETYNET representative may be able to provide a Motor Carrier Identification Number.

Federal regulations require that almost all commercial trucks/buses operating across State lines that meet the above criteria (i.e., interstate) have identification numbers except those hauling "exempt" commodities (such as unprocessed agricultural products). This will be a U.S. DOT or MC/MX (ICC) number. Some States issue "Intrastate" motor carriers a State number that can also be recorded here.

Identification Number should be left justified. If less than 9 characters, left-justify and do not zero-fill.

Sup	olen	nen	t/P	AR			(Coc	din	ıg				
	0	0	3 5	5 1	8	-	0	0	3	5	1	8		
			3 5	1	8	-	0	0	0	3	5	1	8	
	3	5	1 8	3		-	3	5	1	8				
3	5	8	1 0	0	0		3	5	Ω	1	0	0	0	-

Figure 13: Examples of Left-Justified Coding of Motor Carrier Identification Number

Note: Many carriers will have a U.S. DOT or MC/MX (ICC) number plus a State number.

HIERARCHY: When identification numbers are available from more than one Source (Issuing Authority), it is most important to code the U.S. DOT number, then the MC/MX (ICC) number if one is available. It is next most important to code the Mexican or Canadian issued number. Finally, State-issued numbers should be coded.

57 (**US DOT NUMBERS**): U.S. DOT is used in "Issuing Authority" if a U.S. DOT Number or a State Number and U.S. DOT Number are recorded on the police crash report or Supplement. Enter the U.S. DOT Number in "Identification Number."

• U.S. DOT Numbers are in the process of being assigned to Intrastate motor carriers in a number of States. These should include the issuing State's two-character abbreviation on the end; e.g., U.S. DOT 123456XX (where "XX" is the State abbreviation). See example of proper coding in Figure 13.

58 (MC/MX (ICC) NUMBERS): MC/MX (ICC) is used in "Issuing Authority" if an MC/MX (ICC) number or a State Number and an MC/MX (ICC) Number are recorded on the police crash report or supplement. Enter the MC/MX (ICC) Number in "Identification Number."

STATE NUMBERS: If only a State Number is recorded on the police crash report or Supplement, then code the appropriate FARS State Code in "Issuing Authority" and enter the State Number in "Identification Number."

State Numbers are issued by a public utility commission, a public service commission, or some other State agency, to vehicles that operate either in interstate commerce or only within that State. However, some States do not regulate the motor carrier industry. Trucks and buses that operate strictly within such States (i.e., intrastate) may not have numbers.

CANADIAN/MEXICAN NUMBERS: Use attributes "95" or "96" in "Issuing Authority" if a Canadian or Mexican authority (respectively) has issued the only Carrier Identification Number recorded on the police crash report or Supplement.

88/8s (**None**) is used when you would expect this type of vehicle to have an ID Number because the qualifying criteria above apply to this vehicle, but there is no Motor Carrier Identification number to record or the case material states "No Number." This can occur because the vehicle is not properly marked or because its use or activity at the time of the crash does not require it to have a number. Examples of vehicles that may not require a number include construction or farm equipment, vehicles operated strictly intrastate in a State that does not regulate intrastate carriers, government owned/operated vehicles, and personal use vehicles (i.e., non-commercial).

99/9s (Unknown) is used if:

- the investigating officer *indicates that* the MOTOR CARRIER IDENTIFICATION NUMBER *is* unknown; *and*
- the NCSA BODY TYPE of the vehicle is unknown or not reported; or
- it cannot be determined if the vehicle qualifies for this data element (e.g., a light pickup truck pulling a trailer where the GCWR is not known).

When this attribute is used, <u>VEHICLE CONFIGURATION</u> and <u>CARGO BODY TYPE</u> should also be Unknown. However, it is possible that the officer may know the VEHICLE CONFIGURATION and/or CARGO BODY TYPE but report the MOTOR CARRIER IDENTIFICATION NUMBER as unknown (e.g., hit-and-run truck tractor semi-trailer).

77/7s (Not Reported) For this element, Not Reported is used when the qualifying criteria above DO apply to this vehicle but 88/8s (None) does not apply, and:

- the police crash report or truck supplement leaves the identification number field blank; or
- the officer did not complete a supplement or a field on the police crash report (no further information given).

Check to see if <u>00/0s (Not Applicable)</u>, <u>88/8s (None)</u>, or <u>99/9s (Unknown)</u> are more appropriate for the situation.

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**."

Code **77/7s** (**Not Reported**) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).

Error ID	IF	THEN
4N1P	VEHICLE CONFIGURATION does not equal 00,	MOTOR CARRIER IDENTIFICATION NUMBER must not equal 00-000000000.
4N2P	MOTOR CARRIER IDENTIFICATION NUMBER equals 00-000000000,	VEHICLE CONFIGURATION must equal 00.
4N3P	MOTOR CARRIER IDENTIFICATION NUMBER (Identification Number) equals 000000000,	MOTOR CARRIER IDENTIFICATION NUMBER (Issuing Authority) must equal 00.
4N4P	MOTOR CARRIER IDENTIFICATION NUMBER does not equal 00-000000000 or 99-99999999,	POWER UNIT GVWR_From and POWER UNIT GVWR_To must equal 13-18, or VEHICLE TRAILING must equal 1-6, or CARGO BODY TYPE must equal 22, or HM2 must equal 2.
4N5P	POWER UNIT GVWR_From and POWER UNIT GVWR_To do not equal 13-18, and VEHICLE TRAILING does not equal 1-6, and CARGO BODY TYPE does not equal 22, and HM2 does not equal 2,	MOTOR CARRIER IDENTIFICATION NUMBER must equal 00-000000000, 99- 999999999.
4N7P	MOTOR CARRIER IDENTIFICATION NUMBER (Identification Number) equals 88888888 or 777777777 or 999999999,	MOTOR CARRIER IDENTIFICATION NUMBER (Issuing Authority) should be filled respectively as 88 or 77 or 99.

Error ID	IF	THEN
4N8P	any one of the fields MOTOR CARRIER IDENTIFICATION NUMBER, VEHICLE CONFIGURATION, and CARGO BODY TYPE equals Unknown [MOTOR CARRIER IDENTIFICATION NUMBER (99-999999999), VEHICLE CONFIGURATION (99), CARGO BODY TYPE (99)],	the other two should also equal Unknown and HM1 must equal 1.
4NAP	MOTOR CARRIER IDENTIFICATION NUMBER (Issuing Authority) equals 01- 58, 95, 96,	MOTOR CARRIER IDENTIFICATION NUMBER (Identification Number) should not equal 888888888, 777777777, 999999997, 9999999999.
4NBP	MOTOR CARRIER IDENTIFICATION NUMBER (Issuing Authority) equals 01- 58, 95, 96,	MOTOR CARRIER IDENTIFICATION NUMBER (Identification Number) must not equal 000000000.
4NCP	MOTOR CARRIER IDENTIFICATION NUMBER (Issuing Authority) is 00 or 77 or 88 or 99,	MOTOR CARRIER IDENTIFICATION NUMBER (Identification Number) must be filled respectively as 000000000 or 777777777 or 888888888 or 999999999.
U680	UNLIKELY: MOTOR CARRIER IDENTIFICATION NUMBER (Identification Number) equals 999999997.	
V980	POWER UNIT GVWR_From and POWER UNIT GVWR_To equals 13-18, or VEHICLE CONFIGURATION equals 20 or 21, or HM1 equals 2,	MOTOR CARRIER IDENTIFICATION NUMBER must not equal 00-000000000 or 99-999999999999999999999999999999999
V981	VEHICLE CONFIGURATION equals 00,	MOTOR CARRIER IDENTIFICATION NUMBER <i>must</i> equal 00-000000000.
V982	MOTOR CARRIER IDENTIFICATION NUMBER does not equal 00-000000000,	VEHICLE CONFIGURATION <i>must</i> not equal 00.
V987	vPIC MAKE equals 99998 (Not Reported) or 99999 (Unknown) and vPIC MODEL equals 99998 (Not Reported) or 99999 (Unknown) and vPIC BODY CLASS equals 998 (Not Reported) or 999 (Unknown),	MOTOR CARRIER IDENTIFICATION NUMBER <i>should</i> equal 99-999999999.

Error ID	IF	THEN
VP83	POWER UNIT GVWR_From and POWER UNIT GVWR_To equal 13-18	MOTOR CARRIER IDENTIFICATION NUMBER, VEHICLE CONFIGURATION, and CARGO BODY TYPE must not equal 00.
VP84	vPIC BODY CLASS equals 073, 066, or 068	MOTOR CARRIER IDENTIFICATION NUMBER, VEHICLE CONFIGURATION, and CARGO BODY TYPE must not equal 00.
VP85	VEHICLE TRAILING equals 0 and POWER UNIT GVWR_From and POWER UNIT GVWR_To are either 11 or 12 and HM2 does not equal 2	VEHICLE CONFIGURATION must equal 00, 20, or 99, and CARGO BODY TYPE must equal 00 or 22.

V24 - Vehicle Configuration

FORMAT: 2 numeric

SAS NAME: Vehicle.V_CONFIG, Parkwork.PV_CONFIG

ELEMENT VALUES:

Codes	Attributes
00	Not Applicable
10	Vehicle 10,000 pounds or less placarded for hazardous materials
01	Single-Unit Truck (2-axle and GVWR more than 10,000 lbs.)
02	Single-Unit Truck (3 or more axles)
04	Truck Pulling Trailer(s)
05	Truck Tractor (Bobtail)
06	Truck Tractor/Semi-Trailer
07	Truck Tractor/Double
08	Truck Tractor/Triple
19	Truck More Than 10,000 lbs., Cannot Classify
20	Bus/Large Van (seats for 9-15 occupants, including driver)
21	Bus (seats for more than 15 occupants, including driver)
99	<u>Unknown</u>

Definition: This element identifies the general configuration of this vehicle when applicable.

Remarks: This information should be available on your police crash report or truck and bus supplement with other elements required by the Federal Motor Carrier Safety Administration (FMCSA).

In some States, the data element VEHICLE CONFIGURATION or its attributes may appear under another title, such as: Unit Type, Vehicle Type, Type of Unit, etc. In many States, Vehicle Configuration is recorded for all vehicles. *See the Coding Guide: Qualifying Vehicles for Elements V23-V25 for helpful information.*

The following are qualifying motor vehicles for this data element:

- 1. *A vehicle* pulling a trailer with gross combination weight rating (GCWR) greater than 10,000 lbs.
- 2. A single vehicle with a GVWR greater than 10,000 lbs.
- 3. A Vehicle with 9 or more seats (including the driver).
- 4. A Vehicle displaying a hazardous materials placard.

- 00 (Not Applicable) is used when none of the qualifying criteria above apply to this vehicle. When this attribute is used, <u>MOTOR CARRIER IDENTIFICATION NUMBER</u> and <u>CARGO BODY TYPE</u> must also be Not Applicable.
- 10 (Vehicle 10,000 Pounds or Less Placarded for Hazardous Materials) is used for light vehicles (10,000 lbs or less) with at least one hazardous cargo placard displayed. When vehicles in this category are not displaying a hazardous materials placard, use 00 (Not Applicable).
- **01** (**Single-Unit Truck [2-axle and GVWR more than 10,000 lbs.]**) is a power unit that includes a permanently mounted cargo body (also called a straight truck) that has only two axles and a GVWR of over 10,000 lbs. This attribute includes pickup trucks without a trailer with a GVWR of over 10,000 lbs. This also includes single-unit trucks towing other vehicles where the towed vehicle has at least two wheels on the ground. (See <u>CARGO BODY TYPE</u> attribute <u>12</u> (Vehicle Towing Another Motor Vehicle)).
- **02** (**Single-Unit Truck [3 or more axles]**) is a power unit that includes a permanently mounted cargo body (also called a straight truck) that has three or more axles. When counting axles on a single-unit truck, include raised axles. This also includes single-unit trucks towing other vehicles where the towed vehicle has at least two wheels on the ground. (See <u>CARGO BODY TYPE</u> attribute **12** (**Vehicle Towing Another Motor Vehicle**)).
- **04** (**Truck Pulling Trailer[s]**) is used for single-unit trucks pulling a trailer. This attribute includes a pickup truck pulling a trailer with a GCWR of over 10,000 lbs.
- **05** (**Truck Tractor [Bobtail]**) is a motor vehicle consisting of a single motorized transport device designed primarily for pulling semi-trailers (e.g., cab only). These vehicles are sometimes referred to as a "bobtail." This also includes truck tractors towing other truck tractors in a saddlemount towing position or towing other vehicles where the towed vehicle has at least two wheels on the ground. (See <u>CARGO BODY TYPE</u> attribute <u>12 (Vehicle Towing Another Motor Vehicle)</u>).
- **06** (**Truck Tractor/Semi-Trailer**) is used for a truck tractor pulling one trailer. This attribute should not be used for single-unit trucks pulling a trailer.
- **07** (**Truck Tractor/Double**) is used for a truck tractor pulling two trailers.
- **08** (**Truck Tractor/Triple**) is used for a truck tractor pulling three trailers.
- 19 (Truck More Than 10,000 lbs., Cannot Classify) is used when the vehicle *qualifies for this data element by weight*, but the above attributes do not apply. Examples would include motor homes, construction or farm equipment such as a bulldozer, crane, backhoe, combine, farm tractor, etc. If the VEHICLE CONFIGURATION is Unknown, see 99 (Unknown).
- **20** (Bus/Large Van [seats for 9-15 people, including driver]) is used for smaller van-based buses (less than 16 seats, including driver). Examples include commuter vans and van-based school buses. This attribute would include a limousine with seating capacity in this range.
- **21** (Bus [seats for more than 15 occupants, including driver]). A van-based bus qualifies for this attribute if it is configured to include enough seats. A CDL is required for the driver of this bus. This attribute would include a limousine with seating capacity in this range.

99 (*Unknown*) is used if:

- the investigating officer indicates that the VEHICLE CONFIGURATION is unknown;
- a specific VEHICLE CONFIGURATION cannot be identified for a qualifying vehicle (e.g., known bus with unknown seating; known M/H truck with unknown number of axles; a vehicle with one trailer, but it is unknown whether it is a truck tractor semitrailer or a single-unit truck pulling a trailer, etc.), and
- the <u>NCSA BODY TYPE</u> of the vehicle is unknown *or not reported*, *or*
- when it cannot be determined if the vehicle qualifies for this data element (e.g., a light pickup truck pulling a trailer where the GCWR is not known).

When this attribute is used, <u>MOTOR CARRIER IDENTIFICATION NUMBER</u> and <u>CARGO</u> <u>BODY TYPE</u> should also be Unknown.

Error ID	IF	THEN
4N1P	VEHICLE CONFIGURATION does not equal 00,	MOTOR CARRIER IDENTIFICATION NUMBER must not equal 00-000000000.
4N2P	MOTOR CARRIER IDENTIFICATION NUMBER equals 00-000000000,	VEHICLE CONFIGURATION must equal 00.
4N8P	any one of the fields MOTOR CARRIER IDENTIFICATION NUMBER, VEHICLE CONFIGURATION, and CARGO BODY TYPE equals Unknown [MOTOR CARRIER IDENTIFICATION NUMBER (99-99999999), VEHICLE CONFIGURATION (99), CARGO BODY TYPE (99)],	the other two should also equal Unknown and HM1 must equal 1.
AB1P	VEHICLE CONFIGURATION equals 01,	CARGO BODY TYPE must NOT equal 22.
AD0P	VEHICLE CONFIGURATION equals 04, 06-08,	VEHICLE TRAILING must not equal 0.
AE0P	VEHICLE CONFIGURATION equals 05 and CARGO BODY TYPE does not equal 12,	VEHICLE TRAILING must equal 0.
AE1P	VEHICLE CONFIGURATION equals 05-08,	vPIC BODY CLASS must equal 066 (Truck- Tractor), or FINAL STAGE BODY CLASS must equal 066 (Truck-Tractor).
AF1P	VEHICLE CONFIGURATION equals 20, 21,	CARGO BODY TYPE must equal 22.
AF2P	VEHICLE CONFIGURATION equals 20, 21,	vPIC BODY CLASS must equal 009 (Van), 016 (Bus), 068 (Streetcar / Trolley), 073 (Bus- School Bus), 117 (Limousine), or FINAL STAGE BODY CLASS must equal 009 (Van), 016 (Bus), 068 (Streetcar / Trolley), 073 (Bus- School Bus), or 117 (Limousine).

Error ID	IF	THEN
AH0P	VEHICLE CONFIGURATION does not equal 00 or 99,	vPIC BODY CLASS should equal 009 (Van), 011 (Truck), 016 (Bus), 060 (Pickup), 066 (Truck-Tractor), 068 (Streetcar / Trolley), 073 (Bus - School Bus), 095 (Cargo Van), 108 (Motorhome), 111 (Step Van / Walk-in Van), 117 (Limousine), 126 (Off-road Vehicle - Farm Equipment), 127 (Off-road Vehicle - Construction Equipment), or FINAL STAGE BODY CLASS should equal 009 (Van), 011 (Truck), 016 (Bus), 060 (Pickup), 066 (Truck-Tractor), 068 (Streetcar / Trolley), 073 (Bus-School Bus), 095 (Cargo Van), 108 (Motorhome), 111 (Step Van / Walk-in Van), 117 (Limousine), or 997 Other (Specify:), or HM2 should equal 2.
V46P	VEHICLE CONFIGURATION equals 21,	vPIC BODY CLASS must equal 009 (Van), 016 (Bus), 068 (Streetcar / Trolley), or 073 (Bus-School Bus), or FINAL STAGE BODY CLASS must equal 016 (Bus), 068 (Streetcar / Trolley), or 073 (Bus-School Bus).
V470	VEHICLE CONFIGURATION equals 01,	CARGO BODY TYPE should be 01-05, 07, 12, 96-98.
V47P	VEHICLE CONFIGURATION equals 21,	CARGO BODY TYPE must equal 22.
V531	BUS USE equals 01, 04-07, 98,	VEHICLE CONFIGURATION should equal 20, 21, and CARGO BODY TYPE should equal 22.
V532	VEHICLE CONFIGURATION equals 01, 02, 05 -08, 19, 21,	POWER UNIT GVWR must not be 11 or 12.
V56P	VEHICLE CONFIGURATION equals 10,	POWER UNIT GVWR must equal 11-12, and HM1 must equal 2.
V57P	VEHICLE CONFIGURATION equals 05,	CARGO BODY TYPE must equal 12 or 96.
V58P	VEHICLE CONFIGURATION equals 04,	vPIC BODY CLASS must not equal 066 (Truck-Tractor), and FINAL STAGE BODY CLASS must not equal 066 (Truck-Tractor).
V59P	VEHICLE CONFIGURATION equals 06,	vPIC BODY CLASS must equal 066 (Truck- Tractor), or FINAL STAGE BODY CLASS must equal 066 (Truck-Tractor), and VEHICLE TRAILING must equal 1.
V60P	VEHICLE CONFIGURATION equals 07,	vPIC BODY CLASS must equal 066 (Truck- Tractor), or FINAL STAGE BODY CLASS must equal 066 (Truck-Tractor), and VEHICLE TRAILING must equal 2.

Error ID	IF	THEN
V61P	VEHICLE CONFIGURATION equals 08,	vPIC BODY CLASS must equal 066 (Truck- Tractor), or FINAL STAGE BODY CLASS must equal 066 (Truck-Tractor), and VEHICLE TRAILING must equal 3.
V65P	POWER UNIT GVWR equals 13, 14, 15, 16, 17, or 18,	VEHICLE CONFIGURATION must not equal 00 and CARGO BODY TYPE must not equal 00.
V790	vPIC BODY CLASS equals 002 (Minivan), and HM1 equals 1,	VEHICLE CONFIGURATION should equal 00, and CARGO BODY TYPE should equal 00.
V791	vPIC BODY CLASS equals 998 or 999 and POWER UNIT GVWR_From is equal to 98 or 99, AND POWER UNIT GVWR_To equals 98 or 99,	VEHICLE CONFIGURATION must equal 99 and CARGO BODY TYPE must equal 99.
V800	NCSA BODY TYPE equals 21, 22, 28, 29,	VEHICLE CONFIGURATION should equal 00, 04, 10, 20, 21, 99, and CARGO BODY TYPE should equal 00, 01, 22, 99.
V810	vPIC BODY CLASS equals 060 (Pickup), or FINAL STAGE BODY CLASS equals 060 (Pickup), and POWER UNIT GVWR_From equals 13, 14, or 15, and POWER UNIT GVWR_To equals 13, 14, or 15, and VEHICLE TRAILING equals 1-4,	VEHICLE CONFIGURATION should equal 04, and CARGO BODY TYPE should equal 01, 03, 04, 09.
V840	vPIC BODY CLASS equals 016 (Bus), 068 (Streetcar / Trolley), or 073 (Bus-School Bus), or FINAL STAGE BODY CLASS equals 016 (Bus), 068 (Streetcar / Trolley), or 073 (Bus-School Bus), and POWR UNIT GVWR From_and GVWR_To equals 13-18,	VEHICLE CONFIGURATION should equal 21, and CARGO BODY TYPE should equal 22.
V850	vPIC BODY CLASS equals 111 (Step Van / Walk-in Van), or FINAL STAGE BODY CLASS equals 111 (Step Van / Walk-in Van), and POWER UNIT GVWR From_ and GVWR_To equals 13-18,	VEHICLE CONFIGURATION should equal 01 or 04, and CARGO BODY TYPE should equal 01.
V860	HIT-AND-RUN equals 0, and vPIC BODY CLASS equals 011 (Truck) or FINAL STAGE BODY CLASS equals 011 (Truck),	VEHICLE CONFIGURATION should equal 01, 02, <i>or</i> 04, and CARGO BODY TYPE should equal 01-10, 12, <i>or</i> 96-98.
V870	vPIC BODY CLASS equals 108 (Motorhome), or FINAL STAGE BODY CLASS equals 108 (Motorhome), and POWER UNIT GVWR From_ and GVWR_To equals 13-18,	VEHICLE CONFIGURATION should equal 19, and CARGO BODY TYPE should equal 97.

Error ID	IF	THEN
V880	vPIC BODY CLASS equals 066 (Truck- Tractor), or FINAL STAGE BODY CLASS equals 066 (Truck-Tractor),	VEHICLE CONFIGURATION should equal 05-08 <i>or</i> 19, and CARGO BODY TYPE should equal 01-04, 06-12, 96-98.
V900	vPIC BODY CLASS equals 108 (Motorhome), or FINAL STAGE BODY CLASS equals 108 (Motorhome), and POWER UNIT GVWR equals 98 or 99,	VEHICLE CONFIGURATION should equal 99, and CARGO BODY TYPE should equal 99.
V910	vPIC BODY CLASS equals 99 (Unknown), and POWER UNIT GVWR From_ and GVWR_To equals 13-18,	VEHICLE CONFIGURATION should equal 19, and CARGO BODY TYPE should equal 98.
V915	vPIC BODY CLASS equals 060 (Pickup), or FINAL STAGE BODY CLASS equals 060 (Pickup), and POWER UNIT GVWR From_and GVWR_To equals 13-18, and VEHICLE TRAILING equals 0,	VEHICLE CONFIGURATION should equal 01, and CARGO BODY TYPE should equal 97.
V920	vPIC BODY CLASS equals 011 (Truck) or 060 (Pickup), or FINAL STAGE BODY CLASS equals 011 (Truck) or 060 (Pickup), and POWER UNIT GVWR From_ and GVWR_To equals 98 or 99,	VEHICLE CONFIGURATION should equal 04, 99, and CARGO BODY TYPE should equal 98 <i>or</i> 99.
V930	VEHICLE CONFIGURATION equals 00, or CARGO BODY TYPE equals 00,	POWER UNIT GVWR From_ and GVWR_To must not equal 13-18.
V940	HM1 equals 2,	VEHICLE CONFIGURATION should not equal 00, 99, and CARGO BODY TYPE should not equal 00, 99.
V981	VEHICLE CONFIGURATION equals 00,	MOTOR CARRIER IDENTIFICATION NUMBER <i>must</i> equal 00-000000000.
V982	MOTOR CARRIER IDENTIFICATION NUMBER does not equal 00-000000000,	VEHICLE CONFIGURATION <i>must</i> not equal 00.
V985	VEHICLE TRAILING equals 5,	VEHICLE CONFIGURATION should not equal 00, 10, 19-21.
V991	VEHICLE TRAILING equals 0,	VEHICLE CONFIGURATION must not equal 04, 06-08.
V992	VEHICLE TRAILING equals 1,	VEHICLE CONFIGURATION must not equal 01, 02, 05, 07, or 08.
V993	VEHICLE TRAILING equals 2,	VEHICLE CONFIGURATION must not equal 01, 02, 05, 06, or 08.
V994	VEHICLE TRAILING equals 3,	VEHICLE CONFIGURATION must not equal 01, 02, 05-07.
V995	VEHICLE TRAILING equals 4,	VEHICLE CONFIGURATION must not equal 01, 02, 05-08.

Error ID	IF	THEN
V997	VEHICLE TRAILING equals 6,	VEHICLE CONFIGURATION must not equal 04, 06-08.
V998	VEHICLE TRAILING equals 9,	VEHICLE CONFIGURATION must not equal 04-07 or 08.
VA70	POWER UNIT GVWR equals 11 or 12 , and HM2 equals 2,	VEHICLE CONFIGURATION must equal 10.
VH75	UNIT TYPE equals 4,	VEHICLE CONFIGURATION should not equal 05, 20, 21, 10.
VP83	POWER UNIT GVWR_From and POWER UNIT GVWR_To equal 13-18	MOTOR CARRIER IDENTIFICATION NUMBER, VEHICLE CONFIGURATION, and CARGO BODY TYPE must not equal 00.
VP84	vPIC BODY CLASS equals 073, 066, or 068	MOTOR CARRIER IDENTIFICATION NUMBER, VEHICLE CONFIGURATION, and CARGO BODY TYPE must not equal 00.
VP85	VEHICLE TRAILING equals 0 and POWER UNIT GVWR_From and POWER UNIT GVWR_To are either 11 or 12 and HM2 does not equal 2	VEHICLE CONFIGURATION must equal 00, 20, or 99, and CARGO BODY TYPE must equal 00 or 22.

Consistency Checks (FARS Only) (See Section 400):

Error ID	IF	THEN
D280	VEHICLE CONFIGURATION equals 05-08, 21, or HM1 equals 2,	COMMERCIAL MOTOR VEHICLE LICENSE STATUS should not equal 00.
D450	COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 00,	VEHICLE CONFIGURATION should not equal 05-08, 21, and HM2 should not equal 2.

V25 - Cargo Body Type

FORMAT: 2 numeric

SAS NAME: Vehicle.CARGO_BT, Parkwork.PCARGTYP

ELEMENT VALUES:

Codes	Attributes
00	Not Applicable (N/A)
01	Van/Enclosed Box
02	Cargo Tank
03	<u>Flatbed</u>
04	<u>Dump</u>
05	Concrete Mixer
06	<u>Auto Transporter</u>
07	Garbage/Refuse
08	Grain/Chips/Gravel
09	<u>Pole-Trailer</u>
10	Log
11	Intermodal Container Chassis
12	<u>Vehicle Towing Another Motor Vehicle</u>
22	Bus
96	No Cargo Body Type
97	<u>Other</u>
98	Unknown Cargo Body Type
99	<u>Unknown</u>

Definition: This element identifies the primary cargo carrying capability of this vehicle when applicable.

Remarks: This information should be available on the or truck and bus supplement with other elements required by the FMCSA. See the <u>Coding Guide: Qualifying Vehicles for Elements</u> <u>V23-V25 for helpful information</u>.

The following are qualifying motor vehicles for this data element:

- 1. A vehicle pulling a trailer with GCWR greater than 10,000 lbs.
- 2. A single vehicle with a GVWR greater than 10,000 lbs.
- 3. A Vehicle with 9 or more seats (including the driver).
- 4. A Vehicle displaying a hazardous materials placard.

- 00 (Not Applicable [N/A]) is used when none of the qualifying criteria above apply to this vehicle. When this attribute is used, <u>MOTOR CARRIER IDENTIFICATION NUMBER</u> and <u>VEHICLE CONFIGURATION</u> must also be Not Applicable.
- NOTE: For truck/trailer vehicle configurations where the power unit and trailer have different cargo body types, code the CARGO BODY TYPE of the power unit. For example, a dump truck pulling a flatbed trailer should be coded as <u>04 (Dump)</u>.
- For truck/trailer vehicle configurations where the power unit's CARGO BODY TYPE would be coded <u>96 (No Cargo Body Type)</u> or <u>97 (Other)</u>, code the cargo body of the trailer. For example, a dual rear-wheel pickup truck pulling a flatbed trailer should be coded as <u>03</u> (<u>Flatbed</u>).
- **01** (Van/Enclosed Box) is a single-unit truck, truck/trailer, or truck tractor/semi-trailer having an enclosed body integral to the frame of the motor vehicle (e.g., enclosed trailers, enclosed cargo vans, and ambulances).
- **03** (**Flatbed**) is used when the available information refers to a cargo body without sides or roof, with or without readily removable stakes that may be tied together with chains/slats or panels. This includes "stake trucks."
- **04** (**Dump**) is used when the available information refers to a cargo body designed to be tilted to discharge its load by gravity.
- **06** (**Auto Transporter**) is used when the available information refers to a cargo body capable of transporting multiple, fully assembled automobiles on an "auto transporter" trailer. Do not use this code for flatbeds transporting vehicles (e.g., flatbed tow truck or flatbed semi-trailer carrying wrecked/salvaged automobiles).
- **07** (**Garbage/Refuse**) is used when the available information refers to a cargo body that is specifically designed to collect and transport garbage and refuse. This includes both conventional rear-loading and over-the-top bucket loading garbage trucks. Also included are recycle trucks and roll-off style garbage trucks.
- **08** (**Grain/Chips/Gravel**) is used when the available information refers to trucks that discharge their loads by gravity from the bottom (i.e., belly dump).
- **09** (**Pole-Trailer**) is used when the available information refers to a cargo body type that consists of a trailer designed to be attached to a towing vehicle by a reach or pole or by being boomed and secured to the towing vehicle. These are ordinarily used to carry property of a long or irregular shape, such as telephone poles. The pole trailer extends or retracts to accommodate varying lengths of cargo.
- **10** (**Log**) is used when the available information refers to a cargo body type with a fixed middle beam and side support posts specifically designed for carrying logs. This includes single-unit log trucks.
 - **09** (**Pole-Trailer**) and **10** (**Log**) may be listed on a police crash report as "Pole/Log." If the trailer can telescope to carry different log lengths, then it should be considered a **09** (**Pole-Trailer**).
- 11 (Intermodal Container Chassis) is used when the available information refers to a cargo body type used for a trailer specifically designed to have a rail or ship container mounted directly

on the chassis. These should not be confused with van/enclosed box cargo body types. Intermodal containers may also be mounted on a flatbed trailer, in which case 03 (Flatbed) is the CARGO BODY TYPE.

- 12 (Vehicle Towing Another Motor Vehicle) is used when the available information refers to vehicles that have no cargo carrying capability but are in the act of towing another motor vehicle where the towed vehicle has at least two wheels on the ground. These are often called "drive-away, tow-aways" and will be applicable to tow trucks and specially rigged truck tractors. This includes "saddlemount" configurations. Does not apply to vehicles "towed" by being loaded on a flatbed or auto transporter.
- **22** (**Bus**) is a motor vehicle with seating for transporting nine or more people, including the driver. This attribute would include a limousine with sufficient seating capacity to qualify as a bus.
- **96** (**No Cargo Body Type**) is used for any medium/heavy truck with no cargo carrying capability (bobtail); a truck chassis with a cab only (stripped chassis); and light trucks and passenger vehicles displaying a hazardous materials placard. Other examples of **96** (**No Cargo Body Type**) would be sign trucks, fire trucks, tow trucks, construction or farm equipment, etc.
- **97** (**Other**) is used when the CARGO BODY TYPE is other than the body types listed above. This includes pickups greater than 10,000 lbs without a trailer. If a pickup is pulling a trailer, code the CARGO BODY TYPE of the attached trailer instead of the CARGO BODY TYPE of the pickup. This attribute would also include motor homes.
- **98** (Unknown Cargo Body Type) is used when the vehicle qualifies for this data element, but the CARGO BODY TYPE is not known or when there is not enough information to distinguish one CARGO BODY TYPE from another. An example would be contradictory data on whether the truck is a van/enclosed box or a flatbed.

99 (*Unknown*) is used *when*:

- the NCSA BODY TYPE of the vehicle is unknown or not reported; or
- it cannot be determined if the vehicle qualifies for this data element (e.g., a light pickup truck pulling a trailer where the GCWR is not known).

When this attribute is used, <u>MOTOR CARRIER IDENTIFICATION NUMBER</u> and <u>VEHICLE CONFIGURATION</u> should also be Unknown.

Error ID	IF	THEN
4N8P	any one of the fields MOTOR CARRIER IDENTIFICATION NUMBER, VEHICLE CONFIGURATION, and CARGO BODY TYPE equals Unknown [MOTOR CARRIER IDENTIFICATION NUMBER (99-99999999), VEHICLE CONFIGURATION (99), CARGO BODY TYPE (99)],	the other two should also equal Unknown and HM1 must equal 1.
AB1P	VEHICLE CONFIGURATION equals 01,	CARGO BODY TYPE must NOT equal 22.
AE0P	VEHICLE CONFIGURATION equals 05, and CARGO BODY TYPE does not equal 12,	VEHICLE TRAILING must equal 0.
AF1P	VEHICLE CONFIGURATION equals 20, 21,	CARGO BODY TYPE must equal 22.
AK00	CARGO BODY TYPE equals 22, 96,	JACKKNIFE should equal 0.
AL0P	CARGO BODY TYPE equals 22,	vPIC BODY CLASS must equal 009 (Van), 016 (Bus), 068 (Streetcar / Trolley), 073 (Bus- School Bus), or 117 (Limousine), or FINAL STAGE BODY CLASS must equal 009 (Van), 016 (Bus), 068 (Streetcar / Trolley), 073 (Bus- School Bus), or 117 (Limousine).
AM0P	CARGO BODY TYPE does not equal 00 or 99,	vPIC BODY CLASS should equal 009 (Van), 011 (Truck), 016 (Bus), 060 (Pickup), 066 (Truck-Tractor), 068 (Streetcar / Trolley), 073 (Bus - School Bus), 095 (Cargo Van), 108 (Motorhome), 111 (Step Van / Walk-in Van), 117 (Limousine), 126 (Off-road Vehicle - Farm Equipment), 127 (Off-road Vehicle - Construction Equipment), or FINAL STAGE BODY CLASS should equal 009 (Van), 011 (Truck), 016 (Bus), 060 (Pickup), 066 (Truck-Tractor), 068 (Streetcar / Trolley), 073 (Bus-School Bus), 095 (Cargo Van), 108 (Motorhome), 111 (Step Van / Walk-in Van), or 117 (Limousine), or 997 Other (Specify:), or HM2 should equal 2.
V470	VEHICLE CONFIGURATION equals 01,	CARGO BODY TYPE should be 01-05, 07, 12, 96-98.
V47P	VEHICLE CONFIGURATION equals 21,	CARGO BODY TYPE must equal 22.
V531	BUS USE equals 01, 04-07, 98,	VEHICLE CONFIGURATION should equal 20, 21, and CARGO BODY TYPE should equal 22.
V57P	VEHICLE CONFIGURATION equals 05,	CARGO BODY TYPE must equal 12 or 96.

Error ID	IF	THEN
V62P	VEHICLE TRAILING equals 0 and CARGO BODY TYPE equals 01-08, 97, 98, and VEHICLE IDENTIFICATION NUMBER does not equal 8s or 9s,	POWER UNIT GVWR_from and GVWR_to must equal 13, 14, 15, 16, 17, or 18.
V65P	POWER UNIT GVWR equals 13, 14, 15, 16, 17, or 18,	VEHICLE CONFIGURATION must not equal 00, and CARGO BODY TYPE must not equal 00.
V68P	CARGO BODY TYPE equals 12,	VEHICLE TRAILING must equal 5.
V790	vPIC BODY CLASS equals 002 (Minivan), and HM1 equals 1,	VEHICLE CONFIGURATION should equal 00, and CARGO BODY TYPE should equal 00.
V800	NCSA BODY TYPE equals 21, 22, 28, 29,	VEHICLE CONFIGURATION should equal 00, 04, 10, 20, 21, 99, and CARGO BODY TYPE should equal 00, 01, 22, 99.
V810	vPIC BODY CLASS equals 060 (Pickup), or FINAL STAGE BODY CLASS equals 060 (Pickup), and POWER UNIT GVWR_From equals 13, 14, or 15, and POWER UNIT GVWR_To equals 13, 14, or 15, and VEHICLE TRAILING equals 1-4,	VEHICLE CONFIGURATION should equal 04, and CARGO BODY TYPE should equal 01, 03, 04, 09.
V840	vPIC BODY CLASS equals 016 (Bus), 068 (Streetcar / Trolley), or 073 (Bus-School Bus), or FINAL STAGE BODY CLASS equals 016 (Bus), 068 (Streetcar / Trolley), or 073 (Bus- School Bus), and POWR UNIT GVWR From_ and GVWR_To equals 13-18,	VEHICLE CONFIGURATION should equal 21, and CARGO BODY TYPE should equal 22.
V850	vPIC BODY CLASS equals 111 (Step Van / Walk-in Van), or FINAL STAGE BODY CLASS equals 111 (Step Van / Walk-in Van), and POWER UNIT GVWR From_ and GVWR_To equals 13-18,	VEHICLE CONFIGURATION should equal 01 or 04, and CARGO BODY TYPE should equal 01.
V860	HIT-AND-RUN equals 0, and vPIC BODY CLASS equals 011 (Truck) or FINAL STAGE BODY CLASS equals 011 (Truck),	VEHICLE CONFIGURATION should equal 01, 02, <i>or</i> 04, and CARGO BODY TYPE should equal 01-10, 12, <i>or</i> 96-98.
V870	vPIC BODY CLASS equals 108 (Motorhome), or FINAL STAGE BODY CLASS equals 108 (Motorhome), and POWER UNIT GVWR From_ and GVWR_To equals 13-18,	VEHICLE CONFIGURATION should equal 19, and CARGO BODY TYPE should equal 97.
V880	vPIC BODY CLASS equals 066 (Truck- Tractor), or FINAL STAGE BODY CLASS equals 066 (Truck-Tractor),	VEHICLE CONFIGURATION should equal 05-08 <i>or</i> 19, and CARGO BODY TYPE should equal 01-04, 06-12, 96-98.

Error ID	IF	THEN
V900	vPIC BODY CLASS equals 108 (Motorhome), or FINAL STAGE BODY CLASS equals 108 (Motorhome), and POWER UNIT GVWR equals 98 or 99,	VEHICLE CONFIGURATION should equal 99, and CARGO BODY TYPE should equal 99.
V910	vPIC BODY CLASS equals 99 (Unknown), and POWER UNIT GVWR From_ and GVWR_To equals 13-18,	VEHICLE CONFIGURATION should equal 19, and CARGO BODY TYPE should equal 98.
V915	vPIC BODY CLASS equals 060 (Pickup), or FINAL STAGE BODY CLASS equals 060 (Pickup), and POWER UNIT GVWR From_and GVWR_To equals 13-18, and VEHICLE TRAILING equals 0,	VEHICLE CONFIGURATION should equal 01, and CARGO BODY TYPE should equal 97.
V920	vPIC BODY CLASS equals 011 (Truck) or 060 (Pickup), or FINAL STAGE BODY CLASS equals 011 (Truck) or 060 (Pickup), and POWER UNIT GVWR From_ and GVWR_To equals 98 or 99,	VEHICLE CONFIGURATION should equal 04, 99, and CARGO BODY TYPE should equal 98 <i>or</i> 99.
V930	VEHICLE CONFIGURATION equals 00, or CARGO BODY TYPE equals 00,	POWER UNIT GVWR From_ and GVWR_To must not equal 13-18.
V940	HM1 equals 2,	VEHICLE CONFIGURATION should not equal 00, 99, and CARGO BODY TYPE should not equal 00, 99.
VH80	UNIT TYPE equals 4,	CARGO BODY TYPE should not equal 06, 07, 11, 12, 22.
VP83	POWER UNIT GVWR_From and POWER UNIT GVWR_To equal 13-18	MOTOR CARRIER IDENTIFICATION NUMBER, VEHICLE CONFIGURATION, and CARGO BODY TYPE must not equal 00.
VP84	vPIC BODY CLASS equals 073, 066, or 068	MOTOR CARRIER IDENTIFICATION NUMBER, VEHICLE CONFIGURATION, and CARGO BODY TYPE must not equal 00.
VP85	VEHICLE TRAILING equals 0 and POWER UNIT GVWR_From and POWER UNIT GVWR_To are either 11 or 12 and HM2 does not equal 2	VEHICLE CONFIGURATION must equal 00, 20, or 99, and CARGO BODY TYPE must equal 00 or 22.

V26 - Hazardous Materials Involvement / Placard

FORMAT: 1 set, 1 numeric; 1 set, 1 numeric; 1 set, 4 numeric; 1 set, 2 numeric; 1 set, 1 numeric

SAS NAME: Vehicle.HAZ_INV, Vehicle.HAZ_PLAC, Vehicle.HAZ_ID, Vehicle.HAZ_CNO, Vehicle.HAZ_REL, Parkwork.PHAZ_INV, Parkwork.PHAZPLAC, Parkwork.PHAZ_ID, Parkwork.PHAZ_CNO, Parkwork.PHAZ_REL

ELEMENT VALUES:

HM1: Hazardous Materials Involvement

Codes	Attributes
1	<u>No</u>
2	<u>Yes</u>

HM2: Placard (Did This Motor Vehicle Display a Hazardous Material (HM) Placard?)

Codes	Attributes
0	Not Applicable
1	<u>No</u>
2	<u>Yes</u>
8	Not Reported

HM3: 4-digit Hazardous Material Identification Number

Codes	Attributes
0000	Not Applicable
	Actual 4-Digit Number
8888	Not Reported

HM4: 2-digit Hazardous Material Class Number

Codes	Attributes
00	Not Applicable
01-09	Actual 1-Digit Number (with leading zero)
88	Not Reported

HM5: Release of Hazardous Material from the Cargo Compartment

Codes	Attributes
0	Not Applicable
1	<u>No</u>
2	<u>Yes</u>
8	Not Reported

Definition: This element identifies the presence of hazardous cargo for this vehicle and records information about the hazardous cargo when present.

Remarks: This element must be coded for all vehicles.

Placard and Hazardous Materials Released information should be available on your police crash report or truck and bus supplement with other elements required by the FMCSA for commercial vehicles.

Hazardous Material is a substance or material that has been designated by the U.S. Department of Transportation, or other authorizing entity, as capable of posing an unreasonable risk to health, safety, and property when transported in commerce. Any motor vehicle transporting hazardous materials in quantities above the thresholds established by the U.S. Department of Transportation, or other authorized entity, is required to display a hazardous materials placard.

Exclusions:

• Fuel or oil carried by the vehicle for its own use.

Hazardous Materials Placard: is a sign required to be affixed to any motor vehicle transporting hazardous materials in quantities above the thresholds established by the U.S. Department of Transportation, or other authorized entity. This placard identifies the 1-digit hazard class division number, 4-digit hazardous material identification number, or name of the hazardous material being transported.

Vehicle transporting hazardous materials should have a diamond-shaped placard affixed indicating the material carried. (See <u>Figure 14</u> below.)

HM1 - Hazardous Materials Involvement

Definition: This element indicates whether the vehicle was carrying hazardous materials - involvement.

1 (No) is used when there is no indication of hazardous materials for this vehicle in the case material. For cases involving a hit-and-run, the default is 1 (No) when no details are reported regarding the hit-and-run vehicle.

If HM1 is 1 (No), HM2-HM5 will be coded 0s (Not Applicable).

2 (Yes) is used when hazardous materials were indicated for this vehicle in the case material.

Examples for code 2 (Yes):

- 1. The officer records any information about a placard, whether he indicates that the vehicle was carrying hazardous materials or not.
- 2. The officer does not record any information about a placard; however, you know that hazardous material was involved.
- 3. Information identifying hazardous material is blank, but you know that hazardous material was released.

HM2 - Hazardous Materials Placard

Definition: This element indicates the presence of hazardous materials and whether the vehicle displayed a hazardous materials placard.

0 (**Not Applicable**) is used when there is no indication of hazardous materials for this vehicle in the case material (HM1 equals $\frac{1}{N_0}$).

1 (No) is used when hazardous materials are involved, but the officer indicates there was no placard.

2 (Yes) is used when hazardous materials are involved, and the vehicle does have a placard.

8 (**Not Reported**) is used when hazardous materials are involved, but the crash report does not record any information about the presence of a placard. *Check to see if* <u>0</u> (*Not Applicable*) *is more appropriate for the situation*.

HM3 - 4-Digit Hazardous Materials Identification Number

Definition: This element indicates the 4-digit identification number.

0000 (Not Applicable) - No indication of hazardous materials for this vehicle in the case material (HM1 equals 1 (No)).

Actual 4-digit Number - Record the 4-digit Hazardous Materials Identification Number reported in the case material.

8888 (**Not Reported**) - Hazardous materials involved, but the 4-digit number was not recorded, or this field is not available on your crash report. If you are provided the name of the hazardous material on your report but not the 4-digit number, use this attribute and be sure to record the 1-digit class number, if it is provided, in HM4. *Check to see if* <u>0000 (Not Applicable)</u> is more appropriate for the situation.

HM4 - 2-Digit Hazardous Materials Class Number

Definition: This element indicates the single-digit hazardous material class number for the vehicle.

00 (**Not Applicable**) - No indication of hazardous materials for this vehicle in the case material (HM1 equals 1 (No)).

Actual 2-digit Class Number (01-09) - Record the 1-digit Hazardous Materials Class Number recorded on your crash report with a leading zero (e.g., if the 1-digit class number is 5, enter

"05"). If you were given a two-digit number with decimal point, record only the first digit with a leading zero (e.g., if the class number is "1.3" you should record "01"). See **Figure 14**.

88 (**Not Reported**) - Hazardous Materials involved, but the 1-digit number was not recorded, or this field is not available in the crash materials. *Check to see if* <u>00</u> (<u>Not Applicable</u>) is more appropriate for the situation.

HM5 - Release of Hazardous Materials from Cargo Compartment

Definition: This element indicates whether or not any hazardous cargo was released from the cargo tank or compartment.

0 (**Not Applicable**) - No indication of hazardous materials for this vehicle in the case material (HM1 equals **1** (**No**)).

1 (No) - Hazardous Materials involved, and the officer indicates there was no release of the material(s) from the cargo compartment.

2 (Yes) - Hazardous Materials involved, and the officer indicates there was a release of the material(s) from the cargo compartment.

8 (**Not Reported**) - Hazardous Materials involved, and you can't determine from the crash materials whether hazardous material was released from the cargo compartment or not. *Check to see if 0 (Not Applicable) is more appropriate for the situation.*

Do not include fuel or oil carried by the vehicle for its own use that has been released.

Guideline for recording multiple hazardous materials:

- If the case has a hazmat spill and you know which material was released, always record that material.
- If you were to get two hazardous materials reported of different classes (1-9), report the material from DOT Hazmat Table 1 and its associated 4-digit UN number over materials in Table 2. Table 1 includes Hazard Class or Divisions: 1.1, 1.2. 1.3, 2.3, 4.3, 5.2, 6.1, 7.
- If you have two materials of the same class (e.g., both class 8 Corrosive) report the material in greatest quantity if you have the information. If not, report the material that is listed first on the report.

Any transport vehicle containing any quantity of the following classes of material must be placarded:

- Explosives (1.1, 1.2, 1.3)
- Poison Gas
- Materials Dangerous When Wet
- Poison
- Radioactive

Any transport vehicle containing over 1,001 lbs or more (gross weight) of the following classes of materials must be placarded:

- Explosives (1.4, 1.5, 1.6)
- Flammable and Non-Flammable Gas
- Flammable/Combustible Liquid (gasoline, fuel oil)
- Flammable Solid/Spontaneously Combustible
- Oxidizer/Organic Peroxide
- Poison
- Radioactive
- Corrosive
- Other (A material that presents a hazard during transportation that is not included in any other hazard class)

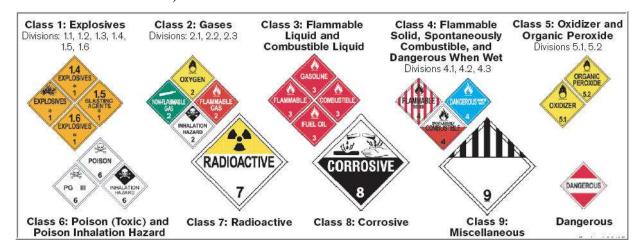


Figure 14: Nine Classes of Hazardous Materials

Error ID	IF	THEN
4N4P	MOTOR CARRIER IDENTIFICATION NUMBER does not equal 00-000000000 or 99- 999999999,	POWER UNIT GVWR_From and POWER UNIT GVWR_To must equal 13-18, or VEHICLE TRAILING must equal 1-6, or CARGO BODY TYPE must equal 22, or HM2 must equal 2.
4N5P	POWER UNIT GVWR_From and POWER UNIT GVWR_To do not equal 13-18, and VEHICLE TRAILING does not equal 1-6, and CARGO BODY TYPE does not equal 22, and HM2 does not equal 2,	MOTOR CARRIER IDENTIFICATION NUMBER must equal 00-000000000, 99- 999999999.
9K0P	HM2 equals 2,	REGISTRATION STATE must not equal 00.

Error ID	IF	THEN
AH0P	VEHICLE CONFIGURATION does not equal 00 or 99,	vPIC BODY CLASS should equal 009 (Van), 011 (Truck), 016 (Bus), 060 (Pickup), 066 (Truck-Tractor), 068 (Streetcar / Trolley), 073 (Bus - School Bus), 095 (Cargo Van), 108 (Motorhome), 111 (Step Van / Walk-in Van), 117 (Limousine), 126 (Off-road Vehicle - Farm Equipment), 127 (Off-road Vehicle - Construction Equipment), or FINAL STAGE BODY CLASS should equal 009 (Van), 011 (Truck), 016 (Bus), 060 (Pickup), 066 (Truck-Tractor), 068 (Streetcar / Trolley), 073 (Bus-School Bus), 095 (Cargo Van), 108 (Motorhome), 111 (Step Van / Walk-in Van), 117 (Limousine), or 997 Other (Specify:), or HM2 should equal 2.
AM0P	CARGO BODY TYPE does not equal 00 or 99,	vPIC BODY CLASS should equal 009 (Van), 011 (Truck), 016 (Bus), 060 (Pickup), 066 (Truck-Tractor), 068 (Streetcar / Trolley), 073 (Bus - School Bus), 095 (Cargo Van), 108 (Motorhome), 111 (Step Van / Walk-in Van), 117 (Limousine), 126 (Off-road Vehicle - Farm Equipment), 127 (Off-road Vehicle - Construction Equipment), or FINAL STAGE BODY CLASS should equal 009 (Van), 011 (Truck), 016 (Bus), 060 (Pickup), 066 (Truck-Tractor), 068 (Streetcar / Trolley), 073 (Bus-School Bus), 095 (Cargo Van), 108 (Motorhome), 111 (Step Van / Walk-in Van), or 117 (Limousine), or 997 Other (Specify:), or HM2 should equal 2.
D580	VIOLATIONS CHARGED equals 85,	HM1 should equal 2.
V070	HM1 equals 2,	REGISTRATION STATE should not equal 92.
V940	HM1 equals 2,	VEHICLE CONFIGURATION should not equal 00, 99, and CARGO BODY TYPE should not equal 00, 99.
V980	POWER UNIT GVWR_From and POWER UNIT GVWR_To equals 13-18, or VEHICLE CONFIGURATION equals 20 or 21, or HM1 equals 2,	MOTOR CARRIER IDENTIFICATION NUMBER must not equal 00-000000000 or 99-999999999999999999999999999999999
VA00	HM1 equals 1,	HM2, HM5 must equal 0, HM4 must equal 00 and HM3 must equal 0000.
VA10	HM1 equals 2,	HM2, HM5 must not equal 0, HM4 must not equal 00 and HM3 must not equal 0000.

Error ID	IF	THEN
VA20	any of HM2, HM5 equals 0, or HM4 equals 00, or HM3 equals 0000,	HM1 must equal 1.
VA30	any of HM2, HM5 does not equal 0, or HM4 does not equal 00, or HM3 does not equal 0000,	HM1 must equal 2.
VA40	HM5 equals 2,	HM3 should not equal 8888, or HM4 should not equal 88.
VA50	HM3 equals 8888, and HM4 equals 88,	HM5 should not equal 2.
VA60	HM3 does not equal 0000, 8888, or HM4 does not equal 00, 88,	HM2 should equal 2.
VA70	POWER UNIT GVWR equals 11 or 12 , and HM2 equals 2,	VEHICLE CONFIGURATION must equal 10.
VA80	HM3 - 4-Digit Hazardous Materials Identification Number must contain 4 digits.	

Consistency Checks (FARS Only) (See Section 400):

Error ID	IF	THEN
4S1P	VPIC BODY CLASS does equal 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport/Adventure/Supermoto/On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 100 (Motorcycle - Enclosed Three Wheeled / Enclosed Autocycle), 103 (Motorcycle - Unenclosed Three Wheeled / Open Autocycle), 104 (Moped), 105 (Off-road Vehicle - Recreational Off-Road Vehicle (ROV)), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road	THEN COMPLIANCE WITH CDL ENDORSEMENTS MUST equal 0.
	1	

Error ID	IF	THEN
D270	POWER UNIT GVWR_From and POWER UNIT GVWR_To equals 17-18, or VEHICLE CONFIGURATION equals 21, or HM2 equals 2,	COMMERCIAL MOTOR VEHICLE LICENSE STATUS should not equal 00.
D280	VEHICLE CONFIGURATION equals 05-08, 21, or HM1 equals 2,	COMMERCIAL MOTOR VEHICLE LICENSE STATUS should not equal 00.
D300	HM2 equals 2,	COMMERCIAL MOTOR VEHICLE LICENSE STATUS should not equal 00 or 99.
D310	HM2 equals 2,	COMPLIANCE WITH CDL ENDORSEMENTS should equal 1-3.
D440	COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 00,	POWER UNIT GVWR_From and POWER UNIT GVWR_To should not be in 17-18, VEHICLE CONFIGURATION should not equal 21, and HM2 should not equal 2.
D450	COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 00,	VEHICLE CONFIGURATION should not equal 05-08, 21, and HM2 should not equal 2.
V090	HM1 equals 2,	COMMERCIAL MOTOR VEHICLE LICENSE STATUS should equal 06, 99.
V100	HM1 equals 2, and RELATED FACTORS-DRIVER LEVEL does not equal <i>0</i> 19,	COMMERCIAL MOTOR VEHICLE LICENSE STATUS should not equal 01, 02, 05.
V570	HM1 equals 2,	REGISTERED VEHICLE OWNER should not equal 0, 1, 2, 4.
V580	HM1 equals 2,	REGISTERED VEHICLE OWNER should equal 3.

V27 - Bus Use

FORMAT: 2 numeric

SAS NAME: Vehicle.BUS_USE, Parkwork.PBUS_USE

ELEMENT VALUES:

Codes	Attributes
00	Not a Bus
01	School
04	<u>Intercity</u>
05	<u>Charter/Tour</u>
06	Transit/Commuter
07	<u>Shuttle</u>
08	Modified for Personal/Private Use
98	Not Reported
99	Reported as Unknown

Definition: This data element describes the common type of bus service this vehicle was being used for at the time of the crash or the primary use for the bus if not in service at the time of the crash.

Remarks: Buses are any motor vehicle with seats to transport nine or more people, including the driver's seat. This element does not include vans that are owned and operated for personal use.

00 (**Not a Bus**) This should be used for vehicles with less than nine seats (including the driver), personal-use vans with nine or more seats (including the driver), and for vehicles that do not have a bus body type **AND** are not being used as a bus in the crash.

01 (**School**) is used for vehicles that meet the definition of a bus and are being used by a public or private school or district, or contracted carrier operation on behalf of the entity, providing transport for school children (up to the 12th grade) to/from school (public or private), or any other school function or activity.

In most cases, the decision to use this code will be based on a reference to the vehicle as a school bus in the case material. In this situation, assume the criteria are met unless it is otherwise stated in the case material.

In addition, **01** (**School**) includes buses that are not externally identifiable as a school/pupil transport vehicle. For example, a transit bus, at the time of the crash, used exclusively (no other passengers except students) to transport students to/from the school or school-related activity.

04 (**Intercity**) is used when a company provides for-hire, long-distance passenger transportation between cities over fixed routes with regular schedules (e.g., Greyhound bus service between major cities).

- **05** (**Charter/Tour**) is used when a company provides transportation on a for-hire basis and demand-response basis, usually round-trip service for a tour group or outing.
- **06** (**Transit/Commuter**) is used for a government entity or private company that provides passenger transportation over fixed, scheduled routes, within primarily urban geographical areas. (For example, inner-city mass transit bus/van service.)
- **07** (**Shuttle**) is used when private companies provide transportation services for their own employees, non-governmental organizations (such as churches and non-profit groups), and non-educational units of government (such as departments of corrections). (Examples include buses/nine-passenger vans transporting people from airports, hotels, rental car companies, and business facility to facility.)
- **08** (Modified for Personal/Private Use) is used when a bus body type has been modified for personal or private use. For example, a bus with seats removed and exterior altered to allow for personal/private hauling of cargo (instead of passengers). Also includes musical groups in cross-country bus with interior remodeled with home-like conveniences.
- 98 (Not Reported) Check to see if <u>00 (Not a Bus)</u> or <u>99 (Reported as Unknown)</u> are more appropriate for the situation.

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**."

Code **98** (**Not Reported**) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).
- **99** (**Reported as Unknown**) is used if the information about this vehicle is reported as Unknown.

Note: if the investigating officer indicates a bus was involved but not how it was being used, use **98** (**Not Reported**).

Error ID	IF	THEN
AH1P	BUS USE equals 08,	vPIC BODY CLASS must equal 009 (Van), 016 (Bus), or 073 (Bus - School Bus), or FINAL STAGE BODY CLASS must equal 009 (Van), 016 (Bus), 073 (Bus - School Bus), 108 (Motorhome), or 997 Other (Specify:).
AH2P	BUS USE equals 06,	vPIC BODY CLASS should equal 009 (Van) or 016 (Bus), or FINAL STAGE BODY CLASS should equal 009 (Van) or 016 (Bus).
V051	BUS USE equals 01,	vPIC BODY CLASS should equal 009 (Van), 016 (Bus), or 073 (Bus - School Bus), or FINAL STAGE BODY CLASS should equal 009 (Van), 016 (Bus), or 073 (Bus - School Bus).
V052	BUS USE equals 04,	vPIC BODY CLASS should equal 016 (Bus), or FINAL STAGE BODY CLASS should equal 016 (Bus).
V053	BUS USE equals 05,	vPIC BODY CLASS should equal 009 (Van), 016 (Bus), or 117 (Limousine), or FINAL STAGE BODY CLASS should equal 009 (Van), 016 (Bus), or 117 (Limousine).
V054	BUS USE equals 07,	vPIC BODY CLASS must equal 009 (Van), 016 (Bus), 068 (Streetcar / Trolley), or 073 (Bus-School Bus), or FINAL STAGE BODY CLASS must equal 009 (Van), 016 (Bus), 068 (Streetcar / Trolley), or 073 (Bus-School Bus).
V055	BUS USE equals 00,	vPIC BODY CLASS must not equal 016 (Bus) or 073 (Bus - School Bus), and FINAL STAGE BODY CLASS must not equal 016 (Bus) or 073 (Bus - School Bus).
V056	SPECIAL USE equals 02,	BUS USE should equal 01.
V057	SPECIAL USE equals 03,	BUS USE should equal 04-07, 98, or 99.
V059	BUS USE equals 01,	SPECIAL USE must equal 02.
V061	BUS USE equals 04-07,	SPECIAL USE must equal 03.
V330	SCHOOL BUS RELATED equals 1,	vPIC BODY CLASS or FINAL STAGE BODY CLASS of at least one of the involved vehicles should equal 073 (Bus - School Bus), or SPECIAL USE for at least one involved vehicle should equal 02, or BUS USE for at least one vehicle should equal 01.
V531	BUS USE equals 01, 04-07, 98,	VEHICLE CONFIGURATION should equal 20, 21, and CARGO BODY TYPE should equal 22.

Error ID	IF	THEN
V989	vPIC MAKE equals 99998 (Not Reported) or 99999 (Unknown), and vPIC MODEL equals 99998 (Not Reported) or 99999 (Unknown), and vPIC BODY CLASS equals 998 (Not Reported) or 999 (Unknown),	BUS USE should equal 99.

V28 - Special Use

FORMAT: 2 numeric

SAS NAME: Vehicle.SPEC_USE, Person.SPEC_USE, Parkwork.PSP_USE

ELEMENT VALUES:

Codes	Attributes
00	No Special Use
01	<u>Taxi</u>
02	<u>Vehicle Used for School Transport</u>
03	<u>Vehicle Used as Other Bus</u>
04	<u>Military</u>
05	<u>Police</u>
06	<u>Ambulance</u>
07	<u>Fire Truck</u>
08	Non-Transport Emergency Services Vehicle
10	Safety Service Patrols - Incident Response
12	Towing - Incident Response
11	Other Incident Response
19	Motor Vehicle Used for Vehicle Sharing Mobility
20	Motor Vehicle Used for Electronic Ride-Hailing
21	Mail Carrier
22	Public Utility
23	Rental Truck Over 10,000 lbs.
24	Truck Operating with Crash Attenuator Equipment
98	Not Reported
99	Reported as Unknown

Definition: This data element identifies if a special use is applicable to this vehicle at the time it was involved in the crash.

Remarks: This data element identifies any special use associated with this motor vehicle at the time of the crash. The special function served by this motor vehicle should be coded regardless of whether the function is marked on the vehicle.

00 (**No Special Use**) is used when the available information does not indicate or imply that this vehicle was applicable to any of the special uses listed above.

01 (Taxi) is used when this vehicle was being used during this trip (at the time of the crash) on a "fee-for-hire" basis to transport people. Most of these vehicles will be marked and formally

registered as taxis; however, vehicles that are used as taxis, even though they are not registered are included here. For vehicles affiliated with a transportation network company, see 20 (*Motor Vehicle Used for Electronic Ride-Hailing*). Passengers do not have to be present at the time of the crash. Taxis and drivers that are off-duty at the time of the crash are coded as 00 (No Special Use). If it is unknown whether the taxi is on-duty or not, code as 01 (Taxi). This attribute also applies for limousines on a "fee-for-hire" basis.

02 (Vehicle Used for School Transport) is used for any motor vehicle that satisfies all the following criteria:

- operated, leased, owned, or contracted by a public or private school-type institution;
- where the institution's students may range from pre-school through high school;
- whose occupants (if any) are associated with the institution; and,
- at the time of the crash the vehicle is being used for transportation to/from a school or on a school-sponsored activity or trip.

Note: This attribute also includes vehicles that are not externally identifiable as a school/pupil transport vehicle but do meet all the other criteria above. For example, a transit bus, at the time of the crash, used exclusively (no other passengers except students) to transport students to/from the school or school-related activity.

In most cases, the decision to use this attribute will be based on a reference to the vehicle as a school bus in the available information. In this situation, assume the criteria are met unless it is otherwise stated in the available information.

03 (Vehicle Used as Other Bus) is used when a motor vehicle is designed for transporting nine or more people including the driver and does not satisfy the above "school bus" criteria. For example, *NCSA* BODY TYPE code "School Bus" transporting senior citizens to an activity.

04 (**Military**) is used for any vehicle that is owned by any of the Armed Forces regardless of body type. This attribute includes

- military police vehicles,
- military ambulances,
- military hearses, and
- military fire vehicles.

05 (**Police**) is used for a vehicle equipped with police emergency devices (lights and siren) that is owned or subsidized by any local, county, State, or Federal Government entity. The police vehicle is presumed to be in special use at all times, although not necessarily in "emergency use." Vehicles not owned by a government entity that are used by law enforcement officers (e.g., undercover) are excluded.

06 (**Ambulance**) is used for any readily identifiable (lights or markings) vehicles designed to transport sick or injured people. The ambulance is presumed to be in special use at all times, although not necessarily in "emergency use."

07 (**Fire Truck**) is used for any readily identifiable (lights or markings) vehicles specially designed and equipped to respond to fire, hazmat, medical, and extrication incidents. This

attribute includes medium and heavy vehicles such as engines, pumpers, ladder, platform aerial apparatus, heavy rescue vehicles, water tenders or tankers, brush or wilderness firefighting vehicles, etc. The fire truck is presumed to be in special use at all times, although not necessarily in "emergency use."

08 (Non-Transport Emergency Services Vehicle) is used for any readily identified (lights and markings) vehicles that do not meet the criteria for <u>06</u> (Ambulance) or <u>07</u> (Fire Truck), and are specifically designed and equipped to respond to fire, hazmat, medical, and extrication incidents. This attribute includes light vehicles such as sedans, van, SUVs, pickups, trucks, motorcycles, etc. This attribute includes vehicles that have been dispatched to an incident or have initiated operation in a non-emergency mode and are not transporting passengers, such as patients or suspects. An example of a Non-Transport Emergency Services vehicle is a fire chief's unit, commonly an SUV.

NOTE on Incident Response Vehicles: An Incident Response Vehicle is a vehicle typically equipped with a variety of tools, emergency medical equipment, traffic cones and control signs, absorbent material (for responding to spills), emergency and work lighting. These multi-purpose response units are intended to assist law enforcement, fire, and rescue personnel with trafficway incident management. A traffic incident scene is the scene of any unplanned traffic event that adversely effects normal traffic operations. Examples include, but are not limited to, traffic crashes, disabled vehicles, traffic backups, or spilled cargo.

10 (**Safety Service Patrols - Incident Response**) is used for special units that patrol highways to provide temporary traffic control for emergency situations, assistance with disabled vehicles, traffic incident scene management, and emergency response. The case material must indicate the vehicle was responding to a traffic incident at the time of its involvement in the crash.

12 (**Towing - Incident Response**) is used for any type of tow truck involved in the crash while providing tow service at a traffic incident scene. The tow truck does not need to have a vehicle in tow at the time of the crash to use this attribute. The case material must indicate the vehicle was responding to a traffic incident at the time of its involvement in the crash. Tow trucks involved in crashes under any other circumstances are not included in this attribute. Please see VEHICLE LEVEL-RELATED FACTOR **042** (**Other Working Vehicle**) for these other circumstances.

11 (Other Incident Response) is used for Incident Response Vehicles excluding 10 (Safety Service Patrols - Incident Response) and 12 (Towing - Incident Response). Vehicles responding to clean up spills are examples of this. The case material must indicate the vehicle was responding to a traffic incident at the time of its involvement in the crash.

19 (Motor Vehicle Used for Vehicle Sharing Mobility) is used when this motor vehicle was part of a shared mobility service (Transportation Network Company) to provide customers with the vehicle only (no driver included) at the time of the crash.

Examples may include car-sharing, personal vehicle sharing, e-bike sharing, or other on-demand motor vehicle transportation services on an as-needed basis.

20 (*Motor* Vehicle Used for Electronic Ride-Hailing) is used when this vehicle was actively working for a transportation network company (TNC) to provide passengers with transportation, on the way to pick up passengers, dropping off passengers, or waiting to provide passengers with transportation at the time of the crash. If the vehicle was off duty and in use as a personal vehicle, use code **00** (No Special Use). A TNC may also be called a mobility

service provider (MSP). Both apply here as they both connect paying passengers seeking transportation with vehicles/drivers via websites and mobile apps.

Examples may include TNCs such as Beat, Uber, Lyft, Juno, Pick Me Up, Bolt, and others.

- **21** (**Mail Carrier**) is used when the case material indicate this vehicle was a U.S. Postal Service (USPS) authorized mail carrier at the time of the crash. This includes personal vehicles being used as rural USPS-authorized mail carriers. This attribute excludes other delivery services (e.g., FedEx, UPS). See also VEHICLE LEVEL-RELATED FACTOR <u>042</u> (<u>Other Working</u> Vehicle).
- **22** (**Public Utility**) is used when the case material indicate this vehicle was a public utility vehicle (electricity, gas, telephone, cable, etc.). This attribute may be used with any **UNIT TYPE**. For example, a utility truck parked at a work site or in-transport back to the depot.
- 23 (Rental Truck over 10,000 lbs.) is used when case material indicate the vehicle was being used as a rental vehicle at the time of the crash (*NCSA* BODY TYPES 60-79). This attribute is intended for rental trucks in use by private citizens, not for uses by commercial concerns as part of regular business. For example, a homeowner rents a truck to move their belongings.
- **24** (**Truck Operating with Crash Attenuator Equipment**) is used when the case material indicate this vehicle was specially equipped with devices to absorb impacts from collisions and was in use as a crash attenuator at the time of the crash (**UNIT TYPE** must equal 4).
- 98 (Not Reported) Check to see if <u>00 (No Special Use)</u> or <u>99 (Reported as Unknown)</u> are more appropriate for the situation.

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**."

Code **98** (**Not Reported**) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).
- **99** (**Reported as Unknown**) is used if the investigating officer reported SPECIAL USE as unknown.

Error ID	IF	THEN
1D0P	SPECIAL USE equals 01 or 20,	vPIC Body Class should equal 002 (Minivan), 003 (Coupe), 005 (Hatchback/Liftback/Notchback), 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 008 (Crossover Utility Vehicle (CUV)), 09 (Van), 013 (Sedan/Saloon), 015 (Wagon), 060 (Pickup), or 119 (Sport Utility Truck (SUT)).
1D0Q	SPECIAL USE equals 00-03, 19, 20-24,	EMERGENCY MOTOR VEHICLE USE must equal 0.
1D0R	SPECIAL USE equals 23,	REGISTERED VEHICLE OWNER should equal 4.
1D0S	SPECIAL USE equals 10, 11, 12, 21, 22, or 24,	REGISTERED VEHICLE OWNER should equal 3.
1D0T	SPECIAL USE equals 19,	REGISTERED VEHICLE OWNER must not equal 1.
1D1P	SPECIAL USE equals 24,	UNIT TYPE must equal 4.
1D2P	SPECIAL USE equals 12 or 21,	at least one RELATED FACTORS - VEHICLE LEVEL must equal <i>0</i> 42.
1E0P	SPECIAL USE equals 19,	vPIC Body Class must not equal a 011 (Truck), 016 (Bus), 066 (Truck-Tractor), 068 (Streetcar / Trolley), 073 (Bus - School Bus), 095 (Cargo Van), 111 (Step Van / Walk-in Van), 117 (Limousine), 126 (Off-road Vehicle - Farm Equipment), or 127 (Off-road Vehicle - Construction Equipment), and FINAL STAGE BODY CLASS must not equal 011 (Truck), 016 (Bus), 066 (Truck-Tractor), 068 (Streetcar / Trolley), 073 (Bus - School Bus), 095 (Cargo Van), 111 (Step Van / Walk-in Van), or 117 (Limousine).
2D0P	SPECIAL USE equals 02,	vPIC Body Class should equal 002 (Minivan), 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 008 (Crossover Utility Vehicle (CUV)), 009 (Van), 016 (Bus), 073 (Bus-School Bus), or 119 (Sport Utility Truck (SUT)), or FINAL STAGE BODY CLASS should equal 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 008 (Crossover Utility Vehicle (CUV)), 009 (Van), 016 (Bus), or 073 (Bus-School Bus).

Error ID	IF	THEN
3A0P	SPECIAL USE equals 07,	vPIC BODY CLASS must equal 011 (Truck), or FINAL STAGE BODY CLASS must equal 997 (Other (Specify:)).
3D0P	SPECIAL USE for any vehicle equals 02,	SCHOOL BUS RELATED must equal 1.
4A0P	vPIC BODY CLASS equals 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport / Adventure / Supermoto / On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 097 (Off-road Vehicle - Snowmobile), 098 (Motorcycle - Street), 100 (Motorcycle - Enclosed Three Wheeled / Enclosed Autocycle), 103 (Motorcycle - Unenclosed Three Wheeled / Open Autocycle), 104 (Moped), 105 (Off-road Vehicle - Recreational Off-Road Vehicle (ROV)), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 124 (Off-road Vehicle - Golf Cart), 125 (Motorcycle - Unknown Body Type), 126 (Off-road Vehicle - Farm Equipment), 127 (Off-road Vehicle - Construction Equipment), or 996 (Motorized Bicycle),	SPECIAL USE must not equal 01-03, 06, 07, 12, or 20-24.
4D0P	SPECIAL USE equals 03,	vPIC BODY CLASS must equal 009 (Van), 016 (Bus), 068 (Streetcar / Trolley), 073 (Bus-School Bus), or 117 (Limousine), or FINAL STAGE BODY CLASS must equal 009 (Van), 016 (Bus), 068 (Streetcar / Trolley), 073 (Bus-School Bus), or 117 (Limousine).

Error ID	IF	THEN
5D0P	SPECIAL USE equals 04,	vPIC BODY CLASS should equal 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 009 (Van), 011 (Truck), 016 (Bus), 060 (Pickup), 066 (Truck-Tractor), 095 (Cargo Van), 119 (Sport Utility Truck (SUT)), 997 (Other (Specify:)), or 999 (Unknown), or FINAL STAGE BODY CLASS should equal 009 (Van), 011 (Truck), 016 (Bus), 060 (Pickup), 066 (Truck-Tractor), 095 (Cargo Van), 119 (Sport Utility Truck (SUT)), 997 (Other (Specify:)), or 999 (Unknown).
5M0G	SPECIAL USE equals 06, and PERSON TYPE equals 02 or 09,	RELATED FACTORS - PERSON (MV OCCUPANT) LEVEL should equal <i>0</i> 92, <i>0</i> 94, or <i>0</i> 95.
5M1G	SPECIAL USE equals 21 and PERSON TYPE equals 01,	SEATING POSITION should equal 13.
5M2G	SPECIAL USE equals 06, and PERSON TYPE equals 02, and SEATING POSITION equals 51,	at least one RELATED FACTORS - PERSON LEVEL should equal 092 or 094.
5M3G	SPECIAL USE equals 06, and PERSON TYPE equals 01 or 02, and SEATING POSITION equals 11-19,	at least one RELATED FACTORS - PERSON LEVEL should equal 094, or at least one RELATED FACTORS - DRIVER LEVEL should equal 094.
6D0P	SPECIAL USE equals 05,	vPIC BODY CLASS should equal 006 (Motorcycle - Standard), 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 008 (Crossover Utility Vehicle (CUV)), 009 (Van), 013 (Sedan/Saloon), 015 (Wagon), 060 (Pickup), 081 (Motorcycle - Touring / Sport Touring), 082 (Motorcycle - Cruiser), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 119 (Sport Utility Truck (SUT)), or 125 (Motorcycle - Unknown Body Type).
7D0P	SPECIAL USE equals 06,	NCSA BODY TYPE must equal 11, 14-17, 19, 21, 22, 28, 29, 40, 41, 45, 48, 49, 61, 62, 64, 79, 98, 99.

Error ID	IF	THEN
8D0P	SPECIAL USE equals 08,	vPIC BODY CLASS should equal 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 011 (Truck), 060 (Pickup), or 119 (Sport Utility Truck (SUT)), or FINAL STAGE BODY CLASS should equal vPIC BODY CLASS should equal 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 011 (Truck), 060 (Pickup), or 119 (Sport Utility Truck (SUT)), and POWER UNIT GVWR_FROM and POWER UNIT GVWR_TO should be in 11-12.
U050	UNLIKELY: SPECIAL USE equals 04, 08.	
U080	vPIC BODY CLASS does not equal 009 (Van), 016 (Bus), 068 (Streetcar / Trolley), or 073 (Bus-School Bus), and FINAL STAGE BODY CLASS does not equal 009 (Van), 016 (Bus), 068 (Streetcar / Trolley), or 073 (Bus-School Bus),	UNLIKELY: SPECIAL USE equals 02 or 03.
U420	UNLIKELY: SPECIAL USE equals 98 unless STATE or PSU_STATE equals 25.	
V032	SPECIAL USE equals 10, 11, or 12,	vPIC BODY CLASS should equal 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 009 (Van), 011 (Truck), 060 (Pickup), or 119 (Sport Utility Truck (SUT)), or FINAL STAGE BODY CLASS should equal 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 009 (Van), 011 (Truck), 060 (Pickup), or 119 (Sport Utility Truck (SUT)).
V056	SPECIAL USE equals 02,	BUS USE should equal 01.
V057	SPECIAL USE equals 03,	BUS USE should equal 04-07, 98, or 99.
V058	EMERGENCY MOTOR VEHICLE USE equals 2-6,	SPECIAL USE should equal 04-08, 10, 11, 12, or 24.
V059	BUS USE equals 01,	SPECIAL USE must equal 02.
V060	SPECIAL USE equals 04,	REGISTRATION STATE should equal 94.
V061	BUS USE equals 04-07,	SPECIAL USE must equal 03.
V330	SCHOOL BUS RELATED equals 1,	vPIC BODY CLASS or FINAL STAGE BODY CLASS of at least one of the involved vehicles should equal 073 (Bus - School Bus), or SPECIAL USE for at least one involved vehicle should equal 02, or BUS USE for at least one vehicle should equal 01.

Error ID	IF	THEN
V596	SPECIAL USE equals 23,	POWER UNIT GVWR_FROM and POWER UNIT GVWR_TO must be in 13-18, and vPIC BODY CLASS must equal 009 (Van), 011 (Truck), 060 (Pickup), or 095 (Cargo Van), or FINAL STAGE BODY CLASS must equal 009 (Van), 011 (Truck), 060 (Pickup), or 095 (Cargo Van).

Consistency Checks (FARS Only) (See Section 400):

Error ID	IF	THEN
AR0P	SPECIAL USE equals 04,	REGISTERED VEHICLE OWNER must not equal 0, 1, 2, 4.
V560	SPECIAL USE equals 04,	REGISTERED VEHICLE OWNER should equal 3, and REGISTRATION STATE should equal 94.

V29 - Emergency Motor Vehicle Use

FORMAT: 1 numeric

SAS NAME: Vehicle.EMER_USE, Person.EMER_USE, Parkwork.PEM_USE

ELEMENT VALUES:

Codes	Attributes
0	Not Applicable
2	Non-Emergency, Non-Transport
3	Non-Emergency Transport
4	Emergency Operation, Emergency Warning Equipment Not in Use
5	Emergency Operation, Emergency Warning Equipment in Use
6	Emergency Operation, Emergency Warning Equipment in Use Unknown
8	Not Reported
9	Reported as Unknown

Definition: Emergency Motor Vehicle Use indicates operation of any motor vehicle that is legally authorized by a government authority to respond to emergencies with or without the use of emergency warning equipment, such as a police vehicle, fire truck, or ambulance while actually engaged in such response.

Remarks: Emergency use also refers to an official motor vehicle that is usually traveling with emergency signals in use while engaged in an emergency response; typically, red light blinking, siren sounding, etc. Services such as escorting a funeral procession, providing traffic control assistance at a work zone, or for a motorcade or a parade would not qualify as emergency uses.

If <u>SPECIAL USE</u> is <u>04 (Military)</u>, <u>05 (Police)</u>, <u>06 (Ambulance)</u>, <u>07 (Fire Truck)</u>, <u>08 (Non-Transport, Emergency Services Vehicle)</u>, <u>10 (Safety Service Patrols - Incident Response)</u>, <u>11 Other Incident Response)</u>, or <u>12 (Towing - Incident Response)</u>, then refer to the case material to determine if the vehicle was on an emergency response (i.e., red lights flashing, siren sounding, on route to hospital, etc.) at the time of the crash.

- 0 (Not Applicable) is used when <u>SPECIAL USE</u> for this vehicle is coded <u>00</u> (No Special Use), <u>01</u> (Taxi), <u>02</u> (Vehicle Used as School Transport), <u>03</u> (Vehicle Used as Other Bus), <u>19</u> (Motor Vehicle Used for Vehicle Sharing Mobility), <u>20</u> (Motor Vehicle Used for Electronic Ride-Hailing), <u>21</u> (Mail Carrier), <u>22</u> (Public Utility), <u>23</u> (Rental Truck Over <u>10,000 lbs.</u>), or <u>24</u> (Truck Operating with Crash Attenuator Equipment).
- **2** (Non-Emergency, Non-Transport) is used when the authorized emergency vehicle has been dispatched to an incident or has initiated operation in a non-emergency mode and is not transporting passengers, such as patients or suspects. The emergency vehicle operator is not using emergency lighting, audible siren, or emergency vehicle maneuvers.
- **3 (Non-Emergency Transport)** is used when the authorized emergency vehicle has been dispatched to an incident or has initiated a transport-related operation in a non-emergency mode. The emergency vehicle operator is not using emergency lighting, audible siren, or emergency

vehicle maneuvers. For example, transport of a suspect from one location to another, or interfacility transport of a patient in an ambulance to a nursing home.

- 4 (Emergency Operation, Emergency Warning Equipment Not in Use) is used when the authorized emergency vehicle has been dispatched to an incident or has initiated an emergency operation and has no emergency lighting or audible siren in use. The emergency vehicle operator may be using emergency vehicle maneuvers as allowed under State law. Examples: a police car in the last mile approaching a bank robbery; transport of a patient in an ambulance for which lights and sirens are not used per protocol.
- **5** (Emergency Operation, Emergency Warning Equipment in Use) is used when the authorized emergency vehicle has been dispatched to an incident or has initiated an emergency operation and is using an audible siren and/or has illuminated its emergency lighting devices. The emergency vehicle operator is using, or is prepared to use, emergency vehicle maneuvers as allowed by State law.
- **6** (Emergency Operation, Emergency Warning Equipment in Use Unknown) is used when the authorized emergency vehicle has been dispatched to an incident or has initiated an emergency operation and it cannot be determined if it is using an audible siren and/or has illuminated its emergency lighting devices.
- 8 (Not Reported) Check to see if $\frac{0 \text{ (Not Applicable)}}{0 \text{ (Not Reported as Unknown)}}$ are more appropriate for the situation.

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**."

Code **8** (**Not Reported**) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).

Examples:

- The case material are not clear as to whether the vehicle was on an emergency response.
- The case material are not clear as to whether the vehicle is legally authorized by a government authority to respond to emergencies.
- **9 (Reported as Unknown)** is used if the investigating officer reported emergency use as unknown.

Error ID	IF	THEN
1D0Q	SPECIAL USE equals 00-03, 19, 20-24,	EMERGENCY MOTOR VEHICLE USE must equal 0.
PB44	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 240,	EMERGENCY MOTOR VEHICLE USE should equal 2-6 for at least one vehicle.
V058	EMERGENCY MOTOR VEHICLE USE equals 2-6,	SPECIAL USE should equal 04-08, 10, 11, 12, or 24.

V30 - Travel Speed

FORMAT: 3 numeric

SAS NAME: Vehicle.TRAV_SP

ELEMENT VALUES:

Codes	Attributes
000	Stopped Motor Vehicle In-Transport
001-151	Reported Speed Up to 151 mph
997	Greater than 151 MPH
998	Not Reported
999	Reported as Unknown

Definition: This element records the speed the vehicle was traveling prior to the occurrence of the crash as reported by the investigating officer.

Remarks: Code the TRAVEL SPEED as indicated by the investigating officer. Do not enter the SPEED LIMIT. It is permissible to use estimates by drivers or witnesses reported in the case material if the speed reported is not contradictory to the officer's reported travel speed. See clarification on the use of information provided by witnesses in section 103. Data Sources. TRAVEL SPEED should be representative of the vehicle's speed associated with the pre-event movement, prior to any avoidance maneuvers. If the police calculated a speed, please be aware that this may represent the impact speed that is not necessarily the travel speed.

Code the nearest mph for this vehicle as reported on the case material.

Examples:

Reported Speed	Code
40.2 mph	40
40.5 mph	41

If the officer gives a range, code the median speed and, if necessary, round up to the next higher whole number. If the officer gives a minimum speed (e.g., "at least 55 mph" or "in excess of 60 mph,") then use that speed (e.g., code as "55" and "60" respectively).

Examples:

Reported Speed	Code
40-50 mph	45
45-50 mph	48

000 (**Stopped Motor Vehicle In-Transport**) is used when this vehicle is stopped on the roadway.

998 (Not Reported) Check to see if <u>999 (Reported as Unknown)</u> is more appropriate for the situation.

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**."

Code **998** (**Not Reported**) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).

Examples:

- 1. the officer did not mention Travel Speed, or
- 2. did not indicate Travel Speed within a field in the case material.

999 (**Reported as Unknown**) is used when the officer indicates that the TRAVEL SPEED is unknown.

Error ID	IF	THEN
39IP	TRAVEL SPEED is equal to 000 and ATTEMPTED AVOIDANCE MANEUVER equals 01,	PRE-IMPACT STABILITY must equal 1.
3B0P	JACKKNIFE equals 2, 3,	TRAVEL SPEED must not equal 000.
3B1P	CRASH TYPE equals 21-23,	TRAVEL SPEED must equal 000 for this vehicle.
40IP	TRAVEL SPEED is equal to 000,	ATTEMPTED AVOIDANCE MANEUVER should equal <i>00 or</i> 01.
41IP	TRAVEL SPEED is equal to 000,	DRIVER MANEUVERED TO AVOID should equal 00 or 95.
42IP	TRAVEL SPEED equals 000,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 00, 05, 07, 17, 98, or 99.
A090	NUMBER OF VEHICLE FORMS SUBMITTED is greater than 001,	there should be at least one vehicle with TRAVEL SPEED of 001-151, 997-999, or blanks.

Error ID	IF	THEN
A100	FIRST HARMFUL EVENT is not equal to 02, 04, 05, 10, 16,	there should be one vehicle with TRAVEL SPEED of 001-151, 997-999, or blanks.
AZA0	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 05 or 07,	TRAVEL SPEED must equal 000 for this vehicle.
U111	Unlikely TRAVEL SPEED is 97, 98, or 99.	
VH70	UNIT TYPE equals 2-4,	elements JACKKNIFE, TRAVEL SPEED, AND SEQUENCE OF EVENTS must all be left blank.

Consistency Checks (FARS Only) (See Section 400):

Error ID	IF	THEN
A240	LAND USE AND FUNCTIONAL SYSTEM (b) equals 01, and RELATION TO JUNCTION (a) equals 0,	TRAVEL SPEED should not equal 005-040 for any vehicle.

V31 - Underride/Override - FARS Only

FORMAT: 1 numeric

SAS NAME: Vehicle.UNDERIDE, Parkwork.PUNDERIDE

ELEMENT VALUES:

Codes	Attributes
0	No Underride or Override Noted
1	Underriding a Motor Vehicle In-Transport, Underride, Compartment Intrusion
2	Underriding a Motor Vehicle In-Transport, Underride, No Compartment Intrusion
3	Underriding a Motor Vehicle In-Transport, Underride, Compartment Intrusion Unknown
4	Underriding a Motor Vehicle Not In-Transport, Underride, Compartment Intrusion
5	Underriding a Motor Vehicle Not In-Transport, Underride, No Compartment Intrusion
6	Underriding a Motor Vehicle Not In-Transport, Underride, Compartment Intrusion Unknown
7	Overriding a Motor Vehicle In-Transport
8	Overriding a Motor Vehicle Not In-Transport
9	<u>Unknown if Underride or Override</u>

Definition: This element indicates whether an underride or override occurred during the crash involving this vehicle.

Remarks:

UNDERRIDE/OVERRIDE is not applicable to <u>NCSA BODY TYPES 80-84, 88-91</u> (motorcycles, ATVs, snowmobiles); use **0** (No Underride or Override Noted).

Rationale: Needed to identify the magnitude of crashes in which an underride or override occurs to support NHTSA rulemaking activities and motor vehicle bumper compatibility research.

For underrides and overrides, it is important to determine the vehicle performing the action. Two vehicles cannot be considered to underride and override simultaneously.

In cases in which two vehicles collide "head-on" and one vehicle ends up under the other, you must determine whether an **Underride** or **Override** has occurred.

An Underride refers to a vehicle sliding under another vehicle during a crash. Examples include vehicles completely underriding a trailer from the side without stopping and vehicles striking the rear end or the side of a tractor-trailer and coming to a stop under the trailer. In these examples, the automobile is the underriding vehicle. We distinguish between those underriding vehicles with compartment intrusion versus those with no compartment intrusion.

• **Compartment intrusion** indicates a breach of the passenger compartment of this underriding (striking) vehicle. For example, damage to the windshield or glass area.

• **No compartment intrusion** means that the underridden vehicle (struck vehicle) did not directly enter the passenger compartment of this vehicle (for example, damage to the hood or front bumper).

An **Override** refers to a vehicle riding up over another (including a parked vehicle). A vehicle straddling a guardrail, for example, is not coded as an override.

0 (**No Underride or Override Noted**) is used when there is no indication in the case material that this vehicle was involved in and underride or override as defined above. Also use this attribute for <u>NCSA BODY TYPES 80-84, 88-91</u> (motorcycles, ATVs, snowmobiles).

Underrides and Vehicles Under Other Vehicles

Codes "1-3" are used when **this vehicle** underrides a motor vehicle in-transport (includes those in motion outside the trafficway).

Codes "4-6" are used when **this vehicle** underrides a motor vehicle that is Not In-Transport. This includes parked/stopped off roadway motor vehicles and working motor vehicles (e.g., cherry picker, paint-striping truck).

Compartment Intrusion Guidelines:

To use Codes "1" or "4," the police crash report should indicate that the passenger compartment of the underriding (striking) vehicle has been damaged. Sources of this information can be the police crash report narrative and/or the vehicle damage scale. If the top of the vehicle is damaged, as noted by the vehicle damage scale, codes "1" or "4" would apply.

Codes "2" and "5," **Underride, No Compartment Intrusion**, are used when a portion of the vehicle is under another, and it is known that there is no passenger compartment intrusion. Codes "3" and "6" are used when it is unknown if there is passenger compartment intrusion.

Overrides

- **7 (Overriding a Motor Vehicle In-Transport)** is used when this vehicle overrides a motor vehicle in-transport (includes those in motion outside the trafficway).
- **8** (Overriding a Motor Vehicle Not In-Transport) is used when this vehicle overrides a motor vehicle not in-transport. This includes parked/stopped off roadway motor vehicles and working motor vehicles (e.g., cherry picker, paint-striping truck).
- **9** (**Unknown if Underride or Override**) is used when an Underride or Override occurred but it cannot be determined which is appropriate.

Error ID	IF	THEN
431P	NUMBER OF VEHICLE FORMS SUBMITTED equals 002 and UNDERRIDE/OVERRIDE equals 1-8, 9 for one vehicle,	UNDERRIDE/OVERRIDE for the other vehicle must equal 0.
432P	NUMBER OF VEHICLE FORMS SUBMITTED equals 001,	UNDERRIDE/OVERRIDE must equal 0.
440P	UNDERRIDE/OVERRIDE equals 7,	VEHICLE SEQUENCE OF EVENTS must not equal 12, 14, 45, or 55, or CRASH EVENTS equals 12, 14, 45, or 55 for that vehicle, AND the vPIC BODY CLASS for at least one of the corresponding vehicles (THIS VEHICLE or OTHER VEHICLE) in that row equals 006 (Motorcycle – Standard), 012 (Motorcycle – Scooter), 069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcyclestyle)), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring / Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle – Trike), 084 (Off-road Vehicle - Dirt Bike / Off-Road), 085 (Motorcycle - Dual Sport / Adventure / Supermoto / On/Off-Road), 086 (Off-road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small / Minibike), 088 (Off-road Vehicle - Go Kart), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 097 (Off-road Vehicle - Street), 104 (Motorcycle - Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motocross (Off-road short distance, closed track racing)), 114 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle).
6A1P	UNDERRIDE/OVERRIDE equals 1-8,	NCSA BODY TYPE must not equal 80-84, 88-91.
9B3P	UNDERRIDE/OVERRIDE equals 7,	there must be at least one vehicle with UNIT TYPE equal to 1.
9B4P	UNDERRIDE/OVERRIDE equals 8,	there must at least one vehicle with UNIT TYPE equal 2-4.
9B5P	UNIT TYPE equals 2, 3,	UNDERRIDE/OVERRIDE must equal 0.

Error ID	IF	THEN
V750	UNDERRIDE/OVERRIDE equals 1-3,	FIRST HARMFUL EVENT or at least one SEQUENCE OF EVENTS (for this vehicle) should equal 12, 55.
V760	UNDERRIDE/OVERRIDE equals 4-6,	FIRST HARMFUL EVENT or at least one SEQUENCE OF EVENTS (for this vehicle) should equal 14, 45.
V770	UNDERRIDE/OVERRIDE equals 7,	at least one SEQUENCE OF EVENTS (for this vehicle) must equal 12, 55.
V780	UNDERRIDE/OVERRIDE equals 8,	at least one SEQUENCE OF EVENTS (for this vehicle) must equal 14, 45.
VP87	vPIC BODY CLASS equals 006 (Motorcycle – Standard), 012 (Motorcycle – Scooter), 069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring / Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle – Trike), 084 (Off-road Vehicle - Dirt Bike / Off-Road), 085 (Motorcycle - Dual Sport / Adventure / Supermoto / On/Off-Road), 086 (Off-road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small / Minibike), 088 (Off-road Vehicle - Go Kart), 090 (Motorcycle - Side Car), 094 (Motorcycle – Custom), 097 (Off-road Vehicle – Snowmobile), 098 (Motorcycle – Street), 104 (Motorcycle – Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle – Underbone), 113 (Off-road Vehicle - Motocross (Off-road short distance, closed track racing)), 114 (Motorcycle – Unknown Body Type), or 996 (Motorized Bicycle),	UNDERRIDE/OVERRIDE must equal 7.

Error ID	IF	THEN
VP88	UNDERRIDE/OVERRIDE equals 1 or 2,	vPIC BODY CLASS must not equal 006 (Motorcycle – Standard), 012 (Motorcycle – Scooter), 069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring / Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle – Trike), 084 (Off- road Vehicle - Dirt Bike / Off-Road), 085 (Motorcycle - Dual Sport / Adventure / Supermoto / On/Off-Road), 086 (Off-road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small / Minibike), 088 (Off-road Vehicle - Go Kart), 090 (Motorcycle - Side Car), 094 (Motorcycle – Custom), 097 (Off-road Vehicle – Snowmobile), 098 (Motorcycle – Street), 104 (Motorcycle – Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle – Underbone), 113 (Off-road Vehicle - Motocross (Off-road short distance, closed track racing)), 114 (Motorcycle – Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle).

V32 - Rollover

FORMAT: 1 numeric

SAS NAME: Vehicle.ROLLOVER, Person.ROLLOVER

ELEMENT VALUES:

Codes	Attributes
0	No Rollover
1	Rollover, Tripped by Object/Vehicle
2	Rollover, Untripped
9	Rollover, Unknown Type

Definition: This element identifies whether a rollover or overturn occurred during the crash involving this vehicle.

Remarks: ROLLOVER is defined as any vehicle rotation of 90 degrees or more about any true longitudinal or lateral axis. Rollover can also be referred to as overturn or end-over, and can occur at any time during this vehicle's <u>SEQUENCE OF EVENTS</u>.

ROLLOVER does **not** apply to 2-wheeled motorcycles for this element (use <u>0</u> (No Rollover)). However, in the <u>FIRST HARMFUL EVENT</u>, <u>MOST HARMFUL EVENT</u>, and <u>SEQUENCE OF EVENTS</u> you may use <u>01</u> (Rollover/ Overturn) to record that this vehicle (motorcycle) overturned. If a motorcycle is pulling a trailing unit that overturns, the motorcycle should have <u>01</u> (Rollover/Overturn) in its Crash Events. However, since the power unit is a motorcycle, the element ROLLOVER still does NOT apply.

A ROLLOVER can be used for 3- or 4-wheeled ATVs, snowmobiles, go-karts, and 3-wheeled motorcycles.

0 (No Rollover) is used when there is no indication that a rollover occurred.

- **1** (Rollover, Tripped by Object/Vehicle) is used when the vehicle's lateral motion is *known to have been* suddenly slowed or stopped by an opposing force, inducing a rollover. The opposing force may be produced by a curb, ditch, pothole, another vehicle, pavement, or soil dug into by the vehicle's wheels. This includes instances where a vehicle impacts a fixed object (e.g., tree, barrier, pole, or post) then rolls over.
- **2** (**Rollover**, **Untripped**) is used when a rollover occurs *and it is known that the rollover was* not a result of a collision with an object or a vehicle or generated by any other opposing force as referred to in **1** (**Rollover**, **Tripped by Object/Vehicle**). An untripped rollover is one for which there is no obvious cause other than normal surface friction. This is usually the result of vehicle instability and there is no evidence of furrowing or gouging on the pavement, gravel, grass, or dirt surface.
- **9 (Rollover, Unknown Type)** is used when a rollover occurred, but there is not sufficient information to determine tripped versus untripped status.

Error ID	IF	THEN
1Z2P	any SEQUENCE OF EVENTS equals 01, and vPIC BODY CLASS does not equal 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport / Adventure / Supermoto / On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 104 (Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle), or any RELATED FACTORS-VEHICLE LEVEL equals 030,	ROLLOVER must equal 1, 2, or 9.
5A0P	vPIC BODY CLASS equals 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport / Adventure / Supermoto / On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 104 (Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle), and any RELATED FACTORS - VEHICLE LEVEL does not equal 030,	ROLLOVER must equal 0.
V700	ROLLOVER equals 2,	CRASH TYPE should equal 01-10, 14, 98, or 99 for this vehicle.
V74P	UNIT TYPE equals 1, and ROLLOVER equals 1, 2, 9, or LOCATION OF ROLLOVER equals 1-7, 9,	at least one SEQUENCE OF EVENTS must equal 01 for this vehicle.

Error ID	IF	THEN
V75P	ROLLOVER is not blank,	LOCATION OF ROLLOVER must not be blank.
V76P	ROLLOVER is blank,	LOCATION OF ROLLOVER must be blank.
V77P	ROLLOVER equals 1, 2, 9,	LOCATION OF ROLLOVER must equal 1-7, 9.
V78P	ROLLOVER equals 0,	LOCATION OF ROLLOVER must equal 0.
V79P	ROLLOVER equals 2, and FIRST HARMFUL EVENT equals 01,	CRASH TYPE must equal 01-10, 14, 15, or 98 for the vehicle involved in the FIRST HARMFUL EVENT.

V33 - Location of Rollover

FORMAT: 1 numeric

SAS NAME: Vehicle.ROLINLOC

ELEMENT VALUES:

Codes	Attributes
0	No Rollover
1	On Roadway
2	<u>On Shoulder</u>
3	On Median/Separator
4	<u>In Gore</u>
5	On Roadside
6	Outside of Trafficway
7	In Parking Lane/Zone
9	<u>Unknown</u>

Definition: This element identifies the location of the trip point or start of the vehicle's roll.

Remarks:

1 (On Roadway) is used when the available information indicates the vehicle tripped or began its roll on the roadway. A roadway is that part of a trafficway designed, improved, and ordinarily used for motor vehicle travel. Where various classes of motor vehicles are segregated, that part of a trafficway used by a particular class is the roadway (i.e., travel lanes). Separate roadways may be provided for northbound and southbound traffic or for trucks and automobiles. This includes continuous left-turn lanes.

- **2 (On Shoulder)** is used when the available information indicates the vehicle tripped or began its roll on the shoulder. A shoulder is that part of a trafficway contiguous with the roadway for emergency use, for accommodation of stopped road vehicles, and for lateral support of the roadway structure.
- **3 (On Median/Separator)** is used when the available information indicates the vehicle tripped or began its roll on the median/separator. A median is an area of a trafficway between parallel roads separating travel in opposite directions. Continuous left-turn lanes are not considered painted medians. A separator is the area of a trafficway between parallel roads separating travel in the same direction or separating a frontage road.
- **4 (In Gore)** is used when the available information indicates the vehicle tripped or began its roll in the gore. The gore is an area of land where two roadways diverge or converge. The area is bounded on two sides by the edges of the roadways, which join at the point of divergence or convergence. The direction of traffic must be the same on both of these roadways. The area includes shoulders or marked pavement, if any, between the roadways. (See **Figure 11**)

- **5 (On Roadside)** is used when the available information indicates the vehicle tripped or began its roll on the roadside. Roadside is the outermost part of the trafficway from the property line or other boundary into the edge of the first road.
- **6 (Outside of Trafficway)** is used when the available information indicates the vehicle tripped or began its roll outside the right-of-way.
- 7 (In Parking Lane/Zone) refers to an area on the roadway, or next to the roadway, on which parking is permitted in marked or unmarked spaces. This includes curbside and edge of-roadway parking (for example, legal residential parking, city-street parking, etc.). Sometimes a strip of roadway can be designated for parking at certain hours of the day (parking lane) and for regular travel at other hours (travel lane). This code should NOT be used during hours when parking is NOT permitted (see 1 (On Roadway)).
- **9 (Unknown)** is used when the location of the trip point cannot be determined from available resources.

If the FIRST HARMFUL EVENT was a 01 (Rollover/Overturn), then:

If Relation to Trafficway equals:	Then Location of Rollover should equal:
01 (On Roadway)	1 (On Roadway)
02 (On Shoulder)	2 (On Shoulder)
03 (On Median)	3 (On Median/Separator)
04 (On Roadside)	5 (On Roadside)
05 (Outside Trafficway)	6 (Outside of Trafficway)
06 (Off Roadway - Location Unknown)	9 (Unknown)
07 (In Parking Lane/Zone)	7 (In Parking Lane/Zone)
08 (Gore)	4 (In Gore)
10 (Separator)	3 (On Median/Separator)
11 (Continuous Left-Turn Lane)	1 (On Roadway)
12 (Pedestrian Refuge Island or Traffic Island)	5 (On Roadside)
98 (Not Reported)	9 (Unknown)
99 (Reported as Unknown)	9 (Unknown)

Error ID	IF	THEN
A380	FIRST HARMFUL EVENT equals 01 and this vehicle is involved in the FIRST HARMFUL EVENT and vPIC BODY CLASS does not equal 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring / Sport Touring), 082 (Motorcycle - Cruiser), 084 Offroad Vehicle - Dirt Bike / Off-Road), 085 (Motorcycle - Dual Sport / Adventure / Supermoto / On/Off-Road), 086 (Off-road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small / Minibike), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 104 (Motorcycle - Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motocross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle), for this vehicle, and RELATION TO TRAFFICWAY equals,	LOCATION OF ROLLOVER should equal respectively.
V74P	UNIT TYPE equals 1, and ROLLOVER equals 1, 2, 9, or LOCATION OF ROLLOVER equals 1-7, 9,	at least one SEQUENCE OF EVENTS must equal 01 for this vehicle.
V75P	ROLLOVER is not blank,	LOCATION OF ROLLOVER must not be blank.
V76P	ROLLOVER is blank,	LOCATION OF ROLLOVER must be blank.
V77P	ROLLOVER equals 1, 2, 9,	LOCATION OF ROLLOVER must equal 1-7, 9.
V78P	ROLLOVER equals 0,	LOCATION OF ROLLOVER must equal 0.

V34 - Areas of Impact - Initial Contact Point / Damaged Areas

FORMAT: 2 subfields: Subfield 1, 2 numeric; Subfield 2, Select All That Apply

SAS NAME: Vehicle.IMPACT1, Person.IMPACT1, Parkwork.PIMPACT1,

Damage.DAMAGE

ELEMENT VALUES:

Subfield 1: Areas of Impact - Initial Contact Point

Codes	Attributes
00	Non-Collision
01-12	<u>Clock Points</u>
13	<u>Top</u>
14	<u>Undercarriage</u>
61	<u>Left</u>
62	<u>Left - Front Side</u>
63	<u>Left - Back Side</u>
81	Right
82	Right - Front Side
83	Right - Back Side
18	Cargo/Vehicle Parts Set in Motion
19	Other Objects or Person Set in Motion
20	Object Set in Motion, Unknown if Cargo/Vehicle Parts or Other
98	Not Reported
99	Reported as Unknown

Subfield 2: Damaged Areas

Codes	Attributes
01-12	<u>Clock Values</u>
13	<u>Top</u>
14	<u>Undercarriage</u>
15	No Damage
99	Damage Areas Unknown

Definition (**Areas of Impact - Initial Contact Point**): This subfield identifies the area on this vehicle that produced the first instance of injury to non-motorists or occupants of this vehicle, or that resulted in the first instance of damage to other property or to this vehicle.

Definition (**Damaged Areas**): This subfield identifies all the areas on this vehicle that were damaged in the crash as reflected in the case material by the officer.

Remarks: If AREAS OF IMPACT- INITIAL CONTACT POINT / DAMAGED AREAS are provided on the crash report in this exact format, use the values from the report unless there are clear errors (e.g., officer switches vehicles by mistake). If these elements are not provided on the crash report in this exact format, then similar report fields, narrative, or diagram information may be used to code these elements. These subfields do not refer to direction of force of the impact. They identify the area(s) on the vehicle associated with the initial contact (Subfield 1) and all damage to the vehicle identified in the case material (Subfield 2).

Areas of Impact - Initial Contact Point (Subfield 1):

This subfield identifies the area on this vehicle that produced the first instance of injury to non-motorists or occupants of this vehicle, or that resulted in the first instance of damage to other property or to this vehicle. The event that produced the Initial Contact Point for this vehicle may or may not be the FIRST HARMFUL EVENT for the **crash**. This data is derived from the **CRASH EVENTS** Table and will always be the first recorded AREA(S) OF IMPACT element value for each vehicle in the Crash Events Table.

See the Coding Guide: Vehicle Components and Areas of Impact for helpful information.

*Note the same element values from **Areas of Impact - Initial Contact Point** are used to complete the **Areas of Impact (AOI)** fields in the <u>CRASH EVENTS</u> Table for all harmful events.

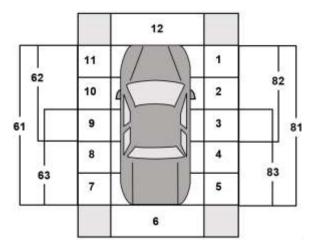


Figure 15: Areas of Impact - Initial Contact Point Element Values Diagram

00 (Non-Collision [Initial Contact Point])

If the first harmful event involving this vehicle in the Crash Events Table is a <u>non-collision</u> event, then Initial Contact Point will be **00** (**Non-Collision**).

"01-12" refer to the points on a clock (see <u>Figure 15</u>). The sides of the vehicle are divided into 5 equal segments, 01 through 05 for the right side and 07 through 11 for the left side. The front

(12), back (06), top (13) and undercarriage (14) complete the outside surfaces of the vehicle. Use the diagrams in <u>Figure 15</u> for examples of how the 5 equal side segments are created on several vehicle types.

As procedure, start by looking for one of the "clock" values 01-12 or specific situation values 00, 13, 14, 18. If sufficient detail is not available to choose one of these values, move out to the next set of values to try to identify the appropriate codes (i.e., **62-63**, **82-83**, then **61**, **81**). (See <u>Figure 15</u>) Lastly, for missing information pertaining to known harmful events, a <u>98 (Not Reported)</u> attribute is available.

61-63 and 81-83:

Codes 62-63 and 82-83 are used when there is not sufficient detail available in the case material to identify a more specific AREA OF IMPACT, 01-05 and 07-11, but one of the quadrants can be identified (i.e., **62** (**Left-Front Side**), **63** (**Left-Back Side**), **82** (**Right-Front Side**), or **83** (**Right-Back Side**)). Also, use these attributes if the case material indicate that the damage area is "between" or overlapping two known clock points. (e.g., if the damage area is midway between or overlapping clock points 10 and 11, use **62** (**Left-Front Side**)).

Codes 61 and 81 are used when there is not sufficient detail available in the case material to identify a more specific AREA OF IMPACT, 62-63 or 82-83, but one of the sides can be identified (i.e., **61** (**Left**) or **81** (**Right**)).

Guideline for Resolving Ambiguous Information

If the language in the narrative is ambiguous **AND** the diagram or other case information don't provide resolution, use the area indicated **first in the narrative wording** to select the AREA OF IMPACT to code. See examples table below.

Examples:

Description	Coding
Front, left	12
Left, front	62
Front, corner	12
Right, rear	83
Back, right side	06

It is important to note that AREA OF IMPACT refers mainly to the area of the vehicle that sustained the damage and does not depend upon the attitude of the vehicle (e.g., damage to a grille is still damage at 12 o-clock even if it was caused by sliding sideways past a utility pole).

However, **13** (**Top**) may raise questions. The front and rear windows of some vehicles may also be viewed from the top. It may also be difficult to code impacts to the hood and rear deck of a vehicle.

With 13 (Top) the direction of force sometimes must be considered. The following are guidelines for using 13 (Top).

- 1. If the area was damaged by an impact that was received horizontally to an upright vehicle, use one of the codes "01 to 12, 61-63, 81-83."
- 2. If the area was damaged by an impact that was received from a vertical direction above the upright vehicle, use **13** (**Top**).
- 3. If the impact was received or direction of force was at an angle of less than 15 degrees above the horizontal, it is considered horizontal.
- 4. With a vehicle in other than upright attitudes, remember, it is the area of the vehicle that was damaged that is important.

14 (**Undercarriage**) refers to non-horizontal impacts to the undercarriage or swiping or snagging of undercarriage components (axles, exhaust system, etc.). Tire/Wheel impacts are coded to the AREA OF IMPACT (01-12, 61-63, 81-83). If a vehicle impacts the side plane of a truck tractor/trailer, and the AOI for the truck tractor/trailer is listed as undercarriage on the police crash report, code the truck tractor/trailer's AOI - Initial Contact clock point involved in the impact rather than **14** (**Undercarriage**).

Special Instructions Involving Motorcycles:

For cases involving a motorcycle where the area of initial contact is described as "front tire/wheel" or "front end" code as **12** (**Front**), or "rear tire/wheel" or "rear end" code as **06** (**Back**) if the impact was received on a horizontal plane.

If the only event for a vehicle is a <u>non-collision event</u>, the AREA OF IMPACT - Initial is coded <u>00 (Non-Collision</u>). If following a non-collision event, a vehicle has a collision event; AREA OF IMPACT, INITIAL CONTACT POINT is still coded <u>00 (Non-Collision</u>).

Hitting the ground during a non-collision crash is not considered an "impact" for this subfield.

Set in Motion Attributes:

"Loads" of a vehicle includes people or property upon or set in motion by the vehicle, people boarding or alighting from the vehicle, and people or property attached to and in position to move with the vehicle. A vehicle associated with a harmful event produced by a load being separated from, or propelled by, the vehicle should have one of the three set in motion AOI values for this event. These set in motion values identify that only the load has made contact with the other vehicle, person, or other property in that event.

Important Notes:

A load separated from, or an object propelled by, a vehicle should not receive a
 <u>SEQUENCE OF EVENTS 63 (Ran Off Roadway-Right)</u>, 64 (Ran Off Roadway-Left),
 <u>65 (Cross Median)</u>, 68 (Cross Centerline), or 69 (Re-entering Roadway) associated
 with the movement of the load because these events apply to the vehicle itself and not to
 the load or object that was propelled. For example, if logs fall from a truck and only the
 logs (load of the truck) cross the centerline, this crossing of the centerline by the load
 would NOT receive a 68 (Cross Centerline) event.

- If debris set in motion as the result of a vehicle to vehicle collision produces a subsequent harmful event (e.g., strikes a third vehicle) and you cannot reasonably determine which vehicle the debris came from, use the lowest vehicle number of the MVIT(s) involved in the vehicle to vehicle event that produced the debris. In the element RELATED FACTORS VEHICLE LEVEL use code 029 (Default Code Used for Vehicle Numbering).
- The in-transport vehicle setting the object in motion and the object set in motion are coded under VEHICLE NUMBER (THIS VEHICLE) and AOI (This Vehicle).
- The only time AOI (This Vehicle) and AOI (Other Vehicle) are both coded 18 (Cargo/Vehicle Parts Set in Motion), 19 (Other Objects or Person Set in Motion), or 20 (Object Set in Motion, Unknown if Cargo/Vehicle Parts or Other) is if the impact is between objects set in motion by both in-transport motor vehicles.

18 (Cargo/Vehicle Parts Set in Motion) is selected when the harmful event involves an impact between a fixed/non-fixed object or vehicle and cargo or parts from an in-transport motor vehicle that are set in motion. That is, use this code when the object set in motion is cargo (e.g., mattress, logs, tools, unsecured objects on the in-transport motor vehicle) or a part of an in-transport motor vehicle (e.g., hubcap or mirror).

Examples:

Vehicle 1 (log truck) swerves to avoid a braking vehicle (Vehicle 2). A log becomes dislodged from Vehicle 1 and lands on Vehicle 2's top.

- Vehicle 1 AREA OF IMPACT, INITIAL CONTACT POINT would be coded as 18 (Cargo/Vehicle Parts Set in Motion).
- Vehicle 2 AREA OF IMPACT, INITIAL CONTACT POINT would be coded as **13** (**Top**).

19 (Other Objects or Person Set in Motion) is used when the harmful event involves an object set in motion by an in-transport motor vehicle that is **NOT** cargo or part of the in-transport motor vehicle (e.g., kicked-up stone, motorcycle rider, parked vehicle, stop sign).

Examples:

Vehicle 1 kicks up a stone that impacts Vehicle 2's windshield.

- 1. Vehicle 1 AREA OF IMPACT, INITIAL CONTACT POINT would be coded as 19 (Other Objects or Person Set in Motion).
- 2. Vehicle 2 AREA OF IMPACT, INITIAL CONTACT POINT would be coded as **12** (**Front**).

20 (**Object Set in Motion, Unknown if Cargo/Vehicle Parts or Other**) is used when it is UNKNOWN whether the object was the cargo or a part of an in-transport motor vehicle (<u>18</u> (<u>Cargo/Vehicle Parts Set in Motion</u>)) or some other object (<u>19 (Other Objects or Person Set in Motion</u>)).

98 (Not Reported) Check to see if <u>99 (Reported as Unknown)</u> is more appropriate for the situation.

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**."

Code 98 (Not Reported) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).

AREAS OF IMPACT - Initial Contact Point Examples of Not Reported:

- The case material lack the detail to identify the initial contact point at all (e.g., narrative only states the vehicle departed the roadway and impacted a tree).
- The case material lack the detail to identify the initial contact point among a number of possible choices for the first harmful event for the vehicle (e.g., crash report field indicates front and right side damage from separate impacts and does not clarify which area is associated with the initial impact).

99 (**Reported as Unknown**) is used if the investigating officer reported that the Initial Contact Point was unknown.

Areas of Impact - Damaged Areas (Subfield 2):

This subfield identifies all the areas on this vehicle that were damaged in the crash as reflected in the case material. For trailers that become separated from the power unit at the onset of the unstabilized situation or during the crash, treat the entire combination as one unit when recording Damaged Areas. Please see the Clock *Point Diagrams* in Figure 17 to establish damage areas for combination vehicles. See the Figure 17 to establish damage areas for helpful information.

Vehicles noted as "totaled:"

This element is identifying the vehicle planes that were damaged, so do not assume that a vehicle noted in the case material as "totaled" translates to all areas being damaged. This term is often referring to the cost to repair the damage, not the areas damaged.

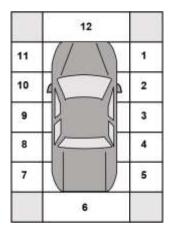


Figure 16: Damaged Areas Element Values Diagram

*Note: When entering the data there are three short cut selections in *RBIS* for identifying multiple areas. Those selections are:

- 1. Select All this will select all values 01-12, 13 (Top), and 14 (Undercarriage)
- 2. Left Side this will select all values **07-11**.
- 3. Right Side this will select all values **01-05**.

01-12 (**Clock Values**) refer to the points on a clock (see <u>Figure 16</u>) to identify areas on the vehicle that were damaged in the crash. This subfield includes induced damage identified in the report. For example, the case material show an impact centered at 03 (AOI - Initial Contact) that produced damage in 02, 03, 04. The sides of the vehicle are divided into 5 equal segments, 01 through 05 for the right side and 07 through 11 for the left side. The front (12), back (06), top (13), and undercarriage (14) complete the outside surfaces of the vehicle. Use the diagrams in <u>Figure 17</u> for examples of how the 5 equal side segments are created on several vehicle types.

13 (Top) includes damage to the hood, windshield, roof, rear window, and trunk deck.

14 (Undercarriage) includes damage to the tires/wheels, axles, exhaust system, etc.

15 (**No Damage**) is used for vehicles that experience harmful events, but the events do not produce physical damage to the vehicle itself.

Examples include:

- Vehicles that have the <u>non-collision harmful events</u> of gas inhalation, injured in vehicle, fell/jumped from vehicle, or other non-collision.
- Vehicles that have a collision event but the event does not produce damage to the
 vehicle such as running over a pedestrian lying in the roadway, striking a bicyclist,
 striking another vehicle where only the struck vehicle is damaged, or when the only
 collision event is cargo falling from this vehicle that lands on another vehicle or
 person.

99 (Damage Areas Unknown) is used when the case material does not indicate which area or areas received damage or when the information in the case material is confusing or inadequate for the purposes of this determination.

Handling of known events with unknown damage areas:

For situations where you have known damage areas associated with a specific event(s), and additional harmful events without knowing specific damage areas for the additional events, code only the known damage areas in this subfield. For example, if the narrative only states that "V1 struck several trees" with the only indication of damage given as the initial front contact, and a police crash report box marked "Totaled," code only 12 for the known damage to the front of the vehicle.

Handling of non-collision harmful events that produce vehicle damage:

For situations where a vehicle is involved in the following non-collision harmful events: (01) Rollover/Overturn, (02) Fire/Explosion, (03) Immersion or Partial Immersion, (16) Thrown or Falling Object, (44) Pavement Surface Irregularity (Ruts, Potholes, Grates, etc.), (51) Jackknife (harmful to this vehicle), or (72) Cargo/Equipment Loss or Shift (harmful to this vehicle), code only the damage areas reflected in the case material by the officer.

For example, the investigating officer may indicate damaged locations that translate to:

- 01-12, 13, 14 for a vehicle that was consumed by a fire or immersed in a river.
- 01-05, 13 for a vehicle that rolls onto its right side and then roof.
- 13 for a vehicle that only has damage to the hood from a fire.
- 13 for a vehicle that has a tree fall on its roof.
- 14 for a vehicle that strikes a pothole on its undercarriage.

Do not record damage at these locations for these non-collision harmful events unless so indicated by the case material.

If a vehicle that experiences only these non-collision events and has only "non-collision" reflected in the case material by the officer for its damaged areas, then use **99 (Damage Areas Unknown).**

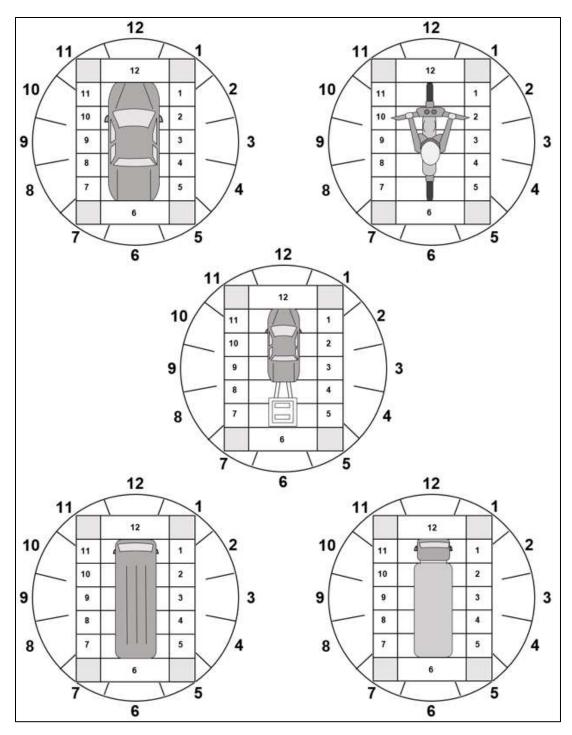


Figure 17: Clock Point Diagrams

Consistency Checks (See Section 400):

Error ID	IF	THEN
2U0Q	vPIC BODY CLASS equals 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport / Adventure / Supermoto / On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small / Minibike), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 104 (Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle),	AREA OF IMPACT - INITIAL CONTACT POINT should not equal 14.
3B2P	CRASH TYPE equals 20, 24, 28, 34, 36, 38, 40, 50-54, 56, 58, or 60,	AREA OF IMPACT-INITIAL CONTACT POINT must equal 12 for this vehicle.
3B3P	CRASH TYPE equals 21-23, 25-27, 29-31, 35, 37, 39, or 41,	AREA OF IMPACT-INITIAL CONTACT POINT must equal 6 for this vehicle.
3B6P	CRASH TYPE equals 87,	AREA OF IMPACT-INITIAL CONTACT POINT must equal 01-05, 81-83 for this vehicle.
3B7P	CRASH TYPE equals 89,	AREA OF IMPACT-INITIAL CONTACT POINT must equal 07-11, 61-63 for this vehicle.
3CA0	EXTENT OF DAMAGE for this vehicle equals 0,	DAMAGED AREAS must equal only 15.
420P	MANNER OF COLLISION OF THE FIRST HARMFUL EVENT equals 07, 08,	there must be at least two vehicle forms with AREA OF IMPACT-INITIAL CONTACT POINT equal to 01-05, 07-11, 61-63, 81-83, 98, 99.
421P	MANNER OF COLLISION OF THE FIRST HARMFUL EVENT equals 01,	AREA OF IMPACT-INITIAL CONTACT POINT for one vehicle in the first harmful event must equal 12, and AREA OF IMPACT- INITIAL CONTACT POINT for the other vehicle in the first harmful event must equal 06.

Error ID	IF	THEN
422P	MANNER OF COLLISION OF THE FIRST HARMFUL EVENT equals 02,	AREA OF IMPACT-INITIAL CONTACT POINT for one vehicle in the first harmful event must equal 12, and AREA OF IMPACT- INITIAL CONTACT POINT for the other vehicle in the first harmful event must equal 12.
423P	MANNER OF COLLISION OF THE FIRST HARMFUL EVENT equals 06,	AREA OF IMPACT-INITIAL CONTACT POINT for one vehicle in the first harmful event must equal 01, 11, 12, 98, 99, and AREA OF IMPACT-INITIAL CONTACT POINT for the other vehicle in the first harmful event must equal 01-05, 07-11, 61-63, 81-83, 98, 99.
424P	MANNER OF COLLISION OF THE FIRST HARMFUL EVENT equals 09,	AREA OF IMPACT-INITIAL CONTACT POINT for one vehicle in the first harmful event should equal 06, and AREA OF IMPACT-INITIAL CONTACT POINT for the other vehicle in the first harmful event should equal 01-05, 07-11, 61-63, 81-83, 98, 99.
425P	MANNER OF COLLISION OF THE FIRST HARMFUL EVENT equals 10,	AREA OF IMPACT- INITIAL CONTACT POINT for one vehicle in the first harmful event should equal 06, and AREA OF IMPACT- INITIAL CONTACT POINT for the other vehicle in the first harmful event should equal 06, 98, 99.
8L8Q	AREA OF IMPACT (THIS VEHICLE) equals 18, 19, or 20 in the CRASH EVENTS,	the corresponding event in that row must not equal 12 or 55.
8L8R	the CRASH EVENTS event equals 54,	AREA OF IMPACT (THIS VEHICLE) must equal 18, 19, or 20 in that row.
8L8S	AREA OF IMPACT (THIS VEHICLE) equals 18, 19, or 20 in the CRASH EVENTS and the corresponding event in that row equals 14, 45, or 54,	RELATED FACTORS-CRASH LEVEL must equal 0 14.
8L8T	RELATED FACTORS-CRASH LEVEL equals 014,	there must exist at least one event in the CRASH EVENTS where AREA OF IMPACT (THIS VEHICLE or OTHER VEHICLE) equals 18, 19, or 20 and the corresponding event in that row equals 14, 45, or 54.
8L8U	AREA OF IMPACT (THIS VEHICLE) equals 18, 19, or 20 in the CRASH EVENTS and the corresponding event in that row equals 08, 09, 15, 49,	RELATED FACTORS-CRASH LEVEL must equal 015.

Error ID	IF	THEN
8L8V	RELATED FACTORS-CRASH LEVEL equals 015,	there must exist at least one event in the CRASH EVENTS where AREA OF IMPACT (THIS VEHICLE) equals 18, 19, or 20, and the corresponding event in that row equals 08-10, 15, 18, 49, or 91.
8L8W	SEQUENCE OF EVENTS is not equal to 45,	AREA OF IMPACT (OTHER VEHICLE) should not equal 18 or 19.
8L8X	AREA OF IMPACT (THIS VEHICLE) equals 18,	there should be a previous event involving that vehicle where the CRASH EVENTS event equals 60, 61, 62, or 72.
8L8Y	SEQUENCE OF EVENTS is equal to 45 (Working Motor Vehicle),	AREA OF IMPACT (THIS VEHICLE) and AREA OF IMPACT (OTHER VEHICLE) should not both equal 18 or 19 in that same event row.
8L9P	vPIC BODY CLASS does not equal 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring / Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 Off- road Vehicle - Dirt Bike / Off-Road), 085 (Motorcycle - Dual Sport / Adventure / Supermoto / On/Off-Road), 086 (Off-road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small / Minibike), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 097 (Off-road Vehicle - Snowmobile), 098 (Motorcycle - Street), 104 (Motorcycle - Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motocross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle), and the CRASH EVENTS event equals 54, and the corresponding AREAS OF IMPACT (THIS VEHICLE) equals 19 or 20 in that row,	there should be a previous event with CRASH EVENTS event equal to 18, 73, 91, or 98 involving that vehicle.
BZ10	CRITICAL EVENT - PRECRASH (EVENT) equals 53,	AREA OF IMPACT-INITIAL CONTACT POINT should not equal 12 for this vehicle.
BZ20	CRITICAL EVENT - PRECRASH (EVENT) equals 51, 52,	AREA OF IMPACT-INITIAL CONTACT POINT should not equal 06 for this vehicle.

Error ID	IF	THEN
FP1F	AREA OF IMPACT - INITIAL CONTACT POINT equals blank,	case status is flawed.
V595	RELATED FACTORS - VEHICLE LEVEL equals 029 for this vehicle,	at least one other vehicle in the crash must have an AREA OF IMPACT equal to 18, 19, or 20 associated with an event involving this vehicle in the crash events table.
VH81	any DAMAGED AREAS equals 15 or 99,	only that one value must be coded.
VH82	EXTENT OF DAMAGE for this vehicle equals 2, 4, 6,	DAMAGED AREAS must not equal 15.
VH83	the only harmful SEQUENCE OF EVENTS for this vehicle equals 04-06,	DAMAGED AREAS should equal 15.
VH84	the only harmful SEQUENCE OF EVENTS for this vehicle equals 01-03, 16, 44, 51, 72, 98,	DAMAGED AREAS should not equal 15.
VH85	AREA OF IMPACT-INITIAL CONTACT POINT equals 61-63,	DAMAGED AREAS should include at least one of the codes 07-11, or DAMAGED AREAS should equal 15 or 99.
VH86	AREA OF IMPACT-INITIAL CONTACT POINT equals 81-83,	DAMAGED AREAS should include at least one of the codes 01-05, or DAMAGED AREAS should equal 15 or 99.
VH87	HIT-AND-RUN equals 0, and AREA OF IMPACT-INITIAL CONTACT POINT equals 01-14,	the corresponding code should be included in DAMAGED AREAS, or DAMAGED AREAS should equal 15.

V35 - Extent of Damage

FORMAT: 1 numeric

SAS NAME: Vehicle.DEFORMED, Parkwork.PVEH_SEV

ELEMENT VALUES:

Codes	Attributes
0	No Damage
2	Minor Damage
4	Functional Damage
6	<u>Disabling Damage</u>
8	Not Reported
9	Reported as Unknown

Definition: This element indicates the amount of damage sustained by this vehicle in this crash as indicated in the case material based on an operational damage scale.

Remarks: There is a distinction between the cost to repair the damage and the degree to which the damage affects the vehicle's operability (totaled, under/over monetary threshold). Operational damage is recorded here. For example, if the available information indicates that the vehicle was totaled and the vehicle was towed away for any reason, use <u>6 (Disabling Damage)</u>. However, if the available information indicates that the vehicle was totaled, but the vehicle was driven away, use <u>4 (Functional Damage)</u>.

0 (**No Damage**) is used when there is no damage indicated in the available information for this vehicle.

2 (**Minor Damage**) is damage that does not disable or affect the operation of the motor vehicle. This attribute is used when the case material indicate damage to the vehicle to be Minor or less than Functional and the vehicle is not towed due to damage.

Examples of **2** (**Minor Damage**) include: dented or bent fenders, bumpers, grills, body panels, and destroyed hubcaps.

4 (**Functional Damage**) is damage that is not disabling but affects the operation of the motor vehicle or its parts. This attribute is used when the available information specifically indicates the damage is moderate or functional.

Examples of 4 (Functional Damage) include

- doors, windows, hood and trunk lids that will not operate properly;
- broken glass that obscures vision;
- damage that would prevent the motor vehicle from passing an official motor vehicle inspection;
- tire damage even though the tire may have been changed at the scene;
- bumpers that are loose;

- headlamp or taillight damage that would make night driving hazardous but would not affect daytime driving; and,
- damage to turn signals, horn, or windshield wipers, which makes them inoperative.

6 (**Disabling Damage**) is damage that precludes departure of the motor vehicle from the crash scene in its usual daylight-operating manner after simple repairs. As a result, the motor vehicle would have had to have been towed or carried from the crash scene or assisted by an emergency motor vehicle. This attribute should be used when the available information specifically indicates disabling or severe damage. This attribute is also used when the damage is indicated to be of greater magnitude than Functional (moderate), e.g., major, extensive, totaled and the vehicle was towed from the scene.

8 (Not Reported) Check to see if $\underline{0}$ (No Damage) or $\underline{9}$ (Reported as Unknown) are more appropriate for the situation.

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**."

Code **8** (**Not Reported**) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).

9 (Reported as Unknown) is used when the available information specifically indicated the damage severity to be unknown.

Consistency Checks (See Section 400):

Error ID	IF	THEN
3C1Q	EXTENT OF DAMAGE equals 0, 2, 4,	VEHICLE REMOVAL must equal 3, 5, 8, or 9.
3C2Q	EXTENT OF DAMAGE equals 8, 9	VEHICLE REMOVAL should equal 5, 7, 8, 9.
3C3P	EXTENT OF DAMAGE equals 6,	VEHICLE REMOVAL must equal 2, 5, 8, or 9.
3CA0	EXTENT OF DAMAGE for this vehicle equals 0,	DAMAGED AREAS must equal only 15.
VH82	EXTENT OF DAMAGE for this vehicle equals 2, 4, 6,	DAMAGED AREAS must not equal 15.

Consistency Check (FARS ONLY) (See Section 400):

Error ID	Error Message
U370	UNLIKELY: EXTENT OF DAMAGE equals 8 if STATE does not equal <i>06</i> , 17, 18, 34, <i>36</i> , 48, 49, or 53.

Consistency Checks (CRSS Only) (See Section 400):

Error ID	Error Message
4U2F	At least one INJURY SEVERITY should equal 1, 2, 3, 4, 5, or 9, or at least one EXTENT OF DAMAGE should equal 2, 4, 6, 8, or 9.
U371	UNLIKELY: EXTENT OF DAMAGE equals 8 if PSU_STATE does not equal <i>CA</i> , IL, NJ, NY, TX, UT, or WA.

V36 - Vehicle Removal

FORMAT: 1 numeric

SAS NAME: Vehicle.TOWED, Parkwork.PTOWED

ELEMENT VALUES:

Codes	Attributes
2	Towed Due to Disabling Damage
3	Towed But Not Due to Disabling Damage
7	Towed, Unknown Reason
5	Not Towed
8	Not Reported
9	Reported as Unknown

Definition: This data element describes the mode in which the vehicle left the scene of the crash.

Remarks: This data element describes the mode in which the vehicle left the scene of the crash. Towing includes vehicles carried from the scene on a flatbed tow truck.

If the vehicle is a combination vehicle (power unit and at least one trailer), the power unit and/or trailer(s) are considered when determining tow status. If the available information indicates the power unit, or trailer of a combination unit, sustained enough damage to require towing, consider this vehicle as towed due to damage.

2 (**Towed Due to Disabling Damage**) is used for any towing that is due to disabling damage caused by this crash that prohibits vehicle movement under its own power.

If a vehicle was pushed by hand or by another vehicle after the crash because it was not drivable, then use 2 (Towed Due to Disabling Damage).

If a vehicle was towed due to disabling damage **AND** for other reasons such as driver arrest, then code this vehicle as **2** (**Towed Due to Disabling Damage**).

- **3 (Towed** *But* **Not Due to Disabling Damage**) is used when the vehicle did not sustain disabling damage, but the vehicle had been removed from the scene of the crash by tow truck or other vehicle for other reasons (e.g., minor damage, functional damage, mired vehicles, driver arrested, injured driver, etc.).
- **7 (Towed, Unknown Reason)** is used if the vehicle is towed, but the reason for towing is unknown. For example, a vehicle is reported in the case material as towed, but it cannot be determined whether it was due to disabling damage or for other reasons.
- **5** (**Not Towed**) is used when it is specifically indicated in the available information that the vehicle was not towed or when the preponderance of the information available indicates that the vehicle was driven away or was not towed.

NOTE: The police crash report narrative may be used to supersede and/or clarify the above information.

8 (Not Reported) Check to see if <u>5 (Not Towed)</u> or <u>9 (Reported as Unknown)</u> are more appropriate for the situation.

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported.**"

Code **8** (**Not Reported**) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).

9 (Reported as Unknown) is used when the investigating officer indicates it was unknown as to how the vehicle was removed.

Consistency Checks (See Section 400):

Error ID	IF	THEN
3C1Q	EXTENT OF DAMAGE equals 0, 2, 4,	VEHICLE REMOVAL must equal 3, 5, 8, or 9.
3C2Q	EXTENT OF DAMAGE equals 8, 9	VEHICLE REMOVAL should equal 5, 7, 8, 9.
3C3P	EXTENT OF DAMAGE equals 6,	VEHICLE REMOVAL must equal 2, 5, 8, or 9.
V881	HIT AND RUN equals 1,	VEHICLE REMOVAL should not equal 8 or 9.

Consistency Checks (FARS Only) (See Section 400):

Error ID	Error Message
U430	UNLIKELY: VEHICLE REMOVAL equals 8 unless STATE equals <i>TX</i> .

Consistency Checks (CRSS Only) (See Section 400):

Error ID	Error Message
U435	UNLIKELY: VEHICLE REMOVAL equals 8 unless <i>STATE</i> equals <i>TX</i> .

V37 - Sequence of Events

FORMAT: Read Only

SAS NAME: Cevent.SOE, Vevent.SOE

ELEMENT VALUES:

Non-Harmful Events:

Codes	Attributes
61	Equipment Failure (blown tire, brake failure, etc.)
62	Separation of Units
63	Ran Off Roadway-Right
64	Ran Off Roadway-Left
79	Ran off Roadway - Direction Unknown
71	End Departure
65	<u>Cross Median</u>
68	<u>Cross Centerline</u>
66	Downhill Runaway
67	<u>Vehicle Went Airborne</u>
69	Re-entering Roadway
70	Non-harmful, Swaying Trailer/Jackknife
60	Cargo/Equipment Loss or Shift (non-harmful)

Non-Collision Harmful Events:

Codes	Attributes
01	Rollover/Overturn
02	<u>Fire/Explosion</u>
03	Immersion or Partial Immersion
04	Gas Inhalation
51	Jackknife (harmful to this vehicle)
06	Injured in Vehicle (Non-Collision)
44	Pavement Surface Irregularity (Ruts, Potholes, Grates, etc.)
07	Other Non-Collision
72	Cargo/Equipment Loss, Shift, or Damage (harmful)
16	Thrown or Falling Object
05	Fell/Jumped from Vehicle

Collision With Motor Vehicle In-Transport:

Codes	Attributes
12	Motor Vehicle In-Transport
54	Motor Vehicle In-Transport Strikes or is Struck by Cargo, Persons, or Objects Set in Motion from/by Another Motor Vehicle In-Transport
55	Motor Vehicle in Motion Outside the Trafficway

Collision With Object Not Fixed:

Codes	Attributes
08	<u>Pedestrian</u>
09	Pedalcyclist
10	Railway Vehicle
74	Road Vehicle on Rails
11	Live Animal
49	Ridden Animal or Animal-Drawn Conveyance
18	Other Object (Not Fixed)
15	Non-Motorist on Personal Conveyance
14	Parked Motor Vehicle
45	Working Motor Vehicle
73	Object That Had Fallen from Motor Vehicle In-Transport
91	Unknown Object Not Fixed

Collision With Fixed Object:

Codes	Attributes
17	Boulder
19	Building
58	Ground
20	Impact Attenuator/Crash Cushion
50	Bridge Overhead Structure
21	Bridge Pier or Support
23	Bridge Rail (Includes Parapet)
24	Guardrail Face
52	<u>Guardrail End</u>

Codes	Attributes
25	Concrete Traffic Barrier
57	Cable Barrier
26	Other Traffic Barrier
59	Traffic Sign Support
46	Traffic Signal Support
30	Utility Pole/Light Support
31	Other Post, Other Pole, or Other Supports
32	<u>Culvert</u>
33	Curb
34	<u>Ditch</u>
35	<u>Embankment</u>
38	<u>Fence</u>
39	Wall
40	Fire Hydrant
41	Shrubbery
42	Tree (Standing Only)
48	Snow Bank
53	<u>Mailbox</u>
43	Other Fixed Object
93	<u>Unknown Fixed Object</u>

Not Reported/Unknown

Code	Attribute
98	Harmful Event, Details Not Reported
99	Reported as Unknown

Definition: The events in sequence related to this motor vehicle, regardless of injury and/or property damage. Code each event for this vehicle in the order in which they occur, time wise, from police crash report narrative and diagram.

Remarks: This data element is derived from the <u>CRASH EVENTS</u> Table. Recording of CRASH EVENTS ends at the last harmful event of the entire crash. Therefore, a non-harmful event (e.g., Crossing the Centerline) that occurs following the last harmful event of the crash will not be included. Prior to selecting an unknown value, the case material should be thoroughly evaluated to identify if a specific attribute can be applied.

Correction to the SEQUENCE OF EVENTS order must be made by revision to the <u>CRASH</u> EVENTS Table.

Non-Harmful Events:

- **61** (**Equipment Failure**) (blown tire, brake, etc.) Examples of equipment failure include blown tires, brake failures, etc. This attribute should not be used to describe damage resulting from a collision event.
- **62** (**Separation of Units**) is used when a trailing unit separates from its power unit or another trailing unit(s). This applies to truck tractors with trailer(s), single-unit trucks with a trailer, and other vehicles pulling a trailer (e.g., car pulling a boat or motor home).
- **63** (**Ran Off Roadway-Right**) is used if any part of the vehicle runs off the right side of the roadway. Identification of running off roadway can be determined from the case material. This attribute can be used anytime in the event sequence before or after any harmful events. This attribute does not apply to the "load" in cases involving AREAS OF IMPACT <u>18</u> (Cargo/Vehicle Parts Set in Motion) or <u>19</u> (Other Objects or Person Set in Motion).
- **64** (**Ran Off Roadway-Left**) is used if any part of the vehicle runs off the left side of the roadway. Identification of running off roadway can be determined from the case material. This attribute can be used anytime in the event sequence before or after any harmful events. This attribute does not apply to the "load" in cases involving Areas of Impact 18 (Cargo/Vehicle Parts Set in Motion) or 19 (Other Objects or Person Set in Motion).

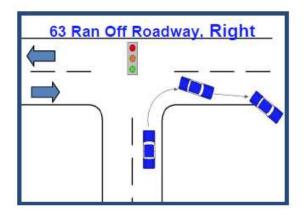




Figure 18: Ran Off Roadway Examples

79 (Ran off Roadway-Direction Unknown) is used when any part of the vehicle ran off the roadway, but it cannot be determined from the case material whether right or left. See clarification on the use of information provided by witnesses in section 103. Data Sources.

Coding Guidelines for Running Off Roadway (Right or Left)

For Divided Highways:

On a divided highway, a vehicle can run off the roadway by leaving the roadway and entering the median. When this occurs involving a vehicle on the correct side of a divided highway, the proper "Ran Off Roadway" attribute is always 64 (Ran Off Roadway - Left). In situations where a vehicle departs the roadway into the median, traverses the median, and continues across the opposing roadway, code 64 (Ran Off Roadway - Left) followed by 65 (Cross Median).

For vehicles turning at "T-intersections":

For "T-intersections" when the vehicle loses control when in a turn, choose right or left based upon the direction of travel for the vehicle's proper travel lane for their intended travel path. For vehicles traveling straight through "T-Intersections" use **71** (**End Departure**). See <u>Figure 19</u> below.

71 (**End Departure**) is used if the vehicle leaves the roadway by traveling straight through the top of a "T-intersection" of a two-way trafficway or top of an intersecting one-way roadway. This code should also apply to vehicles traveling off the end of dead-end roadways or into the barrier of a closed trafficway. See **Figure 19** below.

71 - End Departure

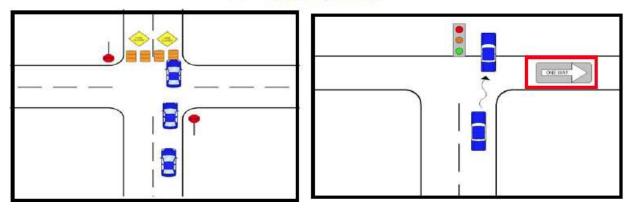


Figure 19: End Departure Examples

- **65** (**Cross Median**) is used when a vehicle departs its roadway, traverses the median, and enters the shoulder or travel lanes on the opposite side of a divided highway. This attribute does not apply to the "load" in cases involving AREAS OF IMPACT **18** (**Cargo/Vehicle Parts Set in Motion**) or **19** (**Other Objects or Person Set in Motion**).
- **68** (**Cross Centerline**) is used when a vehicle crosses over the centerline of a two-way, undivided highway. The centerline must be delineated with paint or raised markers. This is also used for unstabilized situations involving vehicles that depart from their initial travel lane(s) and enter the continuous left-turn lane, having a harmful event that is located within the marked boundaries of the continuous left-turn lane. This attribute also applies to vehicles that traverse the continuous left-turn lane area, having a harmful event that is located in the opposing travel lane(s). This attribute does not apply to the "load" in cases involving AREAS OF IMPACT 18 (**Cargo/Vehicle Parts Set in Motion**) or 19 (**Other Objects or Person Set in Motion**).
- **66** (**Downhill Runaway**) refers to any vehicle that cannot decelerate on a downhill grade. This does not apply to a vehicle that cannot slow down due to lack of surface friction (due to ice, snow, etc.).
- **67** (**Vehicle Went Airborne**) must only be used if the officer indicates by narrative or diagram that the vehicle left the ground (excludes vehicles leaving the ground during a rollover event). Examples: the vehicle drove off a cliff, the vehicle was launched into the air after striking another vehicle or after traversing a berm.
- **69** (**Re-entering Roadway**) is used when a vehicle that departed the roadway portion of the trafficway returns to **the same roadway** (e.g., a motor vehicle in-transport runs off the roadway

right, strikes the guardrail face, then re-enters the roadway and collides with another motor vehicle in transport). This attribute does not apply to the "load" in cases involving AREAS OF IMPACT 18 (Cargo/Vehicle Parts Set in Motion) or 19 (Other Objects or Person Set in Motion).

70 (Non-harmful, Swaying Trailer/Jackknife) applies to a condition that occurs to an articulated vehicle (any vehicle with a trailing unit(s) connected by a hitch; truck tractor or single-unit truck with one or more trailers, articulated bus, or a car pulling a boat on a trailer, etc.) while in motion. The condition reflects a loss of control of the vehicle by the driver in which the trailer(s) yaws from its normal straight-line path behind the power unit.

60 (Cargo/Equipment Loss or Shift [non-harmful]) refers specifically to the loss or shift of items carried on or in a motor vehicle or its trailing unit, that does not cause damage and/or injury to the vehicle, its occupants, its parts, trailing unit, or the cargo itself. Codes **60** and **54** can be used sequentially. For example, Vehicle 1's cargo falls off and strikes Vehicle 2. Code **60** is used to show the non-harmful cargo shift that led up to the set in motion collision event of code **54**.

However, this attribute should never be used:

- to refer to a "collision" event (see <u>54 (Motor Vehicle In-Transport Strikes or is Struck by Cargo, Persons, or Objects Set in Motion from/by Another Motor Vehicle In-Transport)</u>
 In other words, code 60 should not be used instead of code <u>54</u>.
- 2. to refer to a harmful event related to the loss or shift of cargo in/on a vehicle causing damage to that vehicle, its cargo, or injury to its occupants (see 72 (Cargo/Equipment Loss, Shift, or Damage [harmful])).

Examples:

- A load of logs on a truck tractor semi-trailer shifts as the truck rounds a curve resulting in an overturn. The shift of the load of logs would be a **60** (Cargo/Equipment Loss or Shift [non-harmful]).
- A spare tire falls from a vehicle. The loss of the spare tire would be a **60** (Cargo/ Equipment Loss or Shift [non-harmful]).
- An axle on a vehicle breaks and the wheel then separates from the vehicle would be a (61 (Equipment Failure)).

Non-Collision events involving motorcycles and vehicles with a "load":

Non-Collision events may occur before or after a collision event. They should not be coded as a separate event if they occur as part of a collision event.

Examples:

- A motorcycle strikes a deer, overturns and the rider becomes separated from the vehicle. Code the collision event, not the non-collision "Rollover/Overturn" and "Fell/Jumped from Vehicle" that occur as part of the collision event.
- One truck tractor/trailer rear-ends another truck tractor/trailer. The impact pushes the lead vehicle's load into the back of the truck tractor cab with part falling onto the

roadway. Code the collision event, not the non-collision "cargo-loss or shift" that occurred as part of the collision event.

Non-Collision Harmful Events:

01 (**Rollover/Overturn**) is used when a motor vehicle rotates (rollover) at least one quarter turn onto its side or end.

NOTES regarding 01 (Rollover/Overturn):

- For motorcycles, laying the motorcycle down on its side is sufficient to use attribute **01** (**Rollover/Overturn**) as a harmful event if damage or injury is produced, even though the data element <u>ROLLOVER</u> is not applicable to motorcycles.
- Every vehicle that overturns will have contact with the ground. The collision event <u>58</u> (<u>Ground</u>) should not be used in describing a non-collision <u>01</u> (<u>Rollover/Overturn</u>) event. For example: A vehicle's tires furrow into soft soil causing the vehicle to roll. The harmful event is <u>01</u> (<u>Rollover/Overturn</u>). If the report identifies the vehicle "struck" the ground, and that harmful collision event caused the vehicle to roll, the events are <u>58</u> (<u>Ground</u>), <u>01</u> (<u>Overturn/Rollover</u>). Note this will give you a Level 2 edit check. If overriding the edit check, be specific in your override remarks.
- The only instances <u>67 (Airborne)</u> should be used immediately prior or immediately after **01 (Rollover/Overturn)** is if the officer identifies "airborne" as defined in this element. Note this will give you a Level 2 edit check. If overriding the edit check, be specific in your override remarks.
- A vehicle rolls over 3 quarter turns. This is one rollover event involving 3 quarter turns.
- If there is a **01** (**Rollover/Overturn**) that begins in another location but involves a ditch or embankment in the case (e.g., "rolled through the ditch," "rolled down the embankment," "came to rest against the embankment"), then the rule applies where if there is no damage associated with an impact with the fixed object during the rollover, it is not included in the CRASH EVENTS. If there is indication that damage resulted from an impact with the fixed object, it is included in the CRASH EVENTS. This follows the same logic as striking a tree or another vehicle during an overturn.
- For a vehicle that rolls over, impacts a fence, and continues to rollover: only two events would be coded for that circumstance. The first event would be the rollover followed by an impact with the fence. For more than one rollover event to appear in a vehicle's SEQUENCE OF EVENTS, the vehicle must return to its wheels, and track for a period of time before experiencing a separate rollover event. This would be a rare occurrence and must be clearly identified in the case material.

Note: For vehicles with attached trailing unit(s) by fixed or non-fixed linkage, when either the power unit or the trailing unit(s) rolls over, the entire vehicle will be considered a rollover. This applies to all motor vehicles with any type of trailing unit(s). If a motorcycle is pulling a trailing unit that overturns, the motorcycle should have 01 (Rollover/Overturn) in its Crash Events. However, since the power unit is a motorcycle, the element ROLLOVER still does NOT apply.

02 (**Fire/Explosion**) is used for a vehicle fire or explosion that occurs during the crash sequence or as a result of the crash.

As it pertains to the occurrence of **02** (**Fire/Explosion**), the crash circumstances are not considered stabilized until the threat of damage to this vehicle, or injury consequences to this vehicle's occupants, has ceased. Therefore, the crash sequence is not considered stabilized until all occupants have exited the vehicle and the scene has been declared safe by police or other authority. Fires that occur at a later time to vehicles abandoned at the scene (in open fields, on hillsides, etc.), or to vehicles removed from the scene to another location (tow yard, curbside, etc.), are not considered part of the crash sequence.

- **03** (**Immersion or Partial Immersion**) is used when an in-transport motor vehicle enters a body of water and results in injury or damage. This code would also be used if the vehicle came to rest in water and the depth cannot be ascertained from case material. **NOTE:** In immersion fatalities, the injury to the person may be noted as "drowning."
- **04** (**Gas Inhalation**) includes injury or death as a result of toxic fumes, such as carbon monoxide fumes leaking from a motor vehicle in-transport.
- **51** (Jackknife [harmful to this vehicle]) applies to a condition that occurs to an articulated vehicle (any vehicle with a trailing unit(s) connected by a hitch; truck tractor or single-unit truck with one or more trailers, articulated bus, car pulling a boat on a trailer, etc.) while in motion. The condition reflects a loss of control of the vehicle by the driver in which the trailer(s) yaws from its normal straight-line path behind the power unit, striking the power unit, causing damage to the power unit or trailer. Jackknife should only be coded as a harmful event if there is clear indication of damage to the jackknifed vehicle or injury to its occupants caused by the jackknife.
- **06** (**Injured in Vehicle [Non-Collision]**) is used when an occupant is injured during an unstabilized situation without a collision, excluding cargo/equipment loss or shift. Examples: Driver slams on brake, causing an unrestrained passenger to be injured. Driver makes a sharp turn causing driver to strike head on side window, knocking driver unconscious.
- **44** (**Pavement Surface Irregularity [ruts, potholes, grates, etc.]**) is used when the pavement surface irregularity is on a paved surface. Other examples include indication of contact with a dip, depression, low spot, trough, etc. If the impact is with a surface irregularity (e.g., ruts, potholes) not on a paved surface, use **58** (**Ground**). For a vehicle that "bottoms out" on the paved surface (causing damage) due to speed, but not because of a pavement surface irregularity, use attribute **07** (**Other Non-Collision**).
- **07** (Other Non-Collision). Non-collision not captured in the listed non-collision attributes.

Examples:

- Damage to the vehicle produced by its own dislodged vehicle parts (including hood flying up and contacting the windshield).
- A vehicle "bottoms out" (causing damage) due to speed but not because of a pavement surface irregularity. Damage due to pavement surface irregularities should be coded 44 (Pavement Surface Irregularity [ruts, potholes, grates, etc.]).
- **16** (**Thrown or Falling Object**) is used when any object (1) is thrown (intentionally or unintentionally) and impacts an in-transport vehicle, or (2) falls onto, into, or in the path of an intransport motor vehicle. If a tree limb falls from a tree and is contacted by a car, enter **16**

(Thrown or Falling Object). If a person maliciously throws an object off an overpass into traffic below, enter 16 (Thrown or Falling Object). This excludes contacts made by loads or objects set in motion by a motor vehicle (see 54 (Motor Vehicle In-Transport Strikes or is Struck by Cargo, Persons, or Objects Set in Motion from/by Another Motor Vehicle In-Transport)).

72 (Cargo/Equipment Loss, Shift, or Damage [harmful]) refers specifically to the loss or shift of items carried on or in a motor vehicle or its trailing unit, causing damage and/or injury to the vehicle, its occupants, its parts, trailing unit, or the cargo itself. Harm can be measured in loss of monetary value from unrecoverable cargo loss as well as physical damage. This attribute should never be used to refer to a "collision" event (see 54 (Motor Vehicle In-Transport Strikes or is Struck by Cargo, Persons, or Objects Set in Motion from/by Another Motor Vehicle In-Transport)).

Examples:

- A pickup truck brakes rapidly to avoid a collision. This causes a piece of lumber in the pickup bed to smash through the rear window.
- Unsecured cargo shifts inside a box truck and bursts through the wall of the trailer.
- Pallets of beehives on a flatbed truck fall off the truck on a sharp curve causing the hives to open and the bees to fly away.

Notes:

In situations when a cargo shift is part of a collision event, the cargo shift is not coded separately. See Non-Collision events involving motorcycles and vehicles with a "load."

- Unsecured cargo shifts inside a box truck causing a loss of control. The driver overcorrects, driving off the road. This would be a 60 (Cargo/Equipment Loss or Shift [non-harmful]).
- Use <u>07 (Other Non-Collision)</u> in a situation where a motor vehicle in-transport is towing another unit (motor vehicle, trailer, etc.) and the second unit collides into the back of the power unit (not a Jackknife or part of a collision event).

05 (**Fell/Jumped from Vehicle**) is used when an occupant of this vehicle falls or jumps (not suicide) from the vehicle causing injury. For example, an occupant of a motor vehicle intransport leans against the car door, it opens and the occupant falls out; or a person riding on a vehicle's exterior (hood, roof, running board, etc.) falls or jumps, and is injured by the fall. If an occupant falls or jumps from a vehicle and is struck by that vehicle, use this attribute.

Collision With Motor Vehicle In-Transport:

12 (**Motor Vehicle In-Transport**) is used when the injury- or damage-producing event is two motor vehicles in-transport making contact within the trafficway boundaries. In-transport means that the motor vehicle is in motion or on the roadway portion of a trafficway.

54 (Motor Vehicle In-Transport Strikes or is Struck by Cargo, Persons, or Objects Set in Motion from/by Another Motor Vehicle In-Transport) is used when the injury- or damage-producing event is two motor vehicles in-transport making contact by something set in motion by one or both of the vehicles.

In crashes involving harmful events caused by objects set in motion by a motor vehicle intransport, remember that a vehicle's load is considered to be part of the vehicle.

Examples:

- If cargo falls from a truck (in-transport) and strikes another motor vehicle intransport, this is treated as a two-vehicle crash. Therefore, the proper code for both vehicles is 54 (Motor Vehicle In-Transport Strikes or is Struck by Cargo, Persons, or Objects Set in Motion from/by Another Motor Vehicle In-Transport) and the AREA OF IMPACT (THIS VEHICLE) column is coded 18 (Cargo/Vehicle Parts Set in Motion).
- If an in-transport vehicle strikes an at-rest object that was previously cargo or part of another motor vehicle in-transport, the SEQUENCE OF EVENTS for that event is 73 (Object That Had Fallen from Motor Vehicle In-Transport). If that object is then propelled into another motor vehicle in-transport, the proper SEQUENCE OF EVENTS attribute for this next event is 54 (Motor Vehicle In-Transport Strikes or is Struck by Cargo, Persons, or Objects Set in Motion from/by Another Motor Vehicle In-Transport) and the AREA OF IMPACT (THIS VEHICLE) column is coded 19 (Other Objects or Person Set in Motion).
- If an in-transport vehicle strikes an at-rest object that was not cargo or part of another motor vehicle in-transport, the SEQUENCE OF EVENTS for that event is 18 (Other Object [Not Fixed]). If that object is then propelled into another motor vehicle in-transport, the proper SEQUENCE OF EVENTS code for this next event is 54 (Motor Vehicle In-Transport Strikes or is Struck by Cargo, Persons, or Objects Set in Motion from/by Another Motor Vehicle In-Transport) and the AREA OF IMPACT (THIS VEHICLE) column is coded 19 (Other Objects or Person Set in Motion).

This attribute does not apply when the cargo, people, or objects set in motion by an in-transport motor vehicle strikes something other than another in-transport motor vehicle. In this case, use the applicable "collision with non-fixed object," or "collision with fixed object" code for the object struck by the cargo, person, or object set in motion.

Examples:

- If cargo falls from a truck (in-transport) and strikes another vehicle that is not intransport, the proper SEQUENCE OF EVENTS attribute is 14 (Parked Motor Vehicle) or 45 (Working Motor Vehicle) depending on which type of not intransport vehicle was contacted by the load and the AREA OF IMPACT (THIS VEHICLE) column is coded 18 (Cargo/Vehicle Parts Set in Motion).
- If cargo falls from a truck (in-transport) and strikes a pedestrian, the proper SEQUENCE OF EVENTS attribute would be <u>08 (Pedestrian)</u> and the AREA OF IMPACT (THIS VEHICLE) column is coded <u>18 (Cargo/Vehicle Parts Set in Motion)</u>.
- If a pedestrian is struck by an at-rest object propelled by an in-transport vehicle (parked motor vehicle, stop sign, etc.), the proper SEQUENCE OF EVENTS attribute for this harmful event is **08** (Pedestrian) and the AREA OF IMPACT (THIS VEHICLE) column is coded **19** (Other Objects or Person Set in Motion).
- **55** (**Motor Vehicle in Motion Outside the Trafficway**) is used when the injury- or damage-producing event is two motor vehicles in-transport making contact outside the trafficway boundaries in a motor vehicle traffic crash.

Example:

A vehicle loses control attempting to turn into a gas station and strikes another vehicle pulling away from the pump in the station lot.

Collision With Object Not Fixed:

08 (**Pedestrian**) is used for all those not on a personal conveyance. A person pushing a vehicle should be coded **08** (**Pedestrian**). A person being carried by another person should also be considered a **08** (**Pedestrian**).

09 (**Pedalcyclist**) is used for any person on a non-motorized other road vehicle propelled by pedaling. Examples include a bicycle, tricycle, unicycle, or pedal car.

If a non-motorist is hit as a result of a vehicle to vehicle collision and you cannot reasonably determine which vehicle struck the non-motorist, use the lowest vehicle number of the MVIT(s) involved in the vehicle to vehicle event that resulted in the pedestrian or pedalcyclist collision. In the element RELATED FACTORS - PERSON (NOT A MOTOR VEHICLE OCCUPANT) LEVEL, code 031 Default Code Used for Vehicle Numbering.

- **10** (**Railway Vehicle**) is any land vehicle that is (1) designed primarily for, or in use for, moving people or property from one place to another on rails and (2) not in use on a land way other than a railway.
 - Inclusions: Railway Trains, Streetcar/trolley on private way.
 - Exclusions: Streetcar/trolley operating on trafficway.

- **74** (**Road Vehicle on Rails**) is any land vehicle on rails operating in a trafficway.
 - Inclusions: Streetcar/trolley operating on trafficway.
 - Exclusions: Railway Trains, Streetcar/trolley on private way, Streetcar/trolley or electric bus operating on tires.
- 11 (Live Animal) is used for collisions with live animals (domesticated or wild) that are not themselves being used as transportation or to draw a wagon, cart, or other transport device (see <u>ANSI D16.1</u>). Default to 11 (Live Animal) if it cannot be determined if the struck animal is alive, dead, or if it was being ridden or drawing a transport device.
- **49** (**Ridden Animal or Animal-Drawn Conveyance**) is used for ridden animals and animals drawing transport devices. See **18** (**Other Object [Not Fixed**]) for an animal carcass.
- **18** (**Other Object [Not Fixed]**) is used when a motor vehicle in-transport strikes a non-fixed object that is known NOT to have been the cargo or part of another motor vehicle in-transport, or when it is UNKNOWN whether the object was the cargo or part of another motor vehicle intransport (i.e., refers to objects such as a dead body, animal carcass, construction cones or barrels, an unattached trailer, a bicycle without a rider, downed tree limbs or power lines, or debris from a prior crash). For objects that have become separated from a motor vehicle intransport not as a result of a prior crash, use attribute **73** (**Object That Had Fallen from Motor Vehicle In-Transport)**.
- **15** (**Non-Motorist on Personal Conveyance**) is used for pedestrians using personal conveyances. A personal conveyance is a device, other than a transport device, used by a pedestrian for personal mobility assistance or recreation. These devices can be motorized or human powered, but not propelled by pedaling.

Inclusions:

- 1. Rideable toys
 - a. Roller skates, in-line skates
 - b. Skateboards
 - c. Skates
 - d. Baby carriage
 - e. Scooters
 - f. Toy wagons
- 2. Motorized rideable toys
 - a. Motorized skateboard
 - b. Motorized toy car
 - c. Motorized kick scooter

- 3. Devices for personal mobility assistance
 - a. Self-balancing personal conveyance (e.g., Segway-style device)
 - b. Motorized and non-motorized wheelchair
 - c. Mobility aid scooters

Exclusions:

- 1. Golf cart
- 2. Low-speed vehicles (LSVs)
- 3. Go-carts
- 4. Minibike
- 5. "Pocket" motorcycles
- 6. Motor scooters
- 7. Moped
- **14** (**Parked Motor Vehicle**) is used when the impact occurred between a motor vehicle intransport and a motor vehicle neither on a roadway nor in motion. A vehicle stopped off the roadway, its door open over a roadway, is not in-transport.
- **45** (**Working Motor Vehicle**) is used to indicate the motor vehicle contacted was in the act of performing construction, maintenance, or utility work related to the trafficway when it became an involved unit. The vehicle should be known to be in the act of performing work. This "work" may be located within open or closed portions of the trafficway and motor vehicles performing these activities can be within or outside the trafficway boundaries. This code does not include private construction/maintenance vehicles, or vehicles such as garbage trucks, delivery trucks, taxis, emergency vehicles, tow trucks, etc. **DO NOT evaluate this attribute on** *NCSA* **Body Type alone.**

Examples:

- 1. Asphalt/steam roller working in a highway construction zone paving the roadway or flattening dirt.
- 2. State highway maintenance crew painting lane lines on the road, mowing grass on the roadside or median, repairing potholes, removing debris from the roadway, etc.
- 3. Utility truck or a "cherry picker," performing maintenance on power lines along the roadway or maintaining a traffic signal.
- 4. A private excavating company contracted by the State digging the foundation for a new overpass.
- 5. A State, county, or privately-owned snowplow, plowing ice/snow as part of a highway maintenance activity.
- 6. Street sweeper sweeping the street.

- 7. A vehicle in a mobile work convoy displaying arrow boards or other signaling devices warning motorists of the work activity.
- 8. A law enforcement vehicle that is participating strictly in a stationary construction or mobile maintenance activity as a traffic slowing, control, signaling, or calming influence.

FARS SPECIAL INSTRUCTION:

NOTE: Code "45" excludes working activities other than highway construction, maintenance, or utility vehicles (garbage truck picking up trash, mail/delivery trucks while making deliveries, personal vehicles plowing snow, etc. These are considered motor vehicles In-transport). Use RELATED FACTORS-VEHICLE LEVEL code <u>042</u> (Other Working Vehicle [Not Construction, Maintenance, Utility, Police, Fire, or EMS Vehicle]) to identify these vehicles.

A question may arise when a police, fire, or emergency medical vehicle is struck on the roadway while at the scene of a crash, at a traffic stop, or as traffic control. The question becomes, "has its function changed from being a motor vehicle in-transport to a working vehicle?" The answer is "no." Treat these situations as a motor vehicle in-transport striking another motor vehicle in-transport. Use RELATED FACTORS-VEHICLE LEVEL code <u>041</u> (Police, Fire, or EMS Vehicle Working at the Scene of an Emergency or Performing Other Traffic Control Activities) to identify that this vehicle was struck while performing these work activities.

73 (Object That Had Fallen from Motor Vehicle In-Transport) is used when a motor vehicle in-transport impacts a non-fixed object at rest that is known to have been the cargo or part of another motor vehicle in-transport. Do not use this attribute for debris from a prior crash. This attribute does not include vehicle occupants that are ejected or fall from a motor vehicle in-transport (e.g., a motorcycle operator falling from a motorcycle.) For people falling from a motor vehicle, see non-collision event 05 (Fell/Jumped From Vehicle). For impacts involving two motor vehicles in-transport resulting from cargo, people, or objects set in motion, see 54 (Motor Vehicle In-Transport Strikes or is Struck by Cargo, Persons, or Objects Set in Motion from/by another Motor Vehicle In-Transport). For at rest detached trailers (e.g., a detached semi-trailer), use attribute 18 (Other Object [Not Fixed]). If cargo fell from a vehicle, came to rest, and was struck, this attribute would apply. If the cargo was at rest as a result of a prior crash, use attribute 18 (Other Object [Not Fixed]).

91 (Unknown Object Not Fixed) is used when the event involves an object that is known to be not fixed but the case material does not identify the specific object.

Collision With Fixed Object:

The attributes <u>58 (Ground)</u>, <u>33 (Curb)</u>, <u>34 (Ditch)</u>, and <u>35 (Embankment)</u> are grouped under the Collision With Fixed Object subset because they are intended to be harmful events in the crash (i.e., they are associated with an impact that produces injury or damage).

When coding these events there must be fields on the police crash report or verbiage in the narrative such as "struck," "hit," "impacted," etc. that identify these as harmful.

For cases where the indication of the harmful event came from the narrative, there may not be a corresponding indication of damage in any police crash report field. In these instances, code the

harmful event as stated in the narrative and include the corresponding attribute under <u>AREAS</u> OF IMPACT.

If there is no indication of damage from contact with the fixed object in fields on the police crash report and the narrative language does not identify it as a harmful event (e.g., "came to rest on the embankment," "drove through" or "drove across" the ditch and/or the embankment, or "drove over" the curb), do not code 33 (Curb), 34 (Ditch), or 35 (Embankment) in the SEQUENCE OF EVENTS.

- **17** (**Boulder**) is a rock of sufficient mass that when struck by a motor vehicle moves very little and remains basically intact.
- **19** (**Building**) is used when the vehicle impacts a roofed and walled structure built for permanent use. The type of construction material used is not of interest, nor is the use of the building.
- **58** (**Ground**) is used when the impact is with an earthen or paved surface off the roadway. **58** (**Ground**) is not to be entered when the harmful event is **01** (**Rollover/Overturn**).

Indication of furrowing, gouging, or digging in of the tires/wheels is not sufficient to code the collision event **58** (**Ground**). For example, if the police crash report narrative states "the truck's tires dug into the turf causing the vehicle to rollover," the harmful event should be **01** (**Rollover/Overturn**).

- **20** (**Impact Attenuator/Crash Cushion**) is a device for controlling the absorption of energy released during vehicle collision (crash cushion). Its most common application involves the protection of fixed roadside objects such as bridge piers, elevated gores at exit ramps, etc. Examples include barrels filled with water or sand, and plastic collapsible structures.
- **50** (**Bridge Overhead Structure**) is used when striking the bottom of a bridge while traveling underneath it. See <u>Figure 20</u>.
- **21** (**Bridge Pier or Support**) is a square or round column of stone, concrete, brick, steel, or wood for supporting a bridge between abutments. This attribute includes the bridge abutments that are supporting the ends of a bridge. Abutments are generally designed for retaining or supporting the embankment under bridge ends and composed of stone, concrete, brick, or wood (includes the wing-walls). See **Figure 20**.
- **23** (**Bridge Rail [Includes Parapet]**) is a wooden, brick, stone, concrete, or metal fence-like structure that runs along the outermost edge of the roadway or sidewalk on the bridge, or a rail constructed along the top of a parapet. Balustrade is often used synonymously with parapet. See **Figure 20**.
 - Bridges do not need to support another roadway. It may be an overpass for a train or even for a viaduct (water conduit).

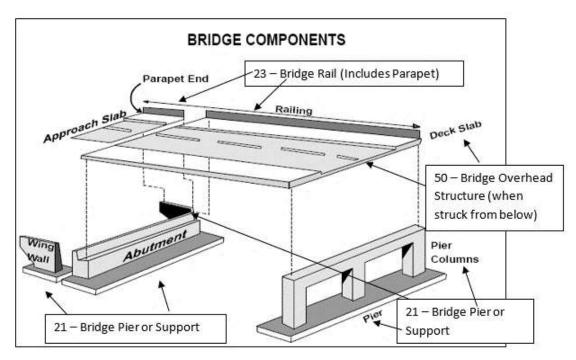


Figure 20: Bridge Components Diagram

24 (**Guardrail Face**) is a low barrier that has the primary longitudinal structure composed of metal (plates, mesh, box beam, etc.). A guardrail is differentiated from **25** (**Concrete Traffic Barrier**) by the material making up the greatest part of the longitudinal portion of the structure. In the case of guardrails, this is metal whereas in concrete barriers this is concrete (including concrete rails). If the crash report does not differentiate between guardrail face and end, default to guardrail face.

Guardrails that serve as bridge rails should be coded as 23 (Bridge Rail [Includes Parapet]).

- **52** (**Guardrail End**) is coded if a vehicle strikes the end of a guardrail. Guardrails can have a separate flat or rounded piece of metal attached to the end of an expanse of guardrail face.
- **25** (**Concrete Traffic Barrier**) refers to the longitudinal traffic barriers constructed of concrete. This includes all temporary concrete barriers regardless of location (i.e., temporary Jersey Barrier on a bridge being used to control traffic during bridge repair/construction). Concrete walls (vertical side surfaces) do not apply here (see <u>39 (Wall)</u>).
- **57** (**Cable Barrier**) refers to a flexible barrier system that uses several cables typically supported by steel posts. These barriers are designed to help lessen impact or keep vehicles within the confines of the road.
- **26** (Other Traffic Barrier) is used for all other longitudinal barriers such as wood or rock.
- **59** (**Traffic Sign Support**) is used when the post supporting a traffic sign, or the sign itself, is hit by a motor vehicle in-transport. This includes mile marker posts and elevated signs.
- **46** (**Traffic Signal Support**) is used when the post supporting a traffic signal, or the signal itself, is hit by a motor vehicle in-transport. *Use* **46** (*Traffic Signal Support*) *for a railroad crossing arm/gate*.

- **30** (**Utility Pole/Light Support**) refers to supports for highway lighting systems, not including other private lighting systems (e.g., parking lot lights). **30** (**Utility Pole/Light Support**) is used for electrical, telephone, cable, and other utility pole-type supports.
- **31** (Other Post, Other Pole, or Other Supports) is used for posts other than highway signs, utility poles, or light supports (reflectors on poles alongside of roadway, parking meters, flag poles, etc.). For mailbox posts, use **53** (Mailbox). For fence posts, use **38** (Fence).
- 32 (Culvert) is a man-made drain or channel crossing under a road, sidewalk, etc.
- **33** (**Curb**) is a concrete or asphalt structure that borders the paved surface. It provides drainage control and pavement edge delineation. The face of the curb may be sloped or vertical. Ensure that the police crash report provides some indication that damage has occurred when a vehicle strikes a curb. This attribute includes collisions with curbing that forms raised islands, medians, or separators. For example, if the report identifies the vehicle struck/collided with a traffic island, channelizing island, raised median, or separator use **33** (**Curb**) not **43** (**Other Fixed Object**).
- **34** (**Ditch**) includes any man-made structure for drainage purposes. A ditch ends where a culvert begins and resumes on the opposite side of the culvert. Reference to a "ditchbank," "embankment of the ditch," or "ditch embankment" should be coded under **34** (**Ditch**).
- **35** (**Embankment**) is a raised structure to hold back water, to carry a roadway, or the result of excavation or washout (including erosion) that may be faced with earth (or rock, stone, or concrete). A **35** (**Embankment**) can usually be differentiated from a **39** (**Wall**) by its incline whereas a wall is usually vertical. However, there are exceptions to this, such as a retaining wall that may be inclined or a vertical embankment that is caused by a natural event such as a washout.

In crashes involving a field approach or driveway crossing, use attribute **35** (**Embankment**) when no specific components (e.g., culverts or ditches) are identified.

- **38** (Fence) includes the fence posts. A Fence can be made of wood, chain link, stone, etc.
- **39** (Wall) is a primarily vertical structure composed of concrete, metal, timber, or stone that is not part of a building or a fence but typically is used for retaining earth, abating noise, and separating areas (but not for containment as in the primary function of a fence). Also included as a **39** (Wall), are headwalls (or endwalls) that are sometimes provided on culvert ends principally to protect the sides of the embankment around the culvert opening against erosion. This does not include wing-walls, which are attached to ends of bridge abutments and extend back at an angle from the roadway. Wingwalls should be coded as **21** (Bridge Pier or Support).
- **40** (**Fire Hydrant**) refers to the roadside device used by fire departments to provide water for fighting fires. Usually made of steel, these devices are also referred to as fire plugs or fire standpipes in some areas.
- **41** (**Shrubbery**) refers to vegetation that is usually of a woody, multi-stemmed variety and in most instances, is low growing rather than tall. May also be called bushes. Some common examples are boxwood, hawthorn, and mountain laurel.
- **42** (**Tree** [**Standing Only**]) is used when a vehicle strikes a standing tree. This includes impacts from overhanging branches, tree stumps, or large cactus (Saguaro). If a vehicle strikes a fallen

tree, use 18 (Other Object [Not Fixed]). If a tree falls on a vehicle as it is passing by, use 16 (Thrown or Falling Object).

- **48** (**Snow Bank**) is used when snowfall and/or road plowing creates essentially fixed barriers of snow/ice that are not snow-covered earth or rock embankments.
- **53** (**Mailbox**) refers to a private residence mail/newspaper box including the post. A cluster of private mailboxes is included in this attribute. This attribute does not include U.S. Mailboxes, which are typically blue and are for general public use. Code a U.S. Mailbox as **43** (**Other Fixed Object**).
- **43** (Other Fixed Object) is used when the object is fixed (considered a permanent structure) and is not described by any of the other fixed object attributes. This attribute excludes collisions with curbing that forms raised islands, medians, or separators (see 33 (Curb)).

Examples:

- Bus shelters.
- Pedestrian walkways.
- Toll booths.
- Guy wires supporting utility poles.
- U. S. Mailbox for public use.

Other examples would include property damage to standing crops, yards, and other vegetation (excluding: 41 (Shrubbery), 42 (Tree [Standing Only]), and 58 (Ground) if noted on the crash report.

When the case material identifies a non-specific object impact, apply the following guidelines. If the case material only identifies the harmful event as:

- "Fixed Object," then use 43 (Other Fixed Object).
- "Sign," then use **59** (**Traffic Sign Support**).
- "Post," then use 31 (Other Post, Other Pole, or Other Supports).
- "Signpost," then use 59 (Traffic Sign Support).
- "Bridge," then use 23 (Bridge Rail [Includes Parapet]) when the vehicle is on top of the bridge. When the vehicle is going under the bridge, use 21 (Bridge Pier or Support).
- "Barrier," then use 26 (Other Traffic Barrier).

93 (Unknown Fixed Object) is used when the event involves an object that is known to be fixed but the case material does not identify the specific object.

Not Reported/Unknown

98 (Harmful Event, Details Not Reported) is used when a harmful event was reported but the object classification was not reported. Check to see if 91 (Unknown Object Not Fixed), 93 (Unknown Fixed Object), or 99 (Reported as Unknown) are more appropriate for the situation.

99 (Reported as Unknown) is used when police indicate unknown.

Consistency Checks (See Section 400):

Error ID	IF	THEN
1Z0N	SEQUENCE OF EVENTS for this vehicle should not include more than one occurrence of 01. Please see SEQUENCE OF EVENTS remarks for 01 (Rollover/Overturn) to confirm coding.	
1Z1N	SEQUENCE OF EVENTS for this vehicle should not equal 01, 67 consecutively or 67, 01 consecutively.	
1Z1P	any SEQUENCE OF EVENTS equals 66,	ROADWAY GRADE should equal 6 for this vehicle.
1Z2P	any SEQUENCE OF EVENTS equals 01, and vPIC BODY CLASS does not equal 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport / Adventure / Supermoto / On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 104 (Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle), or any RELATED FACTORS-VEHICLE LEVEL equals 030,	ROLLOVER must equal 1, 2, or 9.
2Z0F	any SEQUENCE OF EVENTS equals 12, 14, 45, 54, 55,	NUMBER OF VEHICLE FORMS SUBMITTED must be greater than 001.

Error ID	IF	THEN
440P	UNDERRIDE/OVERRIDE equals 7,	VEHICLE SEQUENCE OF EVENTS must not equal 12, 14, 45, or 55, or CRASH EVENTS equals 12, 14, 45, or 55 for that vehicle, AND the vPIC BODY CLASS for at least one of the corresponding vehicles (THIS VEHICLE or OTHER VEHICLE) in that row equals 006 (Motorcycle – Standard), 012 (Motorcycle – Scooter), 069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcyclestyle)), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring / Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle – Trike), 084 (Off-road Vehicle - Dirt Bike / Off-Road), 085 (Motorcycle - Dual Sport / Adventure / Supermoto / On/Off-Road), 086 (Off-road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small / Minibike), 088 (Off-road Vehicle - Go Kart), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 097 (Off-road Vehicle - Snowmobile), 098 (Motorcycle - Street), 104 (Motorcycle - Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motocross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle).
4Z0P	SEQUENCE OF EVENTS equals 02,	FIRE OCCURRENCE for this vehicle must equal 1.
4Z1P	UNIT TYPE equals 1 and FIRE OCCURRENCE equals 1,	at least one SEQUENCE OF EVENTS must equal 02.
4Z2P	UNIT TYPE equals 4,	there must be at least one record in CRASH EVENTS TABLE with SEQUENCE OF EVENT equal to 45 for that vehicle VEHICLE NUMBER (OTHER VEHICLE).
4Z3P	UNIT TYPE equals 2 or 3	there must be at least one record in CRASH EVENTS TABLE with SEQUENCE OF EVENT equal to 14 for that vehicle VEHICLE NUMBER (OTHER VEHICLE).
532F	FIRST HARMFUL EVENT equals 14, and RELATION TO TRAFFICWAY equals 07,	at least one previous CRASH EVENTS- SEQUENCE OF EVENTS should equal 63, 64, 71, or 79 for the motor vehicle in transport involved in the FIRST HARMFUL EVENT.

Error ID	IF	THEN
5Z0F	SEQUENCE OF EVENTS equals 08,	at least one person must have PERSON TYPE equal to 05, 10.
671F	the only harmful event in the SEQUENCE OF EVENTS for this vehicle equals 02 or 04,	CRITICAL EVENT - PRECRASH (EVENT) must equal 98.
6Z0F	SEQUENCE OF EVENTS equals 09,	at least one person must have PERSON TYPE equal to 06, 07.
7Z0F	any SEQUENCE OF EVENTS equals 05, 06,	at least one occupant of this vehicle (PERSON TYPES 01, 02, 09) must have INJURY SEVERITY equal to 1-5, or blank.
8L8Q	AREAS OF IMPACT (THIS VEHICLE) equals 18, 19, or 20 in the CRASH EVENTS,	the corresponding event in that row must not equal 12 or 55.
8L8R	the CRASH EVENTS event equals 54,	AREAS OF IMPACT (THIS VEHICLE) must equal 18, 19, or 20 in that row.
8L8S	AREAS OF IMPACT (THIS VEHICLE) equals 18, 19, or 20 in the CRASH EVENTS and the corresponding event in that row equals 14, 45, or 54,	RELATED FACTORS-CRASH LEVEL must equal 014.
8L8T	RELATED FACTORS-CRASH LEVEL equals 014,	there must exist at least one event in the CRASH EVENTS where AREAS OF IMPACT (THIS VEHICLE or OTHER VEHICLE) equals 18, 19, or 20 and the corresponding event in that row equals 14, 45, or 54.
8L8U	AREAS OF IMPACT (THIS VEHICLE) equals 18, 19, or 20 in the CRASH EVENTS and the corresponding event in that row equals 08, 09, 15, 49,	RELATED FACTORS-CRASH LEVEL must equal 0 15.
8L8V	RELATED FACTORS-CRASH LEVEL equals 015,	there must exist at least one event in the CRASH EVENTS where AREAS OF IMPACT (THIS VEHICLE) equals 18, 19, or 20, and the corresponding event in that row equals 08-10, 15, 18, 49, or 91.
8L8W	SEQUENCE OF EVENTS is not equal to 45,	AREAS OF IMPACT (OTHER VEHICLE) should not equal 18 or 19.
8L8X	AREAS OF IMPACT (THIS VEHICLE) equals 18,	there should be a previous event involving that vehicle where the CRASH EVENTS event equals 60, 61, 62, or 72.
8L8Y	SEQUENCE OF EVENTS is equal to 45 (Working Motor Vehicle),	AREAS OF IMPACT (THIS VEHICLE) and AREAS OF IMPACT (OTHER VEHICLE) should not both equal 18 or 19 in that same event row.

Error ID	IF	THEN
8L9P	vPIC BODY CLASS does not equal 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring / Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 Off- road Vehicle - Dirt Bike / Off-Road), 085 (Motorcycle - Dual Sport / Adventure / Supermoto / On/Off-Road), 086 (Off-road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small / Minibike), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 097 (Off-road Vehicle - Snowmobile), 098 (Motorcycle - Street), 104 (Motorcycle - Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motocross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle), and the CRASH EVENTS event equals 54, and the corresponding AREAS OF IMPACT (THIS VEHICLE) equals 19 or 20 in that row,	there should be a previous event with CRASH EVENTS event equal to 18, 73, 91, or 98 involving that vehicle.
8Z0F	any SEQUENCE OF EVENTS equals 15,	at least one Person Level (Not a MV Occupant) form must have a PERSON TYPE code of <i>11</i> , <i>12</i> , <i>or 13</i> .
9B9P	any SEQUENCE OF EVENTS equals 55,	there must be at least one other vehicle with UNIT TYPE equal to 1.
A041	CRASH MONTH equals 05-09,	SEQUENCE OF EVENTS, FIRST HARMFUL EVENT, MOST HARMFUL EVENT should not equal 48.
A042	CRASH EVENTS-SEQUENCE OF EVENTS equals <i>14</i> , 17, 19-21, 23-26, 30-35, 38-43, <i>46</i> , 52, 53, 57- <i>59</i> , <i>65</i> , <i>or</i> 93, for a vehicle,	at least one previous CRASH EVENTS-SEQUENCE OF EVENTS should equal 63, 64, 71, or 79 for <i>this</i> vehicle.
A043	SEQUENCE OF EVENTS for the last event in the CRASH EVENTS TABLE must not equal 60-71, 79.	
A044	CRASH EVENTS TABLE - SEQUENCE OF EVENT equals 45,	the UNIT TYPE for VEHICLE NUMBER (OTHER VEHICLE) must equal 4.
A045	CRASH EVENTS TABLE - SEQUENCE OF EVENT equals 14,	the UNIT TYPE for VEHICLE NUMBER (OTHER VEHICLE) must equal 2 or 3.

Error ID	IF	THEN
A047	CRASH EVENTS TABLE - VEHICLE NUMBER (OTHER VEHICLE) UNIT TYPE is 1,	SEQUENCE OF EVENT must equal 12, 54, or 55 for that row
A495	TRAFFICWAY DESCRIPTION equals 0,	the first event in SEQUENCES OF EVENTS for this vehicle should not equal 63, 64, 69, or 71.
A520	SEQUENCE OF EVENTS equals 10,	TRAFFIC CONTROL DEVICE should not equal 01-09, 20-29, 40-50, 98.
A521	any SEQUENCE OF EVENTS equals 46,	SPEED LIMIT should equal 05-55, 98, or 99 for this vehicle.
A612	PERSON TYPE equals 04, and VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST equals,	at least one SEQUENCE OF EVENTS must equal 10, 49, or 74 for that vehicle number in the CRASH EVENTS table.
A613	PERSON TYPE equals 05, and VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST equals,	at least one SEQUENCE OF EVENTS must equal 08 for that vehicle number in the CRASH EVENTS table.
A614	PERSON TYPE equals 06, and VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST equals,	at least one SEQUENCE OF EVENTS must equal 09 for that vehicle number in the CRASH EVENTS table.
A615	PERSON TYPE equals 07, and VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST equals,	at least one SEQUENCE OF EVENTS must equal 09 for that vehicle number in the CRASH EVENTS table.
A616	PERSON TYPE equals 11, 12, or 13, and VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST equals,	at least one SEQUENCE OF EVENTS must equal 15 for that vehicle number in the CRASH EVENTS table.
A617	PERSON TYPE equals 10, and VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST equals,	at least one SEQUENCE OF EVENTS must equal 08 for that vehicle number in the CRASH EVENTS table.
A618	PERSON TYPE equals 19, and VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST equals,	at least one SEQUENCE OF EVENTS must equal 99 for that vehicle number in the CRASH EVENTS table.
A619	the total count of persons with PERSON TYPE equal to 05 that have the same VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is,	the number of events equal to 08 for that vehicle in the CRASH EVENTS table should equal
A61A	the total count of PERSON TYPE is equal to 11, 12, or 13 for the vehicle in VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is,	the number of events equal to 15 in the CRASH EVENTS table should equal for that vehicle.

Error ID	IF	THEN
A61B	the total count of PERSON TYPE is equal to 10 for the vehicle in VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is,	the number of events equal to 08 in the CRASH EVENTS table should equal for that vehicle.
AL1P	SEQUENCE OF EVENTS equals 51, 62, 70,	VEHICLE TRAILING must not equal 0.
AL2P	SEQUENCE OF EVENTS equals 45,	WORK ZONE should equal 1-4.
AL5P	If UNIT TYPE equals 1,	at least one event in the SEQUENCE OF EVENTS must equal the MOST HARMFUL EVENT.
AL8P	SEQUENCE OF EVENTS equals 51, 70,	JACKKNIFE must equal 2, 3.
AM1P	FIRST HARMFUL EVENT equals 54, or SEQUENCE OF EVENTS equals 54 for any vehicle,	one RELATED FACTORS-CRASH LEVEL must equal θ 14.
AM2P	any SEQUENCE OF EVENTS equals 25 or 57,	TRAFFICWAY DESCRIPTION should equal 3, 6.
BZ40	CRITICAL EVENT - PRECRASH (EVENT) equals 01,	at least one SEQUENCE OF EVENTS must equal 61 for this vehicle.
BZ50	CRITICAL EVENT - PRECRASH (EVENT) equals 12, and PRE-IMPACT LOCATION is not equal to 5,	at least one SEQUENCE OF EVENTS must equal 64 for this vehicle.
BZ60	CRITICAL EVENT - PRECRASH (EVENT) equals 13, and PRE-IMPACT LOCATION is not equal to 5,	at least one SEQUENCE OF EVENTS must equal 63 for this vehicle.
BZ70	CRITICAL EVENT - PRECRASH (EVENT) equals 14,	at least one SEQUENCE OF EVENTS must equal 71 for this vehicle.
BZ90	CRASH TYPE equals 01-05, and PRE-IMPACT LOCATION is not equal to 0 or 5,	at least one SEQUENCE OF EVENTS prior to the FIRST HARMFUL EVENT must equal 63.
BZ91	CRASH TYPE equals 06-10, and PRE-IMPACT LOCATION is not equal to 0 or 5,	at least one SEQUENCE OF EVENTS prior to the FIRST HARMFUL EVENT must equal 64.
BZ92	CRASH TYPE equals 14,	at least one CRASH EVENTS-SEQUENCE OF EVENTS must equal 71 for this vehicle.
BZ93	PRE-IMPACT LOCATION equals 4,	at least one SEQUENCE OF EVENTS for this vehicle must equal 63, 64, 71, or 79.
PB00	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 110-910,	at least one SEQUENCE OF EVENTS for the striking vehicle must equal 08 or 15.
PB02	PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE equals 111-980,	at least one SEQUENCE OF EVENTS for the striking vehicle must equal 09.
U651	UNLIKELY: SEQUENCE OF EVENTS equals 62, 60 consecutively.	

Error ID	IF	THEN
U652	UNLIKELY: SEQUENCE OF EVENTS equals 01, 58 or 58, 01 consecutively.	
U653	UNLIKELY: SEQUENCE OF EVENTS equals 65, 69 consecutively.	
U675	UNLIKELY: TRAFFICWAY DESCRIPTION equals 1, 4, or 5, and any SEQUENCE OF EVENTS equals 65 for this vehicle.	
V74P	UNIT TYPE equals 1, and ROLLOVER equals 1, 2, 9, or LOCATION OF ROLLOVER equals 1-7, 9,	at least one SEQUENCE OF EVENTS must equal 01 for this vehicle.
V990	any SEQUENCE OF EVENTS equals 61,	CONTRIBUTING CIRCUMSTANCES, MOTOR VEHICLE should not equal 00.
VH70	UNIT TYPE equals 2-4,	elements JACKKNIFE, TRAVEL SPEED, AND SEQUENCE OF EVENTS must all be left blank.
VH83	the only harmful SEQUENCE OF EVENTS for this vehicle equals 04-06,	DAMAGED AREAS should equal 15.
VH84	the only harmful SEQUENCE OF EVENTS for this vehicle equals 01-03, 16, 44, 51, 72, 98,	DAMAGED AREAS should not equal 15.

Consistency Checks (FARS Only) (See Section 400):

Error ID	IF	THEN
A230	SEQUENCE OF EVENTS equals 10,	LAND USE AND FUNCTIONAL SYSTEM (b) should not equal 01-03.
V750	UNDERRIDE/OVERRIDE equals 1-3,	FIRST HARMFUL EVENT or at least one SEQUENCE OF EVENTS (for this vehicle) should equal 12, 55.
V760	UNDERRIDE/OVERRIDE equals 4-6,	FIRST HARMFUL EVENT or at least one SEQUENCE OF EVENTS (for this vehicle) should equal 14, 45.
V770	UNDERRIDE/OVERRIDE equals 7,	at least one SEQUENCE OF EVENTS (for this vehicle) must equal 12, 55.
V780	UNDERRIDE/OVERRIDE equals 8,	at least one SEQUENCE OF EVENTS (for this vehicle) must equal 14, 45.

V38 - Most Harmful Event

FORMAT: 2 numeric

SAS NAME: Vehicle.M_HARM, Parkwork.PM_HARM

ELEMENT VALUES:

Non-Collision Most Harmful Events:

Codes	Attributes
01	Rollover/Overturn
02	<u>Fire/Explosion</u>
03	Immersion or Partial Immersion
04	Gas Inhalation
51	Jackknife (harmful to this vehicle)
06	Injured in Vehicle (non-collision)
44	Pavement Surface Irregularity (ruts, potholes, grates, etc.)
07	Other Non-Collision
16	Thrown or Falling Object
72	Cargo/Equipment Loss, Shift, or Damage (harmful)
05	Fell/Jumped from Vehicle

Collision With Motor Vehicle In-Transport:

Codes	Attributes
12	Motor Vehicle In-Transport
54	Motor Vehicle In-Transport Strikes or is Struck by Cargo, Persons, or Objects Set in Motion from/by Another Motor Vehicle In-Transport
55	Motor Vehicle in Motion Outside the Trafficway

Collision With Object Not Fixed:

Codes	Attributes
08	<u>Pedestrian</u>
09	<u>Pedalcyclist</u>
10	Railway Vehicle
74	Road Vehicle on Rails
11	Live Animal
49	Ridden Animal or Animal Drawn Conveyance

Codes	Attributes
18	Other Object (not fixed)
15	Non-Motorist on Personal Conveyance
14	Parked Motor Vehicle
45	Working Motor Vehicle
73	Object That Had Fallen from Motor Vehicle In-Transport
91	<u>Unknown Object Not Fixed</u>

Collision With Fixed Object:

Codes	Attributes
17	Boulder
19	Building
58	Ground
20	Impact Attenuator/Crash Cushion
50	Bridge Overhead Structure
21	Bridge Pier or Support
23	Bridge Rail (Includes Parapet)
24	Guardrail Face
52	Guardrail End
25	Concrete Traffic Barrier
57	Cable Barrier
26	Other Traffic Barrier
59	Traffic Sign Support
46	Traffic Signal Support
30	Utility Pole/Light Support
31	Other Post, Other Pole, or Other Supports
32	<u>Culvert</u>
33	<u>Curb</u>
34	<u>Ditch</u>
35	Embankment
38	<u>Fence</u>
39	Wall
40	Fire Hydrant

Codes	Attributes
41	Shrubbery
42	Tree (Standing Only)
48	Snow Bank
53	<u>Mailbox</u>
43	Other Fixed Object
93	<u>Unknown Fixed Object</u>

Not Reported/Unknown

Codes	Attributes
98	Harmful Event, Details Not Reported
99	Reported as Unknown

Definition: This element identifies the event that resulted in the most severe injury or, if no injury, the greatest property damage involving this motor vehicle.

Remarks: Must be the major event **FOR THIS VEHICLE**, even if different from the <u>FIRST HARMFUL EVENT</u>. **Code for each vehicle. May be different for each vehicle.**

Code using the following hierarchy:

Fatalities/injuries to non-occupants are attributed to the vehicle that struck them when applying this hierarchy.

A. FATALITIES take precedence over INJURIES.

- 1. If this vehicle is involved in more than one event that causes fatality to its own occupants or to people not in a motor vehicle, choose the event that causes the greatest number of fatalities to occupants of this vehicle or to people not in a motor vehicle (not occupants of other vehicles). For example, if there are fatalities to non-occupants and vehicle occupants in separate events, the greater number of fatalities is more harmful.
- 2. If this vehicle is involved in more than one event that causes fatality to its own occupants or to people not in a motor vehicle; and if there are an equal number of fatalities in each such event, choose the fatal event that is worst with respect to other injuries and property damage. For example, if there are equal numbers of fatalities in each event, the event that also has additional injuries/damage is more harmful.
- 3. As a last resort choose the fatal event that occurred first, timewise.

B. INJURIES take precedence over PROPERTY DAMAGE.

- 1. If the vehicle is not involved in events that cause fatality to its occupants or to people not in a motor vehicle, choose the event that produces the worst injury.
- 2. If in doubt, choose the event with the greatest number of injuries.
- 3. If in doubt, choose the event that occurred first, timewise.

C. If only PROPERTY DAMAGE results for this vehicle:

- 1. Choose the event causing the most damage.
- 2. If in doubt, choose the event that happened first, timewise.

Non-Collision Most Harmful Events:

Non-Collision events involving motorcycles and vehicles with a "load":

Non-Collision events may occur before or after a collision event. They should not be coded as a separate event if they occur as part of a collision event.

Examples:

- A motorcycle strikes a deer, overturns, and the rider becomes separated from the vehicle. Code the collision event, not the non-collision "Rollover/Overturn" and "Fell/Jumped from Vehicle" that occur as part of the collision event.
- One truck tractor/trailer rear-ends another truck tractor/trailer. The impact pushes the lead vehicle's load into the back of the truck tractor cab with part falling onto the roadway. Code the collision event, not the non-collision "cargo-loss or shift" that occurred as part of the collision event.

Most Harmful Event Coding Procedures for Parked and Working Motor Vehicles

- 1. If the MOST HARMFUL EVENT for a parked/working motor vehicle is an impact with a motor vehicle in-transport, use 12 (Motor Vehicle In-Transport).
 - a. **Example:** A parked motor vehicle (V2) is struck by an in-transport motor vehicle (V1) and this is the MOST HARMFUL EVENT for the parked motor vehicle (V2). The MOST HARMFUL EVENT for the parked motor vehicle (V2) is **12** (Motor Vehicle In-Transport).
- 2. If the MOST HARMFUL EVENT for a parked/working motor vehicle is an impact with something after it has been set in motion, code that other thing.
 - a. **Example:** In a chain reaction crash, an in-transport motor vehicle (V1) strikes a parked motor vehicle (V2) injuring the person sitting in the driver's seat of V2. The parked motor vehicle (V2) is pushed into an unoccupied motor vehicle (V3) and the parked motor vehicle (V3) strikes and kills a pedestrian. The MOST HARMFUL EVENT for parked motor vehicle (V3) is **08** (Pedestrian).
- 3. If the MOST HARMFUL EVENT for a parked/working motor vehicle is an impact with anything set in motion except another parked or working motor vehicle, see attribute 12 (Motor Vehicle In-Transport).

- 4. If the MOST HARMFUL EVENT for a parked/working motor vehicle is an impact with another parked or working motor vehicle that has been set in motion, use 14 (Parked Motor Vehicle) or 45 (Working Motor Vehicle), whichever describes the object set in motion.
- 5. The MOST HARMFUL EVENT for a parked/working motor vehicle can be a non-collision harmful event not recorded in the CRASH EVENTS list. For example, if a parked vehicle rolls over after an impact with an in-transport motor vehicle and the MOST HARMFUL EVENT is the rollover, then use code 01 (Rollover/Overturn).
 - a. **Example:** A parked motor vehicle (V2) is struck by an in-transport vehicle (V1). The parked motor vehicle (V2) is pushed down an embankment and rolls over. The case material indicate the most harmful event for the parked motor vehicle (V2) is the rollover. The MOST HARMFUL EVENT for the parked motor vehicle (V2) is **01** (Rollover/ Overturn).

01 (**Rollover/Overturn**) is used when a motor vehicle rotates (rollover) at least one quarter turn onto its side or end. For motorcycles, laying the motorcycle down on its side is sufficient to code **01** (**Rollover/Overturn**) as a harmful event if damage or injury is produced, even though the data element <u>ROLLOVER</u> is not applicable to motorcycles.

If there is a **01** (**Rollover/Overturn**) that begins in another location but involves a ditch or embankment in the case (e.g., "rolled through the ditch," "rolled down the embankment," "came to rest against the embankment"), then the rule applies where if there is no damage associated with an impact with the fixed object during the rollover, it is not included in the CRASH EVENTS. If there is indication that damage resulted from an impact with the fixed object, it is included in the CRASH EVENTS. This follows the same logic as striking a tree or another vehicle during an overturn.

Note: For vehicles with attached trailing unit(s) by fixed or non-fixed linkage, when either the power unit or the trailing unit(s) rolls over, the entire vehicle will be considered a rollover. This applies to all motor vehicles with any type of trailing unit(s). If a motorcycle is pulling a trailing unit that overturns, the motorcycle should have 01 (Rollover/Overturn) in its Crash Events. However, since the power unit is a motorcycle, the element ROLLOVER still does NOT apply.

02 (**Fire/Explosion**) is used for a vehicle fire or explosion that occurs during the crash sequence or as a result of the crash.

As it pertains to the occurrence of **02** (**Fire/Explosion**), the crash circumstances are not considered stabilized until the threat of damage to this vehicle, or injury consequences to this vehicle's occupants, has ceased. Therefore, the crash sequence is not considered stabilized until all occupants have exited the vehicle and the scene has been declared safe by police or other authority. Fires that occur at a later time to vehicles abandoned at the scene (in open fields, on hillsides, etc.), or to vehicles removed from the scene to another location (tow yard, curbside, etc.), are not considered part of the crash sequence.

- **03** (**Immersion or Partial Immersion**) is used when *a* motor vehicle enters a body of water and results in injury or damage. This code would also be used if the vehicle came to rest in water and the depth cannot be ascertained from case material. **NOTE:** In immersion fatalities, the injury to the person may be noted as "drowning."
- **04** (**Gas Inhalation**) includes injury or death as a result of toxic fumes, such as carbon monoxide fumes leaking from a motor vehicle.
- **51** (Jackknife [harmful to this vehicle]) applies to a condition that occurs to an articulated vehicle (any vehicle with a trailing unit(s) connected by a hitch; truck tractor or single-unit truck with one or more trailers, articulated bus, car pulling a boat on a trailer, etc.) while in motion. The condition reflects a loss of control of the vehicle by the driver in which the trailer(s) yaws from its normal straight-line path behind the power unit, striking the power unit, causing damage to the power unit or trailer. Jackknife should only be coded as a harmful event if there is clear indication of damage to the jackknifed vehicle or injury to its occupants caused by the jackknife.
- **06** (**Injured in Vehicle [Non-Collision]**) is used when an occupant is injured during an unstabilized situation without a collision, excluding cargo/equipment loss or shift. Examples: Driver slams on brake, causing an unrestrained passenger to be injured. Driver makes a sharp turn causing driver to strike head on side window, knocking driver unconscious.
- **44** (**Pavement Surface Irregularity [ruts, potholes, grates, etc.]**) is used when the pavement surface irregularity is on a paved surface. Other examples include indication of contact with a dip, depression, low spot, trough, etc.) If the impact is with a surface irregularity (e.g., ruts, potholes) not on a paved surface, use the **58** (**Ground**). For a vehicle that "bottoms out" on the paved surface (causing damage) due to speed but not because of a pavement surface irregularity, use attribute **07** (**Other Non-Collision**).
- **07** (Other Non-Collision). Non-collision not captured in the listed non-collision attributes.

Examples:

- Damage to the vehicle produced by its own dislodged vehicle parts (including hood flying up and contacting the windshield).
- A vehicle "bottoms out" (causing damage) due to speed but not because of a pavement surface irregularity. Damage due to pavement surface irregularities should be coded 44 (Pavement Surface Irregularity [ruts, potholes, grates, etc.]).
- **16** (**Thrown or Falling Object**) is used when any object: (1) is thrown (intentionally or unintentionally) and impacts *a* vehicle, or (2) falls onto, into, or in the path of *a* motor vehicle. If a tree limb falls from a tree and is contacted by a car, enter **16** (**Thrown or Falling Object**). If a person maliciously throws an object off an overpass into traffic below, enter **16** (**Thrown or Falling Object**). This excludes contacts made by loads or objects set in motion by a motor vehicle (see **54** (**Motor Vehicle In-Transport Strikes or is Struck by Cargo, Persons, or Objects Set in Motion from/by Another Motor Vehicle In-Transport**)).
- **72** (Cargo/Equipment Loss, Shift, or Damage [harmful)) refers specifically to the loss or shift of items carried on or in a motor vehicle or its trailing unit, causing damage and/or injury to the vehicle, its occupants, its parts, trailing unit, or the cargo itself. Harm can be measured in loss of monetary value from unrecoverable cargo loss as well as physical damage. This attribute should never be used to refer to a "collision" event (see 54 (Motor Vehicle In-Transport Strikes or is

Struck by Cargo, Persons, or Objects Set in Motion from/by Another Motor Vehicle In-Transport).

Examples:

- A pickup truck brakes rapidly to avoid a collision. This causes a piece of lumber in the pickup bed to smash through the rear window.
- Unsecured cargo shifts inside a box truck and bursts through the wall of the trailer.
- Pallets of beehives on a flatbed truck fall off the truck on a sharp curve causing the hives to open and the bees to fly away.

Notes:

In situations when a cargo shift is part of a collision event, the cargo shift is not coded separately. See Non-Collision events involving motorcycles and vehicles with a "load."

- Unsecured cargo shifts inside a box truck causing a loss of control. The driver overcorrects, driving off the road. This would be a 60 (Cargo/Equipment Loss or Shift [non-harmful]) in the SEQUENCE OF EVENTS.
- Use <u>07 (Other Non-Collision)</u> in a situation where a motor vehicle in-transport is towing another unit (e.g., motor vehicle, trailer, etc.) and the second unit collides into the back of the power unit (not a Jackknife or part of a collision event).

05 (**Fell/Jumped from Vehicle**) is used when an occupant of this vehicle falls or jumps (not suicide) from the vehicle causing injury. For example, an occupant of a motor vehicle intransport leans against the car door, it opens and the occupant falls out; or a person riding on a vehicle's exterior (hood, roof, running board, etc.) falls or jumps, and is injured by the fall. If an occupant falls or jumps from a vehicle and is struck by that vehicle, use this attribute.

Collision With Motor Vehicle In-Transport:

12 (**Motor Vehicle In-Transport**) is used when the most injury- or damage-producing event is two motor vehicles in-transport making contact within the trafficway boundaries.

Parked and Working Motor Vehicles:

This attribute is used for parked and working motor vehicles when their MOST HARMFUL EVENT is an impact with a motor vehicle in-transport.

This attribute also applies to parked and working motor vehicles when their MOST HARMFUL EVENT is an impact with any object set in motion other than another parked or working motor vehicle. Set in motion objects include cargo, people, stone, stop sign, tire tread, and debris from a previous impact. If the object set in motion is another parked or working motor vehicle use 14 (Parked Motor Vehicle) or 45 (Working Motor Vehicle), whichever describes the object set in motion.

Examples:

• If the MOST HARMFUL EVENT for V1 (a motor vehicle in-transport) is when V1 impacts V2 (another motor vehicle in-transport) within the trafficway boundaries, then the MOST HARMFUL EVENT for V1 is 12 (Motor Vehicle In-Transport).

- If the most harmful event for V2 (a parked motor vehicle) is when V2 is struck by V1 (a motor vehicle in-transport), then the MOST HARMFUL EVENT for V2 is 12 (Motor Vehicle In-Transport).
- If the MOST HARMFUL EVENT for V2 (a parked motor vehicle) is when V2 is struck by a stop sign set in motion by V1 (a motor vehicle in-transport), then the MOST HARMFUL EVENT for V2 is 12 (Motor Vehicle In-Transport).
- If V1 (a motor vehicle in-transport) strikes V2 (a parked motor vehicle) and V2 then strikes V3 (a parked motor vehicle), then the MOST HARMFUL EVENT for V3 is 14 (Parked Motor Vehicle).

54 (Motor Vehicle In-Transport Strikes or is Struck by Cargo, Persons, or Objects Set in Motion from/by Another Motor Vehicle In-Transport) applies only to events involving two in-transport motor vehicles. It is used in two situations: 1) The most harmful injury- or damage-producing event for an in-transport motor vehicle is when something it sets in motion (cargo, person, object) strikes another in-transport motor vehicle. 2) The most harmful injury- or damage-producing event for an in-transport motor vehicle is when it is struck by cargo, people, or objects set in motion by another in-transport motor vehicle.

Example:

Cargo that fell from an in-transport motor vehicle (V1) is involved in an impact with V2, another in-transport motor vehicle. The case material indicate this is the most harmful event for both V1 and V2. MOST HARMFUL EVENT is **54** (**Motor Vehicle In-Transport Strikes or is Struck by Cargo, Persons, or Objects Set in Motion from/by Another Motor Vehicle In-Transport**) for both V1 and V2.

When selecting the MOST HARMFUL EVENT, 54 (Motor Vehicle In-Transport Strikes or is Struck by Cargo, Persons, or Objects Set in Motion from/by Another Motor Vehicle In-Transport) does not have to be the MOST HARMFUL EVENT for both vehicles.

Example:

Cargo that fell from an in-transport motor vehicle (V1) is involved in an impact with V2, another in-transport motor vehicle. This event is the only event for V1. Thus, **54** (**Motor Vehicle In-Transport Strikes or is Struck by Cargo, Persons, or Objects Set in Motion from/by Another Motor Vehicle In-Transport**) is the MOST HARMFUL EVENT for V1. The case material identifies a subsequent impact by V2 with a tree as the MOST HARMFUL EVENT for V2. Thus, **42** (**Tree [Standing Only])** is the MOST HARMFUL EVENT for V2.

This attribute does not apply when the MOST HARMFUL EVENT for an **in-transport motor vehicle** is an impact between cargo, a person, or object it set in motion and something other than a motor vehicle in transport. In this case, use the "collision with non-fixed object," or "collision with fixed object" code that is applicable.

Examples:

• If the MOST HARMFUL EVENT for an in-transport motor vehicle is when cargo that fell off its trailer strikes a pedestrian, code **08** (**Pedestrian**).

- If the MOST HARMFUL EVENT for an in-transport motor vehicle is when a parked motor vehicle it set in motion strikes a pedestrian, code **08** (**Pedestrian**).
- If the MOST HARMFUL EVENT for an in-transport motor vehicle is when cargo that fell off its trailer strikes a parked motor vehicle, code <u>14 (Parked Motor Vehicle)</u>.
- **55** (**Motor Vehicle in Motion Outside the Trafficway**) is used when the injury- or damage-producing event is two motor vehicles in-transport making contact outside the trafficway boundaries in a motor vehicle traffic crash.

Example:

A vehicle loses control attempting to turn into a gas station and strikes another vehicle pulling away from the pump in the station lot.

Collision With Object Not Fixed:

08 (**Pedestrian**) is used for all those not on a personal conveyance. A person pushing a vehicle should be coded **08** (**Pedestrian**). A person being carried by another person should also be considered a **08** (**Pedestrian**).

09 (**Pedalcyclist**) is used for any person on a non-motorized other road vehicle propelled by pedaling. Examples include a bicycle, tricycle, unicycle, or pedal car.

If a non-motorist is hit as a result of a vehicle to vehicle collision and you cannot reasonably determine which vehicle struck the non-motorist, use the lowest vehicle number of the MVIT(s) involved in the vehicle to vehicle event that resulted in the pedestrian or pedalcyclist collision. In the element RELATED FACTORS - PERSON (NOT A MOTOR VEHICLE OCCUPANT) LEVEL code 031 Default Code Used for Vehicle Numbering.

- **10** (**Railway Vehicle**) is any land vehicle that is (1) designed primarily for, or in use for, moving people or property from one place to another on rails and (2) not in use on a land way other than a railway.
 - **Inclusions:** Railway Trains, Streetcar/trolley on private way.
 - Exclusions: Streetcar/trolley operating on trafficway.
- 74 (Road Vehicle on Rails) is any land vehicle on rails operating in a trafficway.
 - **Inclusions:** Streetcar/trolley operating on trafficway.
 - **Exclusions:** Railway trains, streetcar/trolley on private way, streetcar/trolley or electric bus operating on tires.
- **11** (**Live Animal**) is used for collisions with live animals (domesticated or wild) that are not themselves being used as transportation or to draw a wagon, cart, or other transport device (see <u>ANSI D16.1</u>). Default to **11** (**Live Animal**) if it cannot be determined if the struck animal is alive, dead, or if it was being ridden or drawing a transport device.
- **49** (**Ridden Animal or Animal-Drawn Conveyance**) is used for ridden animals and animals drawing transport devices. See **18** (**Other Object [Not Fixed]**) for an animal carcass.

18 (**Other Object [Not Fixed]**) is used when a motor vehicle strikes a non-fixed object that is known NOT to have been the cargo or part of *a* motor vehicle in-transport or when it is UNKNOWN whether the object was the cargo or part of *a* motor vehicle in-transport (i.e., refers to objects such as a dead body, animal carcass, construction cones or barrels, an unattached trailer, a bicycle without a rider, downed tree limbs or power lines, or debris from a prior crash). For objects that have become separated from a motor vehicle in-transport not as a result of a prior crash, use attribute **73** (**Object That Had Fallen from Motor Vehicle In-Transport**).

15 (**Non-Motorist on Personal Conveyance**) is used for pedestrians using personal conveyances. A personal conveyance is a device, other than a transport device, used by a pedestrian for personal mobility assistance or recreation. These devices can be motorized or human powered, but not propelled by pedaling.

Inclusions:

- 1. Rideable toys
 - a. Roller skates, in-line skates
 - b. Skateboards
 - c. Skates
 - d. Baby carriage
 - e. Scooters
 - f. Toy wagons
- 2. Motorized rideable toys
 - a. Motorized skateboard
 - b. Motorized toy car
 - c. Motorized kick scooter
- 3. Devices for personal mobility assistance
 - a. Self-balancing personal conveyance (e.g., Segway-style device)
 - b. Motorized and non-motorized wheelchair
 - c. Mobility aid scooters

Exclusions:

- 1. Golf cart
- 2. Low-speed vehicles (LSVs)
- 3. Go-carts
- 4. Minibike
- 5. "Pocket" motorcycles
- 6. Motor scooters
- 7. Moped

14 (Parked Motor Vehicle) is used when the impact occurred between a motor vehicle intransport and a motor vehicle neither on a roadway nor in motion. A vehicle stopped off the roadway, its door open over a roadway, is not in-transport. This attribute would also apply for a parked vehicle struck by another parked vehicle. For example, if a motor vehicle in-transport hits a parked vehicle and pushes it into a second parked vehicle (the only event for the second parked vehicle), the MOST HARMFUL EVENT for the second parked vehicle is 14 (Parked Motor Vehicle).

45 (**Working Motor Vehicle**) is used to indicate the motor vehicle contacted was in the act of performing construction, maintenance, or utility work related to the trafficway when it became an involved unit. The vehicle should be known to be in the act of performing work. This "work" may be located within open or closed portions of the trafficway and motor vehicles performing these activities can be within or outside the trafficway boundaries. This code does not include private construction/maintenance vehicles, or vehicles such as garbage trucks, delivery trucks, taxis, emergency vehicles, tow trucks, etc. **DO NOT evaluate this attribute on** *NCSA* **Body Type alone.**

Examples:

- 1. Asphalt/steam roller working in a highway construction zone paving the roadway or flattening dirt.
- 2. State highway maintenance crew painting lane lines on the road, mowing grass on the roadside or median, repairing potholes, removing debris from the roadway, etc.
- 3. Utility truck or a "cherry picker," performing maintenance on power lines along the roadway or maintaining a traffic signal.
- 4. A private excavating company contracted by the State digging the foundation for a new overpass.
- 5. A State, county, or privately-owned snowplow, plowing ice/snow as part of a highway maintenance activity.
- 6. Street sweeper sweeping the street.
- 7. A vehicle in a mobile work convoy displaying arrow boards or other signaling devices warning motorists of the work activity.
- 8. A law enforcement vehicle that is participating strictly in a stationary construction or mobile maintenance activity as a traffic slowing, control, signaling, or calming influence.

NOTE: Code "45" excludes working activities other than highway construction, maintenance, or utility vehicles (garbage truck picking up trash, mail/delivery trucks while making deliveries, personal vehicles plowing snow, etc. These are considered motor vehicles In-transport). Use <u>RELATED FACTORS-VEHICLE LEVEL</u> code <u>042 (Other Working Vehicle [Not Construction, Maintenance, Utility, Police, Fire, or EMS Vehicle])</u> to identify these vehicles.

A question may arise when a police, fire, or emergency medical vehicle is struck on the roadway while at the scene of a crash, at a traffic stop, or as traffic control. The question becomes, "has its function changed from being a motor vehicle in-transport to a working

vehicle?" The answer is "no." Treat these situations as a motor vehicle in-transport striking another motor vehicle in-transport. Use RELATED FACTORS-VEHICLE LEVEL code <u>041</u> (Police, Fire, or EMS Vehicle Working at the Scene of an Emergency or Performing <u>Other Traffic Control Activities</u>) to identify that this vehicle was struck while performing these work activities.

73 (Object That Had Fallen from Motor Vehicle In-Transport) is used when a motor vehicle impacts a non-fixed object at rest that is known to have been the cargo or part of *a* motor vehicle in-transport. Do not use this attribute for debris from a prior crash. This attribute does not include vehicle occupants that are ejected or fall from a motor vehicle in-transport (e.g., a motorcycle operator falling from a motorcycle). For people falling from a motor vehicle, see the non-collision event 05 (Fell/Jumped From Vehicle). For impacts involving two motor vehicles intransport resulting from cargo, people, or objects set in motion, see 54 (Motor Vehicle In-Transport Strikes or is Struck by Cargo, Persons, or Objects Set in Motion from/by another Motor Vehicle In-Transport). For at rest detached trailers (e.g., a detached semitrailer), use attribute 18 (Other Object [Not Fixed]). If cargo fell from a vehicle, came to rest, and was struck, this attribute would apply. If the cargo was at rest in the roadway as a result of a prior crash, use attribute 18 (Other Object [Not Fixed]).

91 (Unknown Object Not Fixed) is used when the event involves an object that is known to be not fixed but the case material does not identify the specific object.

Collision With Fixed Object:

The attributes <u>58 (Ground)</u>, <u>33 (Curb)</u>, <u>34 (Ditch)</u>, and <u>35 (Embankment)</u> are grouped under the Collision With Fixed Object subset because they are intended to be harmful events in the crash (i.e., they are associated with an impact that produces injury or damage).

When coding these events there must be fields on the or verbiage in the narrative such as "struck," "hit," "impacted," etc. that identify these as harmful.

For cases where the indication of the harmful event came from the narrative, there may not be a corresponding indication of damage in any police crash report field. In these instances, code the harmful event as stated in the narrative and include the corresponding attribute under <u>AREAS</u> OF IMPACT.

If there is no indication of damage from contact with the fixed object in fields on the police crash report and the narrative language does not identify it as a harmful event (e.g., "came to rest on the embankment," "drove through" or "drove across" the ditch and/or the embankment, or "drove over" the curb), do not code 33 (Curb), 34 (Ditch), or 35 (Embankment) in the SEQUENCE OF EVENTS.

- **17** (**Boulder**) is a rock of sufficient mass that when struck by a motor vehicle moves very little and remains basically intact. It may be considered as a fixed object.
- **19** (**Building**) is used when the vehicle impacts a roofed and walled structure built for permanent use. The type of construction material used is not of interest, nor is the use of the building.
- **58** (**Ground**) is used when the impact is with an earthen or paved surface off the roadway. **58** (**Ground**) is not to be entered when the harmful event is **01** (**Rollover/Overturn**).

- Indication of furrowing, gouging, or digging in of the tires/wheels is not sufficient to code the collision event **58** (**Ground**). For example, if the police crash report narrative states "the trucks tires dug into the turf causing the vehicle to roll over," the harmful event should be **01** (**Rollover/Overturn**).
- **20** (**Impact Attenuator/Crash Cushion**) is a device for controlling the absorption of energy released during vehicle collision (crash cushion). Its most common application involves the protection of fixed roadside objects such as bridge piers, elevated gores at exit ramps, etc. Examples include barrels filled with water or sand, and plastic collapsible structures.
- **50** (**Bridge Overhead Structure**) is used when striking the bottom of a bridge while traveling underneath it. See <u>Figure 20</u> for a diagram of Bridge Components.
- **21** (**Bridge Pier or Support**) is a square or round column of stone, concrete, brick, steel, or wood for supporting a bridge between abutments. This attribute includes the bridge abutments that are supporting the ends of a bridge. Abutments are generally designed for retaining or supporting the embankment under bridge ends and composed of stone, concrete, brick, or wood (includes the wing-walls). See <u>Figure 20</u> for a diagram of Bridge Components.
- **23** (**Bridge Rail [Includes Parapet]**) is a wooden, brick, stone, concrete, or metal fence-like structure that runs along the outermost edge of the roadway or sidewalk on the bridge or a rail constructed along the top of a parapet. Balustrade is often used synonymously with parapet. See **Figure 20** or a diagram of Bridge Components.
 - Bridges do not need to support another roadway. It may be an overpass for a train or even for a viaduct (water conduit).
- **24** (**Guardrail Face**) is a low barrier that has the primary longitudinal structure composed of metal (plates, mesh, box beam, etc.). A guardrail is differentiated from **25** (**Concrete Traffic Barrier**) by the material making up the greatest part of the longitudinal portion of the structure. In the case of guardrails, this is metal whereas in concrete barriers this is concrete (including concrete rails). If the crash report does not differentiate between guardrail face and end, default to guardrail face.
 - Guardrails that serve as bridge rails should be coded as **23** (**Bridge Rails** [**Includes Parapet**]).
- **52** (**Guardrail End**) is coded if a vehicle strikes the end of a guardrail. Guardrails can have a separate flat or rounded piece of metal attached to the end of an expanse of guardrail face.
- **25** (**Concrete Traffic Barrier**) refers to the longitudinal traffic barriers constructed of concrete. This includes all temporary concrete barriers regardless of location (i.e., temporary Jersey Barrier on a bridge being used to control traffic during bridge repair/construction). Concrete walls (vertical side surfaces) do not apply here (see <u>39 (Wall)</u>).
- **57** (**Cable Barrier**) refers to a flexible barrier system that uses several cables typically supported by steel posts. These barriers are designed to help lessen impact or keep vehicles within the confines of the road.
- **26** (Other Traffic Barrier) is used for all other longitudinal barriers such as wood or rock.
- **59** (**Traffic Sign Support**) is used when the post supporting a traffic sign, or the sign itself, is hit by a motor vehicle. This includes mile marker posts and elevated signs.

- **46** (**Traffic Signal Support**) is used when the post supporting a traffic signal, or the signal itself, is hit by a motor vehicle. *Use 46* (*Traffic Signal Support*) for a railroad crossing arm/gate.
- **30** (**Utility Pole/Light Support**) refers to supports for highway lighting systems, not including other private lighting systems (e.g., parking lot lights). **30** (**Utility Pole/Light Support**) is used for electrical, telephone, cable, and other utility pole-type supports.
- **31** (Other Post, Other Pole, or Other Supports) is used for posts other than highway signs, utility poles, or light supports (reflectors on poles alongside of roadway, parking meters, flag poles, etc.). For mailbox posts, use **53** (Mailbox). For fence posts, use **38** (Fence).
- 32 (Culvert) is a man-made drain or channel crossing under a road, sidewalk, etc.
- **33** (**Curb**) is a concrete or asphalt structure that borders the paved surface. It provides drainage control and pavement edge delineation. The face of the curb may be sloped or vertical. Ensure that the police crash report provides some indication that damage has occurred when a vehicle strikes a curb. This attribute includes collisions with curbing that forms raised islands, medians, or separators. For example, if the report identifies the vehicle struck/collided with a traffic island, channelizing island, raised median, or separator, use **33** (**Curb**) not **43** (**Other Fixed Object**).
- **34** (**Ditch**) includes any man-made structure for drainage purposes. A ditch ends where a culvert begins and resumes on the opposite side of the culvert. Reference to a "ditchbank," "embankment of the ditch," or "ditch embankment" should be coded under **34** (**Ditch**).
- **35** (**Embankment**) is a raised structure to hold back water, to carry a roadway, or the result of excavation or washout (including erosion) that may be faced with earth (or rock, stone, or concrete). A **35** (**Embankment**) can usually be differentiated from a <u>39 (Wall)</u> by its incline whereas a wall is usually vertical. However, there are exceptions to this, such as a retaining wall that may be inclined or a vertical embankment that is caused by a natural event such as a washout. In crashes involving a field approach or driveway crossing, use attribute **35** (**Embankment**) when no specific components (e.g., culverts or ditches) are identified.
- **38** (Fence) includes the fence posts. A Fence can be made of wood, chain link, stone, etc.
- **39 (Wall)** is a primarily vertical structure composed of concrete, metal, timber, or stone that is not part of a building or a fence but typically is used for retaining earth, abating noise, and separating areas (but not for containment as in the primary function of a fence). Also included as a **39 (Wall)** are headwalls (or endwalls) that are sometimes provided on culvert ends principally to protect the sides of the embankment around the culvert opening against erosion. This does not include wing-walls, which are attached to ends of bridge abutments and extend back at an angle from the roadway. Wingwalls should be coded as **21 (Bridge Pier or Support)**.
- **40** (**Fire Hydrant**) refers to the roadside device used by fire departments to provide water for fighting fires. Usually made of steel, these devices are also referred to as fire plugs or fire standpipes in some areas.
- **41** (**Shrubbery**) refers to vegetation that is usually of a woody multi-stemmed variety and in most instances, is low growing rather than tall. May also be called bushes. Some common examples are boxwood, hawthorn, and mountain laurel.
- **42** (**Tree** [**Standing Only**]) is used when a vehicle strikes a standing tree. This includes impacts from overhanging branches, tree stumps, or large cactus (Saguaro). If a vehicle strikes a fallen

tree, use 18 (Other Object [Not Fixed]). If a tree falls on a vehicle as it is passing by, use 16 (Thrown or Falling Object).

- **48** (**Snow Bank**) is used when snowfall and/or road plowing creates essentially fixed barriers of snow/ice that are not snow-covered earth or rock embankments.
- **53** (**Mailbox**) refers to a private residence mail/newspaper box including the post. A cluster of private mailboxes is included in this attribute. This element does not include U.S. Mailbox, which are typically blue and are for general public use. Code a U.S. Mailbox as **43** (**Other Fixed Object**).
- **43** (Other Fixed Object) is used when the object is fixed (considered a permanent structure) and is not described by any of the other fixed object attributes. This attribute excludes collisions with curbing that forms raised islands, medians, or separators (See also 33 (Curb).)

Examples:

- Bus shelters
- Pedestrian walkways
- Toll booths
- Guy wires supporting utility poles
- U.S. Mailbox for public use

Other examples would include property damage to standing crops, yards, and other vegetation (excluding: 41 (Shrubbery), 42 (Tree [Standing Only]), and 58 (Ground) if noted on the crash report.

When the case material identifies a non-specific object impact, apply the following guidelines. If the case material only identifies the harmful event as:

- "Fixed Object," then use 43 (Other Fixed Object).
- "Sign," then use **59** (**Traffic Sign Support**).
- "Post," then use 31 (Other Post, Other Pole, or Other Supports).
- "Signpost," then use **59** (**Traffic Sign Support**).
- "Bridge," then use 23 (Bridge Rail [Includes Parapet]) when the vehicle is on top of the bridge. When the vehicle is going under the bridge, use 21 (Bridge Pier or Support).
- "Barrier," then use 26 (Other Traffic Barrier).

93 (Unknown Fixed Object) is used when the event involves an object that is known to be fixed but the case material does not identify the specific object.

Not Reported/Unknown

98 (Harmful Event, Details Not Reported) is used when a harmful event was reported but the object classification was not reported. Check to see if 91 (Unknown Object Not Fixed), 93 (Unknown Fixed Object), or 99 (Reported as Unknown) are more appropriate for the situation.

(**Reported as Unknown**) is only used if the MOST HARMFUL EVENT is an event where the **SEQUENCE OF EVENTS** is **99** (**Reported as Unknown**).

Consistency Checks (See Section 400):

Error ID	IF	THEN
A041	CRASH MONTH equals 05-09,	SEQUENCE OF EVENTS, FIRST HARMFUL EVENT, MOST HARMFUL EVENT should not equal 48.
AL3P	UNIT TYPE equals 2-4,	MOST HARMFUL EVENT must not equal 54 for this vehicle.
AL5P	UNIT TYPE equals 1,	at least one event in the SEQUENCE OF EVENTS must equal the MOST HARMFUL EVENT.
AL7P	UNIT TYPE equals 2-4,	MOST HARMFUL EVENT should not equal 04-07, 16, 51, 72.
AL9P	there is one and only one parked vehicle (UNIT TYPE equals 2 or 3) in the crash,	MOST HARMFUL EVENT for the parked vehicle must not equal 14.

V39 - Fire Occurrence

FORMAT: 1 numeric

SAS NAME: Vehicle.FIRE_EXP, Person.FIRE_EXP, Parkwork.PFIRE

ELEMENT VALUES:

Codes	Attributes
0	No or Not Reported
1	Yes

Definition: This element identifies whether or not a fire in any way related to the crash occurred in this vehicle.

Remarks: For the purposes of this element, "vehicle" is defined to mean the power unit plus any and all trailing units associated with the power unit.

If it cannot be determined that a fire occurred in the vehicle during the crash, use **0** (**No or Not Reported**).

1 (Yes) is used when the case material indicate that this vehicle sustained fire damage.

In a multi-vehicle crash where a fire occurs, only the vehicles sustaining fire damage should be coded as 1 (Yes).

Fires that begin in a vehicle before the first impact may be counted. If fire damage is produced, **02** (**Fire/Explosion**) would be the <u>FIRST HARMFUL EVENT</u>.

If the <u>MOST HARMFUL EVENT</u> for this vehicle is <u>02 (Fire/Explosion)</u>, or a fire in the vehicle is produced by damage in the crash, use **1 (Yes)**. The involved vehicles may be at rest for a short period of time.

If the vehicles are at rest long enough to raise a question about the fire's relationship to the crash's damage-producing events, use **0** (No or Not Reported).

Examples for Fire Occurrence:

Examples	Code
Car (V#1) strikes tank truck (V#2) in rear, the car catches on fire with no fire occurring for the tank truck.	V#1 - 1 (Yes) V#2 - 0 (No or Not Reported)
Vehicle #1 catches fire, causing driver to strike vehicle #2.	V#1 - 1 (Yes) V#2 - 0 (No or Not Reported)
Vehicle #1 catches fire, causing driver to stop vehicle in roadway and all occupants exit vehicle. Two minutes later, a second car (V#2) rearends the stopped car and its driver is killed from collision. (Attributes reflect the second crash.)	V#1 - 0 (No or Not Reported) V#2 - 0 (No or Not Reported)

Consistency Checks (See Section 400):

Error ID	IF	THEN
4Z0P	SEQUENCE OF EVENTS equals 02,	FIRE OCCURRENCE for this vehicle must equal 1.
4Z1P	UNIT TYPE equals 1, and FIRE OCCURRENCE equals 1,	at least one SEQUENCE OF EVENTS must equal 02.
540F	FIRST HARMFUL EVENT equals 02,	the vehicle involved in the FIRST HARMFUL EVENT must have FIRE OCCURRENCE equal to 1.

V40 - Motor Vehicle Automated Driving System(s)

FORMAT: 3 sets, 2 numeric

SAS NAME: Vehicle.ADS_PRES; Vehicle.ADS_LEV; Vehicle.ADS_ENG

ELEMENT VALUES:

Subfield 1 - Automation System or Systems Present in Vehicle

Codes	Attributes
00	<u>No</u>
01	<u>Yes</u>
98	Not Reported
99	Reported as Unknown

Subfield 2 - Highest Automation System Level Present in Vehicle

Codes	Attributes
00	Level 0 - No Automation
01	Level 1 - Driver Assistance Present
02	Level 2 - Partial Automation Present
03	Level 3 - Conditional Automation Present
04	Level 4 - High Automation Present
05	Level 5 - Full Automation Present
09	Automation Present, Level Unknown
98	Not Reported
99	Reported as Unknown

Subfield 3 - Highest Automation System Level Engaged at Time of Crash

Codes	Attributes
00	Level 0 - No Automation
01	Level 1 - Driver Assistance Engaged
02	Level 2 - Partial Automation Engaged
03	Level 3 - Conditional Automation Engaged
04	Level 4 - High Automation Engaged
05	Level 5 - Full Automation Engaged
06	Automation System(s) Engaged, Level Unknown
09	Automation System(s) Present, Unknown if Any Engaged

Codes	Attributes
90	Automation System(s) Present, Not Engaged
98	Not Reported
99	Reported as Unknown

Definition: The hardware and software that are collectively capable of performing part of or all the dynamic driving task on a sustained basis. This term, Automated Driving System (ADS), is used generically to describe any system capable of level 1-5 driving automation. (SAE 2016) See **Figure 21** below.

Remarks:

Dynamic driving task includes the operational (steering, braking, accelerating, monitoring the vehicle and roadway) and tactical (responding to events, determining when to change lanes, turn, use signals, etc.) aspects of the driving task, but not the strategic (determining destinations and waypoints) aspect of the driving task.

Driving mode is a type of driving scenario with characteristic dynamic driving task requirements (expressway merging, high-speed cruising, low speed traffic jam, closed-campus operations, etc.).

Request to intervene is notification by the Automated Driving System (ADS) to a human driver that s/he should promptly begin or resume performance of the dynamic driving task.

Subfield 1 - Automation System or Systems Present in Vehicle

Indicates the presence of an Automation System or Systems in this vehicle.

00 (**No**) is used when an Automation System or Systems is/are not present in this vehicle. If Subfield 1 is coded **00** (**No**), then Subfield 2 and Subfield 3 must be coded 00 (Level 0 - No Automation).

01 (Yes) is used when an Automation System or Systems is/are present in this vehicle.

98 (Not Reported) Check to see if 00 (No) or 99 (Reported as Unknown) are more appropriate for the situation.

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "Not Reported."

Code **98** (**Not Reported**) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).

If Subfield 1 is coded **98** (**Not Reported**), then **Subfield 2** and **Subfield 3** must also be coded **98** (**Not Reported**).

99 (Reported as Unknown) is used if the investigating officer reported the presence of automated driving systems in this vehicle as unknown. If Subfield 1 is coded 99 (Reported as Unknown), then Subfield 2 and Subfield 3 must also be coded 99 (Reported as Unknown).

Subfield 2 - Highest Automation System Level Present in Vehicle

Indicates the highest level of Automation present in this vehicle. These systems do not have to be engaged in this vehicle at the time of the crash. See <u>Figure 21</u> for automation level determination.

- **00** (Level 0 No Automation): is used when Subfield 1 is coded **00** (No).
- **01** (**Level 1 Driver Assistance Present**): Driver assistance system of either steering or acceleration/ deceleration using information about the driving environment and with the expectation that the human driver performs all remaining aspects of the dynamic driving task. See **Figure 21** below.
- **02** (**Level 2 Partial Automation Present**): The driving mode-specific execution by one or more driver assistance systems of both steering and acceleration/deceleration using information about the driving environment and with the expectation that the human driver performs all remaining aspects of the dynamic driving task. See **Figure 21**.
- **03** (**Level 3 Conditional Automation Present**): The driving mode-specific performance by an automated driving system of all aspects of the dynamic driving task with the expectation that the human driver will respond appropriately to a request to intervene. See <u>Figure 21</u> below.
- **04** (**Level 4 High Automation Present**): The driving mode-specific performance by an automated driving system of all aspects of the dynamic driving task, even if a human driver does not respond appropriately to a request to intervene. See **Figure 21** below.
- **05** (**Level 5 Full Automation Present**): The full-time performance by an automated driving system of all aspects of the dynamic driving task under all roadway and environmental conditions that can be managed by a human driver. See **Figure 21** below.
- **09** (Automation Present, Level Unknown) is used when it is known that an Automation System was present; however, the level of automation is unknown.
- **98** (Not Reported) is used when Subfield 1 is coded **98** (Not Reported).
- 99 (Reported as Unknown) is used when Subfield 1 is coded 99 (Reported as Unknown).

Subfield 3 - Highest Automation System Level Engaged at Time of Crash

Indicates the highest level of Automation that was known to have been engaged in this vehicle at the time of the crash. See <u>Figure 21</u> for automation level determination.

- **00** (Level 0 No Automation): is used when Subfield 1 is coded 00 (No).
- **01** (**Level 1 Driver Assistance Engaged**): Driver assistance system of either steering or acceleration/ deceleration using information about the driving environment and with the expectation that the human driver performs all remaining aspects of the dynamic driving task. See **Figure 21** below.

- **02** (**Level 2 Partial Automation Engaged**): The driving mode-specific execution by one or more driver assistance systems of both steering and acceleration/deceleration using information about the driving environment and with the expectation that the human driver perform all remaining aspects of the dynamic driving task. See **Figure 21** below.
- **03** (**Level 3 Conditional Automation Engaged**): The driving mode-specific performance by an automated driving system of all aspects of the dynamic driving task with the expectation that the human driver will respond appropriately to a request to intervene. See <u>Figure 21</u> below.
- **04** (**Level 4 High Automation Engaged**): The driving mode-specific performance by an automated driving system of all aspects of the dynamic driving task, even if a human driver does not respond appropriately to a request to intervene. See **Figure 21** below.
- **05** (**Level 5 Full Automation Engaged**): The full-time performance by an automated driving system of all aspects of the dynamic driving task under all roadway and environmental conditions that can be managed by a human driver. See **Figure 21** below.
- **06** (**Automation System(s) Engaged, Level Unknown**) is used when it is known that an Automation System was engaged at the time of the crash; however, the level of automation is unknown.
- **09** (Automation System(s) Present, Unknown if Any Engaged) is used when it is known that an Automation System was present in this vehicle; however, it is Unknown if it was engaged at the time of this crash.
- **90** (Automation System(s) Present, Not Engaged) is used when it is known that an Automation System or Systems is/are present in this vehicle, but none are engaged at the time of the crash.
- **98** (**Not Reported**) is used when Subfield 1 is coded **98** (**Not Reported**).
- 99 (Reported as Unknown) is used when Subfield 1 is coded 99 (Reported as Unknown).

SAE	Name	Narrative Definition	Execution of Steering and Acceleration/ Deceleration	Monitoring of Driving Environment	Fallback Performance of Dynamic Driving Task	System Capability (Driving Modes)
Huma	n driver monit	ors the driving environment				
0	No Automation	the full-time performance by the human driver of all aspects of the dynamic driving task, even when enhanced by warning or intervention systems	Human driver	Human driver	Human driver	n/a
1	Driver Assistance	the driving mode-specific execution by a driver assistance system of either steering or acceleration/deceleration using information about the driving environment and with the expectation that the human driver perform all remaining aspects of the dynamic driving task	Human driver and system	Human driver	Human driver	Some driving modes
2	Partial Automation	the driving mode-specific execution by one or more driver assistance systems of both steering and acceleration/ deceleration using information about the driving environment and with the expectation that the human driver perform all remaining aspects of the dynamic driving task	System	Human driver	Human driver	Some driving modes
Autor	nated driving s	ystem ("system") monitors the driving environment		1		
3	Conditional Automation	the driving mode-specific performance by an automated driving system of all aspects of the dynamic driving task with the expectation that the human driver will respond appropriately to a request to intervene	System	System	Human driver	Some driving modes
4	High Automation	the driving mode-specific performance by an automated driving system of all aspects of the dynamic driving task, even if a human driver does not respond appropriately to a request to intervene	System	System	System	Some driving modes
5	Full Automation	the full-time performance by an automated driving system of all aspects of the dynamic driving task under all roadway and environmental conditions that can be managed by a human driver	System	System	System	All driving modes

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Figure 21: SAE International's Levels of Driving Automation; SAE International Standard J3016 (2014)

Consistency Checks (See Section 400):

Error IF	THEN
[[VEHICLE MODEL YEAR is greater than or equal to 2000 and vPIC BODY CLASS does not equal 004 (Low Speed Vehicle (LSV)/ Neighborhood Electric Vehicle (NEV)), 006 (Motorcycle - Scaoter), 069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring / Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 (Off-Road Vehicle - Dirt Bike / Off-Road), 085 (Motorcycle - Dual Sport / Adventure / Supermoto / On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small / Minibike), 088 (Off-road Vehicle - Go Kart), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 097 (Off-road Vehicle - Snowmobile), 098 (Motorcycle - Street), 100 (Motorcycle - Enclosed Three Wheeled / Enclosed Autocycle), 103 (Motorcycle - Unenclosed Three Wheeled / Open Autocycle), 104 (Motorcycle - Moped), 105 (Off-road Vehicle - Recreational Off-Road Vehicle (ROV)), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 124 (Off-road Vehicle - Golf Cart), 125 (Motorcycle - Unknown Body Type), 126 (Off-road Vehicle - Farm Equipment), 127 (Off-road Vehicle - Farm Equipment), 127 (Off-road Vehicle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Standard), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 085 (Motorcycle - Dual Sport / Adventure / Supermoto / On/Off-Road), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 109 (Motorcycle - Unknown Body Type), and VEHICLE MODEL YEAR is greater than 2020]], and STATE NUMBER does not equal 8 (CO), 17 (IL), 23 (ME), 26 (MI), or 28 (MS),	MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S) Subfield 1 should not equal 00 or 99.

Error ID	IF	THEN
U700	UNLIKELY: MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S)- Subfield 2 or MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S)- Subfield 3 equals 3, 4, or 5.	
U710	UNLIKELY: MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S)- Subfield 1 equals 01 and VEHICLE MODEL YEAR is between 2000 and 2012.	
VA90	MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S)-Subfield 1 equals 01,	MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S)-Subfield 2 and MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S)-Subfield 3 must not equal 00, 98, or 99.
VA91	MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S)-Subfield 1 equals 00,	MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S)-Subfield 2 and MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S)-Subfield 3 must equal 00.
VA92	MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S)-Subfield 1 equals 98,	MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S)-Subfield 2 and MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S)-Subfield 3 must equal 98.
VA93	MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S)-Subfield 1 equals 99,	MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S)-Subfield 2 and MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S)-Subfield 3 must equal 99.
VA94	MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S)-Subfield 1 equals 01 and MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S)-Subfield 2 equals [2-5],	MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S)-Subfield 3 must not be a greater number than Subfield 2 unless equal to 06, 09, or 90.
VA95	VEHICLE MODEL YEAR is less than 2000,	MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S) Subfield 1 must equal 00.
VA96	VEHICLE MODEL YEAR is between 2000 and 2012 and MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S)-Subfield 1 equals 01,	MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S)-Subfield 2 must equal 01.
VA97	MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S)-Subfield 2 equals 1,	MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S)-Subfield 3 must equal 1, 09, 90.

Error ID	IF	THEN
VA98	vPIC BODY CLASS equals 006 (Motorcycle - Standard), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring / Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 085 (Motorcycle - Dual Sport / Adventure / Supermoto / On/Off-Road), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 109 (Motorcycle - Cross Country), or 125 (Motorcycle - Unknown Body Type), and VEHICLE MODEL YEAR is less than 2021,	MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S) Subfield 1 must equal 00.
VA99	vPIC BODY CLASS equals 04 (Low Speed Vehicle (LSV) / Neighborhood Electric Vehicle (NEV)), 012 (Motorcycle - Scooter), 069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 088 (Off-road Vehicle - Go Kart), 097 (Off-road Vehicle - Snowmobile), 104 (Moped), 105 (Off-road Vehicle - Recreational Off-Road Vehicle (ROV)), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 124 (Off-road Vehicle - Golf Cart), 126 (Off-road Vehicle - Farm Equipment), 127 (Off-road Vehicle - Construction Equipment), 996 (Motorized Bicycle), or 997 (Other),	MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S) Subfield 1 must equal 00.

V41 - Related Factors - Vehicle Level

FORMAT: 3 numeric. Select All That Apply.

SAS NAME: VehicleSF.VEHICLESF, PVehicleSF.PVEHICLESF

ELEMENT VALUES:

Codes	Attributes
0 00	None

Special Vehicle Flags:

Codes	Attributes
0 30	Multi-Wheeled Motorcycle Conversion
* 0 32	Vehicle Registration for Handicapped
0 33	Vehicle Being Pushed by Non-Motorist
0 35	Reconstructed/Altered Vehicle
* 0 37	Transporting Children to/from Head Start/Day Care
0 39	Highway Construction, Maintenance, or Utility Vehicle, In-Transport (Inside or Outside Work Zone)
0 41	Police, Fire, or EMS Vehicle Working at the Scene of an Emergency or Performing Other Traffic Control Activities
0 42	Other Working Vehicle (Not Construction, Maintenance, Utility, Police, Fire, or EMS Vehicle)
0 44	Adaptive Equipment
0 45	Slide-in Camper
0 29	Default Code Used for Vehicle Numbering
9 99	Reported as Unknown

*FARS ONLY ATTRIBUTES

Definition: This element identifies factors related to this vehicle expressed in the case material.

Remarks: Code information provided in the case material.

Attributes 029-045 are flags used to identify this vehicle as one with special circumstances. They do not necessarily imply that this circumstance caused the crash. RELATED FACTORS-DRIVER LEVEL <u>024 (Operating Without Required Equipment)</u> can be coded in conjunction with vehicle level conditions.

000 (None) is used when no applicable related factors are noted in the case material.

030 (Multi-Wheeled Motorcycle Conversion) is used when the case material identifies this vehicle is a motorcycle that is converted to a multi-wheeled configuration from a 2-wheeled **Original Equipment Manufacturer** (OEM) motorcycle. These vehicles will **not** have a **NCSA** BODY TYPE attribute **82** (Three-Wheeled Motorcycle [2 Rear Wheels]).

*032 (Vehicle Registration for Handicapped) is used when the case material identifies this vehicle is registered and/or specially equipped for a *person with a disability*. This information can be derived from the vehicle registration. This excludes placards that are usually hung from the rear-view mirror and can be moved from one vehicle to the other.

033 (Vehicle Being Pushed by Non-Motorist) is used when the case material identifies this vehicle is being pushed by a non-motorist with or without a driver at the controls.

045 (**Slide-in Camper**) A slide-in camper is a unit that mounts within a pickup bed. Pickup bed caps, tonneau covers, or frame mounted campers are not applicable for this code.

035 (Reconstructed/Altered Vehicle) is used when the case material identifies this vehicle is a home-made vehicle constructed from vehicle components or is significantly altered in some way. These vehicles may have a standard VIN, or the State may issue a number in place of the VIN for their registration.

Examples include:

- The addition of enhanced performance engine chips or accessories.
- Significant altering of suspension system ("monster trucks," "low riders," etc.).
- Hydraulic systems or tilted/canted wheels.

*037 (Transporting Children to/from Head Start/Day Care) is used when the case material identifies this vehicle is used to transport children to Day Care/Head Start in vehicles arranged, operated, or owned by a Head Start or Day Care Program. This attribute is not intended for children being transported to daycare by family/friends in personal vehicles.

039 (Highway Construction, Maintenance, or Utility Vehicle, In-Transport [Inside or Outside Work Zone]) is used when the case material identifies this vehicle is a highway construction, maintenance, or utility vehicle that is in-transport at the time it became involved in the crash. **Note:** This is **only** used when the vehicle is considered to **not** be a working motor vehicle and is "**in-transport**." For example, while moving from one job site to another job site or returning to the depot after concluding work activities. This attribute refers to vehicles owned by a local, county, State, or Federal agency. Private vehicles are excluded.

041 (Police, Fire, or EMS Vehicle Working at the Scene of an Emergency or Performing Other Traffic Control Activities) is used when the case material identifies this vehicle is a police car, fire truck, or ambulance performing some work function related to working at the scene of an emergency or acting as traffic control.

Examples include:

- Police car, fire truck, or ambulance at the scene of a crash.
- Fire truck at the scene of a fire.
- Police car leading or trailing a convoy for a funeral.
- Police car blocking the entrance to a parade route.
- Police car at a check point.

042 (Other Working Vehicle (Not Construction, Maintenance, Utility, Police, Fire, or EMS Vehicle) is used when the case material identifies this vehicle is performing some other work activity at the time it was involved in the crash and that activity is somehow associated with the crash.

Examples include:

- Garbage truck picking up trash.
- Personal pickup with a snow blade plowing.
- UPS or postal vehicle stopped in the roadway while making a delivery.
- Food delivery truck making a delivery.

044 (Adaptive Equipment) is used when the case material identifies this vehicle is equipped with adaptive equipment for operator(s) with a disability.

Examples include:

- Extended brake/gas pedals.
- Special steering apparatus.
- Hand brakes or accelerator, etc.

029 (**Default Code Used for Vehicle Numbering**) is used when debris is set in motion as the result of a vehicle-to-vehicle collision and subsequently produces a harmful event for this vehicle and it cannot be determined from the case material that vehicle's debris hit this vehicle. See guidance under AREAS OF IMPACT - INITIAL CONTACT POINT/DAMAGED AREAS.

999 (**Reported as Unknown**) is used when "unknown" is reported for the vehicle condition in the police crash report itself and none of the *other attributes apply*.

Consistency Checks (See Section 400):

Error ID	IF	THEN
1D2P	SPECIAL USE equals 12 or 21,	at least one RELATED FACTORS - VEHICLE LEVEL must equal 0 42.
1G0P	any RELATED FACTORS-VEHICLE LEVEL equals 000 or 999,	only that one code and no other must be coded.
1Z2P	any SEQUENCE OF EVENTS equals 01, and vPIC BODY CLASS does not equal 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport / Adventure / Supermoto / On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 104 (Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle), or any RELATED FACTORS-VEHICLE LEVEL equals 030,	ROLLOVER must equal 1, 2, or 9.
4G0P	A RELATED FACTORS-VEHICLE LEVEL between 030 and 045 can be used only once per vehicle form.	

Error ID	IF	THEN
5A0P	vPIC BODY CLASS equals 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport / Adventure / Supermoto / On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 104 (Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle), and any RELATED FACTORS - VEHICLE LEVEL does not equal 030,	ROLLOVER must equal 0.
6G0Q	any RELATED FACTORS - VEHICLE LEVEL equals 030,	vPIC BODY CLASS must equal 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport / Adventure / Supermoto / On/Off- Road), 086 (Off-Road Vehicle - Enduro (Off- road long-distance racing)), 087 (Motorcycle - Small/Minibike), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 104 (Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle) for this vehicle.
9C1P	UNIT TYPE equals 4,	RELATED FACTORS-VEHICLE LEVEL must not equal <i>0</i> 39.

Error ID	IF	THEN
V031	RELATED FACTORS-VEHICLE LEVEL equals 039,	vPIC BODY CLASS should equal 011 (Truck), 060 (Pickup), 66 (Truck-Tractor), 095 (Cargo Van), 111 (Step Van / Walk-in Van), 127 (Off-road Vehicle - Construction Equipment), or 997 (Other), or FINAL STAGE BODY CLASS should equal 011 (Truck), 060 (Pickup), 66 (Truck-Tractor), 095 (Cargo Van), 111 (Step Van/Walk-in Van), or 997 (Other (Specify:)).
V033	RELATED FACTORS-VEHICLE LEVEL equals 045,	vPIC BODY CLASS must equal 060 (Pickup), or FINAL STAGE BODY CLASS must equal 060 (Pickup).
V594	RELATED FACTORS - VEHICLE LEVEL equals <i>0</i> 29,	NUMBER OF VEHICLE FORMS SUBMITTED must be greater than 002.
V595	RELATED FACTORS - VEHICLE LEVEL equals 029 for this vehicle,	at least one other vehicle in the crash must have an AREA OF IMPACT equal to 18, 19, or 20 associated with an event involving this vehicle in the crash events table.
VH06	vPIC BODY CLASS equals 083 (Motorcycle - Trike), 100 (Motorcycle - Enclosed Three Wheeled / Enclosed Autocycle), or 103 (Motorcycle - Unenclosed Three Wheeled / Open Autocycle),	RELATED FACTORS-VEHICLE LEVEL must not equal 030.

Consistency Checks (FARS Only) (See Section 400):

Error ID	IF	THEN
6G0P	RELATED FACTORS-VEHICLE LEVEL equals 032,	REGISTRATION STATE must not equal 00, 92.
AS0P	RELATED FACTORS-VEHICLE LEVEL equals 032,	REGISTERED VEHICLE OWNER must not equal 0.
V590	RELATED FACTORS-VEHICLE LEVEL equals 032,	REGISTERED VEHICLE OWNER should equal 1-3.
V592	RELATED FACTORS-VEHICLE LEVEL equals 037,	REGISTRATION STATE should not equal 00, 92.
V593	RELATED FACTORS-VEHICLE LEVEL equals 037,	REGISTERED VEHICLE OWNER should not equal 0.

Driver Level Data Elements

- D1 State Number FARS Only
- D2 Consecutive Number FARS Only
- D3 Vehicle Number Driver Level
- <u>D4 Driver Presence</u>
- D5 Driver's License State FARS Only
- D6 Driver's ZIP Code
- D7 Non-CDL License Type/Status FARS Only
- D8 Commercial Motor Vehicle License Status FARS Only
- D9 Compliance with CDL Endorsements FARS Only
- D10 License Compliance with Class of Vehicle FARS Only
- D11 Compliance with License Restrictions FARS Only
- D12 Driver Height FARS Only
- D13 Driver Weight FARS Only
- D14, D15, D16, D17, D18 Driver Level Counters FARS Only
- D19, D20 Date of *Oldest* and *Most Recent* Crash, Suspension, Conviction FARS Only
- D21 Violations Charged
- D22 Speeding Related
- D23 Condition (Impairment) at Time of Crash
- D24 Related Factors Driver Level

D3 - Vehicle Number - Driver Level

FORMAT: 3 numeric

SAS NAME: Vehicle.VEH_NO

ELEMENT VALUES:

Codes	Attributes
000-999	Assigned Number

Definition: This element identifies the vehicle number associated with this driver.

Remarks:

- Must be coded on an original submission
- System-Generated (*RBIS* Only)
- See <u>Vehicle Number-Vehicle Level</u> for assignments numbers.
- FOR DRIVERLESS, PARKED/STOPPED OFF ROADWAY/WORKING MOTOR VEHICLES, AND MOTOR VEHICLES IN MOTION OUTSIDE THE TRAFFICWAY, ONLY CODE DRIVER PRESENCE AND RELATED FACTORS-DRIVER LEVEL.

Consistency Check (See Section 400):

Error ID	Error Message
CSI2	There must be exactly one DRIVER LEVEL FORM corresponding to each VEHICLE LEVEL FORM.

D4 - Driver Presence

FORMAT: 1 numeric

SAS NAME: Vehicle.DR_PRES

ELEMENT VALUES:

Codes	Attributes
0	No Driver Present/Not Applicable
1	Yes
9	<u>Unknown</u>

Definition: This element identifies whether or not a driver was present in this vehicle at the onset of the unstabilized situation.

Remarks:

0 (**No Driver Present/Not Applicable**) is used when there is no person who was controlling this vehicle at the time of the crash.

Also, use **0** (**No Driver Present/Not Applicable**) when <u>UNIT TYPE</u> for this vehicle is not a motor vehicle in-transport (<u>UNIT TYPE</u> attributes "2, 3, 4"). Use this attribute regardless of the presence of an occupant in the driver's seat.

1 (Yes) is used when there is a person who is physically controlling the vehicle at the onset of the unstabilized situation for this crash. Do not use this attribute for a child sitting in the driver's seat unless the case material indicate the child was in control of the vehicle. Hit-and-run drivers are included in this attribute. A driver under medical distress would be included. This attribute includes when it is known there was a driver, but it is unknown which occupant was the driver at the time of the crash.

9 (**Unknown**) is used when it is unknown if there was a driver present in the vehicle at the time of the crash.

If coded **0** (**No Driver Present/Not Applicable**) or **9** (**Unknown**), all other elements on the Driver Level except <u>RELATED FACTORS-DRIVER LEVEL</u> must be left blank. A Person Level - Occupant of a Motor Vehicle form with <u>PERSON TYPE</u> equal to **01** (**Driver of a Motor Vehicle In-Transport**) must not be submitted for that vehicle.

If coded **0** (**No Driver Present/Not Applicable**) or **9** (**Unknown**), <u>RELATED FACTORS-DRIVER LEVEL</u> are coded "**0**00" unless <u>UNIT TYPE</u> is equal to <u>1</u> (<u>Motor Vehicle In-Transport [Inside or Outside the Trafficway]</u>). In such a case, only select <u>RELATED FACTORS-DRIVER LEVEL</u> that are applicable.

Consistency Checks (See Section 400):

Error ID	IF	THEN
1H6F	DRIVER PRESENCE equals 0, 9,	VIOLATIONS CHARGED must be blank.
1HFF	DRIVER PRESENCE equals 0, 9,	SPEEDING RELATED must be blank.
1HJF	DRIVER'S VISION OBSCURED BY equals 95,	DRIVER PRESENCE must equal 0 or 9.
2F0F	NUMBER OF OCCUPANTS equals 00,	DRIVER PRESENCE must equal 0.
2H0F	DRIVER PRESENCE equals 0, 9,	RELATED FACTORS-DRIVER LEVEL must not equal 004, 008, 010, 012, 013, 015, 016, 019, 052, 053, 058, 059, 073, 074, 077-088, 094-097.
2H1F	UNIT TYPE equals 1, and DRIVER PRESENCE equals 0 or 9,	DRIVER'S VISION OBSCURED BY must equal 95.
3BAP	UNIT TYPE equals 1, and DRIVER PRESENCE equals 0,	CRASH TYPE must equal 00, 04, 09, 15, 32, 42, 48, 52, 62, 66, 74, 84, 90, 93, or 98.
3BGP	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 00,	DRIVER PRESENCE must equal 0 or 9.
3H0F	DRIVER PRESENCE equals 1,	there must be one and only one Person Level form for that vehicle with PERSON TYPE equal to 01, or there must be no Person Level form for that vehicle with PERSON TYPE equal to 01 and at least two Person Level forms for that vehicle with PERSON TYPE equal to 09.
4H0F	DRIVER PRESENCE equals 0, 9,	there must not be a Person Level form for that vehicle with PERSON TYPE equal to 01.
5L0F	RELATED FACTORS-DRIVER LEVEL equals 0 20,	DRIVER PRESENCE must not equal 1, 9.
5L1F	RELATED FACTORS-DRIVER LEVEL equals 004, 008, 010, 012, 013, 015, 016, 019, 052, 053, 058, 059, 073, 074, 077-088, 094-097,	DRIVER PRESENCE must not equal 0 or 9.
6H0P	DRIVER PRESENCE equals 0, 9,	DRIVER'S ZIP CODE must be blank.
6H1P	DRIVER PRESENCE equals 0, 9,	CONDITION (IMPAIRMENT) AT TIME OF CRASH (D23) must be blank.
7B0F	JACKKNIFE equals 2, 3,	DRIVER PRESENCE must equal 1.
9A3P	UNIT TYPE equals 2-4,	DRIVER PRESENCE must equal 0.
9C4P	UNIT TYPE equals 1, and DRIVER PRESENCE equals 0 or 9,	DRIVER MANEUVERED TO AVOID must only equal 95.

Error ID	IF	THEN
9C5P	DRIVER MANEUVERED TO AVOID equals 95,	DRIVER PRESENCE must equal 0 or 9.
A080	DRIVER PRESENCE equals 0, and FIRST HARMFUL EVENT equals 12, and NUMBER OF VEHICLE FORMS SUBMITTED equals 002,	one RELATED FACTORS-DRIVER LEVEL should equal 0 20 or 0 54.
AZ20	UNIT TYPE equals 1, and DRIVER PRESENCE equals 0 or 9,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 00.
ВЈ1Р	UNIT TYPE equals 1, and DRIVER PRESENCE equals 0 or 9,	DRIVER DISTRACTED BY must equal 16.
BJ2P	UNIT TYPE equals 1, and DRIVER PRESENCE equals 1,	DRIVER DISTRACTED BY must not equal 16 or blank.
ВЈЗР	UNIT TYPE equals 1, and DRIVER DISTRACTED BY equals 16,	DRIVER PRESENCE must equal 0 or 9.
BJ5P	If UNIT TYPE equals 1 and HIT AND RUN equals 1,	then DRIVER PRESENCE should not equal 0.
FD0F	DRIVER PRESENCE is blank,	case status is flawed.
PB30	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 220,	at least one DRIVER PRESENCE must equal 0 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
PB60	PERSON TYPE equals 05, 11, 12, or 13, and DRIVER PRESENCE equals 0 for the motor vehicle which strikes the non-motorist,	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 220.
PB61	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 220,	DRIVER PRESENCE should equal 0 for the motor vehicle striking the non-motorist.

Consistency Checks (FARS Only) (See Section 400):

Error ID	IF	THEN
1H0F	DRIVER PRESENCE equals 0, 9,	PREVIOUS SPEEDING CONVICTIONS must be blank.
1H1F	DRIVER PRESENCE equals 0, 9,	DRIVER'S LICENSE STATE must be blank.
1H2F	DRIVER PRESENCE equals 0, 9,	LICENSE COMPLIANCE WITH CLASS OF VEHICLE must be blank.
1H3F	DRIVER PRESENCE equals 0, 9,	NON-CDL LICENSE STATUS and COMMERCIAL MOTOR VEHICLE LICENSE STATUS must be blank.
1H4F	DRIVER PRESENCE equals 0, 9,	COMPLIANCE WITH LICENSE RESTRICTIONS must be blank.
1H7F	DRIVER PRESENCE equals 0, 9,	PREVIOUS RECORDED CRASHES must be blank.
1H8F	DRIVER PRESENCE equals 0, 9,	all three Subfields of PREVIOUS RECORDED SUSPENSIONS AND REVOCATIONS must be blank.
1H9F	DRIVER PRESENCE equals 0, 9,	PREVIOUS DWI CONVICTIONS must be blank.
1HAF	DRIVER PRESENCE equals 0, 9,	PREVIOUS OTHER MOVING VIOLATION CONVICTIONS must be blank.
1HBF	DRIVER PRESENCE equals 0, 9,	DATE OF <i>MOST RECENT</i> CRASH, SUSPENSION, CONVICTION must be blank.
1HCF	DRIVER PRESENCE equals 0, 9,	DATE OF <i>OLDEST</i> CRASH, SUSPENSION, CONVICTION must be blank.
1HDF	DRIVER PRESENCE equals 0, 9,	DRIVER HEIGHT (feet and inches) must equal blank.
1HEF	DRIVER PRESENCE equals 0, 9,	DRIVER WEIGHT must equal blank.
BJ0P	DRIVER PRESENCE equals 0, 9,	COMPLIANCE WITH LICENSE ENDORSEMENTS must be blank.
BN0P	DRIVER PRESENCE equals 0, 9,	COMMERCIAL MOTOR VEHICLE LICENSE STATUS must be blank.
CB0P	REGISTERED VEHICLE OWNER equals 6,	DRIVER PRESENCE must equal 0.
D330	DRIVER PRESENCE equals 0, and REGISTRATION STATE is not equal to 00, 92, 99,	REGISTERED VEHICLE OWNER should equal 3-6.

D5 - Driver's License State - FARS Only

FORMAT: 2 numeric

SAS NAME: Vehicle.L_STATE

ELEMENT VALUES:

Codes	Attributes
01	Alabama
02	Alaska
03	American Samoa
04	Arizona
05	Arkansas
06	California
08	Colorado
09	Connecticut
10	Delaware
11	District of Columbia
12	Florida
13	Georgia
14	Guam
15	Hawaii
16	Idaho
17	Illinois
18	Indiana
19	Iowa
20	Kansas
21	Kentucky
22	Louisiana
23	Maine
24	Maryland
25	Massachusetts
26	Michigan
27	Minnesota
28	Mississippi
29	Missouri
30	Montana
31	Nebraska
32	Nevada

Codes	Attributes
33	New Hampshire
34	New Jersey
35	New Mexico
36	New York
37	North Carolina
38	North Dakota
39	Ohio
40	Oklahoma
41	Oregon
42	Pennsylvania
43	Puerto Rico
44	Rhode Island
45	South Carolina
46	South Dakota
47	Tennessee
48	Texas
49	Utah
50	Vermont
51	Virginia
52	Virgin Islands
53	Washington
54	West Virginia
55	Wisconsin
56	Wyoming
57	Other US Driver's License
93	Indian Nation
94	US Government
95	Canada
96	Mexico
97	Other Foreign Country
98	Not Reported
99	Reported as Unknown

Definition: This element identifies the State of issue for the license held by this driver.

Remarks: If no license is required or driver is not licensed, use the resident State of the driver. U.S. Government is used to indicate the license was issued by the U.S. Government, such as military or State Department Foreign Service.

57 (**Other US Driver's License**) is used for U.S. Territories not identified by their own attribute (Other U.S. Territories, or U.S.-owned outlying areas such as Northern Marianas Islands, Wake Islands, etc.).

98 (Not Reported) Check to see if 99 (Reported as Unknown) is more appropriate for the situation.

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**."

Code **98** (**Not Reported**) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).

Error ID	IF	THEN
1H1F	DRIVER PRESENCE equals 0, 9,	DRIVER'S LICENSE STATE must be blank.
1I0P	DRIVER'S LICENSE STATE equals 99,	NON-CDL LICENSE STATUS must not equal 0-4, 6, and COMMERCIAL MOTOR VEHICLE LICENSE STATUS must not equal 00-08.
1K0P	DRIVER'S LICENSE STATE equals 99,	LICENSE COMPLIANCE WITH CLASS OF VEHICLE must not equal 0-3.
2I0P	DRIVER'S LICENSE STATE equals 99,	COMPLIANCE WITH LICENSE RESTRICTIONS must not equal 0-3.
3I2P	DRIVER'S LICENSE STATE equals 98, 99,	all driver history counters must equal 99.
BIOP	DRIVER'S LICENSE STATE equals 99,	COMPLIANCE WITH CDL ENDORSEMENTS must not equal 1, 2.
CJ00	PREVIOUS RECORDED CRASHES equals 98,	DRIVER'S LICENSE STATE should equal 09, 13, 28, 30, 35, 49.
CJ01	any driver history counter is not equal to 99,	DRIVER'S LICENSE STATE must not be 96, 97, 98, or 99.
D010	DRIVER'S LICENSE STATE equals 96, 97,	PREVIOUS RECORDED CRASHES should equal 99.
D020	DRIVER'S LICENSE STATE equals 96, 97,	all three Subfields of PREVIOUS RECORDED SUSPENSIONS AND REVOCATIONS should equal 99.
D030	DRIVER'S LICENSE STATE equals 96, 97,	PREVIOUS DWI CONVICTIONS should equal 99.

Error ID	IF	THEN
D040	DRIVER'S LICENSE STATE equals 96, 97,	PREVIOUS SPEEDING CONVICTIONS should equal 99.
D050	DRIVER'S LICENSE STATE equals 96, 97,	PREVIOUS OTHER MOVING VIOLATION CONVICTIONS should equal 99.
D170	DRIVER'S LICENSE STATE does not equal 93-99,	DRIVER'S ZIP CODE should not equal 99998 or 99999.
D180	DRIVER LICENSE STATE equals 95- 97,	DRIVER ZIP CODE should equal 00000.
D320	DRIVER'S LICENSE STATE does not equal 93-99,	DRIVER'S ZIP CODE should equal 99998 , 99999, or be a valid ZIP code for DRIVER'S LICENSE STATE.
D480	DRIVER'S LICENSE STATE equals 09, 28, 30, 35, 49,	PREVIOUS RECORDED CRASHES should equal 98.
D710	DRIVER'S LICENSE STATE equals 02, 04, 09, 15, 20, 30, 38, 40,	NON-CDL LICENSE TYPE should not equal 2.
U410	UNLIKELY: DRIVER'S LICENSE STATE equals 98 if HIT AND RUN does not equal 1.	

D6 - Driver's ZIP Code

FORMAT: 5 numeric

SAS NAME: Vehicle.DR_Zip

ELEMENT VALUES:

Codes	Attributes
00000	Not a Resident of US or Territories
nnnnn	Actual Value
99998	Not Reported
99999	Reported as Unknown

Definition: This element identifies the ZIP Code of this driver's area of residence.

Remarks: Code only the first five digits of nine-digit ZIP Codes.

00000 (Not Resident of US or Territories) is used when the address found in the case material indicates that the driver resides at an address that has not been assigned a ZIP Code by the U.S. Post Office.

99998 (Not Reported) Check to see if 99999 (Reported as Unknown) is more appropriate for the situation.

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "Not Reported."

Code 99998 (Not Reported) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).

99999 (*Reported as* Unknown) is used *when the officer indicates the driver's ZIP Code is unknown*. For example, use this attribute when no information is provided on the police crash report about the driver (e.g., hit-and-run). In addition, use this code if the driver, licensed or not, has no permanent address. For example, the driver could be living out of his/her vehicle (camper, motor home, etc.), or the driver could be "homeless."

If a ZIP Code is listed on the police crash report but it is not a valid number use attribute <u>99998</u> (*Not Reported*).

FARS SPECIAL INSTRUCTION:

Use the following guidelines to resolve discrepancies between the police crash report and Driver License File:

- If the street address is the same on both sources but the ZIP Codes differ, use the ZIP Code from the License File.
- If you have internet access available, you may use the <u>USPS ZIP Code Look Up</u> <u>website</u> to confirm you have the correct address.
- If the street addresses on the two sources differ, then use the ZIP Code for the address reported on the police crash report.
- If you have both a residence address and a different mailing address (e.g., a P.O. Box) use the ZIP Code for the residence address.

If the police crash report indicates an address in-State and a driver's license from another State is recorded (with a different residence address), attempt to determine the most current address for the driver. If the most current address cannot be determined, use the ZIP Code that corresponds to the address from the DRIVER'S LICENSE STATE.

CRSS SPECIAL INSTRUCTION:

For the purposes of this variable, a driver is considered to reside at the address listed on the police crash report. This address was most likely taken from the driver's license given to the police officer and/or from the licensing State's driver license file.

If the driver's address is present and the ZIP Code is missing or not available, then determine the correct ZIP Code by using the *USPS ZIP Code Look Up website*.

Consistency Checks (See Section 400):

Error ID	IF	THEN
6H0P	DRIVER PRESENCE equals 0, 9,	DRIVER'S ZIP CODE must be blank.
BY0P	DRIVER'S ZIP CODE must be a valid code, blanks, 00000, <i>99998</i> , or 99999.	

Consistency Checks (FARS Only) (See Section 400):

Error ID	IF	THEN
D160	NON-CDL LICENSE STATUS does not equal 9, or COMMERCIAL MOTOR VEHICLE LICENSE STATUS does not equal 99,	DRIVER'S ZIP CODE should not equal 99998 or 99999.
D170	DRIVER'S LICENSE STATE does not equal 93-99,	DRIVER'S ZIP CODE should not equal <i>99998</i> or 99999.
D180	DRIVER LICENSE STATE equals 95-97,	DRIVER ZIP CODE should equal 00000.

Error ID	IF	THEN
D320	DRIVER'S LICENSE STATE does not equal 93-99,	DRIVER'S ZIP CODE should equal <i>99998</i> , 99999, or be a valid ZIP code for DRIVER'S LICENSE STATE.

D7 - Non-CDL License Type / Status - FARS Only

FORMAT: 1 numeric occurring 2 times.

SAS NAME: Vehicle.L_TYPE, Vehicle.L_STATUS

ELEMENT VALUES:

Type

Codes	Attributes
0	Not Licensed
1	Full Driver License
2	Intermediate Driver License
7	<u>Learner's Permit</u>
8	Temporary License
9	<u>Unknown License Type</u>

Status

Codes	Attributes
0	Not Licensed
1	Suspended
2	Revoked
3	Expired
4	Canceled or Denied
6	Valid
9	Unknown License Status

Definition: This element identifies in two subfields the type of license held by this driver and the status of the license at the time of the crash.

Source: Official driver record and police report. Official driver records take precedence over police-reported information.

Remarks:

This element is used to establish the driver's license type and status for all license classes except the commercial driver's license (CDL). It also captures the type and status of the NON-CDL driving privilege for drivers with CDLs.

The NON-CDL LICENSE TYPE/STATUS is coded for all drivers, including drivers with a CDL.

Use the "<u>TYPE</u>" field to record whether the driver has a full driver's license, intermediate driver's license, learner's permit, temporary license, or is not licensed. Use the "<u>STATUS</u>" field to record if the license is valid, suspended, revoked, expired, canceled, or denied.

Note About Involved Drivers in the Military:

When involved drivers are in the military, the analyst should be cautious because some States automatically (without driver application) renew drivers' licenses or extend the license until the individual is discharged. Each State analyst should be familiar with their State's policy on military personnel and code these license variables accordingly. In addition, when out-of-State driver requests are made, the analyst requesting the data should note that the driver is in the military.

0 (Not Licensed) (for both Type and Status). **0** (Not Licensed) should be used only when it has been reasonably established that the driver is not licensed (anywhere). Takes precedence over all other NON-CDL License Type/Status attributes. Drivers who have a license but fail to have their license with them at the time of the crash should be coded according to the type (class) of license they possess and the validity of the license. If the police report indicates that the driver has "no license," the analyst should first determine whether this means that the person was not in possession of his/her license at the time of the crash, or that the driver is not a registered motor vehicle operator. A review of the violations cited section of the police report may yield some clues in this matter. If the person is cited for not possessing his/her license or for not having one, then code this information in VIOLATIONS CHARGED. If the analyst is uncertain as to whether or not the person possesses a license, then code 9 (Unknown License Type) should be used.

Non-CDL License Type Remarks:

1 (Full Driver License) is used for unlimited driving privileges (with no GDL restrictions). This is based on your State's eligibility guidelines.

7 (Learner's Permit) and 2 (Intermediate Driver License) are the first two stages of a tiered licensing process that allows young drivers to obtain full driver license privileges through safe driving practices. Typical restrictions include minimum age requirements, passing vision/knowledge tests, and supervision by an adult driver over the age of 21. Other requirements may include limiting the number of passengers in the vehicle, occupants must wear seatbelts, zero alcohol tolerance, and no at-fault crashes or convictions for a period of time.

NOTE: If **7** (**Learner's Permit**) or **2** (**Intermediate Driver License**) has expired, code Type as **2** (**Intermediate Driver License**) or **7** (**Learner's Permit**) and Status as **3** (**Expired**).

NOTE: It is important that you know your State's graduated driver license (GDL) restrictions. GDL program restrictions vary from State-to-State.

2 (**Intermediate Driver License**) is the second stage of obtaining a full license privilege. It is typically for drivers between the ages of 16 and 17 and does not require total supervision during daylight hours (e.g., adult supervision during the hours of midnight to 5 am). A **2** (**Intermediate Driver License**) may be suspended or revoked under certain violations. Other conditions may include conviction-free performance, seatbelt use for occupants, and some age restrictions for passengers. If any restriction is violated, this GDL restriction period can be extended.

NOTE: 2 (**Intermediate Driver License**) does not apply for States that do not have a GDL program. However, your State may have a Learner's Permit. Also, your State may not use the name "Intermediate Driver License" and may call it something else.

NOTE: 7 (**Learner's Permit**) is the first stage of obtaining a full license privilege. It is typically for drivers between 14 and 16 years old, and typically requires total adult supervision, seatbelt use for occupants, and conviction-free performance. If any restriction is violated, this GDL restriction period can be extended.

8 (**Temporary License**) includes any type of non-permanent license issued for a period of time less than that for a permanent license (e.g., temporary license to drive within a resort area, temporary license issued to foreign nationals). Short-term permanent licenses are not temporary (e.g., license issued to elderly drivers requiring frequent re-testing).

7 (Learner's Permit) and 2 (Intermediate Driver License) held by young drivers awaiting a 1 (Full Driver's License) are not to be coded 8 (Temporary License).

9 (Unknown License Type) should be used when the type of the license is unknown. **9** (Unknown License Type) is also used when it is unknown whether the driver had a license or not (e.g., hit-and-run).

Non-CDL License Status Remarks:

0 (**Not Licensed**) should be used only when it has been reasonably established that the driver is not registered (anywhere). **0** (**Not Licensed**) takes precedence over all other Non-CDL License Status attributes. Drivers who have a license but fail to have their license with them at the time of the crash should be coded according to the type (class) of license they possess and the validity of the license. If the police report indicates that the driver has "no license," the analyst should first determine whether this means that the person was not in possession of his/her license at the time of the crash, or that the driver is not a registered motor vehicle operator. A review of the violations cited section of the police report may yield some clues in this matter. If the person is cited for not possessing his/her license or for not having one, then code this information *in* VIOLATIONS CHARGED. *If* the analyst is uncertain as to whether or not the person possesses a license, then code **9** (**Unknown**) should be used.

1 (Suspended), 2 (Revoked), or 3 (Expired) are used if a 1 (Full Driver License) * is suspended, revoked, or expired. A 2 (Intermediate Driver License) may be 1 (Suspended) or 2 (Revoked) under certain violations. If 7 (Learner's Permit) or 2 (Intermediate Driver License) has expired, then code 3 (Expired).

Examples:

If a **1** (**Full Driver License**) is revoked or suspended but limited driving is permitted (e.g., to and from work), use the following criteria:

a. If the crash occurs during permitted times of driving, code NON-CDL LICENSE TYPE as 1 (Full Driver License) and STATUS as 6 (Valid), code <u>COMPLIANCE WITH LICENSE RESTRICTIONS</u> as 1 (Restrictions Complied with), and code RELATED FACTORS-DRIVER LEVEL as <u>019 (Legally Driving on Suspended or Revoked License)</u>.

- b. If the crash occurs during invalid times for driving, code NON-CDL LICENSE TYPE as 1 (Full Driver License) and STATUS as 1 (Suspended) or 2 (Revoked), code COMPLIANCE WITH LICENSE RESTRICTIONS as 2 (Restriction Not Complied with), and do NOT use RELATED FACTORS-DRIVER LEVEL 019 (Legally Driving on Suspended or Revoked License).
- 1 (Suspended) takes precedence over all other LICENSE STATUS attributes except 0 (Not Licensed).
- **4 (Canceled or Denied)** is used whenever the driver's official driver record indicates the driver's license* (1) was canceled; or (2) the driver's request for license, or an extension of one, was denied.
- **6 (Valid)** refers to any license held by the driver that is valid for a class of vehicle*. If the driver is in violation of some aspect of his/her license (e.g., one of the restrictions) do not consider the license as being not valid. Record the restriction on element <u>COMPLIANCE WITH LICENSE RESTRICTIONS</u> if applicable. If the police cite the driver for the violation, then the information would be recorded under elements <u>VIOLATIONS CHARGED</u> and/or <u>RELATED FACTORS-DRIVER LEVEL</u>.
- **9** (Unknown License Status) should be used when the status of the license is unknown. **9** (Unknown License Status) is also used when it is unknown whether the driver had a license or not (e.g., hit-and-run).

<u>See Cross Reference table for coding elements D7 and D10</u>, following the remarks section of element <u>LICENSE COMPLIANCE WITH CLASS OF VEHICLE</u>.

* NON-CDL privilege only

IMPORTANT NOTE:

In distinguishing license requirements from restrictions, focus upon whether all drivers possessing the type of license are mandated to obey the requirement or not. If they are, then the requirement is not a restriction, but rather part of the definition of the license. Restrictions, on the other hand, are requirements specific to individual drivers.

Error ID	IF	THEN
1H3F	DRIVER PRESENCE equals 0, 9,	NON-CDL LICENSE STATUS and COMMERCIAL MOTOR VEHICLE LICENSE STATUS must be blank.
110P	DRIVER'S LICENSE STATE equals 99,	NON-CDL LICENSE STATUS must not equal 0-4, 6, and COMMERCIAL MOTOR VEHICLE LICENSE STATUS must not equal 00-08.
5I0P	NON-CDL LICENSE STATUS equals 0,	COMPLIANCE WITH LICENSE RESTRICTIONS must not equal 1-3, 9.
5I1P	NON-CDL LICENSE STATUS for this person equals 9,	COMMERCIAL MOTOR VEHICLE LICENSE STATUS should equal 99.

Error ID	IF	THEN
6I0P	NON-CDL LICENSE STATUS equals 9, and COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 00,	COMPLIANCE WITH LICENSE RESTRICTIONS must not equal 1-3.
7I0P	COMPLIANCE WITH LICENSE RESTRICTIONS equals 1, and RELATED FACTORS-DRIVER LEVEL equals 019,	NON-CDL LICENSE STATUS must equal 6.
7K0P	any VIOLATIONS CHARGED equals 71,	NON-CDL LICENSE STATUS must equal 0, 1, 2, or COMMERCIAL MOTOR VEHICLE LICENSE STATUS must equal 01, 02, 05.
8I0P	NON-CDL LICENSE STATUS equals 0-4, 9,	RELATED FACTORS-DRIVER LEVEL must not equal <i>0</i> 19.
8J0P	NON-CDL LICENSE TYPE equals 0,	NON-CDL LICENSE STATUS must equal 0.
8J1P	NON-CDL LICENSE STATUS equals 0,	NON-CDL LICENSE TYPE must equal 0.
D060	NON-CDL LICENSE STATUS equals 1-4, 6, or COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 1-8, and PERSON TYPE equals 01,	AGE should not be less than 015.
D100	NON-CDL LICENSE STATUS equals 9,	all driver history counters PREVIOUS RECORDED CRASHES should equal 99.
D110	NON-CDL LICENSE STATUS equals 9,	all driver history counters should equal 99.
D120	NON-CDL LICENSE STATUS equals 9,	all driver history counters PREVIOUS DWI CONVICTIONS should equal 99.
D130	NON-CDL LICENSE STATUS equals 9,	all driver history counters PREVIOUS SPEEDING CONVICTIONS should equal 99.
D140	NON-CDL LICENSE STATUS equals 9,	all driver history counters PREVIOUS OTHER MOVING VIOLATION CONVICTIONS should equal 99.
D160	NON-CDL LICENSE STATUS does not equal 9, or COMMERCIAL MOTOR VEHICLE LICENSE STATUS does not equal 99,	DRIVER'S ZIP CODE should not equal 99998 or 99999.
D260	NON-CDL LICENSE STATUS equals 9, or COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 99,	COMPLIANCE WITH LICENSE RESTRICTIONS should not equal 0.
D340	NON-CDL LICENSE STATUS equals 1-4, 6, 9, or COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 01-08, 99,	LICENSE COMPLIANCE WITH CLASS OF VEHICLE should not equal 0.
D350	VIOLATIONS CHARGED equals 71,	NON-CDL LICENSE STATUS should not equal 0, 3, 6, 9.

Error ID	IF	THEN
D380	NON-CDL LICENSE STATUS equals 9,	LICENSE COMPLIANCE WITH CLASS OF VEHICLE should equal 1 or 9.
D390	NON-CDL LICENSE STATUS equals 0,	LICENSE COMPLIANCE WITH CLASS OF VEHICLE should not equal 2, 3, 8, 9.
D400	NON-CDL LICENSE STATUS equals 0-4,	LICENSE COMPLIANCE WITH CLASS OF VEHICLE should not equal 3, 8, 9.
D620	NON-CDL LICENSE TYPE equals 7,	AGE (for the driver) should equal 014-016.
D630	NON-CDL LICENSE TYPE equals 2,	AGE (for the driver) should equal 015-017.
D640	AGE equals 014-017, and PERSON TYPE equals 01,	NON-CDL LICENSE TYPE should equal 2, 7.
D650	AGE equals 018-120, and PERSON TYPE equals 01,	NON-CDL LICENSE TYPE should equal 1.
D680	NON-CDL LICENSE TYPE does not equal 0, 9,	NON-CDL LICENSE STATUS should not equal 0, 9.
D690	NON-CDL LICENSE TYPE equals 2, 7, and COMPLIANCE WITH LICENSE RESTRICTIONS equals 2,	RELATED FACTORS-DRIVER LEVEL should equal <i>0</i> 73, <i>0</i> 74.
D700	NON-CDL LICENSE TYPE equals 1, and COMPLIANCE WITH LICENSE RESTRICTIONS equals 2,	RELATED FACTORS-DRIVER LEVEL should equal <i>0</i> 74.
D710	DRIVER'S LICENSE STATE equals 02, 04, 09, 15, 20, 30, 38, 40,	NON-CDL LICENSE TYPE should not equal 2.
D730	RELATED FACTORS-DRIVER LEVEL equals 073,	COMPLIANCE WITH LICENSE RESTRICTIONS should equal 2, and NON- CDL LICENSE TYPE should equal 2, 7.

See the following tables for additional guidance for coding NON-CDL LICENSE TYPE/STATUS for young drivers with GDL License (<u>7 (Learner's Permit</u>) and <u>2 (Intermediate Driver Licenses)</u>) and CDL Drivers:

Coding Scenarios for CDL Licenses

No.	Coding Scenarios for CDL Licenses	D7 Non- CDL Type	D7 Non- CDL Status	D8 CMV Status	D10 Comp w/ Class	D11 Comp w/ Restriction
	CDL w/no endorsement valid, driving a CDL vehicle (no endorsement required). Non-CDL License Type/Status is Full License/Valid.	1	6	6	3	0
	CDL w/hazardous material endorsement, valid driving CDL vehicle w/hazardous cargo. Non-CDL License Type/Status is Full License/Valid.	1	6	6	3	1
	CDL w/hazardous material endorsement, valid driving non-CDL vehicle. Non-CDL License Type/Status is Full License/Valid.	1	6	6	3	0
	CDL w/ no endorsements suspended, driving a CDL (double bottom) vehicle. Non-CDL License Type/Status is Full License/Valid.	1	6	1	2	2
	CDL w/tanker endorsement, disqualified, driving a tanker. Non-CDL License Type/Status is Full License/Suspended.	1	1	5	2	1
	CDL w/tanker endorsement suspended, driving a non-CDL vehicle. Non-CDL License Type/Status is Full License/Valid.	1	6	1	3	0
	Non-CDL license driving CDL 24 passenger bus. Non-CDL License Type/Status is Full License/Valid.	1	6	0	2	2
	Non-CDL license driving 24 passenger bus. Non-CDL License Type/Status is Full License/Suspended.	1	1	0	2	2
	*CDL w/no endorsements valid, driving CDL vehicle (endorsement requirement unknown). Non-CDL License Type/Status is Full License/Suspended.	1	1	6	8	9
	*CDL w/no endorsements *CDL w/tanker endorsements valid, driving non-CDL vehicle. Non-CDL License Type/Status is Full License/Suspended.	1	1	6	2	0
	*CDL w/tanker endorsements valid, driving non-CDL vehicle. Non-CDL License Type/Status is Full License/Suspended.	1	1	6	2	0

^{*} possible, but unlikely situation

Coding Scenarios for GDL Programs

No.	Coding Scenarios for Graduated Driver's Licensing Program	Non- CDL Type	Non- CDL Status	Comp. w/ Restriction	Related Factors- Driver Level
	A 16-year-old driver with a valid Intermediate License driving a vehicle during prohibited driving hours without corrective lenses.	2	6	2	73, 74
	A 15-year-old with a valid Learner's Permit driving alone (adult supervision required).	7	6	2	73
	A 16-year-old with a valid Intermediate License not complying with seat-belt requirement during permitted daytime driving hours.	2	6	2	73
	A 17-year-old driver with a valid Intermediate License. The officer reported there was a 19-year-old non-family passenger, in violation of the State's GDL requirements.	2	6	2	73
	An 18-year-old driver with an expired Learner's Permit driving with no violations of GDL restrictions.	7	3	1	00
	A 15-year-old with a suspended Learner's Permit is driving without required prescription lenses and is complying with all GDL restrictions.	7	1	2	74
	A driver with a suspended Intermediate Driver's License complying with all GDL restrictions.	2	1	1	00
	A 19-year-old with a valid Intermediate License that was extended due to prior GDL violations is driving a truck greater than 26,000 lbs requiring a CDL during prohibited hours.	2	6	2	73
	A driver with a valid Full Driver's License driving without required corrective lenses.	1	6	2	74

D8 - Commercial Motor Vehicle License Status - FARS Only

FORMAT: 2 numeric

SAS NAME: Vehicle.CDL_STAT

ELEMENT VALUES:

Codes	Attributes
00	No Commercial Driver's License (CDL)
01	Suspended
02	Revoked
03	Expired
04	Canceled or Denied
05	Disqualified
06	Valid
07	Commercial Learner's Permit (CLP)
08	Other - Not Valid
99	<u>Unknown License Status</u>

Definition: This element indicates the status for a driver's CDL if applicable.

Remarks: This element indicates the status for a driver's CDL.

As of April 1, 1992, all States require a driver to have a CDL for driving a **commercial motor vehicle in excess of 26,000 pounds**, for transporting hazardous materials in sufficient amounts to be placarded, or for transporting 16 or more passengers, including the driver.

See the <u>Coding Scenarios for CDL Licenses table</u> for guidance on coding this element and related driver status elements.

05 (**Disqualified**) is used for commercial drivers who have their CDL privilege taken away for violations against the Federal regulations. Although similar to suspension, the reasons for "disqualification" of a CDL may differ from State suspension reasons.

06 (Valid) refers to a CDL official record status that authorizes the driver to operate a class of a commercial motor vehicle.

07 (**Commercial Learner's Permit [CLP]**) means a permit issued to an individual by a State or other jurisdiction of domicile, which, when carried with a valid driver's license issued by the same State or jurisdiction, authorizes the individual to operate a class of a commercial motor vehicle for purposes of behind-the-wheel training. When issued to a CDL holder, a CLP serves as authorization for behind-the-wheel training in a CMV for which the holder's current CDL is not valid.

08 (Other - Not Valid) should be used when a CDL is surrendered or not valid due to the lack of medical clearance.

99 (Unknown License Status) should be used when the status of the CDL license is unknown or when it is unknown whether the driver had a CDL license or not (e.g., hit-and-run).

Error ID	IF	THEN
1H3F	DRIVER PRESENCE equals 0, 9,	NON-CDL LICENSE STATUS and COMMERCIAL MOTOR VEHICLE LICENSE STATUS must be blank.
1I0P	DRIVER'S LICENSE STATE equals 99,	NON-CDL LICENSE STATUS must not equal 0-4, 6, and COMMERCIAL MOTOR VEHICLE LICENSE STATUS must not 00-08.
5I1P	NON-CDL LICENSE STATUS for this person equals 9,	COMMERCIAL MOTOR VEHICLE LICENSE STATUS should equal 99.
6I0P	NON-CDL LICENSE STATUS equals 9, and COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 00,	COMPLIANCE WITH LICENSE RESTRICTIONS must not equal 1-3.
7K0P	any VIOLATIONS CHARGED equals 71,	NON-CDL LICENSE STATUS must equal 0, 1, 2, or COMMERCIAL MOTOR VEHICLE LICENSE STATUS must equal 01, 02, 05.
BN0P	DRIVER PRESENCE equals 0, 9,	COMMERCIAL MOTOR VEHICLE LICENSE STATUS must be blank.
CC0P	COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 00, 99,	COMPLIANCE WITH CDL ENDORSEMENTS must not equal 1.
D060	NON-CDL LICENSE STATUS equals 1-4, 6, or COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 1-8, and PERSON TYPE equals 01,	AGE should not be less than 015.
D160	NON-CDL LICENSE STATUS does not equal 9, or COMMERCIAL MOTOR VEHICLE LICENSE STATUS does not equal 99,	DRIVER'S ZIP CODE should not equal <i>99998</i> or 99999.
D260	NON-CDL LICENSE STATUS equals 9, or COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 99,	COMPLIANCE WITH LICENSE RESTRICTIONS should not equal 0.
D270	POWER UNIT GVWR_From and POWER UNIT GVWR_To equals 17-18, or VEHICLE CONFIGURATION equals 21, or HM2 equals 2,	COMMERCIAL MOTOR VEHICLE LICENSE STATUS should not equal 00.
D280	VEHICLE CONFIGURATION equals 05-08, 21, or HM1 equals 2,	COMMERCIAL MOTOR VEHICLE LICENSE STATUS should not equal 00.
D300	HM2 equals 2,	COMMERCIAL MOTOR VEHICLE LICENSE STATUS should not equal 00 or 99.

Error ID	IF	THEN
D340	NON-CDL LICENSE STATUS equals 1-4, 6, 9, or COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 01-08, 99,	LICENSE COMPLIANCE WITH CLASS OF VEHICLE should not equal 0.
D420	COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 00,	COMPLIANCE WITH CDL ENDORSEMENTS should not equal 1-3.
D430	COMPLIANCE WITH CDL ENDORSEMENTS equals 1-3,	COMMERCIAL MOTOR VEHICLE LICENSE STATUS should not equal 00.
D440	COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 00,	POWER UNIT GVWR_From and POWER UNIT GVWR_To should not be in 17-18, VEHICLE CONFIGURATION should not equal 21, and HM2 should not equal 2.
D450	COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 00,	VEHICLE CONFIGURATION should not equal 05-08, 21, and HM2 should not equal 2.
D460	COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 99,	COMPLIANCE WITH CDL ENDORSEMENTS should equal 0, 3, 9.
V090	HM1 equals 2,	COMMERCIAL MOTOR VEHICLE LICENSE STATUS should equal 06, 99.
V100	HM1 equals 2, and RELATED FACTORS-DRIVER LEVEL does not equal <i>0</i> 19,	COMMERCIAL MOTOR VEHICLE LICENSE STATUS should not equal 01, 02, 05.

D9 - Compliance With CDL Endorsements - FARS Only

FORMAT: 1 numeric

SAS NAME: Vehicle.L_ENDORS

ELEMENT VALUES:

Codes	Attributes
0	No Endorsement(s) Required for the Vehicle
1	Endorsement(s) Required, complied with
2	Endorsement(s) Required, not complied with
3	Endorsement(s) Required, compliance unknown
9	<u>Unknown</u> , if required

Definition: This element indicates whether the vehicle driven at the time of the crash requires endorsement(s) on a CDL and whether this driver is complying with the CDL endorsements.

Remarks: These endorsements include double/triple bottoms, passenger vehicles with 16 passengers, tank, hazardous materials, combined tank/hazardous materials, and others. This element is to be coded independently from CDL Status. The driver is not automatically failing to comply with a CDL endorsement by not having a valid CDL. See the <u>Guidance on Coding This</u> Element per License Type and Vehicle section below.

- **0** (No Endorsements Required for the Vehicle) is used when this vehicle requires no special endorsement on a CDL or requires no CDL to operate.
- 1 (Endorsement(s) Required, complied with) is used when this vehicle requires a CDL and requires a particular endorsement or set of endorsements, and the driver has a CDL and is in compliance with the specific endorsements. (Note: The status of the CDL is not used in determining if the driver has complied with the endorsement.)
- **2** (Endorsement(s) Required, not complied with) is used when this vehicle requires a CDL and particular endorsement(s) on the CDL, but the driver does not have a CDL or does not have the particular endorsement(s) required for the vehicle driven. The driver may have some other endorsement(s). (Note: The status of the CDL is not used in determining if the driver has complied with the endorsement.)
- **3** (Endorsement(s) Required, compliance unknown) is used when this vehicle requires a CDL and particular endorsement(s) on the CDL, but it is not known whether the driver was in compliance with the particular endorsement(s) or it is not known whether the driver had a CDL.
- **9** (Unknown, if required) is used when it is unknown if the vehicle requires a CDL, or when it is unknown if an endorsement is required on a CDL to operate the crash vehicle. The driver may or may not have a CDL.

Guidance on Coding This Element per License Type and Vehicle

The tables below provide guidance for coding this element for the type of license and vehicle driven in the crash:

Non-CDL Driver License

VEHICLE DRIVEN IN THE CRASH	D9
Automobile	0
Non-CDL Truck/Bus	0
CDL, Not Requiring Endorsement	0
CDL, Requiring Endorsement	2
CDL, Unknown If Required	9

CDL With No Endorsement

VEHICLE DRIVEN IN THE CRASH	D9
Automobile	0
Non- CDL Truck/Bus	0
CDL, Not Requiring Endorsement	0
CDL, Requiring Endorsement	2
CDL, Unknown If Required	9

CDL With Endorsement

VEHICLE DRIVEN IN THE CRASH	D9
Automobile	0
Non- CDL Truck/Bus	0
CDL, Not Requiring Endorsement	0
CDL, Matching Endorsement	1
CDL, W/Different Endorsement	2
CDL, Unknown If Required	9

CDL, Endorsement Unknown

VEHICLE DRIVEN IN THE CRASH	D9
Automobile	0
Non- CDL Truck/Bus	0
CDL, Not Requiring Endorsement	0
CDL, Requiring Endorsement	3

VEHICLE DRIVEN IN THE CRASH	D9
CDL, Unknown If Required	9

CDL Unknown

VEHICLE DRIVEN IN THE CRASH	D9
Automobile	0
Non- CDL Truck/Bus	0
CDL, Not Requiring Endorsement	0
CDL, Requiring Endorsement	3
CDL, Unknown If Required	9

Not Licensed

VEHICLE DRIVEN IN THE CRASH	D9
Automobile	0
Non- CDL Truck/Bus	0
CDL, Not Requiring Endorsement	0
CDL, Requiring Endorsement	2
CDL, Unknown If Required	9

Error ID	IF	THEN
4S1P	vPIC BODY CLASS does equal 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport/Adventure/Supermoto/On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 100 (Motorcycle - Enclosed Three Wheeled / Enclosed Autocycle), 103 (Motorcycle - Unenclosed Three Wheeled / Open Autocycle), 104 (Moped), 105 (Off-road Vehicle - Recreational Off-Road Vehicle (ROV)), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle), and HM1 does not equal 1,	COMPLIANCE WITH CDL ENDORSEMENTS MUST equal 0.
BI0P	DRIVER'S LICENSE STATE equals 99,	COMPLIANCE WITH CDL ENDORSEMENTS must not equal 1, 2.
BJ0P	DRIVER PRESENCE equals 0, 9,	COMPLIANCE WITH LICENSE ENDORSEMENTS must be blank.
BK0P	LICENSE COMPLIANCE WITH CLASS OF VEHICLE equals 1,	COMPLIANCE WITH CDL ENDORSEMENTS must not equal 1-3, 9.
BL0P	COMPLIANCE WITH CDL ENDORSEMENTS equals 1, and any RELATED FACTORS-DRIVER LEVEL equals 019,	LICENSE COMPLIANCE WITH CLASS OF VEHICLE must equal 3.
CC0P	COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 00, 99,	COMPLIANCE WITH CDL ENDORSEMENTS must not equal 1.
CG0P	LICENSE COMPLIANCE WITH CLASS OF VEHICLE equals 0,	COMPLIANCE WITH CDL ENDORSEMENTS must not equal 1, 3.
D310	HM2 equals 2,	COMPLIANCE WITH CDL ENDORSEMENTS should equal 1-3.
D410	LICENSE COMPLIANCE WITH CLASS OF VEHICLE equals 0,	COMPLIANCE WITH CDL ENDORSEMENTS should not equal 1-3, 9.

Error ID	IF	THEN
D420	COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 00,	COMPLIANCE WITH CDL ENDORSEMENTS should not equal 1-3.
D430	COMPLIANCE WITH CDL ENDORSEMENTS equals 1-3,	COMMERCIAL MOTOR VEHICLE LICENSE STATUS should not equal 00.
D460	COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 99,	COMPLIANCE WITH CDL ENDORSEMENTS should equal 0, 3, 9.

D10 - License Compliance with Class of Vehicle - FARS Only

FORMAT: 1 numeric

SAS NAME: Vehicle.L_COMPL

ELEMENT VALUES:

Codes	Attributes
0	<u>Not licensed</u>
1	No license required for this class vehicle
2	No valid license for this class vehicle
3	<u>Valid license for this class vehicle</u>
8	Unknown if CDL and/or CDL endorsement required for this vehicle
9	<u>Unknown</u>

Definition: This element refers to the type of license possessed or not possessed by the driver for the class of vehicle being driven at the time of the crash.

Source: Official driver record and police report. Official driver records take precedence over police reported information.

Remarks: This element is coded according to the driver's <u>NON-CDL LICENSE STATUS</u> when driving a vehicle not requiring a CDL and to the driver's <u>COMMERCIAL MOTOR VEHICLE</u> <u>LICENSE STATUS</u> when driving a vehicle requiring a CDL.

Also see Remarks for NON-CDL LICENSE TYPE/STATUS on military personnel.

0 (**Not licensed**) should be used only when it has been reasonably established that the driver is not licensed (anywhere) and where <u>NON-CDL LICENSE TYPE/STATUS</u> equals **0** (**Not licensed**). Drivers who have a license but fail to have their license with them at the time of the crash should be coded according to the type of license they possess and the class of vehicle they were driving. **0** (**Not licensed**) should not be used in this instance. If the police report indicates that the driver has "no license," the analyst must first determine whether this means the person was not in possession of his/her license at the time of the crash or that the driver is not a licensed motor vehicle operator. A review of the violations cited section of the police report might yield some clues in this matter. If the person is cited for not possessing his/her license or for not having one, then code this information *in* <u>VIOLATIONS CHARGED</u>. *If* the analyst is uncertain as to whether or not the person possesses a license, then **9** (**Unknown**) should be used.

- 1 (No license required for this class vehicle) means that a license was not required for the vehicle being driven (e.g., mopeds in some States).
- **2** (No valid license for this class vehicle) may be used for suspended, revoked, canceled, or expired driving privileges. It also refers to **drivers with a valid license** but not for the class of vehicle driven at the time of the crash. As an example, the driver has an "operator's license" when a "public passenger" type of license is required. For this driver, **2** (No valid license for this class vehicle) should be coded. Another common situation occurs when a separate license is

required for a motorcycle. If the driver possesses a valid license for a passenger car but not for the motorcycle, then **2** (**No valid license for this class vehicle**) should be used if the driver was involved in this crash while driving a motorcycle.

A license (or a portion of the license applicable to the class vehicle driven) that is not in effect because of some action taken by the State, such as suspended, revoked, etc., is not to be coded as valid. Similarly, learner's permits that are not used under the proper conditions (for example, a required licensed driver for the class of vehicle driven is not present to accompany the driver involved) are not to be coded as valid either.

- **2** (No valid license for this class vehicle) should be used for suspended, revoked, disqualified, canceled, or expired CDL licenses when the vehicle requires a CDL (see table for Coding Scenarios for CDL Licenses).
- **3** (Valid license for this class vehicle) refers to the class of vehicle being driven. As an example, the driver has a "motorcycle" driver's license only and was driving a motorcycle at the time of the crash; **3** (Valid license for this class vehicle) should be used. On the other hand, a driver might possess a multiple-class license allowing him or her to drive a passenger car as well as a motorcycle. If the vehicle being driven at the time of the crash is a passenger car, also code this element **3** (Valid license for this class vehicle). If the vehicle driver requires a CDL and the CDL status is valid, use **3** (Valid license for this class vehicle).
- **8** (Unknown if CDL and/or CDL endorsement required for the vehicle) should be used if it cannot be determined if the vehicle driven requires a CDL or CDL endorsement. There should be sufficient cause to suspect the need for a CDL or CDL endorsement to use this code, such as the vehicle's size (26,001 lbs or more), configuration (truck tractor/trailer, combinations, tankers, etc.), or possibly hauling hazardous cargo.
- **9 (Unknown)** should be used when the driver has a license, but the type or validity are uncertain or if it is unknown whether the driver had a license or not (e.g., hit-and-run).

A cross-reference table for coding variables D7 and D10 follows. Consult this table only when the driver is operating a vehicle that does not require a CDL.

Cross Reference Table for <u>NON-CDL LICENSE STATUS</u> and LICENSE COMPLIANCE WITH CLASS OF VEHICLE:

LICENSE COMPLIANCE WITH CLASS OF VEHICLE

<u>STATUS</u>	0	1	2	3	8	9
0	Y	Y	N	N	N	N
1	N	Y	Y	N	N	N
2	N	Y	Y	N	N	N
3	N	Y	Y	N	N	N
4	N	Y	Y	N	N	N
6	N	Y	Y	Y	N	Y
9	N	Y	N	N	N	Y

Y = Valid Combination

N = Invalid Combination

REMINDER: NON-CDL LICENSE STATUS applies to any license entry in the driver's record (except CDL). LICENSE COMPLIANCE WITH CLASS OF VEHICLE applies to this vehicle only.

Error ID	IF	THEN
1H2F	DRIVER PRESENCE equals 0, 9,	LICENSE COMPLIANCE WITH CLASS OF VEHICLE must be blank.
1K0P	DRIVER'S LICENSE STATE equals 99,	LICENSE COMPLIANCE WITH CLASS OF VEHICLE must not equal 0-3.
6L0P	COMPLIANCE WITH LICENSE RESTRICTIONS equals 1, and RELATED FACTORS-DRIVER LEVEL equals <i>0</i> 19,	LICENSE COMPLIANCE WITH CLASS OF VEHICLE must equal 3.
8L0P	LICENSE COMPLIANCE WITH CLASS OF VEHICLE equals 0-2, 9,	RELATED FACTORS-DRIVER LEVEL must not equal <i>0</i> 19.
9J0P	LICENSE COMPLIANCE WITH CLASS OF VEHICLE equals 0, 1,	COMPLIANCE WITH LICENSE RESTRICTIONS must not equal 1-3, 9.
BK0P	LICENSE COMPLIANCE WITH CLASS OF VEHICLE equals 1,	COMPLIANCE WITH CDL ENDORSEMENTS must not equal 1-3, 9.
BL0P	COMPLIANCE WITH CDL ENDORSEMENTS equals 1, and any RELATED FACTORS-DRIVER LEVEL equals 019,	LICENSE COMPLIANCE WITH CLASS OF VEHICLE must equal 3.
CG0P	LICENSE COMPLIANCE WITH CLASS OF VEHICLE equals 0,	COMPLIANCE WITH CDL ENDORSEMENTS must not equal 1, 3.

Error ID	IF	THEN
D340	NON-CDL LICENSE STATUS equals 1-4, 6, 9, or COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 01-08, 99,	LICENSE COMPLIANCE WITH CLASS OF VEHICLE should not equal 0.
D380	NON-CDL LICENSE STATUS equals 9,	LICENSE COMPLIANCE WITH CLASS OF VEHICLE should equal 1 or 9.
D390	NON-CDL LICENSE STATUS equals 0,	LICENSE COMPLIANCE WITH CLASS OF VEHICLE should not equal 2, 3, 8, 9.
D400	NON-CDL LICENSE STATUS equals 0-4,	LICENSE COMPLIANCE WITH CLASS OF VEHICLE should not equal 3, 8, 9.
D410	LICENSE COMPLIANCE WITH CLASS OF VEHICLE equals 0,	COMPLIANCE WITH CDL ENDORSEMENTS should not equal 1-3, 9.

D11 - Compliance with License Restrictions - FARS Only

FORMAT: 1 numeric

SAS NAME: Vehicle.L_RESTRI

ELEMENT VALUES:

Codes	Attributes
0	No Restrictions or Not Applicable
1	Restrictions Complied With
2	Restrictions Not Complied With
3	Restrictions, Compliance Unknown
9	<u>Unknown</u>

Definition: This element identifies if a driver was compliant with restrictions on their license.

Remarks: Refers to both physical restrictions (corrective lenses, automatic transmission, etc.) and imposed restrictions (limited driving). It also refers to any limitations imposed on Learner's Permits and Intermediate Licenses in States with graduated driver licensing (GDL) programs (e.g., driving during prohibited periods [midnight to 5 a.m.], driving without adult supervision, etc.). (See Coding Scenarios for GDL Licensing Program table.)

Code all applicable restrictions regardless of license status.

Examples:

If a <u>NON-CDL LICENSE TYPE</u> of **1** (**Full Driver License**) is revoked or suspended but limited driving is permitted (e.g., to and from work), use the following criteria:

- a. If the crash occurs during permitted times of driving, code NON-CDL LICENSE

 TYPE as 1 (Full Driver License) and STATUS as 6 (Valid), code COMPLIANCE
 WITH LICENSE RESTRICTIONS as 1 (Restrictions Complied with), and code
 RELATED FACTORS-DRIVER LEVEL as 019 (Legally Driving on Suspended or
 Revoked License).
- b. If the crash occurs during invalid times for driving, code NON-CDL LICENSE TYPE as 1 (Full Driver License) and STATUS as 1 (Suspended) or 2 (Revoked), code COMPLIANCE WITH LICENSE RESTRICTIONS as 2 (Restriction Not Complied with), and do NOT use RELATED FACTORS-DRIVER LEVEL 019 (Legally Driving on Suspended or Revoked License).

If due to a CDL, a driver has more than one license restriction, code compliance for the most appropriate license restrictions based on the vehicle being driven at the time of the crash (i.e., if vehicle being driven requires a CDL, use the CDL license restrictions).

0 (No Restrictions or Not Applicable) is used when the driver has no restrictions on their license, when the driver is unlicensed or when they are operating a vehicle that does not require a license.

- **1** (**Restrictions Complied With**) is used when the driver is in compliance with the restrictions for their driver's license.
- **2 (Restrictions Not Complied With)** is used when the driver is not compliant with the restrictions for their driver's license.
- **3 (Restrictions, Compliance Unknown)** is used when it is known that this driver has restrictions on their license, but compliance is not known.
- **9 (Unknown)** is used when it is unknown if the driver is licensed or when it is unknown if a licensed driver had restrictions.

Error ID	IF	THEN
1H4F	DRIVER PRESENCE equals 0, 9,	COMPLIANCE WITH LICENSE RESTRICTIONS must be blank.
2I0P	DRIVER'S LICENSE STATE equals 99,	COMPLIANCE WITH LICENSE RESTRICTIONS must not equal 0-3.
5I0P	NON-CDL LICENSE STATUS equals 0,	COMPLIANCE WITH LICENSE RESTRICTIONS must not equal 1-3, 9.
6I0P	NON-CDL LICENSE STATUS equals 9, and COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 00,	COMPLIANCE WITH LICENSE RESTRICTIONS must not equal 1-3.
6L0P	COMPLIANCE WITH LICENSE RESTRICTIONS equals 1, and RELATED FACTORS-DRIVER LEVEL equals 019,	LICENSE COMPLIANCE WITH CLASS OF VEHICLE must equal 3.
7I0P	COMPLIANCE WITH LICENSE RESTRICTIONS equals 1, and RELATED FACTORS-DRIVER LEVEL equals 019,	NON-CDL LICENSE STATUS must equal 6.
8J2P	RELATED FACTORS-DRIVER LEVEL equals 073, 074,	COMPLIANCE WITH LICENSE RESTRICTIONS must equal 2.
9J0P	LICENSE COMPLIANCE WITH CLASS OF VEHICLE equals 0, 1,	COMPLIANCE WITH LICENSE RESTRICTIONS must not equal 1-3, 9.
D260	NON-CDL LICENSE STATUS equals 9, or COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 99,	COMPLIANCE WITH LICENSE RESTRICTIONS should not equal 0.
D690	NON-CDL LICENSE TYPE equals 2, 7, and COMPLIANCE WITH LICENSE RESTRICTIONS equals 2,	RELATED FACTORS-DRIVER LEVEL should equal <i>0</i> 73, <i>0</i> 74.
D700	NON-CDL LICENSE TYPE equals 1, and COMPLIANCE WITH LICENSE RESTRICTIONS equals 2,	RELATED FACTORS-DRIVER LEVEL should equal <i>0</i> 74.

Error ID	IF	THEN
D730	RELATED FACTORS-DRIVER LEVEL equals <i>0</i> 73,	COMPLIANCE WITH LICENSE RESTRICTIONS should equal 2, and NON- CDL LICENSE TYPE should equal 2, 7.

D12 - Driver Height - FARS Only

FORMAT: 1 set 1 numeric, 1 set 2 numeric

SAS NAME: Vehicle.DR_HGT

ELEMENT VALUES:

FEET

Codes	Attributes
0	See Inches
2-8	Actual Feet
9	Unknown

INCHES

Codes	Attributes
00-11, 24-96	Actual Inches
98	Other
99	Unknown

Definition: This element identifies a driver's height.

Remarks: Use the driver licensing files to code this element. The medical examiner or coroner's report may be used and may contain more current/accurate information.

Code the driver's height in feet and inches, if available. Inches less than 10 must be right justified with a leading "0" (e.g., 9 inches is coded "09"). If height is only available in total inches, then code INCHES and code FEET as "0."

The tallest height that can be recorded in total INCHES is 96 inches (8 ft.). The tallest height that can be recorded in FEET and INCHES is 8 ft. - 11 inches. If the driver is taller than 96 inches, then you must code height as feet and inches. If the driver is taller than 8 ft. - 11 inches, then you must code the DRIVER HEIGHT as "Other" (use code 0 for FEET, use code 98 for INCHES).

DRIVER HEIGHT less than "3 Feet," greater than "7 Feet - 0 Inches," less than "36 Inches," or greater than "0 Feet - 84 Inches" will raise an error flag.

Error ID	IF	THEN
1HDF	DRIVER PRESENCE equals 0, 9,	DRIVER HEIGHT (feet and inches) must equal blank.
4H1P	DRIVER HEIGHT/INCHES is less than 12,	DRIVER HEIGHT/FEET must not be blank nor equal to 0.
4H2P	DRIVER HEIGHT/INCHES is greater than 11,	DRIVER HEIGHT/FEET must equal 0.

Error ID	IF	THEN
4H3P	DRIVER HEIGHT/FEET is 2-8,	DRIVER HEIGHT/ INCHES must equal 00-11.
4H4P	DRIVER HEIGHT/FEET equals 9,	DRIVER HEIGHT/INCHES must equal 99.
4H5P	DRIVER HEIGHT/INCHES equals 99,	DRIVER HEIGHT/FEET must equal 9.
4H6P	DRIVER HEIGHT/INCHES equals 98,	DRIVER HEIGHT/FEET must equal 0.
4H7P	DRIVER HEIGHT/FEET is 0,	DRIVER HEIGHT/INCHES must equal 24-96, 98.
D600	DRIVER HEIGHT/INCHES is greater than 11,	DRIVER HEIGHT/INCHES should not be less than 48.
D610	DRIVER HEIGHT/FEET is not blank and not equal to 0,	DRIVER HEIGHT/FEET should not be less than 3.
U260	UNLIKELY: DRIVER HEIGHT (in feet) is less than 3 feet or greater than 7 feet; verify data.	
U280	UNLIKELY: DRIVER HEIGHT is less than 36 inches or greater than 84 inches, verify data.	

D13 - Driver Weight - FARS Only

FORMAT: 3 numeric

SAS NAME: Vehicle.DR_WGT

ELEMENT VALUES:

Codes	Attributes
040-700	Actual weight in pounds
998	Other
999	Unknown

Definition: This element identifies a driver's weight.

Remarks: Use the driver licensing files to code this element. The medical examiner or coroner's report may be used and may contain more current/accurate information.

Code the driver's weight in pounds, if available.

Weight should be right justified.

Weights less than 100 lbs must be coded with a leading "0" in the left-most position (e.g., 98 lbs is coded "098").

DRIVER WEIGHT less than 50 lbs or greater than 399 lbs will raise an error flag.

Error ID	IF	THEN
1HEF	DRIVER PRESENCE equals 0, 9,	DRIVER WEIGHT must equal blank.
U290	UNLIKELY: DRIVER WEIGHT is less than 50 lbs. or greater than 399 lbs., verify data.	

D14, D15, D16, D17, D18 - Driver Level Counters - FARS Only

D14 - Previous Recorded Crashes*

D15 - Previous Recorded Suspensions, **Revocations**, and Withdrawals*

D16 - Previous DWI Convictions*

D17 - Previous Speeding Convictions*

D18 - Previous Other Moving Violation Convictions*

FORMAT: 2 numeric for each element

SAS NAME: Vehicle.PREV_ACC, Vehicle.PREV_SUS1, Vehicle.PREV_SUS2, Vehicle.PREV_SUS3, Vehicle.PREV_DWI, Vehicle.PREV_SPD, Vehicle.PREV_OTH

ELEMENT VALUES:

Codes	Attributes
00	<u>None</u>
01-97	Actual Value
98	Crashes not reported on Driving Record (valid only for <u>Previous Recorded Crashes</u>)
99	<u>Unknown</u>

D14 Definition for Previous Recorded Crashes: This element records any previous crashes for this driver. Count only events occurring within **5 years** *of* the crash date.

D15 Definitions for Previous Recorded Suspensions, Revocations, and Withdrawals:

Subfield 1: Previous Underage Administrative Per Se for BAC:

This subfield records any underage pre-conviction administrative license suspension, revocation, or withdrawal in the previous 5 years including those for zero-tolerance alcohol violations while driving or refusing to submit to chemical testing. This subfield is only for administrative actions associated with alcohol. These are NOT BAC CONVICTIONS.

Subfield 2: Previous Administrative Per Se for BAC (Not Underage):

This subfield records the count of previous pre-conviction administratively imposed suspensions, revocations, or withdrawals within the previous 5 years for driving with a BAC above a specified limit or refusing to submit to chemical testing. This subfield is only for administrative actions associated with alcohol. These are NOT BAC CONVICTIONS.

Subfield 3: Previous Recorded Other Suspensions, Revocations, or Withdrawals:

This subfield records any previous license suspensions, revocations, or withdrawals for this driver other than Administrative action for BAC violations. This subfield would include administrative actions associated with drugged driving. Count only the events occurring within 5 years *of* the crash date. If it can be identified on the driving record, do not include in this count recorded actions

resulting from non-traffic related issues or offenses (e.g., failure to pay child support, failure to appear in court for a non-driving offense, a suspension imposed for a drug-related offense not involving the operation of a motor vehicle). Also note that "cancellation" of a CDL license is not counted here. If a driver has been DISQUALIFIED for a CDL, record this here.

D16 Definition for Previous DWI Convictions: This element records any previous DWI convictions for this driver. Count only the events occurring within **5 years** *of* the crash date.

D17 Definition for Previous Speeding Convictions: This element records any previous Speeding convictions for this driver. Count only the events occurring within **5 years** *of* the crash date.

D18 Definition for Previous Other Moving Violation Convictions: This element records any other previous moving violation convictions for this driver. Count only the events occurring within **5 years** *of* the crash date.

This count excludes non-moving violations noted in the driver history. *Exclusion examples* include registration or title violations, operating a motor vehicle without insurance, failure to pay required toll, improper/illegal parking, leaving child unattended in vehicle, driving on a suspended/revoked license, etc.

Remarks: DO NOT include the current crash in any of the counters.

Remember there is a difference between a violation and a conviction. The violation is not counted in <u>Previous DWI</u>, <u>Previous Speeding</u>, and <u>Previous Other Moving Violation</u> <u>Convictions</u>. These elements refer ONLY TO CONVICTIONS. Both convictions and violations appear on driver records in many States. Be careful that you code the conviction dates and NOT the violation dates.

DWI refers to both alcohol and drug convictions.

When you are responding to another State's request for driver data, do the following.

- 1. In the counters, record both in-State and out-of-State convictions, crashes, suspensions, and revocations that appear on your State's record.
- 2. List out-of-State activity that is included in the counters in the area provided on the Out-of-State Driver Data Response through *RBIS*.

Drivers can have a driving record or driver's license from more than one State. When you are coding the driver level counter elements (<u>Crashes</u>, <u>Suspensions</u>, <u>Revocations</u>, <u>DWI</u>, <u>Speeding</u>, and <u>Other Moving Violation Convictions</u>), be sure to combine distinct events from all of the records you have. Be careful not to double-count the same event. Also use RELATED FACTORS - DRIVER LEVEL <u>089</u> (<u>Driver has a Driving Record or Driver's License from More Than One State</u>) when this situation occurs.

<u>PREVIOUS OTHER MOVING VIOLATION CONVICTIONS</u> includes all other motor vehicle convictions. Some examples of convictions include:

- running a red light,
- reckless driving,
- improper lane changing, and
- failure to yield, etc.

00 (None) indicates no counts of the indicated type appear on the driving history record. Also, use this attribute if the driver has not compiled a record of infractions and has never been licensed.

01-97 (**Actual Value**) Record the actual count of events of the indicated type recorded on the driver history within the previous 5 years.

99 (**Unknown**) indicates the driver appears to be licensed but a driver history cannot be obtained or accessed. If any counter equals 99, all counters must equal 99.

* For Element _____, Values greater than ____ are unlikely and will raise an error flag:

Element	Value
PREVIOUS RECORDED CRASHES	8
Any Subfield of PREVIOUS RECORDED SUSPENSIONS AND REVOCATIONS	10
PREVIOUS DWI CONVICTIONS	8
PREVIOUS SPEEDING CONVICTIONS	8
PREVIOUS OTHER MOVING VIOLATION CONVICTIONS	8

Make sure you know what constitutes a MOVING VIOLATION in your State. The DMV should be able to help you determine these.

Error ID	IF	THEN
1H0F	DRIVER PRESENCE equals 0, 9,	PREVIOUS SPEEDING CONVICTIONS must be blank.
1H7F	DRIVER PRESENCE equals 0, 9,	PREVIOUS RECORDED CRASHES must be blank.
1H8F	DRIVER PRESENCE equals 0, 9,	all three Subfields of PREVIOUS RECORDED SUSPENSIONS AND REVOCATIONS must be blank.
1H9F	DRIVER PRESENCE equals 0, 9,	PREVIOUS DWI CONVICTIONS must be blank.

Error ID	IF	THEN
1HAF	DRIVER PRESENCE equals 0, 9,	PREVIOUS OTHER MOVING VIOLATION CONVICTIONS must be blank.
2J0P	all counters are not blanks and PREVIOUS RECORDED CRASHES is not equal to 98 and any counter are not equal to 00, 99,	DATE OF <i>MOST RECENT</i> CRASH, SUSPENSION, CONVICTION must not equal 000000, 999999.
2J1P	all counters are not blanks and PREVIOUS RECORDED CRASHES is not equal to 98 and any counter are not equal to 00, 99,	DATE OF <i>OLDEST</i> CRASH, SUSPENSION, CONVICTION must not equal 000000, 9999999.
3I2P	DRIVER'S LICENSE STATE equals 98, 99,	then all driver history counters must equal 99.
4J0P	all counters are not blanks and the sum of all counters less than 98 is equal to 1,	DATE OF <i>MOST RECENT</i> CRASH, SUSPENSION, CONVICTION must equal DATE OF <i>OLDEST</i> CRASH, SUSPENSION, CONVICTION.
990P	any counter equals 99,	all counters must equal 99 and DATE OF <i>MOST RECENT</i> CRASH, SUSPENSION, CONVICTION and DATE OF <i>OLDEST</i> CRASH, SUSPENSION, CONVICTION must equal 9999 [year]/99 [month].
CJ00	PREVIOUS RECORDED CRASHES equals 98,	DRIVER'S LICENSE STATE should equal 09, 13, 28, 30, 35, 49.
CJ01	any driver history counter is not equal to 99,	DRIVER'S LICENSE STATE must not be 96, 97, 98, or 99.
D010	DRIVER'S LICENSE STATE equals 96, 97,	PREVIOUS RECORDED CRASHES should equal 99.
D020	DRIVER'S LICENSE STATE equals 96, 97,	all three Subfields of PREVIOUS RECORDED SUSPENSIONS AND REVOCATIONS should equal 99.
D030	DRIVER'S LICENSE STATE equals 96, 97,	PREVIOUS DWI CONVICTIONS should equal 99.
D040	DRIVER'S LICENSE STATE equals 96, 97,	PREVIOUS SPEEDING CONVICTIONS should equal 99.
D050	DRIVER'S LICENSE STATE equals 96, 97,	PREVIOUS OTHER MOVING VIOLATION CONVICTIONS should equal 99.
D100	NON-CDL LICENSE STATUS equals 9,	all driver history counters PREVIOUS RECORDED CRASHES should equal 99.
D110	NON-CDL LICENSE STATUS equals 9,	all driver history counters should equal 99.
D120	NON-CDL LICENSE STATUS equals 9,	all driver history counters PREVIOUS DWI CONVICTIONS should equal 99.

Error ID	IF	THEN
D130	NON-CDL LICENSE STATUS equals 9,	all driver history counters PREVIOUS SPEEDING CONVICTIONS should equal 99.
D140	NON-CDL LICENSE STATUS equals 9,	all driver history counters PREVIOUS OTHER MOVING VIOLATION CONVICTIONS should equal 99.
D480	DRIVER'S LICENSE STATE equals 09, 28, 30, 35, 49,	PREVIOUS RECORDED CRASHES should equal 98.
U210	UNLIKELY: PREVIOUS RECORDED CRASHES is greater than 8 and less than 98.	
U220	UNLIKELY: any Subfield of PREVIOUS RECORDED SUSPENSIONS AND REVOCATIONS is greater than 10 and less than 98.	
U230	UNLIKELY: PREVIOUS DWI CONVICTIONS is greater than 8 and less than 98.	
U240	UNLIKELY: PREVIOUS SPEEDING CONVICTIONS is greater than 8 and less than 98.	
U250	UNLIKELY: PREVIOUS OTHER MOVING VIOLATION CONVICTIONS is greater than 8 and less than 98.	

D19, D20 - Date of Oldest and Most Recent Crash, Suspension, Conviction - FARS Only

FORMAT: 1 set 2 numeric, 1 set 4 numeric for each element.

SAS NAME: Vehicle.FIRST_MO, Vehicle.FIRST_YR / Vehicle.LAST_MO,

Vehicle.LAST_YR

ELEMENT VALUES:

MONTH

Codes	Attributes
00	No Record
01-12	Actual Month
99	Unknown

YEAR

Codes	Attributes
0000	No Record
	All 4 Digits of Actual Year
9999	Unknown

Definition for Date of *Oldest* **Crash, Suspension, Conviction:** This element identifies the date of the *oldest* crash, suspension, or conviction recorded in elements **D14** through **D18**. Count only dates of events occurring within **5** years *of* the crash date.

Definition for Date of *Most Recent* **Crash, Suspension, Conviction:** This element identifies the date of the *most recent* crash, suspension, or conviction recorded in elements **D14** through **D18**. Count only dates of events occurring within **5** years of the crash date.

Remarks: If it can be identified on the driving record, do not include recorded suspensions and revocations resulting from non-traffic related issues or offenses (e.g., failure to pay child support, failure to appear in court for a non-driving offense, a suspension imposed for a drug-related offense not involving the operation of a motor vehicle).

Code only dates of events occurring within **5 years** *of* the crash date. Code the month and year in that order.

This element, although it contains two pieces of information, should be treated as one element. That is, never leave month blank without leaving the year blank, and vice versa.

00 (No Record) indicates no records of the indicated type appear on the driving history record. Also, use this attribute if the driver has not compiled a record of infractions and has never been licensed.

Consistency Checks (See Section 400):

Error ID	IF	THEN
1HBF	DRIVER PRESENCE equals 0, 9,	DATE OF <i>MOST RECENT</i> CRASH, SUSPENSION, CONVICTION must be blank.
1HCF	DRIVER PRESENCE equals 0, 9,	DATE OF <i>OLDEST</i> CRASH, SUSPENSION, CONVICTION must be blank.
2J0P	all counters are not blanks and PREVIOUS RECORDED CRASHES is not equal to 98 and any counter are not equal to 00, 99,	DATE OF <i>MOST RECENT</i> CRASH, SUSPENSION, CONVICTION must not equal 000000, 999999.
2J1P	all counters are not blanks and PREVIOUS RECORDED CRASHES is not equal to 98 and any counter are not equal to 00, 99,	DATE OF <i>OLDEST</i> CRASH, SUSPENSION, CONVICTION must not equal 000000, 9999999.
2K0P	DATE OF <i>OLDEST</i> CRASH, SUSPENSION, CONVICTION must be less than or equal to DATE OF <i>MOST RECENT</i> CRASH, SUSPENSION, CONVICTION.	
3J0P	all counters equal 00,	DATE OF <i>MOST RECENT</i> CRASH, SUSPENSION, CONVICTION must equal 000000.
3J1P	all counters equal 00,	DATE OF <i>OLDEST</i> CRASH, SUSPENSION, CONVICTION must equal 000000.
3K0P	DATE OF <i>MOST RECENT</i> CRASH [Year], SUSPENSION, CONVICTION is not equal to 9999 and DATE OF <i>MOST RECENT</i> CRASH [Month], SUSPENSION, CONVICTION is not equal to 99,	DATE OF <i>MOST RECENT</i> CRASH, SUSPENSION, CONVICTION must be less than or equal to CRASH DATE.
4J0P	all counters are not blanks and the sum of all counters less than 98 is equal to 1,	DATE OF <i>MOST RECENT</i> CRASH, SUSPENSION, CONVICTION must equal DATE OF <i>OLDEST</i> CRASH, SUSPENSION, CONVICTION.
4K0P	Month of DATE OF <i>MOST RECENT</i> CRASH, SUSPENSION, CONVICTION equals 00,	then Year (of same) must equal 0000.
4K1P	Year of DATE OF <i>MOST RECENT</i> CRASH, SUSPENSION, CONVICTION equals 0000,	then Month (of same) must equal 00.
4K2P	Month of DATE OF <i>OLDEST</i> CRASH, SUSPENSION, CONVICTION equals 00,	Year (of same) must equal 0000.
4K3P	Year of DATE OF <i>OLDEST</i> CRASH, SUSPENSION, CONVICTION equals 0000,	Month (of same) must equal 00.

Error ID	IF	THEN
5J0P	If the sum of all counters less than 98 is greater than fifteen,	DATE OF <i>MOST RECENT</i> CRASH, SUSPENSION, CONVICTION must not equal DATE OF <i>OLDEST</i> CRASH, SUSPENSION, CONVICTION.
5K0P	The Year of DATE OF <i>OLDEST</i> CRASH, SUSPENSION, CONVICTION must be within five years of the Year of CRASH DATE.	
990P	any counter equals 99,	all counters must equal 99 and DATE OF <i>MOST RECENT</i> CRASH, SUSPENSION, CONVICTION and DATE OF <i>OLDEST</i> CRASH, SUSPENSION, CONVICTION must equal 9999 [year]/99 [month].
D150	the sum of all counters less than 98 is greater than five but less than fifteen,	DATE OF <i>MOST RECENT</i> CRASH, SUSPENSION, CONVICTION should not equal DATE OF <i>OLDEST</i> CRASH, SUSPENSION, CONVICTION.

D21 - Violations Charged

FORMAT: 2 numeric. Select All That Apply.

SAS NAME: Violatn. VIOLATION

ELEMENT VALUES:

Reckless/Careless/Hit-and-Run Type Offenses:

Codes	Attributes
00	None
01	Manslaughter or homicide
02	Willful reckless driving; driving to endanger; negligent driving
03	Unsafe reckless (not willful, wanton reckless) driving
04	Inattentive, careless, improper driving, driving without due care
10	Use of Telecommunications Device
05	Fleeing or eluding police
06	Fail to obey police, fireman, authorized person directing traffic
07	Hit-and-run, fail to stop after crash
08	Fail to give aid, information, wait for police after crash
09	Serious violation resulting in death

Impairment Offenses:

Codes	Attributes
11	Driving while intoxicated (alcohol or drugs) or BAC above limit (any detectable BAC for CDLs)
12	Driving while impaired
13	Driving under influence of substance not intended to intoxicate
14	Drinking while operating
15	Illegal possession of alcohol or drugs
16	Driving with detectable alcohol
18	Refusal to submit to chemical test
19	Alcohol, drug, or impairment violations generally

Speed-Related Offenses:

Codes	Attributes
21	Racing
22	Speeding (above the speed limit)
23	Speed greater than reasonable and prudent (not necessarily over the limit)
24	Exceeding special limit (e.g., for trucks, buses, cycles, or on bridge, in school zone, etc.)
25	Energy speed (exceeding 55 mph, non-pointable)
26	Driving too slowly
29	Speed related violations, generally

Rules of the Road - Traffic Sign and Signals:

Codes	Attributes
31	Fail to stop for red signal
32	Fail to stop for flashing red
33	Violation of turn on red (fail to stop and yield, yield to pedestrians before turning)
34	Fail to obey flashing signal (yellow or red)
35	Fail to obey signal, generally
36	Violate RR grade crossing device/regulations
37	Fail to obey stop sign
38	Fail to obey yield sign
39	Fail to obey traffic control device

Rules of the Road - Turning, Yielding, Signaling:

Codes	Attributes
41	Turn in violation of traffic control (disobey signs, turn arrow, or pavement markings; this is not a right-on-red violation)
42	Improper method and position of turn (too wide, wrong lane)
43	Fail to signal for turn or stop
45	Fail to yield to emergency vehicle
46	Fail to yield, generally
48	Enter intersection when space insufficient
49	Turn, yield, signaling violations, generally

Rules of the Road - Wrong Side, Passing, and Following:

Codes	Attributes
51	Driving wrong way on one-way road
52	Driving on left, wrong side of road, generally
53	Improper, unsafe passing
54	Pass on right (drive off pavement to pass)
55	Pass stopped school bus
56	Fail to give way when overtaken
58	Following too closely
59	Wrong side, passing, following violations, generally

Rules of the Road - Lane Usage:

Codes	Attributes
61	Unsafe or prohibited lane change
62	Improper use of lane (enter of 3-lane road, HOV designated lane)
63	Certain traffic to use right lane (trucks, slow-moving, etc.)
66	Motorcycle lane violations (more than two per lane, riding between lanes, etc.)
67	Motorcyclist attached to another vehicle
69	Lane violations, generally

Non-Moving - License and Registration Violations:

Codes	Attributes
71	Driving while license withdrawn
72	Other driver license violations
73	Commercial driver violations (logbook, hours, permits carried)
74	Vehicle registration violations
75	Fail to carry insurance card
76	Driving uninsured vehicle
79	Non-moving violations, generally

Equipment:

Codes	Attributes
81	Lamp violations
82	Brake violations
83	Failure to require restraint use (by self or passengers)
84	Motorcycle equipment violations (helmet, special equipment)
85	Violation of hazardous cargo regulations
86	Size, weight, load violations
89	Equipment violations, generally

License and Registration Violations:

Codes	Attributes
91	Parking
92	Theft, unauthorized use of motor vehicle
93	Driving where prohibited (sidewalk, limited access, off truck route)
97	Not Reported
98	Other moving violation (coasting, backing, opening door)
99	Unknown Violation(s)

Definition: This element identifies all violations, citations, and infractions noted as charged to this driver in this crash, regardless of whether the driver survived the crash.

Remarks: This refers to those violations to the Vehicle Code charged as noted in the case material associated with this crash. Code all violations listed in the case material for this driver regardless of ownership of the vehicle ("borrowed," "fleet," "rental cars," etc.).

If you are unable to distinguish between the violations within a specific category, use the General Code (i.e., 09, 19, 29, 39, 49, 59, 69, 79, 89) for that category.

00 (**None**) is used when there is indication that no violations were charged to this driver or when no violations are noted in the case material for this driver and that indicates no violations were charged to the driver.

CRSS SPECIAL INSTRUCTION:

In cases where the investigating officer has designated "pending" in the case material use **00 (None)**.

71 (**Driving While License Withdrawn**) would include violations for operating a vehicle with a suspended or revoked driver's license or violating the provisions of a work permit.

72 (**Other Driver License Violations**) is used when the driver is cited for not complying with learner's permit or intermediate driver license restrictions (GDL Restrictions) or if the driver's license has expired. This attribute is also used when the driver has been cited for driving without a license (i.e., never been issued a license). For suspended or revoked, see **71** (**Driving While License Withdrawn**).

97 (Not Reported) Check to see if <u>00 (None)</u> or <u>99 (Unknown Violation(s))</u> are more appropriate for the situation.

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**."

Code **97** (**Not Reported**) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).

99 (Unknown Violation(s)) is used when it is known that this driver had one or more violations but the specific violation(s) or violation category(ies) cannot be identified.

Examples:

- If it is known a driver had two violations but they cannot be identified, code 99 (Unknown Violation(s)) once.
- If the driver has a known specific violation(s) and other unspecified violation(s), code all the specific violation(s) and code **99** (**Unknown Violation(s**)) once.

FARS SPECIAL INSTRUCTION:

In cases where the investigating officer has designated "pending," always follow up whenever possible to confirm a violation was charged before entering (None) or <a href="toldolor: Unknown Violation(s)).

Consistency Checks (See Section 400):

Error ID	IF	THEN
1H6F	DRIVER PRESENCE equals 0, 9,	VIOLATIONS CHARGED must be blank.
6K0P	VIOLATION CHARGED equals 71,	RELATED FACTORS-DRIVER LEVEL must not equal <i>0</i> 19.
7K1P	VIOLATIONS CHARGED code 99 must not be used more than once per driver.	
8K0P	VIOLATIONS CHARGED equals 07, 08,	HIT-AND-RUN must not equal 0.

Error ID	IF	THEN
A270	any VIOLATIONS CHARGED equals 31 or 33,	TRAFFIC CONTROL DEVICE should equal 01-03 for this vehicle.
A271	VIOLATIONS CHARGED equals 32 or 34,	TRAFFIC CONTROL DEVICE should equal 04, for this vehicle.
A272	VIOLATIONS CHARGED equals 35,	TRAFFIC CONTROL DEVICE should equal 01-09, for this vehicle.
A273	VIOLATIONS CHARGED equals 36,	TRAFFIC CONTROL DEVICE should equal 65, for this vehicle.
A274	VIOLATIONS CHARGED equals 37,	TRAFFIC CONTROL DEVICE should equal 20, for this vehicle.
A275	VIOLATIONS CHARGED equals 38,	TRAFFIC CONTROL DEVICE should equal 21, for this vehicle.
A276	VIOLATIONS CHARGED equals 39,	TRAFFIC CONTROL DEVICE must not equal 00, for this vehicle.
D090	VIOLATIONS CHARGED equals 11-19, and PERSON TYPE equals 01, 03,	POLICE REPORTED ALCOHOL INVOLVEMENT should equal 1, or POLICE REPORTED DRUG INVOLVEMENT should equal 1.
D500	VIOLATIONS CHARGED equals 05,	at least one RELATED FACTORS-CRASH LEVEL should equal 0 20.
D501	At least one VIOLATIONS CHARGED equals 04,	at least one RELATED FACTORS - DRIVER LEVEL must equal 006 or 036.
D530	any VIOLATIONS CHARGED equal 36 for a vehicle involved in the FIRST HARMFUL EVENT,	RELATION TO JUNCTION (b) should equal 06.

Error ID	IF	THEN
D560	VIOLATIONS CHARGED equals 66,	vPIC BODY CLASS should equal 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport/Adventure/Supermoto/On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 104 (Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle).
D570	any VIOLATIONS CHARGED equals 83,	not all occupants of this vehicle should have RESTRAINT SYSTEM USE Subfield-1 Type of Restraint System in Use equal to 01-06, 08, 10-12.
D580	VIOLATIONS CHARGED equals 85,	HM1 should equal 2.
D5A0	VIOLATIONS CHARGED equals 21-25, 29,	SPEEDING RELATED must equal 2-5.
D5B0	any VIOLATIONS CHARGED equal 11-13, 18, 19,	at least one CONDITION (IMPAIRMENT) AT TIME OF CRASH (D23) should equal 09.
D5E0	any VIOLATIONS CHARGED equal 00 or 97,	only that one code and no other must be coded for this driver.
D660	VIOLATIONS equals 55,	SCHOOL BUS RELATED must equal 1.
U440	UNLIKELY: VIOLATIONS CHARGED equals 97.	

Consistency Checks (FARS Only) (See Section 400):

Error ID	IF	THEN
7K0P	any VIOLATIONS CHARGED equals 71,	NON-CDL LICENSE STATUS must equal 0, 1, 2, or COMMERCIAL MOTOR VEHICLE LICENSE STATUS must equal 01, 02, 05.
D080	VIOLATION CHARGED equals 01-06, 09, 31-69, 81-91, 98,	RELATED FACTORS-DRIVER LEVEL should not equal 0 00 or 9 99.
D350	VIOLATIONS CHARGED equals 71,	NON-CDL LICENSE STATUS should not equal 0, 3, 6, 9.

Consistency Checks (CRSS Only) (See Section 400):

Error ID	IF	THEN
D081	VIOLATIONS CHARGED equals 01-04, 09, 51, 52, 67, 81, 82, 84, 89, or 98,	RELATED FACTORS-DRIVER LEVEL should not equal 000 or 999.

D22 - Speeding Related

FORMAT: 1 numeric

SAS NAME: Vehicle.SPEEDREL

ELEMENT VALUES:

Codes	Attributes
0	<u>No</u>
2	Yes, Racing
3	Yes, Exceeded Speed Limit
4	Yes, Too Fast for Conditions
5	Yes, Specifics Unknown
9	Reported as Unknown

Definition: This element identifies if the driver *was* speed*ing and it* was related to the crash as identified by law enforcement.

Remarks: If the case material states that more than one condition was present at the same time, enter the code with the lowest value. For example, if the driver was charged with "Too Fast for Conditions" **and** had a factor recorded for "Exceeded Speed Limit," you would use code <u>3 (Yes, Exceeded Speed Limit)</u> because that has a lower value than <u>4 (Yes, Too Fast for Conditions)</u>.

Excessive or unsafe speed can be indicated in the case material by the police issuing a citation for a speed offense, by their indicating a related or contributing factor, or through a description in the narrative. For driving too slowly, or so as to impede traffic, see RELATED FACTORS - DRIVER LEVEL 045 (Driving Less Than Posted Minimum).

- **0** (No) is used if the case material does not indicate any speed related charges (violations, citations) and do not indicate any speed related factors.
- **2** (Yes, Racing) is used when two or more motor vehicles are engaged in a speed-related competition on the trafficway.
- **3 (Yes, Exceeded Speed Limit)** is used when a motor vehicle is traveling above the posted/statutory speed limit on certain designated roadways and/or by certain types of vehicles (for trucks, buses, motorcycles, on bridge, at night, in school zone, etc.). **Do not compare an estimated travel speed to the posted speed limit for determining the correct attribute for this data element.** This attribute would apply in a case where law enforcement reports actual or estimated speed as unknown and still identifies exceeding the speed limit as a factor.
- **4 (Yes, Too Fast for Conditions)** is used when a vehicle is traveling at a speed that was unsafe for the road, weather, traffic, or other environmental conditions at the time.
- **5** (Yes, Specifics Unknown) is used when it is known that Speed or Speeding applies but it cannot be determined which of the more specific attributes apply. When the only known information is "traveling at a high rate of speed" or "speed was a factor," default to **5** (Yes, specifics unknown).

9 (Reported as Unknown) is used if the police state that the circumstances of the crash are unknown (i.e., it is unknown what factors, if any, may have been present at the time of the crash).

Consistency Checks (See Section 400):

Error ID	IF	THEN
1HFF	DRIVER PRESENCE equals 0, 9,	SPEEDING RELATED must be blank.
D5A0	VIOLATIONS CHARGED equals 21-25, 29,	SPEEDING RELATED must equal 2-5.

D23/NM 15 - Condition (Impairment) at Time of Crash

FORMAT: 2 numeric. Select All That Apply

SAS NAME: Drimpair.DRIMPAIR

ELEMENT VALUES:

Codes	Attributes
00	None/Apparently Normal
01	Ill, Blackout
02	Asleep or Fatigued
03	Walking with a Cane or Crutches, etc.
04	Paraplegic or in a Wheelchair
05	Impaired Due to Previous Injury
06	<u>Deaf</u>
07	Blind
08	Emotional (Depressed, Angry, Disturbed, etc.)
09	<u>Under the Influence of Alcohol, Drugs, or Medication</u>
10	Physical Impairment - No Details
96	Other Physical Impairment
98	Not Reported
99	Reported as Unknown if Impaired

Definition: This element identifies physical impairments to this driver or non-motorist that may have contributed to the cause of the crash as identified by law enforcement.

Remarks: Select all that apply. These impairments can appear anywhere in the case material (in the narrative section, in the violations section, in a column entitled "Contributing Factors," or "Driver Action," etc.). See clarification on the use of information provided by witnesses in section 103. Data Sources.

00 (None/Apparently Normal) is used when:

- When the case material make a positive statement that the individual was apparently normal, or "none" was indicated on the police crash report.
- When the case material does not indicate an impairment in an available field and not reporting an impairment in that field indicates **00** (None/Apparently Normal).
- When the investigating officer:
 - o is limited in the number of factors that can be displayed, and
 - o cannot select an impairment in addition to another factor relevant to the crash, and

- o some other factor is selected, and
- o no other indication of impairment exists in the case material.
- For omission of information see **98** (Not Reported) guidance below.
- **01** (III, Blackout) is used when indicated in the case material. Enter this attribute even if the source of the illness or loss of consciousness is alcohol or drug related. Use this attribute if the driver or non-motorist had fainted and/or seizures were identified.
- **02** (**Asleep or Fatigued**) is used when indicated in the case material. Also, use this attribute when the investigating officer indicates the person was drowsy or sleepy. Alcohol or other drugs may be the source of this impairment.
- **03** (Walking with a Cane or Crutches, etc.) is used when non-motorist is walking with a cane, walker, knee scooter, or crutches when indicated in the case material.
- **04** (**Paraplegic or in a Wheelchair**) is used if this person is paraplegic or in a wheelchair. This includes motorized and non-motorized wheelchairs and *mobility aid* scooters.
- **05** (**Impaired Due to Previous Injury**) is used if the case material dictate this condition (e.g., if a person is involved in this crash subsequent to his/her involvement in a previous crash in which the person was injured). This attribute should be extremely rare.
- 06 (Deaf) is used when this person is deaf or hard of hearing. The case material may also use the term hearing-impaired.
- **07** (**Blind**) is used when this person is blind or visually impaired.
- **08** (Emotional [Depressed, Angry, Disturbed, etc.]) is used when the person is arguing with someone, is having a disagreement, is depressed, and/or is emotionally upset.
- **09** (Under the Influence of Alcohol, Drugs, or Medication) is used when the investigating officer indicates that the individual was under the influence of alcohol, drugs, or medication. This attribute excludes interpretation of test results by the analyst/coder.
- **10** (**Physical Impairment No Details**) is used when the case material indicate a physical impairment existed but provide no further details about the impairment.
- **96** (Other Physical Impairment) is used when the case material indicate that a physical impairment was involved but it isn't a listed attribute.
- 98 (Not Reported) Check to see if <u>00 (None/Apparently Normal)</u> or <u>99 (Reported as Unknown if Impaired)</u> are more appropriate for the situation.

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**."

Code **98** (**Not Reported**) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS

attribute AND no other information is available to code the element (e.g., narrative, diagram, case material).

99 (**Reported as Unknown if Impaired**) is used if the investigating officer states that the physical impairment of this person is unknown.

Consistency Checks (See Section 400):

Error ID	IF	THEN
3D80	CRITICAL EVENT: PRECRASH (EVENT) equals 08 for this vehicle, and CONDITION (IMPAIRMENT) AT TIME OF CRASH equals 09 for this vehicle's driver, and RELATED FACTORS - PERSON (MV OCCUPANT) LEVEL for this vehicle is not equal 005 for any occupants of this vehicle,	another CONDITION (IMPAIRMENT) AT TIME OF CRASH for this vehicle's driver should equal 01.
4X2F	any CONDITION (IMPAIRMENT) AT TIME OF CRASH (D23) equals 00 or 98 or 99,	only that one code and no other must be coded for this driver.
4X4F	any CONDITION (IMPAIRMENT) AT TIME OF CRASH (D23) equals 09,	POLICE REPORTED ALCOHOL INVOLVEMENT (P16) or POLICE REPORTED DRUG INVOLVEMENT (P19) should equal 1 for this person.
6H1P	DRIVER PRESENCE equals 0, 9,	CONDITION (IMPAIRMENT) AT TIME OF CRASH (D23) must be blank.
B17P	CONDITION (IMPAIRMENT) AT TIME OF CRASH (D23) equals 09 for this driver,	CRITICAL EVENT: PRECRASH (EVENT) should not equal 08 for this driver's vehicle.
D5B0	any VIOLATIONS CHARGED equal 11-13, 18, 19,	at least one CONDITION (IMPAIRMENT) AT TIME OF CRASH (D23) should equal 09.
U530	UNLIKELY: any CONDITION (IMPAIRMENT) AT TIME OF CRASH (D23) equals 03, 05, or 07.	
U682	UNLIKELY: CRITICAL EVENT: PRECRASH (EVENT) equals 08 for this vehicle and CONDITION (IMPAIRMENT) AT TIME OF CRASH (D23) does not equal 01 for this vehicle's driver.	

D24 - Related Factors - Driver Level

FORMAT: 3 numeric. Select All That Apply.

SAS NAME: DriverRF.DRIVERRF

ELEMENT VALUES:

Codes	Attributes
0 00	<u>None</u>

Physical/Mental Condition:

Codes	Attributes
0 06	Careless Driving, Inattentive Operation, Improper Driving, Driving Without Due Care
0 08	Aggressive Driving/Road Rage
* 0 13	Mentally Challenged
* 0 04	Reaction to or Failure to Take Drugs/Medication
* 0 12	Mother of Dead Fetus/Mother of Infant Born Post Crash

Miscellaneous Factors:

Codes	Attributes
* 0 15	Seat Back Not in Normal Upright Position, Seat Back Reclined
0 18	Traveling on Prohibited Trafficways
* 0 19	Legally Driving on Suspended or Revoked License
0 20	Leaving Vehicle Unattended with Engine Running. Leaving Vehicle Unattended in Roadway
0 21	Overloading or Improper Loading of Vehicle with Passengers or Cargo
0 22	Towing or Pushing Improperly
0 23	Failure to Dim Lights or to Have Lights on When Required
0 24	Operating Without Required Equipment
* 0 26	Following Improperly
* 0 27	Improper or Erratic Lane Changing
* 0 28	Improper Lane Usage
0 29	Intentional Illegal Driving Off the Roadway
* 0 30	Making Improper Entry to or Exit from Trafficway
* 0 31	Starting or Backing Improperly
0 32	Opening Closure into Moving Traffic or While Vehicle is in Motion

Codes	Attributes	
* 0 33	Passing Where Prohibited by Posted Signs, Pavement Markings, or School Bus Displaying Warning Not to Pass	
* 0 34	Improper Passing Location	
* 0 35	Passing with Insufficient Distance, or Inadequate Visibility, or Failing to Yield to Overtaking Vehicle	
0 36	Operating the Vehicle in an Erratic, Reckless, or Negligent Manner	
0 16	Police or Law Enforcement Officer	
0 37	Police Pursuing This Driver or Police Officer in Pursuit	
0 94	Emergency Medical Services Personnel	
0 95	Fire Personnel	
0 96	Tow Operator	
0 97	<u>Transportation</u> (i.e., maintenance workers, safety service patrol operators, etc.)	
* 0 38	Failure to Yield Right-of-Way	
* 0 39	Failure to Obey Actual Traffic Signs, Traffic Control Devices, or Traffic Officers. Failure to Obey Safety Zone Traffic Laws	
* 0 40	Passing Through or Around Barrier	
* 0 41	Failure to Observe Warnings or Instructions on Vehicles Displaying Them	
* 0 42	Failure to Signal Intentions	
* 0 45	Driving Less Than Posted Minimum	
* 0 47	Making Right Turn from Left-Turn Lane, Left Turn from Right-Turn Lane	
* 0 48	Making Other Improper Turn	
0 50	Driving Wrong Way on One-Way Trafficway	
0 51	Driving on Wrong Side of Two-Way Trafficway (Intentional or Unintentional)	
* 0 52	Operator Inexperience	
* 0 53	<u>Unfamiliar with Roadway</u>	
0 54	Stopped in Roadway (Vehicle Not Abandoned)	
0 55	Improper Management of Vehicle Controls (Specify:)	
0 56	Object Interference with Vehicle Controls (Specify:)	
0 57	Driving with Tire-Related Problems	
0 58	Overcorrecting	
0 59	Getting Off/Out of a Vehicle	
0 60	Alcohol and/or Drug Test Refused	
0 10	Looked But Did Not See	

Special Circumstances:

Codes	Attributes
* 0 73	Driver Has Not Complied with Learner's Permit or Intermediate Driver License Restrictions (GDL Restrictions)
* 0 74	Driver Has Not Complied with Physical or Other Imposed Restrictions (not including GDL Restrictions)
* 0 89	Driver has a Driving Record or Driver's License from More Than One State
0 91	Non-Traffic Violation Charged (manslaughter, homicide, or other assault offense committed without malice)

Skidding, Swerving, Sliding Due To:

Codes	Attributes
* 0 77	Severe Crosswind
* 0 78	Wind from Passing Truck
* 0 79	Slippery or Loose Surface
* 0 80	Tire Blowout or Flat
* 0 81	Debris or Objects in Road
* 0 82	Ruts, Holes, Bumps in Road
* 0 83	Live Animals in Road
* 0 84	Vehicle in Road
* 0 85	Phantom Vehicle
* 0 86	Pedestrian, Pedal Cyclist, or Other Non-Motorist
* 0 87	Ice, Snow, Slush, Water, Sand, Dirt, Oil, Wet Leaves on Road
* 0 88	Trailer Fishtailing or Swaying

Unknown:

Codes	Attributes
9 99	Reported as Unknown

* FARS ONLY ATTRIBUTES

Definition: This element identifies factors related to this driver expressed in the case material.

Remarks: Code information provided in the case material. This is a nominal list only and does NOT imply a hierarchy.

NOTE: RELATED FACTORS-DRIVER LEVEL SHOULD BE CODED ONLY FOR "INTRANSPORT VEHICLES" (UNIT TYPE "1").

RELATED FACTORS FOR MOTOR VEHICLE OCCUPANTS OTHER THAN DRIVERS OF "IN-TRANSPORT" VEHICLES SHOULD BE CODED UNDER RELATED FACTORS-PERSON (MV OCCUPANT) LEVEL (INCLUDING ALL OCCUPANTS IN UNIT TYPES 2, 3, AND 4).

000 (None) is used when no applicable related factors are noted in the case material.

Physical/Mental Condition:

006 (Careless Driving, *Inattentive Operation*, *Improper Driving*, *Driving Without Due Care*) is used when the case material include a factor or note a violation indicating careless driving.

Examples include:

- Driving without due care.
- Operating a motor vehicle in a careless manner.
- Failure to give full time and attention.
- Inattentive operation.

008 (Aggressive Driving/Road Rage) is used when the case material include a factor or note a violation identifying aggressive driving behavior. The officer must use the term "Aggressive" or "Road Rage" in describing this driver's behavior.

*013 (Mentally Challenged) is used when the case material identifies this person has an intellectual, cognitive, or developmental disability.

*004 (Reaction to or Failure to Take Drugs/Medication) is used when the case material identifies that this driver had an allergic reaction to medication/drugs, a reaction to drug interaction (over the counter and/or prescribed), or if there is information identifying that the driver failed to take required medication.

*012 (Mother of Dead Fetus/Mother of Infant Born Post Crash) is used when the case material identifies that this driver is the mother of a fetus that died in or as a result of this crash or it is identified that this driver gave birth after the crash whether the child survives or not. Note that for crash classification purposes, a fetus is considered to be part of a pregnant woman rather than a separate individual and, thus, is not counted as a separate occupant in the crash.

Miscellaneous Factors:

*015 (Seat Back Not in Normal Upright Position, Seat Back Reclined) is used when the case material identifies that this driver's seat back was not in a normal, safe driving position prior to the crash.

018 (Traveling on Prohibited Trafficways) is used when the case material identifies this driver was driving on an open trafficway that prohibited travel for the kind of vehicle they were operating. For example, driving a moped on an interstate, driving a truck where prohibited, or operating a vehicle with hazardous materials cargo where prohibited. For trucks or slower vehicles using the left lane when prohibited, use 28 (Improper Lane Usage).

*019 (Legally Driving on Suspended or Revoked License) is used when the case material identifies this driver's license was suspended/revoked but they were legally driving at the time of

the crash. For example, occupational restricted licenses typically allow drivers to drive to work, school, community service, or certain other activities, with restrictions including the times of day, days of week, and areas to which they may drive. Drivers whose licenses have been suspended or revoked for certain alcohol- or drug-related offenses can apply for ignition interlock restricted licenses. These licenses permit them to drive if they use an ignition interlock device, which tests breath for alcohol consumption, installed in their car.

020 (Leaving Vehicle Unattended with Engine Running. Leaving Vehicle Unattended in Roadway) is used when the case material identifies this driver took improper actions where their vehicle was left in a location intentionally and the driver was not present in or in close proximity to the vehicle.

Examples include:

- Leaving the vehicle curbside or in a driveway with a running engine.
- Abandoning a non-running vehicle in the middle of traffic.
- "Double-parked."
- "Parked on a bridge or tunnel."
- "Parking within an intersection."

021 (Overloading or Improper Loading of Vehicle with Passengers or Cargo) is used when the case material identifies this driver improperly loaded the vehicle occupants or cargo into or on the vehicle.

Examples include:

- The vehicle had more than 3 passengers in the front seat.
- There were people riding on the exterior of the vehicle.
- The vehicle was carrying occupants that were sitting or standing on the rails, tailgate of a pickup, or improperly sitting in the bed of a pickup.
- More than one person secured in a belt restraint.
- An unsecured or uncovered load violation.
- The vehicle's trunk was open with extra-large cargo protruding.
- The case material states the vehicle was overweight, over length, or illegally or improperly oversize.

022 (**Towing or Pushing Improperly**) is used when the case material identifies this driver was operating the vehicle that was towing another vehicle with an improper connection (e.g., by rope or cable) or was pushing another vehicle in a dangerous manner (e.g., bumper to bumper).

023 (Failure to Dim Lights or to Have Lights on When Required) is used when the case material identifies this driver failed to use proper headlight beams, failed to reduce high beams for an approaching vehicle or when following another vehicle, or used fog lights when prohibited.

Examples include:

- The vehicle has its headlamps adjusted improperly causing glare.
- The vehicle failed to have its headlights on in a tunnel.
- A motorcycle not using lights as required.

024 (Operating Without Required Equipment) is used when the case material identifies this driver was operating the vehicle without a required piece of equipment or with required equipment being inoperable. For seatbelts, child restraints, and motorcycle helmets, do not use this attribute when there is indication that an available restraint was not used (i.e., Police Crash Report Restraint Use box is marked as "Not Used").

Examples include:

- Defective or no lamps, brakes, mirrors, muffler, flares, wipers, horn, snow tires, chains, etc.
- A vehicle does not have extended side mirrors when required (e.g., when pulling a trailer).
- A vehicle driving in snow without snow tires when required.
- If the seatbelts have been removed from the vehicle.
- If there was no child safety seat(s) in the vehicle when required for the occupant(s).
- For a motorcycle rider that had no helmet with them when required by law.
- If the vehicle failed to have an air bag(s) reinstalled after a prior crash.

*026 (Following Improperly) is used when the case material identifies this driver followed too closely.

Examples include:

- Following a fire truck too closely.
- Failure to maintain a safe passing distance between trucks.
- Following another vehicle in a caravan too closely to allow entry by a merging vehicle.
- Following too close, generally. Also, code for cases where the case material document the vehicle was following too closely for weather conditions.

NOTE: 026 (Following Improperly) denotes "after or before the process of lane change" while 027 (Improper or Erratic Lane Changing) signifies "in the process."

*027 (Improper or Erratic Lane Changing) is used when the case material identifies this driver was making unsafe lane changes or failed to obey a "no lane change" sign or pavement

marking prohibiting lane change. This may also be used in cases where the officer states the vehicle was weaving in and out of traffic.

*028 (Improper Lane Usage) is used when the case material identifies this driver failed to properly keep their vehicle in the appropriate lane of travel. This attribute does not apply to vehicles that run off the roadway, cross the median, or exhibit control loss before crossing the centerline. Also do not use this value for a vehicle that leaves its lane because of a previous impact or at the direction of a flagman or police officer. For situations where the vehicle is on the wrong side as a result of a passing maneuver, see <u>033 (Passing Where Prohibited by Posted Signs, Pavement Markings, or School Bus Displaying Warning Not to Pass). See <u>051</u> (Driving on Wrong Side of Two-Way Trafficway [Intentional or Unintentional]) for Driving on Wrong Side of Road.</u>

Examples include:

- A vehicle that "drove left of center" striking an oncoming vehicle (includes both crossing a painted centerline and failing to maintain the proper side of a 2-lane roadway with no painted centerline.)
- A vehicle that goes straight in a turn lane.
- A vehicle that was using more than one lane on its side of a multi-lane highway.
- Trucks, buses, or slow vehicles failing to keep right for faster moving traffic.

029 (Intentional Illegal Driving Off the Roadway) is used when the case material identifies this driver was intentionally illegally driving in a location off the roadway (shoulder, median, roadside, etc.). This attribute should not be used when the vehicle enters one of these locations as part of an avoidance maneuver or as a result of a critical or harmful event. Also do not use this value for a vehicle that leaves its lane at the direction of a flagman or police officer.

*030 (Making Improper Entry to or Exit from Trafficway) is used when the case material identifies this driver made an improper entry to or exit from the trafficway. For improper entry of the roadway from a parked or stopped position see 031 (Starting or Backing Improperly).

Examples include:

- Driving onto or from a controlled access highway where prohibited.
- A vehicle entering a highway from a roadside location like a front yard, adjacent pasture, or field.
- A vehicle entering a highway on an exit ramp or exiting on an entrance ramp.

*031 (Starting or Backing Improperly) is used when the case material identifies this driver improperly entered the roadway from a parked or stopped position or improperly backed the vehicle in the roadway.

- Making an unsafe start from a parked position.
- Backing up on a one-way roadway.
- Starting onto a highway from a parked position on the shoulder.

032 (Opening Closure into Moving Traffic or While Vehicle is in Motion) is used when the case material identifies this driver improperly opened their door into moving traffic. This would include opening the trunk while the vehicle is in-transport.

*033 (Passing Where Prohibited by Posted Signs, Pavement Markings, or School Bus Displaying Warning Not to Pass) is used when the case material identifies this driver passed improperly by executing a passing maneuver where prohibited as designated by traffic controls or rules of the road.

Examples include:

- A vehicle passing a stopped school bus.
- A vehicle crossing over the solid line to pass another vehicle.
- Passing a vehicle stopped to allow a pedestrian movement.

*034 (*Improper* Passing *Location*) is used when the case material identifies this driver was passing *in a prohibited location*.

Examples include:

- A vehicle passing on the right side where it is prohibited.
- A vehicle passing on the right or left shoulder, emergency lane, or roadside.
- A vehicle passing in the median.
- A motorcycle passing on the left or right within the same lane as the vehicle it is passing (in a State where lane splitting, filtering, and/or sharing is not permitted). NOTE: If your State does not prohibit lane splitting, filtering, and/or sharing, do NOT use 034 (Improper Passing Location) for this situation.

*035 (Passing with Insufficient Distance, or Inadequate Visibility, or Failing to Yield to Overtaking Vehicle) is used when the case material identifies this driver exercised faulty judgment when passing or being passed.

Examples include:

- A vehicle passing uphill or in a curve that limits visibility.
- Cutting off the other vehicle while passing or being passed.

036 (Operating the Vehicle in an Erratic, Reckless, or Negligent Manner) is used when the case material identifies this driver was operating the vehicle in an erratic, reckless, or negligent manner. These are circumstances where the driver is engaged in a driving behavior with willful or wanton disregard for safety. This attribute can be used in conjunction with other factors but must be explicitly stated on the police record.

- Driving erratically.
- Erratic lane changing.
- Suddenly changing speed.
- Motorcyclist doing wheelies (aka "popping" wheelies)

016 (Police or Law Enforcement Officer) is used when the case material identifies this driver was a Federal, State, or local law enforcement officer working at the time of the crash. This attribute also includes military and park police, border patrol, and all other sworn law enforcement officers.

037 (Police Pursuing This Driver or Police Officer in Pursuit) is used when the case material identifies this driver was fleeing from or attempting to elude the police, or this driver is a police officer engaged in a "pursuit" that is active at the time of crash. For a case where both the fleeing driver and pursuing officer are in-contact vehicles, this factor is used for both drivers. Identify the officer using factor 016 (Police or Law Enforcement Officer). Also see RELATED FACTORS-CRASH LEVEL 020 (Police Pursuit Involved)).

Definition of Police Pursuit: A pursuit is an event that is initiated when a law enforcement officer, operating an authorized emergency vehicle, gives notice to stop (either through the use of visual or audible emergency signals or a combination of emergency devices) to a motorist who the officer is attempting to apprehend, and that motorist fails to comply with the signal by either maintaining his/her speed, increasing speed, or taking other evasive action to elude the officer's continued attempts to stop the motorist. A pursuit is terminated when the motorist stops, or when the attempt to apprehend is discontinued by the officer, or at the direction of a competent authority.

094 (Emergency Medical Services Personnel) is used when the case material identifies that this person was described as emergency medical services (EMS) personnel. This includes personnel located in the cab and in the treatment compartment of an ambulance.

095 (Fire Personnel) is used when the case material identifies that this person was fire personnel.

096 (**Tow Operator**) is used when the case material identifies that this person was an operator of a tow truck.

097 (Transportation (i.e., maintenance workers, safety service patrol operators, etc.)) is used when the case material indicate this person was working to assist with detouring traffic, maintaining roadway damage, or a safety service patrol operator, etc.

*038 (Failure to Yield Right-of-Way) is used when the case material identifies this driver failed to yield the right-of-way.

- Failure to yield to pedestrian in a crosswalk.
- Failure to yield at an intersection or merge.
- Failure to yield to emergency vehicles.
- Failure to yield to streetcar already in intersection.

*039 (Failure to Obey Actual Traffic Signs, Traffic Control Devices, or Traffic Officers, Failure to Obey Safety Zone Traffic Laws) is used when the case material identifies this driver failed to obey an applicable traffic control device (sign or signal), traffic officer, or traffic safety zone laws. If a driver stops as required but then fails to yield, use code <u>038 (Failure to Yield Right-of-Way)</u> and not 039 (Failure to Obey Actual Traffic Signs, Traffic Control Devices, or Traffic Officers, Failure to Obey Safety Zone Traffic Laws).

Examples include:

- Failure to obey flashing signal.
- Violation of "No Turn on Red."
- Failure to obey lane use control signal.
- Failure to obey stop signs.
- Failure to obey yield sign (use both codes <u>038</u> (Failure to Yield Right-of-Way) and 039 (Failure to Obey Actual Traffic Signs, Traffic Control Devices, or Traffic Officers, Failure to Obey Safety Zone Traffic Laws)).
- Passing around railroad gates.
- When vehicle does not stop when required by a traffic signal.

*040 (Passing Through or Around Barrier) is used when the case material identifies this driver was driving in a prohibited area (play street, construction, etc.). This would denote "demarcated" areas. For driving around a railroad gate use <u>039 (Failure to Obey Actual Traffic Signs, Traffic Control Devices, or Traffic Officers, Failure to Obey Safety Zone Traffic Laws).</u>

*041 (Failure to Observe Warnings or Instructions on Vehicles Displaying Them) is used when the case material identifies this driver failed to heed warnings or follow instructions displayed on other vehicles.

Examples include:

- Construction instructions such as arrows directing traffic mounted on a vehicle.
- Instructions on or warnings by emergency vehicles (ambulances, fire trucks, police cars).
- Failure to observe a wide right-turn warning on trucks or buses.
- Failure to heed hazard lights on a disabled vehicle or a school bus arm.

*042 (Failure to Signal Intentions) is used when the case material identifies this driver failed to signal their intentions. This attribute includes a failure to signal by either lamp turn signal or hand.

*045 (Driving Less Than Posted Minimum) is used when the case material identifies this driver was driving too slowly, or so as to impede traffic.

*047 (Making Right Turn from Left-Turn Lane, Left Turn from Right-Turn Lane) is used when the case material identifies this driver was making an improper turn from a turn lane. To

distinguish from <u>027 (Improper or Erratic Lane Changing)</u> and <u>028 (Improper Lane Usage)</u>, police officer must indicate the driver's intention to turn to use this attribute.

*048 (Making Other Improper Turn) is used when the case material identifies this driver made a turn that was improper because it was unsafe, poorly executed, or in bad judgment. This attribute excludes turns that are improper because they are prohibited (e.g., No Right on Red, turning left in violation of a traffic signal). A roadway departure is not an indication of an improper turn in and of itself.

Examples include:

- A "too wide" right or left turn.
- An unsafe U-turn (from the shoulder, etc.).

050 (**Driving Wrong Way on One-Way Trafficway**) is used when the case material identifies this driver was driving in the wrong direction on a one-way trafficway. If this is a divided highway, although each side is "one-way," driving against traffic should be coded as **051** (**Driving on Wrong Side of Two-Way Trafficway [Intentional or Unintentional]).** If the vehicle was going the wrong way on an entrance or exit ramp, also use **030** (**Making Improper Entry to or Exit from Trafficway**).

051 (Driving on Wrong Side of Two-Way Trafficway [Intentional or Unintentional]) is used when the case material identifies this driver was established in and driving on the wrong side of the highway. "Unintentional" means they may not be aware they are on the wrong side. For situations where a driver unintentionally crosses the centerline, see <u>028 (Improper Lane Usage)</u>. For situations where the vehicle is on the wrong side as a result of a passing maneuver, see *<u>033 (Passing Where Prohibited by Posted Signs, Pavement Markings, or School Bus Displaying Warning Not to Pass)</u>, or *<u>035 (Passing with Insufficient Distance, or Inadequate Visibility, or Failing to Yield to Overtaking Vehicle)</u>.

Examples include:

- Driving the wrong way/on the wrong side of a divided trafficway.
- Driving on the wrong side of an undivided trafficway.
- Driving the wrong way on a Rotary Intersection.
- Driving on the left half of approaching bridge or tunnel.

*052 (Operator Inexperience) is used when the case material identifies this driver lacks experience operating the vehicle they were driving at the time of the crash. Should be expressed by officer, driver, or passenger and not presumed based on age, rental status, or State of residence.

- A *novice* driver.
- A driver inexperienced in the operation of a large truck or bus (based on the judgment of the police officer).
- A person driving a rental car where they are unfamiliar with the vehicle.

*053 (Unfamiliar with Roadway) is used when the case material identifies this driver is unfamiliar with the area/location where they were driving when the crash occurred. Should be expressed by officer, driver, or passenger and not presumed based on age, rental status, or State of residence.

Examples include:

- A driver from out-of-State unfamiliar with area.
- A driver operating on a new stretch of road or section of road altered because of construction and/or detour.

054 (Stopped in Roadway [Vehicle Not Abandoned]) is used when the case material identifies this driver stopped their vehicle in the roadway/travel lanes. It is intended to capture an unusual condition where a vehicle is stopped in the roadway with the driver present in or in close proximity to the vehicle. It includes both a vehicle in the process of stopping and "stopped" vehicles. It **excludes** typical "stopping" situations such as stopping in/for traffic, waiting to turn, or stopping for a traffic control.

Examples include:

- A vehicle disabled in a prior crash.
- A vehicle with a flat tire.
- A vehicle that stops for debris in the roadway, etc.

055 (Improper Management of Vehicle Controls (SPECIFY:)) is used for driver errors related to accelerating/braking/gear selection, etc. (reverse instead of forward, forward instead of reverse, accelerator instead of brake, unspecified pedal error, etc.).

*Note: For attributes with a "Specify:" designation, a fill-in text box will open in *RBIS*. This text box should be used to provide additional detail about the attribute selection. Please include a specific reason for this selection.

056 (Object Interference with Vehicle Controls (SPECIFY:)) is used for items reported to have interfered with the driver's operation of the vehicle controls (footwear interfered with pedals, floor mat interfered with pedals, loose cargo interfered with pedals, etc.).

*Note: For attributes with a "Specify:" designation, a fill-in text box will open in *RBIS*. This text box should be used to provide additional detail about the attribute selection. Please include a specific reason for this selection.

057 (Driving with Tire-Related Problems) is used when the officer noted this driver was driving with a "donut"/spare tire, improperly sized tire(s), driving on run flats in an air-out situation, etc. See the table below for comparison examples between this attribute and CONTRIBUTING CIRCUMSTANCES, MOTOR VEHICLE code 01 (Tires).

Example Coding Situations for RELATED FACTORS - DRIVER LEVEL 057 (Driving with Tire Related problems) and CONTRIBUTING CIRCUMSTANCES MOTOR VEHICLE 01 (Tires)

Example Situations	RELATED FACTORS - DRIVER LEVEL 057 (Driving with Tire-Related Problems)	CONTRIBUTING CIRCUMSTANCES MOTOR VEHICLE <u>01</u> (<u>Tires)</u>
Officer notes driving with a "donut" or spare tire on the vehicle.	X	
Officer notes improperly sized tires on the vehicle	X	
Officer notes the tires are "run flat" tires and have been punctured but the Driver was still driving on them.	X	
Officer notes "Tires" in a Contributing Circumstances report field.		X
Officer notes bald tires or insufficient tread on the vehicle.		X
Officer notes lost or losing re-tread on a tire or tires on the vehicle.		X
Officer notes improper tire pressure or under-inflated tires (not "run flat" tires in an air out situation)		X
Officer notes bald tires and a "donut" or spare tire on the vehicle.	X	X

058 (**Overcorrecting**) is used when the case material identifies this driver "overcorrected" based on the judgment of the police officer. This must be stated by the officer in the narrative or police crash report field to be coded. Overcorrecting and Oversteering are technically different, but this attribute may be selected for a reported combination of the two (e.g., overcorrecting/oversteering) on the police crash report.

059 (Getting Off/Out of a Vehicle) is used when the case material identifies this driver was attempting to exit the vehicle when involved in the crash. It applies for either moving or non-moving vehicles.

060 (Alcohol and/or Drug Test Refused) is used when the officer notes that this person refused to take an alcohol and/or a drug test. Refusing a test does not necessarily mean that a test was not given. It is possible that after a refusal, the officer may have obtained a warrant or some other authorization to administer a test post-refusal. This includes when the person initially refuses and later consents. Because of this, it is possible to code **060** (Alcohol and/or Drug Test Refused) and also code an actual test with results for the same person.

010 (Looked But Did Not See) is used when the driver is paying attention to driving (not distracted), but does not see the relevant vehicle, object, etc. This attribute should be used when a

driver has an opportunity to take some action prior to impact, but the driver takes no action and no distractions apply under <u>DRIVER DISTRACTED BY</u>. This situation frequently occurs when an overtaking vehicle is in the driver's "blind spot" or at intersections when a crossing vehicle is not noticed.

Skidding, Swerving, Sliding Due To:

This set of attributes is applicable to the driver that attempted to avoid one of the following or whose ability to control the vehicle was affected by one of the following.

*077 (Severe Crosswind) is used when the case material identifies this driver's ability to control the vehicle was affected by severe crosswinds.

*078 (Wind from Passing Truck) is used when the case material identifies this driver's ability to control the vehicle was affected by winds produced by a passing truck.

*079 (Slippery or Loose Surface) is used when the case material identifies this driver's ability to control the vehicle was affected by the surface composition of the roadway and/or the condition of that composition. Not to be used when the surface is slippery due to environment conditions such as rain, ice, or snow (see <u>087 (Ice, Snow, Slush, Water, Sand, Dirt, Oil, or Wet Leaves on Road)</u>.

Examples include:

- A slippery surface that is old or worn resulting in loose gravel on the roadway.
- Blacktop that is slick as a newly paved surface.

*080 (Tire Blowout or Flat) is used when the case material identifies this driver's ability to control the vehicle was affected by a tire blowout or flat.

*081 (Debris or Objects in Road) is used when the case material identifies this driver attempted to avoid or lost control as a result of debris in the road. Examples would include nails, glass, trash cans, tire retread, trash, dead animals, pile of sand, barricades, etc.

*082 (Ruts, Holes, Bumps in Road) is used when the case material identifies this driver attempted to avoid or lost control as a result of road surface anomalies such as ruts, holes, dips, or bumps.

*083 (Live Animals in Road) is used when the case material identifies this driver attempted to avoid or lost control as a result of a live animal(s) that was in the road.

*084 (Vehicle in Road) is used when the case material identifies this driver attempted to avoid or lost control as a result of another vehicle in the road. This includes both contact and noncontact vehicles that remain at the scene.

*085 (Phantom Vehicle) is used when the case material identifies this driver attempted to avoid or lost control as a result of a non-contact vehicle that left the scene as described by the police officer.

*086 (Pedestrian, Pedal Cyclist, or Other Non-Motorist) is used when the case material identifies this driver attempted to avoid or lost control as a result of a pedestrian, a pedalcyclist, or other type of non-motorist.

*087 (Ice, Snow, Slush, Water, Sand, Dirt, Oil, or Wet Leaves on Road) is used when the case material identifies this driver's ability to control the vehicle was affected by a substance on the roadway that caused the roadway to be slick, which may interfere with the traction of the vehicle. This attribute does not include part of the roadway composition. For cases involving roadway composition issues, see 079 (Slippery or Loose Surface).

*088 (Trailer Fishtailing or Swaying) is used when the case material identifies this driver's ability to control the vehicle was affected by a trailer fishtailing or swaying. This condition may or may not result in a jackknife.

Special Circumstances (073, 074, 089, 091):

*073 (Driver Has Not Complied with Learner's Permit or Intermediate Driver License Restrictions [GDL Restrictions]) is used when the case material identifies this driver was a young driver and was not in compliance with a Learner's Permit or Intermediate Driver License restriction under a State's Graduated Driver's License (GDL) program.

Examples include:

- Nighttime driving restrictions (e.g., midnight until 6:00 am).
- Unsupervised driving restrictions (e.g., the driver must have a passenger over the age of 21 to legally drive the vehicle).
- Passenger Restriction (e.g., the driver is only allowed one other passenger in the vehicle when driving).

This should **not** be used for restrictions for eyeglasses, lenses, equipment, or other physical restrictions (see *074* (**Driver Has Not Complied with Physical or Other Imposed Restrictions** [**not including GDL Restrictions**])).

*074 (Driver Has Not Complied with Physical or Other Imposed Restrictions (not including GDL Restrictions) is used when the case material identifies this driver did not comply with physical or other imposed license restrictions.

Examples include:

- Driving without corrective lenses when required.
- Driving without required equipment (e.g., automatic transmission, adaptive controls, etc.).
- Violating special privileges on a suspended/revoked license for other than permitted activities (e.g., driving permitted only to and from work). Not to be used for general "driving on a suspended or revoked license."
- Driving vehicle without "Interlock System" when required.

*089 (Driver has a Driving Record or Driver's License from More than One State) is used when the case material identifies this driver had any combination of a State or record in more than one State. This is coded regardless of the status of the license or the driving privilege of the driver at the time of the crash.

091 (Non-Traffic Violation Charged [Manslaughter, Homicide, or Other Assault Offense Committed Without Malice]) is used when the case material identifies this driver will receive "Criminal" charges such as intoxicated assault or vehicular manslaughter. It would exclude other criminal offenses such as hit-and-run or failure to render aid at the scene of a crash.

Unknown

999 (**Reported as Unknown**) is used when the circumstances surrounding the crash are unknown and reported as "unknown" by the investigating officer.

*FARS ONLY ATTRIBUTES

Consistency Checks (See Section 400):

Error ID	IF	THEN
1L1P	Any RELATED FACTORS - DRIVER LEVEL equals 028,	there must not be any RELATED FACTORS - DRIVER LEVEL equal to 033 or 051.
2H0F	DRIVER PRESENCE equals 0, 9,	RELATED FACTORS-DRIVER LEVEL must not equal 004, 008, 010, 012, 013, 015, 016, 019, 052, 053, 058, 059, 073, 074, 077-088, 094-097.
2L0P	Any RELATED FACTORS-DRIVER LEVEL equal 000 or 9 99,	only that one code and no other must be coded.
2P0G	CONDITION (IMPAIRMENT) AT TIME OF CRASH equals 03,	PERSON TYPE must be 05, 10, 11, 12, 13, or 19.
5L0F	RELATED FACTORS-DRIVER LEVEL equals 020,	DRIVER PRESENCE must not equal 1, 9.
5L0P	any RELATED FACTORS-DRIVER LEVEL equals 010,	DRIVER DISTRACTED BY must equal 00.
5L1F	RELATED FACTORS-DRIVER LEVEL equals 004, 008, 010, 012, 013, 015, 016, 019, 052, 053, 058, 059, 073, 074, 077-088, 094-097,	DRIVER PRESENCE must not equal 0 or 9.
6K0P	VIOLATION CHARGED equals 71,	RELATED FACTORS-DRIVER LEVEL must not equal <i>0</i> 19.
7L0P	Any RELATED FACTORS-DRIVER LEVEL can be used only once per driver form.	
9C6P	UNIT TYPE equals 2-4,	RELATED FACTORS-DRIVER LEVEL must equal <i>00</i> 0.
9L0F	PERSON TYPE equals 01, and RELATED FACTORS-DRIVER LEVEL equals 012,	SEX must equal 2, and AGE must be greater than 012.
9L0P	any RELATED FACTORS-DRIVER LEVEL equals 010,	ATTEMPTED AVOIDANCE MANEUVER must equal 01.

Error ID	IF	THEN
A080	DRIVER PRESENCE equals 0, and FIRST HARMFUL EVENT equals 12, and NUMBER OF VEHICLE FORMS SUBMITTED equals 002,	one RELATED FACTORS-DRIVER LEVEL should equal 0 20 or 0 54.
AZA2	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) does not equal 10, 11, or 12,	then RELATED FACTORS - DRIVER LEVEL should not equal 0 48.
AZA3	If RELATED FACTORS - DRIVER LEVEL equals 0 48,	then PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 10, 11, or 12.
D470	any RELATED FACTORS-DRIVER LEVEL equals 037,	at least one RELATED FACTORS-CRASH LEVEL should equal 0 20.
D501	At least one VIOLATIONS CHARGED equals 04,	at least one RELATED FACTORS - DRIVER LEVEL must equal 006 or 036.

Consistency Checks (CRSS Only) (See Section 400):

Error ID	IF	THEN
D081	VIOLATIONS CHARGED equals 01-04, 09, 51, 52, 67, 81, 82, 84, 89, or 98,	RELATED FACTORS-DRIVER LEVEL should not equal 000 or 999.

Consistency Checks (FARS ONLY) (See Section 400):

Error ID	IF	THEN
1L6P	RELATED FACTORS-DRIVER equals 33	SCHOOL BUS RELATED should equal 1.
	*	•
4L0P	any RELATED FACTORS-DRIVER LEVEL equals 0 39 for this vehicle,	TRAFFIC CONTROL DEVICE should not equal 00 for this vehicle.
662P	TRAFFIC CONTROL DEVICE is not equal to	at least one RELATED FACTORS - DRIVER
	00 and CRASH TYPE is 14,	LEVEL should equal 0 39.
6L0P	COMPLIANCE WITH LICENSE	LICENSE COMPLIANCE WITH CLASS OF
	RESTRICTIONS equals 1, and RELATED	VEHICLE must equal 3.
	FACTORS-DRIVER LEVEL equals 0 19,	
7IOP	COMPLIANCE WITH LICENSE	NON-CDL LICENSE STATUS must equal 6.
	RESTRICTIONS equals 1, and RELATED	
	FACTORS-DRIVER LEVEL equals 0 19,	
8I0P	NON-CDL LICENSE STATUS equals 0-4, 9,	RELATED FACTORS-DRIVER LEVEL must not equal <i>0</i> 19.

Error ID	IF	THEN
8J2P	RELATED FACTORS-DRIVER LEVEL equals 073, 074,	COMPLIANCE WITH LICENSE RESTRICTIONS must equal 2.
8L0P	LICENSE COMPLIANCE WITH CLASS OF VEHICLE equals 0-2, 9,	RELATED FACTORS-DRIVER LEVEL must not equal <i>0</i> 19.
BL0P	COMPLIANCE WITH CDL ENDORSEMENTS equals 1, and any RELATED FACTORS-DRIVER LEVEL equals 019,	LICENSE COMPLIANCE WITH CLASS OF VEHICLE must equal 3.
D080	VIOLATION CHARGED equals 01-06, 09, 31-69, 81-91, 98,	RELATED FACTORS-DRIVER LEVEL should not equal <i>0</i> 00 <i>or 9</i> 99.
D690	NON-CDL LICENSE TYPE equals 2, 7, and COMPLIANCE WITH LICENSE RESTRICTIONS equals 2,	RELATED FACTORS-DRIVER LEVEL should equal 073, 074.
D700	NON-CDL LICENSE TYPE equals 1, and COMPLIANCE WITH LICENSE RESTRICTIONS equals 2,	RELATED FACTORS-DRIVER LEVEL should equal <i>0</i> 74.
D730	RELATED FACTORS-DRIVER LEVEL equals <i>0</i> 73,	COMPLIANCE WITH LICENSE RESTRICTIONS should equal 2, and NON- CDL LICENSE TYPE should equal 2, 7.
D733	at least one RELATED FACTORS - DRIVER LEVEL equals 0 60 and PERSON TYPE equals 01,	ALCOHOL TEST RESULT should equal 995 or at least one DRUG TEST RESULT should equal 095.
V100	HM1 equals 2, and RELATED FACTORS-DRIVER LEVEL does not equal 019,	COMMERCIAL MOTOR VEHICLE LICENSE STATUS should not equal 01, 02, 05.
V16P	RELATED FACTORS-DRIVER LEVEL equals 088,	VEHICLE TRAILING must not equal 0, 9.

Precrash Level Data Elements

PC1 - State Number - FARS Only

PC2 - Consecutive Number - FARS Only

Precrash Data Overview

PC3 - Vehicle Number - Precrash Level

PC4 - Contributing Circumstances, Motor Vehicle

PC5 - Trafficway Description

PC6 - Total Lanes in Roadway

PC7 - Speed Limit

PC8 - Roadway Alignment

PC9 - Roadway Grade

PC10 - Roadway Surface Type - FARS Only

PC11 - Roadway Surface Conditions

PC12 - Traffic Control Device

PC13 - Device Functioning

PC14 - Driver's Vision Obscured By

PC15 - Driver Maneuvered to Avoid

PC16 - Driver Distracted By

PC17 - Pre-Event Movement (Prior to Recognition of Critical Event)

PC18 - Critical Event - Precrash (Category)

PC19 - Critical Event - Precrash (Event)

PC20 - Attempted Avoidance Maneuver

PC21 - Pre-Impact Stability

PC22 - Pre-Impact Location

PC23 - Crash Type

Precrash Data Overview

Precrash data elements are completed for each of the in-transport motor vehicles in the case. This means that the entire crash is first completed from the perspective of one vehicle, then from the perspective of a second vehicle, if any, and so forth. The precrash data elements are the following.

- Driver Distracted By
- Pre-Event Movement (Prior to Recognition of Critical Event)
- Critical Precrash Category
- Critical Precrash Event
- Attempted Avoidance Maneuver
- Pre-Impact Stability
- Pre-Impact Location
- Crash Type

The precrash data elements are designed to identify the following.

- What was this vehicle doing just prior to the critical precrash event?
- What made this vehicle's situation critical?
- What was the avoidance response, if any, to this critical situation?
- What was the movement of the vehicle just prior to impact?

The most important determination that must be made for each in-transport motor vehicle is: what was this vehicle's <u>CRITICAL PRECRASH EVENT</u>, (i.e., what action by this vehicle, another vehicle, person, animal, or non-fixed object was critical to this vehicle's crash?). Once the critical event is determined, the remaining precrash data elements are coded relative to this selected <u>CRITICAL PRECRASH EVENT</u>.

Do not consider culpability as a factor for determining precrash data. Many crash scenarios will suggest fault, but this is considered coincidental rather than by design.

Critical Crash Envelope

The critical crash envelope begins at the point where:

- 1. the driver recognizes an impending danger (e.g., deer runs into the roadway), OR
- 2. the vehicle is in an imminent path of collision with another vehicle, pedestrian, pedalcyclist, other non-motorist, object, or animal.

The critical crash envelope ends when:

- 1. all three:
 - a. the driver has made a successful avoidance maneuver, and
 - b. has full steering control, and
 - c. the vehicle is tracking;

OR

2. the driver's vehicle impacts another vehicle, pedestrian, pedalcyclist, other non-motorist, object, or animal.

See the Coding Guide: Critical Crash Envelope Timeline for helpful information.

Simple Single Critical Crash Envelope

Most crashes involve only a single critical crash envelope in which the object contacted is captured under the <u>CRITICAL PRECRASH EVENT</u>, (e.g., a vehicle is traveling straight on a roadway and a deer runs into the roadway and is struck by the vehicle). This scenario, and similar ones, are very straightforward and will not present many problems.

Complex Single Critical Crash Envelope

However, some single critical crash envelopes are more complex.

Example A: A driver avoids one obstacle and immediately impacts another vehicle, person, object, or animal. Because immediate is defined as **not** having an opportunity, or sufficient time, to take any additional avoidance actions, the <u>CRITICAL PRECRASH EVENT</u> is related to the vehicle, person, object, or animal that the driver successfully avoided instead of the vehicle's first harmful event (i.e., its impact); see example 3 and example 5.

Example B: The driver avoids an obstacle only to (a) lose steering control and/or (b) have the vehicle stop tracking, and the vehicle subsequently impacts another vehicle, person, object, or animal.

Regardless of whether the driver:

- 1. attempted to regain steering control,
- 2. caused the vehicle to resume a tracking posture, or
- 3. avoided the impacted vehicle, person, object, or animal,

the Critical Precrash Event is similarly related to the vehicle, person, object, or animal that the driver successfully avoided because the driver's critical crash envelope was never stabilized.

In both examples above, the <u>ATTEMPTED AVOIDANCE MANEUVER</u> records the successful action taken to avoid the CRITICAL PRECRASH EVENT.

Vehicles that are not involved in an impact with another vehicle, person, object, or animal in the sequence of crash events (that define this crash) are not included.

The coding order for a single critical crash envelope is illustrated in **Figure 22**.

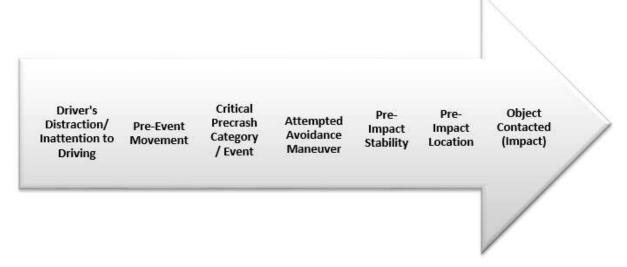


Figure 22: Typical Order of a Single Critical Crash Envelope

Critical Crash Envelopes

When a case involves more than one critical crash envelopes, select only the final critical crash envelope. In this situation, code the element PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT)) as: 17 (Successful avoidance maneuver to a previous critical event). The final critical crash envelope is the one that resulted in this vehicle's first harmful event (i.e., its impact) as shown in Figure 23.

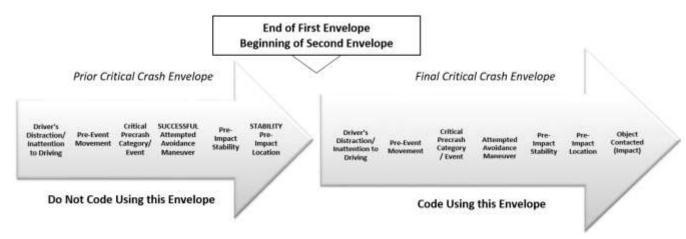


Figure 23: Typical Order of Multiple Critical Crash Envelopes

When there is doubt as to whether this vehicle had experienced a complex single, or multiple critical crash envelopes, choose the Critical Precrash Category/Event, to the vehicle, person, object, or animal that the driver successfully avoided (i.e., default to Complex Single). See Complex Single Critical Crash Envelope examples **A** and **B** above.

The following pages have a method protocol, a <u>flowchart</u> illustrating the proper method and protocol for determining the precrash data elements, 10 <u>Precrash General Rules</u>, and <u>18</u> <u>examples</u> of various crash event sequences that contain one or more critical crash envelopes.

Method Protocol

Consider the information obtained from the police report and any supplemental documents as inputs to your decision-making process.

1. Determine CRITICAL PRECRASH CATEGORY / CRITICAL PRECRASH EVENT.

What action by this vehicle, another vehicle, person, animal, or object was critical to this driver becoming involved in the crash (i.e., use the "**BUT FOR**" * test)?

FOR EXAMPLE:

- "But for" Vehicle # going left-of-center, this vehicle would not have been involved in this crash.
- "But for" having entered into the intersection, this vehicle would not have been involved in this crash.

ASK yourself questions (a) through (f) below. Proceed through each question that applies to the crash you are researching. Stop when the answer to the questions is "Yes." This is the CRITICAL PRECRASH CATEGORY.

- a. Did the vehicle exhibit a control loss?
- b. Does the evidence suggest that the vehicle was in an environmentally dangerous position?
- c. Was another vehicle "in" this vehicle's lane?
- d. Was another vehicle entering into this vehicle's lane?
- e. Was a pedestrian, pedalcyclist, or other non-motorist in or approaching this vehicle's path?
- f. Was an animal in or approaching this vehicle's path or was an object in this vehicle's path?
- 2. Determine DRIVER DISTRACTED BY.
- 3. Determine PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT).
- 4. Determine <u>ATTEMPTED AVOIDANCE MANEUVER</u>. What does your information indicate that the driver tried to do to avoid the crash?
- 5. Determine PRE-IMPACT STABILITY.
- 6. Determine <u>PRE-IMPACT LOCATION</u>.

Precrash Methodology Flowchart

Vehicle Inspection Police Report Scene Inspection Interviewee Determine the Critical Precrash Event What action by this vehicle, another vehicle, person, animal, or object was critical to this vehicle's crash? Use the "BUT FOR TEST" Was Vehicle Loss of Control Critical? If so, code under subcategory "This Vehicle Loss of Control Due To:" Was the Vehicle's Position in the Environment Critical? If so, code under subcategory "This Vehicle Traveling" Was Another Vehicle "In" this Vehicle's Lane? If so, code under subcategory "Other Motor Vehicle in Lane" Was Another Vehicle Encroaching Into this Vehicle's Lane? If so, code under subcategory "Other Motor Vehicle Encroaching into Lane" Did a Pedestrian, Pedalcyclist, or Other Non-Motorist Precipitate the Critical Event? If so, code under subcategory "Pedestrian, Pedalcyclist, or Other Non-Motorist" Did an Animal or Object Precipitate the Critical Event? If so, code under subcategory "Animal or Object" Was the Critical Event Something Other than Listed, or Unknown? If so, select "Other Critical Precrash Event" and specify the event or select Unknown Once the Critical Precrash Event is determined, all Other Precrash Variables are Related to this Event Determine if there was a Driver's Distraction or Inattention to Driving (Immediately Prior to Critical Event) Determine the Vehicle's Pre-Event Movement (Immediately Prior to Critical Event) Determine the Driver's Attempted Avoidance Maneuver (In Response to the Critical Event) Determine the Pre-Impact Stability of the Vehicle (After any Avoidance Maneuvers were taken) Determine the Pre-Impact Location of the Vehicle (After the "stability" has been determined and Immediately Prior to Impact)

Precrash General Rules

- 1. <u>ATTEMPTED AVOIDANCE MANEUVER</u> assesses what the driver's action(s) was during the critical crash envelope in response to realization of impending danger.
- 2. The mere presence of a traffic control signal/sign typically does not make the situation critical when determining <u>CRITICAL PRECRASH EVENT</u>.

For example: A single vehicle approaches a stop sign and departs the right side of the road impacting a tree, in an attempt to avoid passing through the intersection. The sign has no bearing and therefore, does not make the situation critical.

3. When you know the <u>CRITICAL PRECRASH CATEGORY</u>, but are unable to select a specific <u>CRITICAL PRECRASH EVENT</u>, use the following guideline:

Default to one of the "Other" or "Unknown" attributes within each CRITICAL PRECRASH EVENT category, rather than coding the entire CRITICAL PRECRASH CATEGORY as "Other critical precrash event."

- 4. If control is lost due to driver illness such as heart attacks, diabetic comas, etc., then CRITICAL PRECRASH EVENT should be coded as (8) (Other cause of control loss (Specify:)).
- 5. When coding <u>CRITICAL PRECRASH CATEGORY</u> as <u>1 (This vehicle loss of control)</u>, the loss of control must have occurred prior to the driver doing any avoidance maneuver. If the driver attempts a maneuver (i.e., brakes, steers, etc.) as a result of the driver's perception of a vehicle, object, pedestrian, or non-motorist, then select the vehicle, object, pedestrian, or non-motorist as the critical event because that is what made the situation critical. If the vehicle is in a yaw prior to the driver taking an avoidance action, then loss-of-control is what made it critical (critical curve scuff, hydroplaning, etc.).
- 6. When determining CRITICAL PRECRASH CATEGORY/EVENT if you do not know from available sources which driver had the right-of-way at a controlled or uncontrolled intersection, then use the following as a guideline:
 - a. If the junction is controlled by a three-way/four-way stop sign, or is uncontrolled, then use the common rule that the vehicle on the right has the right-of-way for determining encroachment.
 - b. If the junction is controlled by an on-colors traffic control device, and both drivers claim a green light, then both vehicles are in an environmentally dangerous position, and Critical Precrash Event for both vehicles should be 2 (This Vehicle Traveling) (CRITICAL PRECRASH CATEGORY) 17 (Crossing over (passing through) junction">17 (Crossing over (passing through) junction) (CRITICAL PRECRASH EVENT).
- 7. When two vehicles are initially traveling on the same trafficway and one executes a left turn with the right-of-way (i.e., green arrow), use 4 (Other Motor Vehicle Encroaching Into Lane) 63 (From opposite direction-over right lane line) for the turning vehicle's critical event. This applies to Crash Types 68, 69.

If the vehicles were initially on different trafficways (Crash Types <u>76, 77</u> and <u>82, 83</u>) the critical event for the vehicle turning left with the right-of-way should be <u>4 (Other Motor Vehicle Encroaching Into Lane)</u> - <u>66 (From crossing street across path)</u>.

- 8. "Fixed" objects (e.g., trees, poles, fire hydrants, etc.) cannot be in the roadway.
- 9. A motor vehicle is stopped in a travel lane and is impacted by another motor vehicle ricocheting off a vehicle. The CRITICAL PRECRASH EVENT for the vehicle struck by the ricocheting vehicle is in the <u>category</u> of either: <u>3 (Other Motor Vehicle In Lane)</u> or <u>4 (Other Motor Vehicle Encroaching Into Lane)</u>.
- 10. <u>PRE-IMPACT STABILITY</u> should be indicated as <u>1 (Tracking)</u> if the following are met:
 - a. no skid marks are present on the diagram or mentioned in the narrative,
 - b. the case material does not indicate skidding, **AND**
 - c. the vehicle did not rotate 30° or more either clockwise or counterclockwise.

Note regarding PRE-IMPACT STABILITY:

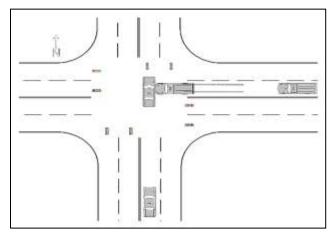
If the case material does not provide enough information (in the diagram, narrative, etc.) to determine precrash stability, code **9** (**Precrash Stability Unknown**).

Trafficway and its component definitions (i.e., roadway, road, shoulder, and median) can be found in the ANSI D16.1 Manual on the Classification of Motor Vehicle Traffic Crashes.

Precrash Examples

Example 1

Example 1 Diagram



Vehicle 1 was traveling northbound on a four-lane roadway. Vehicle 2 was traveling westbound on an intersecting four-lane roadway. The intersection was controlled by traffic signals. Both vehicles entered the intersection and the right side of Vehicle 1 was struck by the front of Vehicle 2. Police could not determine which vehicle had the right-of-way, both drivers claimed to have a green light. The driver of Vehicle 1 reported that he never saw Vehicle 2 approaching.

"None" was identified by police on the crash report for both drivers in the data element for recording driver distractions. The police also indicated that no skid marks were present at the scene associated with Vehicle 1, but there were pre-impact skids present at the scene associated with Vehicle 2 and that this supported the driver's statement that he attempted to stop when he saw Vehicle 1 in his path.

Precrash Element	Vehicle 1	Vehicle 2
<u>Driver Distracted By</u>	Not Distracted	Not Distracted
Pre-Event Movement	Going Straight	Going Straight
Critical Precrash (Category)	This Vehicle Traveling	This Vehicle Traveling
Critical Precrash (Event)	Crossing Over (Passing Through) Junction	Crossing Over (Passing Through) Junction
Attempted Avoidance Maneuver	No Avoidance Maneuver	Braking
Pre-Impact Stability	Tracking	Skidding Longitudinally Rotation Less Than 30 Degrees
Pre-Impact Location	Stayed in Original Travel Lane	Stayed in Original Travel Lane
Crash Type	87	86

In this example, the **Critical Crash Envelope** for Vehicle 1 (V₁CCE) begins at the point where it is in an imminent collision path with Vehicle 2. The **Critical Crash Envelope** for Vehicle 2 (V₂CCE) begins at the point where the drivers recognize the impending danger. The **Critical Crash Envelopes** end at the point of impact with the other vehicle.

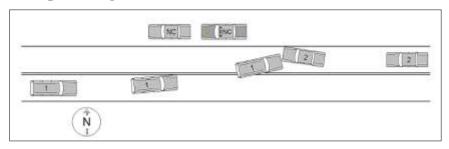
Since it could not be determined which vehicle had the right-of-way, the **Critical Event** is determined using **Precrash General Rule #6b.** It states, "If the junction is controlled by an oncolors traffic control device, and both drivers claim a green light, then both vehicles are in an environmentally dangerous position and the **Critical Event** for both vehicles should be <u>This Vehicle Traveling (Critical Event - Precrash (Category)) Crossing Over (Passing Through) Junction (Critical Event - Precrash (Event))."</u>

Vehicle 1's **Pre-Impact Stability** was <u>Tracking</u> based on <u>Precrash General Rule #10</u>. <u>Skidding Longitudinally Rotation Less Than 30 Degrees</u> was selected for Vehicle 2's **Pre-Impact Stability** because tire marks were identified on the report and there was no indication of rotation.

It is important to keep in mind the type of traffic control (traffic signal versus stop sign) when determining right-of-way. Using the same scenario but substituting stops signs for the traffic signals, would change the **Critical Event** for both vehicles. **Precrash General Rule #6a** states, "If the junction is controlled by a 3-way or 4-way stop sign, or is uncontrolled, the vehicle on the right [Vehicle 2 in this case] would have had the right-of-way for determining encroachment."

Example 2

Example 2 Diagram



Vehicle 1 and Vehicle 2 are traveling in opposite directions on the same roadway. A police car (with lights activated) is making a traffic stop on the north side of the road. The driver of Vehicle 1 is looking at the activity on his left. Before he can react, Vehicle 1 crosses the centerline and strikes the front of Vehicle 2. The driver of Vehicle 2 also noticed the police activity, but he was attentive to the slowing traffic ahead. Vehicle 2 attempted to avoid the crash by braking and steering right.

Precrash Element	Vehicle 1	Vehicle 2
Driver Distracted By	Distracted by Outside Person, Object, or Event	Not Distracted
Pre-Event Movement	Going Straight	Going Straight
Critical Precrash (Category)	This Vehicle Traveling	Other Motor Vehicle Encroaching Into Lane
Critical Precrash (Event)	Over the Lane Line on Left Side of Travel Lane	From Opposite Direction Over Left Lane Line
Attempted Avoidance Maneuver	No Avoidance Maneuver	Braking and Steering Right
Pre-Impact Stability	Tracking	Tracking
Pre-Impact Location	Stayed on Roadway, But Left Original Travel Lane	Stayed in Original Travel Lane
Crash Type	50	51

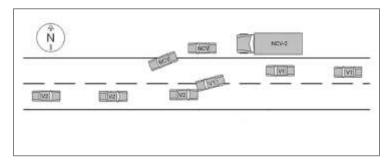
In this example, Vehicle 1 has one **Critical Crash Envelope** (V₁CCE) that begins at the point where Vehicle 1 is in an imminent collision path with Vehicle 2. Vehicle 1's **Critical Crash Envelope** ends at the point of impact with Vehicle 2.

Vehicle 2's **Critical Crash Envelope** (V₂CCE) begins when the driver recognizes impending danger and ends at the point of impact with Vehicle 1.

When determining **Crash Type**, it is important to keep in mind that some **Crash Configurations** are plane of impact dependent, while others are not. In this case the **Crash Type** for Vehicle 1 and Vehicle 2 is "50" and "51," Head-On respectively since it involved the front planes of both vehicles. If the collision had involved the side of one or both of the vehicles, then the **Crash Type** would have been "64" and "65," Angle/Sideswipe.

Example 3

Example 3 Diagram



Vehicle 1 and Vehicle 2 are traveling in opposite directions on the same roadway. A non-contact vehicle (NCV) is parked in front of a non-contact heavy truck on the road shoulder and suddenly enters the roadway into Vehicle 1's travel lane. The driver of Vehicle 1 instantly brakes, and steers left to avoid the non-contact vehicle. Vehicle 1 crosses over the center line and **immediately** impacts the front of Vehicle 2. Vehicle 2 had no avoidance maneuvers. "None" was identified by police on the crash report for both drivers in the data element for recording driver distractions.

Precrash Element	Vehicle 1	Vehicle 2
<u>Driver Distracted By</u>	Not Distracted	Not Distracted
Pre-Event Movement	Going Straight	Going Straight
Critical Precrash (Category)	Other Motor Vehicle Encroaching Into Lane	Other Motor Vehicle Encroaching Into Lane
Critical Precrash (Event)	From Parking Lane/Shoulder	From Opposite Direction Over Left Lane Line
Attempted Avoidance Maneuver	Braking and Steering Left	No Avoidance Maneuver
Pre-Impact Stability	Tracking	Tracking
Pre-Impact Location	Stayed on Roadway, But Left Original Travel Lane	Stayed in Original Travel Lane
Crash Type	58	59

In this example, Vehicle 1 has one **Critical Crash Envelope** (V₁CCE). Vehicle 1's **Critical Crash Envelope** involved a successful avoidance of a non-contact vehicle and resulted in an **immediate** impact to Vehicle 2. Vehicle 1's **Critical Crash Envelope** was initiated by the non-contact vehicle; afterwards there was no opportunity for subsequent avoidance actions. Therefore, the encroachment of the non-contact vehicle into Vehicle 1's travel lane is coded as the **Critical Event - Precrash (Event)** for Vehicle 1. Vehicle 1's **Attempted Avoidance Maneuver** is coded as the action taken to avoid the non-contact vehicle.

Vehicle 2 has one **Critical Crash Envelope** (V₂CCE) that begins at the point where Vehicle 1 is in an imminent path of collision with Vehicle 2 and ends at the point of impact with Vehicle 1.

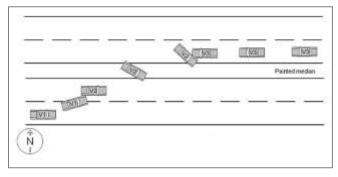
<u>Tracking</u> is selected as Vehicle 1's **Pre-Impact Stability** based on <u>Precrash General Rule #10</u>.

Vehicle 1's **Pre-Impact Location** is <u>Stayed On Roadway But Left Original Travel Lane</u>. This attribute best describes the location of the vehicle after the critical event and before impact.

The non-contact vehicle and the non-contact truck were not involved in an impact in the sequence of crash events and are, therefore, non-contact vehicles and not counted in the structuring of the case.

Example 4

Example 4 Diagram



Vehicle 1 and Vehicle 2 are traveling in the same direction in adjacent lanes on a divided highway (with a painted median). Vehicle 1 has a tire blow out and loses control, crosses the left lane line, and impacts the right rear of Vehicle 2. Vehicle 2 is redirected across the painted median, skidding and rotating clockwise, and subsequently impacts Vehicle 3. Vehicle 3 attempted to avoid Vehicle 2 by steering right and accelerating. "None" was identified by police on the crash report for all drivers in the data element for recording driver distractions.

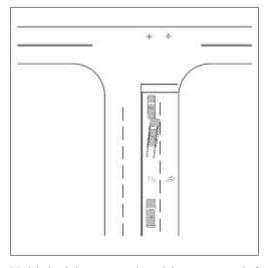
Precrash Element	Vehicle 1	Vehicle 2	Vehicle 3
<u>Driver Distracted By</u>	Not Distracted	Not Distracted	Not Distracted
Pre-Event Movement	Going Straight	Going Straight	Going Straight
Critical Precrash (Category)	This Vehicle Loss Control Due To:	Other Motor Vehicle Encroaching Into Lane	Other Motor Vehicle Encroaching Into Lane
Critical Precrash (Event)	Blow Out or Flat Tire	From Adjacent Lane (Same Direction) - Over Right Lane Line	From Opposite Direction - Over Left Lane Line
Attempted Avoidance Maneuver	Unknown/Not Reported	Unknown/Not Reported	Accelerating and Steering Right
Pre-Impact Stability	Tracking	Tracking	Tracking
Pre-Impact Location	Stayed on Roadway, But Left Original Travel Lane	Stayed in Original Travel Lane	Stayed in Original Travel Lane
<u>Crash Type</u>	45	44	98

In this example, Vehicle 1 has one **Critical Crash Envelope** (V₁CCE) that begins with control loss due to the tire blow out and ends at the point of impact with Vehicle 2. The blow out is the

Critical Event - Precrash (Event). Vehicle 2 has two Critical Crash Envelopes (V₂CCE₁ and V₂CCE₂). Vehicle 2's first Critical Crash Envelope (V₂CCE₁) begins when Vehicle 1 enters Vehicle 2's travel lane and ends at the point of impact with Vehicle 1. The first CCE is selected because Precrash is only interested in coding the Critical Crash Envelope that leads to a vehicle's first harmful event. Vehicle 3 has one Critical Crash Envelope (V₃CCE) that begins when Driver 3 recognizes and reacts to Vehicle 2 that is in an imminent path of collision with Vehicle 3 and ends at the point of impact with Vehicle 2.

Attempted Avoidance Maneuver was coded as <u>Unknown/Not Reported</u> for Vehicles 1 and 2 because of a lack of information to assess attempted avoidance. The **Crash Type** for Vehicle 1 and Vehicle 2 is "45" - "44," <u>Sideswipe/Angle: Straight Ahead</u>, respectively based on their positions (i.e., left versus right) and because Vehicle 1 did not **intend** to change lanes. Situations involving vehicles that **intended** to change lanes are captured with **Crash Type** codes "46" and "47," <u>Sideswipe/Angle: Changing lanes</u>. The **Crash Type** for Vehicle 3 is "98," <u>Other</u> since it was not involved in the FIRST HARMFUL EVENT in the crash.

Example 5 Diagram



Vehicle 2 is stopped waiting to turn left in a left turn lane at an intersection controlled by a traffic signal. Vehicle 1 approaches the intersection and the driver is texting. Vehicle 1's driver looks up at the last minute and brakes and steers right leaving tire marks but cannot avoid striking the rear of Vehicle 2. There is no information on the crash report to assess distraction for the driver of Vehicle 2.

Precrash Element	Vehicle 1	Vehicle 2
Driver Distracted By	While Manipulating Mobile Phone	Not Reported
Pre-Event Movement	Going Straight	Stopped in Road
Critical Precrash (Category)	Other Vehicle in Lane	Other Vehicle in Lane
Critical Precrash (Event)	Other Vehicle Stopped	Traveling in Same Direction with Higher Speed

Precrash Element	Vehicle 1	Vehicle 2
Attempted Avoidance Maneuver	Braking and Steering Right	No Avoidance Maneuver
Pre-Impact Stability	Skidding Longitudinally - Rotation Less Than 30 Degrees	Tracking
Pre-Impact Location	Stayed in Original Travel Lane	Stayed in Original Travel Lane
<u>Crash Type</u>	20	22

In this example, Vehicle 1's **Critical Crash Envelope** (V₁CCE) begins at the point the driver recognizes Vehicle 2 is stopped in the lane and ends at the point of impact with Vehicle 2. Vehicle 2's **Critical Crash Envelope** (V₂CCE) begins and ends at the point of impact.

Vehicle 1's **Driver Distracted By** is While Manipulating a Mobile Phone. Texting is captured in this attribute.

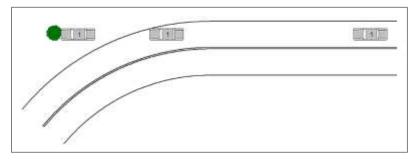
The Pre-Event Movement and Critical Event coding can be tricky in rear-end crash scenarios. Refer to the <u>Precrash Event Scenarios for Different Rear-End Collision Situations</u> following the Precrash Examples for additional guidance.

The **Crash Type** for Vehicle 2 is <u>'22,' Rear-end: Stopped Left</u> because it was stopped and **intended** to turn left at the intersection.

The **Pre-Impact Stability** for Vehicle 1 is <u>Skidding Longitudinally - Rotation Less Than 30</u> Degrees as opposed to <u>Tracking</u> because tire marks were present and rotation was minimal.

Example 6

Example 6 Diagram



Vehicle 1 is traveling on a two-lane roadway and the driver, who is diabetic, has a hypoglycemic attack and begins to lose consciousness. The vehicle departs the right side of the road as it enters a curve and strikes a tree.

Precrash Element	Vehicle 1
<u>Driver Distracted By</u>	Not Distracted
Pre-Event Movement	Going Straight
Critical Precrash (Category)	This Vehicle Loss of Control Due To
Critical Precrash (Event)	Other Cause of Control Loss (Specify:)

588

Precrash Element	Vehicle 1
Attempted Avoidance Maneuver	None
Pre-Impact Stability	Tracking
Pre-Impact Location	Departed Roadway
Crash Type	01

Vehicle 1's **Critical Crash Envelope** (V₁CCE) begins at the point where the vehicle is in imminent path of a collision with the tree and ends at impact.

Driver Distracted By is coded as <u>Not Distracted</u> because the driver lost consciousness just prior to the Critical Precrash Event and intoxication, illness, blackouts, falling asleep, or being fatigued are not considered distractions for the purposes of this element in FARS and CRSS.

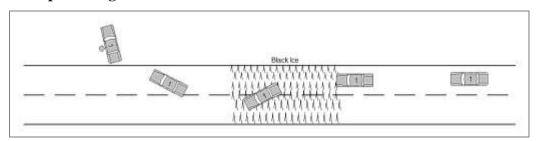
The **Critical Event** is coded <u>This Vehicle Control Loss Due To: Other Cause of Control Loss</u> (<u>Specify:</u>) following <u>Precrash General Rule #4</u> that addresses loss of control because of driver illness.

The **Pre-Event Movement** element describes the vehicle's activity just prior to the **Critical Event**, in this case, Going Straight.

The **Crash Type** for Vehicle 1 is "01," Right Roadside Departure: Drive Off Road. Do not confuse the **Critical Event Category** coding of This Vehicle Control Loss Due To with the **Crash Type** "02," Right Roadside Departure: Control/Traction Loss.

Example 7

Example 7 Diagram



Vehicle 1 is traveling on a two-lane roadway with moderate snow falling. The driver suddenly encounters black ice on the roadway, loses control, and begins to rotate counterclockwise. The driver attempts to regain control by braking and steering right but overcorrects and the vehicle departs the right side of the roadway and strikes a pole. The police on the crash report identify that the driver is "Not Distracted."

Precrash Element	Vehicle 1
Driver Distracted By	Not Distracted
Pre-Event Movement	Going Straight
Critical Precrash (Category)	This Vehicle Loss of Control Due To:

589

Precrash Element	Vehicle 1
Critical Precrash (Event)	Suddenly Encountered Poor Road Conditions (Specify:)
Attempted Avoidance Maneuver	Braking and Steering Right
Pre-Impact Stability	Skidding Laterally Clockwise Rotation
Pre-Impact Location	Departed Roadway
<u>Crash Type</u>	02

Vehicle 1's **Critical Crash Envelope** (V₁CCE) begins when the vehicle encounters the black ice and ends at impact with the pole.

The **Critical Event** in this example is <u>This Vehicle Control Loss Due To: Poor Road Conditions</u> (Specify: (Black ice)).

It can be difficult to determine the **Critical Event** in cases when weather, road conditions, roadway alignment, and speed all potentially play a role in the crash. Examples 7 and 8 are prime examples, <u>Poor Road Conditions</u>, <u>Too Fast For Conditions</u>, or <u>This Vehicle Traveling</u> category attributes (e.g., <u>Off the Edge of the Road on the Right Side</u>) could be selected based on the circumstances.

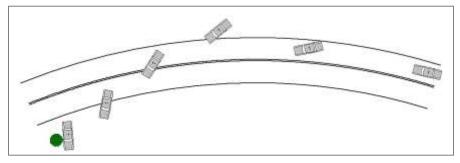
Typically, <u>Poor Road Conditions</u> such as ice and puddles are "suddenly" encountered by the driver and not an ongoing situation.

<u>Too Fast for Conditions</u> applies when the vehicle's movement and speed were not appropriate relative to the vehicle's surroundings; roadway curves are often involved.

If neither of these <u>Loss of Control</u> Critical Events apply, then <u>This Vehicle Traveling</u> Category attributes are appropriate.

Example 8

Example 8 Diagram



Vehicle 1 is traveling on a two-lane roadway with heavy rain falling. Police estimate the driver was traveling 55 mph in this 35-mph speed zone. While negotiating a curve, the driver loses control on the rain-slickened road and the vehicle slides off the right edge of the road but does not sustain an impact. The driver steers left in an attempt to regain control, crosses both travel lanes, and departs the left side of the road before striking a tree with its right side. The crash

report identifies "None" in a Contributing Circumstances field that includes various driver distraction attributes among the factors available.

Precrash Element	Vehicle 1
Driver Distracted By	Not Distracted
Pre-Event Movement	Negotiating a Curve
Critical Precrash (Category)	This Vehicle Loss of Control Due To
Critical Precrash (Event)	Traveling Too Fast for Conditions or Road Configuration
Attempted Avoidance Maneuver	Steering Left
Pre-Impact Stability	Skidding Laterally Counterclockwise Rotation
Pre-Impact Location	Departed Roadway
<u>Crash Type</u>	07

In this example, Vehicle 1 has one **Critical Crash Envelope** (V₁CCE) that begins when the driver begins to lose control and the vehicle begins to rotate counterclockwise. The envelope ends at impact with the tree. This crash is not a multiple **Critical Crash Envelope** scenario because Vehicle 1 never regained control.

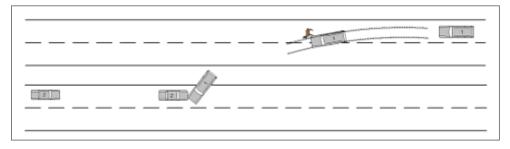
The **Critical Event** is coded <u>This Vehicle Control Loss Due To: Too Fast For Conditions</u> because the vehicle's movement and speed were not appropriate relative to the vehicle's surroundings (heavy rain and curve). This is applicable in this case even without the officer specifically stating, "too fast for conditions."

The **Pre-Impact Location** is coded <u>Departed Roadway</u> since the element is based on the location of the vehicle after the critical event, and immediately before the first impact.

The **Crash Type** element is based on the FIRST HARMFUL EVENT and the vehicle did not strike anything when it departed the right side of the road, therefore, "07," Left Roadside Departure-Control/Traction Loss is selected as the **Crash Type**.

Example 9

Example 9 Diagram



Vehicle 1 is traveling westbound on a highway with a posted speed limit of 55 mph. Vehicle 2 is traveling east on the same highway in sunny and dry conditions. A deer suddenly enters the roadway from the right and the driver of Vehicle 1 attempts to brake and steer left, leaving

several meters of tire marks, but strikes the deer. Vehicle 1 then goes into a counterclockwise yaw and crosses into the oncoming lanes and strikes Vehicle 2.

The driver of Vehicle 1 had a blood alcohol concentration (BAC) of 0.15 and was charged with driving under the influence. There were no indications of distraction identified on the crash report for the driver of Vehicle 1. Instead, in the Contributing Factors field where the officer could assess distraction he selected "animal in road" and "had been drinking." The Contributing Factors for the driver of Vehicle 2 were coded as "Unknown." The driver of Vehicle 2 was killed

Precrash Element	Vehicle 1	Vehicle 2
<u>Driver Distracted By</u>	Not Distracted	Unknown if Distracted
Pre-Event Movement	Going Straight	Going Straight
Critical Precrash (Category)	Object or Animal	Other Motor Vehicle Encroaching Into Lane
Critical Precrash (Event)	Animal in Road	From Opposite Direction Over Left Lane Line
Attempted Avoidance Maneuver	Braking and Steering Left	Unknown/Not Reported
Pre-Impact Stability	Skidding Longitudinally Rotation Less Than 30 Degrees	Tracking
Pre-Impact Location	Stayed On Roadway, But Left Original Travel Lane	Stayed in Original Travel Lane
<u>Crash Type</u>	13	98

Vehicle 1 has two **Critical Crash Envelopes** (V₁CCE₁ and V₁CCE₂). Vehicle 1's first **Critical Crash Envelope** (V₁CCE₁) begins when the driver recognizes the deer in the roadway and ends at the point of impact with the deer. The Precrash coding is based on the **Critical Crash Envelope** that resulted in Vehicle 1's first impact (V₁CCE₁).

Vehicle 2 has only one **Crash Envelope** (V₂CCE) that begins when it's in imminent path of collision with Vehicle 1 and ends at impact.

Not Distracted is selected for Vehicle 1 Driver Distracted By. The driver took evasive maneuvers to avoid the deer that identifies that the driver was attentive prior to the Critical Event. Also, there were no indications of distraction identified on the crash report for the driver of Vehicle 1 and in the Contributing Factors field, where the officer could assess distraction, he selected "animal in road" and "had been drinking." It's important to note that the BAC level or indication of alcohol as a factor in the crash for the driver of Vehicle 1 plays no role in distraction coding.

The **Pre-Impact Location** for Vehicle 1 is <u>Stayed On Roadway- But Left Original Travel Lane</u> since part of the vehicle was out of its original lane prior to impact with the deer. Similarly, vehicles that depart the road and strike a curb are coded as <u>Departed the roadway</u> even though the majority of the vehicle is still on the roadway.

The **Crash Type** for Vehicle 1 is "13," Pedestrian/Animal on Road.

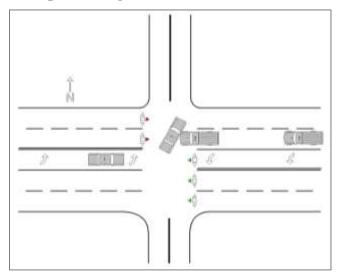
Vehicle 2 **Driver Distracted By** is coded <u>Unknown if Distracted</u>; the deceased driver could not be interviewed by the police and the officer coded "Unknown" in the field where distraction would be assessed.

Since no information was available to assess **Attempted Avoidance Maneuver** <u>Unknown/Not</u> Reported was selected for Vehicle 2.

The **Crash Type** for Vehicle 2 is <u>'98,' Other</u> since it was not involved in the FIRST HARMFUL EVENT in the crash.

Example 10

Example 10 Diagram



The crash occurred at the intersection of a five-lane east/west roadway with a center left-turn lane and a two-lane north/south roadway. The intersection was controlled by traffic signals. Vehicle 1 was eastbound in the left-turn lane of the five-lane roadway. Vehicle 2 was traveling west on the same roadway. Vehicle 1 had a green turn arrow and attempted to turn left to go north on the intersecting two lane road. Vehicle 2 passed through the intersection and its front struck the right side of Vehicle 1. The officer reported that there was no evidence of avoidance actions by either of the vehicles involved.

"Not Distracted" was identified by police on the crash report for the driver of Vehicle 1. The police crash report did not detail the circumstances regarding Vehicle 2's passing through the intersection, but the driver was cited for running a red light.

Precrash Element	Vehicle 1	Vehicle 2
<u>Driver Distracted By</u>	Not Distracted	Not Reported
Pre-Event Movement	Turning Left	Going Straight
Critical Precrash (Category)	Other Motor Vehicle Encroaching into Lane	This Vehicle Traveling

Precrash Element	Vehicle 1	Vehicle 2
Critical Precrash (Event)	From Opposite Direction Over Right Lane Line	Crossing Over (Passing Through) Junction
Attempted Avoidance Maneuver	No Avoidance Maneuver	No Avoidance Maneuver
Pre-Impact Stability	Tracking	Tracking
Pre-Impact Location	Stayed in Original Travel Lane	Stayed in Original Travel Lane
Crash Type	68	69

In this example, the **Critical Crash Envelope** for both vehicles (V_1CCE) and (V_2CCE) begin when they are in an imminent path of collision. The **Critical Crash Envelopes** end at the point of impact.

The first portion of <u>Precrash General Rule #7</u> applies to this crash. It states "When two vehicles are initially traveling on the <u>same</u> trafficway and one executes a left turn with the right-of-way (i.e., green arrow), use <u>Other Motor Vehicle Encroaching Into Lane - From Opposite Direction Over Right Lane Line</u> for the turning vehicle's <u>Critical Event</u>."

A similar principle applies for Vehicle 1's **Pre-Impact Location**; it's considered to have <u>Stayed in Original Travel Lane</u> while making the turn. Consider Vehicle 1's "lane" as continuing left as they negotiate the turn through the intersection.

Vehicle 2's **Driver Distracted By** is coded <u>Not Reported</u> since the police crash report did not provide any information on distractions.

Example 11

Example 11 Diagram



The crash occurred at the intersection of a five-lane east/west roadway with a center left-turn lane and a two-lane north/south roadway. The intersection was controlled by traffic signals.

Vehicle 1 was southbound on the two-lane roadway. Vehicle 2 was traveling west on the five-lane roadway. Vehicle 1 had a green turn arrow and attempted to turn left to travel east on the intersecting five lane road. Vehicle 2 passed through the intersection and its front struck the left side of Vehicle 1.

The driver of Vehicle 1 was attentive and took no avoidance actions. Vehicle 2's driver reported that he was thinking about an issue at work and did not notice the traffic signal until the last moment. He applied his brakes, but no tire marks were present.

Precrash Element	Vehicle 1	Vehicle 2	
<u>Driver Distracted By</u>	Not Distracted	Lost in Thought/Day Dreaming	
Pre-Event Movement	Turning Left	Going Straight	
Critical Precrash (Category)	Other Motor Vehicle Encroaching Into Lane	This Vehicle Traveling	
Critical Precrash (Event)	From Crossing Street Across Path	Crossing Over (Passing Through) Junction	
Attempted Avoidance Maneuver	No Avoidance Maneuver	Braking	
Pre-Impact Stability	Tracking	Tracking	
Pre-Impact Location	Stayed in Original Travel Lane	Stayed in Original Travel Lane	
<u>Crash Type</u>	82	83	

In this example, Vehicle 1's **Critical Crash Envelope** (V₁CCE) begins at the point where Vehicle 1 is in an imminent collision path with Vehicle 2 and ends at the point of impact.

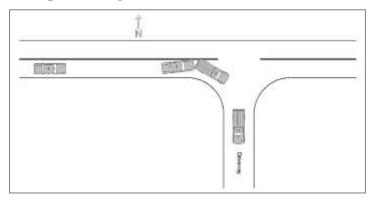
Vehicle 2's **Critical Crash Envelope** (V₂CCE) begins when the driver recognizes Vehicle 1 turning in front of it in the intersection and ends at impact.

The second portion of <u>Precrash General Rule #7</u> applies to this crash. It states "When two vehicles are initially traveling on <u>different</u> trafficways the <u>Critical Event</u> for the vehicle turning left with the right-of-way should be <u>Other Motor Vehicle Encroaching into Lane-From Crossing Street</u>, Across Path."

Vehicles initially on **different** trafficways are captured in **Crash Type Configuration** "K," Turn Into Path (**Crash Types** "76" - "85"). So, in this case, the **Crash Types** for Vehicle 1 and Vehicle 2 are "82" and "83" respectively. Turning vehicles initially on the **same** trafficway are coded in **Crash Type Configuration** "J," Turn Across Path (**Crash Types** "68" - "75"). Unlike many of the other **Crash Types**, the plane contacted on the vehicle is irrelevant for the <u>Change Trafficway</u> (Category IV) **Crash Types**.

Example 12

Example 12 Diagram



Vehicle 1 was eastbound on a two-lane roadway. Vehicle 2 was backing out of a driveway on the south side of the road, intending to travel east. Vehicle 1 braked and steered left but was unable to avoid striking the rear of Vehicle 2. The driver of Vehicle 2 stated he saw the other vehicle approaching but misjudged its speed and did not think they were going to collide.

The officer indicated that Vehicle 1 was traveling 50 mph in the 35-mph speed zone and applied the brakes just prior to impact but did not leave tire marks. Driver distractions were identified by police for both drivers on the crash report as "None."

Precrash Element	Vehicle 1	Vehicle 2
Driver Distracted By	Not Distracted	Not Distracted
Pre-Event Movement	Going Straight	Backing Up
Critical Precrash (Category)	Other Motor Vehicle Encroaching Into Lane	This Vehicle Traveling
Critical Precrash (Event)	From Driveway, Turning into Same Direction	Backing
Attempted Avoidance Maneuver	Braking and Steering Left	No Avoidance Maneuver
Pre-Impact Stability	Tracking	Tracking
Pre-Impact Location	Stayed in Original Travel Lane	Entered Roadway
Crash Type	93	92

In this example, Vehicle 1's **Critical Crash Envelope** (V₁CCE) begins at the point where the driver recognizes Vehicle 2 is backing into the roadway and recognizes the danger. The **Critical Crash Envelope** for Vehicle 1 ends at impact.

Vehicle 2's **Critical Crash Envelope** (V₂CCE) begins when it's in imminent path of collision with Vehicle 1 and ends at impact.

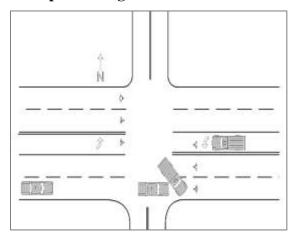
Although Vehicle 1 was traveling 15 mph over the speed limit, the **Critical Precrash Category** for Vehicle 1 is <u>Other Motor Vehicle Encroaching Into Lane</u>. The situation that made the event critical was Vehicle 2's movement (backing out of the driveway) and not Vehicle 1's speed. The

Critical Event for Vehicle 1 is <u>From Driveway Turning Into Same Direction</u>, since Vehicle 2 **intended** to travel east in the same direction as Vehicle 1.

The **Critical Event** for Vehicle 2 is This Vehicle Traveling- Backing.

Example 13

Example 13 Diagram



Vehicle 1 was eastbound on a five-lane roadway with center left-turn lanes approaching an intersection controlled by a traffic signal. Vehicle 2 was westbound on the same roadway in the left turn lane. The signal was solid green for eastbound and westbound traffic. Vehicle 2 attempted to make a U-turn at the intersection to travel east and was struck in the right side by the front of Vehicle 1. The driver of Vehicle 2 stated he scanned the intersection for traffic but did not see Vehicle 1 approaching. The driver of Vehicle 1 was attentive and saw the other vehicle approaching but did not think it would attempt to turn and consequently had no time to react. Police charged the driver of Vehicle 2 with failure to yield.

Precrash Element	Vehicle 1	Vehicle 2
<u>Driver Distracted By</u>	Not Distracted	Not Distracted
Pre-Event Movement	Going Straight	Making a U-Turn
Critical Precrash (Category)	Other Motor Vehicle Encroaching into Lane	This Vehicle Traveling
Critical Precrash (Event)	From Opposite Direction Over Left Lane Line	Making a U-Turn
Attempted Avoidance Maneuver	No Avoidance Maneuver	No Avoidance Maneuver
Pre-Impact Stability	Tracking	Tracking
Pre-Impact Location	Stayed in Original Travel Lane	Stayed on Roadway but Left Original Travel Lane
Crash Type	98	98

In this example, Vehicle 1's **Critical Crash Envelope** (V₁CCE) begins at the point where the driver recognizes Vehicle 2 is making a U-turn in front of them and ends at impact.

Vehicle 2's **Critical Crash Envelope** (V₂CCE) begins when it's in imminent path of collision with Vehicle 1 and ends at impact.

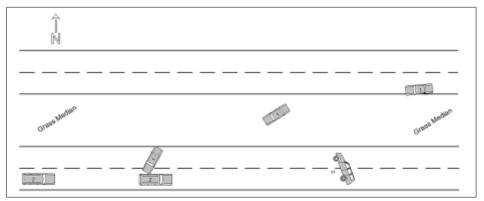
The **Critical Event** for Vehicle 1 is <u>Other Motor Vehicle Encroaching into Lane-From Opposite</u> Direction Over Left Lane Line.

The **Pre-Event Movement** for Vehicle 2 is <u>Making a U-Turn</u> and the **Critical Event** for Vehicle 2 is <u>Making a U-Turn</u>. If it is unclear if a vehicle is <u>Turning Left</u> or <u>Making a U-Turn</u>, default to <u>Turning Left</u>.

The key to the **Critical Event** coding in this case is that Vehicle 2 did **not** have the right of way while making the U-turn. If the scenario was altered such that Vehicle 2 was making a legal U-turn **with** the right of way, the first portion of **Precrash General Rule #7** would apply and Vehicle 2's **Critical Event** would be Other Motor Vehicle Encroaching into Lane -From Opposite Direction Over Right Lane Line.

The **Crash Type** for both vehicles is, "98," Other Crash Type. This **Crash Type** is used for collisions that do not reasonably fit into any of the specified types. This code includes (but is not limited to): Rollovers on the road, U-turns, third or subsequent vehicles involved in a crash, or the second involved vehicle when the FIRST HARMFUL EVENT involved a vehicle-to-object collision or non-collision.

Example 14 Diagram



Vehicle 1 was traveling westbound on a median divided highway. Vehicle 2 was traveling east on the same highway. The driver of Vehicle 1 reportedly fell asleep and drifted off the left side of the roadway. Vehicle 1 crossed the median and entered the eastbound lanes where its front struck the left side of Vehicle 2. After initial impact Vehicle 2 rotated counterclockwise and rolled over one quarter turn, coming to rest on its right side. The field on the crash report for assessing driver distraction was coded as "Other" for the driver of Vehicle 1 and "None" for the driver of Vehicle 2.

Precrash Element	Vehicle 1	Vehicle 2
Driver Distracted By	Not Distracted	Not Distracted
Pre-Event Movement	Going Straight	Going Straight
Critical Precrash (Category)	This Vehicle Traveling	Other Motor Vehicle Encroaching Into Lane
Critical Precrash (Event)	Off the Edge of the Road on the Left Side	From Opposite Direction Over Left Lane Line
Attempted Avoidance Maneuver	No Avoidance Maneuver	Unknown/Not Reported
Pre-Impact Stability	Skidding Laterally Counterclockwise Rotation	Tracking
Pre-Impact Location	Departed Roadway	Stayed in Original Travel Lane
<u>Crash Type</u>	64	65

In this example, Vehicle 1's **Critical Crash Envelope** (V₁CCE) begins at the point where the vehicle leaves the initial roadway and ends at impact.

Vehicle 2's **Critical Crash Envelope** (V₂CCE) begins when the driver recognizes the other vehicle approaching and ends at impact.

Vehicle 1's **Driver Distracted By** is coded as <u>Not Distracted</u> because the driver was asleep just prior to the Critical Precrash Event and intoxication, illness, blackouts, falling asleep, or being fatigued are not considered distractions for the purposes of this element in FARS and CRSS.

Vehicle 1's **Attempted Avoidance Maneuver** is coded as <u>No Avoidance Maneuver</u> because this element identifies the driver's action/response to the Critical Event and this driver was asleep.

<u>Tracking</u> is the appropriate selection for Vehicle 2's **Pre-Impact Stability**. <u>Precrash General</u> Rule #10 states that a vehicle is considered to be "Tracking" if the following conditions are met:

- a. No skid marks are present on the diagram or mentioned in the narrative,
- b. The case material does not indicate skidding, and
- c. The vehicle did not rotate 30 degrees or more.

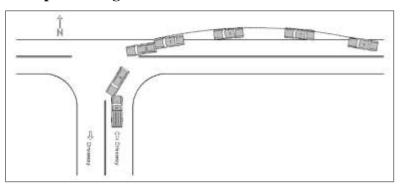
The **Pre-Impact Stability** for Vehicle 1 is <u>Skidding laterally-counterclockwise rotation</u> since the vehicle rotated 30 degrees or more. The driver need not make any steering inputs or leave tire marks for this attribute to be selected.

Median scenarios sometime cause confusion with the **Pre-Impact Location** element. <u>Departed Roadway</u> is used for vehicles crossing a median into oncoming traffic, as Vehicle 1 does in this case. A vehicle is considered to have <u>Returned to Roadway</u> only if it returned to the **same** roadway it was initially traveling on after the **Critical Event**.

The **Crash Type** for Vehicle 1 and Vehicle 2 is "64" and "65," <u>Angle/Sideswipe</u> respectively since it involved the side plane of one or both of the vehicles. If the collision had involved the front plane of both vehicles, then the **Crash Type** would have been "50" and "51," Head-On.

Example 15

Example 15 Diagram



Vehicle 1 was traveling west on a two-lane roadway with a private driveway on the south side of the road. Vehicle 2 was westbound ahead of Vehicle 1 and was decelerating so it could turn left into the private drive. Vehicle 3 was stopped facing north on the driveway access of the private drive. The driver of Vehicle 1 was reportedly daydreaming and did not see Vehicle 2 decelerating in the lane ahead. After realizing Vehicle 2 was in its lane, the driver of Vehicle 1 braked and steered right off the right side of the road (leaving tire marks) and then steered left back into the travel lanes. The front of Vehicle 1 struck the rear of Vehicle 2 before the driver of Vehicle 2 could react. The initial impact pushed Vehicle 2 forward into Vehicle 3. The crash report identified "Not Distracted" for Vehicle 2 and Vehicle 3.

Precrash Element	Vehicle 1	Vehicle 2	Vehicle 3
Driver Distracted By	Lost in Thought/Day Dreaming	Not Distracted	Not Distracted
Pre-Event Movement	Going Straight	Going Straight	Stopped in Roadway
Critical Precrash (Category)	Other Motor Vehicle in Lane	This Vehicle Traveling	Other Motor Vehicle Encroaching into Lane
Critical Precrash (Event)	Traveling in Same Direction While Decelerating	This Vehicle Decelerating	From Crossing Street- Turning into Opposite Direction
Attempted Avoidance Maneuver	Braking and Steering Right	No Avoidance Maneuver	No Avoidance Maneuver
Pre-Impact Stability	Skidding Longitudinally Rotation Less Than 30 Degrees	Tracking	Tracking
Pre-Impact Location	Returned to Roadway	Stayed in Original Travel Lane	Stayed in Original Travel Lane
<u>Crash Type</u>	28	30	98

In this example, Vehicle 1's **Critical Crash Envelope** (V₁CCE) begins when the driver recognizes Vehicle 2 is decelerating ahead and ends with impact with Vehicle 2.

Vehicle 2 has two **Critical Crash Envelopes** (V₂CCE₁ and V₂CCE₂). Vehicle 2's first **Critical Crash Envelope** (V₂CCE₁) begins when it is in imminent path of a collision with Vehicle 1 and ends at the point of impact with Vehicle 1. Use the **Critical Crash Envelope** that resulted in Vehicle 2's first impact (V₂CCE₁), because Precrash coding is associated with the **Critical Crash Envelope** that leads to a vehicle's first harmful event.

The **Critical Event** for Vehicle 1 is <u>Other Motor Vehicle in Lane-Traveling in Same Direction While Decelerating</u>, even though the vehicle departed the right side of the roadway prior to striking Vehicle 2. Determining the **Critical Event** can be made easier by using the "**But For**" test. In this example "But For" Vehicle 2 being in this vehicle's lane, it would not have been involved in the crash.

Vehicle 1's **Attempted Avoidance Maneuver** is *Braking and Steering Right*, because that was the driver's initial action in response to the realization of impending danger. Vehicle 1 steering left back into the roadway is not considered in this case. Vehicle 3's **Attempted Avoidance Maneuver** is **No Avoidance Maneuver** because the vehicle was stopped.

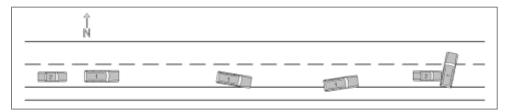
The **Pre-Impact Location** for Vehicle 1 is <u>Returned to Roadway</u>, since the vehicle returned to the **same** roadway during the Precrash motion.

The **Crash Type** for Vehicle 1 and Vehicle 2 is <u>"28" Rear-End: Decelerating (Slowing)</u> – <u>"30,"</u> Rear-End: Decelerating, Going Left respectively based on three factors:

- a. The front to rear impact configuration,
- b. Vehicle 2's decelerating (as opposed to stopped or lower steady speed), and
- c. Vehicle 2's **intent** to turn left into the private drive.

Example 16

Example 16 Diagram



Vehicle 1 was traveling east in the right lane of a straight and level divided highway with shoulders. Vehicle 2 was eastbound in the right lane behind Vehicle 1. Conditions were daylight with rain falling and fog. All indications are that both vehicles were driving at or near the speed limit. Vehicle 1 edged off the right side of the roadway onto the shoulder and the driver overcorrected, braking and steering left, back into its original lane. The vehicle went into a counterclockwise yaw and was struck on the left side by the front of Vehicle 2.

Police indicated the driver of Vehicle 1 was "Distracted" and that the driver of Vehicle 2 was "Not Distracted."

Precrash Element	Vehicle 1	Vehicle 2
<u>Driver Distracted By</u>	Distraction (Distracted), Details Unknown	Not Distracted
Pre-Event Movement	Going Straight	Going Straight
Critical Precrash (Category)	This Vehicle Traveling	Other Motor Vehicle in Lane
Critical Precrash (Event)	Over the Lane Line on Right Side of Travel Lane	Traveling in Same Direction While Decelerating
Attempted Avoidance Maneuver	Braking and Steering Left	Unknown/Not Reported
Pre-Impact Stability	Skidding Laterally-Counter-Clockwise Rotation	Tracking
Pre-Impact Location	Returned to Roadway	Stayed in Original Travel Lane
Crash Type	48	48

Vehicle 1's **Critical Crash Envelope** (V₁CCE) begins when the driver realizes the vehicle is departing the travel lane and ends at impact.

The **Critical Crash Envelope** for Vehicle 2 (V₂CCE) begins when the vehicle is in imminent path of collision with Vehicle 1 and ends at impact.

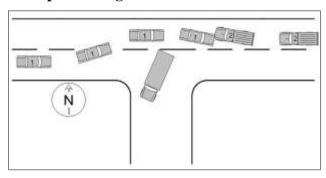
<u>Distraction (Distracted)</u>, <u>Details Unknown</u> is selected for Vehicle 1 **Driver Distracted By**. Police reported the driver was distracted, although the specific distraction was not identified.

The presence of rain and fog does not affect Vehicle 1's **Critical Event** of <u>This Vehicle</u> <u>Traveling-Off The Edge of the Road On the Right Side</u> in this case. Do not assume that <u>This Vehicle Loss of Control</u> **Critical Events** such as <u>Poor Road Conditions</u> or <u>Traveling Too Fast for Conditions</u> are always selected just because the weather and/or road conditions were not optimal.

When determining **Crash Type**, it is important to keep in mind that some **Crash Configurations** are plane of impact dependent, while others are not. In this case the **Crash Type** for both vehicles are "48," <u>Sideswipe/Angle: Specifics Other</u>. The vehicles were traveling in the same trafficway in the same direction (<u>Crash Type Category II</u>) and the impact involved the side of one or both of the vehicles (<u>Crash Type Configuration F</u>). If the impact had been front to rear, <u>Crash Configuration D (Rear-End)</u> would have applied.

Example 17

Example 17 Diagram



Vehicle 1 is traveling eastbound. A non-contact vehicle (NCV) is westbound and attempts to turn left in front of Vehicle 1 into an intersecting private driveway. Vehicle 1 braked and steered left to avoid the non-contact vehicle. The driver of Vehicle 1 successfully avoided the non-contact vehicle and maintained full control but crossed into the westbound lane. Now traveling the wrong way in the westbound lane, Vehicle 1 recognized that Vehicle 2 was in his path and attempted to steer right and return to the eastbound lane but struck Vehicle 2 head on. Vehicle 2 attempted to avoid the crash by braking and steering right. The crash report was coded as "Not Distracted" for both drivers.

Precrash Element	Vehicle 1	Vehicle 2
Driver Distracted By	Not Distracted	Not Distracted
Pre-Event Movement	Successful Avoidance Maneuver to a Previous Critical Event	Going Straight
Critical Precrash (Category)	Other Motor Vehicle in Lane	Other Motor Vehicle in Lane
Critical Precrash (Event)	Traveling in Opposite Direction	Traveling in Opposite Direction
Attempted Avoidance Maneuver	Steering Right	Braking and Steering Right
Pre-Impact Stability	Tracking	Tracking
Pre-Impact Location	Stayed in Original Travel Lane	Stayed in Original Travel Lane
Crash Type	52	52

In this example, Vehicle 1 has two **Critical Crash Envelopes** (V₁CCE₁ and V₁CCE₂). Vehicle 1's first **Critical Crash Envelope** (V₁CCE₁) ends at the point where the driver of Vehicle 1 made a successful avoidance maneuver and maintained full control of the vehicle. Vehicle 1's second **Critical Crash Envelope** (V₁CCE₂) begins shortly after the successful avoidance maneuver and ends at the point of impact with Vehicle 2. For coding purposes, use the **Critical Crash Envelope** that resulted in Vehicle 1's first impact (V₁CCE₂).

Vehicle 2 has one **Critical Crash Envelope** (V2CCE₁), which begins at the point where the driver of Vehicle 2 recognizes Vehicle 1 in their lane and ends at the point of impact with Vehicle 1.

The **Crash Type** for both vehicles is coded <u>"52," Head-On: Specifics Other</u> because Vehicle 1 had full control traveling the wrong way.

Example 18: Precrash Event Scenarios for Different Rear-End Collision Situations

Rear-end crashes sometimes cause confusion with precrash coding. Two key points must be determined to accurately code the <u>Pre-Event Movement</u>, <u>Critical Event - Precrash (Category)</u> and <u>Critical Event - Precrash (Event)</u>:

- Was the lead vehicle stopped, decelerating, or traveling at a steady speed?
- Did the trailing vehicle decelerate prior to impact?

The following scenarios should be used as a guide.

Two Vehicle Collisions

Scenario 1: Both vehicles in motion. Leading vehicle, traveling at steady speed, is struck from behind by trailing vehicle.

Vehicle Position	Pre-Event Movement	Critical Precrash (Category)	Critical Precrash (Event)
Trailing	Going Straight	Other Motor Vehicle in Lane	Traveling in Same Direction with Lower Steady Speed
Lead	Going Straight	Other Motor Vehicle in Lane	Traveling in Same Direction with Higher Speed

Scenario 2: Both vehicles traveling at same speed. Lead vehicle decelerates and trailing vehicle continues at initial speed. Trailing vehicle eventually applies brakes before striking the lead vehicle that is not yet stopped.

Vehicle Position	Pre-Event Movement	Critical Precrash (Category)	Critical Precrash (Event)
Trailing	Going Straight	Other Motor Vehicle in Lane	Traveling in Same Direction While Decelerating
Lead	Going Straight	This Vehicle Traveling	This Vehicle Decelerating

Scenario 3: Both vehicles traveling at same speed. Lead vehicle stops and is immediately struck by trailing vehicle.

Vehicle Position	Pre-Event Movement	Critical Precrash (Category)	Critical Precrash (Event)
Trailing	Going Straight	Other Motor Vehicle in Lane	Traveling in Same Direction While Decelerating
Lead	Going Straight	Other Motor Vehicle in Lane	Traveling in Same Direction with Higher Speed

Scenario 4: Lead vehicle is stopped on roadway and is struck by a trailing vehicle.

Vehicle Position	Pre-Event Movement	Critical Precrash (Category)	Critical Precrash (Event)
Trailing	Going Straight	Other Motor Vehicle in Lane	Other Vehicle Stopped
Lead	Stopped in Road	Other Motor Vehicle in Lane	Traveling in Same Direction with Higher Speed

Scenario 5: Lead and trailing vehicle stopped on roadway. Lead vehicle backs into trailing vehicle.

Vehicle Position	Pre-Event Movement	Critical Precrash (Category)	Critical Precrash (Event)
Trailing	Stopped in Road	Other Motor Vehicle in Lane	Backing
Lead	Stopped in Road	This Vehicle Traveling	Backing

Three Vehicle Collisions

Scenario 6: Two vehicles stopped in traffic, struck by decelerating trailing vehicle.

Vehicle Position	Pre-Event Movement	Critical Precrash (Category)	Critical Precrash (Event)
Trailing	Decelerating	Other Motor Vehicle in Lane	Other Vehicle Stopped
Middle	Stopped in Road	Other Motor Vehicle in Lane	Traveling in Same Direction while Decelerating
Lead	Stopped in Road	Other Motor Vehicle in Lane	Traveling in Same Direction with Higher Speed

Scenario 7: Lead vehicle stopped in traffic, middle vehicle decelerating, trailing vehicle strikes middle vehicle that strikes lead vehicle.

Vehicle Position	Pre-Event Movement	Critical Precrash (Category)	Critical Precrash (Event)
Trailing	Going Straight	Other Motor Vehicle in Lane	Traveling in Same Direction while Decelerating
Middle	Decelerating	Other Motor Vehicle in Lane	Traveling in Same Direction with Higher Speed
Lead	Stopped in Road	Other Motor Vehicle in Lane	Traveling in Same Direction with Higher Speed

PC3 - Vehicle Number - Precrash Level

FORMAT: 3 numeric

SAS NAME: Vehicle.VEH_NO

ELEMENT VALUES:

Codes	Attributes
001-999	Assigned Number

Definition: This element identifies the number assigned to this vehicle in the crash.

Remarks: Each motor vehicle in a crash must be assigned a unique number by the Analyst. Order is not important.

Numbers assigned to vehicles must be consecutive, starting with "001" with no missing numbers.

PC4 - Contributing Circumstances, Motor Vehicle

FORMAT: 2 numeric. Select All That Apply.

SAS NAME: Factor. VEHICLECC

ELEMENT VALUES:

Codes	Attributes
00	None Noted
01	<u>Tires</u>
02	Brake System
03	Steering
04	Suspension
05	Power Train
06	Exhaust System
07	Head Lights
08	Signal Lights
09	Other Lights
10	Wipers
11	Wheels
12	Mirrors
13	<u>Windows/Windshield</u>
14	Body/Doors
15	Truck Coupling/Trailer Hitch/Safety Chains
16	Safety Systems
17	<u>Vehicle Contributing Factors - No Details</u>
97	<u>Other</u>
99	Reported as Unknown

Definition: This element describes the possible pre-existing motor vehicle defects or maintenance conditions that may have contributed to the crash.

Remarks: Rationale: Important for determining the significance of pre-existing problems, including equipment and operation, in motor vehicles involved in crashes that could be useful in determining the need for improvements in manufacturing and consumer alerts.

00 (None *Noted*) is used:

- when the case material make a positive statement that the vehicle had no defects, or "none" was indicated on the police crash report.
- when the case material does not indicate a defect in an available field and not reporting a defect in that field indicates "None."
- when the investigating officer is limited in selection and cannot select a defect in addition to another factor relevant to crash and no other indication of a defect exists in the case material.
- When the case material are silent on this information and there is no reason to suspect a pre-existing motor vehicle defect or maintenance condition exists that may have contributed to the crash.
- **01** (**Tires**) include any defect (e.g., lost/losing re-tread) or maintenance issue of a tire (e.g., one or more bald tires). If the contributing factor is of the wheel (e.g., a lug nut comes off), then use **11** (**Wheels**). If the officer noted this driver was driving with a "donut"/spare tire, improperly sized tire(s), driving on run-flats in an air-out situation, etc., see RELATED FACTORS-DRIVER LEVEL <u>057</u> (**Driving with Tire Related Problems**) and the table for comparison example coding situations.
- **02** (**Brake System**) includes parking brakes.
- **03** (**Steering**) is used when the case material indicate the following may have contributed to the crash: tie rod ends, kingpins, power steering components, and ball joints.
- **04** (**Suspension**) is used when the case material indicate that the vehicle's suspension components may have contributed to the crash. These include, springs, shock absorbers, struts, and control arms.
- **05** (**Power Train**) is used when the case material indicate that the vehicle's power train components may have contributed to the crash. Examples are universal joints, drive shaft, and transmission. This also includes engine, differential, and stuck throttles.
- **06** (Exhaust System) includes exhaust manifold(s), headers, muffler, catalytic converter, tailpipe, etc.
- **09** (Other Lights) is used for an indication of missing or inoperative taillights on the vehicle or trailer contributing to the crash. It is also used when the case material indicated the "lights" of the vehicle contributed to the crash, but the type of light is not specified.
- 11 (Wheels) includes loss of lug nuts.
- **13** (Windows/Windshield) is used when there is a pre-existing defect to the windows or windshield such as improper tinting or cracks.
- 14 (Body/Doors) includes trunk, hood, tailgate, rear doors of cargo vans, etc.
- **15** (**Truck Coupling/Trailer Hitch/Safety Chains**) applies to a defective trailer hitch or an improper trailer hitch.

16 (**Safety Systems**) is used when the case material indicate that the air bags failed to deploy, or the air bag deployed inappropriately. Also, use this when a seat belt failure is described, such as webbing that was excessively worn or came unlatched. Excludes: improper use.

17 (Vehicle Contributing Factors - No Details) is used if a vehicle "factor" or "defect" is indicated in the case material but no information is given concerning the nature of the "factor."

97 (**Other**) includes any other component described in the case material that is not listed in the above attribute list, such as horns.

99 (**Reported as Unknown**) is used only if the case material specifically indicates an "unknown defect" or "unknown contributing factor."

Consistency Checks (See Section 400):

Error ID	IF	THEN
1L4P	any DRIVER'S VISION OBSCURED BY equals 09,	at least one CONTRIBUTING CIRCUMSTANCES, MOTOR VEHICLE must equal 97.
1L5P	any DRIVER'S VISION OBSCURED BY equals 10,	at least one CONTRIBUTING CIRCUMSTANCES, MOTOR VEHICLE must equal 07 or 08 or 09.
3D70	CRITICAL EVENT - PRECRASH (EVENT) equals 01-04,	CONTRIBUTING CIRCUMSTANCES, MOTOR VEHICLE must not equal 00.
3DB0	any CONTRIBUTING CIRCUMSTANCES, MOTOR VEHICLE equals 00 or 99,	only that one code and no other must be coded for this vehicle.
V990	any SEQUENCE OF EVENTS equals 61,	CONTRIBUTING CIRCUMSTANCES, MOTOR VEHICLE should not equal 00.

PC5 - Trafficway Description

FORMAT: 1 numeric

SAS NAME: Vehicle.VTRAFWAY

ELEMENT VALUES:

Codes	Attributes
0	Non-Trafficway or Driveway Access
1	Two-Way, Not Divided
2	Two-Way, Divided, Unprotected Median
3	Two-Way, Divided, Positive Median Barrier
5	Two-Way, Not Divided with a Continuous Left-Turn Lane
4	One-Way Trafficway
6	Entrance/Exit Ramp
8	Not Reported
9	Reported as Unknown

Definition: This element identifies the value indicated in the case material that best describes the trafficway flow just prior to this vehicle's CRITICAL PRECRASH EVENT.

Remarks: Enter the value indicated in the case material that best describes the trafficway flow just prior to this vehicle's <u>CRITICAL PRECRASH EVENT</u>. For vehicles departing the trafficway prior to their CRITICAL PRECRASH EVENT, the trafficway selected for classification is the one the vehicle departed. If this vehicle is in a junction just prior to its CRITICAL PRECRASH EVENT, the trafficway selected for classification is the one it is on before entering the junction.

See the **Coding Guide: Trafficway Components** for helpful information.

A trafficway may include several roadways if it is a physically divided highway. Trafficways are not physically divided unless the divider is a median, barrier, or other constructed device. **Pavement markings do qualify when they meet the definition of a median.** Refer to the definition of **03 (On Median)** under RELATION TO TRAFFICWAY.

A channelized lane should be considered a turn lane of the roadway it is part of, not a separate one-way roadway. Therefore, crashes occurring in a channelized lane should not be coded as on a separate trafficway but should reflect the trafficway the vehicle was on before entering the channel.

0 (Non-Trafficway or Driveway Access) is used when this vehicle is entering a trafficway but was not on a trafficway prior to its <u>CRITICAL PRECRASH EVENT</u> or when the vehicle was in a driveway access prior to its <u>CRITICAL PRECRASH EVENT</u>.

1 (Two-Way, Not Divided) is used whenever there is no median. Generally, medians are not designed to legally carry traffic. Any painted markings on the roadway less than four feet wide

are not medians. **NOTE:** Although gores separate roadways, and traffic islands (associated with channels) separate travel lanes, neither is involved in the determination of trafficway division.

- **5** (**Two-Way, Not Divided, with a Continuous Left-Turn Lane**) is used whenever the trafficway has a two-way left turn lane positioned between opposing straight-through travel lanes. It is designed to allow left turns to driveways, shopping centers, businesses, etc., while at the same time providing a separation of opposing straight-through travel lanes.
- 2 (Two-Way, Divided, Unprotected Median) is used whenever the trafficway is physically divided; however, the division is unprotected (e.g., vegetation, gravel, paved medians, trees, water, embankments, painted medians greater than 4 feet, and ravines that separate a trafficway (i.e., all non-manufactured barriers)). NOTE: Curbs alone are not traffic barriers; therefore, raised curbed medians DO NOT constitute a positive barrier in and by themselves. Without a positive barrier, curbed medians are examples of 2 (Two-Way, Divided, Unprotected Medians). The unprotected medians can be of any width; however, painted, paved, flush areas must be at least 4 feet in width to constitute a median strip. Continuous Left-turn Lanes are not considered Unprotected Medians (see 5 (Two-Way, Not Divided, with a Continuous Left-Turn Lane)).
- **3 (Two-Way, Divided, Positive Median Barrier**) is used whenever the traffic is physically divided and the division is protected by any concrete, metal, or other type of longitudinal barrier (i.e., all manufactured barriers). For underpass support structures and bridge rails acting as a barrier, use this attribute.

Traffic Barrier refers to a physical structure such as a guardrail, a concrete safety barrier, or a rock wall that has the primary function of preventing cross-median travel by deflecting and redirecting vehicles along the roadway on which they were traveling. Therefore, trees, curbing, rumble strips, and drain depressions are not barriers.

All traffic barriers are constructed on a median strip; therefore, if a traffic barrier exists on a divided highway, **3** (**Two-Way**, **Divided**, **Positive Median Barrier**) must be used. If it is not known whether a barrier exists or not, assume one does and use **3** (**Two-Way**, **Divided**, **Positive Median Barrier**) (that is, if a median is known to exist).

- **4 (One-Way Trafficway)** is used whenever the trafficway is undivided and traffic flows in one direction (e.g., one-way streets).
- **6** (Entrance/Exit Ramp) is an auxiliary or connecting roadway used for entering or exiting through-traffic lanes of a limited access roadway.
- 8 (Not Reported) Check to see if <u>0 (Non-Trafficway or Driveway Access)</u> or <u>9 (Reported as Unknown)</u> are more appropriate for the situation.

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks is NOT considered "**Not Reported**."

Code **8** (**Not Reported**) in these two situations:

1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).

2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).

9 (Reported as Unknown) is used when police indicate unknown.

Error ID	IF	THEN
250P	RELATION TO JUNCTION (b) equals 01, 02, 04, 06, 07, 16-19, 98, 99, and RELATION TO TRAFFICWAY equals 03,	TRAFFICWAY DESCRIPTION should equal 2, 3 for at least one vehicle involved in the first harmful event.
254P	RELATION TO TRAFFICWAY equals 01, and RELATION TO JUNCTION (b) equals 20,	TRAFFICWAY DESCRIPTION must equal 6 for at least one vehicle involved in the FIRST HARMFUL EVENT.
258P	RELATION TO JUNCTION (b) is 05 or 20	TRAFFICWAY DESCRIPTION should equal 6 for <i>at least one</i> vehicle involved in the FIRST HARMFUL EVENT.
740P	RELATION TO JUNCTION (b) equals 07,	TRAFFICWAY DESCRIPTION must equal 2, 3 for at least one vehicle.
A091	NUMBER OF VEHICLE FORMS SUBMITTED is greater than one, and CRITICAL EVENT – PRECRASH (EVENT) equals 70-73,	TRAFFICWAY DESCRIPTION should equal 0 for at least one other vehicle in the crash.
A16A	FUNCTIONAL SYSTEM equals 1, and STATE does not equal 02, and RELATION TO JUNCTION equals 01, 07, 18, or 19,	TRAFFICWAY DESCRIPTION should equal 2 or 3.
A292	any TRAFFICWAY DESCRIPTION, TOTAL LANES IN ROADWAY, ROADWAY ALIGNMENT, ROADWAY GRADE, ROADWAY SURFACE TYPE, or ROADWAY SURFACE CONDITIONS equals 0, 00 for this vehicle,	all must equal 0, 00, and SPEED LIMIT must equal 00 for this vehicle.
A470	WORK ZONE equals 0, and TRAFFICWAY DESCRIPTION equals 1-3, 5,	TOTAL LANES IN ROADWAY should not equal 1.
A481	TRAFFICWAY DESCRIPTION equals 6, and RELATION TO JUNCTION (b) does not equal 02, 03,	TOTAL LANES IN ROADWAY should equal 1, 2, 8, 9.
A482	TRAFFICWAY DESCRIPTION equals 4 or 6,	TOTAL LANES IN ROADWAY should not equal 5-7.
A491	TRAFFICWAY DESCRIPTION equals 2 or 3,	TOTAL LANES IN ROADWAY should not equal 7.

Error ID	IF	THEN
A492	TRAFFICWAY DESCRIPTION equals 2, 3, 5, 6,	SPEED LIMIT must not equal 00.
A493	TRAFFICWAY DESCRIPTION equals 2, 3, 5,	SPEED LIMIT should be greater than 15.
A494	TRAFFICWAY DESCRIPTION equals 6,	ROADWAY GRADE should not equal 3, 4.
A495	TRAFFICWAY DESCRIPTION equals 0,	the first event in SEQUENCE OF EVENTS for this vehicle should not equal 63, 64, 69, or 71.
A496	RELATION TO JUNCTION (b) does not equal 02 or 03, and TRAFFICWAY DESCRIPTION equals 5,	TOTAL LANES IN ROADWAY should not equal 1, 2, 4, or 6.
A610	RELATION TO TRAFFICWAY equals 01, and RELATION TO JUNCTION (b) equals 05,	TRAFFICWAY DESCRIPTION should equal 6 for at least one vehicle involved in the FIRST HARMFUL EVENT.
A611	TRAFFICWAY DESCRIPTION equals 6 for at least one vehicle involved in the FIRST HARMFUL EVENT,	RELATION TO JUNCTION (b) should equal 02, 03, 05, 17-20.
A620	CRASH TYPE equals 06-10, and TRAFFICWAY DESCRIPTION equals 3,	RELATION TO TRAFFICWAY should equal 03 or 12.
A881	RELATION TO TRAFFICWAY equals 11,	TRAFFICWAY DESCRIPTION should equal 5 for at least one vehicle.
AM2P	any SEQUENCE OF EVENTS equals 25 or 57,	TRAFFICWAY DESCRIPTION should equal 3, 6.
B18P	CRITICAL EVENT – PRECRASH (EVENT) equals 70-73,	TRAFFICWAY DESCRIPTION must not equal 0 for this vehicle.
V536	CRASH TYPE equals 20-49,	TRAFFICWAY DESCRIPTION should be the same for the vehicles involved in the FIRST HARMFUL EVENT.
U675	UNLIKELY: TRAFFICWAY DESCRIPTION equals 1, 4, or 5, and any SEQUENCE OF EVENTS equals 65 for this vehicle.	

Consistency Check (CRSS Only) (See Section 400):

Error ID	IF	THEN
АЗНО	INTERSTATE HIGHWAY equals 1, and RELATION TO JUNCTION (a) equals 1, and RELATION TO JUNCTION (b) is not equal to 03 or 05 or 20,	TRAFFICWAY DESCRIPTION should not equal 4 for at least one vehicle involved in the FIRST HARMFUL EVENT.

Consistency Checks (FARS Only) (See Section 400):

Error ID	IF	THEN
A300	ROUTE SIGNING equals 1,	TRAFFICWAY DESCRIPTION should equal 2, 3, 6 for at least one vehicle.
A490	TRAFFICWAY DESCRIPTION equals 2, 3, 5,	ROADWAY SURFACE TYPE should not equal 4, 5, 7.
A720	LAND USE AND FUNCTIONAL SYSTEM (b) equals 01, 02,	TRAFFICWAY DESCRIPTION should equal 2, 3, 6 for at least one vehicle.

PC6 - Total Lanes in Roadway

FORMAT: 1 numeric

SAS NAME: Vehicle.VNUM_LAN

ELEMENT VALUES:

Codes	Attributes
0	Non-Trafficway or Driveway Access
1	One Lane
2	Two Lanes
3	Three Lanes
4	Four Lanes
5	Five Lanes
6	Six Lanes
7	Seven or More Lanes
8	Not Reported
9	Reported as Unknown

Definition: This element identifies the value indicated in the case material that best describes the number of roadway lanes just prior to this vehicle's CRITICAL PRECRASH EVENT.

Remarks: For vehicles departing the trafficway prior to their <u>CRITICAL PRECRASH EVENT</u>, the trafficway selected for classification is the one the vehicle departed. If this vehicle is in a junction just prior to its CRITICAL PRECRASH EVENT, the roadway selected for classification is the one it is on before entering the junction.

See the Coding Guide: Total Lanes in Roadway for helpful information.

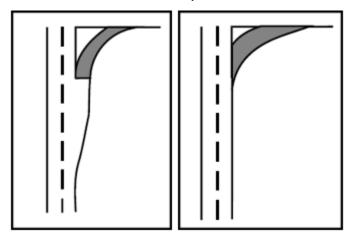
A Trafficway may have several Roads or, if undivided, a single Road. A Road consists of the travel lanes plus any adjacent shoulder(s) or parking lanes. A Trafficway consists of all Roads plus any roadsides, medians, or dividers. The travel lanes constitute the Roadway. A Road is the Roadway plus any adjacent Shoulder(s). The TOTAL LANES IN ROADWAY counted here include the travel lanes but not the shoulder(s).

The number of lanes counted does not include any of which are rendered unusable by restriction of the right-of-way (e.g., closed due to construction).

If turn bays, acceleration, deceleration, or center 2-way left turn lanes exist and are physically located within the cross section of the roadway, and these lanes are the most representative of the driver's environment just prior to the <u>CRITICAL PRECRASH EVENT</u>, then they are to be included in the number of lanes. Because a channelized lane is separated, it should not be included unless it is preceded by a turn bay or turn lane and this bay or lane is felt to be most representative of the driver's environment just prior to impact.

Channelized lanes are separated from other through or turn related lanes. (**NOTE:** The separation normally will not involve a physical barrier.) If the channel is most representative of the driver's critical precrash environment, count the number of lanes in the channel for this element. (See Examples of Channelized lanes <u>Figure 24</u>.)

Figure 24: Channel with Turn Bay, Channel without Turn Bay



0 (Non-Trafficway or Driveway Access) is used when this vehicle is entering a trafficway but was not on a trafficway prior to its <u>CRITICAL PRECRASH EVENT</u>, or when the vehicle was in a driveway access prior to its <u>CRITICAL PRECRASH EVENT</u>.

If traffic flows in both directions and is undivided, code the total number of lanes in both directions. If the trafficway is divided into two or more roadways, code only the number of lanes for the roadway on which this vehicle was traveling. **Be aware that the case material may indicate the total number of lanes on the divided trafficway.**

8 (Not Reported) Check to see if <u>9 (Reported as Unknown)</u> is more appropriate for the situation.

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks is NOT considered "**Not Reported.**"

Code **8** (**Not Reported**) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).
- **9 (Reported as Unknown)** is used when police indicate unknown.

Consistency Checks (See Section 400):

Error	IF	THEN
ID		
A292	any TRAFFICWAY DESCRIPTION, TOTAL LANES IN ROADWAY, ROADWAY ALIGNMENT, ROADWAY GRADE, ROADWAY SURFACE TYPE, or ROADWAY SURFACE CONDITIONS equals 0, 00 for this vehicle,	all must equal 0, 00, and SPEED LIMIT must equal 00 for this vehicle.
A470	WORK ZONE equals 0, and TRAFFICWAY DESCRIPTION equals 1-3, 5,	TOTAL LANES IN ROADWAY should not equal 1.
A481	TRAFFICWAY DESCRIPTION equals 6, and RELATION TO JUNCTION (b) does not equal 02, 03,	TOTAL LANES IN ROADWAY should equal 1, 2, 8, 9.
A482	TRAFFICWAY DESCRIPTION equals 4 or 6,	TOTAL LANES IN ROADWAY should not equal 5-7.
A491	TRAFFICWAY DESCRIPTION equals 2 or 3,	TOTAL LANES IN ROADWAY should not equal 7.
A496	RELATION TO JUNCTION (b) does not equal 02 or 03, and TRAFFICWAY DESCRIPTION equals 5,	TOTAL LANES IN ROADWAY should not equal 1, 2, 4, or 6.
PC50	PRE-IMPACT LOCATION equals 2,	TOTAL LANES IN ROADWAY should not equal 1.

Consistency Check (CRSS Only) (See Section 400):

Error ID	IF	THEN
A3G0	INTERSTATE HIGHWAY equals 1, and RELATION TO JUNCTION (a) equals 1, and RELATION TO JUNCTION (b) is not equal to 03 or 05 or 20,	TOTAL LANES IN ROADWAY should not equal 1 for at least one vehicle involved in the first harmful event.

Consistency Checks (FARS Only) (See Section 400):

Error ID	IF	THEN
A250	LAND USE AND FUNCTIONAL SYSTEM (b) equals 01-03, and RELATION TO JUNCTION (a) equals 1, and RELATION TO JUNCTION (b) does not equal 03, 05, 20,	TOTAL LANES IN ROADWAY should not equal 1 for the vehicles involved in the FIRST HARMFUL EVENT.
A310	ROUTE SIGNING equals 1, and RELATION TO JUNCTION (a) equals 0,	TOTAL LANES IN ROADWAY should not equal 1 for any vehicle.
A500	TOTAL LANES IN ROADWAY equals 3-7,	ROADWAY SURFACE TYPE should not equal 4, 5, 7.

PC7 - Speed Limit

FORMAT: 2 numeric

SAS NAME: Vehicle.VSPD_LIM

ELEMENT VALUES:

Codes	Attributes
00	No Statutory Limit/Non-Trafficway or Driveway Access
05-95	Actual Speed Limit (in 5 mph increments)
98	Not Reported
99	Reported as Unknown

Definition: This element identifies the value indicated in the case material that best represents the speed limit just prior to this vehicle's <u>CRITICAL PRECRASH EVENT</u>.

Remarks: For vehicles departing the trafficway prior to their <u>CRITICAL PRECRASH EVENT</u>, the trafficway selected for classification is the one the vehicle departed. If this vehicle is in a junction just prior to its CRITICAL PRECRASH EVENT, the roadway selected for classification is the one it is on before entering the junction.

Note: Refer to the highway speed limit that is operational at the time and place of the crash whether physically displayed or not. Try not to confuse advisory signs on entrance/exit ramps or near intersections with the actual legal maximum speed limit. Disregard advisory or other speed signs since they do not indicate the legal speed limit. If a State has a statute that uniformly reduces the maximum allowable speed limit within or near a construction zone, then code the indicated reduced speed limit, if known.

Acceptable speed limits are in 5 mph increments.

00 (**No Statutory Limit/Non-Trafficway or Driveway Access**) is used when there is no posted speed limit and no law that governs the maximum speed you can drive (dirt roads, private roads open to the public). Also use this attribute in cases when this vehicle is entering a trafficway but was not on a trafficway prior to its <u>CRITICAL PRECRASH EVENT</u> or when the vehicle was in a driveway access prior to its precrash event.

When coding SPEED LIMIT for roadways with two different speed limits (for north and south-bound lanes), use the speed limit for the direction of travel where the <u>CRITICAL PRECRASH</u> <u>EVENT</u> begins.

When a roadway has a different speed limit for different types of vehicles, code the SPEED LIMIT that is applicable to passenger cars.

Example:

A rural Interstate highway has a speed limit of 65 mph for passenger cars, but the same road has a 55 mph speed limit for heavy trucks/buses.

- Circumstance 1: A single-vehicle (passenger car) crash. Speed Limit = 65 mph
- **Circumstance 2:** A single-vehicle (heavy truck/bus) crash. Speed Limit = 65 mph
- **Circumstance 3:** A two-vehicle crash, (passenger car and heavy truck/bus) crash. Speed Limit = 65 mph

Logic:

Our statisticians feel that it would be more representative to code the SPEED LIMIT of the majority of the traffic, namely the passenger car. In addition, they feel that by identifying the car speed limit of 65 mph, they can then determine the truck speed limit by reviewing the State's speed limit law. (The reverse is not necessarily true.)

98 (Not Reported) Check to see if <u>99 (Reported as Unknown)</u> is more appropriate for the situation.

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**."

Code **98** (**Not Reported**) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).

99 (Reported as Unknown) is used when police indicate unknown.

Values less than 15 mph are unlikely occurrences and will raise an error flag.

FARS SPECIAL INSTRUCTION:

Accurate coding of SPEED LIMIT is extremely important. Do not rely solely on the police crash report . Check with the State Highway Department as well.

When coding SPEED LIMIT on On/Off Ramps (i.e., when the <u>CRITICAL PRECRASH EVENT</u> occurs on the ramp), consider the following.

- A. When a ramp has a posted Speed Limit a regulatory (black on white) sign, not an advisory (black on yellow) one the posted speed should be coded.
- B. When there is an advisory speed limit or no sign at all, you should:

- 1. Check with your State Highway Department to see if there is an implicit speed limit for all unmarked ramps. If there is, code speed limit.
- 2. If there is not, code the speed limit of the controlled access highway.

Consistency Checks (See Section 400):

Error ID	IF	THEN
A292	any TRAFFICWAY DESCRIPTION, TOTAL LANES IN ROADWAY, ROADWAY ALIGNMENT, ROADWAY GRADE, ROADWAY SURFACE TYPE, or ROADWAY SURFACE CONDITIONS equals 0, 00 for this vehicle,	all must equal 0, 00, and SPEED LIMIT must equal 00 for this vehicle.
A492	TRAFFICWAY DESCRIPTION equals 2, 3, 5, 6,	SPEED LIMIT must not equal 00.
A493	TRAFFICWAY DESCRIPTION equals 2, 3, 5,	SPEED LIMIT should be greater than 15.
A521	any SEQUENCE OF EVENTS equals 46,	SPEED LIMIT should equal 05-55, 98, or 99 for this vehicle.

Consistency Checks (CRSS Only) (See Section 400):

Error ID	IF	THEN
A3J0	INTERSTATE HIGHWAY equals 1, and RELATION TO JUNCTION (a) equals 1, and RELATION TO JUNCTION (b) is not equal to 03 or 05 or 20,	SPEED LIMIT should not equal 01-40 for at least one vehicle involved in the FIRST HARMFUL EVENT.
A965	PSU equals MA, VT, NY, NJ, OR,	maximum SPEED LIMIT (not including 98 or 99) should equal 65.
A970	PSU equals AL, CA, FL, GA, IA, IL, KY, MD, MI, MN, NC, OH, PA, SC, TN, VA, WA, WI	maximum SPEED LIMIT (not including 98 or 99) should equal 70.
A975	PSU equals AZ, CO, LA, ME, OK, UT,	maximum SPEED LIMIT (not including 98 or 99) should equal 75.
A980	PSU equals SD,	Maximum SPEED LIMIT (not including 98 or 99) should equal 80.
A985	PSU equals TX,	then maximum SPEED LIMIT (not including 98 or 99) should equal 85.

Consistency Checks (FARS Only) (See Section 400):

Error ID	IF	THEN
1T0P	SPEED LIMIT for every vehicle is greater than 55, and not equal to 98 or 99,	LAND USE AND FUNCTIONAL SYSTEM (a) should not equal 2 or 6, and LAND USE AND FUNCTIONAL SYSTEM (b) should not equal 06, 07, or 96.
A220	LAND USE AND FUNCTIONAL SYSTEM (b) equals 01, 02, and RELATION TO JUNCTION (a) equals 0,	SPEED LIMIT should not equal 05-40 for any vehicle.
A320	ROUTE SIGNING equals 1, and RELATION TO JUNCTION (a) equals 0,	SPEED LIMIT should not equal 05-40 for any vehicle.
A700	SPEED LIMIT is greater than 65 for every vehicle and STATE NUMBER does not equal 48,	ROUTE SIGNING should equal 1-4.
A900	SPEED LIMIT equals 60 <i>or</i> 65 for every vehicle and STATE NUMBER does not equal <i>20 or</i> 48,	LAND USE AND FUNCTIONAL SYSTEM (b) should not equal 04-07 or 96.
A940	STATE NUMBER equals 11,	maximum SPEED LIMIT (not including 98 or 99) should equal 55.
A945	STATE NUMBER equals 15,	maximum SPEED LIMIT (not including 98 or 99) should equal 60.
A950	STATE NUMBER equals 02, 09, 10, 25, 34, 36, 41, 43, 44, 50,	maximum SPEED LIMIT (not including 98 or 99) should equal 65.
A955	STATE NUMBER equals 01, 05, 06, 12, 13, 17, 18, 19, 21, 24, 26, 27, 28, 29, 33, 37, 39, 42, 45, 47, 51, 53, 54, 55,	maximum SPEED LIMIT (not including 98 or 99) should equal 70.
A960	STATE NUMBER equals 04, 08, 20, 22, 23, 31, 35, <i>or</i> 38,	maximum SPEED LIMIT (not including 98 or 99) should equal 75.
A961	STATE NUMBER equals 16, 30, 32, 40 , 46, 49, 56,	maximum SPEED LIMIT (not including 98 or 99) should equal 80.
A962	STATE NUMBER equals 48,	maximum SPEED LIMIT (not including 98 or 99) should equal 85.

PC8 - Roadway Alignment

FORMAT: 1 numeric

SAS NAME: Vehicle.VALIGN

ELEMENT VALUES:

Codes	Attributes
0	Non-Trafficway or Driveway Access
1	Straight
2	<u>Curve - Right</u>
3	<u>Curve - Left</u>
4	<u>Curve - Unknown Direction</u>
8	Not Reported
9	Reported as Unknown

Definition: This element identifies the value indicated in the case material that best represents the roadway alignment prior to this vehicle's <u>CRITICAL PRECRASH EVENT</u>.

Remarks: For vehicles departing the trafficway prior to their <u>CRITICAL PRECRASH EVENT</u>, the *roadway* selected for classification is the one the vehicle departed. For crashes occurring in a channel, consider the ROADWAY ALIGNMENT of the channel itself.

This data element is coded in accordance with the precrash protocols outlined in the PRECRASH DATA OVERVIEW section of the Coding Manual. In the precrash data elements that record the characteristics of the trafficway, the value coded should be most representative of the driver's critical precrash environment. For resolving ambiguities, the police crash report information is prioritized as follows:

- 1. The **Narrative** is used if it describes roadway alignment prior to the vehicle's critical precrash event.
- 2. The **Diagram** is used if it shows the roadway alignment prior to the vehicle's critical precrash event.
- 3. If the roadway alignment prior to the vehicle's critical precrash event is not described in the Narrative or shown in the Diagram, use the **check-box** information.
- 4. If the check-box does not exist, is not filled out, or is recorded at the crash level and does not apply to this vehicle's environment, then code 8 (Not Reported).

0 (Non-Trafficway or Driveway Access) is used when this vehicle is entering a trafficway but was not on a trafficway prior to its <u>CRITICAL PRECRASH EVENT</u> or when the vehicle was in a driveway access prior to its <u>CRITICAL PRECRASH EVENT</u>.

1 (Straight) is selected if the case material indicate this vehicle's roadway is straight.

2 (Curve - Right) or 3 (Curve - Left) is selected if the case material indicate this vehicle's roadway is curved or there is any curvature discernable on the diagram.

4 (Curve - Unknown Direction) is selected if the case material indicate a curve, but no curve direction (left/right) is indicated.

8 (Not Reported) Check to see if <u>9 (Reported as Unknown)</u> is more appropriate for the situation.

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks is NOT considered "**Not Reported**."

Code **8** (**Not Reported**) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).

9 (**Reported as Unknown**) is used when police indicate unknown.

Error ID	IF	THEN
A292	any TRAFFICWAY DESCRIPTION, TOTAL LANES IN ROADWAY, ROADWAY ALIGNMENT, ROADWAY GRADE, ROADWAY SURFACE TYPE, or ROADWAY SURFACE CONDITIONS equals 0, 00 for this vehicle,	all must equal 0, 00, and SPEED LIMIT must equal 00 for this vehicle.
A4D0	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 14,	ROADWAY ALIGNMENT must equal 2-4.
A4D1	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 01,	ROADWAY ALIGNMENT should not equal 2-4.
V539	CRASH TYPE equals 50-67,	ROADWAY ALIGNMENT should not equal 2 for both vehicles involved in the FIRST HARMFUL EVENT, and should not equal 3 for both vehicles involved in the FIRST HARMFUL EVENT.

PC9 - Roadway Grade

FORMAT: 1 numeric

SAS NAME: Vehicle.VPROFILE

ELEMENT VALUES:

Codes	Attributes
0	Non-Trafficway or Driveway Access
1	Level
3	<u>Hillcrest</u>
5	Uphill
6	Downhill
2	Grade, Unknown Slope
4	Sag (Bottom)
8	Not Reported
9	Reported as Unknown

Definition: This element identifies the value indicated in the case material that best represents the roadway grade prior to this vehicle's <u>CRITICAL PRECRASH EVENT</u>.

Remarks: For vehicles departing the trafficway prior to their <u>CRITICAL PRECRASH EVENT</u>, the trafficway selected for classification is the one the vehicle departed. If this vehicle is in a junction just prior to its CRITICAL PRECRASH EVENT, the roadway selected for classification is the one it is on before entering the junction. For crashes occurring in a channel, consider the ROADWAY GRADE of the channel itself.

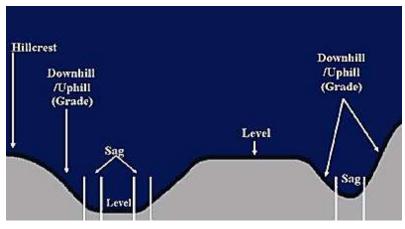


Figure 25: Diagram of Roadway Grades

0 (Non-Trafficway or Driveway Access) is used when this vehicle is entering a trafficway but was not on a trafficway prior to its <u>CRITICAL PRECRASH EVENT</u> or when the vehicle was in a driveway access prior to its <u>CRITICAL PRECRASH EVENT</u>.

3 (Hillcrest) refers to the area of transition between an uphill and a downhill grade.

- **2** (**Grade**, **Unknown Slope**) is used if the case material indicate a grade, but uphill/downhill is not indicated.
- **4 (Sag [Bottom])** is a designed transition feature between a change of grade at the bottom of a hill. It is not a dip, which is a flaw.

A dip on the road is not the same as a sag. A sag is a design feature whereas a dip is a flaw. The minimum length of a sag is 100 feet.

8 (Not Reported) Check to see if <u>9 (Reported as Unknown)</u> is more appropriate for the situation.

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported.**"

Code **8** (**Not Reported**) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).

9 (Reported as Unknown) is used when police indicate unknown.

Error ID	IF	THEN
1Z1P	any SEQUENCE OF EVENTS equals 66,	ROADWAY GRADE should equal 6 for this vehicle.
A292	any TRAFFICWAY DESCRIPTION, TOTAL LANES IN ROADWAY, ROADWAY ALIGNMENT, ROADWAY GRADE, ROADWAY SURFACE TYPE, or ROADWAY SURFACE CONDITIONS equals 0, 00 for this vehicle,	all must equal 0, 00, and SPEED LIMIT must equal 00 for this vehicle.
A494	TRAFFICWAY DESCRIPTION equals 6,	ROADWAY GRADE should not equal 3, 4.

PC10 - Roadway Surface Type - FARS Only

FORMAT: 1 numeric

SAS NAME: Vehicle.VPAVETYP

ELEMENT VALUES:

Codes	Attributes
0	Non-Trafficway Area or Driveway Access
1	Concrete
2	Blacktop, Bituminous, or Asphalt
3	Brick or Block
4	Slag, Gravel, or Stone
5	Dirt
7	Other
8	Not Reported
9	Reported as Unknown

Definition: This element identifies the value indicated in the case material that best represents the roadway surface type prior to this vehicle's <u>CRITICAL PRECRASH EVENT</u>.

Remarks: For vehicles departing the trafficway prior to their <u>CRITICAL PRECRASH EVENT</u>, the trafficway selected for classification is the one the vehicle departed. If this vehicle is in a junction just prior to its CRITICAL PRECRASH EVENT, the roadway selected for classification is the one it is on before entering the junction.

Should be obtained from the crash report or the State Highway Department.

If the police crash report narrative states more than one type, choose the type with the lowest number. For example, if the PCR indicates both dirt and gravel are present, then use code 4 (Slag, Gravel, or Stone) because it is a lower number than 5 (Dirt). If the PCR has a combination code selected such as "Dirt/Gravel" without further explanation, and you cannot determine if the officer is indicating dirt or gravel, or both dirt and gravel, then use code 8 (Not Reported).

0 (Non-Trafficway or Driveway Access) is used when this vehicle is entering a trafficway but was not on a trafficway prior to its <u>CRITICAL PRECRASH EVENT</u> or when the vehicle was in a driveway access prior to its <u>CRITICAL PRECRASH EVENT</u>.

If a police crash report data element is coded with the attribute "Other" but the officer does not specify what this refers to:

- 1. Code **7 (Other)** if the police crash report attribute choices can be matched to or include all the attributes in FARS/CRSS.
- 2. Code **8** (**Not Reported**) if the police crash report choices cannot be matched to or include all the attributes in FARS/CRSS.

8 (Not Reported) Check to see if 9 (Reported as Unknown) is more appropriate for the situation.

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks is NOT considered "**Not Reported**."

Code **8** (**Not Reported**) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).

Error ID	IF	THEN
A160	LAND USE AND FUNCTIONAL SYSTEM (b) equals 01-06,	ROADWAY SURFACE TYPE should equal 1, 2, 8, or 9 for at least one vehicle.
A170	ROADWAY SURFACE TYPE equals 3-5 for every vehicle,	LAND USE AND FUNCTIONAL SYSTEM (b) should not equal 01-06.
A292	any TRAFFICWAY DESCRIPTION, TOTAL LANES IN ROADWAY, ROADWAY ALIGNMENT, ROADWAY GRADE, ROADWAY SURFACE TYPE, or ROADWAY SURFACE CONDITIONS equals 0, 00 for this vehicle,	all must equal 0, 00, and SPEED LIMIT must equal 00 for this vehicle.
A330	ROUTE SIGNING equals 1, 2,	ROADWAY SURFACE TYPE should equal 1, 2, 8 for at least one vehicle.
A490	TRAFFICWAY DESCRIPTION equals 2, 3, 5,	ROADWAY SURFACE TYPE should not equal 4, 5, 7.
A500	TOTAL LANES IN ROADWAY equals 3-7,	ROADWAY SURFACE TYPE should not equal 4, 5, 7.

PC11 - Roadway Surface Conditions

FORMAT: 2 numeric

SAS NAME: Vehicle.VSURCOND

ELEMENT VALUES:

Codes	Attributes
00	Non-Trafficway or Driveway Access
01	<u>Dry</u>
02	Wet
03	Snow
10	<u>Slush</u>
04	<u>Ice/Frost</u>
06	Water (Standing, Moving)
05	Sand
11	Mud, Dirt, Gravel
07	<u>Oil</u>
08	<u>Other</u>
98	Not Reported
99	Reported as Unknown

Definition: This element identifies the value indicated in the case material that best represents the roadway surface condition prior to this vehicle's <u>CRITICAL PRECRASH EVENT</u>.

Remarks: For vehicles departing the trafficway prior to their <u>CRITICAL PRECRASH EVENT</u>, the trafficway selected for classification is the one the vehicle departed. If this vehicle is in a junction just prior to its CRITICAL PRECRASH EVENT, the roadway selected for classification is the one it is on before entering the junction. These conditions may have been present but did not necessarily contribute to the crash.

00 (Non-Trafficway or Driveway Access) is used when this vehicle is entering a trafficway but was not on a trafficway prior to its EVENT or when the vehicle was in a driveway access prior to its CRITICAL PRECRASH EVENT.

A road made of sand or dirt would be coded **01** (**Dry**) under normal conditions, not **05** (**Sand**), or **11** (**Mud**, **Dirt**, **Gravel**).

02 (Wet) describes a roadway surface that is covered with water from rain or melted snow.

- **03** (Snow) describes a roadway surface that is covered with snow.
- **10** (**Slush**) describes a roadway surface that is covered with melting snow.
- **04** (**Ice/Frost**) includes a roadway covered with ice from freezing rain or water runoff that has pooled on the roadway and turned to ice.
- **06** (Water [Standing, Moving]) describes a roadway surface that is covered with water and typically localized.
- **05** (Sand) includes sand on the roadway as a result of sand blown by wind or sand discharged on the roadway by highway trucks.
- 11 (Mud, Dirt, Gravel) indicates these substances present on the surface of the roadway at the crash location, not the surface type of the roadway by design.
- **07** (**Oil**) includes fuel spilled on the roadway.
- **08** (Other) is used for roadway surface conditions not described above.

If a police crash report data element is coded with the attribute "Other," but the officer does not specify what this refers to:

- 1. Code **08** (**Other**) if the police crash report attribute choices can be matched to or include all the attributes in FARS/CRSS.
- 2. Code **98** (**Not Reported**) if the police crash report choices cannot be matched to or include all the attributes in FARS/CRSS.

98 (Not Reported) Check to see if <u>99 (Reported as Unknown)</u> is more appropriate for the situation.

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**."

Code **98** (**Not Reported**) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 99 (Reported as Unknown) is used when police indicate unknown.

Error ID	IF	THEN
1A1P	RELATED FACTORS-CRASH LEVEL equals 005,	ROADWAY SURFACE CONDITIONS must equal 06 for at least one vehicle.
A040	CRASH MONTH equals 05-09,	ROADWAY SURFACE CONDITIONS should not equal 03, 04, 10.
A1A0	ROADWAY SURFACE CONDITIONS equals 01 for a vehicle involved in the FIRST HARMFUL EVENT,	ATMOSPHERIC CONDITIONS should not equal 02-04, 11, 12.
A1C0	ROADWAY SURFACE CONDITIONS equals 01,	DRIVER'S VISION OBSCURED BY should not equal 08.
A292	any TRAFFICWAY DESCRIPTION, TOTAL LANES IN ROADWAY, ROADWAY ALIGNMENT, ROADWAY GRADE, ROADWAY SURFACE TYPE, or ROADWAY SURFACE CONDITIONS equals 0, 00 for this vehicle,	all must equal 0, 00, and SPEED LIMIT must equal 00 for this vehicle.
A510	any ATMOSPHERIC CONDITIONS equals 02-04, 11, 12,	ROADWAY SURFACE CONDITIONS should not equal 01, 07, 08, 99 for any vehicle.

PC12 - Traffic Control Device

FORMAT: 2 numeric

SAS NAME: Vehicle.VTRAFCON

ELEMENT VALUES:

Codes	Attributes
00	No Controls

Traffic Signals

Codes	Attributes
01	Traffic Control Signal (on colors) without Pedestrian Signal
02	Traffic Control Signal (on colors) with Pedestrian Signal
03	Traffic Control Signal (on colors) not known whether or not Pedestrian Signal
07	Lane Use Control Signal
08	Other Highway Traffic Signal
09	Unknown Highway Traffic Signal
04	Flashing Traffic Control Signal

Regulatory Signs

Codes	Attributes
20	Stop Sign
21	Yield Sign
28	Other Regulatory Sign
29	<u>Unknown Regulatory Sign</u>
23	School Zone Sign/Device

Other Signs and Signals

Codes	Attributes
40	Warning Sign
65	Railway Crossing Device
50	<u>Person</u>
98	<u>Other</u>

Not Reported and Unknown

Codes	Attributes
97	Not Reported
99	Reported as Unknown

Definition: This element identifies the sign or signal indicated in the case material that best describes the traffic controls in the vehicle's environment just prior to this vehicle's CRITICAL
PRECRASH EVENT.

Remarks: The roadway used for coding this element is the one this vehicle departed if it is off the roadway just prior to its <u>CRITICAL PRECRASH EVENT</u>. If this vehicle is in a junction just prior to its <u>CRITICAL PRECRASH EVENT</u>, this element is coded based on the roadway this vehicle was on before entering the junction.

Code the attribute indicated in the case material if it directly matches. Devices known to be missing should be coded as the type of device and under DEVICE FUNCTIONING coded as **1** (Device Not Functioning).

Code this element whether the device was functioning or not. If more than one device is present, code the highest device (lowest number on list) most related to the crash.

There are *three* exceptions:

- 1. One exception is <u>50 (Person)</u> which includes a law enforcement officer, crossing guard, flagman, etc.
 - **50** (**Person**) takes precedence over the entire list.
- 2. The *second* exception is a **28** (Other Regulatory Sign). You may have a Regulatory Speed Limit Sign along with another TRAFFIC CONTROL DEVICE. For example, a Warning Sign for a dangerous condition in which the Warning Sign is more relevant in the crash. In this case, the **40** (Warning Sign) is more appropriate to code.
- 3. The third exception is <u>65 (Railway Crossing Device)</u>. The various railway crossing devices take precedence over <u>40 (Warning Sign)</u> when both "flashing lights on an approaching train" and a railway crossing device are present.

MUTCD Notes:

- Traffic calming devices:
 - Although some highway design features, such as curbs, median barriers, guardrails, speed humps or tables, and textured pavement, have a significant impact on traffic operations and safety, they are not considered to be traffic control devices and provisions regarding their design and use are generally not included.
- Pavement markings:
 - While pavement markings are considered Traffic Control Devices in MUTCD, this element should only be used to identify Signs and Signals.

00 (**No Controls**) is used if, at the time of the crash, there was no intent to control (regulate or warn) vehicle traffic. Use this attribute if statutory controls apply (e.g., State law requires that when two vehicles meet at an uncontrolled intersection, the one on the right has the right-of-way).

When a traffic control is deactivated (e.g., traffic signal that emits no signals) during certain times of the day and was deactivated at the time of the crash, code **00** (**No Controls**). A traffic control that has just been installed and not yet activated is also coded **00** (**No Controls**).

However, a traffic control that is out (e.g., due to a power failure) and was reported as such in the case material, is coded, unless a temporary control (e.g., stop sign, police officer, etc.) has been inserted, in which case the temporary control should be coded. Devices known to be missing should be coded as the type of device and under DEVICE FUNCTIONING coded as 1 (Device Not Functioning).

Traffic Signals

- **01** (**Traffic Control Signal [on colors] without Pedestrian Signal**) refers to any highway traffic signal by which traffic is alternatively directed to stop and permitted to proceed, using the colors of red, yellow, and green. This traffic control signal does not have a pedestrian control signal. The source of actuation is of no concern.
- **02** (**Traffic Control Signal [on colors] with Pedestrian Signal**) refers to any highway traffic signal by which traffic is alternatively directed to stop and permitted to proceed, using the colors of red, yellow, and green. This traffic control signal does have a pedestrian control signal. The source of actuation is of no concern.
- **03** (Traffic Control Signal [on colors] not known whether or not Pedestrian Signal) any highway traffic signal by which traffic is alternatively directed to stop and permitted to proceed, using the colors of red, yellow, and green. It is unknown if this traffic control signal has a pedestrian control signal. The source of actuation is of no concern.
- **07** (Lane Use Control Signal) is for permanent lane control electronic devices (i.e., overhead lights or "X" indicating lane open or closed for rush hour lanes, bridges, or at tollbooths).
- **08** (Other Highway Traffic Signal) should be coded for traffic signals that are not covered in the preceding attributes. Use this attribute when a School Bus uses flashing lights to control traffic around the bus, regardless of any additional signs the school bus uses. For example, a school bus uses flashing lights and a stop sign on an arm to stop traffic around the school bus. This should only be used if the crash occurred during the time the sign was in effect.
- **09** (Unknown Highway Traffic Signal) is used with the investigating officer reported that the highway traffic signal was unknown at the time of crash.
- **04** (**Flashing Traffic Control Signal**) usually has a single colored head and flashes. Use this attribute if it is a Highway Traffic Signal that is flashing. This includes a flashing beacon. If a flashing red beacon appears with a stop sign, use this attribute.

Guide signs do not constitute traffic controls.

You may have a Regulatory Speed Limit Sign along with another Traffic Control Device (for example, a Warning Sign for a dangerous condition in which the Warning Sign is more relevant in the crash). In this case, the Warning Sign is more appropriate to code.

Another set of questions arises from the issue of proximity of the device to the crash. Judgment must be applied in these situations. Typical signs that create such problems are:

- Speed limit signs where a party to the crash may be speeding.
- "Do Not Pass" signs where a no passing zone extends for miles but is only marked at the beginning of the zone.
- "Pedestrians Prohibited" signs at entrances to freeways, but a pedestrian crash occurs on the freeway between interchanges.
- And other such signs that may pertain to a significant length of road.

In these instances, if the crash occurs within reasonably close proximity of the sign and the sign type is relevant to the crash, then it may be appropriate to code the sign.

If there is a question as to which type a sign is, consult the <u>Manual of Uniform Traffic Control Devices (MUTCD)</u>. Generally, the appropriate code should be used if a party to the crash failed to heed the sign, was in a position to be controlled by the sign, or the sign has some relationship to the crash. For example, for a crash at a four-legged, two-way stop intersection where a driver fails to stop at the stop sign and collides with another vehicle, use the attribute **20** (**Stop Sign**). Conversely, at the same intersection, a driver on an approach not controlled by a stop sign loses control and strikes a utility pole. In this case, **20** (**Stop Sign**) would not be appropriate.

Pavement markings are not considered as traffic control devices.

Regulatory Signs

20 (**Stop Sign**) is a traffic sign used to control vehicular traffic, usually erected at road junctions, which instructs drivers to stop and then to proceed only if the way ahead is clear. This attribute does not include Stop Signs at Rail Grade Crossings. Stop Signs at Rail Grade Crossings are coded **65** (**Railway Crossing Device**).

21 (**Yield Sign**) indicates that a vehicle driver must slow down and prepare to stop if necessary, usually while merging into traffic on another road but needn't stop if the way is clear. This attribute does not include Yield Signs at Rail Grade Crossings. Yield Signs at Rail Grade Crossings are coded **65** (**Railway Crossing Device**).

28 (Other Regulatory Sign)

Regulatory signs inform highway users of traffic laws or regulations and indicate the applicability of legal requirements that would not otherwise be apparent.

Examples of Regulatory Signs other than 20 (Stop Sign) or 21 (Yield Sign) are:

- Regulatory Speed Limit signs (black numbers on a white background)
- Turn Prohibition signs
- Do Not Pass
- Do Not Enter signs
- Wrong way
- One-way signs

- Road Closed signs
- Hazardous Cargo signs
- **29** (Unknown Regulatory Sign) is used when the investigating officer reported that the regulatory sign was unknown at the time of crash.
- **23** (**School Zone Sign/Device**) is used when the <u>FIRST HARMFUL EVENT</u> occurred during the time the sign was in effect. If the sign was in effect, it does not matter whether children were present. Some **23** (**School Zone Signs/Devices**) can be flashing, if this is the case, use this attribute before using **04** (**Flashing Traffic Control Signal**).

Other Signs and Signals

40 (Warning Sign) is used when it is deemed necessary to warn traffic of existing or potentially hazardous conditions on or adjacent to a highway or street.

Examples of Warning Signs:

- Work/Construction Zone related signs (Lane Shift, Uneven Surface, Workers Ahead, etc.).
- Changes in Horizontal Alignment signs (Hill, Curve, etc.).
- Road Narrows.
- Divided Road/Divided Road Ends.
- Low Clearance.
- Road Surface Condition signs (Bump, Slippery When Wet, etc.).
- Traffic Flow signs (Merge, Two-way Traffic, No Passing Zone, etc.).
- This includes electronic warning signs such as portable signs (i.e., attached to a vehicle), or stationary devices.
- Flashing lights on an approaching train.
- Advisory Speed signs (often black-on-yellow).
- **65** (Railway Crossing Device) is used to control or warn vehicular traffic at a railway crossing.

Examples:

- Flashing Lights,
- Wigwags,
- Bells.
- Cross Bucks.
- Stop Signs at Rail Grade Crossing.
- Yield Signs at Rail Grade Crossings.

50 (**Person**) is someone (e.g., police officer, crossing guard, flagman, or officially designated person) who is in the act of controlling both vehicular and pedestrian traffic.

98 (Other) includes: any other device, which (a) functions as a traffic control device that is not listed as an attribute of this data element, (b) is not excluded by the manual, and (c) is related to the crash. Some examples are barricades, cones, drums, and object markers.

If a police crash report data element is coded with the attribute "Other" but the officer does not specify what this refers to:

- 1. Code **98** (**Other**) if the police crash report attribute choices can be matched to or include all the attributes in FARS/CRSS.
- 2. Code **97** (**Not Reported**) if the police crash report choices cannot be matched to or include all the attributes in FARS/CRSS.

Not Reported and Unknown

97 (Not Reported) Check to see if <u>00 (No Controls)</u> or <u>99 (Reported as Unknown)</u> are more appropriate for the situation.

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks is NOT considered "**Not Reported.**"

Code **97** (**Not Reported**) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).

99 (**Reported as Unknown**) is used if the investigating officer reported that the traffic control device at the time of crash was not known.

Error ID	IF	THEN
4L0P	any RELATED FACTORS-DRIVER LEVEL equals 0 39 for this vehicle,	TRAFFIC CONTROL DEVICE should not equal 00 for this vehicle.
520F	FIRST HARMFUL EVENT equals 10,	TRAFFIC CONTROL DEVICE must not equal 01-04, 07-09, 20, 21, 23, 28, 29, 50, 98 for the vehicle involved in the first harmful event.
610P	TRAFFIC CONTROL DEVICE equals 00,	DEVICE FUNCTIONING must equal 0.
640F	TRAFFIC CONTROL DEVICE equals 23 for any vehicle,	RELATED FACTORS-CRASH LEVEL should equal 021.
641F	RELATED FACTORS-CRASH LEVEL equals 021,	TRAFFIC CONTROL DEVICE should not equal 00 for every vehicle.
642F	TRAFFIC CONTROL DEVICE equals 00 for any vehicle,	RELATED FACTORS-CRASH LEVEL should not equal 0 21.

Error ID	IF	THEN
660P	TRAFFIC CONTROL DEVICE is not equal to 00,	DEVICE FUNCTIONING must not equal 0.
660Q	TRAFFIC CONTROL DEVICE does not equal 97,	it is unlikely that DEVICE FUNCTIONING equals 8.
661P	TRAFFIC CONTROL DEVICE equals 97,	DEVICE FUNCTIONING must equal 8.
A1B0	TRAFFIC CONTROL DEVICE equals 20, 21 for a vehicle involved in the FIRST HARMFUL EVENT,	RELATION TO JUNCTION (b) should not equal 01, 18.
A270	any VIOLATIONS CHARGED equals 31 or 33,	TRAFFIC CONTROL DEVICE should equal 01-03 for this vehicle.
A271	VIOLATIONS CHARGED equals 32 or 34,	TRAFFIC CONTROL DEVICE should equal 04, for this vehicle.
A272	VIOLATIONS CHARGED equals 35,	TRAFFIC CONTROL DEVICE should equal 01-09, for this vehicle.
A273	VIOLATIONS CHARGED equals 36,	TRAFFIC CONTROL DEVICE should equal 65, for this vehicle.
A274	VIOLATIONS CHARGED equals 37,	TRAFFIC CONTROL DEVICE should equal 20, for this vehicle.
A275	VIOLATIONS CHARGED equals 38,	TRAFFIC CONTROL DEVICE should equal 21, for this vehicle.
A276	VIOLATIONS CHARGED equals 39,	TRAFFIC CONTROL DEVICE must not equal 00, for this vehicle.
A293	WORK ZONE equals 1-3, and RELATION TO JUNCTION (b) equals 02, 03,	TRAFFIC CONTROL DEVICE should equal 01-03, 20, 40, 97, or 98 for the vehicle(s) involved in the FIRST HARMFUL EVENT.
A294	WORK ZONE equals 1-3, and RELATION TO JUNCTION (b) equals 01, 04, 05, 08, 17-19,	TRAFFIC CONTROL DEVICE should equal 00, 21, 28, 40, 50, 97, or 98 for the vehicle(s) involved in the FIRST HARMFUL EVENT.
A440	RELATION TO JUNCTION (b) equals 06,	TRAFFIC CONTROL DEVICE should equal 65 for any vehicle involved in the FIRST HARMFUL EVENT.
A520	SEQUENCE OF EVENTS equals 10,	TRAFFIC CONTROL DEVICE should not equal 01-09, 20-29, 40-50, 98.
A770	FIRST HARMFUL EVENT equals 46,	TRAFFIC CONTROL DEVICE should equal 01-04, 65 for the vehicle involved in the FIRST HARMFUL EVENT.
A780	FIRST HARMFUL EVENT equals 46,	TRAFFIC CONTROL DEVICE should not equal 00 for the vehicle involved in the FIRST HARMFUL EVENT.
A890	RELATION TO JUNCTION (b) equals 01,	TRAFFIC CONTROL DEVICE should not equal 01-04, 20, or 21 for any vehicle involved in the FIRST HARMFUL EVENT.
A891	RELATION TO JUNCTION (b) equals 98 or 99,	TRAFFIC CONTROL DEVICE should not equal 01, 02, 03, 20, 21, or 65 for a vehicle involved in the FIRST HARMFUL EVENT.

Error ID	IF	THEN
PB06	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 730,	TRAFFIC CONTROL DEVICE for the striking vehicle must equal 01-03.
PB09	PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE equals 141, 143, 151-158, 217, or 218,	TRAFFIC CONTROL DEVICE for the striking vehicle must not equal 00.
PB10	PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE equals 151, 156, 157, 217, or 218,	TRAFFIC CONTROL DEVICE for the striking vehicle must equal 01-03.
PB11	PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE equals 154,	TRAFFIC CONTROL DEVICE for the striking vehicle must equal 01-04, 08.
PB21	PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE equals 160,	TRAFFIC CONTROL DEVICE for the striking vehicle should equal 00.
PBC2	PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE equals 143,	TRAFFIC CONTROL DEVICE for the striking vehicle must equal 20, 21, 28, or 29.

Consistency Check (CRSS Only) (See Section 400):

Error ID	IF	THEN
A930	INTERSTATE HIGHWAY equals 1, and RELATION TO JUNCTION (a) equals 1, and RELATION TO JUNCTION (b) is not equal to 03, 05, or 20,	TRAFFIC CONTROL DEVICE should not equal 01-03, 20, 23, or 65 for at least one vehicle involved in the FIRST HARMFUL EVENT.

Consistency Checks (FARS Only) (See Section 400):

Error ID	IF	THEN
650P	TRAFFIC CONTROL DEVICE equals 65 for any vehicle,	RAIL GRADE CROSSING IDENTIFIER must not equal 0000000.
662P	TRAFFIC CONTROL DEVICE is not equal to 00 and CRASH TYPE is 14,	at least one RELATED FACTORS - DRIVER LEVEL should equal <i>0</i> 39.
A210	LAND USE AND FUNCTIONAL SYSTEM (b) equals 01, 02, and RELATION TO JUNCTION (a) equals 0,	TRAFFIC CONTROL DEVICE should not equal 01-04, 07, 20, 23, 40, 50, 65.

PC13 - Device Functioning

FORMAT: 1 numeric

SAS NAME: Vehicle.VTCONT_F

ELEMENT VALUES:

Codes	Attributes
0	No Controls
1	Device Not Functioning
2	Device Functioning - Functioning Improperly
4	Device Not Functioning or Device Functioning Improperly, Specifics Unknown
3	Device Functioning Properly
8	Not Reported
9	Reported as Unknown

Definition: This element identifies the functionality of the traffic control device recorded for this vehicle in the element TRAFFIC CONTROL DEVICE.

Remarks: This data element is coded with respect to the control selected in the element TRAFFIC CONTROL DEVICE.

- **1** (**Device Not Functioning**) is used when the device is not functioning at all (e.g., signal out, sign knocked down). Devices known to be missing should be coded here.
- **2** (**Device Functioning Functioning Improperly**) is used when the device was functioning to an extent but not as intended (e.g., red signal lamp burned out, sign twisted, or obscured by vegetation).
- 4 (Device Not Functioning or Device Functioning Improperly, Specifics Unknown) is used when the case material indicate the traffic control device was not functioning as designed at the time of the crash, but a differentiation between codes 1 (Device Not Functioning) and 2 (Device Functioning Functioning Improperly) cannot be determined. An example of this may be a contributing circumstance field value such as "Traffic control device inoperative, missing, or obscured" without clarifying information in the case material.
- **3** (**Device Functioning Properly**) is used when the traffic control device was functioning as designed at the time of the crash. As a default rule, if the device is listed as present, code **3** (**Device Functioning Properly**) unless specified otherwise. For example, the police crash report indicates a stop sign is applicable to a vehicle at an intersection crash and there is no mention of it functioning improperly, it is assumed the stop sign was functional.
- 8 (Not Reported) Check to see if 0 (No Controls) or <u>9 (Reported as Unknown)</u> is more appropriate for the situation.

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks is NOT considered "**Not Reported**."

Code **8** (**Not Reported**) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).
- **9 (Reported as Unknown)** is used if the investigating officer reported that it was unknown if the traffic control device was functioning at the time of crash.

Error ID	IF	THEN
610P	TRAFFIC CONTROL DEVICE equals 00,	DEVICE FUNCTIONING must equal 0.
660P	TRAFFIC CONTROL DEVICE is not equal to 00,	DEVICE FUNCTIONING must not equal 0.
660Q	TRAFFIC CONTROL DEVICE does not equal 97,	it is unlikely that DEVICE FUNCTIONING equals 8.
661P	TRAFFIC CONTROL DEVICE equals 97,	DEVICE FUNCTIONING must equal 8.

PC14 - Driver's Vision Obscured By

FORMAT: 2 numeric. Select All That Apply.

SAS NAME: Vision. VISION

ELEMENT VALUES:

Codes	Attributes
00	No Obstruction Noted
01	Rain, Snow, Fog, Smoke, Sand, Dust
02	Reflected Glare, Bright Sunlight, Headlights
03	Curve, Hill, or Other Roadway Design Feature
04	Building, Billboard, Other Structure
05	Trees, Crops, Vegetation
06	In-Transport Motor Vehicle (including load)
07	Not In-Transport Motor Vehicle (parked/working)
08	Splash or Spray of Passing Vehicle
09	Inadequate Defrost or Defog System
10	Inadequate Vehicle Lighting System
11	Obstruction Interior to the Vehicle
12	External Mirrors
13	Broken or Improperly Cleaned Windshield
14	Obstructing Angles on Vehicle
95	No Driver Present/Unknown if Driver Present
97	<u>Vision Obscured - No Details</u>
98	Other Visual Obstruction
99	Reported as Unknown

Definition: This data element records impediments to a driver's visual field that were noted in the case material.

Remarks: These "visual obstructions" can appear anywhere in the case material. Examples include a field on the police crash report (e.g., "Contributing Factors"), in the narrative section, in the violations section, or in witness statements. See clarification on the use of information provided by witnesses in section <u>103</u>. <u>Data Sources</u>.

00 (**No Obstruction Noted**) is used when the case material give no indication of a visual obstruction for this driver.

01 (**Rain, Snow, Fog, Smoke, Sand, Dust**) is used when one or more of these conditions exist AND are noted to have obstructed the view of the driver. Do not use this attribute when only the

- vehicle windshield is described as "fogged." (See <u>09 (Inadequate Defrost or Defog System)</u> or <u>13 (Broken or Improperly Cleaned Windshield)</u>.)
- **02** (**Reflected Glare, Bright Sunlight, Headlights**) is used when one or more of these conditions are noted to have obstructed the view of the driver.
- **03** (Curve, Hill, or Other Roadway Design Feature) is used when any of these roadway features or design elements is noted to have obstructed the view of the driver (including embankment, sag, etc.).
- **04** (**Building**, **Billboard**, **Other Structure**) is used when any of these man-made structures are noted to have obstructed the view of the driver (including traffic signs, poles, signals, etc.).
- **05** (**Trees**, **Crops**, **Vegetation**) is used when any of these natural features are noted to have obstructed the view of the driver.
- **06** (**In-Transport Motor Vehicle [including load]**) is used when a vehicle that is in motion or stopped on the roadway is noted to have obstructed the view of the driver. The vehicle may be but does not have to be a contact vehicle in the case.
- **07** (**Not In-Transport Motor Vehicle [parked, working]**) is used when a vehicle that is parked in a designated parking area or space, stopped in an area off the roadway, or is a working motor vehicle is noted to have obstructed the view of the driver. The vehicle may be but does not have to be a contact vehicle in the case.
- **08** (**Splash or Spray of Passing Vehicle**) is used when this condition is noted to have obstructed the view of the driver. The splash or spray can come from water or mud; however, the use of this attribute does not require it to be raining at the time of the crash.
- **09** (**Inadequate Defrost or Defog System**) is used when the presence of frost or fog on the windshield was noted as being due to an inadequate system. The case material must state specifically that the system was not operating properly. If the case material states the presence of frost or fog alone on the windshield, you should use **13** (**Broken or Improperly Cleaned Windshield**).
- **10** (**Inadequate Vehicle Lighting System**) is used when the case material indicate this driver's vision was impaired because the exterior lighting system (including headlights, fog-lights, etc.) of the driver's vehicle was deficient in some way. This would include being turned off or not operating properly. This response should not be used to describe inadequate lighting systems of other vehicles (e.g., oncoming motor vehicles) or for inadequate highway lighting.
- 11 (Obstruction Interior to the Vehicle) is used when the case material indicate this driver's vision was impaired because of a feature in the interior of their vehicle (including head restraint, rear-view mirror, window stickers, sunshades, ornaments, windshield tinting).
- **12** (**External Mirrors**) is used when the case material indicate that an exterior mirror on this driver's vehicle created a visual obstruction.
- 13 (Broken or Improperly Cleaned Windshield) is used when this condition is noted to have obstructed the view of the driver. The presence of frost or fog on the windshield would apply. For a "fogged" or "frosted" windshield due to an inadequate or inoperable system see Defog System).

- **14** (**Obstructing Angles on Vehicle**) is used when the case material indicate that the size or shape of a driver's own vehicle created a visual obstruction (including trailer, vehicle height, blind spot). Not to be confused with visual obstructions from other vehicles or a vehicle's interior components such as head restraints, sunshades, etc.
- **95** (**No Driver Present/Unknown if Driver Present**) is used when there is no driver in this vehicle or when it is unknown if there is a driver present in this vehicle at the time of the crash.
- **97** (**Vision Obscured No Details**) is used when the case material indicate that a vision impediment exists but does not clearly indicate the nature of the impediment.
- **98** (Other Visual Obstruction) is used when the case material indicate the nature of a vision impediment that cannot be attributed to one of the other attributes above. For example, an unattached trailer left on the road shoulder.
- **99** (**Reported as Unknown**) is used when the case material specifically indicate unknown.

Error ID	IF	THEN
1HJF	DRIVER'S VISION OBSCURED BY equals 95,	DRIVER PRESENCE must equal 0 or 9.
1L2P	any DRIVER'S VISION OBSCURED BY equals 00 or 95 or 99,	only that one code and no other must be coded for this vehicle.
1L4P	any DRIVER'S VISION OBSCURED BY equals 09,	at least one CONTRIBUTING CIRCUMSTANCES, MOTOR VEHICLE must equal 97.
1L5P	any DRIVER'S VISION OBSCURED BY equals 10,	at least one CONTRIBUTING CIRCUMSTANCES, MOTOR VEHICLE must equal 07 or 08 or 09.
2H1F	UNIT TYPE equals 1, and DRIVER PRESENCE equals 0 or 9,	DRIVER'S VISION OBSCURED BY must equal 95.
4X8H	any NON-MOTORIST CONTRIBUTING CIRCUMSTANCES equals 01,	DRIVER'S VISION OBSCURED BY must not equal 00, 95, or 99 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
A1C0	ROADWAY SURFACE CONDITIONS equals 01,	DRIVER'S VISION OBSCURED BY should not equal 08.
PB31	PEDESTRIAN/BIKE TYPING -BICYCLIST CRASH TYPE equals 147, 157, or 357,	at least one DRIVER'S VISION OBSCURED BY must equal 06 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.

Error ID	IF	THEN
PB32	PEDESTRIAN/BIKE TYPING - PEDESTRIAN CRASH TYPE equals 742,	at least one DRIVER'S VISION OBSCURED BY must not equal 00 or 95 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
PB33	PEDESTRIAN/BIKE TYPING -BICYCLIST CRASH TYPE equals 156,	DRIVER'S VISION OBSCURED BY for the striking vehicle must not equal 06.

PC15 - Driver Maneuvered to Avoid

FORMAT: 2 numeric. Select All That Apply

SAS NAME: Maneuver.MANEUVER

ELEMENT VALUES:

Codes	Attributes
00	<u>Driver Did Not Maneuver to Avoid</u>
01	<u>Object</u>
02	Poor Road Conditions (Puddle, Ice, Pothole, etc.)
03	<u>Live Animal</u>
04	<u>Contact Motor Vehicle (in this Crash)</u>
05	Pedestrian, Pedalcyclist, or Other Non-Motorist
92	Phantom/Non-Contact Motor Vehicle
95	No Driver Present/Unknown if Driver Present
98	Not Reported
99	Reported as Unknown

Definition: This data element identifies the thing(s) the driver attempted to avoid while the vehicle was on the road portion of the trafficway, just prior to the first harmful event for this vehicle.

Remarks: The "road" by definition includes the roadway and shoulder/parking lane portions when a shoulder/parking lane is present. The source for this data is the crash report narrative or related crash report form fields as completed by the investigating officer. It is the officer's assessment. See clarification on the use of information provided by witnesses in section <u>103.</u> <u>Data Sources.</u>

Use the available crash report fields, narrative, and diagram to code the thing(s) the driver attempted to avoid while the vehicle was on the road portion of the trafficway, just prior to the first harmful event for this vehicle. Code the thing(s) the driver tried to avoid whether the maneuver was successful or not (i.e., whether the driver was able to avoid the object, poor road condition, animal, vehicle, or non-motorist or not).

Currently there are no State crash reports having fields, which by themselves, can be applied to code this element. Some State crash reports do have fields containing relevant information to consider such as Driver Contributing Circumstances, Vehicle Maneuver, Roadway Factors, Avoidance Maneuvers, or Environmental Circumstances. However, the data in these fields will rarely provide all the information needed to code DRIVER MANEUVERED TO AVOID.

00 (**Driver Did Not Maneuver to Avoid**) is used when:

- The officer reports that no avoidance maneuvers were taken by the driver.
- The avoidance maneuver(s) occurred after the first harmful event for the vehicle.
- The avoidance maneuver occurred when the vehicle was not on a roadway, shoulder, or parking lane.

Lack of definitive avoidance information in the report (absence of information) should not be coded as 00 (Driver Did Not Maneuver to Avoid). See <u>98 (Not Reported)</u> for absence of information situations.

Examples of when 00 (Driver Did Not Maneuver to Avoid) CAN be coded:

- The crash report narrative says the FHE event for a motor vehicle "stopped in traffic" is a collision with motor vehicle in motion. "Stopped in traffic" during the entire Critical Crash Envelope (CCE) means the driver did not avoid anything prior to the vehicle's FHE.
- The case material indicate the driver did not try to avoid anything on the road prior to the vehicle's FHE because:
 - o the driver did not have time to react
 - o the driver was asleep or unconscious
 - o the driver did not see or recognize there was anything to avoid
- The crash description identifies the driver did not try to avoid anything in the road prior to its FHE. For example, the crash report narrative says "The vehicle drifted off the road because the driver was talking on a cell phone. The driver tried to recover back to the road, lost control, and hit a tree."
- **01** (**Object**) is used when the driver attempted to avoid a non-fixed object such as: an animal carcass, an unattached trailer, a bicycle without a rider, downed tree limbs or power lines, debris from a previous crash, rocks that fall from an adjacent hillside, a load that fell from another vehicle, debris left from a tire blowout, etc.
- **02** (**Poor Road Conditions [Puddle, Ice, Pothole, etc.]**) is used when the driver maneuvered to avoid the location of a road condition. Treat the condition as if it were an object. Do not use this attribute if the driver lost control while traveling on/over the road condition but made no maneuver to avoid it.
- **03** (**Live Animal**) is used when the driver attempted to avoid a live animal that is stationary or moving. A dead animal carcass is considered debris and coded as **01** (**Object**).
- **04** (*Contact* **Motor Vehicle** (*in this Crash*)) is used when the driver attempted to avoid another **contact** motor vehicle in the crash (**receives a vehicle form**). This includes in-transport, parked, or working motor vehicles. A trailer not connected to a motor vehicle would be considered an <u>01</u> (<u>Object</u>).
- **05** (**Pedestrian**, **Pedalcyclist**, **or Other Non-Motorist**) is used when the driver attempts to avoid a pedestrian, pedalcyclist, or other non-motorist. Other Non-motorist would include people riding on an animal, or in an animal drawn conveyance or on a personal conveyance. A person

killed in a previous crash or an unoccupied pedalcycle or personal conveyance would be considered an **01** (**Object**).

- **92** (**Phantom/Non-Contact Motor Vehicle**) is used when the driver attempted to avoid another motor vehicle in the crash that was reported as a **non-contact** or phantom vehicle (**does not receive a <u>vehicle form</u>**). This includes in-transport, parked, or working motor vehicles. A trailer not connected to a motor vehicle would be considered an **01** (**Object**).
- **95** (**No Driver Present/Unknown if Driver Present**) is used when there is no driver in this vehicle or when it is unknown if there is a driver present in this vehicle at the time of the crash.
- 98 (Not Reported) Check to see if <u>00 (Driver Did Not Maneuver to Avoid)</u> or <u>99 (Reported as Unknown)</u> are more appropriate for the situation.

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks is NOT considered "**Not Reported**."

Code **98** (**Not Reported**) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).
- **99** (**Reported as Unknown**) is used when the information about a particular vehicle's circumstances are reported as "unknown."

Consistency Checks (See Section 400):

Error ID	IF	THEN
3ВСР	CRASH TYPE equals 34, 36, 38, 40, 54, 56, 58, or 60,	DRIVER MANEUVERED TO AVOID must not equal 00.
41IP	TRAVEL SPEED is equal to 000,	DRIVER MANEUVERED TO AVOID should equal 00 <i>or 95</i> .
9C4P	UNIT TYPE equals 1, and DRIVER PRESENCE equals 0 or 9,	DRIVER MANEUVERED TO AVOID must only equal 95.
9C5P	DRIVER MANEUVERED TO AVOID equals 95,	DRIVER PRESENCE must equal 0 or 9.
AZ6P	any DRIVER MANEUVERED TO AVOID equals 00,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must not equal 17.
AZ7P	any DRIVER MANEUVERED TO AVOID equals 00 or 95 or 98, or 99,	only that one code and no other must be coded for this vehicle.
AZBP	any DRIVER MANEUVERED TO AVOID equals 03,	CRITICAL EVENT - PRECRASH (EVENT) should equal 87-89.

Error ID	IF	THEN
AZCP	any DRIVER MANEUVERED TO AVOID equals 05,	CRITICAL EVENT - PRECRASH (EVENT) should equal 80-85.
AZDQ	DRIVER MANEUVERED TO AVOID equals 04,	NUMBER OF VEHICLE FORMS SUBMITTED must be greater than 001.
AZEP	any DRIVER MANEUVERED TO AVOID equals 01,	CRITICAL EVENT - PRECRASH (EVENT) should equal 90-92.
B10P	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) does not equal 17, and ATTEMPTED AVOIDANCE MANEUVER equals 01,	DRIVER MANEUVERED TO AVOID should equal 00.
V59Q	ATTEMPTED AVOIDANCE MANEUVER equals 99,	DRIVER MANEUVERED TO AVOID should equal 00, 98, or 99.

PC16 - Driver Distracted By

FORMAT: 2 numeric. Select All That Apply.

SAS NAME: Distract.DRDISTRACT

ELEMENT VALUES:

Codes	Attributes
00	Not Distracted
16	No Driver Present/Unknown if Driver Present
96	Not Reported
99	Reported as Unknown if Distracted

Distractions

Codes	Attributes
03	By Other Occupant(s)
04	By a Moving Object in Vehicle
05	While Talking or Listening to Mobile Phone
06	While Manipulating Mobile Phone
15	Other Mobile Phone Related
07	Adjusting Audio or Climate Controls
09	While Using Other Component/Controls Integral to Vehicle
10	While Using or Reaching For Device/Object Brought into Vehicle
12	Distracted by Outside Person, Object, or Event
13	Eating or Drinking
14	Smoking Related
17	<u>Distraction/Inattention</u>
18	<u>Distraction/Careless</u>
19	<u>Careless/Inattentive</u>
92	<u>Distraction (Distracted), Details Unknown</u>
93	Inattention (Inattentive), Details Unknown
97	Lost in Thought/Day Dreaming
98	Other Distraction (Specify:)

Definition: This element identifies the attribute(s) that best describe this driver's attention to driving prior to the driver's realization of an impending critical event or just prior to impact if realization of an impending critical event does not occur. This element reports on the presence of

any distractions that may or may not have contributed to the crash. Distraction from the primary task of driving occurs when drivers divert their attention from the driving task to some other activity. Also, driving while daydreaming or lost in thought is identified as distracted driving by NHTSA. Physical conditions/impairments (fatigue, alcohol, medical condition, etc.) or psychological states (anger, emotional, depressed, etc.) are not identified as distractions by NHTSA.

NOTE: "Presence" is not the same as an activity associated with the person or item. The driver needs to be engaged in some activity associated with the thing that is causing a distraction. Just having a mobile phone, sandwich, passenger, etc. in the vehicle isn't a distraction. The distraction is when the driver's attention is diverted from driving to using the phone, eating the sandwich, turning around to talk to a backseat passenger, etc. It doesn't have to be a contributing factor in the crash, but it does have to be in use, engaged, the person was doing it at the time, etc. for it to have been a distraction.

Remarks: Record the attribute(s) that best describe this driver's attention to driving prior to the driver's realization of an impending critical event or just prior to impact if realization of an impending critical event does not occur. If this driver's vehicle has two critical crash envelopes, record the attribute(s) that best describe the driver's attention prior to the first CRITICAL
PRECRASH EVENT (i.e., prior to realization of the impending danger that the driver successfully avoided). Intoxication, Ill, Blackout, Asleep, or Fatigued are not considered distractions. This information is captured under the data element CONDITION (IMPAIRMENT) AT TIME OF CRASH.

DRIVER DISTRACTED BY is a "Select All That Apply" element. If the element values <u>00</u> (<u>Not Distracted</u>), <u>16 (No Driver Present</u>), <u>17 (Distraction/ Inattention</u>), <u>18</u> (<u>Distraction/Careless</u>), <u>19 (Careless/Inattentive</u>), <u>92 (Distraction [Distracted]</u>, <u>Details Unknown</u>), <u>93 (Inattention [Inattentive]</u>, <u>Details Unknown</u>), <u>96 (Not Reported</u>), or <u>99 (Reported as Unknown if Distracted)</u> are selected, then only that one element value may be used.

Witness Statements:

See clarification on the use of information provided by witnesses in section 103. Data Sources.

00 (Not Distracted)

- When the case material indicate that the individual was completely attentive to driving.
- When the case material does not indicate a distraction in an available field, and not reporting a distraction in that field indicates 00 (Not Distracted).
- For omission of information see 96 (Not Reported) guidance below.

16 (**No Driver Present/Unknown if Driver Present**) is used when there is no driver in this vehicle or when it is unknown if there is a driver present in this vehicle at the time of the crash.

96 (Not Reported) Check to see if <u>00 (Not Distracted)</u> or <u>99 (Reported as Unknown if Distracted)</u> are more appropriate for the situation.

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**."

Code **96** (**Not Reported**) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).

99 (**Reported as Unknown if Distracted**) is used when the case material specifically indicate unknown.

Distractions:

- **03** (**By Other Occupant[s]**) is used when the driver was distracted by another occupant in this driver's vehicle prior to realization of impending danger. Examples of other occupant distraction include conversing with or looking at another occupant (baby/child in back seat, rowdy teenager, argumentative spouse, etc.).
- **04** (**By a Moving Object in Vehicle**) is used when the driver was distracted by a moving object in this driver's vehicle prior to realization of impending danger. Examples include a dropped object, a moving pet, insect, or cargo.
- **05** (While Talking or Listening to Mobile Phone) is used when the driver is talking or listening on a mobile phone. This attribute includes talking or listening on a "hands-free" or Bluetooth enabled phone.
- **06** (While Manipulating Mobile Phone) is used when the driver is dialing or text messaging (texting) on a mobile phone. Any manual button/control actuation on the phone qualifies. This includes dialing or text messaging on any wireless e-mail device.
- **15** (Other Mobile Phone Related) is used when the case material indicates the driver is distracted from the driving task due to mobile phone involvement, but none of the specified codes are applicable (reaching for mobile phone, etc.). This attribute is also applied when specific details regarding mobile phone distraction/usage are not provided (e.g., email, nonspecific mobile phone use).
- **07** (**Adjusting Audio or Climate Controls**) is used when someone is distracted from the driving task while adjusting the air conditioner, heater, radio, cassette, using the radio, using the cassette, or CD that are mounted in the vehicle.
- **09** (While Using Other Component/Controls Integral to Vehicle) is used when the driver is distracted while manipulating a control in the vehicle including adjusting headlamps or interior lights, controlling windows (power or manual), manipulating door locks (power or manual),

- adjusting side view mirrors (power or manual), adjusting rear view mirror, adjusting seat (power or manual), adjusting steering wheel, adjusting seat belt, on-board navigational devices, etc. (original equipment).
- **10** (While Using or Reaching for Device/Object Brought into Vehicle) is used when the driver is distracted while using or reaching for a device in the vehicle including a radar detector, CDs, razors, music portable CD player, headphones, a navigational device, laptop or tablet PC, etc. This attribute is also used when it cannot be determined if the involved device was OEM, brought into the vehicle, or a function of a mobile phone (i.e., GPS).
 - If it is unknown if the device or object was brought into the vehicle or was original equipment on this vehicle, default to brought into vehicle and use attribute 10 (While Using or Reaching for Device/Object Brought into Vehicle).
- 12 (Distracted by Outside Person, Object, or Event) is used when the driver was distracted by an outside person, object, or event prior to realization of impending danger. Examples include animals on the roadside, a previous crash, or non-traffic related signs (advertisements, electronic billboards, etc.). Do not use this attribute for a person, object, or event that the driver has recognized and for which the driver has taken some action (e.g., avoiding a pedestrian on the roadway).
- 13 (Eating or Drinking) is used when the driver is eating or drinking or involved in an activity related to these actions (picking food from carton placed on passenger seat, reaching to throw out used food wrapper, etc.).
- **14** (**Smoking Related**) is used when the driver is smoking or involved in an activity related to smoking, such as lighting a cigarette, putting ashes in the ash tray, vaping, etc. Any method of lighting the cigarette would be coded **14** (**Smoking Related**). Chewing tobacco related distractions are coded under **98** (**Other Distraction [Specify:]**).
- **17** (**Distraction/Inattention**) is used **exclusively** when "Distraction/Inattention" or "Inattention/Distraction" are noted in the case material as one combined attribute and it cannot be determined which DRIVER DISTRACTED BY attribute is intended, **92** (**Distraction** [**Distracted**], **Details Unknown**).
- **18** (**Distraction/Careless**) is used **exclusively** when "Distraction/Careless" or "Careless/Distraction" are noted in the case material as one combined attribute and it cannot be determined which DRIVER DISTRACTED BY attribute applies.
- **19** (Careless/Inattentive) is used **exclusively** when "Careless/Inattentive" or "Inattentive/Careless" are noted in the case material as one combined attribute and it cannot be determined which DRIVER DISTRACTED BY attribute applies.
- **92** (**Distraction** [**Distracted**], **Details Unknown**) is used when "distraction" or "distracted" are noted in the case material, but specific distraction(s) cannot be identified. For non-specific "inattention," see attribute
- 93 (Inattention [Inattentive], Details Unknown).
- **93** (**Inattention** [**Inattentive**], **Details Unknown**) is used when "inattention" or "inattentive" are noted in the case material, but it cannot be identified if this refers to a distraction(s).
- **97** (**Lost in Thought/Day Dreaming**) is used when the driver is not completely attentive to driving because he/she is thinking about items other than the driving task. For non-specific

98 (Other Distraction [Specify:])* is used when details regarding this driver's distraction are known but none of the specified codes are applicable (e.g., chewing tobacco related).

*Note: For attributes with a "Specify:" designation, a fill-in text box will open in *RBIS*. This text box should be used to provide additional detail about the attribute selection. Please include a specific reason for this selection.

Consistency Checks (See Section 400):

Error ID	IF	THEN
5L0P	any RELATED FACTORS-DRIVER LEVEL equals 010,	DRIVER DISTRACTED BY must equal 00.
ВЈ1Р	UNIT TYPE equals 1, and DRIVER PRESENCE equals 0 or 9,	DRIVER DISTRACTED BY must equal 16.
BJ2P	UNIT TYPE equals 1, and DRIVER PRESENCE equals 1,	DRIVER DISTRACTED BY must not equal 16 or blank.
ВЈЗР	UNIT TYPE equals 1, and DRIVER DISTRACTED BY equals 16,	DRIVER PRESENCE must equal 0 or 9.
BJ4P	any DRIVER DISTRACTED BY equals 03,	NUMBER OF OCCUPANTS must be greater than 01.
ВЈ7Р	any DRIVER DISTRACTED BY equals 00 or 16 or 17 or 18 or 19 or 92 or 93 or 96 or 99,	only that one code and no other must be used.
BJ8P	DRIVER DISTRACTED BY equals 17,	STATE should equal GA, MN, MO, NV, NY, or SC.
U200	Unlikely DRIVER DISTRACTED BY equals 18 or 19.	

[&]quot;distraction," see <u>92 (Distraction [Distracted], Details Unknown)</u>. For non-specific "inattention," see <u>93 (Inattention [Inattentive], Details Unknown)</u>.

PC17 - Pre-Event Movement (Prior to Recognition of Critical Event)

FORMAT: 2 numeric

SAS NAME: Vehicle.P_CRASH1

ELEMENT VALUES:

Codes	Attributes
00	No Driver Present/Unknown if Driver Present
01	Going Straight
02	Decelerating in Road
03	Accelerating in Road
04	Starting in Road
05	Stopped in Roadway
06	Passing or Overtaking Another Vehicle
07	Disabled or "Parked" in Travel Lane
08	Leaving a Parking Position
09	Entering a Parking Position
10	Turning Right
11	Turning Left
12	Making a U-Turn
13	Backing Up (Other Than for Parking Position)
14	Negotiating a Curve
15	<u>Changing Lanes</u>
16	Merging
17	Successful Avoidance Maneuver to a Previous Critical Event
98	Other (Specify:)
99	<u>Unknown</u>

Definition: This element identifies the attribute that best describes this vehicle's activity prior to the driver's realization of an impending critical event or just prior to impact if the driver took no action or had no time to attempt any evasive maneuvers.

Remarks: Record the attribute that best describes this vehicle's activity **prior** to the driver's realization of an impending critical event or just **prior** to impact if the driver took no action or had no time to attempt any evasive maneuvers.

Actions taken by the driver, of this vehicle, **after realization** of an impending danger are captured in <u>ATTEMPTED AVOIDANCE MANEUVER</u>.

- **00** (**No Driver Present/Unknown if Driver Present**) is pre-coded for in-transport motor vehicles when the element <u>DRIVER PRESENCE</u> is coded as <u>**0** (**No Driver Present/Not Applicable**)</u>.
- **01** (**Going Straight**) is used when this vehicle's path of travel was straight ahead without any attempted or intended changes. The coding of this attribute is not always dependent on the roadway alignment.
- **02** (**Decelerating in Road**) is used when this vehicle was traveling straight ahead within the road portion of the trafficway and was decelerating.
- **03** (Accelerating in Road) is used when this vehicle was traveling straight ahead within the road portion of the trafficway and was accelerating. **03** (Accelerating in Road) must be explicitly stated by officer.
- **04** (**Starting in Road**) is used when this vehicle was in the process of starting forward from a stopped position *and intending to proceed straight ahead* within the road portion of the trafficway (e.g., start up from traffic signal).
- **05** (**Stopped in Roadway**) is used when this vehicle was stopped momentarily, with the motor running within the roadway portion of the trafficway (e.g., stopped for traffic signal).
- **06** (**Passing or Overtaking Another Vehicle**) is used when this vehicle was traveling straight ahead and was in the process of passing or overtaking another vehicle on the left or right. **Note:** This attribute is not used in rear-end collisions. (See Tables <u>Precrash Event Scenarios for Different Rear-End Situations.</u>)
- **07** (**Disabled or "Parked" in Travel Lane**) is used when this vehicle was "parked" in a travel lane (e.g., double parked, disabled) with a driver present in the vehicle.
- **08** (**Leaving a Parking Position**) is used when this vehicle was entering the travel lane from a parking area adjacent to the traffic lanes (i.e., in the process of leaving the parking position). This attribute includes vehicles that were previously stopped/parked on the shoulder, roadside, median, etc. For vehicles backing from a driveway, use attribute **13** (**Backing Up [Other Than for Parking Position]**).
- **09** (**Entering a Parking Position**) is used when this vehicle was leaving the travel lane to a parking area adjacent to the traffic lanes (i.e., in the process of parking). This attribute includes vehicles that are stopping/parking on the shoulder, roadside, median, etc. For vehicle backing into a driveway use **13** (**Backing Up [Other Than for Parking Position]**).
- **10** (**Turning Right**) is used when this vehicle was moving forward and turned right, changing lanes from one roadway to a different roadway (e.g., from or to a driveway, parking lot, or intersection). Excludes situations where the vehicle was leaving a parking position.
- 11 (Turning Left) is used when this vehicle was moving forward and turned left, changing lanes from one roadway to a different roadway (e.g., from or to a driveway, parking lot, or intersection). Excludes situations where the vehicle was leaving a parking position.
- **12** (**Making a U-Turn**) is used when this vehicle was moving forward making a U-turn on the trafficway. Excludes situations where the vehicle was leaving a parking position.
- **13** (Backing Up [Other Than for Parking Position]) is used when this vehicle was intentionally traveling backwards within the trafficway. Vehicles backing into or from a

driveway are included in this attribute. If the backward movement is unintentional (e.g., the vehicle rolls or drifts backward) do not use this attribute (see <u>98 (Other [Specify:])</u>). Also, do not use this attribute if the vehicle was backing into or out of a parking space (see <u>09 (Entering a Parking Position)</u>) or <u>08 (Leaving a Parking Position)</u>, respectively).

- **14** (**Negotiating a Curve**) is used when this vehicle was continuing along a road that curved to the right or left.
- **15** (**Changing Lanes**) is used when this vehicle was traveling straight ahead and changed travel lanes to the right or left while on the same roadway.
- **16** (**Merging**) is used when this vehicle was moving forward and merging from the left or right into a traffic lane (e.g., roadway narrows, exit/entrance ramps).
- 17 (Successful Avoidance Maneuver to a Previous Critical Event) is used when this vehicle responded to a previous critical event and successfully avoided an impact. However, this maneuver precipitated a subsequent critical crash envelope, which resulted in this vehicle's first impact.
- **98** (Other [Specify:]) is used when this vehicle's PRE-EVENT MOVEMENT is known but none of the specified attributes are applicable. An example would be a vehicle that unintentionally travels (e.g., rolls or drifts) backward. The movement must be specified in the "specify box."
 - *Note: For attributes with a "Specify:" designation, a fill-in text box will open in *RBIS*. This text box should be used to provide additional detail about the attribute selection. Please include a specific reason for this selection.
- **99** (**Unknown**) is used when the vehicle's movement prior to the driver's realization of an impending critical event is unknown.

Consistency Checks (See Section 400):

Error ID	IF	THEN
3B4P	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 10,	CRASH TYPE must not equal 44-69, 71-73, 76, 77, 79, 81-83, 86-92.
3B5P	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 11,	CRASH TYPE must not equal 44-67, 69-71, 73, 77-81, 83, 86-92.
3BDP	CRASH TYPE equals 46, 47, and ATTEMPTED AVOIDANCE MANEUVER equals 01 or 99,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must not equal 01.
3BFP	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 08 or 09,	CRASH TYPE must not equal 46 or 47.
3BGP	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 00,	DRIVER PRESENCE must equal 0 or 9.

Error ID	IF	THEN
3C00	CRASH TYPE equals 68, 72, 76, or 82,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 11 or 98.
3C10	CRASH TYPE equals 70, 78, or 80,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 10 or 98.
3C20	this vehicle is involved in the FIRST HARMFUL EVENT and its CRASH TYPE equals 29-31,	this vehicle's PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 02.
3C30	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 12,	CRASH TYPE should equal 98.
3C40	CRASH TYPE equals 46,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 06, 15, 16, or ATTEMPTED AVOIDANCE MANEUVER should equal 07, 09, or 12.
3C50	CRASH TYPE equals 92,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 08, 09, 13, 99.
3C60	CRASH TYPE equals 25-27, 29-31,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should not equal 05 or 07.
3C70	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 13,	CRASH TYPE should equal 92 or 98.
3C80	CRASH TYPE equals 47,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 06, 15, 16, or ATTEMPTED AVOIDANCE MANEUVER should equal 06, 08, or 11.
3D60	CRASH TYPE equals 46 or 47,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should not equal 01.
3E10	CRITICAL EVENT - PRECRASH (EVENT) equals 15 or 16,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should not equal 01.
3E11	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITCAL EVENT) equals 01,	CRITICAL EVENT - PRECRASH (EVENT) should not equal 15 or 16.

Error ID	IF	THEN
42IP	TRAVEL SPEED equals 000,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 00, 05, 07, 17, 98, or 99.
9BAP	MANNER OF COLLISION OF THE FIRST HARMFUL EVENT equals 07, and PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 10 or 11 for neither one of the vehicles involved in the FIRST HARMFUL EVENT,	CRASH TYPE should equal 44-49, 98, 99 for the vehicles involved in the FIRST HARMFUL EVENT.
9ВСР	MANNER OF COLLISION OF THE FIRST HARMFUL EVENT equals 08, and PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 10 or 11 for neither one of the vehicles involved in the FIRST HARMFUL EVENT,	CRASH TYPE should equal 64-67, 98, 99 for the vehicles involved in the FIRST HARMFUL EVENT.
A430	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 10, 11 for a vehicle involved in the FIRST HARMFUL EVENT,	RELATION TO JUNCTION (b) should not equal 01, 18.
A4C0	RELATION TO JUNCTION (b) equals 04,	at least one PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) for the vehicles involved in the FIRST HARMFUL EVENT should equal 10, 11, 13, or 98.
A4D0	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 14,	ROADWAY ALIGNMENT must equal 2-4.
A4D1	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 01,	ROADWAY ALIGNMENT should not equal 2-4.
A61F	FIRST HARMFUL EVENT equals 08, 09, 11, 15, 49, and RELATION TO TRAFFICWAY equals 01, 02, 07, 11, and PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) is not equal to 00, 13 for the vehicle involved in the FIRST HARMFUL EVENT,	CRASH TYPE should equal 13 for the vehicle involved in the FIRST HARMFUL EVENT.
AZ20	UNIT TYPE equals 1, and DRIVER PRESENCE equals 0 or 9,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 00.
AZ30	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 00,	ATTEMPTED AVOIDANCE MANEUVER must equal 00.

Error ID	IF	THEN
AZ50	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 00,	PRE-IMPACT STABILITY must equal 0.
AZ60	PRE-IMPACT STABILITY equals 0,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 00.
AZ6P	any DRIVER MANEUVERED TO AVOID equals 00,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must not equal 17.
AZ70	PRE-IMPACT LOCATION equals 0,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 00.
AZ80	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 00,	PRE-IMPACT LOCATION must equal 0.
AZ81	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 15, or CRITICAL EVENT - PRECRASH (EVENT) equals 10 or 11 for this vehicle,	PRE-IMPACT LOCATION should not equal 1 (Stayed in Original Travel Lane) for this vehicle.
AZA0	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 05 or 07,	TRAVEL SPEED should equal 000 for this vehicle.
AZA2	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) does not equal 10, 11, or 12,	then RELATED FACTORS - DRIVER LEVEL should not equal 0 48.
AZA3	RELATED FACTORS - DRIVER LEVEL equals θ 48,	then PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 10, 11, or 12.
B10P	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) does not equal 17, and ATTEMPTED AVOIDANCE MANEUVER equals 01,	DRIVER MANEUVERED TO AVOID should equal 00.
PB17	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN for a person involved in the first harmful event equals 211-214, or 219,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 08, 09, 13, or 98. Note: this edit is restricted to vehicles which are involved in only one event with pedestrian(s).

Error ID	IF	THEN
PB40	PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE equals 610,	at least one PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 08, 09, or 13 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
PB41	PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE equals 215,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 08 or 09 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
PB42	PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE equals 111, 211, or 212,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 11, 16, or 17 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
PB43	PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE equals 112, 151, 213, 214, 217, or 218,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 10, 16, or 17 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
PB45	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 781 or 782,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 11 or 17 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
PB46	PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE equals 221-225,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 01 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
PB49	PERSON TYPE equals 05, 11, 12, or 13, and PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 13 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST,	at least one PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 211-214 or 219.

Error ID	IF	THEN
PB50	PERSON TYPE equals 05, 11, 12, or 13, and PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 10-12 or 16 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST,	at least one PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 461, 465, 469, 510, 781, 782, 791, 792, 794, 795, or 799.
PB52	PERSON TYPE equals 06 or 07, and PRE- EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 13 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON- MOTORIST,	at least one PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE should equal 610.
PB56	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 791, 792, 794, 795,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 10 or 17 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
PBA0	PEDESTRIAN/ BIKE TYPING - CRASH TYPE - BICYCLE equals 111, 211, 212, and VEHICLE NUMBER - VEHICLE LEVEL equals VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 11.
PBA1	PEDESTRIAN/ BIKE TYPING - CRASH TYPE - BICYCLE equals 112, 151, 213, 214, 217, or 218, and VEHICLE NUMBER - VEHICLE LEVEL equals VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 10.
PBA5	PEDESTRIAN SCENARIO equals 1a, 1b, 1c, 1d, 2a, 2b, 2c, 2d, 3a, 3b, 3c, 3d, 4a, 4b, 4c, 4d,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 01, 02, 03, 04, 06, 08, 09, 12, 13, 14, 15, 16, or 17 for the vehicle number that struck this non-motorist.
PBA6	PEDESTRIAN SCENARIO equals 5a, 5b, 5c, 5d, 6a, 6b, 6c, 6d, 7a, 7b, 7c, 7d, 8a, 8b, 8c, 8d,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 10 for the vehicle number that struck this non-motorist.
PBA7	PEDESTRIAN SCENARIO equals 9a, 9b, 9c, 9d, 10a, 10b, 10c, 10d, 11a, 11b, 11c, 11d, 12a, 12b, 12c, 12d,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 11 for the vehicle number that struck this non-motorist.

Error ID	IF	THEN
V535	ATTEMPTED AVOIDANCE MANEUVER equals 00,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 00.
V538	JACKKNIFE equals 2,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must not equal 04, 05, 07-09, or 13 for this vehicle.

PC18 - Critical Event - Precrash (Category)

FORMAT: 1 numeric **SAS NAME:** none

ELEMENT VALUES:

Codes	Attributes
1	This Vehicle Loss of Control Due to:
2	This Vehicle Traveling
3	Other Motor Vehicle in Lane
4	Other Motor Vehicle Encroaching into Lane
5	Pedestrian or Pedalcyclist or Other Non-Motorist
6	Object or Animal
7	<u>Other</u>
9	<u>Unknown</u>

Definition: This element identifies the category of the event that was critical to this vehicle being involved in the crash.

Remarks: When more than one condition applies and it cannot be determined which one had a greater effect, choose the higher listed attribute (e.g., <u>1 (This Vehicle Loss of Control Due to:)</u> takes precedence over <u>2 (This Vehicle Traveling)</u>).

If you do not know from available sources which driver had the right-of-way at a controlled or uncontrolled intersection, follow the guidelines under **Precrash General Rule #6.**

See the Coding Guide: Precrash Critical Event Category Flowchart for helpful information.

- 1 (This Vehicle Loss of Control Due to:) is used to identify situations where the critical factor leading to the collision involved control loss of this vehicle. Control loss can be related to either mechanical failure or environmentally induced vehicle instability. (See Precrash General Rule#5 for additional guidance.)
- **2** (**This Vehicle Traveling**) is used to identify situations where the critical factor leading to the collision involves the travel path of this vehicle.
- **3 (Other Motor Vehicle in Lane)** is used to identify situations where the critical factor leading to the collision involved the travel of the other vehicle in the same lane as this vehicle.
- **4 (Other Motor Vehicle Encroaching into Lane)** is used to identify situations where the critical factor leading to the collision involves the other vehicle's movement into or across this vehicle's travel lane from another lane, intersection, driveway, or ramp.
- **5** (**Pedestrian or Pedalcyclist or Other Non-Motorist**) is used to identify situations where the critical factor leading to the collision for this vehicle involved a pedestrian, pedalcyclist, or other non-motorist. A pedalcyclist is defined as a person riding a pedal power conveyance (bicycle, tricycle, etc.). Other non-motorists include people on personal conveyances (baby carriage, skate

board, roller blades, motorized wheelchair, etc.) and any person riding on an animal or in an animal-drawn conveyance (on horseback, in a horse-drawn carriage, etc.).

6 (Object or Animal) is used to identify situations where the critical factor leading to the collision for this vehicle involved an object or animal.

7 (Other) is used when a critical factor not previously listed resulted in the collision for this vehicle. Previous impacts in the crash are not considered as other critical precrash events.

9 (Unknown) is used when the critical precrash event that resulted in the collision is unknown.

Consistency Check (See Section 400):

Error ID	Error Message
FP6F	UNIT TYPE equals 1, and CRITICAL EVENT - PRECRASH (CATEGORY) equals blank, case status is flawed.

PC19 - Critical Event - Precrash (Event)

FORMAT: 2 numeric

SAS NAME: Vehicle.P_CRASH2

ELEMENT VALUES:

THIS VEHICLE LOSS OF CONTROL DUE TO:

Codes	Attributes
01	Blow Out/Flat Tire
02	Stalled Engine
03	Disabling Vehicle Failure (e.g., Wheel Fell Off) (Specify:)
04	Non-Disabling Vehicle Problem (e.g., Hood Flew Up) (Specify:)
05	Suddenly Encountered Poor Road Conditions (Puddle, Pothole, Ice, Etc.) (Specify:)
06	Traveling Too Fast for Conditions or Road Configuration
08	Other Cause of Control Loss (Specify:)
09	Unknown Cause of Control Loss

THIS VEHICLE TRAVELING

Codes	Attributes
10	Over the Lane Line on Left Side of Travel Lane
11	Over the Lane Line on Right Side of Travel Lane
12	Off the Edge of the Road on the Left Side
13	Off the Edge of the Road on the Right Side
14	End Departure
15	Turning Left
16	Turning Right
17	Crossing Over (Passing Through) Junction
18	This Vehicle Decelerating
19	Unknown Travel Direction
20	Backing
21	Making a U-Turn

OTHER MOTOR VEHICLE IN LANE

Codes	Attributes
50	Other Vehicle Stopped
51	Traveling in Same Direction with Lower Steady Speed
52	Traveling in Same Direction While Decelerating
53	Traveling in Same Direction with Higher Speed
54	Traveling in Opposite Direction
55	<u>In Crossover</u>
56	Backing
59	Unknown Travel Direction/Speed of the Other Motor Vehicle in Lane

OTHER MOTOR VEHICLE ENCROACHING INTO LANE

Codes	Attributes
60	From Adjacent Lane (Same Direction) Over Left Lane Line
61	From Adjacent Lane (Same Direction) Over Right Lane Line
62	From Opposite Direction Over Left Lane Line
63	From Opposite Direction Over Right Lane Line
64	From Parking Lane/Shoulder, Median/Crossover, Roadside
65	From Crossing Street, Turning into Same Direction
66	From Crossing Street, Across Path
67	From Crossing Street, Turning into Opposite Direction
68	From Crossing Street, Intended Path Not Known
70	From Driveway, Turning into Same Direction
71	From Driveway, Across Path
72	From Driveway, Turning into Opposite Direction
73	From Driveway, Intended Path Not Known
74	From Entrance to Limited Access Highway
78	Encroachment by Other Vehicle - Details Unknown

PEDESTRIAN OR PEDALCYCLIST OR OTHER NON-MOTORIST

Codes	Attributes
80	Pedestrian in Road
81	Pedestrian Approaching Road
82	Pedestrian Unknown Location
83	Pedalcyclist or Other Non-Motorist in Road
84	Pedalcyclist or Other Non-Motorist Approaching Road
85	Pedalcyclist or Other Non-Motorist Unknown Location

OBJECT OR ANIMAL

Codes	Attributes
87	Animal in Road
88	Animal Approaching Road
89	Animal - Unknown Location
90	Object in Road
91	Object Approaching Road
92	Object Unknown Location

OTHER

Code	Attribute
98	Other Critical Precrash Event (Specify:)

UNKNOWN:

Code	Attribute
99	<u>Unknown</u>

Definition: This element identifies the critical event that made the crash imminent (i.e., something occurred that made the collision possible).

Remarks:

The selection of the <u>CRITICAL PRECRASH CATEGORY</u> will determine what CRITICAL PRECRASH EVENTS are available to select.

When you know the CRITICAL PRECRASH CATEGORY, but are unable to select a specific CRITICAL PRECRASH EVENT, use the following guideline:

Default to one of the "Other" or "Unknown" attributes within each CRITICAL PRECRASH EVENT CATEGORY, rather than coding the entire CRITICAL PRECRASH CATEGORY as "Other critical precrash event." (Precrash General Rule #3)

*Note: For attributes with a "Specify:" designation, a fill-in text box will open in *RBIS*. This text box should be used to provide additional detail about the attribute selection. Please include a **specific** reason for this selection.

Responsive actions to this situation, if any, are coded under <u>ATTEMPTED AVOIDANCE</u> <u>MANEUVER</u>.

A CRITICAL PRECRASH EVENT is coded for each vehicle and identifies the circumstances leading to this vehicle's first impact in the crash.

Do not refer to culpability. Many crash scenarios will suggest fault, but this should be coincidental rather than by design. As an example, vehicle 1 was speeding when vehicle 2 crossed vehicle 1's path from a driveway. The situation that made the precrash event critical for vehicle 1 (since it did not lose control) was vehicle 2's movement across vehicle 1's path **and not** vehicle 1's speed.

The mere presence of a traffic control signal/sign typically does not make the situation critical when determining CRITICAL PRECRASH EVENT. (See example under Precrash General Rule #2)

When selecting events within the categories of <u>This Vehicle Traveling</u> and <u>Other Motor Vehicle Encroaching Into Lane</u> for Critical Events occurring in intersections, a vehicle's "travel lane" extends through the intersection area even if no lane line markings are present within the intersection. For example, for a vehicle that is turning left, its original travel lane extends through the intersection to the lane into which it is turning (see <u>Figure 26</u> below).

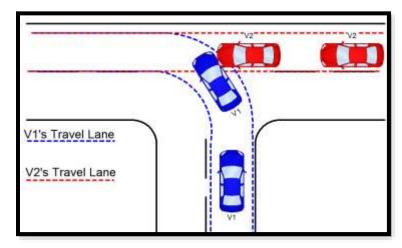


Figure 26: Diagram of a Vehicle Turning Left and its Extended Travel Lane

A motor vehicle is stopped in a travel lane and is impacted by another motor vehicle ricocheting off a vehicle. The CRITICAL PRECRASH EVENT for the vehicle struck by the ricocheting

vehicle is in the category of either: <u>Other Motor Vehicle In Lane</u> or <u>Other Motor Vehicle Encroaching Into Lane</u>. (<u>Precrash General Rule #9</u>)

This Vehicle Loss of Control Due to:

- **01** (**Blow Out or Flat Tire**) is used when a vehicle in motion loses control as the result of an immediate tire disruption. Examples include blow out, rapid air loss, tread separation, etc.
- **02** (**Stalled Engine**) refers to a vehicle that is in motion and loses engine power. A stalled engine situation must precipitate a collision to be coded in this element. A vehicle that is stopped as the result of an engine malfunction does not take this attribute.
- **03** (**Disabling Vehicle Failure [e.g., Wheel Fell Off] [Specify:]**) is selected when a mechanical malfunction, such as a component of the vehicle suspension or steering system, leads to the critical reason for the collision. (See "Note: For attributes with "specify:" designation" at the beginning of Remarks section for this element.)
- **04** (Non-Disabling Vehicle Problem [e.g., Hood Flew Up] [Specify:]) is selected when some mechanical abnormality suddenly occurred to this vehicle that leads to the critical reason for the collision. The abnormality must not be disabling damage. For bald tires, see Mode of Conditions or Road Configuration). (See "Note: For attributes with "specify:" Mode of Configuration). (See "Note: For attributes with "specify:"
- **05** (Suddenly Encountered Poor Road Conditions [Puddle, Pothole, Ice, Etc.] [Specify:]) captures control loss due to suddenly encountered environmental conditions of the roadway and not ongoing situations. For ongoing situations, see <u>06</u> (Traveling Too Fast for Conditions or Road Configuration). These conditions must have initiated the precrash event that resulted in the collision. (See "Note: For attributes with "specify:" designation" at the beginning of Remarks section for this element.).
- **06** (**Traveling Too Fast for Conditions or Road Configuration**) identifies this vehicle's movement and speed were not appropriate relative to its surroundings in which the subsequent loss of control led to the collision. This attribute applies when the loss of control is due to a vehicle traveling at a speed that was unsafe for the road configuration or conditions, and has no bearing on the <u>SPEED LIMIT</u>. The officer does not necessarily have to indicate that speed was a factor in the crash, and therefore this attribute is independent of <u>SPEEDING RELATED</u>. This attribute may also be used in situations where there are no adverse weather and/or road surface conditions.

Examples include:

- A roadway departure on a curve where the driver failed to negotiate and departed the roadway resulting in an impact. If the driver merely steered straight while in a curve and departed the roadway, the category This Vehicle Traveling may apply.
- The vehicle loses control (hydroplanes) on a wet roadway (can be due to bald tires).

08 (Other Cause of Control Loss [Specify:]) is selected when it was determined that this vehicle's loss of control was the primary reason that made the event critical and the above attributes do not adequately identify the control loss condition. If control is lost due to driver illness such as heart attacks, diabetic comas, etc., then CRITICAL EVENT - PRECRASH

(EVENT) should be coded as **08** (**Other cause of control loss [specify:]**). This attribute should not be used for drivers who are impaired by alcohol and/or drugs unless the driver's <u>CONDITION (IMPAIRMENT) AT TIME OF CRASH</u> equals <u>**01** (**III, Blackout**)</u>. (See "<u>Note:</u> <u>For attributes with "Specify:" designation</u>" at the beginning of Remarks section for this element.)

09 (Unknown Cause of Control Loss) is selected when it is known control loss made the situation critical, but it is unknown whether the vehicle or the environment caused the control loss.

This Vehicle Traveling

These attributes identify situations where the critical factor leading to the collision involved the travel path of **this** vehicle.

10 (Over the Lane Line on Left Side of Travel Lane) is selected when this vehicle departs its lane to the left and is entering or had entered the adjoining lane, shoulder, or designated bike lane. The change of travel path by this vehicle must precipitate the critical event for the collision. As an example, this vehicle attempts to pass another vehicle on the other vehicle's left and is struck by a vehicle traveling within its travel lane in the opposite direction.

However, by modifying the scenario slightly, the lane change may not always be the factor leading to the precrash event. Consider the same situation where this vehicle is passing to the left of the lead vehicle. If an animal runs into the roadway and is struck by this vehicle, then the correct choice would be **87** (Animal in Road).

11 (Over the Lane Line on Right Side of Travel Lane) is selected when this vehicle departs its lane to the right and is entering or had entered the adjoining lane, shoulder, or designated bike lane. To use this attribute, change of travel path by this vehicle must precipitate the critical event for the collision. As an example, this vehicle attempts to pass another vehicle on the other vehicle's right and is struck in the rear by a vehicle traveling within its travel lane in the same direction. The correct choice for this vehicle would be 11 (Over the Lane Line on Right Side of Travel Lane).

However, by modifying the scenario slightly the lane change may not always be the factor leading to the precrash event. Consider the same situation where this vehicle is passing to the right of the lead vehicle. If an animal runs into the road and is struck by this vehicle, then the correct choice would be **87** (Animal in Road).

- **12** (**Off the Edge of the Road on the Left Side**) identifies a situation where the initial precrash event occurred beyond the left side shoulder area. This also includes departure into a median.
- 13 (Off the Edge of the Road on the Right Side) identifies a situation where the initial precrash event occurred beyond the right-side shoulder area.
- **14** (**End Departure**) is used when the vehicle departs the end of the roadway (e.g., "T" intersection).
- **15** (**Turning Left**) is used when this vehicle attempts a left turn to or from its roadway or driveway to another roadway or driveway.
- **16** (**Turning Right**) is used when this vehicle attempts a right turn to or from its roadway or driveway to another roadway or driveway.

- 17 (Crossing Over (Passing Through) Junction) identifies this vehicle's travel as proceeding through the junction without any planned turning.
- **18** (**This Vehicle Decelerating**) is used when the vehicle is decelerating.
- **19** (Unknown Travel Direction) is used for those occasions where this vehicle's travel made the situation critical, but it is unknown which travel direction this vehicle was moving.
- **20** (**Backing**) is used when this vehicle was backing in a travel lane or backing into the roadway from a driveway, shoulder, or parking lane. This attribute excludes unintentional backward movement of the vehicle such as a vehicle that rolls or drifts backward (see **98** (**Other Critical Precrash Event [Specify:]**)).
- **21** (**Making a U-Turn**) is used when this vehicle attempts to make a U-Turn. When it cannot be determined if the vehicle is making a left or a U-Turn, default to left turn.

Other Motor Vehicle in Lane

These attributes identify situations where the critical factor leading to the collision involved the travel of the **other** vehicle in the same lane as **this** vehicle. **Note:** For Rear-End collision situations involving three vehicles see tables <u>Precrash Event Scenarios for Different Rear-End Collision Situations</u>.

- **50** (Other Vehicle Stopped) identifies a situation where the other vehicle is not in motion (i.e., stopped, parked, disabled) and in this vehicle's travel lane.
- **51** (**Traveling in Same Direction with Lower Steady Speed**) is used when the other vehicle was the lead vehicle in the same travel lane, traveling in the same direction, and was traveling slower than this vehicle.
- **52** (**Traveling in Same Direction While Decelerating**) is used when the other vehicle was the lead vehicle in the same travel lane, traveling in the same direction, and was decelerating. Deceleration can include intentional deceleration by braking or unintended deceleration caused by a prior event (e.g., tire blowout, prior collision).
- **53** (**Traveling in Same Direction with Higher Speed**) is used when the speed of the other vehicle was higher than this vehicle or accelerating. The other vehicle must be overtaking this vehicle.
- **54** (**Traveling in Opposite Direction**) is used when the other vehicle was in this vehicle's travel lane and traveling head-on in the opposite direction of this vehicle.
- **55** (**In Crossover**) is used when the other vehicle enters a crossover already occupied by this vehicle. A crossover is defined as a designated opening within a median used primarily for "Uturns."
- **56** (**Backing**) identifies a situation where the other vehicle was in the process of backing up while in this vehicle's travel lane. This attribute also includes unintentional backward movement of the other vehicle. For example, a vehicle that rolls or drifts backward in this vehicle's lane.
- **59** (Unknown Travel Direction/Speed of Other Motor Vehicle in Lane) is used for situations where the other vehicle's activity (while in the same lane as this vehicle) precipitated the precrash event, but the travel direction and/or speed could not be determined.

Other Motor Vehicle Encroaching into Lane

These attributes identify situations where the critical factor leading to the collision involved the **other** vehicle's movement into or across **this** vehicle's travel lane from another lane, intersection, driveway, or ramp.

When two vehicles are initially traveling on the same trafficway and one executes a left turn with the right-of-way (i.e., green arrow), use **Other Motor Vehicle Encroaching Into Lane - <u>From opposite direction-over right lane line</u> for the turning vehicle's critical event. This applies to CRASH TYPES 68, 69.**

If the vehicles were initially on different trafficways (CRASH TYPES <u>76, 77</u> and <u>82, 83</u>) the critical event for the vehicle turning left with the right-of-way should be **Other Motor Vehicle Encroaching - From crossing street across path.** (**Precrash General Rule #7**.)

- **60** (From Adjacent Lane (Same Direction) Over Left Lane Line) is used when the other vehicle was traveling in the same direction as this vehicle and crosses the left lane line with respect to this vehicle's travel lane (i.e., other vehicle crosses its right lane line).
- **61** (From Adjacent Lane (Same Direction) Over Right Lane Line) is used when the other vehicle was traveling in the same direction as this vehicle and crosses the right lane line with respect to this vehicle's travel lane (i.e., other vehicle crosses its left lane line).
- **62** (**From Opposite Direction Over Left Lane Line**) identifies a situation where the other vehicle crosses the left lane line while traveling in the opposite direction from this vehicle.
- **63** (From Opposite Direction Over Right Lane Line) identifies a situation where the other vehicle crosses the right lane line while traveling in the opposite direction from this vehicle.
- **64** (**From Parking Lane/Shoulder, Median/Crossover, Roadside**) is selected when the other vehicle's *Critical Precrash envelope began when* departing one of these trafficway components and entering the travel lane of this vehicle. *This attribute is not to be used for vehicles that cross the median or are re-entering the roadway after a departure.*
- **65** (**From Crossing Street, Turning into Same Direction**) is used when the other vehicle was turning from another roadway onto this vehicle's roadway and attempted to travel in the same direction as this vehicle.
- **66** (**From Crossing Street, Across Path**) is used when the other vehicle was continuing straight through the intersection and attempted to cross over this vehicle's roadway.
- **67** (**From Crossing Street, Turning into Opposite Direction**) is used when the other vehicle was entering an intersection from another roadway and was turning or attempting to turn onto this vehicle's roadway in the opposite travel direction of this vehicle.
- **68** (From Crossing Street, Intended Path Not Known) is used when the other vehicle's entrance into the intersection was the critical factor that led to the collision; however, the other vehicle's travel direction could not be determined.
- **70** (**From Driveway, Turning into Same Direction**) is used when the other vehicle was turning from a driveway onto this vehicle's roadway and attempted to travel in the same direction as this vehicle.

- **71** (**From Driveway, Across Path**) is used when the other vehicle was entering this vehicle's roadway from a driveway and was continuing straight across to another driveway or roadway.
- **72** (**From Driveway, Turning into Opposite Direction**) is used when the other vehicle was entering this vehicle's roadway from a driveway and was attempting to turn into the opposite travel direction of this vehicle.
- **73** (**From Driveway, Intended Path Not Known**) is used to identify driveway-related precrash events where details surrounding the other vehicle's intended path are not known.
- **74** (**From Entrance to Limited Access Highway**) is used for entrance ramp situations where the other vehicle was attempting to enter (merge) onto the limited access highway that was being traveled by this vehicle.
- **78** (Encroachment by Other Vehicle Details Unknown) is used for situations where the other vehicle initiated the critical precrash event, but circumstances surrounding the other vehicle's encroachment are unknown.

Pedestrian or Pedalcyclist or Other Non-Motorist

These attributes identify situations where the critical factor leading to the collision for this vehicle involved a pedestrian, pedalcyclist, or other non-motorist. These selections include situations where a vehicle was exiting a driveway. A pedalcyclist is defined as a person riding a pedal powered conveyance (bicycle, tricycle, etc.). Other non-motorists include people on personal conveyances (baby carriage, skateboard, rollerblades, motorized wheelchair, etc.) and any person riding on an animal or in an animal-drawn conveyance (on horseback, in a horse-drawn carriage, etc.).

80 (**Pedestrian in Road**) is used when a pedestrian was present (sitting, standing, walking, or running, etc.) in the road *and in the travel path of this vehicle during this vehicle's critical precrash envelope*. For people not on foot (e.g., person on a skateboard or in a motorized wheelchair), use **83** (**Pedalcyclist or Other Non-Motorist in Road**).

Examples:

- The driver does not see the pedestrian in the road in the vehicle's travel path ahead and strikes the pedestrian in the road.
- The driver sees the pedestrian in the road in the vehicle's travel path ahead, swerves to avoid the pedestrian, drives off the road, and hits a mailbox.
- **81** (**Pedestrian Approaching Road**) identifies situations where a pedestrian was within the trafficway and moving toward the road or attempting to enter the road but was not on the road *during this vehicle's critical precrash envelope*.

Example:

• The driver sees the pedestrian approaching the road, swerves to avoid the pedestrian, drives off the road, and hits a mailbox.

82 (**Pedestrian Unknown Location**) is used when it was determined the presence or action of a pedestrian was the critical factor that led to this vehicle's collision, but the location or action of the pedestrian was not known.

Example:

- It is known that the presence of a Pedestrian was the event that made the situation critical for this vehicle; however, whether the Pedestrian was approaching the road or already in the road and in the travel path of the vehicle is not known.
- **83** (**Pedalcyclist or Other Non-Motorist in Road**) is selected when a pedalcyclist or other non-motorist was present in the road (irrespective of relative motion) *and in the travel path of this vehicle during this vehicle's critical precrash envelope*. Other non-motorists include people on personal conveyances (baby carriage, skate board, roller blades, motorized wheelchair, etc.) and any person riding on an animal or in an animal-drawn conveyance (on horseback, in a horse-drawn carriage, etc.).

Examples:

- The driver does not see the pedalcyclist in the road in the vehicle's travel path ahead and strikes the pedalcyclist in the road.
- The driver sees the pedalcyclist in the road in the vehicle's travel path ahead, swerves to avoid the pedalcyclist, drives off the road, and hits a mailbox.
- **84** (**Pedalcyclist or Other Non-Motorist Approaching Road**) identifies situations where the pedalcyclist or other non-motorist was within the trafficway and moving toward the road or attempting to enter the road but was not on the road *during this vehicle's critical precrash envelope*.

Example:

- The driver sees the pedalcyclist approaching the road, swerves to avoid the pedalcyclist, drives off the road, and hits a mailbox.
- **85** (**Pedalcyclist or Other Non-Motorist Unknown Location**) is used when it was determined the presence or action of a pedalcyclist or other non-motorist was the critical factor that led to this vehicle's collision, but the action of the pedalcyclist or other non-motorist was not known.

Example:

• It is known that the presence of a Pedalcyclist or Other Non-Motorist was the event that made the situation critical for this vehicle; however, whether the Pedalcyclist or Other Non-Motorist was approaching the road or already in the road and in the travel path of the vehicle is not known.

Object or Animal

These attributes identify situations where the critical factor leading to the collision for this vehicle involved a *non-fixed* object or animal.

87 (Animal in Road) is used when an animal was present (i.e., stationary or moving) in the road and in the travel path of this vehicle during this vehicle's critical precrash envelope.

Examples:

- The driver does not see the animal in the road in the vehicle's travel path ahead and strikes the animal in the road.
- The driver sees the animal in the road in the vehicle's travel path ahead, swerves to avoid the animal, drives off the road, and hits a mailbox.

88 (Animal Approaching Road) identifies situations where an animal was within the trafficway and moving toward the road or attempting to enter the road, but not on the road *during this vehicle's critical precrash envelope*.

Example:

- The driver sees the animal approaching the road, swerves to avoid the animal, drives off the road, and hits a mailbox.
- **89** (**Animal Unknown Location**) is used when it was determined the presence or action of an animal was the critical factor that led to this vehicle's collision, but the action of the animal was not known.

Example:

- It is known that the presence of an animal was the event that made the situation critical for this vehicle; however, whether the animal was approaching the road or already in the road and in the travel path of the vehicle is not known.
- 90 (Object in Road) is used when a *non-fixed* object (*e.g.*, *garbage can*, *train*, *ball*) was present in the road *and in the travel path of this vehicle during this vehicle's critical precrash envelope*. An object is defined as being either fixed or non-fixed (only non-fixed objects are captured in this attribute). "Fixed" objects (trees, poles, fire hydrants, etc.) cannot be in the roadway. (Precrash General Rule #8)

Examples:

- The driver does not see the garbage can in the vehicle's travel path ahead and strikes the garbage can in the road.
- The driver sees the garbage can in the vehicle's travel path ahead, swerves to avoid the garbage can, drives off the road, and hits a mailbox.
- The driver does not see the train in the travel path ahead and strikes the train in the crossing.
- The driver sees the train in the travel path ahead, swerves to avoid the train, drives off the road, and hits the train outside the trafficway.

• The driver sees the train in the travel path ahead, swerves to avoid the train, and strikes a railroad crossing device.

91 (Object Approaching Road) identifies situations where a *non-fixed* object (*e.g.*, *garbage can*, *train*, *ball*) was within the trafficway and moving toward the road, but not on the road *during this vehicle's critical precrash envelope*.

Example:

- The driver sees the garbage can rolling toward (approaching) the vehicle's travel path ahead, swerves to avoid the garbage can, drives off the road, and hits a mailbox.
- The driver sees the train approaching the travel path ahead, swerves to avoid the train, drives off the road, and hits the train outside the trafficway.
- The driver sees the train approaching the travel path ahead, swerves to avoid the train, and strikes a railroad crossing device.

92 (**Object Unknown Location**) is selected when it was determined the presence or movement of an object was the critical factor that led to this vehicle's collision, but details surrounding the location of the object were not known.

Example:

• It is known that the presence of a garbage can, train, or ball was the event that made the situation critical for this vehicle; however, whether the object was approaching the road or already in the road and in the travel path of the vehicle is not known.

If there are doubts, unclear, or unusual circumstances, see 98 (Other Critical Precrash Event [specify:]). For example, an abandoned, driverless motor vehicle in transport was on the roadway in the train crossing when it was struck by a train.

Other

This attribute identifies situations where the critical factor leading to the collision for this vehicle was not previously listed.

98 (Other Critical Precrash Event [Specify:]) is used when a critical factor not previously listed resulted in the collision for this vehicle. Previous impacts in the crash are not considered as "other critical precrash events."

Examples include:

- The first harmful event for this vehicle is a <u>non-collision harmful event</u>.
- The vehicle is a driverless motor vehicle in-transport.
- A MVIT that becomes a contact vehicle by being struck by a "load" from another MVIT.
- The vehicle was disabled in a previous crash.
- An in-transport vehicle strikes or is struck by the door of a parked motor vehicle that is opened into the travel lane or some portion of the equipment of the parked motor

vehicle (excluding the primary outline); e.g., extended mirrors used when hauling a camper or trailer. **NOTE:** This should not be used for **loads** of vehicles extending into the travel lane, e.g., attached trailers or oversized cargo. In these cases, the vehicle is **in-transport** and not parked.

- Unintentional Rolling Backward.
- Height Clearance.
- Mechanical problem with no control loss (stopped in the roadway with a stalled engine or broken axle, etc.).
- Vehicle stuck or stranded on the track and is struck by a train.
- This Vehicle is backing into a driveway/parking stall.

(See "Note: For attributes with "Specify:" designation" at the beginning of Remarks section for this element.)

Unknown:

99 (**Unknown**) is used when the critical precrash event that resulted in the collision is not known.

Consistency Checks (See Section 400):

Error ID	IF	THEN
3B1Q	CRITICAL EVENT - PRECRASH (EVENT) equals 81 or 82,	at least one PERSON TYPE should equal 05.
3B2Q	CRITICAL EVENT - PRECRASH (EVENT) equals 83 and PRE-IMPACT LOCATION does not equal 4,	at least one PERSON TYPE should equal 04, 06, 07, <i>11</i> , <i>12</i> , <i>13</i> , or 19.
3B3Q	CRITICAL EVENT - PRECRASH (EVENT) equals 84 or 85,	at least one PERSON TYPE should equal 04, 06, 07, <i>11</i> , <i>12</i> , <i>13</i> , or 19.
3B8P	CRITICAL EVENT - PRECRASH (EVENT) equals 20,	CRASH TYPE for this vehicle should equal 92.
3D00	CRASH TYPE equals 20-49, and ATTEMPTED AVOIDANCE MANEUVER equals 00, 01,	CRITICAL EVENT - PRECRASH (EVENT) should not equal 12-14, 54, <i>62</i> , <i>63</i> , 66-68, 71-73, or 80-85.
3D10	CRASH TYPE equals 50-67, and ATTEMPTED AVOIDANCE MANEUVER equals 00, 01,	CRITICAL EVENT - PRECRASH (EVENT) should not equal 12-14, 51-53, 60, 61, 65, 66, 70, 71, 80-85, or 87-92.
3D20	CRASH TYPE equals 14 and ATTEMPTED AVOIDANCE MANEUVER equals 01,	CRITICAL EVENT PRECRASH (EVENT) should equal 14.
3D70	CRITICAL EVENT - PRECRASH (EVENT) equals 01-04,	CONTRIBUTING CIRCUMSTANCES, MOTOR VEHICLE must not equal 00.

Error ID	IF	THEN
3D80	CRITICAL EVENT: PRECRASH (EVENT) equals 08 for this vehicle, and CONDITION (IMPAIRMENT) AT TIME OF CRASH equals 09 for this vehicle's driver, and RELATED FACTORS - PERSON (MV OCCUPANT) LEVEL for this vehicle is not equal 005 for any occupants of this vehicle,	another CONDITION (IMPAIRMENT) AT TIME OF CRASH for this vehicle's driver should equal 01.
3D90	CRASH TYPE equals 68-75,	CRITICAL EVENT – PRECRASH (EVENT) must not equal 65-68.
3E00	CRITICAL EVENT - PRECRASH (EVENT) equals 65-68 or 70-73 for a vehicle involved in the first harmful event,	RELATION TO JUNCTION (b) should not equal 01 or 18.
3E10	CRITICAL EVENT - PRECRASH (EVENT) equals 15 or 16,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should not equal 01.
3E11	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITCAL EVENT) equals 01,	CRITICAL EVENT - PRECRASH (EVENT) should not equal 15 or 16.
3F00	CRASH TYPE equals 76-85,	CRITICAL EVENT – PRECRASH (EVENT) must not equal 60-64.
42AP	NUMBER OF MOTOR VEHICLES FORMS SUBMITTED equals 001, and RELATION TO TRAFFICWAY equals 02, 04, 06-08, 12, and ATTEMPTED AVOIDANCE MANEUVER equals 00 or 01,	CRITICAL EVENT - PRECRASH (EVENT) should equal 01-06, 08-14, or 19.
671F	the only harmful event in the SEQUENCE OF EVENTS for this vehicle equals 02 or 04,	CRITICAL EVENT - PRECRASH (EVENT) must equal 98.
A091	NUMBER OF VEHICLE FORMS SUBMITTED is greater than one, and CRITICAL EVENT – PRECRASH (EVENT) equals 70-73,	TRAFFICWAY DESCRIPTION should equal 0 for at least one other vehicle in the crash.
A41A	FIRST HARMFUL EVENT equals 02, 04, 07, 16, 44, or 54,	CRITICAL EVENT - PRECRASH (EVENT) should equal 98 for the vehicles involved in the FIRST HARMFUL EVENT.
AZ81	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 15, or CRITICAL EVENT - PRECRASH (EVENT) equals 10 or 11 for this vehicle,	PRE-IMPACT LOCATION should not equal 1 (Stayed in Original Travel Lane) for this vehicle.

Error ID	IF	THEN
AZ2P	FIRST HARMFUL EVENT does not equal 02- 07, 16, 44, 51, 72, and CRITICAL EVENT - PRECRASH (EVENT) equals 14, and ATTEMPTED AVOIDANCE MANEUVER equals 01,	CRASH TYPE must equal 14 for the vehicle involved in the first harmful event.
AZ5P	CRITICAL EVENT - PRECRASH (EVENT) equals 70-73 for a vehicle involved in the FIRST HARMFUL EVENT,	RELATION TO JUNCTION (b) should equal 04 or 08.
AZBP	any DRIVER MANEUVERED TO AVOID equals 03,	CRITICAL EVENT - PRECRASH (EVENT) should equal 87-89.
AZCP	any DRIVER MANEUVERED TO AVOID equals 05,	CRITICAL EVENT - PRECRASH (EVENT) should equal 80-85.
AZEP	any DRIVER MANEUVERED TO AVOID equals 01,	CRITICAL EVENT - PRECRASH (EVENT) should equal 90-92.
B15P	CRITICAL EVENT - PRECRASH (EVENT) equals 91, and ATTEMPTED AVOIDANCE MANEUVER equals 00, 01, and the vehicle is involved in the FIRST HARMFUL EVENT,	CRASH TYPE should equal 15.
B16P	CRITICAL EVENT - PRECRASH (EVENT) equals 90, and ATTEMPTED AVOIDANCE MANEUVER equals 01, and the vehicle is involved in the FIRST HARMFUL EVENT,	CRASH TYPE should equal 12 or 15.
B17P	CONDITION (IMPAIRMENT) AT TIME OF CRASH equals 09 for this driver,	CRITICAL EVENT - PRECRASH (EVENT) should not equal 08 for this driver's vehicle.
B18P	CRITICAL EVENT – PRECRASH (EVENT) equals 70-73,	TRAFFICWAY DESCRIPTION must not equal 0 for this vehicle.
BZ10	CRITICAL EVENT - PRECRASH (EVENT) equals 53,	AREAS OF IMPACT-INITIAL CONTACT POINT should not equal 12 for this vehicle.
BZ20	CRITICAL EVENT - PRECRASH (EVENT) equals 51, 52,	AREAS OF IMPACT-INITIAL CONTACT POINT should not equal 06 for this vehicle.
BZ40	CRITICAL EVENT - PRECRASH (EVENT) equals 01,	at least one SEQUENCE OF EVENTS must equal 61 for this vehicle.
BZ50	CRITICAL EVENT - PRECRASH (EVENT) equals 12, and PRE-IMPACT LOCATION is not equal to 5,	at least one SEQUENCE OF EVENTS must equal 64 for this vehicle.
BZ51	CRITICAL EVENT - PRECRASH (EVENT) equals 80 and PRE-IMPACT LOCATION does not equal 4,	at least one PERSON TYPE should equal 5.

Error ID	IF	THEN
BZ60	CRITICAL EVENT - PRECRASH (EVENT) equals 13, and PRE-IMPACT LOCATION is not equal to 5,	at least one SEQUENCE OF EVENTS must equal 63 for this vehicle.
BZ70	CRITICAL EVENT - PRECRASH (EVENT) equals 14,	at least one SEQUENCE OF EVENTS must equal 71 for this vehicle.
FP7F	UNIT TYPE equals 1, and CRITICAL EVENT - PRECRASH (EVENT) equals blank,	case status is flawed.
U682	UNLIKELY: CRITICAL EVENT: PRECRASH (EVENT) equals 08 for this vehicle and CONDITION (IMPAIRMENT) AT TIME OF CRASH (D23) does not equal 01 for this vehicle's driver.	

PC20 - Attempted Avoidance Maneuver

FORMAT: 2 numeric

SAS NAME: Vehicle.P_CRASH3

ELEMENT VALUES:

Codes	Attributes
00	No Driver Present/Unknown if Driver Present
01	No Avoidance Maneuver
05	Releasing Brakes
06	Steering Left
07	Steering Right
08	Braking and Steering Left
09	Braking and Steering Right
10	Accelerating
11	Accelerating and Steering Left
12	Accelerating and Steering Right
15	Braking and Unknown Steering Direction
16	Braking
98	Other Actions (Specify:)
99	Unknown/Not Reported

Definition: This element identifies movements/actions taken by the driver, within a critical crash envelope, in response to a CRITICAL PRECRASH EVENT.

Remarks: Attempted avoidance maneuvers are movements/actions taken by the driver, within a critical crash envelope, in response to a Critical Precrash Event. See <u>Precrash Data Overview</u> for an expanded discussion on precrash definitions. Attempted avoidance maneuvers occur after the driver has realization of an impending danger. This element assesses what the driver's action(s) was in response to his/her realization. Use the available crash report fields, narrative, and diagram to code the actions taken by the driver in response to the driver's realization of an impending danger (Critical Event) and within the appropriate Critical Crash Envelope (CCE).

Currently there are no State crash reports having fields, which by themselves, can be applied to code this element. Some State crash reports do have fields containing relevant information to consider such as Driver Contributing Circumstances, Vehicle Maneuver, Roadway Factors, Avoidance Maneuvers, or Environmental Circumstances. However, the data in these fields will rarely provide all the information needed to code ATTEMPTED AVOIDANCE MANEUVER.

First determine the <u>CRITICAL PRECRASH EVENT</u> (for the appropriate Critical Crash Envelope) and select the attribute which best describes the actions taken by the driver in response to that CRITICAL PRECRASH EVENT. Most crashes have only one critical crash envelope and thus only one CRITICAL PRECRASH EVENT; however, multiple critical crash envelopes with their respective Critical Precrash Events, can exist. In the case of multiple critical precrash envelopes, select the attribute which best describes the actions taken by the driver in response to the CRITICAL PRECRASH EVENT, within the appropriate critical crash envelope that occurred just prior to this vehicle's first harmful event.

This element may be used independently: (1) of any maneuvers associated with this driver's Crash Type, and (2) this vehicle's first associated crash event.

When there was a known action (e.g., braking), but you cannot determine whether there was more than one action (e.g., braking and steering left), default to the known action (e.g., braking).

Witness Statements:

See clarification on the use of information provided by witnesses in section 103. Data Sources.

00 (No Driver Present/Unknown if Driver Present) is pre-coded for in-transport motor vehicles when the element <u>DRIVER PRESENCE</u> is coded as <u>**0 (No Driver Present/Not Applicable)**</u>.

01 (**No Avoidance Maneuver**) is selected whenever the driver did not attempt any evasive (preimpact) maneuvers, i.e., the case material indicate that there was no realization of danger or realization without time/ability to react or there is some indication on a field or within the narrative statements (supported by the diagram if present) that identifies no avoidance maneuver was attempted. **Note: This attribute should not be assessed solely by the diagram.**

Lack of definitive avoidance information in the report (absence of information) should not be coded as 01 (No Avoidance Maneuver). See <u>99 (Unknown/Not Reported)</u> for absence of information situations.

Examples of when 01 (No Avoidance Maneuver) CAN be coded:

- The driver cannot attempt an avoidance maneuver in response to his/her realization of an impending danger because the vehicle is "stopped in traffic" during the entire applicable CCE.
- The case material indicate the driver did not attempt an avoidance maneuver after realization of an impending danger and within the appropriate critical crash envelope because:
 - o The driver did not have time to react.
 - o The driver was asleep or unconscious.
 - The driver did not see or recognize there was anything to avoid.

16 (**Braking**) is used when there is indication that the brakes were applied.

98 (Other Actions, [Specify:]) is used when the police crash report indicates the driver took certain avoidance actions, but none of the specified attributes apply. This value also applies when there are reported movements/actions taken by the driver with no information provided about the

driver's specific actions. (e.g., "The driver of Vehicle 2 attempted to avoid the collision but was unsuccessful").

*Note: For attributes with a "Specify:" designation, a fill-in text box will open in *RBIS*. This text box should be used to provide additional detail about the attribute selection. Please include a specific reason for this selection.

99 (Unknown/Not Reported) is used when:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material); or
- 2. a field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material); or
- 3. police indicate unknown.

Note: If a State's crash report manual instructs to leave data blocks blank when there is no avoidance maneuver, then a blank in those data blocks are NOT considered **99** (**Unknown/Not Reported**).

Consistency Checks (See Section 400):

Error ID	IF	THEN
39IP	TRAVEL SPEED is equal to 000 and ATTEMPTED AVOIDANCE MANEUVER equals 01,	PRE-IMPACT STABILITY must equal 1.
3BDP	CRASH TYPE equals 46, 47, and ATTEMPTED AVOIDANCE MANEUVER equals 01 or 99,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must not equal 01.
3ВЕР	CRASH TYPE equals 01 or 06, and ATTEMPTED AVOIDANCE MANEUVER equals 01,	PRE-IMPACT STABILITY should not equal 2-5 or 7.
3ВНР	ATTEMPTED AVOIDANCE MANEUVER does not equal 05-12, 15, 16, 98,	PRE-IMPACT STABILITY must not equal 7.
3C40	CRASH TYPE equals 46,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 06, 15, 16, or ATTEMPTED AVOIDANCE MANEUVER should equal 07, 09, or 12.

Error ID	IF	THEN
3C80	CRASH TYPE equals 47,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 06, 15, 16, or ATTEMPTED AVOIDANCE MANEUVER should equal 06, 08, or 11.
3D00	CRASH TYPE equals 20-49, and ATTEMPTED AVOIDANCE MANEUVER equals 00, 01,	CRITICAL EVENT - PRECRASH (EVENT) should not equal 12-14, 54, 62 , 63 , 66-68, 71-73, or 80-85.
3D10	CRASH TYPE equals 50-67, and ATTEMPTED AVOIDANCE MANEUVER equals 00, 01,	CRITICAL EVENT - PRECRASH (EVENT) should not equal 12-14, 51-53, 60, 61, 65, 66, 70, 71, 80-85, or 87-92.
3D20	CRASH TYPE equals 14 and ATTEMPTED AVOIDANCE MANEUVER equals 01,	CRITICAL EVENT PRECRASH (EVENT) should equal 14.
40IP	TRAVEL SPEED is equal to 000,	ATTEMPTED AVOIDANCE MANEUVER should equal <i>00 or</i> 01.
42AP	NUMBER OF MOTOR VEHICLES FORMS SUBMITTED equals 001, and RELATION TO TRAFFICWAY equals 02, 04, 06-08, 12, and ATTEMPTED AVOIDANCE MANEUVER equals 00 or 01,	CRITICAL EVENT - PRECRASH (EVENT) should equal 01-06, 08-14, or 19.
9L0P	any RELATED FACTORS-DRIVER LEVEL equals 010,	ATTEMPTED AVOIDANCE MANEUVER must equal 01.
AZ2P	FIRST HARMFUL EVENT does not equal 02-07, 16, 44, 51, 72, and CRITICAL EVENT-PRECRASH (EVENT) equals 14, and ATTEMPTED AVOIDANCE MANEUVER equals 01,	CRASH TYPE must equal 14 for the vehicle involved in the first harmful event.
AZ30	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 00,	ATTEMPTED AVOIDANCE MANEUVER must equal 00.
B10P	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) does not equal 17, and ATTEMPTED AVOIDANCE MANEUVER equals 01,	DRIVER MANEUVERED TO AVOID should equal 00.
B15P	CRITICAL EVENT-PRECRASH (EVENT) equals 91, and ATTEMPTED AVOIDANCE MANEUVER equals 00, 01 and the vehicle is involved in the FIRST HARMFUL EVENT,	CRASH TYPE should equal 15.
B16P	CRITICAL EVENT-PRECRASH (EVENT) equals 90, and ATTEMPTED AVOIDANCE MANEUVER equals 01, and the vehicle is involved in the FIRST HARMFUL EVENT,	CRASH TYPE should equal 12 or 15.

Error ID	IF	THEN
V533	CRASH TYPE equals 03, 08, 38, 40, 58, or 60,	ATTEMPTED AVOIDANCE MANEUVER must not equal 00 or 01.
V534	CRASH TYPE equals 02 or 07, and ATTEMPTED AVOIDANCE MANEUVER equals 01,	PRE-IMPACT STABILITY should not equal 09.
V535	ATTEMPTED AVOIDANCE MANEUVER equals 00,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 00.
V59Q	ATTEMPTED AVOIDANCE MANEUVER equals 99,	DRIVER MANEUVERED TO AVOID should equal 00, 98, or 99.
VH10	PRE-IMPACT LOCATION equals 0,	ATTEMPTED AVOIDANCE MANEUVER must equal 00.
VH20	ATTEMPTED AVOIDANCE MANEUVER equals 00,	PRE-IMPACT LOCATION must equal 0.

PC21 - Pre-Impact Stability

FORMAT: 1 numeric

SAS NAME: Vehicle.PCRASH4

ELEMENT VALUES:

Codes	Attributes
0	No Driver Present/Unknown if Driver Present
1	Tracking
2	Skidding Longitudinally Rotation Less Than 30 Degrees
3	Skidding Laterally Clockwise Rotation
4	Skidding Laterally Counter-Clockwise Rotation
5	Skidding Laterally, Rotation Direction Unknown
7	Other Vehicle Loss-of-Control (Specify:)
9	Precrash Stability Unknown

Definition: This element assesses the stability of the vehicle **after** the critical event, but **before** the impact.

Remarks: The stability of the vehicle **prior** to an avoidance action is **not** considered except in the following situation:

A vehicle that is out of control (e.g., yawing clockwise) prior to an avoidance maneuver is coded as **7 (Other Vehicle Loss-of Control [Specify:])** only if an avoidance action was taken in response to an impending danger.

Thus, this element focuses upon this vehicle's dynamics **after the** <u>CRITICAL PRECRASH</u> EVENT.

0 (No Driver Present/Unknown if Driver Present) is pre-coded for in-transport motor vehicles when the element DRIVER PRESENCE is coded as **0** (No Driver Present/Not Applicable).

1 (**Tracking**) is used when there is no brake lockup and the vehicle continued along its intended path without rotation. Stopped, slowing, turning, or accelerating to avoid a rear-end collision are examples. Only if the case material include enough detail to determine all of the items from **Precrash General Rule #10**, code 1 (**Tracking**) can be applied.

Even when the officer does not specifically mention "skidding" or "braking," narrative statements such as "the vehicle began to rotate," "the back end slid out," "the vehicle was sliding," etc., are valid for selecting attributes 2-5.

2 (**Skidding Longitudinally Rotation Less Than 30 degrees**) is selected when there is brake lockup or whenever tire marks are apparent without brake lockup (braking or non-braking) and rotation is less than 30 degrees clockwise or counterclockwise. If there is no information to support rotation greater than or equal to 30 degrees, then use this attribute. Also use this attribute when there is indication in the case material that the vehicle was not tracking (e.g., sliding) but tire marks are not present, (wet, ice, snow covered, etc.).

- **3** (**Skidding Laterally Clockwise Rotation**) is selected when the vehicle rotates clockwise, relative to the driver's seating position. The vehicle must rotate 30 degrees or more. This attribute also applies when the driver attempts a steering input (e.g., steers right), but the vehicle rotates clockwise.
- **4 (Skidding Laterally Counter-Clockwise Rotation)** is selected when the vehicle rotates counterclockwise, relative to the driver's seating position. The vehicle must rotate 30 degrees or more. This attribute also applies when the driver attempts a steering input (e.g., swerves left), but the vehicle rotates counterclockwise.
- **5** (Skidding Laterally, Rotation Direction Unknown) is used when the vehicle rotates 30 degrees or more, but it cannot be determined from the case material whether it was clockwise or counterclockwise rotation.
- **7 (Other Vehicle Loss-of-Control [Specify:])** is selected when a driver loses control of a vehicle prior to the critical event.
 - *Note: For attributes with a "Specify:" designation, a fill-in text box will open in *RBIS*. This text box should be used to provide additional detail about the attribute selection. Please include a specific reason for this selection.
- **9** (**Precrash Stability Unknown**) is selected when the stability of the vehicle cannot be determined. If the case material does not provide enough information (e.g., in the diagram, narrative, etc.) to determine precrash stability, code **9** (**Precrash Stability Unknown**).

Consistency Checks (See Section 400):

Error ID	IF	THEN
39IP	TRAVEL SPEED is equal to 000 and ATTEMPTED AVOIDANCE MANEUVER equals 01,	PRE-IMPACT STABILITY must equal 1.
3ВЕР	CRASH TYPE equals 01 or 06, and ATTEMPTED AVOIDANCE MANEUVER equals 01,	PRE-IMPACT STABILITY should not equal 2-5 or 7.
ЗВНР	ATTEMPTED AVOIDANCE MANEUVER does not equal 05-12, 15, 16, 98,	PRE-IMPACT STABILITY must not equal 7.
3D50	PRE-IMPACT STABILITY equals 1,	CRASH TYPE should not equal 02, 07, 34, 36, 54, or 56.
AZ50	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 00,	PRE-IMPACT STABILITY must equal 0.
AZ60	PRE-IMPACT STABILITY equals 0,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 00.
V534	CRASH TYPE equals 02 or 07, and ATTEMPTED AVOIDANCE MANEUVER equals 01,	PRE-IMPACT STABILITY should not equal 09.

Error ID	IF	THEN
VB60	PRE-IMPACT STABILITY equals 0,	PRE-IMPACT LOCATION must equal 0.
VB70	PRE-IMPACT STABILITY is not equal to 0,	PRE-IMPACT LOCATION must not equal 0.
VBA0	PRE-IMPACT LOCATION equals 1,	PRE-IMPACT STABILITY should equal 1, 2, or 9.

PC22 - Pre-Impact Location

FORMAT: 1 numeric

SAS NAME: Vehicle.PCRASH5

ELEMENT VALUES:

Codes	Attributes
0	No Driver Present/Unknown if Driver Present
1	Stayed in Original Travel Lane
2	Stayed on Roadway, but Left Original Travel Lane
3	Stayed on Roadway, Not Known if Left Original Travel Lane
4	Departed Roadway
5	Remained off Roadway
6	Returned to Roadway
7	Entered Roadway
9	<u>Unknown</u>

Definition: This element assesses the location of the vehicle after the critical event, and immediately before the First Harmful Event for this vehicle.

Remarks: When determining Pre-Impact Location for crashes occurring in intersections, a vehicle's "travel lane" extends through the intersection area even if no lane line markings are present within the intersection. Additionally, for a vehicle that is turning, its original travel lane extends through the junction to the lane or driveway access into which it is turning.

Select the attribute that best describes the location of the vehicle (i.e., perimeter of the vehicle from the case diagram).

- **0** (No Driver Present/Unknown if Driver Present) is used when there is no driver in this vehicle.
- 1 (Stayed in Original Travel Lane) is selected when the vehicle remained within the boundaries of its initial travel lane.
- 2 (Stayed on Roadway but Left Original Travel Lane) is selected when the perimeter of the vehicle departed its initial travel lane; however, the vehicle remained within the boundaries of the roadway (travel lanes).
- **3** (Stayed on Roadway, Not Known if Left Original Travel Lane) is selected when it cannot be ascertained whether the vehicle remained within its initial travel lane. To use this attribute, the vehicle must have remained within the boundaries of the roadway.
- **4** (**Departed Roadway**) is selected when the vehicle departed the roadway as a result of a precrash motion. The roadway departure must not be related to the post-impact trajectory of a crash within the roadway. Use this attribute for vehicles crossing a median into oncoming traffic.

This attribute is selected when any part of the vehicle departed the roadway edge. (See the coding of Pre-Impact Location in Example 9 under the Precrash Data Overview Examples.)

- **5** (**Remained off Roadway**) the precrash motion occurred outside the boundaries of the roadway. This includes traveling on the shoulders, within the median, on the roadside, or off the trafficway.
- **6** (**Returned to Roadway**) is selected when the vehicle was on the roadway, went off the roadway and then returned to the same roadway during precrash motion.
- **7** (**Entered Roadway**) is selected when the vehicle was not previously on the roadway and then the vehicle enters the roadway during precrash motion.
- **9 (Unknown)** the precrash motion of the vehicle cannot be determined.

Consistency Checks (See Section 400):

Error ID	IF	THEN
3B2Q	CRITICAL EVENT - PRECRASH (EVENT) equals 83 and PRE-IMPACT LOCATION does not equal 4,	at least one PERSON TYPE should equal 04, 06, 07, 11, 12, 13, or 19.
AZ70	PRE-IMPACT LOCATION equals 0,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 00.
AZ80	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 00,	PRE-IMPACT LOCATION must equal 0.
AZ81	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 15, or CRITICAL EVENT - PRECRASH (EVENT) equals 10 or 11 for this vehicle,	PRE-IMPACT LOCATION should not equal 1 (Stayed in Original Travel Lane) for this vehicle.
BZ50	CRITICAL EVENT - PRECRASH (EVENT) equals 12, and PRE-IMPACT LOCATION is not equal to 5,	at least one SEQUENCE OF EVENTS must equal 64 for this vehicle.
BZ51	CRITICAL EVENT - PRECRASH (EVENT) equals 80 and PRE-IMPACT LOCATION does not equal 4,	at least one PERSON TYPE should equal 5.
BZ60	CRITICAL EVENT - PRECRASH (EVENT) equals 13, and PRE-IMPACT LOCATION is not equal to 5,	at least one SEQUENCE OF EVENTS must equal 63 for this vehicle.
BZ90	CRASH TYPE equals 01-05, and PRE-IMPACT LOCATION is not equal to 0 or 5,	at least one SEQUENCE OF EVENTS prior to the FIRST HARMFUL EVENT must equal 63.
BZ91	CRASH TYPE equals 06-10, and PRE-IMPACT LOCATION is not equal to 0 or 5,	at least one SEQUENCE OF EVENTS prior to the FIRST HARMFUL EVENT must equal 64.

Error ID	IF	THEN
BZ93	PRE-IMPACT LOCATION equals 4,	at least one SEQUENCE OF EVENTS for this vehicle must equal 63, 64, 71, or 79.
PC20	RELATION TO TRAFFICWAY equals 02-08, 10, or 12,	PRE-IMPACT LOCATION of the vehicle(s) involved in the FIRST HARMFUL EVENT should equal 0, 4, 5, or 9.
PC30	PRE-IMPACT LOCATION for a vehicle involved in the first harmful event equals 4, 5, and RELATION TO JUNCTION (b) does not equal 04,05,	RELATION TO TRAFFICWAY should not equal 01 or 11.
PC40	PRE-IMPACT LOCATION for a vehicle involved in the first harmful event equals 1-3, 6,	RELATION TO TRAFFICWAY should equal 01 or 11.
PC50	PRE-IMPACT LOCATION equals 2,	TOTAL LANES IN ROADWAY should not equal 1.
VB60	PRE-IMPACT STABILITY equals 0,	PRE-IMPACT LOCATION must equal 0.
VB70	PRE-IMPACT STABILITY is not equal to 0,	PRE-IMPACT LOCATION must not equal 0.
VBA0	PRE-IMPACT LOCATION equals 1,	PRE-IMPACT STABILITY should equal 1, 2, or 9.
VH10	PRE-IMPACT LOCATION equals 0,	ATTEMPTED AVOIDANCE MANEUVER must equal 00.
VH20	ATTEMPTED AVOIDANCE MANEUVER equals 00,	PRE-IMPACT LOCATION must equal 0.

PC23 - Crash Type

FORMAT: 2 numeric

SAS NAME: Vehicle.ACC_TYPE

ELEMENT VALUES:

As assigned by the selection on the next screens

Codes	Attributes
00	No Impact
01-93	Crash Types
98	Other Crash Type
99	<u>Unknown</u>

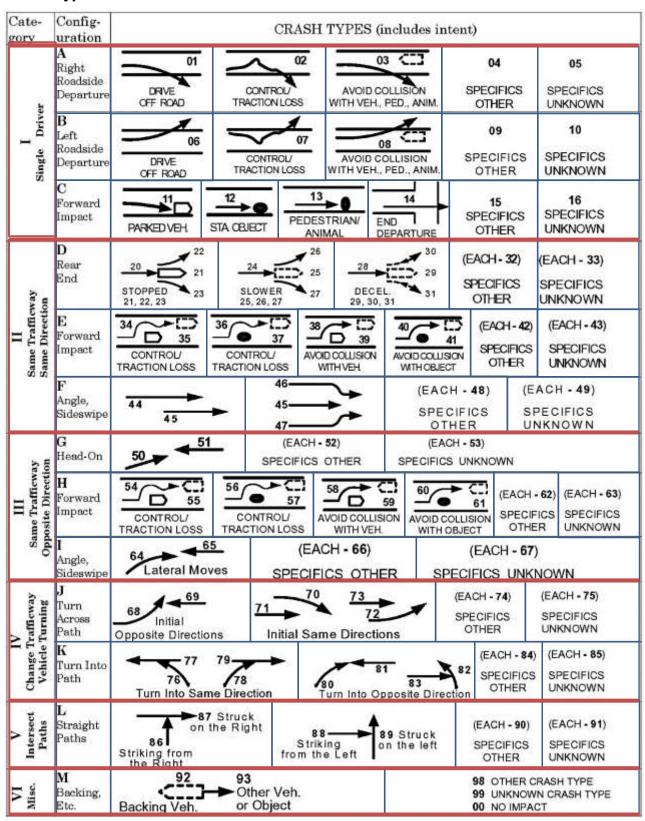
Definition: This element describes the type of crash this in-transport vehicle was involved in based on the <u>FIRST HARMFUL EVENT</u> and the precrash circumstances.

Remarks: The CRASH TYPE is a numeric value assigned by selecting the **Crash Category** and the **Crash Configuration** on the next screens/pages. The number can be directly entered or edited here; however, the two-step process of selecting the Crash Category and Crash Configuration is preferred to visualize the crash scenario.

The FIRST HARMFUL EVENT may include a collision between a vehicle and some object, accompanied by property damage or human injury. The object may be another vehicle, a person, an animal, a fixed object, the road surface, or the ground. If the first collision is a rollover, the impact is with the ground or road surface. The collision may also involve plowing into soft ground, if severe vehicle deceleration results in damage or injury. A road departure without damage or injury is **not** defined as a harmful event.

Please see <u>The following crash types require clarification</u> for guidance on a few specific crash types.

Crash Type Table



Category I. Single Driver

Configuration A. Right Roadside Departure

The vehicle departed the right side of the road with the first harmful event occurring off the road.

01 (Right Roadside Departure: Drive Off Road)



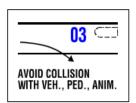
Use **Right Roadside Departure: Drive Off Road** when the vehicle departed the road under a controlled situation (the driver was distracted, fell asleep, intentionally departed, etc.).

02 (Right Roadside Departure: Control/Traction Loss)



Use **Right Roadside Departure: Control/Traction** when there is evidence that the vehicle lost traction or "got away" from the driver in some other way (e.g., the vehicle spun off the road as a result of surface conditions, oversteer phenomena, or mechanical malfunctions). If doubt exists, use <u>01 (Right Roadside Departure, Drive Off Road)</u>. If the control/traction loss occurs as a result of an avoidance of something in the road, see remarks for CRASH TYPE <u>03 (Right Roadside Departure: Avoid Collision with Vehicle, Pedestrian, Animal)</u> and <u>04 (Right Roadside Departure: Specifics Other)</u> to establish which attribute applies.

03 (Right Roadside Departure: Avoid Collision with Vehicle, Pedestrian, Animal)



Use **Right Roadside Departure: Avoid Collision with Vehicle, Pedestrian, Animal** when the vehicle departed the road to avoid something on the road. Phantom vehicle situations, pedestrians, bicyclists, and other cyclists and non-motorists are included here.

04 (Right Roadside Departure: Specifics Other)



Use **Right Roadside Departure: Specifics Other** if the vehicle departed the road to avoid something on the road other than a vehicle, pedestrian, or animal. Also use "Specifics Other" for crashes involving a driverless in-transport vehicle.

05 (Right Roadside Departure: Specifics Unknown)



Use **Right Roadside Departure: Specifics Unknown** if the vehicle departed the right side of the road for unknown reasons.

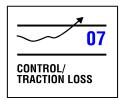
Configuration B. Left Roadside Departure

06 (Left Roadside Departure: Drive Off Road)



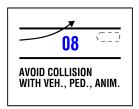
Use **Left Roadside Departure: Drive Off Road** when the vehicle departed the road under a controlled situation (the driver was distracted, fell asleep, intentionally departed, etc.).

07 (Left Roadside Departure: Control/Traction Loss)



Use **Left Roadside Departure: Control/Traction Loss** if there is evidence that the vehicle lost traction or "got away" from the driver in some other way (e.g., the vehicle spun off the road as a result of surface conditions, oversteer phenomena, or mechanical malfunctions.) If doubt exists, use **06** (**Left Roadside Departure, Drive Off Road**). If the control/traction loss occurs as a result of an avoidance of something in the road, see remarks for CRASH TYPE **08** (**Left Roadside Departure: Avoid Collision with Vehicle, Pedestrian, Animal**) and **09** (**Left Roadside Departure: Specifics Other**) to establish which attribute applies.

08 (Left Roadside Departure: Avoid Collision with Vehicle, Pedestrian, Animal)



Use **Left Roadside Departure: Avoid Collision with Vehicle, Pedestrian, Animal** when the vehicle departed the road to avoid something on the road. Phantom vehicle situations, pedestrians, bicyclists, and other cyclists and non-motorists are included here.

09 (Left Roadside Departure: Specifics Other)



Use **Left Roadside Departure: Specifics Other** if the vehicle departed the road to avoid something on the road other than a vehicle, pedestrian, or animal. Also, use "Specifics Other" for crashes involving a driverless in-transport vehicle.

10 (Left Roadside Departure: Specifics Unknown)



Use **Left Roadside Departure: Specifics Unknown** if the vehicle departed the left side of the road for unknown reasons.

Configuration C. Forward Impact

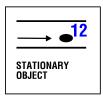
The vehicle struck an object on the road or off the end of a trafficway while moving forward. Vehicle plane of contact is NOT a consideration.

11 (Forward Impact: Parked Vehicle)



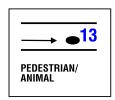
Use **Forward Impact: Parked Vehicle** if the crash involves an impact with a parked vehicle anywhere on the road while moving forward. Vehicle plane of contact is NOT a consideration. For cases involving a parked vehicle opening a door into moving traffic or extended mirrors into the travel lane use **15** (**Forward Impact: Specifics Other**).

12 (Forward Impact: Stationary Object)



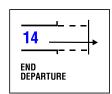
Use **Forward Impact: Stationary Object** if the crash involves an impact with a stationary object anywhere on the road while moving forward. Vehicle plane of contact is NOT a consideration. Use this attribute for cases involving a vehicle that strikes a working motor vehicle that is stationary on the road. For vehicles striking moving working motor vehicles actively performing their task, see **15** (**Forward Impact: Specifics Other**).

13 (Forward Impact: Pedestrian/Animal)



Use **Forward Impact: Pedestrian/Animal** if the first harmful event involves an impact with a pedestrian or animal anywhere on the road while moving forward. Pedestrians, bicyclists, and other cyclists and non-motorists are included here. Vehicle plane of contact is NOT a consideration. However, if a vehicle is backing up when it contacts a non-motorist select **CRASH TYPE 92 (Backing, Etc.: Backing Vehicle).**

14 (Forward Impact: End Departure)



Use **Forward Impact: End Departure** when the vehicle ran off the end of the road and crashed into something while moving forward. Vehicle plane of contact is NOT a consideration.

15 (Forward Impact: Specifics Other)



Use **Forward Impact: Specifics Other** for impacted (striking or struck) trains and non-stationary objects anywhere on the road while moving forward. Vehicle plane of contact is NOT a consideration. Also use "Specifics Other" for crashes involving a driverless in-transport vehicle or for vehicles striking working motor vehicles such as snow plows, street sweepers, etc. in the act of performing their task (for vehicles striking stationary working motor vehicles in the road, see **12** (**Forward Impact: Stationary Object**)). Use this attribute for cases involving a parked

vehicle opening a door into moving traffic, extended mirrors into the travel lane, or an object hanging over the road.

16 (Forward Impact: Specifics Unknown)



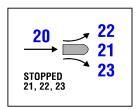
Use **Forward Impact: Specifics Unknown** when the case material indicate a single driver was involved in a forward impact collision, but no further classification is possible. Vehicle plane of contact is NOT a consideration.

Category II. Same Trafficway, Same Direction

Configuration D. Rear-End

The front of the overtaking vehicle impacted the rear of the other vehicle. Note, even if the rear-impacted vehicle had started to make a turn, code here (not in Category IV - Change in Trafficway, Vehicle Turning).

20 (Rear-End: Stopped)



Use **Rear-End: Stopped** for a vehicle that impacts another vehicle from the rear when the impacted vehicle was stopped in the trafficway.

21 (Rear-End: Stopped, Straight)

Use **Rear-End: Stopped, Straight** for a rear-impacted vehicle that was stopped in the trafficway and was intending to proceed straight ahead.

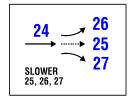
22 (Rear-End: Stopped, Left)

Use **Rear-End: Stopped, Left** for a rear-impacted vehicle that was stopped in the trafficway, intending to make a left turn.

23 (Rear-End: Stopped, Right)

Use **Rear-End: Stopped, Right** for a rear-impacted vehicle that was stopped in the trafficway, intending to make a right turn.

24 (Rear-End: Slower)



Use **Rear-End: Slower** for a vehicle that impacts another vehicle from the rear when the impacted vehicle was going slower than the striking vehicle.

25 (Rear-End: Slower, Going Straight)

Use **Rear-End: Slower, Going Straight** for a rear-impacted vehicle that was going slower than the other vehicle while proceeding straight ahead.

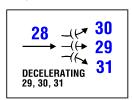
26 (Rear-End: Slower, Going Left)

Use **Rear-End: Slower, Going Left** for a rear-impacted vehicle that was going slower than the other vehicle while intending to turn left.

27 (Rear-End: Slower, Going Right)

Use **Rear-End: Slower, Going Right** for a rear-impacted vehicle that was going slower than the other vehicle while intending to turn right.

28 (Rear-End: Decelerating (Slowing))



Use **Rear-End: Decelerating (Slowing)** for a vehicle that impacts another vehicle from the rear when the impacted vehicle was slowing down.

29 (Rear-End: Decelerating (Slowing), Going Straight)

Use **Rear-End: Decelerating (Slowing), Going Straight** for a rear-impacted vehicle that was slowing down while proceeding straight ahead.

30 (Rear-End: Decelerating (Slowing), Going Left)

Use **Rear-End: Decelerating (Slowing), Going Left** for a rear-impacted vehicle that was slowing down while intending to turn left.

31 (Rear-End: Decelerating (Slowing), Going Right)

Use **Rear-End: Decelerating (Slowing), Going Right** for a rear-impacted vehicle that was slowing down while intending to turn right.

32 (Rear-End: Specifics Other)

EACH: 32
SPECIFICS
OTHER

Use **Rear-End: Specifics Other** for rear-end collisions that cannot be described in "20-31." Enter "Specifics Other" for crashes involving a driverless in-transport vehicle.

33 (Rear-End: Specifics Unknown)

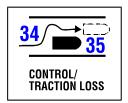
EACH: 33
SPECIFICS UNKNOWN

Use **Rear-End: Specifics Unknown** when the case material indicate a rear-end collision occurred, but no further classification is possible.

Configuration E. Forward Impact

The front of the overtaking vehicle impacted the rear of the other vehicle, following a steering maneuver around a noninvolved vehicle or object.

34 (Forward Impact: Control/Traction Loss)

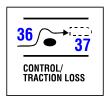


Use **Forward Impact: Control/Traction Loss** for a collision in which a vehicle's frontal area impacts another vehicle due to loss of control or traction (during a maneuver to avoid a collision with a non-involved vehicle) while both are traveling on the same trafficway in the same direction.

35 (Forward Impact: Control/Traction Loss)

Use **Forward Impact: Control/Traction Loss** for a vehicle that is impacted by the frontal area of another vehicle due to loss of control or traction (during a maneuver to avoid a collision with a non-involved vehicle) while both are traveling on the same trafficway in the same direction.

36 (Forward Impact: Control/Traction Loss)



Use **Forward Impact:** Control/Traction Loss for a collision in which a vehicle's frontal area impacts another vehicle due to loss of control or traction (during a maneuver to avoid a collision with a non-fixed object (e.g., garbage can, person, animal, etc.) in the Road) while both are traveling on the same trafficway in the same direction.

37 (Forward Impact: Control/Traction Loss)

Use **Forward Impact: Control/Traction Loss** for a vehicle that is impacted by the frontal area of another vehicle due to loss of control or traction (during a maneuver to avoid a collision with a non-fixed object (garbage can, person, animal, etc.) in the Road) while both are traveling on the same trafficway in the same direction.

38 (Forward Impact: Avoid Collision with Vehicle)

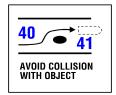


Use **Forward Impact:** Avoid Collision with Vehicle for a vehicle that struck the rear of another vehicle with its front plane while maneuvering to avoid collision with a non-involved vehicle, when loss of control or traction was not a factor, and both were traveling on the same trafficway, in the same direction.

39 (Forward Impact: Avoid Collision with Vehicle)

Use **Forward Impact: Avoid Collision with Vehicle** for a vehicle that was impacted by the frontal area of another vehicle that was maneuvering to avoid a collision with a non-involved vehicle, when loss of control or traction was not a factor, and both were traveling on the same trafficway, in the same direction.

40 (Forward Impact: Avoid Collision with Object)



Use **Forward Impact:** Avoid Collision with Object for a vehicle that struck the rear of another vehicle with its front plane while maneuvering to avoid a collision with a non-fixed object (garbage can, person, animal, etc.) in the road, when loss of control or traction was not a factor, and both were traveling on the same trafficway, in the same direction.

41 (Forward Impact: Avoid Collision with Object)

Use **Forward Impact:** Avoid Collision with Object for a vehicle that was impacted by the frontal area of another vehicle that was maneuvering to avoid a collision with a non-fixed object (garbage can, person, animal, etc.) in the road, when loss of control or traction was not a factor, and both were traveling on the same trafficway, in the same direction.

42 (Forward Impact: Specifics Other)

EACH: 42 SPECIFICS OTHER

Use **Forward Impact: Specifics Other** (for both vehicles) for a forward impact collision that occurred while both vehicles were traveling on the same trafficway, in the same direction, and the striking vehicle was attempting to avoid a vehicle or an object that cannot be described by "34 - 40."

Also, use this code for crashes involving a driverless in-transport vehicle that would otherwise qualify for this configuration.

43 (Forward Impact: Specifics Unknown)

SPECIFICS UNKNOWN

Use **Forward Impact: Specifics Unknown** when the case material indicate that a forward impact collision occurred while both vehicles were traveling on the same trafficway and in the same direction, but no further classification was possible.

Configuration F. Sideswipe/Angle

The two vehicles are involved in an impact involving the side of one or both vehicles.

The following four attributes, Sideswipe/Angle, Straight Ahead On Left, Sideswipe/Angle, Straight Ahead On Left/Right, Sideswipe/Angle, Changing Lanes To The Right and Sideswipe/Angle, Changing Lanes To The Left identify relative vehicle positions (left versus right) and lane of travel intentions (straight ahead versus changing lanes). From these four codes, four combinations are permitted. They are:

- 1. 44 (Sideswipe/Angle, Straight Ahead On Left) and 45 (Sideswipe/Angle, Straight Ahead On Left/Right).
- 2. 46 (Sideswipe/Angle, Changing Lanes To The Right) and 45 (Sideswipe/Angle, Straight Ahead On Left/Right).
- 3. 45 (Sideswipe/Angle, Straight Ahead On Left/Right) and 47 (Sideswipe/Angle, Changing Lanes To The Left).

4. 46 (Sideswipe/Angle, Changing Lanes To The Right) and 47 (Sideswipe/Angle, Changing Lanes To The Left).

When used in combination, these codes refer to a sideswipe or angle collision that involved a vehicle to the left of a vehicle to the right where:

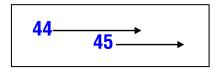
- 1. neither vehicle (Sideswipe/Angle, Straight Ahead On Left and Sideswipe/Angle, Straight Ahead On Left/Right) intended to change its lane;
- 2. the vehicle on the left (**Sideswipe/Angle, Changing Lanes To The Right**) was changing lanes to the right, and the vehicle on the right (**Sideswipe/Angle, Straight Ahead On Left/Right**) was not intending to change its lane;
- 3. the vehicle on the left (Sideswipe/Angle, Straight Ahead On Left/Right) was not intending to change its lane, and the vehicle on the right (Sideswipe/Angle, Changing Lanes To The Left) was changing lanes to the left, and
- 4. the vehicle on the left (Sideswipe/Angle, Changing Lanes To The Right) was changing lanes to the right, and the vehicle on the right (Sideswipe/Angle, Changing Lanes To The Left) was changing lanes to the left.

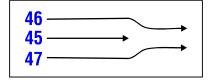
In addition, when:

- 1. the right sides of the two vehicles impact following a 180-degree rotation of the vehicle on the right, or
- 2. the left sides of the two vehicles impact following a 180-degree rotation of the vehicle on the left.

Select the appropriate combination depending upon:

- 1. their positions (i.e., left versus right) and
- 2. the intended lane of travel (straight ahead versus changing lanes) of their drivers.





44 (Sideswipe/Angle: Straight Ahead on Left)

See discussion under <u>Configuration F. Sideswipe/Angle</u>, above for an explanation of when this attribute applies.

45 (Sideswipe/Angle: Straight Ahead on Left/Right)

See discussion under <u>Configuration F. Sideswipe/Angle</u>, above for an explanation of when this attribute applies.

46 (Sideswipe/Angle: Changing Lanes to the Right)

See discussion under <u>Configuration F. Sideswipe/Angle</u>, above for an explanation of when this attribute applies.

47 (Sideswipe/Angle: Changing Lanes to the Left)

See discussion under <u>Configuration F. Sideswipe/Angle</u>, above for an explanation of when this attribute applies.

48 (Sideswipe/Angle: Specifics Other)

EACH: 48
SPECIFICS
OTHER

Use **Sideswipe/Angle: Specifics Other** if one vehicle was behind the other prior to a sideswipe/angle collision occurring while both vehicles were traveling on the same trafficway and in the same direction.

For example, use this code when two vehicles are on the same trafficway and going the same direction, and one loses control and is struck in the side by the front of the other vehicle. However, if one vehicle rotates such that the impact is front to front, then use code **98** (Other crash type).

Use **Sideswipe/Angle: Specifics Other** for crashes involving a driverless in-transport vehicle.

49 (Sideswipe/Angle: Specifics Unknown)

EACH: 49 SPECIFICS UNKNOWN

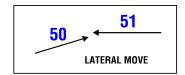
Use **Sideswipe/Angle: Specifics Unknown** for sideswipe/angle collisions that occur while both vehicles are traveling on the same trafficway and in the same direction when no further classification is possible.

Category III. Same Trafficway, Opposite Direction

Configuration G. Head-On

The frontal area of one vehicle impacted the frontal area of another.

50 (Head-On: Lateral Move (Left/Right))



Use **Head-On: Lateral Move (Left/Right)** for a vehicle that LEAVES ITS LANE [moves laterally (sideways)] immediately before colliding head-on with another vehicle, when the vehicles are traveling on the same trafficway in opposite directions.

51 (Head-On: Lateral Move (Going Straight))

Use **Head-On: Lateral Move (Going Straight)** for a vehicle that collides head-on with another vehicle that has IMMEDIATELY LEFT ITS LANE (moved laterally) when the vehicles are traveling on the same trafficway in opposite directions.

52 (Head-On: Specifics Other)

EACH: **52**SPECIFICS OTHER

Use **Head-On: Specifics Other** for a head-on collision that cannot be described by "50-51," when the vehicles are traveling on the same trafficway in opposite directions. Clarification: Enter "52" for both vehicles involved in a head-on collision when one is traveling the wrong way on a one-way roadway.

Enter "Specifics Other" for crashes involving a driverless in-transport vehicle.

53 (Head-On: Specifics Unknown)

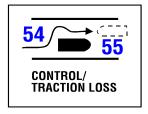
EACH: 53
SPECIFICS
UNKNOWN

Use **Head-On: Specifics Unknown** when the case material indicate a head-on collision occurred between two vehicles traveling on the same trafficway in opposite directions, when no further classification is possible.

Configuration H. Forward Impact

The frontal area of one vehicle impacted the frontal area of another following a steering maneuver around a noninvolved vehicle or an object.

54 (Forward Impact: Control/Traction Loss)

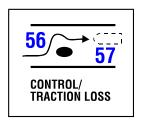


Use **Forward Impact: Control/Traction Loss** for a vehicle whose frontal area impacts another vehicle due to loss of control or traction (during a maneuver to avoid a collision with a third vehicle) while the vehicles are traveling on the same trafficway in opposite directions.

55 (Forward Impact: Control/Traction Loss)

Use **Forward Impact: Control/Traction Loss** for a vehicle that is impacted by the frontal area of another vehicle due to loss of control or traction (during a maneuver to avoid a collision with a third vehicle) while the vehicles are traveling on the same trafficway in opposite directions.

56 (Forward Impact: Control/Traction Loss)

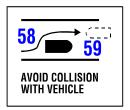


Use **Forward Impact: Control/Traction Loss** for a vehicle whose frontal area impacts another vehicle due to loss of control or traction (during a maneuver to avoid a collision with a non-fixed object (garbage can, person, animal, etc.) in the Road) while the vehicles are traveling on the same trafficway in opposite directions.

57 (Forward Impact: Control/Traction Loss)

Use **Forward Impact: Control/Traction Loss** for a vehicle that is impacted by the frontal area of another vehicle due to loss of control or traction (during a maneuver to avoid a collision with a non-fixed object (garbage can, person, animal, etc.) in the Road) while the vehicles are traveling on the same trafficway in opposite directions.

58 (Forward Impact: Avoid Collision with Vehicle)

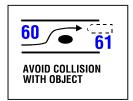


Use **Forward Impact:** Avoid Collision with Vehicle for a vehicle whose frontal area impacts another vehicle while maneuvering to avoid a collision with a non-involved vehicle, when loss of control or traction was not a factor, and the vehicles were traveling on the same trafficway, in opposite directions.

59 (Forward Impact: Avoid Collision with Vehicle)

Use **Forward Impact: Avoid Collision with Vehicle** for a vehicle that was impacted by the frontal area of another vehicle that was maneuvering to avoid collision with a non-involved vehicle, when loss of control or traction was not a factor, and the vehicles were traveling on the same trafficway, in opposite directions.

60 (Forward Impact: Avoid Collision with Object)



Use **Forward Impact:** Avoid Collision with Object for a vehicle that struck the front of another vehicle with the frontal plane while maneuvering to avoid collision with a non-fixed object (garbage can, person, animal, etc.) in the road, when loss of control or traction was not a factor, and the vehicles were traveling on the same trafficway, in opposite directions.

61 (Forward Impact: Avoid Collision with Object)

Use **Forward Impact: Avoid Collision with Object** for a vehicle that was impacted by the frontal area of another vehicle that was maneuvering to avoid collision with a non-fixed object (garbage can, person, animal, etc.) in the road, when loss of control or traction was not a factor, and the vehicles were traveling on the same trafficway, in opposite directions.

62 (Forward Impact: Specifics Other)

EACH: 62
SPECIFICS
OTHER

Use **Forward Impact: Specifics Other** for forward impact collisions occurring while the vehicles were traveling on the same trafficway in opposite directions that cannot be described by "54-61." Enter "Specifics Other" for crashes involving a "driverless in-transport vehicle."

63 (Forward Impact: Specifics Unknown)

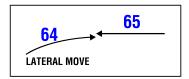


Use **Forward Impact: Specifics Unknown** when the case material indicate a forward impact collision occurred while the vehicles were traveling on the same trafficway in opposite directions, but no further classification is possible.

Configuration I. Sideswipe/Angle

The two vehicles are involved in an impact involving the side of one or both vehicles.

64 (Sideswipe/Angle: Lateral Move (Left/Right))



Use **Sideswipe/Angle: Lateral Move (Left/Right)** identifies the vehicle that **infringed upon the other vehicle** (code "65") in a Category III, Configuration I collision; i.e., enter "64" for the vehicle that left its lane (moved laterally) leading to the collision.

65 (Sideswipe/Angle: Lateral Move (Going Straight))

Use **Sideswipe/Angle: Lateral Move (Going Straight)** for the vehicle that was infringed upon by the other vehicle (code "64") in a Category III, Configuration I collision.

66 (Sideswipe/Angle: Specifics Other)

EACH: 66 SPECIFICS OTHER

Use **Sideswipe/Angle: Specifics Other** for sideswipe/angle collisions occurring while both vehicles were traveling on the same trafficway in opposite directions that cannot be described by "64-65." Enter "Specifics Other" for crashes involving a "driverless in-transport vehicle." However, if one vehicle rotates such that the impact is front to front or front to rear, and did not result from a steering maneuver around a noninvolved vehicle or an object (<u>Configuration H</u>) then use code <u>98 (Other Crash Type)</u>.

67 (Sideswipe/Angle: Specifics Unknown)

EACH: 67
SPECIFICS UNKNOWN

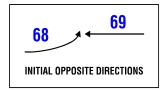
Use **Sideswipe/Angle: Specifics Unknown** when the case material indicate a sideswipe/angle collision occurred while both vehicles were traveling on the same trafficway in opposite directions, but no further classification is possible.

Category IV. Changing Trafficway, Vehicle Turning

Configuration J. Turn Across Path

The two vehicles were initially on the same trafficway when one vehicle tried to turn onto another trafficway, a driveway, or parking lot and pulled in front of the other vehicle. Vehicles making a "U" turn are identified in Category VI. Miscellaneous.

68 (Turn Across Path: Initial Opposite Directions (Left/Right))



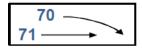
Use Turn Across Path: Initial Opposite Directions (Left/Right) for the vehicle that turned across the path of another vehicle (Turn Across Path: Initial Opposite Directions [Going

Straight]) in a Category IV, Configuration J collision, in which the vehicles were initially traveling in opposite directions.

69 (Turn Across Path: Initial Opposite Directions (Going Straight))

Use **Turn Across Path: Initial Opposite Directions** (**Going Straight**) for a vehicle involved in a collision in which another vehicle (**Turn Across Path: Initial Opposite Directions** [**Left/Right**]) across its Path, and in which the vehicles were initially traveling in opposite directions.

70 (Turn Across Path: Initial Same Directions (Turning Right))

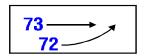


Use Turn Across Path: Initial Same Directions (Turning Right) for a vehicle that turned right, across the path of another vehicle (Turn Across Path: Initial Same Directions [Going Straight]), when both vehicles were initially traveling in the same direction.

71 (Turn Across Path: Initial Same Directions (Going Straight))

Turn Across Path: Initial Same Directions (Going Straight) for a vehicle whose path was crossed by a vehicle turning right (Turn Across Path: Initial Same Directions (Turning Right), when both vehicles were initially traveling in the same direction.

72 (Turn Across Path: Initial Same Directions (Turning Left))



Use **Turn Across Path: Initial Same Directions (Turning Left)** for a vehicle that turned left, across the path of another vehicle (**Turn Across Path: Initial Same Directions [Going Straight]**), when both vehicles were initially traveling in the same direction.

73 (Turn Across Path: Initial Same Directions (Going Straight))

Use **Turn Across Path: Initial Same Directions (Going Straight)** for a vehicle whose path was crossed by a vehicle turning left (**Turn Across Path: Initial Same Directions [Turning Left]**), when both vehicles were initially traveling in the same direction.

74 (Turn Across Path: Specifics Other)

EACH: **74**SPECIFICS
OTHER

Use **Turn Across Path: Specifics Other** for collisions in which one vehicle turned across another's path, which cannot be described by "68-72." Enter "Specifics Other" for crashes involving a driverless in-transport vehicle.

75 (Turn Across Path: Specifics Unknown)

EACH: 75
SPECIFICS UNKNOWN

Use **Turn Across Path: Specifics Unknown** when the case material indicate one vehicle turned across another's path, causing a collision, but no further classification is possible.

Configuration K. Turn Into Path

The two vehicles were initially on different trafficways when one attempted to turn into the same trafficway as the other vehicle. For the purposes of Crash Typing, "trafficway" as used here includes a driveway or parking lot.

Note: The focus of this configuration is on the turning maneuver from one trafficway to another and not on the vehicles' plane of contact.

76 (Turn into Same Direction (Turning Left))

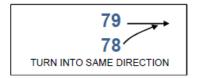


Use **Turn into Same Direction (Turning Left)** for a vehicle that turned left, into the path of another vehicle (**Turn into Same Direction [Going Straight]**), so that both vehicles were traveling in the same direction at the time of the collision.

77 (Turn into Same Direction (Going Straight))

Use **Turn into Same Direction (Going Straight)** for a vehicle involved in a collision in which another vehicle (**Turn into Same Direction [Turning Left]**) turned left, into its path, so that both vehicles were traveling in the same direction at the time of the collision.

78 (Turn into Same Direction (Turning Right))



Use **Turn into Same Direction (Turning Right)** for a vehicle that turned right, into the path of another vehicle (**Turn into Same Direction [Going Straight]**), so that both vehicles were traveling in the same direction at the time of the collision.

79 (Turn into Same Direction (Going Straight))

Use **Turn into Same Direction** (**Going Straight**) for a vehicle involved in a collision in which another vehicle (**Turn into Same Direction [Turning Right**]) turned right, into its path, so that both vehicles were traveling in the same direction at the time of the collision.

80 (Turn into Opposite Directions (Turning Right))

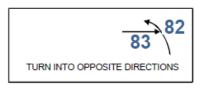


Use **Turn into Opposite Directions (Turning Right)** for a vehicle that turned right, into the path of another vehicle (**Into Opposite Directions [Going Straight]**), so that the vehicles were traveling in opposite directions at the time of the collision.

81 (Turn into Opposite Directions (Going Straight))

Use **Turn into Opposite Directions** (**Going Straight**) for a vehicle involved in a collision in which another vehicle (**Turn into Opposite Directions [Turning Right]**) turned right, into its path, so that the vehicles were traveling in opposite directions at the time of the collision.

82 (Turn into Opposite Directions (Turning Left))



Use **Turn into Opposite Directions** (**Turning Left**) for a vehicle that turned left, into the path of another vehicle (**Turn into Opposite Directions [Going Straight]**), so that the vehicles were traveling in opposite directions at the time of the collision.

Turn into Opposite Directions (Turning Left) is used when the driver's vehicle was in the act of making a left turn (e.g., from a driveway, parking lot, or intersection). Do not confuse this situation with "Configuration L - Straight Paths." The driver's intended path is the prime concern.

83 (Turn into Opposite Directions (Going Straight))

Use **Turn into Opposite Directions (Going Straight)** for a vehicle involved in a collision in which another vehicle (**Turn into Opposite Directions [Turning Left]**) turned left, into its path, so that the vehicles were traveling in opposite directions at the time of the collision.

84 (Turn into Path: Specifics Other)



Use **Turn into Path: Specifics Other** for collisions in which one vehicle turned into another's path, which cannot be described by "76-83." Enter "Specifics Other" for crashes involving a driverless in-transport vehicle.

85 (Turn into Path: Specifics Unknown)

EACH: 85
SPECIFICS
UNKNOWN

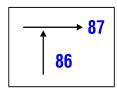
Use **Turn into Path: Specifics Unknown** when the case material indicate one vehicle turned into another's path, causing a collision, but no further classification is possible.

Category V. Intersecting Paths (Vehicle Damage)

Configuration L. Straight Paths

The two vehicles were proceeding (or attempting to proceed) straight ahead.

86 (Straight Paths: Striking from the Right)

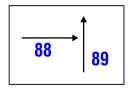


Use **Straight Paths: Striking from the Right** for a vehicle that strikes the right side of another vehicle (code "87") from the right when both vehicles were going straight at the time of the collision, i.e., right side damage to 87, front damage to 86.

87 (Straight Paths: Struck on the Right)

Use **Straight Paths: Struck on the Right** for a vehicle that is struck on the right side by another vehicle (**Straight Paths: Striking from the Right**) from the right when both vehicles were going straight at the time of the collision, i.e., right side damage to 87, front damage to 86.

88 (Straight Paths: Striking from the Left)



Use **Straight Paths: Striking from the Left** for a vehicle that strikes another vehicle (**Straight Paths: Struck on the Left**) from the left when both vehicles were going straight at the time of the collision, i.e., left side damage to 89, front damage to 88.

89 (Straight Paths: Struck on the Left)

Use **Straight Paths: Struck on the Left** for a vehicle that is struck on the left side by another vehicle (**Straight Paths: Striking from the Left**) from the left when both vehicles were going straight at the time of the collision, i.e., left side damage to 89, front damage to 88.

90 (Straight Paths: Specifics Other)

EACH: **90** SPECIFICS OTHER

Use **Straight Paths: Specifics Other** for collisions in which two vehicles, both going straight, collide when their paths intersect, which cannot be described by "86-89." Enter "Specifics Other" for crashes involving a driverless in-transport vehicle.

91 (Straight Paths: Specifics Unknown)

EACH: **91** SPECIFICS UNKNOWN

Use **Straight Paths: Specifics Unknown** when the case material indicate two vehicles, both going straight, collided when their paths intersected, but no further classification is possible.

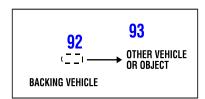
Category VI. Miscellaneous

Configuration M. Backing, etc.

One of the two vehicles involved was a backing vehicle, regardless of its location on the trafficway or the damage location on the vehicles.

Any crash configuration that cannot be described in Category I. through V. is included here.

92 (Backing, etc.: Backing Vehicle)



Use **Backing, etc.:** Backing Vehicle for a backing vehicle that was involved with another vehicle, object, or non-motorist. If both vehicles were backing, then code 92 for both vehicles. If the vehicle was driverless or unintentionally rolling backwards, use **98 (Other Crash Type)**.

93 (Backing, etc.: Other Vehicle)

Use **Backing**, etc.: Other Vehicle for the in-transport vehicle that was involved with the backing vehicle (code 92). Attribute 93 can only apply when there are two motor vehicles in-transport.

- 98 OTHER CRASH TYPE
 99 UNKNOWN CRASH TYPE
- OO NO IMPACT

98 (Other Crash Type)

Other Crash Type is used for those events and collisions that do not reasonably fit any of the specified types. This code includes (but is not limited to): rollovers on the road; U-turns; crashes initiated by objects set in motion by an in-transport motor vehicle; third or subsequent vehicles involved in a crash; or the second involved vehicle, when the first harmful event involves a vehicle-to-object collision or a non-collision.

99 (Unknown Crash Type)

Use **Unknown Crash Type** when the crash category or configuration is unknown.

00 (No Impact)

No Impact identifies the non-collision events fire, immersion, gas inhalation, jackknife, injured in vehicle, pavement surface irregularity, other non-collision, thrown or falling object, cargo equipment loss or shift, or fell/jumped from vehicle. Rollovers on the road should be coded **98** (**Other Crash Type**).

The following crash types require clarification:

<u>No impact</u> identifies non-collision events (i.e., fire, immersion, gas inhalation, jackknife, non-collision injury, other non-collision, or non-collision - no details). Rollovers on the road should be coded as **98** (Other Crash Type).

<u>Right roadside departure, drive off road</u> and <u>Left roadside departure, drive off road</u> are used when the vehicle departed the road under a controlled situation (the driver was distracted, fell asleep, intentionally departed, etc.).

Right roadside departure, control/traction loss and Left roadside departure, control/traction loss are used if there is some evidence that the vehicle lost traction or in some other manner "got away" from the driver (i.e., the vehicle spun off the road as a result of surface conditions, oversteer phenomena, or mechanical malfunctions). If doubt exists, use Right roadside departure, drive off road or Left roadside departure, drive off road respectively.

Right roadside departure; avoid collision with vehicle, pedestrian, animal and Left roadside departure; avoid collision with vehicle, pedestrian, animal are used when the vehicle departed the road as a result of avoiding something in the road. "Phantom" situations are included here.

Right roadside departure, specifics other and Left roadside departure, specifics other are used for any other stationary or nonstationary objects if the avoidance characteristics of codes "03" or "08" are present.

Forward impact, parked vehicle, Forward impact, stationary object, and Forward impact, pedestrian/animal involves an impact with an object that can be located on either side of the road.

Forward impact, stationary object includes a hole in the road, an overhead object (e.g., overpass), or an object projecting over the road edge (e.g., support column of elevated railway).

Forward impact, pedestrian/animal is used when a pedestrian, non-motorist, or animal is involved with the first harmful event. Vehicle plane of contact is not a consideration.

<u>Forward impact</u>, <u>specifics other</u> is used for impacted (striking or struck) trains and nonstationary objects on the road.

Sideswipe/Angle, straight ahead on left, Sideswipe/Angle, straight ahead on left/right, Sideswipe/Angle, changing lanes to the right, and Sideswipe/Angle, changing lanes to the left identify relative vehicle positions (left versus right) and lane of travel intentions (straight ahead versus changing lanes).

From these four codes, four combinations are permitted. They are:

- 1. "44" and "45."
- 2. "46" and "45,"
- 3. "45" and "47," and
- 4. "46" and "47."

When used as a combination these codes refer to a sideswipe or angle collision that involved a vehicle to the left of a vehicle to the right where:

- 1. neither vehicle (codes "44" and "45") intended to change its lane;
- 2. the vehicle on the left (code "46") was changing lanes to the right, and the vehicle on the right (code "45") was not intending to change its lane;
- 3. the vehicle on the left (code "45") was not intending to change its lane, and the vehicle on the right (code "47") was changing lanes to the left; and
- 4. the vehicle on the left (code "46") was changing lanes to the right, and the vehicle on the right (code "47") was changing lanes to the left.

In addition, when:

- 1. the right sides of the two vehicles impact following a 180-degree rotation of the vehicle on the right, or
- 2. the left sides of the two vehicles impact following a 180-degree rotation of the vehicle on the left; select the appropriate combination ("44-45," "46-45," "45-47," or "46-47") depending upon:
- 3. their positions (i.e., left versus right), and
- 4. the intended lane of travel (straight ahead versus changing lanes) of their drivers.

<u>Sideswipe/Angle, specifics other</u> is used if one vehicle was behind the other prior to their Category II, Configuration F collision. For example, use this code when two vehicles are on the same trafficway and going the same direction, and one loses control and is struck in the side by the front of the other vehicle. However, if one vehicle rotates such that the impact is front to front, then use code **98** (Other crash type).

<u>Sideswipe/Angle, lateral move (Left/Right)</u> identifies the vehicle that infringed upon the other (code 65) in a Category III, Configuration I collision.

Codes 68 through 85 (<u>Turn Across Path</u> and <u>Turn into Path</u>) are used in Configurations J and K where the vehicle's action is the controlling factor, and the plane of contact is irrelevant.

<u>Turn into Opposite Direction (Turning Left)</u> is used when the driver's vehicle was in the act of making a left turn (e.g., from a driveway, parking lot, or intersection). Do not confuse this situation with <u>Configuration L. Straight Paths</u>. The driver's intended path is the prime concern.

Codes 86 through 89 (<u>Straight Paths</u>) must not be confused with crash types in <u>Configuration</u> <u>K. Turn into Path</u>. For these codes the vehicles are proceeding (or attempting to proceed) straight ahead, usually at a junction.

Other Crash Type is used for those events and collisions that do not reasonably fit any of the specified types. This code includes (but is not limited to): rollovers on the road, U-turns, crashes initiated by objects set in motion by an in-transport motor vehicle, third or subsequent vehicles involved in a crash, or the second involved vehicle when the first harmful event involved a vehicle-to-object collision.

Consistency Checks (See Section 400):

Error ID	IF	THEN
253P	RELATION TO TRAFFICWAY equals 03,	CRASH TYPE should equal 06-10, 98, or 99 for the in-transport vehicles involved in the FIRST HARMFUL EVENT.
3B1P	CRASH TYPE equals 21-23,	TRAVEL SPEED must equal 000 for this vehicle.
3B2P	CRASH TYPE equals 20, 24, 28, 34, 36, 38, 40, 50-54, 56, 58, or 60,	AREA OF IMPACT-INITIAL CONTACT POINT must equal 12 for this vehicle.
3B3P	CRASH TYPE equals 21-23, 25-27, 29-31, 35, 37, 39, or 41,	AREAS OF IMPACT-INITIAL CONTACT POINT must equal 6 for this vehicle.
3B4P	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 10,	CRASH TYPE must not equal 44-69, 71-73, 76, 77, 79, 81-83, 86-92.
3B5P	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 11,	CRASH TYPE must not equal 44-67, 69-71, 73, 77-81, 83, 86-92.
3B6P	CRASH TYPE equals 87,	AREAS OF IMPACT-INITIAL CONTACT POINT must equal 01-05, 81-83 for this vehicle.
3B7P	CRASH TYPE equals 89,	AREAS OF IMPACT-INITIAL CONTACT POINT must equal 07-11, 61-63 for this vehicle.
3B8P	CRITICAL EVENT - PRECRASH (EVENT) equals 20,	CRASH TYPE for this vehicle should equal 92.

Error ID	IF	THEN
3BAP	UNIT TYPE equals 1, and DRIVER PRESENCE equals 0,	CRASH TYPE must equal 00, 04, 09, 15, 32, 42, 48, 52, 62, 66, 74, 84, 90, 93, or 98.
3ВСР	CRASH TYPE equals 34, 36, 38, 40, 54, 56, 58, or 60,	DRIVER MANEUVERED TO AVOID must not equal 00.
3BDP	CRASH TYPE equals 46, 47, and ATTEMPTED AVOIDANCE MANEUVER equals 01 or 99,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must not equal 01.
3BEP	CRASH TYPE equals 01 or 06, and ATTEMPTED AVOIDANCE MANEUVER equals 01,	PRE-IMPACT STABILITY should not equal 2-5 or 7.
3BFP	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 08 or 09,	CRASH TYPE must not equal 46 or 47.
3C00	CRASH TYPE equals 68, 72, 76, or 82,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 11 or 98.
3C10	CRASH TYPE equals 70, 78, or 80,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 10 or 98.
3C20	this vehicle is involved in the FIRST HARMFUL EVENT and its CRASH TYPE equals 29-31,	this vehicle's PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 02.
3C30	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 12,	CRASH TYPE should equal 98.
3C40	CRASH TYPE equals 46,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 06, 15, 16, or ATTEMPTED AVOIDANCE MANEUVER should equal 07, 09, or 12.
3C50	CRASH TYPE equals 92,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 08, 09, 13, 99.
3C60	CRASH TYPE equals 25-27, 29-31,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should not equal 05 or 07.
3C70	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 13,	CRASH TYPE should equal 92 or 98.

Error ID	IF	THEN
3C80	CRASH TYPE equals 47,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 06, 15, 16, or ATTEMPTED AVOIDANCE MANEUVER should equal 06, 08, or 11.
3D00	CRASH TYPE equals 20-49, and ATTEMPTED AVOIDANCE MANEUVER equals 00, 01,	CRITICAL EVENT - PRECRASH (EVENT) should not equal 12-14, 54, 62 , 63 , 66-68, 71-73, or 80-85.
3D10	CRASH TYPE equals 50-67, and ATTEMPTED AVOIDANCE MANEUVER equals 00, 01,	CRITICAL EVENT - PRECRASH (EVENT) should not equal 12-14, 51-53, 60, 61, 65, 66, 70, 71, 80-85, or 87-92.
3D20	CRASH TYPE equals 14 and ATTEMPTED AVOIDANCE MANEUVER equals 01,	CRITICAL EVENT PRECRASH (EVENT) should equal 14.
3D50	PRE-IMPACT STABILITY equals 1,	CRASH TYPE should not equal 02, 07, 34, 36, 54, or 56.
3D60	CRASH TYPE equals 46 or 47,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should not equal 01.
3D90	CRASH TYPE equals 68-75,	CRITICAL EVENT – PRECRASH (EVENT) must not equal 65-68.
3F00	CRASH TYPE equals 76-85,	CRITICAL EVENT – PRECRASH (EVENT) must not equal 60-64.
426P	MANNER OF COLLISION OF THE FIRST HARMFUL EVENT equals 02,	CRASH TYPE must not equal 64-67 for the vehicles involved in the FIRST HARMFUL EVENT.
427P	MANNER OF COLLISION OF THE FIRST HARMFUL EVENT equals 06,	CRASH TYPE must not equal 20-43 or 50-53 for the vehicles involved in the FIRST HARMFUL EVENT.
428P	CRASH TYPE equals 20-91,	NUMBER OF VEHICLE FORMS SUBMITTED must be greater than 001.
429P	NUMBER OF VEHICLE FORMS SUBMITTED equals 001,	CRASH TYPE must equal 00, 01-16, 92, 98, 99.
42BP	there is only one vehicle involved in the FIRST HARMFUL EVENT where UNIT TYPE equals 1,	the number of vehicles where CRASH TYPE is coded 00, 1-16, 92, 93, or 99 (excluding from the vehicles being counted, those where CRASH TYPE equals 98) must not equal 0 or be greater than 1.
42CP	there are two vehicles involved in the FIRST HARMFUL EVENT,	those two vehicles' CRASH TYPES must belong to the same CRASH TYPE Configuration.

Error ID	IF	THEN
77AP	CRASH TYPE equals 14,	RELATION TO JUNCTION (b) must not equal 02.
77BP	CRASH TYPE equals 68-91,	RELATION TO JUNCTION (b) should not equal 01.
77CP	CRASH TYPE equals 14,	RELATION TO JUNCTION (b) should equal 01, 03, 19.
9BAP	MANNER OF COLLISION OF THE FIRST HARMFUL EVENT equals 07, and PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 10 or 11 for neither one of the vehicles involved in the FIRST HARMFUL EVENT,	CRASH TYPE should equal 44-49, 98, 99 for the vehicles involved in the FIRST HARMFUL EVENT.
9ВСР	MANNER OF COLLISION OF THE FIRST HARMFUL EVENT equals 08, and PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 10 or 11 for neither one of the vehicles involved in the FIRST HARMFUL EVENT,	CRASH TYPE should equal 64-67, 98, 99 for the vehicles involved in the FIRST HARMFUL EVENT.
9BDP	MANNER OF COLLISION OF THE FIRST HARMFUL EVENT equals 01,	CRASH TYPE should not equal 44-49 for the vehicles involved in the FIRST HARMFUL EVENT.
A3C0	FIRST HARMFUL EVENT equals 02-07,16, 44, 51, 72,	CRASH TYPE must equal 00 for the vehicle involved in the FIRST HARMFUL EVENT.
A3D0	FIRST HARMFUL EVENT equals 01-07, 16, 44, 51, 72,	CRASH TYPE must not equal 20-91.
A3E0	CRASH TYPE equals 13,	FIRST HARMFUL EVENT must equal 08, 09, 11, 15, or 49.
A480	CRASH TYPE equals 00,	FIRST HARMFUL EVENT must equal 02-07, 16, 44, 51, 72.
A4A0	CRASH TYPE equals 01-16,	FIRST HARMFUL EVENT must not equal 12.
A4B0	CRASH TYPE equals 01-10 or 14,	RELATION TO TRAFFICWAY must not equal 01, 02, 07, or 11. If the FIRST HARMFUL EVENT occurs on a different road than the road it departed, see 98 (Other Crash Type).
A4B2	CRASH TYPE equals 11,	RELATION TO TRAFFICWAY must not equal 01, 03, 04, 05, 08, 10, 11, or 12.
A4B3	CRASH TYPE equals 12 or 13,	RELATION TO TRAFFICWAY must not equal 03, 05, 08, 10, or 12.

Error ID	IF	THEN
A4B4	CRASH TYPE equals 12 (Stationary Object on Road) or 13 (Pedestrian/Animal on Road),	RELATION TO TRAFFICWAY should not equal 4 (On Roadside) unless the FIRST HARMFUL EVENT occurs in a bicycle lane.
A4BP	FIRST HARMFUL EVENT equals 54 or 55,	CRASH TYPE must equal 98 for the vehicles involved in the FIRST HARMFUL EVENT.
A4DP	CRASH TYPE equals 20-91,	FIRST HARMFUL EVENT must equal 12.
A4EP	CRASH TYPE equals 11,	FIRST HARMFUL EVENT must equal 14.
A60F	FIRST HARMFUL EVENT equals 14,	CRASH TYPE should equal 01-11, 14, 15, 92, 98, 99.
A61F	FIRST HARMFUL EVENT equals 08, 09, 11, 15, 49, and RELATION TO TRAFFICWAY equals 01, 02, 07, 11, and PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) is not equal to 00, 13 for the vehicle involved in the FIRST HARMFUL EVENT,	CRASH TYPE should equal 13 for the vehicle involved in the FIRST HARMFUL EVENT.
A61G	the FIRST HARMFUL EVENT equals 08, and PERSON TYPE equals 05, and NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 21, 22, 24, 25, 28, and the VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is involved in the FIRST HARMFUL EVENT,	CRASH TYPE should not equal 13 for this vehicle.
А61Н	the FIRST HARMFUL EVENT equals 09, and PERSON TYPE equals 06, 07, and NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 21, 22, 24, 25, 28, and the VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is involved in the FIRST HARMFUL EVENT,	CRASH TYPE should not equal 13 for this vehicle.
A61J	the FIRST HARMFUL EVENT equals 15, and PERSON TYPE equals 11, 12, or 13, and NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 21, 22, 24, 25, 28, and the VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is involved in the FIRST HARMFUL EVENT,	CRASH TYPE should not equal 13 for this vehicle.

Error ID	IF	THEN
A61K	the FIRST HARMFUL EVENT equals 49, and PERSON TYPE equals 04, and NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 21, 22, 24, 25, 28, and the VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is involved in the FIRST HARMFUL EVENT,	CRASH TYPE should not equal 13 for this vehicle.
A620	CRASH TYPE equals 06-10, and TRAFFICWAY DESCRIPTION equals 3,	RELATION TO TRAFFICWAY should equal 03 or 12.
A62F	FIRST HARMFUL EVENT equals 18, 43, 73, 91, or 93, and RELATION TO TRAFFICWAY equals 01, 02, or 11,	CRASH TYPE should equal 12 or 15 for the vehicle involved in the FIRST HARMFUL EVENT.
A62G	FIRST HARMFUL EVENT equals 98 and RELATION TO TRAFFICWAY equals 01, 02, or 11,	CRASH TYPE must equal 16 for the vehicle involved in the FIRST HARMFUL EVENT.
A63F	FIRST HARMFUL EVENT equals 01,	CRASH TYPE should equal 01-10, 98, 99 for the vehicle involved in the FIRST HARMFUL EVENT.
A65F	FIRST HARMFUL EVENT equals 14, and RELATED FACTORS - PERSON (MV OCCUPANT) LEVEL equals 032 or 089 for an occupant of the parked vehicle involved in the FIRST HARMFUL EVENT,	CRASH TYPE should equal 15, 92, or 98 for the in-transport vehicle involved in the FIRST HARMFUL EVENT.
A66F	FIRST HARMFUL EVENT equals 14, and CRASH TYPE equals 01-10 or 14,	RELATED FACTORS - PERSON (MV OCCUPANT) LEVEL must not equal 032 or 089 for any occupant of the parked vehicle involved in the FIRST HARMFUL EVENT.
AZ2P	FIRST HARMFUL EVENT does not equal 02-07, 16, 44, 51, 72, and CRITICAL EVENT-PRECRASH (EVENT) equals 14, and ATTEMPTED AVOIDANCE MANEUVER equals 01,	CRASH TYPE must equal 14 for the vehicle involved in the FIRST HARMFUL EVENT.
B15P	CRITICAL EVENT-PRECRASH (EVENT) equals 91, and ATTEMPTED AVOIDANCE MANEUVER equals 00, 01, and the vehicle is involved in the FIRST HARMFUL EVENT,	CRASH TYPE should equal 15.
B16P	CRITICAL EVENT-PRECRASH (EVENT) equals 90, and ATTEMPTED AVOIDANCE MANEUVER equals 01, and the vehicle is involved in the FIRST HARMFUL EVENT,	CRASH TYPE should equal 12 or 15.

Error ID	IF	THEN
BZ80	MANNER OF COLLISION OF THE FIRST HARMFUL EVENT equals 00,	CRASH TYPE must equal 00, 01-16, 92, 98, 99 for the vehicle in the FIRST HARMFUL EVENT.
BZ90	CRASH TYPE equals 01-05, and PRE-IMPACT LOCATION is not equal to 0 or 5,	at least one SEQUENCE OF EVENTS prior to the FIRST HARMFUL EVENT must equal 63.
BZ91	CRASH TYPE equals 06-10, and PRE-IMPACT LOCATION is not equal to 0 or 5,	at least one SEQUENCE OF EVENTS prior to the FIRST HARMFUL EVENT must equal 64.
BZ92	CRASH TYPE equals 14,	at least one CRASH EVENTS-SEQUENCE OF EVENTS must equal 71 for this vehicle.
FA1F	CRASH TYPE for all in-transport vehicles not involved in the FIRST HARMFUL EVENT must equal 98.	
FP2F	UNIT TYPE equals 1, and CRASH TYPE equals blank,	case status is flawed.
V533	CRASH TYPE equals 03, 08, 38, 40, 58, or 60,	ATTEMPTED AVOIDANCE MANEUVER must not equal 00 or 01.
V534	CRASH TYPE equals 02 or 07, and ATTEMPTED AVOIDANCE MANEUVER equals 01,	PRE-IMPACT STABILITY should not equal 09.
V536	CRASH TYPE equals 20-49,	TRAFFICWAY DESCRIPTION should be the same for the vehicles involved in the FIRST HARMFUL EVENT.
V537	CRASH TYPE equals 68, 69, 82, 83, 86, 87, 88, or 89,	the vehicles involved in the FIRST HARMFUL EVENT should have a RELATION TO JUNCTION equal to 02, 04, or 08.
V539	CRASH TYPE equals 50-67,	ROADWAY ALIGNMENT should not equal 2 for both vehicles involved in the FIRST HARMFUL EVENT, and should not equal 3 for both vehicles involved in the FIRST HARMFUL EVENT.
V700	ROLLOVER equals 2,	CRASH TYPE should equal 01-10, 14, 98, or 99 for this vehicle.
V79P	ROLLOVER equals 2, and FIRST HARMFUL EVENT equals 01,	CRASH TYPE must equal 01-10, 14, 15, or 98 for the vehicle involved in the FIRST HARMFUL EVENT.

Consistency Check (FARS Only) (See Section 400):

Error ID	IF	THEN
662P	TRAFFIC CONTROL DEVICE is not equal to 00 and CRASH TYPE is 14,	at least one RELATED FACTORS - DRIVER LEVEL should equal <i>0</i> 39.

Person Level (Motor Vehicle Occupant) Data Elements

P1 - State Number - FARS Only

P2 - Consecutive Number - FARS Only

P3 - Vehicle Number - Person Level (MV Occupant)

P4/NM3 - Person Number

P5/NM5 - Age

P6/NM6 - Sex

P7 - Person Type

P8/NM8 - Injury Severity

P9 - Seating Position

P10 - Restraint System Use

P11 - Helmet Use

P12 - Air Bag Deployed

P13 - Ejection

P14 - Ejection Path - FARS Only

P15 - Extrication - FARS Only

P16/NM16 - Police Reported Alcohol Involvement

P17/NM17 - Method of Alcohol Determination by Police - FARS Only

P18/NM18 - Alcohol Test

P19/NM19 - Police Reported Drug Involvement

P20/NM20 - Method of Drug Determination by Police - FARS Only

P21/NM21 - Drug Toxicology Results - FARS Only

Alphabetical Drug Index - FARS Only

Drugs by Category Type - FARS Only

P22/NM22 - Transported to First Medical Facility by

P23/NM23 - Died at Scene/En Route - FARS Only

P24/NM24 - Death Date - FARS Only

P25/NM25 - Death Time - FARS Only

P26 - Related Factors - Person (MV Occupant) Level

P3 - Vehicle Number - Person Level (Motor Vehicle Occupant)

FORMAT: 3 numeric

SAS NAME: Vehicle.VEH_NO, Person.VEH_NO, Parkwork.VEH_NO

ELEMENT VALUES:

Codes	Attributes
001-999	Assigned Number

Definition: This element identifies the vehicle number associated with this motor vehicle occupant.

Remarks: 001-999 is used for motor vehicle occupants (In-Transport, Parked/Stopped Off Roadway/ Working Motor Vehicles, and Motor Vehicles in Motion Outside the Trafficway).

People ejected or who fall from a motor vehicle in-transport are still considered occupants of that vehicle for the duration of the unstabilized situation.

Consistency Check (See Section 400):

Error ID	IF	THEN
CSI5	VEHICLE NUMBER at the Person Level is greater than 000,	VEHICLE NUMBER at the Person Level must equal a VEHICLE NUMBER at the Vehicle Level.

P4/NM3 - Person Number

FORMAT: 3 numeric

SAS NAME: Person.PER_NO

ELEMENT VALUES:

Codes	Attributes
001-999	Assigned Number/ Computer Assigned

Definition: This element identifies a number for the motor vehicle occupant in consecutive order for the vehicle they occupied.

Remarks: Person Number is assigned using the police crash report's person number.

Person Level (Motor Vehicle Occupant) must be numbered consecutively beginning with "001" for each motor vehicle occupant. Drivers do not have to be "001." Numbers must not be skipped.

Person Level (Not a Motor Vehicle Occupant) must be numbered consecutively beginning with "001" for people not in motor vehicles. Numbers must not be skipped.

Consistency Check (See Section 400):

Error ID	Error Message
CSI6	For each VEHICLE NUMBER, PERSON NUMBERS must be consecutive, beginning with 001 and with no gaps.

P5/NM5 - Age

FORMAT: 3 numeric

SAS NAME: Person.AGE ELEMENT VALUES:

Codes	Attributes
000	Less than One Year
001-120	Actual Age*
998	Not Reported
999	Reported as Unknown

Definition: This element identifies the person's age, in years, with respect to the person's last birthday.

Remarks: If the case material does not show the age of injured or uninjured drivers or passengers and there is no other information about age, e.g., in the narrative/diagram, then use **998 (Not Reported)**.

998 (Not Reported) Check to see if <u>999 (Reported as Unknown)</u> is more appropriate for the situation.

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported.**"

Code **998** (**Not Reported**) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).

999 (**Reported as Unknown**) is used if the investigating officer indicates that this occupant's age is unknown.

- * Values greater than "094" are unlikely occurrences, and they will raise an error flag.
- * Values greater than "120" are not permitted.

FARS SPECIAL INSTRUCTION:

For drivers, verify age with data on Licensing File. Licensing data takes precedence over crash report data.

Consistency Checks (See Section 400):

Error ID	IF	THEN
2S4P	AGE equals 0-4 and RESTRAINT SYSTEM USE Subfield 1-Type of Restraint System in Use does not equal 04, 10, 11, 12, 20, 98, or 99,	RESTRAINT SYSTEM USE Subfield 2 - Any Indication of Mis-Use must equal 1.
2S5P	AGE equals 5-7 and RESTRAINT SYSTEM USE Subfield 1-Type of Restraint System in Use does not equal 04, 10, 12, 20, 98, or 99,	RESTRAINT SYSTEM USE Subfield 2 - Any Indication of Mis-Use must equal 1.
7P0F	PERSON TYPE equals 01,	AGE must not be less than 002.
8P0P	PERSON TYPE equals 01, and AGE is less than 008,	vPIC BODY CLASS must equal 4 (Low Speed Vehicle (LSV) / Neighborhood Electric Vehicle (NEV)), 12 (Motorcycle - Scooter), 87 (Motorcycle - Small / Minibike), 88 (Off-road Vehicle - Go Kart), 97 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)) and 105 (Off-road Vehicle - Recreational Off-Road Vehicle (ROV)), 124 (Off-road Vehicle - Golf Cart), 125 (Motorcycle - Unknown Body Type), 997 (Other), 998 (Not Reported), or 999 (Unknown).
P010	PERSON TYPE equals 01,	AGE should not be less than 012.
P020	PERSON TYPE equals 02, 03, 09, and RESTRAINT SYSTEM USE Subfield-1 Type of Restraint System in Use equals 04, 10-12,	AGE should be less than 010, or equal to 998 or 999.
U120	UNLIKELY: AGE should not be greater than 094, unless equal to 998, 999.	
U360	UNLIKELY: AGE equals 999 and HIT AND RUN is not equal to 1.	
U694	UNLIKELY: AGE equals 0 and RESTRAINT SYSTEM USE Subfield-1 Type of Restraint System in Use equals 01-03, 06, 08, 20, 97, 98, 99, or blank and [SEX equals 2 and AGE equals 5-72 for at least one other occupant in the vehicle].	
U720	UNLIKELY: AGE equals 0 and HELMET USE Subfield 1-Helmet Use equals 05, 16, 17, 19, 98, 99, or blank and [SEX equals 2 and AGE equals 5-72 for at least one other occupant in the vehicle].	

Consistency Checks (FARS Only) (See Section 400):

Error ID	IF	THEN
5W0P	RELATED FACTORS-PERSON LEVEL equals θ 18,	SEX must equal 2, and AGE must be greater than 012.
9L0F	PERSON TYPE equals 01, and RELATED FACTORS-DRIVER LEVEL equals 012,	SEX must equal 2, and AGE must be greater than 012.
D060	NON-CDL LICENSE STATUS equals 1-4, 6, or COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 1-8, and PERSON TYPE equals 01,	AGE should not be less than 015.
D620	NON-CDL LICENSE TYPE equals 7,	AGE (for the driver) should equal 014-016.
D630	NON-CDL LICENSE TYPE equals 2,	AGE (for the driver) should equal 015-017.
D640	AGE equals 014-017, and PERSON TYPE equals 01,	NON-CDL LICENSE TYPE should equal 2, 7.
D650	AGE equals 018-120, and PERSON TYPE equals 01,	NON-CDL LICENSE TYPE should equal 1.
P1A0	AGE is less than 012, and INJURY SEVERITY equals 4,	FATAL INJURY AT WORK should equal 0.

P6/NM6 - Sex

FORMAT: 1 numeric

SAS NAME: Person.SEX

ELEMENT VALUES:

Codes	Attributes
1	Male
2	Female
8	Not Reported
9	Reported as Unknown

Definition: This element identifies the sex of the person involved in the crash.

Remarks: If the case material does not show the sex of injured or uninjured drivers or passengers and there is no other information about sex, e.g., in the narrative/diagram, then use **8** (**Not Reported**).

8 (Not Reported) Check to see if <u>9 (Reported as Unknown)</u> is more appropriate for the situation.

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**."

Code **8** (**Not Reported**) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).

9 (Reported as Unknown) is used if the investigating officer indicates that this occupant's sex is unknown.

Consistency Checks (See Section 400):

Error ID	Error Message
U340	UNLIKELY: HIT-AND-RUN equals 0, and SEX equals 9.
U694	UNLIKELY: AGE equals 0 and RESTRAINT SYSTEM USE Subfield-1 Type of Restraint System in Use equals 01-03, 06, 08, 20, 97, 98, 99, or blank and [SEX equals 2 and AGE equals 5-72 for at least one other occupant in the vehicle].
U720	UNLIKELY: AGE equals 0 and HELMET USE Subfield 1-Helmet Use equals 05, 16, 17, 19, 98, 99, or blank and [SEX equals 2 and AGE equals 5-72 for at least one other occupant in the vehicle].

Consistency Checks (FARS Only) (See Section 400):

Error ID	IF	THEN
5W0P	RELATED FACTORS-PERSON LEVEL equals θ 18,	SEX must equal 2, and AGE must be greater than 012.
9L0F	PERSON TYPE equals 01, and RELATED FACTORS-DRIVER LEVEL equals 012,	SEX must equal 2, and AGE must be greater than 012.

P7 - Person Type

FORMAT: 2 numeric

SAS NAME: Person.PER_TYP

ELEMENT VALUES:

Codes	Attributes
01	Driver of a Motor Vehicle In-Transport
02	Passenger of a Motor Vehicle In-Transport
03	Occupant of a Motor Vehicle Not In-Transport
09	Unknown Occupant Type in a Motor Vehicle In-Transport

Definition: This element describes the role of this person involved in the crash.

Remarks: Drivers and passengers are motor vehicle occupants. An involved person in a crash must maintain PERSON TYPE during the crash. Once the unstabilized situation begins, a driver, passenger, or non-motorist/non-occupant cannot change PERSON TYPE until the situation stabilizes. A motor vehicle occupant is any person who is part of a motor vehicle (i.e., in it, on it, or attached to it).

If a person is entering or exiting a vehicle before the unstabilized situation begins, try to determine if the person has successfully changed type before control is lost. For example, a person attempting to get into an automobile that begins to move would be classified as a pedestrian. Likewise, a passenger stepping off a bus as it begins to pull away would be classified as an occupant.

Attributes 01, 02, and 09 are used for occupants of a motor vehicle in-transport. This includes occupants of motor vehicles that are in motion outside the trafficway.

01 (**Driver of a Motor Vehicle In-Transport**) is used for a person who is in actual physical control of a motor vehicle or in the case of an out of control vehicle the person that was in control just prior to the unstabilized situation.

In FARS and CRSS, people less than 12 years old will raise an edit check. People less than 8 years old are forbidden from operating motor vehicles except for *NCSA* BODY TYPES <u>88</u>, <u>90</u>, <u>91</u>. In these circumstances the vehicles are classified as <u>0 (No Driver Present/Not Applicable)</u> in the element <u>DRIVER PRESENCE</u> and any underage occupant seated in the driver's position on the crash report is coded as PERSON TYPE <u>2 (Passenger of a Motor Vehicle In-Transport)</u> with <u>SEATING POSITION</u> value <u>11 (Front Seat, Left Side)</u>. People who are less than 2 years old are forbidden in FARS/CRSS from being a driver of any motor vehicle.

02 (**Passenger of a Motor Vehicle In-Transport**) is used for any occupant of a motor vehicle in-transport other than the driver.

If this person was appended to a motor vehicle for motion ("skitching")³ at the onset of the unstabilized situation, also use SEATING POSITION code **56 (Appended to a Motor Vehicle**

³ Abbreviated from "skate-hitching", the act of hitching a ride by holding onto a motor vehicle while riding on a skateboard, roller skates or bicycle.

for Motion). The person may be appended to the vehicle by any means (hand grasp, tow rope etc.), and may also be using a non-motorist device such as a bicycle, skateboard, hoverboard, or sled at the onset of the unstabilized situation. It must be clear that the person was connected at the onset of the unstabilized situation. If it is unclear or if the person was previously connected or attempting to connect, see RELATED FACTORS - PERSON (NOT A MOTOR VEHICLE OCCUPANT) LEVEL codes <u>053</u> (Non-Motorist Previously Used a Motor Vehicle for Motion), <u>054</u> (Non-Motorist Attempting to Use a Motor Vehicle for Motion), and <u>055</u> (Non-Motorist Attempting to Use or Previously Used a Motor Vehicle for Motion, Details Not Reported).

03 (Occupant of a Motor Vehicle Not In-Transport) is used for any occupant of a motor vehicle not in-transport including someone sitting in the driver's seat position.

09 (Unknown Occupant Type in a Motor Vehicle In-Transport) is used when it cannot be determined if the person was the driver or passenger, but it is known that the person was an occupant of a motor vehicle in-transport.

Consistency Checks (See Section 400):

Error ID	IF	THEN
1Q0F	PERSON TYPE equals 01, and vPIC BODY CLASS equals 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 69 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 (Off-Road Vehicle - Dirt Bike/Off- Road), 085 (Motorcycle - Dual Sport/Adventure/Supermoto/On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 90 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 104 (Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle),	SEATING POSITION must not equal 12-56, 99.
2M0F	PERSON TYPE equals 01,	SEATING POSITION must not equal 21-56, 98, or 99.

Error ID	IF	THEN
2Q0F	PERSON TYPE equals 02 or 03, and vPIC BODY CLASS equals 001 (Convertible/Cabriolet), 003 (Coupe), 005 (Hatchback/Liftback/Notchback), 010 (Roadster), 013 (Sedan/Saloon), 060 (Pickup), 095 (Cargo Van), 105 (Off-road Vehicle - Recreational Off-Road Vehicle (ROV)), 108 (Motorhome), 111 (Step Van / Walk-in Van), 117 (Limousine), 126 (Off-road Vehicle - Farm Equipment), or 127 (Off-road Vehicle - Construction Equipment), or FINAL STAGE BODY CLASS equals 060 (Pickup) 095 (Cargo Van), 108 (Motorhome), 111 (Step Van / Walk-in Van), or 117 (Limousine),	SEATING POSITION must not equal 31-50.
3H0F	DRIVER PRESENCE equals 1,	there must be one and only one Person Level form for that vehicle with PERSON TYPE equal to 01, or there must be no Person Level form for that vehicle with PERSON TYPE equal to 01 and at least two Person Level forms for that vehicle with PERSON TYPE equal to 09.
3M0F	PERSON TYPE equals 01,	RESTRAINT SYSTEM USE Subfield 1 Type of Restraint System in Use must not equal 04, 10-12.
3P0F	PERSON TYPE equals 03-07, 10, 11, 12, 13, or 19,	INJURY SEVERITY should not equal 6.
3Q0F	SEATING POSITION equals 50 (Sleeper Section of Cab [Truck]),	vPIC BODY CLASS should equal 011 (Truck) or 066 (Truck-Tractor), or FINAL STAGE BODY CLASS should equal 011 (Truck) or 066 (Truck-Tractor), and POWER UNIT GVWR_FROM and POWER UNIT GVWR_To should equal 13-18.
4H0F	DRIVER PRESENCE equals 0, 9,	there must not be a Person Level form for that vehicle with PERSON TYPE equal to 01.

Error ID	IF	THEN
4Q0F	PERSON TYPE equals 02, and vPIC BODY CLASS equals 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport/Adventure/Supermoto/On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 90 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 100 (Motorcycle - Enclosed Three Wheeled / Enclosed Autocycle), 103 (Motorcycle - Unenclosed Three Wheeled / Open Autocycle), 104 (Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle),	SEATING POSITION should equal 13, 21, 54, 55, or 56.
4W6P	any RELATED FACTORS-PERSON LEVEL (MV Occupant) equals <i>0</i> 21 or <i>0</i> 89,	PERSON TYPE must equal 3, SEATING POSITION must equal 11, and UNIT TYPE must equal 2, 3, or 4.
570F	FIRST HARMFUL EVENT equals 05, 06,	at least one PERSON TYPE equal to 01-03, 09 must have INJURY SEVERITY equal to 1-5 or blank.
5M0F	PERSON TYPE equals 01,	RELATED FACTORS-PERSON LEVEL (MV Occupant) must equal 0 00.
5M0G	SPECIAL USE equals 06, and PERSON TYPE equals 02 or 09,	RELATED FACTORS - PERSON (MV OCCUPANT) LEVEL should equal 0 92, 0 94, or 0 95.
5M1G	SPECIAL USE equals 21 and PERSON TYPE equals 01,	SEATING POSITION should equal 13.
5M2G	SPECIAL USE equals 06, and PERSON TYPE equals 02, and SEATING POSITION equals 51,	at least one RELATED FACTORS - PERSON LEVEL should equal 092 or 094.
5M3G	SPECIAL USE equals 06, and PERSON TYPE equals 01 or 02, and SEATING POSITION equals 11-19,	at least one RELATED FACTORS - PERSON LEVEL should equal 094, or at least one RELATED FACTORS - DRIVER LEVEL should equal 094.

Error ID	IF	THEN
5N0F	PERSON TYPE equals 02,	any RELATED FACTORS-PERSON LEVEL (MV Occupant) must not equal 021, 026, 028, 029, 033, 037, 040-042, 044, 045, 047, 051, 052, 057-070, 072-078, or 080-083.
5Q0F	PERSON TYPE equals 02, and vPIC BODY CLASS equals 016 (Bus), 068 (Streetcar / Trolley), or 73 (Bus-School Bus), or FINAL STAGE BODY CLASS equals 016 (Bus), 068 (Streetcar / Trolley), or 73 (Bus-School Bus),	SEATING POSITION must <i>equal 12-18, 51, 52, 54, 55, 56, 98, or 99.</i>
5Z0F	SEQUENCE OF EVENTS equals 08,	at least one person must have PERSON TYPE equal to 05, 10.
6Q0F	PERSON TYPE equals 02, 03, 09, and <i>NCSA</i> BODY TYPE equals 60-67, 71, 72, 78, 79,	SEATING POSITION must not equal 31-49.
7M0F	any RELATED FACTORS-PERSON LEVEL (MV Occupant) equals <i>0</i> 26, <i>0</i> 28, <i>0</i> 29, <i>0</i> 33, <i>0</i> 37, <i>0</i> 40- <i>0</i> 42, <i>0</i> 44, <i>0</i> 45, <i>0</i> 47, <i>0</i> 51, <i>0</i> 52, <i>0</i> 57- <i>0</i> 70, <i>0</i> 72- <i>0</i> 78, or <i>0</i> 80- <i>0</i> 83,	PERSON TYPE must equal 03, SEATING POSITION must equal 11, and UNIT TYPE must equal 4.
7P0F	PERSON TYPE equals 01,	AGE must not be less than 002.
7Q0F	PERSON TYPE equals 09,	SEATING POSITION must equal 19, 98, or 99.
7Z0F	any SEQUENCE OF EVENTS equals 05, 06,	at least one occupant of this vehicle (PERSON TYPES 01, 02, 09) must have INJURY SEVERITY equal to 1-5, or blank.
8P0P	PERSON TYPE equals 01, and AGE is less than 008,	vPIC BODY CLASS must equal 4 (Low Speed Vehicle (LSV) / Neighborhood Electric Vehicle (NEV)), 12 (Motorcycle - Scooter), 87 (Motorcycle - Small / Minibike), 88 (Off-road Vehicle - Go Kart), 97 (Off-road Vehicle - Snowmobile), 069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)) and 105 (Off-road Vehicle - Recreational Off-Road Vehicle (ROV)), 124 (Off-road Vehicle - Golf Cart), 125 (Motorcycle - Unknown Body Type), 997 (Other), 998 (Not Reported), or 999 (Unknown).
9A5P	PERSON TYPE equals 03,	UNIT TYPE must equal 2-4.
9B7P	UNIT TYPE equals 2-4,	PERSON TYPE of all occupants of this vehicle must equal 03.
9L0F	PERSON TYPE equals 01, and RELATED FACTORS-DRIVER LEVEL equals 012,	SEX must equal 2, and AGE must be greater than 012.

Error ID	IF	THEN
CL0P	PERSON TYPE equals 09,	any RELATED FACTORS-PERSON LEVEL (MV OCCUPANT) must not equal 021, 026, 028, 029, 033, 037, 040-042, 044, 045, 047, 051, 052, 056-070, 072-078, 080-083.
D090	VIOLATIONS CHARGED equals 11-19, and PERSON TYPE equals 01, 03,	POLICE REPORTED ALCOHOL INVOLVEMENT should equal 1, or POLICE REPORTED DRUG INVOLVEMENT should equal 1.
FP0F	PERSON TYPE is blank,	case status is flawed.
P010	PERSON TYPE equals 01,	AGE should not be less than 012.
P01F	RESTRAINT SYSTEM USE Subfield-1 Type of Restraint System in Use equals 01-06, 08, <i>or</i> 10-12,	EJECTION should equal 0 or 7.
P020	PERSON TYPE equals 02, 03, 09, and RESTRAINT SYSTEM USE Subfield-1 Type of Restraint System in Use equals 04, 10-12,	AGE should be less than 010, or equal to 998 or 999.
P030	SPECIAL USE is not equal to 21 and PERSON TYPE equals 01,	SEATING POSITION should not equal 12-19.
P040	PERSON TYPE equals 02, 09,	SEATING POSITION should not equal 11.
P062	SEATING POSITION equals 56,	PERSON TYPE must equal 02.
P071	PERSON TYPE equals 02, 04-07, 10, 11, 12, or 13, and INJURY SEVERITY does not equal 4,	ALCOHOL TEST STATUS should not equal 9, ALCOHOL TEST TYPE should not equal 99, and ALCOHOL TEST RESULT should not equal 999.
P072	PERSON TYPE equals 02, 03, and INJURY SEVERITY equals 0, and ALCOHOL TEST RESULT equals 996,	POLICE REPORTED ALCOHOL INVOLVEMENT should equal 0, 8.
P074	PERSON TYPE equals 02, 04-07, 10, 11, 12, or 13, and INJURY SEVERITY does not equal 4,	ALCOHOL TEST STATUS must not equal 8, ALCOHOL TEST TYPE must not equal 95, and ALCOHOL TEST RESULT must not equal 995.

Consistency Checks (FARS Only) (See Section 400):

Error ID	IF	THEN
7M1F	PERSON TYPE equals 03, and SEATING POSITION is not equal to 11 or 13, and INJURY SEVERITY does not equal 4,	DRUG TEST STATUS must not equal 8, any DRUG SPECIMEN must not equal 96, and any DRUG TEST RESULTS must not equal 095.
D060	NON-CDL LICENSE STATUS equals 1-4, 6, or COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 1-8, and PERSON TYPE equals 01,	AGE should not be less than 015.
D640	AGE equals 014-017, and PERSON TYPE equals 01,	NON-CDL LICENSE TYPE should equal 2, 7.
D650	AGE equals 018-120, and PERSON TYPE equals 01,	NON-CDL LICENSE TYPE should equal 1.
D733	at least one RELATED FACTORS - DRIVER LEVEL equals 0 60 and PERSON TYPE equals 01,	ALCOHOL TEST RESULT should equal 995 or at least one DRUG TEST RESULT should equal 095.
P073	PERSON TYPE equals 02, 04-07, 10, 11, 12, or 13, and INJURY SEVERITY does not equal 4,	DRUG TEST STATUS should not equal 9, and any DRUG SPECIMEN should not equal 99, and any DRUG TEST RESULTS should not equal 999.
P075	PERSON TYPE equals 02, 04-07, 10, 11, 12, 13, or 19, and INJURY SEVERITY does not equal 4,	DRUG TEST STATUS must not equal 8, any DRUG SPECIMEN must not equal 96, and any DRUG TEST RESULTS must not equal 095.
P130	vPIC BODY CLASS equals 011 (Truck), 016 (Bus), 068 (Streetcar / Trolley), 73 (Bus-School Bus), 066 (Truck-Tractor), 095 (Cargo Van), 111 (Step Van / Walk-in Van), 117 (Limousine), 126 (Off-road Vehicle - Farm Equipment), 127 (Off-road Vehicle - Construction Equipment), or FINAL STAGE BODY CLASS equals 011 (Truck), 016 (Bus), 068 (Streetcar / Trolley), 73 (Bus-School Bus), 066 (Truck-Tractor), 095 (Cargo Van), 111 (Step Van / Walk-in Van), or 117 (Limousine), and POWER UNIT GVWR_from and GVWR_to equals 13, 14, 15, 16, 17, or 18, and PERSON TYPE equals 01 or 03, and INJURY SEVERITY equals 4,	FATAL INJURY AT WORK should equal 1.

P8/NM8 - Injury Severity

FORMAT: 1 numeric

SAS NAME: Person.INJ_SEV

ELEMENT VALUES:

Codes	Attributes
0	No Apparent Injury (O)
1	Possible Injury (C)
2	Suspected Minor Injury (B)
3	Suspected Serious Injury (A)
4	Fatal Injury (K)
5	Injured, Severity Unknown
6	Died Prior to Crash*
9	<u>Unknown/Not Reported</u>

Definition: This element describes the severity of the injury to this person in the crash.

Remarks: Enter the most severe police reported injury severity for this person (i.e., occupant, pedestrian or non-motorist). Most jurisdictions use the KABCO injury coding scheme.

K = Fatal Injury (Killed)

A = Suspected Serious Injury (Incapacitating Injury)

B = Suspected Minor Injury (Non-incapacitating Injury)

C = Possible Injury

O = No Apparent Injury (No Injury)

If there are discrepancies between the injury severity reported in the police report fields and the narrative, use the following guidance.

Report Field	Narrative	Guidance
Contains Coded Response	No Conflict With Coded Report Field	USE CODED REPORT FIELD
Not Coded	Silent on injuries	INJURY SEVERITY, 9 (Unknown/Not Reported)
Contains Coded Response	Silent on injuries	USE CODED REPORT FIELD
Contains Coded Response	Includes clear descriptions of injuries more severe than Coded Response	USE NARRATIVE

Report Field	Narrative	Guidance
Not Coded	Includes some injury information. Unknown if information is complete.	USE NARRATIVE
Contains Coded Response	Includes clear descriptions only of injuries less severe than Coded Response. Unknown if information is complete.	USE CODED REPORT FIELD

- **0** (No Apparent Injury) is a situation where there is no reason to believe that the person received any bodily harm from the motor vehicle crash. There is no physical evidence of injury and the person does not report any change in normal function.
- 1 (Possible Injury) is any injury reported or claimed that is not a fatal injury, suspected serious injury, or suspected minor injury. Examples include momentary loss of consciousness, possible concussion, claim of injury limping, complaint of pain, or nausea. Possible injuries are those that are reported by the person or are indicated by his/her behavior, but no wounds or injuries are readily evident.
- **2** (**Suspected Minor Injury**) is any injury that is evident at the scene of the crash, other than fatal or serious injuries. Examples include lump on the head, abrasions, bruises, minor lacerations (cuts on the skin surface with minimal bleeding and no exposure of deeper tissue/muscle). This does not include momentary unconsciousness. (See <u>1</u> (**Possible Injury**)).
- **3 (Suspected Serious Injury)** is any injury other than fatal that results in one or more of the following.
 - Severe laceration resulting in exposure of underlying tissues/muscle/organs or resulting in significant loss of blood
 - Broken or distorted extremity (arm or leg)
 - Crush injuries
 - Suspected skull, chest, or abdominal injury other than bruises or minor lacerations
 - Significant burns (second and third degree burns over 10 percent or more of the body)
 - Unconsciousness when taken from the crash scene
 - Paralysis

This does not include limping (the injury cannot be seen). (See <u>1 (Possible Injury)</u>).

- **4** (**Fatal Injury**) A fatal injury is any injury that results in death within 30 days after the motor vehicle crash in which the injury occurred. If the person did not die at the scene but died within 30 days of the motor vehicle crash in which the injury occurred, the injury classification should be changed from the attribute previously assigned to the attribute **4** (**Fatal Injury**).
- **5** (**Injured**, **Severity Unknown**) It is known the person was injured but the severity of the injury is not known.

6 (**Died Prior to Crash**)* refers to non-motor vehicle fatalities (e.g., a heart attack victim, a homicide victim, a suicide, or person involved in a legal intervention) that are involved in a motor vehicle traffic crash.

This attribute is used only if the police explicitly states the person died prior to the crash and the police report indicates the person died as a result of natural causes (e.g., heart attack), disease, drug overdose or alcohol poisoning, suicide, homicide, and legal intervention.

This attribute also applies if the police report indicates that the person died as a result of natural causes (e.g., heart attack) or disease but is silent about the time of on-set or if on-set is the result of injuries sustained in the crash.

In suicide incidents, use the following criteria:

- 1. If the only fatality is the suicide victim and it can be ascertained that the crash was a suicide, do not code the case.
- 2. If other fatalities occur, code the case as appropriate. The suicide victim's Injury Severity should be coded **6** (**Died Prior to Crash**) if the death occurred at the time of the crash (or prior) or **0** (**No Apparent Injury**) if the death occurred after the crash.

This attribute does not apply if the police report specifically states that the cause of death is a result of crash-related injury or that on-set occurred after the crash.

* This value is an unlikely occurrence and will raise an edit flag.

9 (Unknown/Not Reported) is used when:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material); or
- 2. a field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material); or
- 3. police indicate unknown.

Note: If a State's crash report manual instructs to leave data blocks blank when there is no injury, then a blank in those data blocks are NOT considered **9** (**Unknown/Not Reported**).

FARS SPECIAL INSTRUCTION:

Each case must have at least one Person Level form with INJURY SEVERITY attribute <u>4 (Fatalinjury</u>). See Definition: ANSI D16.1; 2.3.1 and 2.3.2

Consistency Checks (See Section 400):

Error ID	IF	THEN
1R0P	SEATING POSITION equals 51, and vPIC BODY CLASS equals 016 (Bus), 068 (Streetcar / Trolley), or 73 (Bus-School Bus), or FINAL STAGE BODY CLASS equals 016 (Bus), 068 (Streetcar / Trolley), or 73 (Bus- School Bus),	INJURY SEVERITY must not equal 0, 9.
2U3F	INJURY SEVERITY equals 3,	TRANSPORTED TO FIRST MEDICAL FACILITY BY should not equal 0.
3P0F	PERSON TYPE equals 03-07, 10, 11, 12, 13, or 19,	INJURY SEVERITY should not equal 6.
570F	FIRST HARMFUL EVENT equals 05, 06,	at least one PERSON TYPE equal to 01-03, 09 must have INJURY SEVERITY equal to 1-5, or blank.
7Z0F	any SEQUENCE OF EVENTS equals 05, 06,	at least one occupant of this vehicle (PERSON TYPES 01, 02, 09) must have INJURY SEVERITY equal to 1-5, or blank.
FP8F	INJURY SEVERITY is blank,	case status is flawed.
P071	PERSON TYPE equals 02, 04-07, 10, 11, 12, or 13, and INJURY SEVERITY does not equal 4,	ALCOHOL TEST STATUS should not equal 9, ALCOHOL TEST TYPE should not equal 99, and ALCOHOL TEST RESULT should not equal 999.
P072	PERSON TYPE equals 02, 03, and INJURY SEVERITY equals 0, and ALCOHOL TEST RESULT equals 996,	POLICE REPORTED ALCOHOL INVOLVEMENT should equal 0, 8.
P074	PERSON TYPE equals 02, 04-07, 10, 11, 12, or 13, and INJURY SEVERITY does not equal 4,	ALCOHOL TEST STATUS must not equal 8, ALCOHOL TEST TYPE must not equal 95, and ALCOHOL TEST RESULT must not equal 995.
P077	INJURY SEVERITY equals 4, and DIED AT SCENE/EN ROUTE equals 7 or 8,	ALCOHOL TEST Subfield 2 - Test Type should not equal 02, 10, or 11.
P090	INJURY SEVERITY equals 0,	TRANSPORTED TO FIRST MEDICAL FACILITY BY must equal 0.
P300	POLICE REPORTED ALCOHOL INVOLVEMENT equals 1, and INJURY SEVERITY equals 4,	ALCOHOL TEST STATUS should not equal 0.
U160	UNLIKELY: INJURY SEVERITY equals 6.	
U350	UNLIKELY: INJURY SEVERITY equals 1-6, and SEATING POSITION equals 98.	

Consistency Checks (FARS Only) (See Section 400):

Error ID	IF	THEN
1R1P	If DIED AT SCENE/EN ROUTE equals 7, 8,	INJURY SEVERITY must equal 4.
1U1F	INJURY SEVERITY equals 4,	DEATH DATE must not equal 88888888.
1U2F	INJURY SEVERITY equals 4,	DEATH TIME must not equal 8888.
2U1F	INJURY SEVERITY is not equal to 4,	DEATH DATE must equal 88888888.
2U2F	INJURY SEVERITY is not equal to 4,	DEATH TIME must equal 8888.
4V1F	INJURY SEVERITY equals 4,	DEATH DATE and DEATH TIME for this person must be within 720 hours of the CRASH DATE and CRASH TIME.
4U0F	Each original submission must have at least one Person Level form with INJURY SEVERITY coded 4.	
7E0P	INJURY SEVERITY equals 4,	DEATH CERTIFICATE NUMBER must NOT equal 0000-00-000000.
7E1P	INJURY SEVERITY equals 4,	RACE must not equal 00.
7E2P	INJURY SEVERITY equals 4,	HISPANIC ORIGIN must not equal 00.
7E3P	INJURY SEVERITY is not equal to 4,	RACE must equal 00 AND HISPANIC ORIGIN must equal 00.
7F0P	DEATH CERTIFICATE NUMBER is not blank or 0000-00-000000,	INJURY SEVERITY must equal 4.
7F1P	RACE equals 00,	INJURY SEVERITY must not equal 4.
7F2P	HISPANIC ORIGIN equals 00,	INJURY SEVERITY must not equal 4.
7F3P	RACE is not equal to 00, and HISPANIC ORIGIN is not equal to 00,	INJURY SEVERITY must equal 4.
7M1F	PERSON TYPE equals 03, and SEATING POSITION is not equal to 11 or 13, and INJURY SEVERITY does not equal 4,	DRUG TEST STATUS must not equal 8, any DRUG SPECIMEN must not equal 96, and any DRUG TEST RESULTS must not equal 095.
7R0P	FATAL INJURY AT WORK equals 0, 1, 9,	INJURY SEVERITY must equal 4.
7W0P	FATAL INJURY AT WORK equals 8,	INJURY SEVERITY must not equal 4.
P073	PERSON TYPE equals 02, 04-07, 10, 11, 12, or 13, and INJURY SEVERITY does not equal 4,	DRUG TEST STATUS should not equal 9, and any DRUG SPECIMEN should not equal 99, and any DRUG TEST RESULTS should not equal 999.
P075	PERSON TYPE equals 02, 04-07, 10, 11, 12, 13, or 19, and INJURY SEVERITY does not equal 4,	DRUG TEST STATUS must not equal 8, any DRUG SPECIMEN must not equal 96, and any DRUG TEST RESULTS must not equal 095.

Error ID	IF	THEN
P130	vPIC BODY CLASS equals 011 (Truck), 016 (Bus), 068 (Streetcar / Trolley), 73 (Busschool Bus), 066 (Truck-Tractor), 095 (Cargo Van), 111 (Step Van / Walk-in Van), 117 (Limousine), 126 (Off-road Vehicle - Farm Equipment), 127 (Off-road Vehicle - Construction Equipment), or FINAL STAGE BODY CLASS equals 011 (Truck), 016 (Bus), 068 (Streetcar / Trolley), 73 (Bus-School Bus), 066 (Truck-Tractor), 095 (Cargo Van), 111 (Step Van / Walk-in Van), or 117 (Limousine), and POWER UNIT GVWR_from and GVWR_to equals 13, 14, 15, 16, 17, or 18, and PERSON TYPE equals 01 or 03, and INJURY SEVERITY equals 4,	FATAL INJURY AT WORK should equal 1.
P1A0	AGE is less than 012, and INJURY SEVERITY equals 4,	FATAL INJURY AT WORK should equal 0.
P53P	INJURY SEVERITY equals 0-3, 5, 6,	DIED AT SCENE/EN ROUTE must equal 0.

Consistency Check (CRSS Only) (See Section 400):

Error ID	Error Message	
4U2F	At least one INJURY SEVERITY should equal 1, 2, 3, 4, 5, or 9, or at least one EXTENT OF DAMAGE should equal 2, 4, 6, 8, or 9.	
P078	INJURY SEVERITY equals 4,	ALCOHOL TEST Subfield 2 - Test Type should not equal 02, 10, or 11.

P9 - Seating Position

FORMAT: 2 numeric

SAS NAME: Person.SEAT_POS

ELEMENT VALUES:

Codes	Attributes
11	Front Seat, Left Side
12	Front Seat, Middle
13	Front Seat, Right Side
18	Front Seat, Other
19	Front Seat, Unknown
21	Second Seat, Left Side
22	Second Seat, Middle
23	Second Seat, Right Side
28	Second Seat, Other
29	Second Seat, Unknown
31	Third Seat, Left Side
32	Third Seat, Middle
33	Third Seat, Right Side
38	Third Seat, Other
39	Third Seat, Unknown
41	Fourth Seat, Left Side
42	Fourth Seat, Middle
43	Fourth Seat, Right Side
48	Fourth Seat, Other
49	Fourth Seat, Unknown
50	Sleeper Section of Cab (Truck)
51	Other Passenger in Enclosed Passenger or Cargo Area
52	Other Passenger in Unenclosed Passenger or Cargo Area
53	Other Passenger in Passenger or Cargo area, Unknown whether or not Enclosed
54	Trailing Unit
55	Riding on Exterior of Vehicle
56	Appended to a Motor Vehicle for Motion
98	Not Reported
99	Reported as Unknown

Definition: This element identifies the location of this person in or on the vehicle.

Remarks: Seating Position is determined by the location of the occupant in relation to the seat row and the forward longitudinal axis of the vehicle. (See **Figure 27**)

More than one person may be assigned the same seating position; however, this is allowed only when a person is sitting on someone's lap (e.g., child on mother's lap). See Remarks under <u>RESTRAINT SYSTEM USE</u> and <u>DRIVER LEVEL - RELATED FACTORS</u> for situations where the case material identifies improper usage of seating or restraints (two people sharing the same restraint, two people sitting abreast in the same seat, or on one another's lap, etc.).

If the case material does not specifically state that one person was on the lap of another, then see the discussion and tables below to address these situations.

In seating rows designated for only two passengers, use 11 (Front Seat, Left Side), 13 (Front Seat, Right Side), 21 (Second Seat, Left Side), 23 (Second Seat, Right Side), 31 (Third Seat, Left Side), 33 (Third Seat, Right Side), 41 (Fourth Seat, Left Side), 43 (Fourth Seat, Right Side), or 51 (Other Passenger in enclosed passenger or cargo area).

11 (**Front Seat, Left Side**) is typically thought of as the driver seating position. This is also used for an assumed driver of a hit-and-run vehicle unless evidence indicates a different position for the person or people. Note: For motorcycle occupants, see passage below.

18 (Front Seat, Other), 28 (Second Seat, Other), 38 (Third Seat, Other), and 48 (Fourth Seat, Other) are used to record the position of someone sitting on the floor or lying across the seat. In addition, enter these attributes when two or more people are sitting abreast of one another in the same seating location (as opposed to on or in someone's lap), since only one occupant can be assigned the seat's position. These attributes are also used if there is only one seat in the seating row (bucket, pedestal, etc.), and the occupant was in the area but not in the seat. This situation could occur because of vehicle design or seat removal.

19 (Front Seat, Unknown), 29 (Second Seat, Unknown), 39 (Third Seat, Unknown), and 49 (Fourth Seat, Unknown) are used to record the position of someone when the seating row is known; but, the seat position is not known and 18 (Front Seat, Other), 28 (Second Seat, Other), 38 (Third Seat, Other), and 48 (Fourth Seat, Other) do not apply. The tables below provide coding guidance for situations when more than one person is reported as occupying the same seat position. Note that if the report identifies that one person is sitting in another's lap (e.g., child on mother's lap) both occupants may be assigned the same seat position.

Several People in Front Left (Driver's Seat)

Situation: You know who the driver is; however, it is unknown if other person is seated side-by-side with driver or on the driver's lap:

Person	Seating Position
The Driver	Front, Left (11)
Other Person	Front, Unknown (19)

Situation: You don't know who the driver is, and it is unknown if side-by-side or on another's lap:

Person	Seating Position
Unknown	Front, Unknown (19)
Unknown	Front, Unknown (19)

Several People in Other Seats

Situation: If you know one is in another's lap - Both get same Seating Position.

Situation: If you don't know if they are sitting side-by-side or in another's lap - Both get that row, unknown.

Situation: If you know they are sitting side-by-side and only one had a restraint:

Person	Seating Position
Person with restraint	As indicated
Other Person	That row, other

Situation: If you know they are sitting side-by-side and both had restraints:

Person	Seating Position
Oldest Person	As indicated
Other Person	That row, other

Situation: If you know they are sitting side-by-side and neither had restraints:

Person	Seating Position
Oldest Person	As indicated
Other Person	That row, other

50 (**Sleeper Section of Cab [Truck**]) is used if the occupant's vehicle is a medium or heavy truck and has a cab sleeper, and this occupant is in the sleeper section at the time of the crash.

51 (Other Passenger in Enclosed Passenger or Cargo Area) is used when an occupant is in the fifth or higher numbered seat row, in an enclosed area where no defined seating exists or using a fold-down type seat in its folded-down position. This attribute is also used for bus passengers in undetermined seating (not driver) and for bus occupants that fall from an open door.

Note: People in treatment compartment of an ambulance, code as **51** (**Other Passenger in Enclosed Passenger or Cargo Area**). (See examples under RELATED FACTORS - PERSON (MV OCCUPANT) LEVEL attribute <u>092</u> (<u>Person in Ambulance Treatment Compartment</u>).)

52 (Other Passenger in Unenclosed Passenger or Cargo Area) is used when an occupant is in the fifth or higher numbered seat row, in an unenclosed area where no defined seating exists or using a fold-down type seat in its folded-down position. Examples include passenger riding in an open pickup bed, top of open double-decker bus, etc.

If seating in the vehicle is longitudinal rather than lateral, use the basic idea of a vehicle interior being divided laterally into roughly equal thirds and visualize lateral rows of seats to determine what seat position is the best descriptor.

For rearward facing seats, use the basic idea described in the previous paragraph to describe the occupant's seat position.

If a seat row has more than three designated seat positions, the occupants should have their positions assigned as usual for the left and right positions, while the two center positions would be entered as Other (i.e., 18 (Front Seat, Other), 28 (Second Seat, Other), 38 (Third Seat, Other), 48 (Fourth Seat, Other), or 51 (Other Passenger in Enclosed Passenger or Cargo Area)) depending upon the seat row.

Guidance for NCSA Body Type 80-90

For <u>NCSA BODY TYPE 80-90</u> (e.g., Motorcycles, ATV/ATC) enter the driver as **11** (**Front Seat, Left Side**); sidecar passengers as **13** (**Front Seat, Right Side**); any seated passengers behind the driver as **21** (**Second Seat, Left Side**), and a passenger on the lap of the driver (in front of) as **11** (**Front Seat, Left Side**). **55** (**Riding on Exterior of Vehicle**) is applicable to a motorcycle or ATC occupant riding on the fenders or handlebars.

54 (**Trailing Unit**) is used when an occupant is in or on a trailing unit (i.e., <u>VEHICLE</u> <u>TRAILING</u>, for this occupant's vehicle must be coded ≥ 1 , one or more trailing units).

55 (**Riding on Exterior of Vehicle**) is used when an occupant is riding on a fender, the boot of a convertible, etc.

56 (**Appended to a Motor Vehicle for Motion**) is used when this person is appended to the motor vehicle at the onset of the unstabilized situation with the intention of using the motor vehicle's motion to initiate movement or to gain propulsion, momentum, speed, etc. (e.g., "skitching"). The person may be appended by any means (hand grasp, tow rope, etc.), and could be using a non-motorist device (bicycle, skateboard, hoverboard, sled, etc.) at, and during, the time they appended to the Motor Vehicle for the purpose of motion. It must be clear that they were appended at the onset of the unstabilized situation. This code excludes people riding on the roof, trunk, hood, tailgate, etc., which should be coded as SEATING POSITION **55** (Riding on Exterior of Vehicle).

If the case material does not show the seating row of a passenger and there is no other information about seating position, (e.g., in the narrative/diagram), then use **98** (**Not Reported**).

98 (Not Reported) Check to see if <u>99 (Reported as Unknown)</u> is more appropriate for the situation.

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported.**"

Code **98** (**Not Reported**) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).

99 (**Reported as Unknown**) is used if the investigating officer indicates that this occupant's seating position is unknown.

Consistency Checks (See Section 400):

Error ID	IF	THEN
1Q0F	PERSON TYPE equals 01, and vPIC BODY CLASS equals 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 69 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport/Adventure/Supermoto/On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 90 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 104 (Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle),	SEATING POSITION must not equal 12-56, 99.
1R0P	SEATING POSITION equals 51, and vPIC BODY CLASS equals 016 (Bus), 068 (Streetcar / Trolley), or 73 (Bus-School Bus), or FINAL STAGE BODY CLASS equals 016 (Bus), 068 (Streetcar / Trolley), or 73 (Bus- School Bus),	INJURY SEVERITY must not equal 0, 9.
2M0F	PERSON TYPE equals 01,	SEATING POSITION must not equal 21-56, 98, or 99.

Error ID	IF	THEN
2Q0F	PERSON TYPE equals 02 or 03, and vPIC BODY CLASS equals 001 (Convertible/Cabriolet), 003 (Coupe), 005 (Hatchback/Liftback/Notchback), 010 (Roadster), 013 (Sedan/Saloon), 060 (Pickup), 095 (Cargo Van), 105 (Off-road Vehicle - Recreational Off-Road Vehicle (ROV)), 108 (Motorhome), 111 (Step Van / Walk-in Van), 117 (Limousine), 126 (Off-road Vehicle - Farm Equipment), or 127 (Off-road Vehicle - Construction Equipment), or FINAL STAGE BODY CLASS equals 060 (Pickup) 095 (Cargo Van), 108 (Motorhome), 111 (Step Van / Walk-in Van), or 117 (Limousine),	SEATING POSITION must not equal 31-50.
3Q0F	SEATING POSITION equals 50 (Sleeper Section of Cab [Truck]),	vPIC BODY CLASS should equal 011 (Truck) or 066 (Truck-Tractor), or FINAL STAGE BODY CLASS should equal 011 (Truck) or 066 (Truck-Tractor), and POWER UNIT GVWR_FROM and POWER UNIT GVWR_To should equal 13-18.
3R0P	AIR BAG DEPLOYED does not equal 20, 98, or 99,	SEATING POSITION should not equal 12, 22, 32, 41-56.
3S0P	SEATING POSITION equals 55, 56,	EJECTION must equal 8.
4Q0F	PERSON TYPE equals 02, and vPIC BODY CLASS equals 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport/Adventure/Supermoto/On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 90 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 100 (Motorcycle - Enclosed Three Wheeled / Enclosed Autocycle), 103 (Motorcycle - Unenclosed Three Wheeled / Open Autocycle), 104 (Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle),	SEATING POSITION should equal 13, 21, 54, 55, or 56.

Error ID	IF	THEN
4R0P	SEATING POSITION equals 54,	VEHICLE TRAILING must not equal 0 or 9.
4W6P	any RELATED FACTORS-PERSON LEVEL (MV Occupant) equals <i>0</i> 21 or <i>0</i> 89,	PERSON TYPE must equal 3, SEATING POSITION must equal 11, and UNIT TYPE must equal 2, 3, or 4.
5M1G	SPECIAL USE equals 21 and PERSON TYPE equals 01,	SEATING POSITION should equal 13.
5M2G	SPECIAL USE equals 06, and PERSON TYPE equals 02, and SEATING POSITION equals 51,	at least one RELATED FACTORS - PERSON LEVEL should equal 092 or 094.
5M3G	SPECIAL USE equals 06, and PERSON TYPE equals 01 or 02, and SEATING POSITION equals 11-19,	at least one RELATED FACTORS - PERSON LEVEL should equal 094, or at least one RELATED FACTORS - DRIVER LEVEL should equal 094.
5Q0F	PERSON TYPE equals 02, and vPIC BODY CLASS equals 016 (Bus), 068 (Streetcar / Trolley), or 73 (Bus-School Bus), or FINAL STAGE BODY CLASS equals 016 (Bus), 068 (Streetcar / Trolley), or 73 (Bus-School Bus),	SEATING POSITION must equal 12-18, 51, 52, 54, 55, 56, 98, or 99.
6Q0F	PERSON TYPE equals 02 or 03, and vPIC BODY CLASS equals 011 (Truck) or 066 (Truck-Tractor), or FINAL STAGE BODY CLASS equals 011 (Truck) or 066 (Truck- Tractor),	SEATING POSITION must not equal 31-49.
7Q0F	PERSON TYPE equals 09,	SEATING POSITION must equal 19, 98, or 99.
P030	SPECIAL USE is not equal to 21 and PERSON TYPE equals 01,	SEATING POSITION should not equal 12-19.
P040	PERSON TYPE equals 02, 09,	SEATING POSITION should not equal 11.
P060	SEATING POSITION equals 18, 28, 38, 48, 50-54,	RESTRAINT SYSTEM USE Subfield-1 Type of Restraint System in Use should not equal 01, 03.
P061	SEATING POSITION equals 55 or 56,	RESTRAINT SYSTEM USE Subfield 1-Type of Restraint System in Use must equal 20.
P062	SEATING POSITION equals 56,	PERSON TYPE must equal 02.

Error ID	IF	THEN
P094	EJECTION equals 8,	SEATING POSITION must equal 55 or 56, or vPIC BODY CLASS must equal 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport/Adventure/Supermoto/On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 104 (Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle).
P260	SEATING POSITION equals 18, 19, or 99,	AIR BAG DEPLOYED should equal 20, 98, 99.
P270	SEATING POSITION equals 21-23, 28, 29, 31-33, 38, 39, 41-43, 48, 49, 50, 54-56, 98, or 99,	AIR BAG DEPLOYED must not equal 01.
P280	AIR BAG DEPLOYED equals 01,	SEATING POSITION must equal 11-19.
P290	AIR BAG DEPLOYED equals 01-03, 07-09, and vPIC BODY CLASS equals 001 (Convertible/Cabriolet), 002 (Minivan), 003 (Coupe), 005 (Hatchback/Liftback/Notchback), 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 008 (Crossover Utility Vehicle (CUV)), 009 (Van), 010 (Roadster), 011 (Truck), 013 (Sedan/Saloon), 015 (Wagon), 060 (Pickup), 117 (Limousine), 119 (Sport Utility Truck (SUT)), or FINAL STAGE BODY CLASS equals 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 008 (Crossover Utility Vehicle (CUV), 009 (Van), 011 (Truck), 015 (Wagon), 060 (Pickup), 117 (Limousine), or 119 (Sport Utility Truck (SUT)), and VEHICLE MODEL YEAR equals 1998 or newer,	SEATING POSITION should equal 11, 13, 21, 23, 31 or 33.

Error ID	IF	THEN
P340	SEATING POSITION equals 50, 52-54,	RESTRAINT SYSTEM USE Subfield-1 Type of Restraint System in Use should equal 20.
U130	UNLIKELY: SEATING POSITION equals 41-43, 48.	
U350	UNLIKELY: INJURY SEVERITY equals 1-6, and SEATING POSITION equals 98.	
V310	SEATING POSITION equals 54 and VEHICLE TRAILING equals 1-4,	AIR BAG DEPLOYED must equal 20.
V320	vPIC BODY CLASS equals 011 (Truck), 016 (Bus), 066 (Truck-Tractor), 068 (Streetcar / Trolley), 73 (Bus-School Bus), 95 (Cargo Van), 108 (Motorhome), or 111 (Step Van / Walk-in Van), or FINAL STAGE BODY CLASS equals 011 (Truck), 016 (Bus), 066 (Truck-Tractor), 068 (Streetcar / Trolley), 73 (Bus-School Bus), 95 (Cargo Van), 108 (Motorhome), or 111 (Step Van / Walk-in Van), and POWER UNIT GVWR_from and GVWR_to equals 13 to 18, and SEATING POSITION does not equal 11, 13, or 98,	AIR BAG DEPLOYED should equal 20 or 98.

Consistency Check (FARS Only) (See Section 400):

Error ID	IF	THEN
7M1F	PERSON TYPE equals 03, and SEATING POSITION is not equal to 11 or 13, and INJURY SEVERITY does not equal 4,	DRUG TEST STATUS must not equal 8, any DRUG SPECIMEN must not equal 96, and any DRUG TEST RESULTS must not equal 095.

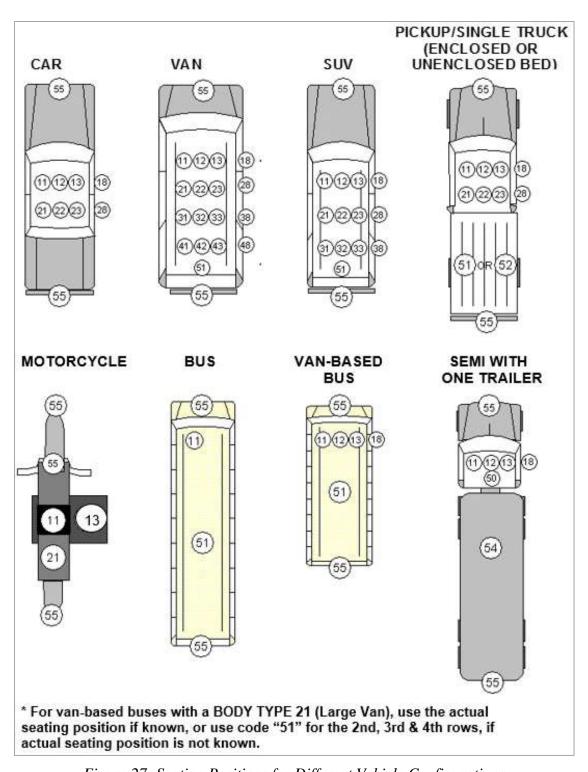


Figure 27: Seating Positions for Different Vehicle Configurations

P10 - Restraint System Use

FORMAT: Subfield 1: 2 numeric; Subfield 2: 1 numeric

SAS NAME: Person.REST_USE, Person.REST_MIS

ELEMENT VALUES:

Subfield 1 - Type of Restraint System in Use

Codes	Attributes
20	None Used/Not Applicable
03	Shoulder and Lap Belt Used
01	Shoulder Belt Only Used
02	Lap Belt Only Used
06	Racing-Style Harness Used
08	Restraint Used - Type Unknown
10	Child Restraint System - Forward Facing
11	Child Restraint System - Rear Facing
12	Booster Seat
04	Child Restraint - Type Unknown
97	<u>Other</u>
98	Not Reported
99	Reported as Unknown

Subfield 2 - Any Indication of Mis-Use?

Codes	Attributes
7	None Used/Not Applicable
0	No Indication of Mis-Use
1	Yes, Indication of Mis-Use

Definition: This element records the restraint equipment in use by the occupant and any indication of mis-use of the available restraint system, at the time of the crash.

Remarks: This element excludes occupants of motor vehicles with <u>NCSA BODY TYPE</u> 80-84, 88-91. Occupants of motor vehicles such as autocycles, ROVs, and go-karts may use a belt restraint system along with a helmet. For occupants of these vehicles, record both P10 RESTRAINT SYSTEM USE and <u>P11 HELMET USE</u>. This applies even if the State only requires and records helmet use.

Subfield 1: Type of Restraint System in Use

Definition: This subfield records the restraint system in use by the occupant at the time of the crash.

Remarks: For occupants using a restraint but using it improperly or the restraint is not appropriate for the person, record the applicable restraint used and identify mis-use in <u>Subfield 2</u>. For examples, see the table <u>Subfield 1</u> and <u>2</u> Example Scenarios below.

20 (None Used/Not Applicable) is used when the case material indicate that the occupant did not use a restraint. This includes situations where the occupant of that seat position did not use the available restraint, or that no restraint was available in the seat position of this occupant.

Also use this attribute for people who are riding in the sleeper section of the cab of a truck, for people who are riding on the exterior of the vehicle, and for people in unenclosed cargo areas, such as a bed of a pickup truck where a restraint would not be present to use, even if the corresponding police crash report field is blank.

NOTE: This element records the restraint equipment in use by the occupant. For code **20** (**None Used/Not Applicable**), the "Not Applicable" does not refer to items or equipment in use that are irrelevant to restraint use. For example, if this person was not in a <u>NCSA BODY TYPE</u> of <u>80-91</u>, <u>96</u>, or <u>97</u>, and the PCR notes that this person was wearing a helmet or other protective/preventive equipment irrelevant to restraint use, then this does not answer the question of if this person was using a restraint or not. In this case, code this person as <u>98 (Not Reported)</u>, because a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute for this element.

- **03** (**Shoulder and Lap Belt Used**) is used when the occupant is restrained by a standard 3-point shoulder belt and lap belt connected to a buckle.
- **01** (Shoulder Belt Only Used) is used when the occupant is restrained only by a shoulder belt.
- **02** (Lap Belt Only Used) is used when the occupant is restrained only by a lap belt.
- **06** (Racing-Style Harness Used) is used when the occupant restraint system in use consists of a 5-Point Seat Belt, 4-Point Latch Harness, 3-5-Point Race Harness, Off-Road Race Harness, 3-Point Non-Retractable Seat Belt, or other similar device rather than a 3-point shoulder and lap belt system.
- **08** (**Restraint Used Type Unknown**) is used when the case material indicate that some type of restraint was in use, but the type of restraint is not clear.
- 10 (Child Restraint System Forward Facing) is used when a child passenger is seated in a forward-facing child safety seat. This does not imply correct use or placement of the seat. Codes 10, 11, 12, and 04 take precedence over other types of restraints.
- 11 (Child Restraint System Rear Facing) is used when a child passenger is seated in a rearward facing child safety seat. This does not imply correct use or placement of the seat. Codes 10, 11, 12, and 04 take precedence over other types of restraints.
- 12 (Booster Seat) is used when a child passenger is seated in a "belt-positioning seat" that positions a child on a vehicle seat to improve the fit of the child in a lap and shoulder seat belt system. This does not imply correct use or placement of the seat. Codes 10, 11, 12, and 04 take precedence over other types of restraints.

04 (**Child Restraint - Type Unknown**) is used when a child passenger is seated in a child safety seat; however, the type used (e.g., forward, rear, or booster, etc.) is not known. This does not imply correct use or placement of the seat. **Codes 10, 11, 12, and 04 take precedence over other types of restraints.**

97 (**Other**) is used when the case material indicated that some other type of restraint not listed was being used at the time of the crash.

If the case material does not show the restraint system of injured or uninjured driver or passengers and there is no other information about restraint system (e.g., in the narrative/diagram), then use **98** (Not Reported).

If a police crash report data element is coded with the attribute "Other" but the officer does not specify what this refers to:

- 1. Code **97** (**Other**) if the police crash report attribute choices can be matched to or include all the attributes in FARS/CRSS.
- 2. Code **98** (**Not Reported**) if the police crash report choices cannot be matched to or include all the attributes in FARS/CRSS.

98 (Not Reported) Check to see if <u>20 (None Used/Not Applicable)</u> or <u>99 (Reported as Unknown)</u> are more appropriate for the situation.

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**."

Code **98** (**Not Reported**) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).

99 (**Reported as Unknown**) is used when the case material indicate that the restraint system use was unknown for this vehicle occupant.

Guidelines When Police and EMS/M.E. Differ:

Occasionally, information from EMS personnel or medical examiners (M.E.) includes statements about protection/restraint use; for example, if EMS arrived and removed victims before police arrived or the M.E. reports definite indications of belt usage. If the PCR leaves RESTRAINT SYSTEM USE blank or is marked as Unknown, then the EMS/M.E. assessment may be used rather than coding 98 (Not Reported) or 99 (Reported as Unknown).

Rules of thumb are as follows, unless you have information to the contrary:

If the M.E./EMS report that a restraint was used but the Police report "NOT USED" or "UNKNOWN," then accept the M.E./EMS assessment. On the other hand, if the M.E./EMS report "NOT USED" but the Police report that a restraint was used, then try to

verify the police assessment that a restraint was used. If the Police report that a restraint was used or was not used but the M.E./EMS report "UNKNOWN," then accept the Police assessment.

The vehicle's decoded VIN data provided in *RBIS* may be used as a source to assist in coding this element when paired with reported information on the police crash report. For example, the officer in the narrative reports that all occupants were "properly restrained" and the VIN identifies that the vehicle is equipped with lap and shoulder belts.

Subfield 2 Any Indication of Mis-use?

Definition: This subfield indicates any mis-use of the available restraint system for this person.

Remarks:

7 (None Used/Not Applicable) is used when <u>Subfield 1 Type of Restraint System in Use</u> is coded as 20 (None Used/Not Applicable), 98 (Not Reported), or 99 (Reported as Unknown).

0 (**No Indication of Mis-Use**) is used when the case material positively indicate that the restraints were used properly by this person, when the case material identifies that the restraints were being used but don't indicate any mis-use (i.e., an absence of information regarding mis-use), or when the case material report that the restraints were being used but it is unknown if the restraints were mis-used by this person. Do not use this attribute when the restraints were not used (see **7** (**None Used/Not Applicable**)).

1 (Yes, Indication of Mis-use) is used when the case material indicate that the restraints were mis-used at the time of the crash. An indication of 1 (Yes) requires a positive response in the case material. Do not use this attribute when the restraints were not used (see 7 (None Used/Not Applicable)).

Subfield 1 and 2 Example Scenarios

Scenario	Restraint System Use	Mis-use
Automatic shoulder harness and a manual belt were available. The shoulder harness was used but the lap belt was not.	01 (Shoulder Belt Only Used)	1 (Yes)
"Safety Belt" is checked on the PCR. It is not known what this represents and no clarification in the narrative. No mention of mis-use.	08 (Restraint Used - Type Unknown)	0 (No)
3-point lap and shoulder belt was available, and the driver had the shoulder belt portion of the seatbelt behind his back.	02 (Lap Belt Only Used)	1 (Yes)
Two people are secured in one 3-point lap and shoulder belt.	03 (Shoulder and Lap Belt Used)	1 (Yes)
A child was in a booster seat but not using the vehicle's restraint system.	12 (Booster Seat)	1 (Yes)
The child restraint system was properly secured to the vehicle in the forward-facing position; however, the child was not using the 5-point harness system.	10 (Child Restraint System - Forward Facing)	1 (Yes)

Scenario	Restraint System Use	Mis-use
A 1-year-old child is in the center back seating position without a child seat and using just a lap belt.	02 (Lap Belt Only Used)	1 (Yes)
The investigating officer states the child restraint system was not properly secured in the vehicle. No clarification on type.	04 (Child Restraint Type Unknown)	1 (Yes)
3-point lap and shoulder belt was available, and the driver was sitting on the lap belt portion of the seatbelt.	01 (Shoulder Belt Only Used)	1 (Yes)

Error ID	IF	THEN
2R0P	RESTRAINT SYSTEM USE Subfield 1 Type of Restraint System in Use equals 01-06 or 08-12,	vPIC BODY CLASS must not equal 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 (Off- Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport/Adventure/Supermoto/On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 097 (Off-road Vehicle - Snowmobile), 098 (Motorcycle - Street), 104 (Motorcycle - Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle).
2R1P	RESTRAINT SYSTEM USE Subfield 2 Any Indication of Mis-Use equals 1,	RESTRAINT SYSTEM USE Subfield 1 Type of Restraint System in Use must equal 01-06, 08-12, 97.
2R3P	RESTRAINT SYSTEM USE Subfield 1-Type of Restraint System in Use equals 1-4, 6, 8, 10-12, or 97;	RESTRAINT SYSTEM USE Subfield 2 - Any Indication of Mis-Use must equal 0 or 1.
2S3P	RESTRAINT SYSTEM USE Subfield 1-Type of Restraint System in Use equals 20, 98, or 99,	RESTRAINT SYSTEM USE Subfield 2 - Any Indication of Mis-Use must equal 7.
2S4P	AGE equals 0-4 and RESTRAINT SYSTEM USE Subfield 1-Type of Restraint System in Use does not equal 04, 10, 11, 12, 20, 98, or 99,	RESTRAINT SYSTEM USE Subfield 2 - Any Indication of Mis-Use must equal 1.

Error ID	IF	THEN
2S5P	AGE equals 5-7 and RESTRAINT SYSTEM USE Subfield 1-Type of Restraint System in Use does not equal 04, 10, 12, 20, 98, or 99,	RESTRAINT SYSTEM USE Subfield 2 - Any Indication of Mis-Use must equal 1.
3M0F	PERSON TYPE equals 01,	RESTRAINT SYSTEM USE Subfield 1 Type of Restraint System in Use must not equal 04, 10-12.
D570	any VIOLATIONS CHARGED equals 83,	not all occupants of this vehicle should have RESTRAINT SYSTEM USE Subfield-1 Type of Restraint System in Use equal to 01-06, 08, 10-12.
P01F	RESTRAINT SYSTEM USE Subfield-1 Type of Restraint System in Use equals 01-06, 08, <i>or</i> 10-12,	EJECTION should equal 0 or 7.
P020	PERSON TYPE equals 02, 03, 09, and RESTRAINT SYSTEM USE Subfield-1 Type of Restraint System in Use equals 04, 10-12,	AGE should be less than 010, or equal to 998 or 999.
P050	EJECTION equals 1,	RESTRAINT SYSTEM USE Subfield-1 Type of Restraint System in Use should not equal 01-06, 08, 10-12.
P060	SEATING POSITION equals 18, 28, 38, 48, 50-54,	RESTRAINT SYSTEM USE Subfield-1 Type of Restraint System in Use should not equal 01, 03.
P061	SEATING POSITION equals 55 or 56,	RESTRAINT SYSTEM USE Subfield-1 Type of Restraint System in Use must equal 20.
P340	SEATING POSITION equals 50, 52-54,	RESTRAINT SYSTEM USE Subfield 1 Type of Restraint System in Use should equal 20.
U170	UNLIKELY: RESTRAINT SYSTEM USE Subfield-1 Type of Restraint System in Use equals 01.	
U694	UNLIKELY: AGE equals 0 and RESTRAINT SYSTEM USE Subfield-1 Type of Restraint System in Use equals 01-03, 06, 08, 20, 97, 98, 99, or blank and [SEX equals 2 and AGE equals 5-72 for at least one other occupant in the vehicle].	

Error ID	IF	THEN
V951	vPIC BODY CLASS equals 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport/Adventure/Supermoto/On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 097 (Off-road Vehicle - Snowmobile), 098 (Motorcycle - Street), 104 (Motorcycle - Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle),	RESTRAINT SYSTEM USE Subfield 1-Type of Restraint System in Use must equal 20 and Subfield 2 - Any Indication of Mis-Use must equal 7.

Consistency Check (FARS Only) (See Section 400):

Error ID	Error Message
U520	UNLIKELY: RESTRAINT SYSTEM USE Subfield-1 Type of Restraint System in Use equals 98 <i>if not a created record and</i> HIT AND RUN does not equal 1.

P11 - Helmet Use

FORMAT: Subfield 1: 2 numeric; Subfield 2: 1 numeric **SAS NAME:** Person.HELM_USE, Person.HELM_MIS

ELEMENT VALUES: Subfield 1 - Helmet Use

Codes	Attributes
20	Not Applicable
17	No Helmet
05	DOT-Compliant Motorcycle Helmet
16	Helmet, Other than DOT-Compliant Motorcycle Helmet
19	Helmet, Unknown if DOT-Compliant
98	Not Reported
99	Reported as Unknown if Helmet Worn

Subfield 2 - Any Indication of Mis-Use?

Codes	Attributes
7	None Used/Not Applicable
0	No Indication of Mis-Use
1	Yes, Indication of Mis-Use

Definition: This element records the helmet use, and any indications of mis-use of the helmet, by motor vehicle occupants of *NCSA* BODY TYPES 80-91, 96, and 97 at the time of the crash.

Remarks: Motorcycle helmets that are compliant with Federal Motor Vehicle Safety Standards typically weigh approximately 3 lbs, have an inner liner at least one-inch thick of firm polystyrene foam, have an inside label that states the manufacturer, model, and date of manufacture, and have a DOT sticker on the back of the helmet.

Occupants of motor vehicles such as autocycles, ROVs, and go-karts may use a belt restraint system along with a helmet. For occupants of these vehicles, record both <u>P10 RESTRAINT SYSTEM USE</u> and <u>P11 HELMET USE</u>. This applies even if your State only requires and records helmet use.

Subfield 1: Helmet Use

Definition: This subfield records the helmet use by motor vehicle occupants of <u>NCSA BODY</u> TYPES 80-91, 96, and 97 at the time of the crash.

Remarks:

- **20** (**Not Applicable**) is used when the case material indicate that this person was an occupant of a motor vehicle with a *NCSA* BODY TYPE other than 80-91, 96, or 97.
- **17** (**No Helmet**) is used when the case material indicate that the occupant was not wearing a helmet.
- **05** (**DOT-Compliant Motorcycle Helmet**) is used when the case material indicate this occupant was wearing a motorcycle helmet that is compliant with Federal Motor Vehicle Safety Standards. It must be specifically indicated to be "DOT-Compliant" in the case material to code this attribute, otherwise use **19** (**Helmet, Unknown if DOT-Compliant**).
- **16** (**Helmet**, **Other than DOT-Compliant Motorcycle Helmet**) is used when the case material indicate this occupant was wearing a motorcycle helmet that is not a DOT-compliant helmet. This also would include bicycle helmets, skateboard helmets, and novelty helmets.
- **19** (**Helmet, Unknown if DOT-Compliant**) is used when the case material indicate this occupant was wearing a motorcycle helmet, but the case material does not identify if it is a DOT-compliant motorcycle helmet.
- **98** (**Not Reported**) is used if the case material does not show the helmet use of injured or uninjured driver or passengers and there is no other information about helmet use (e.g., in the narrative/diagram). Check to see if <u>20</u> (Not Applicable) or <u>99</u> (Reported as Unknown if Helmet <u>Worn</u>) is more appropriate for the situation.

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "Not Reported."

Code **98** (**Not Reported**) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).
- **99** (**Reported as Unknown if Helmet Worn**) is used when the case material indicate that helmet use was unknown for this person.

Guidelines When Police and EMS/M.E. Differ:

Occasionally, information from EMS personnel or medical examiners (M.E.) includes statements about helmet use. For example, if EMS arrived and removed victims before police arrived or the M.E. reports definite indications of helmet usage. If the PCR leaves HELMET USE blank or is marked as Unknown, then the EMS/M.E. assessment may be used rather than coding <u>98 (Not Reported)</u> or <u>99 (Reported as Unknown if Helmet Worn)</u>.

Rules of thumb are as follows, unless you have information to the contrary:

If the M.E./EMS report that a helmet was used but the Police report "NOT USED" or "UNKNOWN," then accept the M.E./EMS assessment. On the other hand, if the M.E./EMS report "NOT USED" but the Police report that a helmet was used, then try to verify the police assessment that a helmet was used. If the Police report that a helmet was used or was not used but the M.E./EMS report "UNKNOWN," then accept the Police assessment.

Subfield 2 Any Indication of Mis-Use?

Definition: This subfield records any indications of mis-use of the helmet used by motor vehicle occupants of *NCSA* BODY TYPES 80-91, 96, and 97 at the time of the crash.

Remarks:

7 (None Used/Not Applicable) is used when the case material indicate that this person was an occupant of a motor vehicle with a <u>NCSA BODY TYPE</u> other than 80-91, 96, or 97, or when an occupant of a vehicle with a <u>NCSA BODY TYPE</u> of 80-91, 96, or 97 was coded in <u>Subfield 1</u> as **17 (No Helmet)**, **98 (Not Reported)**, or **99 (Reported as Unknown if Helmet Worn)**.

0 (**No Indication of Mis-Use**) is used when the case material positively indicate that the helmet was used properly by this person, when the case material identifies that the helmet was being used but don't indicate any mis-use (i.e., an absence of information regarding mis-use), or when the case material report that the helmet was being used but it is unknown if the helmet was mis-used by this person. Do not use this attribute when the helmet was not used (see <u>7 (None Used/Not Applicable)</u>). Using an inappropriate type of helmet (e.g., wearing a bicycle helmet while riding a motorcycle) is not by itself an indication of mis-use.

1 (Yes, Indication of Mis-Use) is used when the case material indicate that the helmet was misused at the time of the crash. An indication of 1 (Yes) requires a positive response in the case material. Do not use this attribute when the helmet was not used (see 7 (None Used/Not Applicable)). Using an inappropriate type of helmet (e.g., wearing a bicycle helmet while riding a motorcycle) is not by itself an indication of mis-use.

Example:

The investigating officer states the operator of the motorcycle had the helmet on backwards.

Error ID	IF	THEN
2S2P	HELMET USE Subfield 2-Any Indication of Mis-Use equals 1,	HELMET USE Subfield 1 - Helmet Use must equal 05, 16, or 19.
U720	UNLIKELY: AGE equals 0 and HELMET USE Subfield 1-Helmet Use equals 05, 16, 17, 19, 98, 99, or blank and [SEX equals 2 and AGE equals 5-72 for at least one other occupant in the vehicle].	

Error ID	IF	THEN
2S6P	HELMET USE Subfield 1 Helmet Use equals 5, 16, or 19,	HELMET USE Subfield 2 Any Indication of Mis-Use must equal 0 or 1.
2S0P	HELMET USE Subfield 1-Helmet Use equals 05, 16, 17, 19, or 99,	then AIR BAG DEPLOYED should equal 20, 98.
2S1P	HELMET USE Subfield 1-Helmet Use equals 17, 98, or 99,	HELMET USE Subfield 2-Any Indication of Mis-Use must equal 7.
981P	vPIC BODY CLASS equals 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport/Adventure/Supermoto/On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 097 (Off-road Vehicle - Snowmobile), 098 (Motorcycle - Street), 104 (Moped), 105 (Off-road Vehicle - Recreational Off-Road Vehicle (ROV)), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle),	HELMET USE Subfield 1-Helmet Use must equal 05, 16, 17, 19, 98, or 99.

Error ID	IF	THEN
982P	vPIC BODY CLASS does not equal 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 (Off- Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport/Adventure/Supermoto/On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 097 (Off- road Vehicle - Snowmobile), 098 (Motorcycle - Street), 100 (Motorcycle - Enclosed Three Wheeled / Enclosed Autocycle), 103 (Motorcycle - Unenclosed Three Wheeled / Open Autocycle), 104 (Moped), 105 (Off-road Vehicle - Recreational Off-Road Vehicle (ROV)), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 124 (Off-road Vehicle - Go Kart), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle),	HELMET USE Subfield 1-Helmet Use must equal 20 and HELMET USE Subfield 2 - Any Indication of Mis-Use must equal 7.

Error ID	IF	THEN
V050	HELMET USE Subfield 1-Helmet Use equals 05, 16, 17, 19, or 99,	vPIC BODY CLASS must equal 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 (Off- Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport/Adventure/Supermoto/On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long- distance racing)), 087 (Motorcycle - Small/Minibike), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 097 (Off-road Vehicle - Snowmobile), 098 (Motorcycle - Street), 100 (Motorcycle - Enclosed Three Wheeled / Enclosed Autocycle), 103 (Motorcycle - Unenclosed Three Wheeled / Open Autocycle), 104 (Moped), 105 (Off-road Vehicle - Recreational Off-Road Vehicle (ROV)), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 124 (Off-road Vehicle - Go Kart), 125 (Motorcycle - Unknown Body Type), 996 (Motorized Bicycle), or 997 (Other).

Consistency Check (FARS Only) (See Section 400):

Error ID	Error Message
U730	UNLIKELY: HELMET USE Subfield 1-Helmet Use equals 98 <i>if not a Created Record and</i> HIT AND RUN does not equal 1.

P12 - Air Bag Deployed

FORMAT: 2 numeric

SAS NAME: Person.AIR_BAG

ELEMENT VALUES:

Codes	Attributes
01	<u>Deployed-Front</u>
02	Deployed-Side (door, seatback)
03	Deployed-Curtain (roof)
07	Deployed-Other (knee, airbelt, etc.)
08	<u>Deployed-Combination</u>
09	Deployment-Unknown Location
20	Not Deployed
98	Not Reported
99	Reported as Deployment Unknown

Definition: This element is used to record air bag deployment for this person as reported in the case material.

Remarks: Code this element regardless of the motor vehicle's <u>NCSA BODY TYPE</u> or the age of the motor vehicle. When an air bag deployment is reported somewhere in the vehicle, and the narrative or other case material does not specify/clarify a seating position or occupant associated with the deployment, then code <u>98 (Not Reported)</u> is applied.

Air Bag(s) Deployed for This Seat Position

<u>01 (Deployed-Front)</u>, <u>02 (Deployed-Side)</u>, <u>03 (Deployed-Curtain)</u>, <u>07 (Deployed-Other)</u>, <u>08 (Deployed-Combination)</u>, and <u>09 (Deployment-Unknown Location)</u> are used only if you have indication in the available information that an air bag deployed for this occupant's seat position (not for others in the vehicle.) There may be multiple air bags available for this occupant's seat position.

<u>01 (Deployed-Front)</u>, <u>02 (Deployed-Side)</u>, <u>03 (Deployed-Curtain)</u>, and <u>07 (Deployed-Other)</u> are used if case material indicate that an air bag deployed for this person from only one of these locations.

01 (**Deployed-Front**) refers to an air bag forward of a first-row occupant. The driver frontal air bag is located in the hub of the steering wheel. The right front passenger frontal air bag is located in the dashboard (instrument panel).

02 (**Deployed-Side** (**door**, **seatback**)) refers to an air bag mounted in the outboard side of the seat or in the door. Side impact air bags located between <u>seating positions</u> 11 and 13 within the inboard seatbacks or center console designed to mitigate occupant versus occupant injury are also collected in this attribute.

In a <u>convertible body type</u>, a head impact curtain may deploy upward from the top of the door panel near the lower edge of the side glazing. This type of head protection is coded <u>03 (Deployed-Curtain (roof)</u>), even though the air bag is located in the side door panel.

03 (**Deployed-Curtain** (**roof**)) refers to a head only, side impact air bag for outboard occupants. These are usually mounted in the roof rail above the side windows, deploying between the glazing and the occupant. These look like a curtain when deployed and are designed to help protect an adult's head in a side-impact crash. This includes a head impact curtain in a **convertible car body type**, which deploys upward from the door panel near the lower edge of the side glazing. A single curtain may cover one or all rows, or, a vehicle may have one for the first row with another covering multiple rearward rows.

The narrative may refer to these as a rollover curtain, roof bag, roof-rail bag, roof curtain, anti-ejection curtain, or a safety canopy. These rollover curtains are a special type of side curtain air bag with sensors that measure vehicle tilting and protect occupants from injury and ejection during a rollover crash.

07 (**Deployed-Other** (**knee**, **airbelt**, **etc.**)) is used if the case material indicate the air bag type that deployed is other than the ones listed above. If multiple "other" types of air bags deploy, use code **08** (**Deployed-Combination**) for this person.

Examples include:

- Inflatable Seat Belt/Airbelts Inflatable seat belts are currently available for outboard passengers beyond the first row. Some airbelts will deploy in either front or side collisions.
- Rear Impact Curtain This curtain helps protect the last row occupants during a rearward impact.
- Knee Air Bags/Knee Bolsters –This deploys from the lower instrument panel/dashboard.
- Anti-slide/Anti-submarine/Seat Cushion Air Bag This inflates in the seat cushion to help maintain the occupant's seating position.
- **08** (**Deployed-Combination**) is used if case material indicate that multiple air bags *of different types* deployed for this seat position.
- **09** (**Deployment-Unknown Location**) is used if an air bag did deploy for this seat position, but the origin of the air bag is not known.
- **20** (**Not Deployed**) is used if the available information indicates that no air bags deployed for this seat position.

This includes when the case material indicate there was no air bag available for this person. Crash Report terms that might be encountered include the following: Not Applicable, No Air Bag, Not Equipped, Not Present, None, Not Available/Unavailable, Not Installed, or Prior Deployment - Not Replaced.

98 (Not Reported) Check to see if 20 (Not Deployed) or <u>99 (Reported as Deployment Unknown)</u> is more appropriate for the situation.

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**."

Code **98** (**Not Reported**) in these situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 3. When an air bag deployment is reported somewhere in the vehicle and the narrative or other case material does not specify/clarify a seating position or occupant associated with the deployment, then code 98 (Not Reported) is applied.

99 (**Reported as Deployment Unknown**) is used if the investigating officer indicates that deployment of an air bag was unknown for this person or for the vehicle and there is no further information in the case material.

Error ID	IF	THEN
2S0P	HELMET USE Subfield 1 Helmet Use equals 05, 16, 17, 19, or 99,	AIR BAG DEPLOYED should equal 20, 98.
2U0P	vPIC BODY CLASS equals 004 (Low Speed Vehicle (LSV)/Neighborhood Electric Vehicle (NEV)), 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcyclestyle)), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport/Adventure/Supermoto/On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 088 (Off-road Vehicle - Go Kart), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 097 (Off-road Vehicle - Snowmobile), 098 (Motorcycle - Street), 100 (Motorcycle - Enclosed Three Wheeled / Enclosed Autocycle), 103 (Motorcycle - Unenclosed Three Wheeled / Open Autocycle), 104 (Motorcycle - Moped), 105 (Off-road Vehicle - Recreational Off-Road Vehicle (ROV)), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road Short distance, closed track racing)), 114 (Motorcycle - Competition), 124 (Off-road Vehicle - Golf Cart), 125 (Motorcycle - Unknown Body Type), 126 (Off-road Vehicle - Farm Equipment), 127 (Off-road Vehicle - Farm Equipment), 127 (Off-road Vehicle - Construction Equipment), 996 (Motorized Bicycle), or 997 (Other), or FINAL STAGE BODY CLASS equals 004 (Low Speed Vehicle (LSV)/Neighborhood Electric Vehicle (NEV)),	AIR BAG DEPLOYED should equal 20 or 98.
3R0P	AIR BAG DEPLOYED does not equal 20, 98, or 99,	SEATING POSITION should not equal 12, 22, 32, 41-56.
P260	SEATING POSITION equals 18, 19, or 99,	AIR BAG DEPLOYED should equal 20, 98, 99.
P270	SEATING POSITION equals 21-23, 28, 29, 31-33, 38, 39, 41-43, 48, 49, 50, 54-56, 98, or 99,	AIR BAG DEPLOYED must not equal 01.

Error ID	IF	THEN
P280	AIR BAG DEPLOYED equals 01,	SEATING POSITION must equal 11-19.
P290	AIR BAG DEPLOYED equals 01-03, 07-09, and vPIC BODY CLASS equals 001 (Convertible/Cabriolet), 002 (Minivan), 003 (Coupe), 005 (Hatchback/Liftback/Notchback), 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 008 (Crossover Utility Vehicle (CUV)), 009 (Van), 010 (Roadster), 011 (Truck), 013 (Sedan/Saloon), 015 (Wagon), 060 (Pickup), 117 (Limousine), 119 (Sport Utility Truck (SUT)), or FINAL STAGE BODY CLASS equals 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 008 (Crossover Utility Vehicle (CUV)), 009 (Van), 011 (Truck), 015 (Wagon), 060 (Pickup), 117 (Limousine), or 119 (Sport Utility Truck (SUT)), and VEHICLE MODEL YEAR equals 1998 or newer,	SEATING POSITION should equal 11, 13, 21, 23, 31 or 33.
V310	SEATING POSITION equals 54 and VEHICLE TRAILING equals 1-4,	AIR BAG DEPLOYED must equal 20.
V320	vPIC BODY CLASS equals 011 (Truck), 016 (Bus), 066 (Truck-Tractor), 068 (Streetcar / Trolley), 73 (Bus-School Bus), 95 (Cargo Van), 108 (Motorhome), or 111 (Step Van / Walk-in Van), or FINAL STAGE BODY CLASS equals 011 (Truck), 016 (Bus), 066 (Truck-Tractor), 068 (Streetcar / Trolley), 73 (Bus-School Bus), 95 (Cargo Van), 108 (Motorhome), or 111 (Step Van / Walk-in Van), and POWER UNIT GVWR_from and GVWR_to equals 13 to 18, and SEATING POSITION does not equal 11, 13, or 98,	AIR BAG DEPLOYED should equal 20 or 98.

P13 - Ejection

FORMAT: 1 numeric

SAS NAME: Person.EJECTION

ELEMENT VALUES:

Codes	Attributes
0	Not Ejected
1	Totally Ejected
2	Partially Ejected
3	Ejected - Unknown Degree
7	Not Reported
8	Not Applicable
9	Reported as Unknown if Ejected

Definition: This element describes the ejection status and degree of ejection for this person, excluding motorcycle occupants.

Remarks: Ejection refers to situations where forces from a crash cause occupants to be totally or partially thrown from the vehicle (including the bed of pickup trucks) during the course of the crash. This includes occupants of jeeps, go carts, snowmobiles, three- or four-wheel ATVs. **Note:** This variable excludes occupants of motorcycles.

Partial ejection refers to those instances where some part but not all of an occupant's body is, at some time during the crash sequence, outside the occupant compartment.

0 (Not Ejected) is used if the case material specifically so state for a given occupant.

If the case material does not show the ejection status of uninjured drivers or passengers, and there is no other information about ejection (e.g., in the narrative/diagram), then use <u>7 (Not Reported)</u>.

- **1 (Totally Ejected)** is used when the occupant's body is entirely outside the vehicle but may be in contact with the vehicle. This includes occupants who are not initially in the seating compartment of the vehicle (e.g., pickup beds, boot of a convertible, and people riding on open tailgates).
- **2** (**Partially Ejected**) refers to those instances where some part but not all of an occupant's body is, at some time during the crash sequence, outside the occupant compartment. This does not apply to occupants who are not initially in the seating compartment of the vehicle (e.g., pickup beds, boot of a convertible, and people riding on open tailgates), since any ejection for them is coded as **1** (**Totally Ejected**).
- **3** (**Ejected Unknown Degree**) is used when the case material indicate that an occupant is ejected but fails to discriminate between total and partial ejection.
- 7 (Not Reported) Check to see if $\frac{0}{2}$ (Not Ejected) or $\frac{9}{2}$ (Reported as Unknown if Ejected) are more appropriate for the situation.

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**."

Code **7** (**Not Reported**) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).
- **8** (**Not Applicable**) is used for people who are riding on or appended to by any means (hand grasp, tow rope, etc.) the exterior of a vehicle or for motorcycle occupants. Exterior of the vehicle includes running boards, roof, fenders, and bumpers, but not the bed of pickup trucks, open tailgate, or boot of a convertible.
- **9 (Reported as Unknown if Ejected)** is used when the case material specifically indicate unknown.

Error ID	IF	THEN
3S0P	SEATING POSITION equals 55, 56,	EJECTION must equal 8.
4S0P	vPIC BODY CLASS equals 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport/Adventure/Supermoto/On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 104 (Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle),	EJECTION must equal 8.
P01F	RESTRAINT SYSTEM USE Subfield-1 Type of Restraint System in Use equals 01-06, 08, <i>or</i> 10-12,	EJECTION should equal 0 or 7.

Error ID	IF	THEN
P050	EJECTION equals 1,	RESTRAINT SYSTEM USE Subfield-1 Type of Restraint System in Use should not equal 01-06, 08, 10-12.
P094	EJECTION equals 8,	SEATING POSITION must equal 55 or 56, or vPIC BODY CLASS must equal 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport/Adventure/Supermoto/On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 104 (Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle).

Consistency Checks (FARS Only) (See Section 400):

Error ID	IF	THEN
6S0P	EJECTION equals 1,	EXTRICATION must not equal 1, 9.
BA0P	EJECTION equals 0, 7, 8, or 9,	EJECTION PATH must equal 0.
BB0P	EJECTION equals 1-3,	EJECTION PATH must equal 1-9.

P14 - Ejection Path - FARS Only

FORMAT: 1 numeric

SAS Name: Person.EJ_PATH

ELEMENT VALUES:

Codes	Attributes
0	Ejection Path Not Applicable
1	Through Side Door Opening
2	Through Side Window
3	Through Windshield
4	Through Back Window
5	Through Back Door/Tailgate Opening
6	Through Roof Opening (sunroof, convertible top down)
7	Through Roof (convertible top up)
8	Other Path (e.g., back of pickup truck)
9	Ejection Path Unknown

Definition: This element identifies the path by which this person was ejected from the vehicle.

Remarks:

0 (**Ejection Path Not Applicable**) is used when the element **EJECTION** is coded **0** (**Not Ejected**), **7** (**Not Reported**), **8** (**Not Applicable**), or **9** (**Unknown if Ejected**). This attribute is an autofill in **RBIS**.

9 (Ejection Path Unknown) is used for ejected occupants when:

- 1. No field or coding block exists on the State's crash report to provide information to code ejection path AND no other information is available to code the element (e.g., narrative, diagram, case material); or
- 2. a field or coding block exists on the State's crash report that would provide the information needed to code ejection path, but it has been left blank, AND no other information is available to code the element (e.g., narrative, diagram, case material); or
- 3. the police indicate ejection path is unknown.

Use the following table as a guideline:

Path	Guideline
Through side door opening	all side doors
Through side window	all side windows, bus side windows
Through windshield	front windshield only
Through back window	standard rear window, back window of bronco, van

Path	Guideline
Through back door/tailgate opening	station wagon tailgate, back door of truck, back door of bronco, van
Through roof opening	(sunroof, convertible top down) t-top, targa top
Through roof	(convertible top up)
Other path	(back of pickup truck) torn-off roof, car cut in half
Ejection Path Unknown	driver's side, unspecified; passenger's side unspecified

Error ID	IF	THEN
BA0P	EJECTION equals 0, 7, 8, or 9,	EJECTION PATH must equal 0.
BB0P	EJECTION equals 1-3,	EJECTION PATH must equal 1-9.

P15 - Extrication - FARS Only

FORMAT: 1 numeric

SAS NAME: Person.EXTRICAT

ELEMENT VALUES:

Codes	Attributes
0	Not Extricated or Not Applicable
1	Extricated
9	<u>Unknown</u>

Definition: This element identifies if *equipment was* used to remove this person from the vehicle.

Remarks: Extrication refers to the use of *equipment to* remove people from the vehicles, i.e., more than just lifting or carrying person out of wreckage.

0 (**Not Extricated or Not Applicable**) is used if there is no reason to believe an occupant was extricated. Do not assume **0** (**Not Extricated or Not Applicable**) when the officer references "pinned," "wedged," or "trapped." See **9** (**Unknown**). This field is not applicable to motorcycle and ATV/ATC riders (**NCSA BODY TYPES 80-84, 88, 89, 90**).

1 (Extricated) is used when the police officer uses the word "extricated" to indicate occupant removal. Use of the term "extricated" is sufficient information to use 1 (Extricated) even if no mention of equipment is made. The only exception to this is if the analyst knows the officer used the term "extrication" not as intended for the purpose of this element. If the officer uses the term "pinned" or "wedged" or something similar, then the officer must indicate that equipment was used to remove the occupant in order to code attribute 1 (Extricated).

9 (Unknown) is to be used when the officer states that the occupant is "pinned" or "wedged," etc., and suggests that the occupant may have been removed with force but does not make it clear whether equipment was used or not.

Error	IF	THEN
<i>ID</i>		
5S0P	vPIC BODY CLASS equals 006 (Motorcycle -	EXTRICATION must equal 0.
	Standard), 012 (Motorcycle - Scooter), 069	
	(Off-road Vehicle - All Terrain Vehicle (ATV)	
	(Motorcycle-style)), 080 (Motorcycle - Sport),	
	081 (Motorcycle - Touring/Sport Touring),	
	082 (Motorcycle - Cruiser), 083 (Motorcycle -	
	Trike), 084 (Off-Road Vehicle - Dirt Bike/Off-	
	Road), 085 (Motorcycle - Dual	
	Sport/Adventure/Supermoto/On/Off-Road),	
	086 (Off-Road Vehicle - Enduro (Off-road	
	long-distance racing)), 087 (Motorcycle -	
	Small/Minibike), 090 (Motorcycle - Side Car),	
	094 (Motorcycle - Custom), 098 (Motorcycle -	
	Street), 104 (Motorcycle - Moped), 109	
	(Motorcycle - Cross Country), 110	
	(Motorcycle - Underbone), 113 (Off-road	
	Vehicle - Motorcross (Off-road short distance,	
	closed track racing)), 114 (Motorcycle -	
	Competition), 125 (Motorcycle - Unknown	
	Body Type), or 996 (Motorized Bicycle),	
6S0P	EJECTION equals 1,	EXTRICATION must not equal 1, 9.

P16/NM16 - Police Reported Alcohol Involvement

FORMAT: 1 numeric

SAS NAME: Person.DRINKING

ELEMENT VALUES:

Codes	Attributes
0	No (Alcohol Not Involved)
1	Yes (Alcohol Involved)
8	Not Reported
9	Reported as Unknown

Definition: This data element reflects only **the judgment of law enforcement** as to whether alcohol was involved or not for this person.

Remarks: The phrase "alcohol involved" means that alcohol is present in the person or presumed to be present by the police. Consequently, this data element may not agree with the alcohol test results for this person. This data element excludes interpretation of lab test results by the analyst/coder unless those results are provided by law enforcement either directly or included on the crash report form. Involvement is not an indication that alcohol was in any way a cause of the crash.

If the case material indicate that open or unopened alcoholic beverages were found in the vehicle, then this information does not by itself constitute involvement unless the police indicate that this was the basis for a determination of involvement. If the case material indicate that a preliminary breath test (PBT) was given and the officer's judgment contradicts the preliminary test, the officer's judgment will be the determining factor.

0 (No [Alcohol Not Involved]) applies if the judgment of law enforcement is that alcohol is not present in this person.

In some circumstances, it is possible for the police to give sufficient information in the report fields (such as contributing circumstances, driver/pedestrian condition, alcohol presence or use, alcohol test, etc.) or narrative to indicate that they believe alcohol is not involved without specifically mentioning "no" alcohol. In such cases, use **0** (**No** [Alcohol Not Involved]). However, if there is any question that the officer's position on alcohol involvement is "no alcohol" because of lack of information, then use **8** (Not Reported).

1 (Yes [Alcohol Involved]) applies only if the judgment of the law enforcement is that alcohol was present in this person. For example, the police indicate alcohol involvement via:

- a specific data element on the police report form such as Driver Condition,
- the police charge the driver with an alcohol-related offense,
- the police mention in the narrative section of the report that the person had been drinking,
- the police report has a positive *blood alcohol concentration* (BAC) test result (BAC>.00).

Some police crash reports have a block labeled "Alcohol/Drugs." If use is indicated, and it cannot be determined which was used (narrative, arrest/charged section, etc.), *use code* <u>8</u> (*Not Reported*). If the police report indicates that a driver was charged with DWI/DUI (driving while intoxicated, driving while impaired or driving under the influence), and no clarification is offered to indicate if the DWI/DUI was alcohol related or other drug related (e.g., a specific data element; mentioned in the narrative section; *blood alcohol concentration* results), then *use code* <u>8</u> (*Not Reported*).

8 (**Not Reported**) applies when law enforcement makes no mention of alcohol involvement in either narrative or data fields. For example, there is a specific location on the police report for assessment of alcohol, but the investigating officer fails to make either a positive or negative assessment by leaving the field blank. Also use **8** (**Not Reported**) if no block exists on the police crash report for reporting alcohol presence and no other information is available. *Check to see if 0* (*No [Alcohol Not Involved]*) or *9* (*Reported as Unknown*) are more appropriate for the situation.

Most States' practice is that passengers are not routinely assessed for the presence of alcohol or drugs. Consequently, for passengers when there is no other information regarding alcohol or drugs, use 8 (Not Reported).

Ordering a test is not the same as reporting involvement. There are instances when the police do not indicate in the police crash report whether alcohol was involved or not, but they do mention that a test was given or ordered. For example, the police may only say that an evidential test was ordered for a driver without indicating that they suspected alcohol or providing a result. The use of passive alcohol sensors (PAS) may also be mentioned as used by the police, without mention of the result. Use 8 (Not Reported) for these instances.

9 (**Reported as Unknown**) applies when law enforcement indicates in either narrative or data fields that alcohol involvement is "unknown" for this person. In general, crash reports have blocks to indicate either positive or negative alcohol involvement. However, if a crash report has a provision for the investigating officer to respond, "unknown involvement," then enter this attribute.

FARS SPECIAL INSTRUCTION:

Important Guidelines:

- Do not change the coding of this element because a positive alcohol test is obtained from the coroner, medical examiner, or State toxicology lab. A positive or negative BAC test submitted from the toxicology lab or coroner directly to the FARS analyst is not evidence of the officer's judgment.
- The police crash report, including any supplemental reports or direct contact with the police are the only valid sources.

When Police-Reported Alcohol Involvement is **8 (Not Reported)** or **9 (Reported as Unknown)**, METHOD OF ALCOHOL BY POLICE DETERMINATION attributes "1-8" are allowed. However, this should only happen when the method is stated by the police, but the involvement is not mentioned at all or stated as unknown.

Consistency Checks (See Section 400):

Error ID	IF	THEN
4X4F	any CONDITION (IMPAIRMENT) AT TIME OF CRASH (D23) equals 09,	POLICE REPORTED ALCOHOL INVOLVEMENT (P16), or POLICE REPORTED DRUG INVOLVEMENT (P19) should equal 1 for this person.
D090	VIOLATIONS CHARGED equals 11-19, and PERSON TYPE equals 01, 03,	POLICE REPORTED ALCOHOL INVOLVEMENT should equal 1, or POLICE REPORTED DRUG INVOLVEMENT should equal 1.
P072	PERSON TYPE equals 02, 03, and INJURY SEVERITY equals 0, and ALCOHOL TEST RESULT equals 996,	POLICE REPORTED ALCOHOL INVOLVEMENT should equal 0, 8.
P076	ALCOHOL TEST Subfield 2 - Test Type equals 02, 10, or 11,	POLICE REPORTED ALCOHOL INVOLVEMENT should not equal 8 or 9, and METHOD OF ALCOHOL DETERMINATION BY POLICE should equal 1 or 2.
P300	POLICE REPORTED ALCOHOL INVOLVEMENT equals 1, and INJURY SEVERITY equals 4,	ALCOHOL TEST STATUS should not equal 0.

Consistency Checks (FARS Only) (See Section 400):

Error ID	IF	THEN
P110	METHOD OF ALCOHOL DETERMINATION BY POLICE equals 1-5, 8,	POLICE REPORTED ALCOHOL INVOLVEMENT should equal 0, 1.
P200	POLICE REPORTED ALCOHOL INVOLVEMENT equals 8, 9,	METHOD OF ALCOHOL DETERMINATION BY POLICE should equal 9.

P17/NM17 - Method of Alcohol Determination by Police - FARS Only

FORMAT: 1 numeric

SAS NAME: Person.ALC_DET

ELEMENT VALUES:

Codes	Attributes
1	Evidential Test (Breath, Blood, Urine)
2	Preliminary Breath Test (PBT)
3	Standard Field Sobriety Test
4	Passive Alcohol Sensor (PAS)
5	<u>Observed</u>
8	Other (e.g., Saliva test)
9	Not Reported

Definition: This element describes **the method by which the police made the determination** as to whether alcohol was involved or not for this person.

Remarks: This variable is coded for each person involved in the crash. The police crash report and supplements are the source of information.

The purpose of this variable is to record the method by which the police made the determination in <u>POLICE-REPORTED ALCOHOL INVOLVEMENT</u> as to whether alcohol was involved or not.

It is used primarily when the <u>POLICE-REPORTED ALCOHOL INVOLVEMENT</u> variable is coded as **0** (No [Alcohol Not Involved]) or **1** (Yes [Alcohol Involved]).

Whenever <u>POLICE-REPORTED ALCOHOL INVOLVEMENT</u> is <u>0 (No [Alcohol Not Involved])</u>, try to find out how the police knew this. When Police-Reported Alcohol Involvement is <u>1 (Yes [Alcohol Involved])</u>, try to determine how the police knew this.

If <u>POLICE-REPORTED ALCOHOL INVOLVEMENT</u> is <u>8 (Not Reported)</u> or <u>9 (Reported as Unknown)</u>, then METHOD OF ALCOHOL DETERMINATION **BY POLICE** is <u>9 (Not Reported)</u>. If more than one method is used by the police to determine alcohol involvement, choose the method the police refer to when they record their assessment. If more than one method is used and they do not state which method was the basis for their alcohol determination, code the highest-ranking method used from the hierarchy (the highest ranking is "1"; the lowest is "5").

1 (Evidential Test [Breath, Blood, Urine]) is used if <u>POLICE-REPORTED ALCOHOL</u> <u>INVOLVEMENT</u> is <u>0 (No [Alcohol Not Involved])</u> or <u>1 (Yes [Alcohol Involved])</u> and the police indicate that they ordered an evidential test and their determination of alcohol involvement was based on the results of that test.

An evidential test can be a breath test on a State-approved breath test device, a blood test, or a urine test. No other tests are considered evidential.

Ordering a test is not the same as knowing the results of that test.

In order to code that the police determined their opinion based on an evidential test, there must be information that the officer had received the test results. If they haven't received test results (e.g., results are pending), then their method of determination of alcohol or drug presence was made using some method other than an evidential test.

2 (**Preliminary Breath Test [PBT]**) is used if <u>POLICE-REPORTED ALCOHOL INVOLVEMENT</u> is <u>0</u> (**No [Alcohol Not Involved]**) or <u>1</u> (**Yes [Alcohol Involved]**) and the police indicate that alcohol involvement was based upon the results of a preliminary breath test, or PBT. Preliminary breath testing devices are not yet considered evidential tests, but merely as tools for the police to help them determine whether alcohol is present or not. Many PBTs only indicate whether alcohol is present in the breath bypass (green) or fail (red) lights. Other PBTs indicate the approximate BAC in numbers. Some PBTs are of evidential quality in some States. But if the device was used only as a preliminary test and not the evidential test, then this value should be coded.

The key to coding this is the definite indication by the police that a PBT was used and was the basis (or the clinching evidence) that a driver had been drinking or not.

3 (Standard Field Sobriety Test) is used if <u>POLICE-REPORTED ALCOHOL</u> <u>INVOLVEMENT</u> is <u>**0 (No [Alcohol Not Involved])**</u> or <u>**1 (Yes [Alcohol Involved])**</u> and the police indicate that the basis for that alcohol assessment was the behavior by the driver during a Standard Field Sobriety Test (SFST).

Examples of SFSTs include the horizontal gaze nystagmus (HGN) test, walking-in-a-straight-line test, one-leg-stand test, etc. **Do not confuse 3 (Standard Field Sobriety Test) with 5 (Observed).**

4 (Passive Alcohol Sensor [PAS]) is used if POLICE-REPORTED ALCOHOL INVOLVEMENT is **0** (No [Alcohol Not Involved]) or **1** (Yes [Alcohol Involved]) and the police indicate that alcohol involvement was based upon the results of a passive alcohol sensor, or "sniffer."

The PAS devices available and in use by police are devices that look like flashlights and when held within 6 inches of the driver's mouth will detect alcohol in the breath while the driver is talking. The PAS is not considered an evidential test nor a PBT. It is not really a test, but a detector or an extension of the police officer's senses. The PAS devices are usually PASS/FAIL indicators with a red-light indicating alcohol on the breath.

The key to coding this attribute is the indication by the police that a PAS was used and was the basis for coding <u>0</u> (No [Alcohol Not Involved]) or <u>1</u> (Yes [Alcohol Involved]) for <u>POLICE-REPORTED ALCOHOL INVOLVEMENT</u>.

5 (Observed) is used if <u>POLICE-REPORTED ALCOHOL INVOLVEMENT</u> is <u>**0 (No [Alcohol Not Involved])**</u> or <u>**1 (Yes [Alcohol Involved])**</u> and the police indicate that the basis for their alcohol assessment was some observation of the driver. Do not confuse **5 (Observed)** with <u>**3 (Standard Field Sobriety Test)**</u>.

Examples of observations would be:

- Smelling alcohol on the driver's breath.
- Staggering, slurring of speech.
- The driver admitting he had been drinking.
- Other observations described by the police that would **not** be considered field sobriety tests.

Be careful not to simply assume that this is the appropriate code when some other method may have been used (e.g., breath test, PBT, PAS).

8 (Other [e.g., Saliva test]) is used if <u>POLICE-REPORTED ALCOHOL INVOLVEMENT</u> is <u>0</u> (No [Alcohol Not Involved]) or <u>1</u> (Yes [Alcohol Involved]) and the police indicate that the basis for alcohol determination was something other than the codes "1, 2, 3, 4, and 5" described above.

Examples of Other methods include:

- 1. Results of a saliva test.
- 2. Results of other tissue tests.

The key to coding this attribute is the description by the police of some other method of alcohol determination that does not fall into codes "1-5."

If a police crash report data element is coded with the attribute "Other" but the officer does not specify what this refers to:

- 1. Code **8** (Other [e.g., Saliva test]) if the police crash report attribute choices can be matched to or include all the attributes in FARS/CRSS.
- 2. Code **9** (**Not Reported**) if the police crash report choices cannot be matched to or include all the attributes in FARS/CRSS.

9 (Not Reported) is coded if <u>POLICE-REPORTED ALCOHOL INVOLVEMENT</u> is <u>8 (Not Reported)</u> or <u>9 (Reported as Unknown)</u>. It is also coded if <u>POLICE-REPORTED ALCOHOL INVOLVEMENT</u> is <u>0 (No [Alcohol Not Involved])</u> or <u>1 (Yes [Alcohol Involved])</u> and there is no indication in the police report or any documents as to how the police made the alcohol assessment.

Witness Statements:

Witness Statements may or may not be used by the police to make a determination of alcohol involvement. See clarification on the use of information provided by witnesses in section <u>103</u>. <u>Data Sources</u>. If the police did use witness statements alone to make a determination of alcohol involvement, use <u>8 (Other)</u>.

If the police mention, but did not use witness statements and there is no other indication of how a determination was made, use **9** (Not Reported).

There are instances when the police do not indicate in the police crash report whether alcohol was involved or not, but they do mention that a test was given or ordered.

FOR EXAMPLE: The police may only say that an evidential test was ordered for a driver without indicating that they suspected alcohol or what the result was. The use of passive alcohol sensors (PAS) may also be mentioned as used by the police, without mention of the result.

Codes 1-8 may be used for METHOD OF ALCOHOL DETERMINATION BY POLICE when <u>POLICE-REPORTED ALCOHOL INVOLVEMENT</u> is coded as <u>8 (Not Reported)</u> or <u>9</u> (Reported as Unknown), if this fits the case.

This should only happen when the method is stated by the police, but the involvement is not mentioned at all or stated as unknown.

Error ID	IF	THEN
P076	ALCOHOL TEST Subfield 2 - Test Type equals 02, 10, or 11,	POLICE REPORTED ALCOHOL INVOLVEMENT should not equal 8 or 9, and METHOD OF ALCOHOL DETERMINATION BY POLICE should equal 1 or 2.
P110	METHOD OF ALCOHOL DETERMINATION BY POLICE equals 1-5, 8,	POLICE REPORTED ALCOHOL INVOLVEMENT should equal 0, 1.
P200	POLICE REPORTED ALCOHOL INVOLVEMENT equals 8, 9,	METHOD OF ALCOHOL DETERMINATION BY POLICE should equal 9.
P400	METHOD OF ALCOHOL DETERMINATION BY POLICE equals 1 or 2,	ALCOHOL TEST Subfield 1-Test Status must be 2.
U681	UNLIKELY: METHOD OF ALCOHOL DETERMINATION BY POLICE equals 8.	

P18/NM18 - Alcohol Test

FORMAT: 3 sets: 1 set, 1 numeric, 1 set, 2 numeric, 1 set, 3 numeric

SAS NAME: Person.ALC_STATUS, Person.ATST_TYP, Person.ALC_RES

ELEMENT VALUES:

Subfield 1 - Test Status

Codes	Attributes
0	Test Not Given
2	<u>Test Given</u>
8	Not Reported
9	Reported as Unknown if Tested

Subfield 2 - Test Type

Codes	Attributes
00	Test Not Given
01	Blood
02	Breath Test (AC)
10	Preliminary Breath Test (PBT)
11	Breath Test, Unknown Type
03	<u>Urine</u>
04*	Vitreous
05*	Blood Plasma/Serum
06*	Blood Clot
07*	Liver
08	Other Test Type
98	<u>Unknown Test Type</u>
95	Not Reported
99	Reported as Unknown if Tested

*FARS ONLY ATTRIBUTES

Subfield 3 - Test Result

Codes	Attributes
000-939	Actual Value
940	.94 or Greater
996	Test Not Given
997	AC Test Performed, Results Unknown
998	Positive Reading with No Actual Value
995	Not Reported
999	Reported as Unknown if Tested

Definition for Alcohol Test Status: This element identifies if an alcohol (ethanol) test was given to this person.

Definition for Alcohol Test Type: This element identifies the type of the alcohol (ethanol) test that was used for this person.

Definition for Alcohol Test Result: This element identifies the alcohol (ethanol) test result for this person.

Remarks: When completing this element, you must have the data to fill **ALL** three subfields. Otherwise, leave all three subfields **blank** until all the data has been acquired to complete all three subfields. An ante mortem *blood alcohol concentration* result (live person) is always preferred over a postmortem *blood alcohol concentration* result (deceased person).

For alcohol tests that were initiated but not completed because of a contaminated or insufficient sample, code:

- Test Status as <u>2 (Test Given)</u>,
- the applicable Test Type, and
- code Test Results as 997 (AC Test Performed, Results Unknown).

In a circumstance where the crash report provides results from a lower order test (e.g., breath or urine) and blood was also drawn to be tested, but blood test results will not be received, it is preferred that we record the known result from the breath or urine test rather than **997** (**AC Test Performed, Results Unknown**).

Guidance on crash reported values indicating Test Refused:

Code all three Subfields as **8/95/995** (**Not Reported**), unless there is clear indication that a test was subsequently performed (<u>2 (Test Given</u>)) or not performed (<u>0 (Test Not Given</u>)). Also, select RELATED FACTORS-DRIVER LEVEL <u>060 (Alcohol and/or Drug Test Refused)</u>, RELATED FACTORS-PERSON (MV OCCUPANT) LEVEL <u>010 (Alcohol and/or Drug Test Refused)</u>, or RELATED FACTORS-PERSON (NOT A MV

OCCUPANT) LEVEL <u>010 (Alcohol and/or Drug Test Refused)</u> anytime it is indicated on the crash report that testing was refused, regardless of subsequent testing.

Subfield 1 - Test Status

Indicates whether a test was performed on this person to detect the presence of alcohol (ethanol) or not.

0 (**Test Not Given**) is used when the case material indicate an alcohol test was not given.

NOTE: Most States' practice is that "live" non-drivers are not routinely tested for alcohol. Consequently, for live non-drivers *RBIS* will auto-fill Test Status, Test Type, and Test Result as **0** (**Test Not Given**). If you happen to obtain an alcohol test result for a "live" non-driver, enter **Test Status** as **2** (**Test Given**) and the appropriate test type and results.

2 (Test Given) is used when the case material indicate an alcohol test was given.

8 (Not Reported) Check to see if $\frac{0}{1}$ (Test Not Given) or $\frac{9}{1}$ (Reported as Unknown if Tested) are more appropriate for the situation.

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**."

Code **8** (**Not Reported**) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).

9 (Reported as Unknown if Tested) is used when the case material specifically indicated "Unknown if Tested."

Subfield 2 - Test Type

Coding Hierarchy:

For all living patients, the hierarchy for preferred specimen is breath followed by blood. This is mainly for the timing of the test; breath testing is most likely to happen in close proximity to the time of the motor vehicle crash. For living patients, all other specimen locations (vitreous, liver, etc.) are not used.

For all post-mortem testing, specimen location should be verified. This is important to ensure the most accurate test is recorded. Unlike living patients, the accuracy of results is dependent on the site of the specimen. The preferred location for alcohol testing in the deceased is vitreous, followed by blood from femoral vein, then subclavian vein, and finally, heart blood. At the bottom of the hierarchy for sites of specimen testing in the deceased are liver, urine, and "other."

When more than one alcohol test exists, use the following hierarchy for Test Type:

Alcohol Testing in Living Patients:

- 1. Breath Test Types
 - <u>02 (Breath Test (AC))</u> or Evidential Breath Test
 - (Preliminary Breath Test (PBT)) See Note
 - (Breath Test, Unknown Type)
- 2. Blood Test Types
 - <u>01 (Blood)</u> or Whole Blood
 - 05 (Blood Plasma)*
 - 05 (Blood Serum)*
 - 06 (Blood Clot)*

Alcohol Testing in Deceased Patients:

- 1. Other Test Types
 - 04 (Vitreous)*
- 2. Blood Test Types

Collection location hierarchy for deceased blood collection. Note: Location of blood collection takes priority over type of blood specimen (whole blood, clot, or plasma).

- 1. Femoral Vein
- 2. Subclavian Vein
- 3. Heart
- 01 (Blood) or Whole Blood
- 06 (Blood Clot)*
- 05 (Blood Plasma)*
- 3. Other Test Types
 - <u>03 (Urine)</u>
 - 07 (Liver)*
 - 08 (Other Test Type)

Note Regarding Preliminary Breath Tests:

The rationale is that a PBT will be performed on a live subject prior to any other test type and, therefore, will automatically be closer in time to the crash. If a PBT was performed on-scene while a blood test was performed much later on a live subject, then the PBT is preferred. If the blood test is performed on a sample that is drawn at the scene or close to the crash time, whether the subject is living or dead, then the usual procedure applies to update a PBT result with an evidential blood test result (See 10 (Preliminary Breath Test) below). Without information to

^{*}Attributes 04 - 07 do not apply for CRSS coding purposes.

determine which type of breath test reported the results, (i.e., only "breath" test is reported) code 11 (Breath Test, Unknown Type).

In a circumstance where the crash report identifies results from a test (e.g., urine or other) but blood was also drawn to be tested, but blood test results will not be received, it is preferred that we record the known result from the urine or other test rather than **997 (AC Test Performed, Results Unknown)**.

The same is correct in a circumstance where you have information that casts clear doubt on the validity or reliability of the blood test, and you have results from a test of another type. For example, the blood test was spoiled or contaminated.

01 (**Blood**) is used when the case material indicate this was the type of test used to obtain a **blood** alcohol concentration.

Note that there are test types for **01** (**Blood**), **05** (**Blood Plasma/Serum**), and **06** (**Blood Clot**). If the coroner, medical examiner, or State lab reports that the test was a "blood" test (whole blood), this most likely does not refer to blood plasma, blood serum, or blood clot, but you should try to verify this. If the test was performed on blood, or if you know the results are already converted to a BAC, then code TEST TYPE as **01** (**Blood**).

02 (**Breath Test** [AC]) is used when the case material indicate this was the type of test used to obtain a *blood alcohol concentration*.

02 (**Breath Test** [AC]) is used if you have a result from an **evidential** breath test (a breath test performed on a State-approved breath test device).

Evidential breath test devices may be stationary or portable (handheld).

Usually, results from a <u>PBT device</u> are not considered evidential. These are always handheld devices. If the device was used only as a preliminary test and not an evidential test, then do not use code **02** (**Breath Test [AC]**). Without information to determine which type of breath test reported the results, (i.e., only "breath" test is reported) code <u>11</u> (<u>Breath Test, Unknown Type</u>).

03 (Urine) is used when the case material indicate this was the type of test used to obtain a **blood** alcohol concentration.

08 (Other Test Type) is used when the case material indicate a type of test used to obtain a *blood alcohol concentration* was recorded as "Other" or is indicated to be of a type other than the available attributes. This attribute would not apply to behavioral tests (field sobriety) or observations.

If a police crash report data element is coded with the attribute "Other" but the officer does not specify what this refers to:

- 1. Code **08** (**Other Test Type**) if the police crash report attribute choices can be matched to or include all the attributes in FARS/CRSS.
- 2. Code <u>95 (Not Reported)</u> if the police crash report choices cannot be matched to or include all the attributes in FARS/CRSS.

10 (**Preliminary Breath Test [PBT]**) is used when the case material indicate this was the type of test used to obtain a *BAC* and no other test is available. Update **Test Type** and corresponding **Result** if a PBT is followed by an evidential test, other than a PBT. A negative result from a PBT (no alcohol detected) is coded as **000**. Without information to determine which type of breath test reported the results, (i.e., only "breath" test is reported) code **11** (**Breath Test, Unknown Type**).

11 (**Breath Test, Unknown Type**) is used when the case material indicate that a breath test was administered, but it cannot be determined from the case material whether it was a preliminary test or an evidential test.

98 (Unknown Test Type) is used when the case material indicate a test was given and the type of test is reported as unknown or pending and the type is unobtainable. This attribute should also be used in cases where test results are given, but it cannot be determined which specimen was used in obtaining the results (e.g., blood/urine).

95 (Not Reported) Check to see if <u>0 (Test Not Given)</u> or <u>99 (Reported as Unknown if Tested)</u> are more appropriate for the situation.

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**."

Code **95** (**Not Reported**) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).

99 (**Reported as Unknown if Tested**) is used when the case material specifically indicated "Unknown if Tested."

Subfield 3 - Test Result

000-939 (Actual Value) All three decimal places should be coded in this field. Blood, urine, and vitreous test results should be represented as g/dL (North American standard). If three decimal places are not available, code the first two digits and zero fill the remaining place. For example, a reported blood alcohol concentration of .09 becomes .090. If more than three decimal places are provided, then truncate the results to three decimal places. Do not round test results. For example, a reported BAC of .0279 becomes .027.

Example Test Results Are in g/dL

g/dL	Translate to g/dL with 3 digits	Record in FARS/CRSS
.2 g/dL	.200 g/dL	200
.17 g/dL	.170 g/dL	170

Example Test Results Are in mg/dL (1mg = .001g)

mg/dL (1mg = .001g)	Translate to g/dL with 3 digits	Record in FARS/CRSS
86 mg/dL	.086 g/dL	086
140 mg/dL	.140 g/dL	140

Example Test Results Are in Other or No Units

Other Units	Translate to g/dL with 3 digits	Record in FARS/CRSS
.08 is considered g/dL	.080	080
.1% is considered g/dL	.100	100

997 (**AC Test Performed, Results Unknown**) refers to alcohol content tests that were performed but the results are reported as unknown or pending and are unobtainable (includes a "Contaminated Sample" or "Insufficient Sample"). AC Test Performed, Results Unknown can be used for any Test Type.

FARS SPECIAL INSTRUCTION:

As a general coding guideline, **do not** prematurely use Test Result "AC Test Performed, Results Unknown." It is recommended that you leave the information blank for drivers and non-motorists until the test results are received from the State lab, coroner, or police. You need to be reasonably certain that you will **never** receive the test results to use attribute "**997**" at the time of the initial coding and case entry.

995 (Not Reported) Check to see if <u>0 (Test Not Given)</u> or <u>999 (Reported as Unknown if Tested)</u> are more appropriate for the situation.

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**."

Code **995** (**Not Reported**) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).

999 (**Reported as Unknown if Tested**) is used when the case material specifically indicate "Unknown if Tested."

998 (**Positive Reading with No Actual Value**) can be used for any Test Type code where the result is indicated to be positive without a numeric value to record. This should only be used

when a final test result is returned as "positive" with no actual result to record. This can occur when a screening test is used, and it is the only test result available. This attribute is also used for a positive *BAC* expressed as a range or as less than some specific value (e.g., less than .020 g/100ml).

Some portable (handheld) breath-test devices are only Preliminary Breath Tests (PBTs) and indicate whether alcohol is present in the breath by positive (green) or negative (red) lights. Other portable breath test devices indicate the approximate *blood alcohol concentration* in numbers. When a PBT result only indicates "positive" for alcohol, with no actual *blood alcohol concentration* value, **998** (**Positive Reading with No Actual Value**) should be used. A negative PBT result should be interpreted as .000.

Before recording this value make sure that this is the appropriate value based on the <u>hierarchy</u> outlined under <u>Subfield 2 Test Type</u>.

State Law Versus Practice:

You may be aware that your State laws require testing of certain classes of crash victims. However, you may also know that the practice in your State is that the law is not observed. In such cases, you are not bound only by what the law says. You may consider State practices in your coding decisions.

Example 1: Your State law may require all fatalities to be tested for *blood alcohol concentration*, but you know that this does not happen in your State and you are unable to locate alcohol test information for this person:

In such a case, you cannot rely on the law for your coding decisions. Therefore, you should use <u>999 (Reported as Unknown If Tested)</u> rather than <u>997 (AC Test Performed, Results Unknown)</u>, or <u>996 (Test Not Given)</u>. (Test Status equals <u>9 (Reported as Unknown if Tested)</u> and Test Type equals <u>99 (Reported as Unknown if Tested)</u>).

Example 2: Most States' practice is that "live" non-drivers are not routinely tested for alcohol. Consequently, for live non-drivers when there is no mention of a test ordered by the police in the police crash report:

• Code Test Status as **0** (**Test Not Given**) and **RBIS** will auto-fill Test Type as **00** (**Test Not Given**) and Test Result as **996** (**Test Not Given**). However, if you happen to obtain an alcohol test result later, you may enter the appropriate test type and results.

Computed Estimates of Blood Alcohol Concentration:

An expert may calculate an estimate of what the *blood alcohol concentration* would have been at the time of the crash (i.e., toxicologist uses the lapse time from crash and the victim's weight to calculate the *blood alcohol concentration*). You may accept these results if the following are **all** true:

- results were reported by someone with the authority in your State to make this determination; and
- the result is considered official in your State; and
- you can support the result with official documentation, or it is reported on the police crash report (may vary from State-to-State).

Consistency Checks (See Section 400):

Error ID	IF	THEN
5T7P	ALCOHOL TEST STATUS equals 0,	ALCOHOL TEST TYPE must equal 00, and ALCOHOL TEST RESULT must equal 996.
5T8P	ALCOHOL TEST STATUS equals 9,	ALCOHOL TEST TYPE must equal 99, and ALCOHOL TEST RESULT must equal 999.
5T9P	ALCOHOL TEST STATUS equals 2,	ALCOHOL TEST TYPE must equal 01-11, 95, 98, and ALCOHOL TEST RESULT must equal 000-940, 997, 998.
5TCP	ALCOHOL TEST STATUS equals 8,	ALCOHOL TEST TYPE must equal 95, and ALCOHOL TEST RESULT must equal 995.
P071	PERSON TYPE equals 02, 04-07, 10, 11, 12, or 13, and INJURY SEVERITY does not equal 4,	ALCOHOL TEST STATUS should not equal 9, ALCOHOL TEST TYPE should not equal 99, and ALCOHOL TEST RESULT should not equal 999.
P074	PERSON TYPE equals 02, 04-07, 10, 11, 12, or 13, and INJURY SEVERITY does not equal 4,	ALCOHOL TEST STATUS must not equal 8, ALCOHOL TEST TYPE must not equal 95, and ALCOHOL TEST RESULT must not equal 995.
P076	ALCOHOL TEST Subfield 2 - Test Type equals 02, 10, or 11,	POLICE REPORTED ALCOHOL INVOLVEMENT should not equal 8 or 9, and METHOD OF ALCOHOL DETERMINATION BY POLICE should equal 1 or 2.
P077	INJURY SEVERITY equals 4, and DIED AT SCENE/EN ROUTE equals 7 or 8,	ALCOHOL TEST Subfield 2 - Test Type should not equal 02, 10, or 11.
P300	POLICE REPORTED ALCOHOL INVOLVEMENT equals 1, and INJURY SEVERITY equals 4,	ALCOHOL TEST STATUS should not equal 0.

Error ID	IF	THEN
P400	METHOD OF ALCOHOL DETERMINATION BY POLICE equals 1 or 2,	ALCOHOL TEST Subfield 1-Test Status must be 2.
U689	UNLIKELY: ALCOHOL TEST Subfield 3- Test Result equals 001-009.	
U691	UNLIKELY: ALCOHOL TEST Subfield 3- Test Result equals 010-019.	
U692	UNLIKELY: ALCOHOL TEST Subfield 3- Test Result equals 020-029.	
U693	UNLIKELY: ALCOHOL TEST Subfield 3- Test Result equals 030-039.	
U696	UNLIKELY: ALCOHOL TEST TYPE equals 01, 03, 04, 05, 06, 07, or 08, and ALCOHOL TEST RESULTS is greater than 600, and ALCOHOL TEST RESULTS not equal to 995, 996, 997, 998, or 999.	
U697	UNLIKELY: ALCOHOL TEST TYPE equals 02, 10, or 11, and ALCOHOL TEST RESULTS is greater than 300, and ALCOHOL TEST RESULTS not equal to 995, 996, 997, 998, or 999.	

Consistency Check (FARS Only) (See Section 400):

Error ID	IF	THEN
D733	at least one RELATED FACTORS - DRIVER LEVEL equals 060 and PERSON TYPE equals 01,	ALCOHOL TEST RESULT should equal 995 or at least one DRUG TEST RESULT should equal 095.

Consistency Check (CRSS Only) (See Section 400):

Error ID	IF	THEN
P078	INJURY SEVERITY equals 4,	ALCOHOL TEST Subfield 2 - Test Type should not equal 02, 10, or 11.

P19/NM19 - Police Reported Drug Involvement

FORMAT: 1 numeric

SAS NAME: Person.DRUGS

ELEMENT VALUES:

Codes	Attributes
0	No (Drugs Not Involved)
1	Yes (Drugs Involved)
8	Not Reported
9	Reported as Unknown

Definition: This data element reflects only **the judgment of law enforcement** as to whether drugs were involved or not for this person.

Remarks: This data element reflects only **the judgment of law enforcement** as to whether drugs were involved or not for this person.

The phrase "drug involvement" means that drugs are present in the person or presumed to be present by the police. Consequently, this data element may not agree with the drug test results for this person. This data element excludes interpretation of lab test results by the analyst/coder unless those results are provided by law enforcement either directly or included on the crash report form. This includes prescription and over-the-counter medications, as well as illicit substances (marijuana, cocaine, heroin, etc.). It is not an indication that the drug usage was in any way a cause of the crash.

If case material indicate that drugs were found in the vehicle, then this information does not by itself constitute involvement unless the police indicate that this was the basis for a determination of involvement.

Some police crash reports have a block labeled "Alcohol/Drugs." If use is indicated, and it cannot be determined which was used (narrative, arrest/charged section, etc.), *use code* <u>8 (Not Reported)</u>. If the police report indicates that a driver was charged with DWI/DUI (driving while intoxicated, driving while impaired, *or driving under the influence*) and no clarification is offered to indicate if the DWI/DUI was alcohol related or *other* drug related (e.g., a specific data element, mentioned in the narrative section, *blood alcohol concentration* results), then *use code* 8 (Not Reported).

0 (**No** [**Drugs Not Involved**]) applies if the judgment of law enforcement is that drugs are not present in this person.

In some circumstances, it is possible for the police to give sufficient information in the report fields (such as contributing circumstances, driver/pedestrian condition, substance use, drug test, etc.) or narrative to indicate that they believe drugs are not involved without specifically mentioning no drugs. In such cases, you may use **0** (**No** [**Drugs Not Involved**]). However, if there is any question that the officer's position on drug involvement is No because of a lack of information, then it is best to use **8** (**Not Reported**).

1 (Yes [Drugs Involved]) applies only if the police assessment is that drugs were present in this person. For example, the police indicate drug involvement via:

- a specific data element on the police report form such as Driver Condition,
- the police charge the driver with a drug-related offense,
- the police mention in the narrative section of the report that the person had been under the influence of a drug,
- the police report has a positive test result reported for drugs.

8 (Not Reported) applies when law enforcement makes no mention of drug involvement in either narrative or data fields. For example, there is a specific location on the police report for assessment of drugs, but the investigating officer fails to make either a positive or negative assessment by leaving the field blank. Also, use 8 (Not Reported) if no block exists on the police crash report for reporting drug presence and no other information is available. Check to see if O (No [Drugs Not Involved]) or O (Reported as Unknown) are more appropriate for the situation.

Most States' practice is that passengers are not routinely assessed for the presence of alcohol or drugs. Consequently, for passengers when there is no other information regarding alcohol or drugs, use 8 (Not Reported).

Ordering a test is not the same as reporting involvement. There are instances when law enforcement does not indicate in the police crash report whether drugs were involved or not, but they do mention that a test was given or ordered. For example, the police may only say that an evidential test was ordered for a driver without indicating that they suspected drugs or providing a result. Use 8 (Not Reported) for these instances.

9 (**Reported as Unknown**) applies when law enforcement indicates in either narrative or data fields that drug involvement is "unknown" for this person. In general, police reports have blocks to indicate either positive or negative drug involvement. However, if a crash report has a provision for the investigating officer to respond "unknown involvement," then enter this attribute.

FARS SPECIAL INSTRUCTION:

Important Guidelines:

- Do not change the coding of this element because a positive drug test is obtained from the coroner, medical examiner, or State toxicology lab. A positive or negative test result submitted from the toxicology lab or coroner directly to the FARS analyst is **not** evidence of the officer's judgment.
- The crash report, including any supplemental reports or direct contact with law enforcement, are the only valid sources.

When POLICE REPORTED DRUG INVOLVEMENT is **8** (Not Reported) or **9** (Reported as Unknown), all METHOD OF DRUG DETERMINATION attributes are allowed. However, this should only happen when the method is stated by the police, but the involvement is not mentioned at all or stated as unknown.

Consistency Checks (See Section 400):

Error ID	IF	THEN
4X4F	any CONDITION (IMPAIRMENT) AT TIME OF CRASH (D23) equals 09,	POLICE REPORTED ALCOHOL INVOLVEMENT (P16), or POLICE REPORTED DRUG INVOLVEMENT (P19) should equal 1 for this person.
D090	VIOLATIONS CHARGED equals 11-19, and PERSON TYPE equals 01, 03,	POLICE REPORTED ALCOHOL INVOLVEMENT should equal 1, or POLICE REPORTED DRUG INVOLVEMENT should equal 1.

Consistency Checks (FARS Only) (See Section 400):

Error	IF	THEN
ID		
BQ0P	METHOD OF DRUG DETERMINATION BY	POLICE REPORTED DRUG
	POLICE equals 8,	INVOLVEMENT must equal 0, 1, 8, 9.
BR0P	METHOD OF DRUG DETERMINATION BY	POLICE REPORTED DRUG
	POLICE equals 1-7,	INVOLVEMENT must equal 0, 1, 8.
P140	POLICE REPORTED DRUG	METHOD OF DRUG DETERMINATION BY
	INVOLVEMENT equals 8, 9,	POLICE should equal 8.
P150	POLICE REPORTED DRUG	DRUG TEST STATUS should not equal 0.
	INVOLVEMENT equals 1, and METHOD OF DRUG DETERMINATION BY POLICE	
	equals 2,	
P160	POLICE REPORTED DRUG	not all DRUG TEST RESULTS should equal
	INVOLVEMENT equals 1, and METHOD OF	001.
	DRUG DETERMINATION BY POLICE equals 2,	
P170	METHOD OF DRUG DETERMINATION BY	POLICE REPORTED DRUG
F1/0	POLICE equals 1-7,	INVOLVEMENT should equal 0, 1.
	1 Object oquals 1 7,	11., OZ, Zivilživi bilouiu oquui o, 1.

P20/NM20 - Method of Drug Determination by Police - FARS Only

FORMAT: 1 numeric

SAS NAME: Person.DRUG_DET

ELEMENT VALUES:

Codes	Attributes
1	Evidential Test (Blood, Urine)
2	Drug Recognition Expert (or Evaluator) (DRE)
3	Observed Behavior or SFST
7	<u>Other</u>
8	Not Reported

Definition: This element identifies **the method by which the police made the determination** as to whether drugs were involved or not for this person.

Remarks: This element is coded for each person involved in the crash. The police crash report and supplements are the source of information.

The purpose of this element is to record the method by which the police made the determination as to whether drugs were involved or not.

It is used primarily when the <u>POLICE REPORTED DRUG INVOLVEMENT</u> element is coded as **0** (**No [Drugs Not Involved]**) or **1** (**Yes [Drugs Involved]**).

Whenever <u>POLICE REPORTED DRUG INVOLVEMENT</u> is <u>0</u> (<u>No [Drugs Not Involved]</u>), try to find out how the police knew this. When <u>POLICE REPORTED DRUG INVOLVEMENT</u> is <u>1</u> (<u>Yes [Drugs Involved]</u>), try to determine how the police knew this.

If <u>POLICE REPORTED DRUG INVOLVEMENT</u> is <u>8 (Not Reported)</u> or <u>9 (Reported as Unknown)</u>, then Method of Drug Determination by Police is <u>8 (Not Reported)</u>. If more than one method is used by the police to determine drug involvement, choose the method the police refer to when they record their assessment. If more than one method is used and they do not state which method was the basis for their determination, code the highest-ranking method used from the hierarchy (the highest ranking is "1"; the lowest is "7").

1 (Evidential Test [Blood, Urine]) is used if <u>POLICE REPORTED DRUG INVOLVEMENT</u> is <u>0 (No [Drugs Not Involved])</u> or <u>1 (Yes [Drugs Involved])</u> and the police indicate that they ordered an evidential test and their determination of drug involvement was based on the results of that test.

Ordering a test is not the same as knowing the results of that test. In order to code that the police determined their opinion based on an evidential test, there must be information that the officer had received the test results. If they haven't received test results (e.g., results are pending), then their method of determination of alcohol or drug presence was made using some method other than an evidential test.

2 (**Drug Recognition Expert** (**or Evaluator**) (**DRE**)) is used if <u>POLICE REPORTED DRUG INVOLVEMENT</u> is <u>0</u> (**No [Drugs Not Involved]**) or <u>1</u> (<u>Yes [Drugs Involved]</u>) and the police indicate that drug involvement was based upon the results of expert opinion of a person trained to recognize impairment in drivers under the influence of drugs other than, or in addition to, alcohol.

The key to coding this attribute is the definite indication by the police that a **DRE** was used and was the basis (or the clinching evidence) that a driver had been using drugs or not.

3 (Observed Behavior or SFST) is used if <u>POLICE REPORTED DRUG INVOLVEMENT</u> is **0** (No [Drugs Not Involved]) or **1 (Yes [Drugs Involved])** and the police indicate that the basis for that drug assessment was the behavior by the driver during their contact with the person such as an SFST.

7 (Other) is used if <u>POLICE REPORTED DRUG INVOLVEMENT</u> is <u>0 (No [Drugs Not Involved])</u> or <u>1 (Yes [Drugs Involved])</u> and the police indicate that the basis for Drug determination was something other than the codes "1, 2, or 3" described above.

Examples of **7 (Other)** include:

- 1. Observations of drugs or drug use paraphernalia,
- 2. Detecting the odor of marijuana, and
- 3. Admission by the person that they used drugs.

If a police crash report data element is coded with the attribute "Other" but the officer does not specify what this refers to:

- 1. Code **7** (**Other**) if the police crash report attribute choices can be matched to or include all the attributes in FARS/CRSS.
- 2. Code **8** (**Not Reported**) if the police crash report choices cannot be matched to or include all the attributes in FARS/CRSS.

8 (Not Reported) is coded if <u>POLICE REPORTED DRUG INVOLVEMENT</u> is <u>8 (Not Reported)</u> or <u>9 (Reported as Unknown)</u>. It is also coded if <u>POLICE REPORTED DRUG INVOLVEMENT</u> is <u>0 (No [Drugs Not Involved])</u> or <u>1 (Yes [Drugs Involved])</u> and there is no indication in the police report or any documents as to how the police made the drug assessment.

Witness Statements:

Witness Statements may or may not be used by the police to make a determination of drug involvement. If the police did use witness statements alone to make a determination of drug involvement, use <u>7 (Other)</u>. See clarification on the use of information provided by witnesses in section <u>103</u>. Data Sources.

If the police mention, but did not use witness statements and there is no other indication of how a determination was made, use **8** (Not Reported).

There are instances when the police do not indicate in the police crash report whether drugs were involved or not, but they do mention that a test was given or ordered.

FOR EXAMPLE: The police may only say that an evidential test was ordered for a driver without indicating that they suspected drugs or what the result was.

Codes 1-7 may be used for METHOD OF DRUG DETERMINATION BY POLICE when <u>POLICE REPORTED DRUG INVOLVEMENT</u> is coded as <u>8 (Not Reported)</u> or <u>9 (Reported as Unknown)</u>, if this fits the case.

This should only happen when the method is stated by the police, but the Involvement is not mentioned at all or stated as unknown.

Consistency Checks (See Section 400):

Error ID	IF	THEN
BQ0P	METHOD OF DRUG DETERMINATION BY POLICE equals 8,	POLICE REPORTED DRUG INVOLVEMENT must equal 0, 1, 8, 9.
BR0P	METHOD OF DRUG DETERMINATION BY POLICE equals 1-7,	POLICE REPORTED DRUG INVOLVEMENT must equal 0, 1, 8.
P140	POLICE REPORTED DRUG INVOLVEMENT equals 8, 9,	METHOD OF DRUG DETERMINATION BY POLICE should equal 8.
P150	POLICE REPORTED DRUG INVOLVEMENT equals 1 and METHOD OF DRUG DETERMINATION BY POLICE equals 2,	DRUG TEST STATUS should not equal 0.
P160	POLICE REPORTED DRUG INVOLVEMENT equals 1, and METHOD OF DRUG DETERMINATION BY POLICE equals 2,	not all DRUG TEST RESULTS should equal 001.
P170	METHOD OF DRUG DETERMINATION BY POLICE equals 1-7,	POLICE REPORTED DRUG INVOLVEMENT should equal 0, 1.
P401	METHOD OF DRUG DETERMINATION BY POLICE equals 1,	DRUG TOXICOLOGY RESULTS Subfield 1-Test Status must be 2.

P21/NM21 - Drug Toxicology Results - FARS Only

FORMAT: 1 set 1 numeric; Unlimited, 2 numeric; Unlimited, 3 numeric **SAS NAME:** Person.DSTATUS, Drugs.DRUGSPEC, Drugs.DRUGRES

ELEMENT VALUES:

Subfield 1 - Drug Test Status

FARS Codes	Attributes
0	Test Not Given
2	<u>Test Given</u>
8	Not Reported
9	Reported as Unknown if Tested

Subfield 2 - Drug Specimen

FARS Codes	Attributes
00	Test Not Given
01	Whole Blood
02	<u>Urine</u>
11	Blood Plasma/Serum
12	Blood Clot
13	Oral Fluids
14	Vitreous
15	Liver
97	<u>Unknown Specimen</u>
98	Other Specimen
96	Not Reported
99	Reported as Unknown if Tested

Subfield 3 - Drug Test Result**

FARS Codes	Attributes
000	Test Not Given
001	Tested, No Drugs Found/Negative
100-295	Narcotic*
300-399	Depressant*
400-495	Stimulant*
500-595	Hallucinogen*

FARS Codes	Attributes
600-695	Cannabinoid*
700-795	Phencyclidine (PCP)*
800-895	Anabolic Steroid*
900-995	Inhalant*
996	Other Drug
997	Tested for Drugs, Results Unknown
998	Tested for Drugs, Drugs Found, Type Unknown/Positive
095	Not Reported
999	Reported as Unknown If Tested for Drugs

^{*} See Specific Drug Listings

Remarks: When completing this element, you must have the data to fill **ALL** three subfields. Otherwise, leave all three subfields **blank** until all the data has been acquired to complete all three subfields.

For drug tests that were initiated but not completed because of a contaminated or insufficient sample, code:

- Test Status as 2 (Test Given),
- the applicable **Specimen**, and
- code Test Results as 997(Tested for Drugs, Results Unknown).

Guidance on crash reported values indicating Test Refused:

Code all three Subfields as **8/96/095** (**Not Reported**), unless there is clear indication that a test was subsequently performed (<u>2 (Test Given</u>)) or not performed (<u>0 (Test Not Given</u>)). Also, select RELATED FACTORS-DRIVER LEVEL <u>060 (Alcohol and/or Drug Test Refused</u>), RELATED FACTORS-PERSON (MV OCCUPANT) LEVEL <u>010 (Alcohol and/or Drug Test Refused</u>), or RELATED FACTORS-PERSON (NOT A MV OCCUPANT) LEVEL <u>010 (Alcohol and/or Drug Test Refused</u>) anytime it is indicated on the crash report that testing was refused, regardless of subsequent testing.

Subfield 1 - Drug Test Status

Definition for Drug Test Status: This element identifies if a chemical test for the presence of drugs was given to this person.

0 (**Test Not Given**) is used when the case material indicate a drug test was not given. If **Test Status** is **0** (**Test Not Given**) then Specimen and Test Result will also be **00** (**Test Not Given**) and **000** (**Test Not Given**).

Most States' practice is that "live" non-drivers are not routinely tested for drugs. Consequently, for live non-drivers *RBIS* will auto-fill **Test Status**, **Specimen**, and **Test**

^{**} Test result does not include aspirin, nicotine, or ethanol. Alcohols reported other than ethanol would be classified under 996 (Other Drug).

Result as **Test Not Given**. If you happen to obtain a drug test result for a "live" non-driver, enter **Test Status** as **2** (**Test Given**) and the appropriate specimen and results.

2 (**Test Given**) is used when the case material indicate at least one specimen was tested for drugs.

8 (Not Reported) Check to see if $\frac{0}{1}$ (Test Not Given) or $\frac{9}{1}$ (Reported as Unknown if Tested) are more appropriate for the situation.

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**."

Code **8** (**Not Reported**) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).
- **9 (Reported as Unknown if Tested)** is used when the case material specifically indicate "Unknown if Tested."

Subfield 2 - Drug Specimen

You may record all reported toxicology lab specimen and their corresponding results.

Definition for Drug Specimen: This element identifies the bodily tissue or fluid used to perform a chemical test for the presence of drugs in this person.

01 (Whole Blood) is used when the case material indicate this was the specimen used to detect the presence of drugs.

Note that there are samples for **01** (**Whole Blood**), **11** (**Blood Plasma/Serum**), and **12** (**Blood Clot**). If the coroner, medical examiner, or State lab reports that the test was a "blood" test (whole blood), this most likely does not refer to blood plasma, blood serum, or blood clot, but you should try to verify this.

- **02** (Urine) is used when the case material indicate this was the specimen used to detect the presence of drugs.
- **11** (**Blood Plasma/Serum**) is used when the case material indicate this was the specimen used to detect the presence of drugs.
- **12** (**Blood Clot**) is used when the case material indicate this was the specimen used to detect the presence of drugs.
- 13 (Oral Fluids) is used when the case material indicate this was the specimen used to detect the presence of drugs.
- **14** (**Vitreous**) is used when the case material indicate this was the specimen used to detect the presence of drugs.

15 (**Liver**) is used when the case material indicate this was the specimen used to detect the presence of drugs.

97 (Unknown Specimen) is used when the case material indicate a test was given and the specimen is reported as unknown or pending and unobtainable. This attribute should also be used in cases where test results are given, but it cannot be determined which specimen was used in obtaining the results (e.g., blood/urine).

98 (Other Specimen) is used when the case material indicate a specimen used to detect the presence of drugs other than the available attributes.

If a police crash report data element is coded with the attribute "Other" but the officer does not specify what this refers to:

- 1. Code **98** (**Other Specimen**) if the police crash report attribute choices can be matched to or include all the attributes in FARS.
- 2. Code **96** (**Not Reported**) if the police crash report choices cannot be matched to or include all the attributes in FARS.

96 (Not Reported) Check to see if <u>00 (Test Not Given)</u> or <u>99 (Reported as Unknown if Tested)</u> are more appropriate for the situation.

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**."

Code **96** (**Not Reported**) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).

99 (**Reported as Unknown if Tested**) is used when the case material specifically indicate "Unknown if Tested."

Subfield 3 - Drug Test Result

Definition for Drug Test Result: This element records the result of a chemical test for the presence of drugs in this person.

**NOTE: This element excludes Nicotine, Aspirin and Ethanol. Alcohols reported other than ethanol would be classified under 996 (Other Drug).

NOTE: You may record as many separate drug test results and their corresponding specimen as are reported. Use the translation table to assign the three-digit code. If the drug is not on the list, use **996 (Other Drug)**. Caffeine and mild analgesics are coded **996 (Other Drug)**.

000 (**Test Not Given**) is used when the case material indicate a drug test was not given. If Test Status is **0** (**Test Not Given**) then Specimen and Test Result will also be **00** (**Test Not Given**) and **000** (**Test Not Given**).

001 (**Tested, No Drugs Found/Negative**) is used when the case material indicate that a test for the presence of drugs was "negative" or that no drugs were found.

997 (**Tested for Drugs, Results Unknown**) refers to drug tests that were performed but the results are reported as unknown or pending and are unobtainable. **997** (**Tested for Drugs, Results Unknown**) can be used for any Specimen.

NOTE: As a general coding guideline, do not prematurely use Test Result 997 (Tested for Drugs, Results Unknown). It is recommended that you leave the information blank until the test results are received from the State lab, M.E., coroner, or police. You need to be reasonably certain that you will never receive the test results to use code "997" at the time of the initial coding and case entry. Examples of this situation would be if the test results are returned indicating a "Contaminated Sample" or "Insufficient Sample."

998 (**Tested for Drugs, Drugs Found, Type Unknown/Positive**) can be used for any Specimen code where the result is indicated to be positive without an actual drug identified to record. This value may be used more than once to record multiple substances found.

NOTE: This should only be used when a final test result is returned as "positive" with no actual result to record. This can occur when a test is used to identify the presence of any one of several substances without identifying which substances are presumed present and this is the only test result available. Before recording this value make sure that this is the **final** test result.

095 (Not Reported) Check to see if <u>000 (Test Not Given)</u> or <u>999 (Reported as Unknown if Tested)</u> are more appropriate for the situation.

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**."

Code **095** (**Not Reported**) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).

999 (**Reported as Unknown if Tested for Drugs**) is used when the case material specifically indicate "Unknown if Tested."

Examples for Interpreting Drug Tests

IF YOU HAVE:	Status	Specimen 1	Result 1	Specimen 2	Result 2	Specimen 3	Result 3	Specimen 4	Result 4
Blood and urine tests and the results are the same for both. Example: Blood - Fentanyl; Urine - Fentanyl	2	01	151	02	151				
Blood and urine tests and the results are different for both. Example: Blood - Hexobarbital, Benzoylecgonine, Morphine; Urine - Cocaine	2	01	333	01	402	01	177	02	407
Both blood and urine tests and the results are given but not linked to either tests. Example: Results - Codeine and Ibogaine	2	97	128	97	509				
Blood and vitreous tests. Example: Blood - Diazepam; Vitreous - Cocaine	2	01	321	14	407				
Urine test only and the results: Example: Urine - Benzodiazepines	2	02	304						
Oral Fluid Test only. Example: Oral Fluid - Amphetamine	2	13	401						
Not tested for drugs.	0	00	000						
Not Reported for drugs	8	96	095						
Reported as Unknown if tested for drugs.	9	99	999						
Tested for Drugs, Results Unknown. Example: Blood test - Yes; Results - Unavailable	2	01	997						
Tested for Drugs, Drugs Found, Type of Drug Unknown. Example: Urine test - Yes; Drugs found - Yes	2	02	998						
Both Whole Blood and Urine Tests, one negative and one positive. Example: Blood - Negative; Urine - Benzoylecgonine	2	01	001	02	402				

Consistency Checks (See Section 400):

Error ID	IF	THEN
7M1F	PERSON TYPE equals 03, and SEATING POSITION is not equal to 11 or 13, and INJURY SEVERITY does not equal 4,	DRUG TEST STATUS must not equal 8, any DRUG SPECIMEN must not equal 96, and any DRUG TEST RESULTS must not equal 095.
ВТОР	DRUG TEST STATUS equals 2,	any DRUG SPECIMEN must not equal 00 or 99 and any DRUG TEST RESULT must not equal 000 or 999.
BT1P	DRUG TEST STATUS equals 0,	there must exist only one DRUG SPECIMEN equal to 00 and one DRUG TEST RESULT equal to 000 for this person.
BT2P	DRUG TEST STATUS equals 8,	there must exist only one DRUG SPECIMEN equal to 96 and one DRUG TEST RESULT equal to 095 for this person.
BT3P	DRUG TEST STATUS equals 2,	at least one DRUG SPECIMEN must equal 01, 02, 11-15, 96, 97, 98, and one corresponding DRUG TEST RESULT must equal 001, 095, 100-295, 300-395, 400-495, 500-595, 600-695, 700-795, 800-895, 900-995, 996-998.
ВТ6Р	DRUG TEST STATUS equals 9,	there must exist only one DRUG SPECIMEN equal to 99 and one DRUG TEST RESULT equal to 999 for this person.
BT8P	DRUG TEST RESULT does not equal 996,	only one record with the same DRUG SPECIMEN and DRUG TEST RESULT must exist.
D733	at least one RELATED FACTORS - DRIVER LEVEL equals 060 and PERSON TYPE equals 01,	ALCOHOL TEST RESULT should equal 995 or at least one DRUG TEST RESULT should equal 095.
P073	PERSON TYPE equals 02, 04-07, 10, 11, 12, or 13, and INJURY SEVERITY does not equal 4,	DRUG TEST STATUS should not equal 9, and any DRUG SPECIMEN should not equal 99, and any DRUG TEST RESULTS should not equal 999.
P075	PERSON TYPE equals 02, 04-07, 10, 11, 12, 13, or 19, and INJURY SEVERITY does not equal 4,	DRUG TEST STATUS must not equal 8, any DRUG SPECIMEN must not equal 96, and any DRUG TEST RESULTS must not equal 095.
P150	POLICE REPORTED DRUG INVOLVEMENT equals 1 and METHOD OF DRUG DETERMINATION BY POLICE equals 2,	DRUG TEST STATUS should not equal 0.

Error ID	IF	THEN
P160	POLICE REPORTED DRUG INVOLVEMENT equals 1, and METHOD OF DRUG DETERMINATION BY POLICE equals 2,	not all DRUG TEST RESULTS should equal 001.
P401	METHOD OF DRUG DETERMINATION BY POLICE equals 1,	DRUG TOXICOLOGY RESULTS Subfield 1-Test Status must be 2.

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Petrichloral	356
"Petroleum Products (gasoline, kerosene)"	903

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Pregabalin 396 Proheptazine 205	Poppy Straw Concentrate	238
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	Pregabalin	396
Properidine 206	Proheptazine	205
	Properidine	206

Drug	Code
Propiram	207
Propoxyphene (Dextropropoxyphene, bulk (non-dosage forms))	208
Propylhexedrine	425
Psilocybin	519
Psilocyn	520
Pyrovalerone	426
"Pyrrolidine (PCPy, PHP, TCPy)"	706
Quazepam	361
Racemethorphan	209
Racemoramide	210
Racemorphan	211
Remifentanil	239
Secobarbital	362
Secobarbital & noncontrolled active ingred.	397
Secobarbital suppository dosage form	398
Sibutramine	385
SPA	427
Stanolone	822
Stanozolol	823
Stenbolone	852
Stimulant compounds previously excepted	440
"Stimulants, Type Unknown"	495
Sufentanil	212
Sulfondiethylmethane	363
Sulfonethylmethane	364
Sulfonmethane	365
Talbutal	366
Temazepam	367
Tested; Drugs Found; Type Unknown/Positive	998

Drug	Code
Tested; Results unknown	997
Testolactone	824
Testosterone	825
Tetrahydrocannabinols (THC)	605
Tetrahydrogestrinone	853
Tetrazepam	368
Thebacon	213
Thebaine	214
Thenylfentanyl	369
Thiamylal	370
Thienyl-cyclohexyl-piperidine	708
Thienyl Cyclohexyl Pyrrolidine	710
Thiofentanyl	215
Thiopental (Pentothal)	371
Thiophene	707
Tiletamine/Zolazepam (Telazol)	372
Tilidine	216
Traizolam	373
Trenbolone	826
Trimeperidine	217
Trimethoxy amphetamine	521
Tybamate	374
Unknown if Tested for Drugs	999
Vinbarbital	434
Volatile Solvents (toluene)	900
Zaleplon	386
Zolpidem	387
Zopiclone	399

Drugs by Category Type - FARS Only

100 - 295	Narcotics Narcotics
300 - 399	Depressants
400 - 495	Stimulants
500 - 595	Hallucinogens
600 - 695	Cannabinoid
700 - 795	PCP
800 - 895	Anabolic Steroids
900 - 995	Inhalant
095, 996 - 999	Not Reported/Other/Unknown

100-295 Narcotics

Code	Drug
100	Acetaminophen + Codeine
101	Acetorphine
102	Acetyl-alpha-methylfentanyl
103	Acetyldihydrocodeine
104	Acetylmethadol
105	Alfentanil
106	Allylprodine
107	Alpha-Methylfentanyl
108	Alphamethythiofentanyl
109	Alpha-meprodine
110	Alphamethadol
111	Alphaprodine
112	Anileridine
113	APC + Codeine
114	Aspirin + Codeine
117	Benzylmorphine
118	Beta-hydroxyfentanyl
119	Betacetylmethadol
120	Beta-meprodine
121	Betamethadol
122	Betaprodine
123	Bezitramide
124	Buprenorphine
125	Carfentanil
126	Clonitazene
127	Codeine methylbromide
128	Codeine
129	Cyprenorphine
130	Desomorphine
131	Dextromoramide
133	Diampromide

Code	Drug
134	Diethylthiambutene
135	Difenoxin
136	Dihydrocodeine
137	Dihydromorphine
138	Dimenoxadol
139	Dimepheptanol (Racemethadol)
140	Dimethylthiambutene
141	Dioxaphetyl Butyrate
142	Diphenoxylate
143	Dipipanone
144	Diprenorphine Hydrochloride
145	Drotebanol
146	Ethylmethylthiambutene
147	Ethylmorphine
148	Etonitazene
149	Etorphine
150	Etoxeridine
151	Fentanyl
152	Fiorinal + Codeine
153	Furethidine
154	Heroin (Diacetylmorphine)
155	Hydrocodone
156	Hydromorphinol
157	Hydromorphone
158	Hydroxypethidine
159	Isomethadone
160	Ketobemidone
161	Levomoramide
162	Levophenacylmorphan
163	Levomethorphan
164	Levorphanol Tartrate

Code	Drug
165	Meperidine (Pethidine)
166	Metazocine
167	Methadone
168	Methyldesorphine
169	Methyldihydromorphine
170	Methylfentanyl
171	Methyl-phenyl-propionoxypiperidine (MPPP)
172	Metopon
173	Moramide - intermediate
174	Morpheridine
175	Morphine methylsulfonate
176	Morphine methylbromide
177	Morphine
178	Myrophine
179	Nalorphine
180	Nicocodeine
181	Nicomorphine
182	Noracymethadol
183	Norlevorphanol
184	Normethadone
185	Normorphine
186	Norpipanone
187	Opium
188	Oxymorphone
189	Oxycodone
190	Para-fluorofentanyl
191	Paregoric
192	Parepectolin
193	Pentazocine
195	Phenadoxone
196	Phenampromide

Code	Drug
197	Phenanthrine
198	Phenazocine
199	Phenomorphan
200	Phenoperidine
202	Pholcodine
203	Piminodine
204	Piritramide
205	Proheptazine
206	Properidine
207	Propiram
208	Propoxyphene (Dextropropoxy-phene, bulk (non-dosage forms))
209	Racemethorphan
210	Racemoramide
211	Racemorphan
212	Sufentanil
213	Thebacon
214	Thebaine
215	Thiofentanyl
216	Tilidine
217	Trimeperidine
218	Butorphanol
220	Alphacetylmethadol
221	Beta-Hydroxy-3-methylfentanyl
222	Codeine & Isoquinoline
223	Codeine-N-oxide
224	Dextropropoxyphene (dosage forms)
226	Dihydroetrophine
227	Diprenorphine
228	Levo-alphacetylmethadol
229	Levorphanol
230	Methylthiofentanyl

Code	Drug
231	Morphine-N-oxide
232	Opium extract
233	Opium Fluid Extract
234	Opium Poppy
235	Opium Tincture
236	Phenylethyl-phenyl-acetoxypiperidine (PEPAP)
237	Poppy Straw
238	Poppy Straw Concentrate
239	Remifentanil
240	Codeine combination product 90 mg/du
241	Codeine preparations - 200 mg/100 ml or 100 gm
242	Difenoxin 1 mg/25ug AtSO4/du
243	Difenoxin preparations - 0.5 mg/25 ug AtSO4/du
244	Dihydrocodeine combination product 90 mg/du
245	Dihydrocodeine preparations 10 mg/100 ml or 100 gm
246	Diphenoxylate preparations 2.5 mg/25 ug AtSO4

Code	Drug
247	Ethylmorphine combination product 15 mg/du
248	Ethylmorphine preparations 100 mg/100 ml or 100 gm
249	Hydrocodone & isoquinoline alkaloid<15 mg/du
250	Hydrocodone combination product<15 mg/du
251	Meperidine intermediate-A
252	Meperidine intermediate-B
253	Meperidine intermediate-C
254	Methadone intermediate
255	Morphine combination product/ 50 mg/100 ml or gm
256	Opium combination product 25 mg/du
257	Opium preparations - 100 mg/ 100 ml or/100 gm
258	Opium, granulated
259	Opium, powdered
260	Oripavine
295	"Narcotics, Type Unknown"

300-399 Depressants

Code	Drug
300	Alprazolam
301	Amobarbital
302	Barbital
303	Barbiturates
304	Benzodiazepines
305	Benzylfentanyl
306	Bromazepam
307	Butabarbital (secbutabarbital)
308	Butalbital
309	Camazepam
310	Carbamate
311	Chloral betaine
312	Chloral Hydrate
313	Chlordiazepoxide
314	Chlorhexadol
315	Clobazam
316	Clonazepam
317	Clorazepate Dipotassium
318	Clotiazepam
319	Cloxazolam
320	Delorazepam
321	Diazepam
322	Estazolam
323	Ethchlorvynol
324	Ethinamate
325	Ethyl Ioflazepate
326	Fiorinal
327	Fludiazepam
328	Flunitrazepam
330	Glutethimide

Code	Drug
331	Halazepam
332	Haloxazolam
333	Hexobarbital
334	Hydroxyzine
335	Ketazolam
336	Loprazolam
337	Lorazepam
338	Lormetazepam
339	Mebutamate
340	Mecloqualone
341	Medazepam
342	Mephobarbital (Methylphenobarbital)
343	Meprobamate
344	Methaqualone
345	Metharbital
346	Methohexital
347	Methyprylon
348	Midazolam
349	Nimetazepam
350	Nitrazepam
351	Nordiazepam
352	Oxazepam
353	Oxazolam
354	Paraldehyde
355	Pentobarbital
356	Petrichloral
357	Phencyclohexylamine
358	Phenobarbital
359	Pinazepam
360	Prazepam

Code	Drug
361	Quazepam
362	Secobarbital
363	Sulfondiethylmethane
364	Sulfonethylmethane
365	Sulfonmethane
366	Talbutal
367	Temazepam
368	Tetrazepam
369	Thenylfentanyl
370	Thiamylal
371	Thiopental (Pentothal)
372	Tiletamine/ Zolazepam (Telazol)
373	Traizolam
374	Tybamate
376	Carisoprodol
377	Gamma-Hydroxybutyric Acid (GHB)
378	Amobarbital & non-controlled active ingred.
379	Aprobarbital

Code	Drug
380	Barbituric Acid Derivative
383	Dexfenfluramine
384	Flurazepam
385	Sibutramin
386	Zaleplon
387	Zolpidem
388	Amobarbital suppository dosage form
389	Butobarbital (butethal)
390	Embutramide
391	Gamma Hydroxybutyric Acid preparations
393	Pentobarbital & noncontrolled active ingred.
394	Pentobarbital suppository dosage form
395	"Depressants, Type Unknown"
396	Pregabalin
397	Secobarbital & noncontrolled active ingred.
398	Secobarbital suppository dosage form
399	Zopiclone

400-495 Stimulants

Code	Drug
400	Amphetamine Sulfate
401	Amphetamine
402	Benzoylecgonine
403	Benzphetamine
404	Cathine (Norpseudoephedrine)
405	Chlorphentermine
406	Clortermine
407	Cocaine
408	Dextroamphetamine
409	Diethylpropion

Code	Drug
410	Ecgonine
411	Fencamfamin
412	Fenethylline
413	Fenfluramine
414	Fenproporex
415	Mazindol
416	Mefenorex
417	Methamphetamine
418	Methylphenidate
419	N-Ethylamphetamine

Code	Drug
420	Pemoline
421	Phendimetrazine
422	Phenmetrazine
423	Phentermine
424	Pipradrol
425	Propylhexedrine
426	Pyrovalerone
427	SPA
428	Aminorex
429	Cathinone
430	Coca Leaves
431	Dichloralphenazone

Code	Drug
432	Methcathinone
433	Modafinil
434	Vinbarbital
435	Methylone
436	Lisdexamfetamine
437	Methoxy-
	Methylenedioxyamphetamine
438	N, N-Dimethylamphetamine
	(Dimethylamphetamine)
439	N-Benzylpiperazine
440	Stimulant compounds previously
	excepted
495	"Stimulants, Type Unknown"

500-595 Hallucinogens

Code	Drug
500	Amphetamine Variants
501	Bufotenine
503	Diethyltryptamine (DET)
504	Dimethoxyamphetamine (DMA)
505	Dimethyltryptamine (DMT)
506	DMA
507	Dronabinol
508	N-Ethyl-3piperdyl benzilate
509	Ibogaine
511	Lysergic Acid
512	Mescaline
513	Methylenedioxymethamphetamine (MDMA)
514	Methoxyamphetamine (PMA)
515	Methylenedioxyamphetamine (MDA)
516	Nabilone
517	Peyote

Code	Drug
518	Phenylacetone (P2P)
519	Psilocybin
520	Psilocyn
521	Trimethoxy amphetamine
522	Ketamine
523	Alpha-Ethyltryptamine
524	Bromo-dimethoxyamphetamine
525	Bromo-dimethoxyphenethylamine
527	Lysergic Acid Amide
528	Lysergic Acid Diethylamide (LSD)
529	Methylaminorex
530	Meth-dimethoxyamphetamine
531	Methylenedioxy-N-ethylamphetamine
533	N-Ethyl-1-phenylcyclohexylamine
534	Alpha-methyltryptamine
535	Dimethoxyethylamphetamine

Code	Drug
536	Dimethoxy-(n)- propylthiophenethylamine
537	Methoxy-NN-diisopropyltryptamine

Code	Drug
538	N-Hydroxymethylenedioxy- amphetamine
539	N-Methylpiperidyl benzilate
595	"Hallucinogens, Type Unknown"

600-695 Cannabinoid

Code	Drug
600	Delta 9
601	Hashish Oil
602	Hashish
603	Marijuana/Marihuana

Code	Drug
604	Marinol
605	Tetrahydrocannabinols (THC)
695	"Cannabinoid, Type Unknown"

700-795 PCP

Code	Drug
700	Ethylamine
701	Parahexyl (Synhexyl)
702	Phencyclidine
703	Phencyclidine Analogs
704	Phenylcyclohexylamine
705	Piperidinocyclohexane-carbonitrile (PCC)

Code	Drug
706	"Pyrrolidine (PCPy, PHP, TCPy)"
707	Thiophene
708	Thienyl Cyclohexyl/piperidine
709	Phenylcyclohexyl-Pyrrolidine
710	Thienyl Cyclohexyl Pyrrolidine
795	"PCP, Type Unknown"

800-895 Anabolic Steroids

Code	Drug
800	Boldenone
801	Chlorotestosterone
803	Dehydrochloromethyltestosterone
804	Dihydrotestosterone
805	Drostanolone
806	Ethylestrenol
807	Fluoxymesterone
808	Formebulone (Formebolone)
809	Mesterolone

Code	Drug
810	Methandienone
811	Methandranone
812	Methandriol
813	Methandrostenolone
814	Methenolone
815	Methyltestosterone
816	Mibolerone
817	Nandrolone
818	Norethandrolone

Code	Drug
819	Oxandrolone
820	Oxymesterone
821	Oxymetholone
822	Stanolone
823	Stanozolol
824	Testolactone
825	Testosterone
826	Trenbolone
827	Clostebol
828	Alpha, Beta-dihydroxy-alpha- androstane
829	Alpha-methyl-alpha-beta-dihydroxy-alpha-androstane
830	Alpha-methyl-beta-beta-dihydroxy-alpha-androstane
831	Alpha-methyl-beta-beta-dihydroxy-androstene
832	Alpha-methyl-delta 1- dihydrotestosterone
833	Alpha-methyl-hydroxynandrolone
834	Androstanedione
835	Androstenediol
836	Androstenedione

834	Androstanedione
835	Androstenediol
836	Androstenedione
900-995 Inhalant	
Code	Drug
900	Volatile Solvents (toluene)
901	Plastic Cement (airplane glue)
902	Paint and Paint Removers
903	"Petroleum Products (gasoline, kerosene)"
904	Lacquer Thinners
920	Anesthetic Gases
921	Amyl Nitrite
923	Butly Nitrite

Code	Drug
837	Beta, beta-dihydroxy-alpha-androstane
838	Bolasterone
839	Calusterone
840	Delta 1-dihydrotestosterone
841	Furazabol
842	Hydroxy-Nortestosterone
843	Hydroxytestosterone
844	Mestanolone
845	Methyldienolone
846	Methyltrienolone
847	Norandrostenediol
848	Norandrostenedione
849	Norbolethone
850	Norclostebol
851	Normethandrolone
852	Stenbolone
853	Tetrahydrogestrinone
854	Boldione
855	Desoxymethyltestosterone
856	Dienedione
895	"Anabolic Steroid, Type Unknown"

Code	Drug
924	Nitrous Oxide
925	Ether
926	Chloroform
940	Aerosols (hydrocarbon gases)
941	Hair spray
942	Insecticides
943	Glass Chillers
944	Frying Pan Lubricants
945	Cyclohexl Nitrite

Code	Drug
946	Enflurane
947	Halothane

Code	Drug
995	"Inhalants, Type Unknown"

095, 996-999 Not Reported/ Other/ Unknown

Code	Drug
095	Not Reported
996	Other Drug
997	Tested for Drugs, Results Unknown
998	Tested for Drugs, Drugs Found, Type Unknown/Positive
999	Reported as Unknown if Tested for Drug

P22/NM22 - Transported to First Medical Facility by

FORMAT: 1 numeric

SAS NAME: Person.HOSPITAL

ELEMENT VALUES:

Codes	Attributes
0	Not Transported for Treatment
1	EMS Air
5	EMS Ground
3	EMS Unknown Mode
2	<u>Law Enforcement</u>
4	Transported Unknown Source
6	<u>Other</u>
8	Not Reported
9	Reported as Unknown

Definition: This element identifies the method of transportation this person was provided to receive treatment or be evaluated for a possible injury at the first hospital or medical facility.

Remarks: Medical Facility refers to an injury treatment facility (hospital, clinic, trauma center, etc.). The treatment facility is the first medical facility to which the person is taken. Use appropriate attribute, even if the person dies en route to the treatment facility. A morgue is not an injury treatment facility.

0 (**Not Transported** *for Treatment*) is used for victims who are dead on the scene and for those who are not taken (or do not go) to a treatment facility or hospital for treatment. For example, an uninjured occupant rides along with an injured person to a treatment facility. **0** (**Not Transported** *for Treatment*) would be used if the person did not go to a treatment facility directly from the scene but was transported at a later time for injuries sustained in this crash. If the case material states the person was transported but does not specifically state that the transport was from the scene, then consider the person transported directly from the scene of the crash.

If a person is moved from the crash scene by emergency services personnel (EMS, rescue squad, fire department, law enforcement) as part of the transport process, consider the person as transported. For example, an injured person that is driven by emergency services to a location to be air lifted should be coded as <u>1 (EMS Air)</u>.

There can also be situations where a person leaves the crash scene (e.g., walks for help) or is moved from a crash scene by a party other than emergency services. For example, in a remote or inaccessible location a private citizen drives an injured person to an accessible location before obtaining help and acquiring emergency services assistance from this new location. Consider these situations as <u>0 (Not Transported for Treatment)</u> for treatment even if the person was eventually transported for treatment from this new location.

- 1 (EMS Air) includes any air transport device. This code would be used any time air transport was used for this person. For example, if there is an indication that both air and ground transportation were used, code 1 (EMS Air).
- **5 (EMS Ground)** includes transport by private and county/city-owned ambulance or rescue squad vehicles.
- **3 (EMS Unknown Mode)** is used when a person is transported to a treatment facility by EMS, but the mode of transportation is not known.
- 2 (Law Enforcement) includes transport by State, county, or local law enforcement agency vehicles.
- **4** (**Transported Unknown Source**) is used if you know the person was transported to a treatment facility, but you do not know the source.
- **6 (Other)** includes transport by private citizens or individuals who drive themselves to the hospital or treatment facility. May be indicated on your crash report as "POV" (Privately/Personally Owned Vehicle).

If a police crash report data element is coded with the attribute "Other" but the officer does not specify what this refers to:

- 1. Code **6 (Other)** if the police crash report attribute choices can be matched to or include all the attributes in FARS/CRSS.
- 2. Code **8** (**Not Reported**) if the police crash report choices cannot be matched to or include all the attributes in FARS/CRSS.

8 (Not Reported) Check to see if $\frac{0 \text{ (Not Transported for Treatment)}}{0 \text{ (Not Reported as Unknown)}}$ are more appropriate for the situation.

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported.**"

Code **8** (**Not Reported**) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).
- **9 (Reported as Unknown)** is used when it is reported as "unknown" whether this victim was taken (or went) to a hospital/treatment facility for treatment or not.

Consistency Checks (See Section 400):

Error ID	IF	THEN
2U3F	INJURY SEVERITY equals 3,	TRANSPORTED TO FIRST MEDICAL FACILITY BY should not equal 0.
P090	INJURY SEVERITY equals 0,	TRANSPORTED TO FIRST MEDICAL FACILITY BY must equal 0.

Consistency Checks (FARS Only) (See Section 400):

Error ID	IF	THEN
A551	EMS TIME AT HOSPITAL equals 8888, 9997, 9998,	TRANSPORTED TO FIRST MEDICAL FACILITY BY should not equal 1, 3, 5 for any person.
P091	TRANSPORTED TO FIRST MEDICAL FACILITY BY equals 1, 3, 5,	EMS TIME AT HOSPITAL should not equal 8888, 9997, 9998.
P093	all persons TRANSPORTED TO FIRST MEDICAL FACILITY BY equals 2, or 6,	NOTIFICATION TIME EMS, ARRIVAL TIME EMS, EMS TIME AT HOSPITAL must equal 8888.
P095	TRANSPORTED TO FIRST MEDICAL FACILITY BY equals 0 for every person in the case,	EMS TIME AT HOSPITAL must not equal 0000-2399, 9999.
P50P	DIED AT SCENE/EN ROUTE equals 7,	TRANSPORTED TO FIRST MEDICAL FACILITY BY must equal 0.
P51P	DIED AT SCENE/EN ROUTE equals 8,	TRANSPORTED TO FIRST MEDICAL FACILITY BY must equal 1-6.
P520	CRASH DATE and DEATH DATE are the same, and CRASH TIME and DEATH TIME are the same,	TRANSPORTED TO FIRST MEDICAL FACILITY BY should equal 0 and DIED AT SCENE/EN ROUTE should equal 7.
P52P	DIED AT SCENE/EN ROUTE equals 9,	TRANSPORTED TO FIRST MEDICAL FACILITY BY must equal 8 or 9.
P55P	TRANSPORTED TO FIRST MEDICAL FACILITY BY equals 9,	DIED AT SCENE/EN ROUTE must equal 0, 9.

P23/NM23 - Died at Scene/En Route - FARS Only

FORMAT: 1 numeric

SAS NAME: Person.DOA ELEMENT VALUES:

Codes	Attributes
0	Not Applicable
7	Died at Scene
8	Died En Route
9	<u>Unknown</u>

Definition: This element identifies if this person died at the scene of the crash or en route to a hospital or treatment facility.

Remarks:

0 (**Not Applicable**) is used for non-fatalities and victims dying at locations other than the scene or en route (hospital, at home, etc.).

7 (**Died at Scene**) is used for victims who are dead on the scene of the crash.

8 (**Died En Route**) is used for victims who die en route to a hospital or treatment facility by EMS or other transport.

9 (Unknown) is used when you know the victim is a fatality, but you don't know if they died at the scene, en route, or at another location (e.g., home).

Error ID	IF	THEN
1R1P	If DIED AT SCENE/EN ROUTE equals 7, 8,	INJURY SEVERITY must equal 4.
P077	INJURY SEVERITY equals 4, and DIED AT SCENE/EN ROUTE equals 7 or 8,	ALCOHOL TEST Subfield 2 - Test Type should not equal 02, 10, or 11.
P50P	DIED AT SCENE/EN ROUTE equals 7,	TRANSPORTED TO FIRST MEDICAL FACILITY BY must equal 0.
P510	EMS TIME AT HOSPITAL equals 8888, 9997, 9998,	DIED AT SCENE/EN ROUTE should not equal 8 for any PERSON.
P51P	DIED AT SCENE/EN ROUTE equals 8,	TRANSPORTED TO FIRST MEDICAL FACILITY BY must equal 1-6.
P520	CRASH DATE and DEATH DATE are the same, and CRASH TIME and DEATH TIME are the same,	TRANSPORTED TO FIRST MEDICAL FACILITY BY should equal 0 and DIED AT SCENE/EN ROUTE should equal 7.
P52P	DIED AT SCENE/EN ROUTE equals 9,	TRANSPORTED TO FIRST MEDICAL FACILITY BY must equal 8 or 9.

Error ID	IF	THEN
P530	EMS TIME AT HOSPITAL equals 9996,	DIED AT SCENE/EN ROUTE must equal 8 for at least one person.
P53P	INJURY SEVERITY equals 0-3, 5, 6,	DIED AT SCENE/EN ROUTE must equal 0.
P54P	DIED AT SCENE/EN ROUTE equals 8,	EMS TIME AT HOSPITAL should not equal 8888, 9997, 9998.
P55P	TRANSPORTED TO FIRST MEDICAL FACILITY BY equals 9,	DIED AT SCENE/EN ROUTE must equal 0, 9.
P56P	DIED AT SCENE/EN ROUTE equals 7,	DEATH TIME should be within 30 minutes of the CRASH TIME.

P24/NM24 - Death Date - FARS Only

FORMAT: 2 sets of 2 numeric, 1 set of 4 numeric

SAS NAME: Person.DEATH_DA, Person.DEATH_MO, Person.DEATH_YR

ELEMENT VALUES:

Month:

Codes	Attributes
88	Not Applicable (Non-fatal)
01-12	Month of the Year
99	Unknown

Day:

Codes	Attributes
88	Not Applicable (Non-fatal)
01-31	Day of the Month
99	Unknown

Year:

Codes	Attributes
8888	Not Applicable (Non-fatal)
	Actual Year of Death
9999	Unknown

Definition: This element records the month, day, and year of this person's death.

Remarks: The death must occur within **thirty 24-hour time periods** from time of the crash in order to be an applicable FARS death.

This element, although it contains three pieces of information, should be treated as one element. Therefore, never leave any one portion blank when another is not.

Normally, the medical examiner or coroner is source of data for death date. If there are no data inconsistencies or errors, use the official death date as recorded on the death certificate. Do not change the official death date without good cause.

Error ID	IF	THEN
1U1F	INJURY SEVERITY equals 4,	DEATH DATE must not equal 88888888.
1V0P	DEATH MONTH or DAY equals 88, or DEATH YEAR equals 8888,	all must equal 8s.
2U1F	INJURY SEVERITY is not equal to 4,	DEATH DATE must equal 88888888.
2V0P	DEATH DAY is 01-31, and DEATH MONTH is 01-12,	DEATH DAY must be a valid day for DEATH MONTH.
3U1P	DEATH DATE equals CRASH DATE, and CRASH HOUR is not equal to 99,	DEATH HOUR must not be less than CRASH HOUR.
3U2P	DEATH DATE equals CRASH DATE, and DEATH HOUR equals CRASH HOUR and CRASH MINUTE is not equal to 99,	DEATH MINUTE must not be less than CRASH MINUTE.
4V1F	INJURY SEVERITY equals 4,	DEATH DATE and DEATH TIME for this person must be within 720 hours of the CRASH DATE and CRASH TIME.
4V2F	CRASH MONTH equals 12, and DEATH MONTH equals 01,	DEATH YEAR must equal CRASH YEAR plus 1.
4V3F	CRASH MONTH equals 12,	DEATH MONTH must equal 01, 12, 88, 99.
4V4F	CRASH MONTH equals 02-11, and DEATH MONTH is not equal to 88 or 99,	DEATH MONTH must equal CRASH MONTH or CRASH MONTH plus 1.
4V5F	CRASH MONTH equals 01, and DEATH MONTH is not equal to 88 or 99,	DEATH MONTH must equal CRASH MONTH or CRASH MONTH plus 1 or CRASH MONTH plus 2.
4V6P	DEATH MONTH is not equal to blanks,	DEATH DAY and DEATH YEAR must not equal blanks.
4V7P	DEATH DAY is not equal to blanks,	DEATH MONTH and DEATH YEAR must not equal blanks.
4V8P	DEATH YEAR is not equal to blanks,	DEATH MONTH and DEATH DAY must not equal blanks.
6V0P	DEATH DATE must not be less than CRASH DATE.	
7V0F	DEATH YEAR equals 9999,	CRASH MONTH must not be 01-11.
8V0P	DEATH YEAR equals 9999,	DEATH MONTH and DEATH DAY must equal 99.
9V0P	DEATH MONTH equals 99,	DEATH DAY must equal 99.
P520	CRASH DATE and DEATH DATE are the same, and CRASH TIME AND DEATH TIME are the same,	TRANSPORTED TO FIRST MEDICAL FACILITY BY should equal 0 and DIED AT SCENE/EN ROUTE should equal 7.

P25/NM25 - Death Time - FARS Only

FORMAT: 4 numeric

SAS NAME: Person.DEATH_HR, Person.DEATH_MN, Person.DEATH_TM

ELEMENT VALUES:

Codes	Attributes
8888	Not Applicable (Non-fatal)
0000-2359	Valid Military Time
0099-2399	Known Hour but Unknown Minutes
9999	<u>Unknown</u>

Definition: This element identifies the hour and minute of this person's death using the 24-hour clock format.

Remarks: Normally, the medical examiner or coroner is the source of data for death time. If there are no data inconsistencies or errors, use the official death time as recorded on the death certificate. Do not change the official death time without good cause.

If it is known that the person died at the scene and the official death time or "pronounced death time" (on the death certificate) is known to be in error, or is greater than 30 minutes after the CRASH TIME then <u>CRASH TIME</u> is the appropriate DEATH TIME to be used. If it is known the person died at the scene, and the time of death is pronounced at the scene by a paramedic or firefighter, and this pronounced time does not contradict other case information, use this time.

See the Coding Guide: TIME: Crash Times, EMS Times, Death Times for helpful information.

0099-2399 (Known Hour but Unknown Minutes) If minutes are unknown, code the actual hour and "99" for the minutes. One minute after midnight is coded **0001**.

9999 (Unknown) If the death certificate indicates the hour of death is unknown or provides a range greater than an hour, enter **9999** (Unknown).

How to Code Midnight:

In general, code midnight as **0000** in military time. Midnight is considered to be the beginning of a new day rather than the end of a day. One minute after midnight is 12:01 and is coded as **0001**. However, there may be confusion over which day the source is referring to when "midnight" is cited or referred to without explanation. Our practice may not be the practice followed in your sources; therefore, you must determine which part of the day is being considered in your sources. The following are examples of midnight time references that do not easily translate to FARS and CRSS times.

- "midnight"
- 12:00-midnight
- 24:00

End of Day

If your data sources give you a crash date and are consistent in talking about the end of that day, when they give a non-translatable "midnight" time reference of the crash, then you should code Crash Time as **2359**.

Beginning of Day

If your sources give a crash date and are consistent in referring to the beginning or early moments of that day when they give a non-translatable "midnight" crash time, code "midnight" as **0000**.

Error ID	IF	THEN
1U2F	INJURY SEVERITY equals 4,	DEATH TIME must not equal 8888.
2U2F	INJURY SEVERITY is not equal to 4,	DEATH TIME must equal 8888.
3U1P	DEATH DATE equals CRASH DATE, and CRASH HOUR is not equal to 99,	DEATH HOUR must not be less than CRASH HOUR.
3U2P	DEATH DATE equals CRASH DATE, and DEATH HOUR equals CRASH HOUR and CRASH MINUTE is not equal to 99,	DEATH MINUTE must not be less than CRASH MINUTE.
4V1F	INJURY SEVERITY equals 4,	DEATH DATE and DEATH TIME for this person must be within 720 hours of the CRASH DATE and CRASH TIME.
P56P	DIED AT SCENE/EN ROUTE equals 7,	DEATH TIME should be within 30 minutes of the CRASH TIME.
P520	CRASH DATE and DEATH DATE are the same, and CRASH TIME AND DEATH TIME are the same,	TRANSPORTED TO FIRST MEDICAL FACILITY BY should equal 0 and DIED AT SCENE/EN ROUTE should equal 7.

P26 - Related Factors - Person (Motor Vehicle Occupant) Level

FORMAT: 3 numeric. Select All That Apply.

SASs NAME: PersonRF.PERSONRF

ELEMENT VALUES:

Codes	Attributes
0 00	None
0 05	Interfering with Driver
* 0 08	Mentally Challenged
0 09	Construction/Maintenance/Utility Worker
0 10	Alcohol and/or Drug Test Refused
* 0 18	Mother of Dead Fetus/Mother of Infant Born Post Crash
0 21	Overloading or Improper Loading of Vehicle with Passengers or Cargo
* 0 26	Following Improperly
0 89	Parked Motor Vehicle with Equipment Extending into the Travel Lane
* 0 28	Improper Lane Usage
* 0 29	Intentional Illegal Driving on Road Shoulder, in Ditch, on Sidewalk or on Median
0 32	Opening Vehicle Closure into Moving Traffic or While Vehicle is in Motion
* 0 33	Passing Where Prohibited by Posted Signs, Pavement Markings or School Bus Displaying Warning Not to Pass
* 0 37	Traveling on Prohibited Trafficways
* 0 40	Passing Through or Around Barrier
* 0 41	Failure to Observe Warnings or Instructions on Vehicles Displaying Them
* 0 42	Failure to Signal Intentions
* 0 44	Driving Too Fast for Conditions or in Excess of Posted Maximum
* 0 45	Driving Less Than Posted Minimum
* 0 47	Making Right Turn from Left-Turn Lane, Left Turn from Right-Turn Lane
* 0 51	Operator Inexperience
* 0 52	<u>Unfamiliar with Roadway</u>
0 56	Non-Driver Flees Scene
* 0 57	Improper Tire Pressure
* 0 59	Overcorrecting

Vision Obscured by:

Codes	Attributes	
* 0 60	Rain, Snow, Fog, Smoke, Sand, Dust	
* 0 61	Reflected Glare, Bright Sunlight, Headlights	
* 0 62	Curve, Hill, or Other Design Features (including traffic signs, embankment)	
* 0 63	Building, Billboard, Other Structures	
* 0 64	Trees, Crops, Vegetation	
* 0 65	Motor Vehicle (including load)	
* 0 66	Parked Vehicle	
* 0 67	Splash or Spray of Passing Vehicle	
* 0 68	Inadequate Lighting System	
* 0 69	Obstructing Angles on Vehicle	
* 0 70	Mirrors	
* 0 72	Other Visual Obstruction	

Skidding, Swerving Sliding, Due to:

Codes	Attributes
* 0 73	Severe Crosswind
* 0 74	Wind from Passing Truck
* 0 75	Slippery or Loose Surface
* 0 76	Tire Blowout or Flat
* 0 77	Debris or Objects in Road
* 0 78	Ruts, Holes, Bumps in Road
* 0 80	<u>Vehicle in Road</u>
* 0 81	Phantom Vehicle
* 0 82	Pedestrian, Pedal Cyclists, or Other Non-Motorist
* 0 83	Ice, Snow, Slush, Water, Sand, Dirt, Oil, Wet Leaves on Road

Other Factors:

Codes	Attributes
0 87	Police or Law Enforcement Officer
0 92	Person in Ambulance Treatment Compartment
0 94	Emergency Medical Services Personnel

Codes	Attributes
0 95	<u>Fire Personnel</u>
0 96	Tow Operator
0 97	<u>Transportation</u> (i.e., maintenance workers, safety service patrol operators, etc.)
* 0 88	Seat Back Not in Normal Upright Position, Seat Back Reclined
0 91	Portable Electronic Devices
9 99	Reported as Unknown

*FARS ONLY ATTRIBUTES

Definition: This element identifies factors related to motor vehicle occupants (other than drivers) expressed in the case material.

Remarks: Code information provided in the case material associated with this person.

In addition to passengers in motor vehicles in-transport (<u>UNIT TYPE</u> 1), this element includes any occupants in motor vehicles that are not in-transport (<u>UNIT TYPES</u> 2, 3, 4). The attributes that are applicable to each is limited by <u>PERSON TYPE</u>.

The following lists those related factors that may be used for each PERSON TYPE:

Person Type	Valid Related Factors
01 (Driver of a Motor Vehicle In-Transport)	000
02 (Passenger of a Motor Vehicle In-Transport)	0 00, 0 05, 0 08, 0 09, 0 10, 0 18, 0 32, 0 56, 0 87- 9 99
03 (Occupant of a Motor Vehicle Not In-Transport)	000, 005, 008, 009, 010, 018, 021, 026, 028, 029, 032, 033, 037, 040-042, 044, 045, 047, 051, 052, 056-070, 072-078, 080-083, 087-999
09 (Unknown Occupant Type in a Motor Vehicle In- <u>Transport</u>	000, 005, 008, 009, 010, 018, 032, 087-999

For forms with <u>PERSON TYPE</u> **01** (**Driver of a Motor Vehicle In-Transport**), *use* <u>**000** (*None*). The related factors for drivers are captured in the <u>RELATED FACTORS-DRIVER LEVEL</u>.</u>

000 (None) is used when no applicable related factors are noted in the case material or this person is a PERSON TYPE 01 (Driver of a Motor Vehicle In-Transport).

005 (Interfering with Driver) is used when the case material identifies that the occupant of a motor vehicle in-transport was interfering with the driver.

Examples include:

- Obstructing the driver's view.
- Striking the driver with their body or an object.
- Rambunctious individuals who cause the driver to be inattentive, even without touching the driver or controls in the vehicle.
- A motorcycle passenger (or other cyclist) shifting weight or affecting the driver's control.

*008 (Mentally Challenged) is used when the case material identifies this person has an intellectual, cognitive, or developmental disability.

009 (Construction/Maintenance/Utility Worker) is used if the case material identifies this person was an occupant of a working motor vehicle. This includes highway department, contractor, or utility company personnel.

010 (Alcohol and/or Drug Test Refused) is used when the officer notes that this person refused to take an alcohol and/or a drug test. Refusing a test does not necessarily mean that a test was not given. It is possible that after a refusal, the officer may have obtained a warrant or some other authorization to administer a test post-refusal. This includes when the person initially refuses and later consents. Because of this, it is possible to code 010 (Alcohol and/or Drug Test Refused) and also code an actual test with results for the same person.

*018 (Mother of Dead Fetus/Mother of Infant Born Post-Crash) is used when the case material identifies that this occupant is the mother of a fetus that died in or as a result of this crash or it is identified that this occupant gave birth after the crash whether the child survives or not. Note that for crash classification purposes, a fetus is considered to be part of a pregnant woman rather than a separate individual and, thus, is not counted as a separate occupant in the crash.

021 (Overloading or Improper Loading of Vehicle with Passengers or Cargo) is used when the case material identifies this occupant improperly loaded the vehicle occupants or cargo into or on the vehicle. This may only be used on the PERSON TYPE <u>03</u> (Occupant of a Motor Vehicle Not In-Transport) and in SEATING POSITION

11 (Front Seat, Left Side).

Examples include:

- The vehicle had more than 3 passengers in the front seat.
- There were people riding on the exterior of the vehicle.
- The vehicle was carrying occupants who were sitting or standing on the rails, tailgate of a pickup, or improperly sitting in the bed of a pickup.
- More than one person secured in a belt restraint.

- An unsecured or uncovered load violation.
- The vehicle's trunk was open with extra-large cargo protruding.
- The case material states the vehicle was overweight, over length or illegally or improperly oversize.

*026 (Following Improperly) is used when the case material identifies this occupant followed too closely. This may only be used on the Person Form for the occupant that is PERSON TYPE <u>03</u> (Occupant of a Motor Vehicle Not In-Transport) and in SEATING POSITION <u>11 (Front Seat, Left Side)</u> in a working motor vehicle (UNIT TYPE 4).

Examples include:

- Following a fire truck too closely.
- Failure to maintain a safe passing distance between trucks.
- Following another vehicle in a caravan too closely to allow entry by a merging vehicle.
- Following too close, generally. Also, code for cases where the case material document the vehicle was following too closely for weather conditions.

089 (Parked Motor Vehicle with Equipment Extending into the Travel Lane) is used when the case material identifies this occupant parked a vehicle but extended equipment (e.g., extended mirrors) attached to the vehicle was still in the travel lane. This may only be used on the Person Form for the occupant that is PERSON TYPE **03** (Occupant of a Motor Vehicle Not In-Transport) and in SEATING POSITION **11** (Front Seat, Left Side).

NOTE: This should not be used for loads of vehicles extending into the travel lane such as attached trailers or oversized cargo. In these cases, the vehicle is in-transport and not parked.

*028 (Improper Lane Usage) is used when the case material identifies this occupant failed to properly keep their vehicle in the appropriate lane of travel. This attribute does not apply to vehicles that run off the roadway, that cross the median, or exhibit control loss before crossing the centerline. Also do not use this value for a vehicle that leaves its lane because of a previous impact or at the direction of a flagman or police officer. This may only be used on the Person Form for the occupant that is PERSON TYPE 03 (Occupant of a Motor Vehicle Not In-Transport) and in SEATING POSITION 11 (Front Seat, Left Side) in a working motor vehicle (UNIT TYPE 4).

Examples include:

- A vehicle that "drove left of center" striking an oncoming vehicle (includes both crossing a painted centerline and failing to maintain the proper side of a two-lane roadway with no painted centerline).
- A vehicle that goes straight in a turn lane.
- A vehicle that was using more than one lane on its side of a multi-lane highway.
- Trucks, buses, or slow vehicles failing to keep right for faster moving traffic.

For situations where the vehicle is on the wrong side as a result of a passing maneuver, see <u>033 (Passing Where Prohibited by Posted Signs, Pavement Markings, or School Bus Displaying Warning Not to Pass).</u>

*029 (Intentional Illegal Driving on Road Shoulder, In Ditch, on Sidewalk or on Median) is used when the case material identifies this occupant was intentionally illegally driving in a location off the roadway (e.g., shoulder, median, roadside, etc.) This attribute should not be used when the vehicle enters one of these locations as part of an avoidance maneuver or as a result of a critical or harmful event. Also do not use this value for a vehicle that leaves its lane at the direction of a flagman or police officer. This may only be used on the Person Form for the occupant that is PERSON TYPE 03 (Occupant of a Motor Vehicle Not In-Transport) and in SEATING POSITION 11 (Front Seat, Left Side) in a working motor vehicle (UNIT TYPE 4).

032 (Opening Vehicle Closure into Moving Traffic or While Vehicle is in Motion) is used when the case material identifies this occupant improperly opened their door into moving traffic.

Examples include:

- An occupant opens a side door into moving traffic.
- An occupant opening the door at a stop light.
- An occupant of a parked motor vehicle opening a door into the travel lane.

*033 (Passing Where Prohibited by Posted Signs, Pavement Markings, or School Bus Displaying Warning Not to Pass) is used when the case material identifies this occupant passed improperly by executing a passing maneuver where prohibited as designated by traffic controls or rules of the road. This may only be used on the Person Form for the occupant that is PERSON TYPE 03 (Occupant of a Motor Vehicle Not In-Transport) and in SEATING POSITION 11 (Front Seat, Left Side) in a working motor vehicle (UNIT TYPE 4).

Examples include:

- A vehicle passing stopped a school bus.
- A vehicle crossing over the solid line to pass another vehicle.
- Passing a vehicle stopped to allow a pedestrian movement.

*037 (Traveling on Prohibited Trafficways) is used when the case material identifies this occupant was driving on an open trafficway that prohibited travel for the kind of vehicle they were operating. For example, driving a truck where prohibited, or operating a vehicle with hazardous materials cargo where prohibited. For trucks or slower vehicles using the left lane when prohibited, use <u>028 (Improper Lane Usage)</u>. This may only be used on the Person Form for the occupant that is PERSON TYPE <u>03</u> (Occupant of a Motor Vehicle Not In-Transport) and in SEATING POSITION <u>11 (Front Seat, Left Side)</u> in a working motor vehicle (UNIT TYPE 4).

*040 (Passing Through or Around Barrier) is used when the case material identifies this occupant drove out of or around a "demarcated" area. This may only be used on the Person Form for the occupant that is PERSON TYPE 03 (Occupant of a Motor Vehicle Not In-Transport) and in SEATING POSITION 11 (Front Seat, Left Side) in a working motor vehicle (UNIT TYPE 4). For example, a working vehicle backing out of the closed portion of the work zone into an open travel lane.

*041 (Failure to Observe Warnings or Instructions on Vehicles Displaying Them) is used when the case material identifies this occupant failed to heed warnings or follow instructions displayed on other vehicles. This may only be used on the Person Form for the occupant that is PERSON TYPE 03 (Occupant of a Motor Vehicle Not In-Transport) and in SEATING POSITION 11 (Front Seat, Left Side) in a working motor vehicle (UNIT TYPE 4).

Examples include:

- Construction instructions such as arrows directing traffic mounted on a vehicle.
- Instructions on or warnings by emergency vehicles (ambulances, fire trucks, police cars).
- Failure to observe a wide right-turn warning on trucks or buses.
- Failure to heed hazard lights on a disabled vehicle or a school bus arm.

*042 (Failure to Signal Intentions) is used when the case material identifies this occupant failed to signal their intentions. This attribute includes a failure to signal by either lamp turn signal or hand. This may only be used on the Person Form for the occupant that is PERSON TYPE 03 (Occupant of a Motor Vehicle Not In-Transport) and in SEATING POSITION 11 (Front Seat, Left Side) in a working motor vehicle (UNIT TYPE 4).

*044 (Driving Too Fast for Conditions or In Excess of Posted Maximum) is used when the case material identifies this occupant was operating the vehicle too fast for certain road conditions or exceeding the posted speed limit. This may only be used on the Person Form for the occupant that is PERSON TYPE 03 (Occupant of a Motor Vehicle Not In-Transport) and in SEATING POSITION 11 (Front Seat, Left Side) in a working motor vehicle (UNIT TYPE 4).

*045 (Driving Less Than Posted Minimum) is used when the case material identifies this occupant was driving too slowly, or so as to impede traffic. This may only be used on the Person Form for the occupant that is PERSON TYPE 03 (Occupant of a Motor Vehicle Not In-Transport) and in SEATING POSITION 11 (Front Seat, Left Side) in a working motor vehicle (UNIT TYPE 4).

*047 (Making Right Turn from Left-Turn Lane, Left Turn from Right-Turn Lane) is used when the case material identifies this occupant was making an improper turn from a turn lane. To distinguish from <u>028 (Improper Lane Usage)</u>, police officer must indicate the occupant's intention to turn to use this attribute. This may only be used on the Person Form for the occupant that is PERSON TYPE <u>03</u> (Occupant of a Motor Vehicle Not In-Transport) and in SEATING POSITION <u>11 (Front Seat, Left Side)</u> in a working motor vehicle (UNIT TYPE 4).

*051 (Operator Inexperience) is used when the case material identifies this occupant lacks experience operating the vehicle they were in at the time of the crash. Should be expressed by officer, *operator*, or passenger and not presumed based on age, rental status, or State of residence. This may only be used on the Person Form for the occupant that is PERSON TYPE 03 (Occupant of a Motor Vehicle Not InTransport) and in SEATING POSITION

11 (Front Seat, Left Side) in a working motor vehicle (UNIT TYPE 4).

Examples include:

- A novice operator.
- The *operator* parks the vehicle where parking is illegal because they are inexperienced.

*052 (Unfamiliar with Roadway) is used when the case material identifies this occupant is unfamiliar with the area/location where they were when the crash occurred. Should be expressed by officer, operator, or passenger and not presumed based on age, rental status, or State of residence. This may only be used on the Person Form for the occupant that is PERSON TYPE 03 (Occupant of a Motor Vehicle Not In-Transport) and in SEATING POSITION 11 (Front Seat, Left Side) in a working motor vehicle (UNIT TYPE 4).

Examples include:

- An operator from out-of-State is unfamiliar with area.
- Operating on a new stretch of road or section of road altered because of construction and/or detour.
- The *operator* parks the vehicle where parking is illegal because they are unfamiliar with the location.

056 (Non-Driver Flees Scene) is used when the case material identifies that this non-*operator* left the scene of a Hit-and-Run crash.

Examples include:

- A passenger of motor vehicle *fled* scene on foot.
- Occupant of an involved parked vehicle leaves by driving their vehicle from the scene.
- An involved motor vehicle in-transport is driven away by a passenger in that vehicle.

*057 (Improper Tire Pressure) is used when the case material identifies that improper tire pressure was present in one or more tires of this vehicle. Improper tire pressure is not a defect, but rather the irresponsibility of the person. This may only be used on the Person Form for the occupant that is PERSON TYPE 03 (Occupant of a Motor Vehicle Not In-Transport) and in SEATING POSITION 11 (Front Seat, Left Side) in a working motor vehicle (UNIT TYPE 4).

*059 (Overcorrecting) is used when the case material identifies this occupant "overcorrected" based on the judgment of the police officer. This must be stated by the officer in the narrative or police crash report field to be coded. Overcorrecting and Oversteering are technically different, but this attribute may be selected for a reported combination of the two (e.g., overcorrecting/ oversteering) on the police crash report. This may only be used on the Person Form for the occupant that is PERSON TYPE 03

(Occupant of a Motor Vehicle Not In-Transport) and in SEATING POSITION 11 (Front Seat, Left Side) in a working motor vehicle (UNIT TYPE 4).

Vision Obscured By:

The following set of attributes identifies visual obstructions noted in the case material. These attributes *are only applicable to* the occupant that is PERSON TYPE <u>03 (Occupant of a Motor Vehicle Not In-Transport)</u> and in SEATING POSITION <u>11 (Front Seat, Left Side)</u> in a working motor vehicle (<u>UNIT TYPE 4</u>).

- *060 (Rain, Snow, Fog, Smoke, Sand, Dust)
- *061 (Reflected Glare, Bright Sunlight, Headlights)
- *062 (Curve, Hill, or Other Design Features [including traffic signs, embankment])

- *063 (Building, Billboard or Other Structures)
- *064 (Trees, Crops or Vegetation)
- *065 (Motor Vehicle [including load])

Examples include:

- A car stopped on the roadway.
- A tractor-trailer in-transport on the road.
- A school bus stopped for the purpose of loading and/or unloading children.
- *066 (Parked Vehicle)
- *067 (Splash or Spray of a Passing Vehicle)
- *068 (Inadequate Lighting System)
- *069 (Obstructing Angles on the Vehicle) is used when the case material identifies obstructing angles on this person's vehicle. This attribute should not be confused with visual obstructions from other vehicles. (See 665 (Motor Vehicle [including load])) and 666 (Parked Vehicle)).
- *070 (Mirrors) is used when the case material identifies that vision was obscured by any mirrors attached to or within a motor vehicle (rear view mirror, side mirror, etc.).
- *072 (Other Visual Obstruction) is used when the case material identifies that vision was obscured something other than previously listed. For example, a trailer that has been left parked on the side of the road by a truck or vehicle.

Skidding, Swerving, Sliding Due To:

This set of attributes is applicable to the occupant that attempted to avoid *and*/or whose ability to control the vehicle was affected by one of the *following—and resulted in that vehicle skidding, swerving, or sliding*. These attributes *are only applicable to* the occupant that is PERSON TYPE <u>03 (Occupant of a Motor Vehicle Not In-Transport)</u> and in SEATING POSITION <u>11 (Front Seat, Left Side)</u> in a working motor vehicle (*UNIT TYPE 4*).

- *073 (Severe Crosswind) is used when the case material identifies this occupant's ability to control the vehicle was affected by severe crosswinds.
- *074 (Wind from Passing Truck) is used when the case material identifies this occupant's ability to control the vehicle was affected by winds produced by a passing truck.
- *075 (Slippery or Loose Surface) is used when the case material identifies this occupant's ability to control the vehicle was affected by the surface composition of the roadway and/or the condition of that composition. Not to be used when the surface is slippery due to environment conditions such as rain, ice, or snow (see orental-883 (Ice, Snow, Slush, Water, Sand, Dirt, Oil, Wet Leaves on Road)).

Examples include:

- A slippery surface that is old or worn resulting in loose gravel on the roadway.
- Blacktop that is slick as a newly paved surface.
- *076 (Tire Blowout or Flat) is used when the case material identifies this occupant's ability to control the vehicle was affected by a tire blowout or flat.

- *077 (**Debris or Objects in Road**) is used when the case material identifies this *operator* attempted to avoid or lost control as a result of debris in the road. Examples would include nails, glass, trash cans, tire retread, trash, dead animals, pile of sand, barricades, etc.
- *078 (Ruts, Holes, Bumps in Road) is used when the case material identifies this *operator* attempted to avoid or lost control as a result of a road surface anomalies such as ruts, holes, dips, or bumps.
- *080 (Vehicle in Road) is used when the case material identifies this *operator* attempted to avoid or lost control as a result of another vehicle in the road. This includes both contact and non-contact vehicles that **remain at the scene**.
- *081 (Phantom Vehicle) is used when the case material identifies this *operator* attempted to avoid or lost control as a result of a non-contact vehicle that **left the scene** as described by the police officer.
- *082 (Pedestrian, Pedal Cyclist, or Other Non-Motorist) is used when the case material identifies this *operator* attempted to avoid or lost control as a result of a pedestrian, a pedalcyclist, or other type of non-motorist.
- *083 (Ice, Snow, Slush, Water, Sand, Dirt, Oil, or Wet Leaves on Road) is used when the case material identifies this occupant's ability to control the vehicle was affected by a substance on the roadway that caused the roadway to be slick, which may interfere with the traction of the vehicle. This attribute does not include part of the roadway composition. For cases involving roadway composition issues, see 075 (Slippery or Loose Surface).

Other Factors:

- **087** (**Police or Law Enforcement Officer**) is used when the case material identifies that this person was a police or law enforcement officer working at the time of the crash. The officer may be affiliated at the Federal, State, or local law enforcement level. This would also include military and park police, border patrol, and all other sworn law enforcement officers.
- *092* (**Person in Ambulance Treatment Compartment**) is used when the case material identifies that this occupant was located in the ambulance treatment compartment. For example: patients, EMS personnel, and other person accompanying patient.

Note: For people identifiable as EMS personnel also use RELATED FACTORS - PERSON (MV OCCUPANT) attribute *094* (Emergency Medical Services Personnel).

094 (Emergency Medical Services Personnel) is used when the case material identifies that this person was described as emergency medical services (EMS) personnel. This includes personnel located in the cab and in the treatment compartment of an ambulance.

Note: For people identifiable as EMS personnel located in the ambulance treatment compartment, also use RELATED FACTORS - PERSON (MV OCCUPANT) attribute <u>092 (Person in Ambulance Treatment Compartment)</u>.

- 095 (Fire Personnel) is used when the case material identifies that this person was fire personnel.
- **096** (**Tow Operator**) is used when the case material identifies that this person was an operator of a tow truck.
- 097 (Transportation (i.e., maintenance workers, safety service patrol operators, etc.)) is used when the case material indicate this person was working to assist with detouring traffic, maintaining roadway damage, or a safety service patrol operator, etc.

*088 (Seat Back Not in Normal Upright Position, Seat Back Reclined) is used when the case material identifies that this occupant's seat back was not in a normal, safe driving/seating position prior to the crash.

091 (**Portable Electronic Devices**) is used when the case material identifies that this occupant had an electronic device (mobile phone, MP3 player, PDA, etc.) in the vehicle that was somehow related to the crash occurrence.

999 (**Reported as Unknown**) is used when the circumstances surrounding the crash are unknown and reported as "unknown" by the investigating officer.

*FARS ONLY ATTRIBUTES

Error ID	IF	THEN
1W0P	Any RELATED FACTORS-PERSON LEVEL equals <i>000 or 9</i> 99,	only that one code and no other must be coded.
3D80	CRITICAL EVENT: PRECRASH (EVENT) equals 08 for this vehicle, and CONDITION (IMPAIRMENT) AT TIME OF CRASH equals 09 for this vehicle's driver, and RELATED FACTORS - PERSON (MV OCCUPANT) LEVEL for this vehicle is not equal 005 for any occupants of this vehicle,	another CONDITION (IMPAIRMENT) AT TIME OF CRASH for this vehicle's driver should equal 01.
4W0P	Any RELATED FACTORS-PERSON LEVEL (MV Occupant) can be used only once per person form.	
4W6P	Any RELATED FACTORS-PERSON LEVEL (MV Occupant) equals 0 21 or 0 89,	PERSON TYPE must equal 3, SEATING POSITION must equal 11, and UNIT TYPE must equal 2, 3, or 4.
580F	FIRST HARMFUL EVENT equals 14, and RELATED FACTORS- PERSON (MV OCCUPANT) LEVEL does not equal 032, 089 for at least one occupant in the not in-transport motor vehicle involved in the FIRST HARMFUL EVENT,	RELATION TO TRAFFICWAY should not equal 01.
5M0F	PERSON TYPE equals 01,	RELATED FACTORS-PERSON LEVEL (MV Occupant) must equal 0 00.
5M0G	SPECIAL USE equals 06, and PERSON TYPE equals 02 or 09,	RELATED FACTORS-PERSON (MV OCCUPANT) LEVEL should equal 0 92, 0 94, or 0 95.
5M2G	SPECIAL USE equals 06, and PERSON TYPE equals 02, and SEATING POSITION equals 51,	at least one RELATED FACTORS - PERSON LEVEL should equal 092 or 094.

Error ID	IF	THEN
5M3G	SPECIAL USE equals 06, and PERSON TYPE equals 01 or 02, and SEATING POSITION equals 11-19,	at least one RELATED FACTORS - PERSON LEVEL should equal 094, or at least one RELATED FACTORS - DRIVER LEVEL should equal 094.
5N0F	PERSON TYPE equals 02,	any RELATED FACTORS-PERSON LEVEL (MV Occupant) must not equal 021, 026, 028, 029, 033, 037, 040-042, 044, 045, 047, 051, 052, 057-070, 072-078, or 080-083.
7M0F	any RELATED FACTORS-PERSON LEVEL (MV Occupant) equals <i>0</i> 26, <i>0</i> 28, <i>0</i> 29, <i>0</i> 33, <i>0</i> 37, <i>0</i> 40- <i>0</i> 42, <i>0</i> 44, <i>0</i> 45, <i>0</i> 47, <i>0</i> 51, <i>0</i> 52, <i>0</i> 57- <i>0</i> 70, <i>0</i> 72- <i>0</i> 78, or <i>0</i> 80- <i>0</i> 83,	PERSON TYPE must equal 03, SEATING POSITION must equal 11, and UNIT TYPE must equal 4.
A65F	FIRST HARMFUL EVENT equals 14, and RELATED FACTORS - PERSON (MV OCCUPANT) LEVEL equals 032 or 089 for an occupant of the parked vehicle involved in the first harmful event,	CRASH TYPE should equal 15, 92 or 98 for the in-transport vehicle involved in the First Harmful Event.
A66F	FIRST HARMFUL EVENT equals 14, and CRASH TYPE equals 01-10 or 14,	RELATED FACTORS - PERSON (MV OCCUPANT) LEVEL must not equal 032 or 089 for any occupant of the parked vehicle involved in the FIRST HARMFUL EVENT.
CL0P	PERSON TYPE equals 09,	any RELATED FACTORS-PERSON LEVEL (MV OCCUPANT) must not equal 021, 026, 028, 029, 033, 037, 040-042, 044, 045, 047, 051, 052, 056-070, 072-078, 080-083.

Consistency Check (FARS Only) (See Section 400):

Error ID	IF	THEN
5W0P	RELATED FACTORS-PERSON LEVEL equals θ 18,	SEX must equal 2, and AGE must be greater than 012.

Person Level (Not A Motor Vehicle Occupant) Data Elements

NM1 - State Number - FARS Only

NM2 - Consecutive Number - FARS Only

NM3/P4 - Person Number

NM4 - Vehicle Number of Motor Vehicle Striking Non-Motorist

NM5/P5 - Age

NM6/P6 - Sex

NM7 - Person Type

NM8/P8 - Injury Severity

NM9 - Pedestrian/Bike Typing

NM10 - Non-Motorist Location at Time of Crash

NM11 - Non-Motorist Action/Circumstances

NM12 - Non-Motorist Contributing Circumstances

NM13 - Non-Motorist Distracted By

NM14 - Non-Motorist Safety Equipment

NM15/D23 - Condition (Impairment) at Time of Crash

NM16/P16 - Police Reported Alcohol Involvement

NM17/P17 - Method of Alcohol Determination by Police - FARS Only

NM18/P18 - Alcohol Test

NM19/P19 - Police Reported Drug Involvement

NM20/P20 - Method of Drug Determination by Police - FARS Only

NM21/P21 - Drug Toxicology Results - FARS Only

NM22/P22 - Transported to First Medical Facility By

NM23/P23 - Died at Scene / En Route - FARS Only

NM24/P24 - Death Date - FARS Only

NM25/P25 - Death Time - FARS Only

NM26 - Related Factors - Person (Not a Motor Vehicle Occupant) Level

NM3/P4 - Person Number

FORMAT: 3 numeric

SAS NAME: Person.PER_NO

ELEMENT VALUES:

Codes	Attributes
001-999	Assigned Number

Definition: This element identifies a number for people that are not in a motor vehicle in consecutive order.

Remarks: This element's values and remarks are identical to the Person Level (MV Occupant) Level element PERSON NUMBER. Please see <u>PERSON NUMBER</u> for remarks.

Error ID	Error Message	
CSI6	For each VEHICLE NUMBER, PERSON NUMBERS must be consecutive, beginning with 001 and with no gaps.	
CSI7	PERSON NUMBERS for persons not in motor vehicles must be consecutive, beginning with 001 and with no gaps.	

NM4 - Vehicle Number of Motor Vehicle Striking Non-Motorist

FORMAT: 3 numeric

SAS NAME: Person.STR_VEH

ELEMENT VALUES:

Codes	Attributes
001-998	Assigned Vehicle Number

Definition: This data element captures the in-transport vehicle that made contact with this non-motorist.

Remarks: *If* a non-motorist is contacted by a parked or working motor vehicle that was propelled by an in-transport vehicle, record the vehicle number of the in-transport vehicle.

In cases where more than one vehicle makes contact with a non-occupant, code the number of the vehicle that caused the most significant injury. If uncertain, code the number of the vehicle that made contact first.

If a non-motorist is hit as a result of a vehicle to vehicle collision and you cannot reasonably determine which vehicle struck the non-motorist, use the lowest vehicle number of the MVIT(s) involved in the vehicle to vehicle event that resulted in the pedestrian or pedalcyclist collision. In the element RELATED FACTORS - PERSON (NOT A MOTOR VEHICLE OCCUPANT) LEVEL code 031 Default Code Used for Vehicle Numbering.

Error ID	IF	THEN
050P	PERSON TYPE equals 04-07, 10-19, and NUMBER OF VEHICLE FORMS SUBMITTED equals 001,	VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST must equal 001.
060P	VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is not equal to 000,	the VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST must equal some VEHICLE NUMBER in the case, and the UNIT TYPE must equal 1.
4X8H	any NON-MOTORIST CONTRIBUTING CIRCUMSTANCES equals 01,	DRIVER'S VISION OBSCURED BY must not equal 00, 95, or 99 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
A612	PERSON TYPE equals 04, and VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST equals,	at least one SEQUENCE OF EVENTS must equal 10, 49, or 74 for that vehicle number in the CRASH EVENTS table.
A613	PERSON TYPE equals 05, and VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST equals,	at least one SEQUENCE OF EVENTS must equal 08 for that vehicle number in the CRASH EVENTS table.

Error ID	IF	THEN
A614	PERSON TYPE equals 06, and VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST equals,	at least one SEQUENCE OF EVENTS must equal 09 for that vehicle number in the CRASH EVENTS table.
A615	PERSON TYPE equals 07, and VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST equals,	at least one SEQUENCE OF EVENTS must equal 09 for that vehicle number in the CRASH EVENTS table.
A616	PERSON TYPE equals 11, 12, or 13, and VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST equals,	at least one SEQUENCE OF EVENTS must equal 15 for that vehicle number in the CRASH EVENTS table.
A617	PERSON TYPE equals 10, and VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST equals,	at least one SEQUENCE OF EVENTS must equal 08 for that vehicle number in the CRASH EVENTS table.
A618	PERSON TYPE equals 19, and VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST equals,	at least one SEQUENCE OF EVENTS must equal 99 for that vehicle number in the CRASH EVENTS table.
A619	the total count of persons with PERSON TYPE equal to 05 that have the same VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is,	the number of events equal to 08 for that vehicle in the CRASH EVENTS table should equal
A61A	the total count of PERSON TYPE is equal to 11, 12, or 13 for the vehicle in VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is,	the number of events equal to 15 in the CRASH EVENTS table should equal for that vehicle.
A61B	the total count of PERSON TYPE is equal to 10 for the vehicle in VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is,	the number of events equal to 08 in the CRASH EVENTS table should equal for that vehicle.
A61G	the FIRST HARMFUL EVENT equals 08, and PERSON TYPE equals 05, and NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 21, 22, 24, 25, 28, and the VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is involved in the FIRST HARMFUL EVENT,	CRASH TYPE should not equal 13 for this vehicle.
A61H	the FIRST HARMFUL EVENT equals 09, and PERSON TYPE equals 06, 07, and NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 21, 22, 24, 25, 28, and the VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is involved in the FIRST HARMFUL EVENT,	CRASH TYPE should not equal 13 for this vehicle.

Error ID	IF	THEN
A61J	the FIRST HARMFUL EVENT equals 15, and PERSON TYPE equals 11, 12, or 13, and NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 21, 22, 24, 25, 28, and the VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is involved in the FIRST HARMFUL EVENT,	CRASH TYPE should not equal 13 for this vehicle.
A61K	the FIRST HARMFUL EVENT equals 49, and PERSON TYPE equals 04, and NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 21, 22, 24, 25, 28, and the VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is involved in the FIRST HARMFUL EVENT,	CRASH TYPE should not equal 13 for this vehicle.
PB30	PEDESTRIAN/BIKE TYPING -PEDESTRIAN CRASH TYPE equals 220,	at least one DRIVER PRESENCE must equal 0 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
PB31	PEDESTRIAN/BIKE TYPING -BICYCLIST CRASH TYPE equals 147, 157, or 357,	at least one DRIVER'S VISION OBSCURED BY must equal 06 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON- MOTORIST.
PB32	PEDESTRIAN/BIKE TYPING -PEDESTRIAN CRASH TYPE equals 742,	at least one DRIVER'S VISION OBSCURED BY must not equal 00 or 95 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
PB40	PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE equals 610,	at least one PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 08, 09, or 13 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
PB41	PEDESTRIAN/BIKE TYPING -BICYCLIST CRASH TYPE equals 215,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 08 or 09 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.

Error ID	IF	THEN
PB42	PEDESTRIAN/BIKE TYPING -BICYCLIST CRASH TYPE equals 111, 211, or 212,	at least one PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 11, 16, or 17 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
PB43	If PEDESTRIAN/BIKE TYPING -BICYCLIST CRASH TYPE equals 112, 151, 213, 214, 217, or 218,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 10, 16, or 17 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
PB45	PEDESTRIAN/BIKE TYPING -PEDESTRIAN CRASH TYPE equals 781 or 782,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 11 or 17 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
PB46	PEDESTRIAN/BIKE TYPING -BICYCLIST CRASH TYPE equals 221-225,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 01 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
PB49	PERSON TYPE equals 05, 11, 12, or 13, and PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 13 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST,	at least one PEDESTRIAN/BIKE TYPING - PEDESTRIAN CRASH TYPE should equal 211-214 or 219.
PB50	PERSON TYPE equals 05, 11, 12, or 13, and PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 10-12 or 16 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST,	at least one PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 461, 465, 469, 510, 781, 782, 791, 792, 794, 795, or 799.
PB52	PERSON TYPE equals 06 or 07, and PRE- EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 13 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON- MOTORIST,	at least one PEDESTRIAN/BIKE TYPING - BICYCLIST CRASH TYPE should equal 610.

Error ID	IF	THEN
PB56	PEDESTRIAN/BIKE TYPING - PEDESTRIAN CRASH TYPE equals 791, 792, 794, 795,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 10 or 17 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
PBA0	PEDESTRIAN/ BIKE TYPING - CRASH TYPE - BICYCLE equals 111, 211, 212, and VEHICLE NUMBER - VEHICLE LEVEL equals VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 11.
PBA1	PEDESTRIAN/ BIKE TYPING - CRASH TYPE - BICYCLE equals 112, 151, 213, 214, 217, or 218, and VEHICLE NUMBER - VEHICLE LEVEL equals VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 10.
PBA5	PEDESTRIAN SCENARIO equals 1a, 1b, 1c, 1d, 2a, 2b, 2c, 2d, 3a, 3b, 3c, 3d, 4a, 4b, 4c, 4d,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 01, 02, 03, 04, 06, 08, 09, 12, 13, 14, 15, 16, or 17 for the vehicle number that struck this non-motorist.
PBA6	PEDESTRIAN SCENARIO equals 5a, 5b, 5c, 5d, 6a, 6b, 6c, 6d, 7a, 7b, 7c, 7d, 8a, 8b, 8c, 8d,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 10 for the vehicle number that struck this non-motorist.
PBA7	PEDESTRIAN SCENARIO equals 9a, 9b, 9c, 9d, 10a, 10b, 10c, 10d, 11a, 11b, 11c, 11d, 12a, 12b, 12c, 12d,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 11 for the vehicle number that struck this non-motorist.

NM5/P5 - Age

FORMAT: 3 numeric

SAS NAME: Person.AGE

ELEMENT VALUES:

Codes	Attributes
	Blank
000	Less than One Year
001-120	Actual Age*
998	Not Reported
999	Reported as Unknown

Definition: This element identifies the person's age, in years, with respect to the person's last birthday.

Remarks: This element's values and remarks are identical to the Person Level (MV Occupant) Level element AGE. Please see <u>AGE</u> for remarks.

Consistency Checks (See Section 400):

Error ID	Error Message
U120	UNLIKELY: AGE should not be greater than 094, unless equal to 998, 999.
U360	UNLIKELY: AGE equals 999 and HIT AND RUN is not equal to 1.
U695	Unlikely AGE equals 0 for a person not in a motor vehicle and [SEX equals 2 and AGE equals 5-72 for at least one other person not in a motor vehicle].

Consistency Checks (FARS Only) (See Section 400):

Error ID	IF	THEN
5W0P	RELATED FACTORS-PERSON LEVEL equals <i>0</i> 18,	SEX must equal 2, and AGE must be greater than 012.
P1A0	AGE is less than 012, and INJURY SEVERITY equals 4,	FATAL INJURY AT WORK should equal 0.

NM6/P6 - Sex

FORMAT: 1 numeric

SAS NAME: Person.SEX

ELEMENT VALUES:

Codes	Attributes
1	Male
2	Female
8	Not Reported
9	Reported as Unknown

Definition: This element identifies the sex of the person involved in the crash.

Remarks: This element's values and remarks are identical to the Person Level (MV Occupant) Level element SEX. Please see <u>SEX</u> for remarks.

Consistency Checks (See Section 400):

Error ID	Error Message
U340	UNLIKELY: HIT-AND-RUN equals 0, and SEX equals 9.
U695	Unlikely AGE equals 0 for a person not in a motor vehicle and [SEX equals 2 and AGE equals 5-72 for at least one other person not in a motor vehicle].

Consistency Checks (FARS Only) (See Section 400):

Error ID	IF	THEN
5W0P	RELATED FACTORS-PERSON LEVEL equals θ 18,	SEX must equal 2, and AGE must be greater than 012.

NM7 - Person Type

FORMAT: 2 numeric

SAS NAME: Person.PER_TYP

ELEMENT VALUES:

Codes	Attributes
04	Occupant of a Non-Motor Vehicle Transport Device
05	<u>Pedestrian</u>
06	Bicyclist
07	Other Cyclist
10	Persons In/On Buildings
11	Person on Motorized Personal Conveyance
12	Person on Non-Motorized Personal Conveyance
13	Person on Personal Conveyance, Unknown if Motorized or Non-Motorized
19	Unknown Type of Non-Motorist

Definition: This element describes the role of this person involved in the crash.

Remarks: An involved person in a crash must maintain PERSON TYPE during the crash. Once the unstabilized situation begins, a driver, passenger, or non-motorist/non-occupant cannot change PERSON TYPE until the situation stabilizes.

If a person is entering or exiting a vehicle before the unstabilized situation begins, try to determine if the person has successfully changed type before control is lost. For example, a person attempting to get into an automobile that begins to move would be classified as a pedestrian. Likewise, a passenger stepping off a bus as it begins to pull away, would be classified as an occupant.

04 (Occupant of a Non-Motor Vehicle Transport Device) refers to people riding in an animal-drawn conveyance, on an animal, or injured occupants of railway trains, etc.

05 (**Pedestrian**) is used for all pedestrians except for those in/on personal conveyances (see <u>11 (Person on Motorized Personal Conveyance</u>), <u>12 (Person on Non-Motorized personal Conveyance</u>), <u>and 13 (Person on Personal Conveyance</u>, <u>Unknown if Motorize or Non-Motorized</u>) below) and in buildings (see <u>10 (Persons In/On Buildings</u>) below). A person pushing a vehicle or being carried by a pedestrian should be coded **05 (Pedestrian**).

06 (**Bicyclist**) is used for a two-wheel, non-motorized cycle. This includes all people (operator and passengers) on a bicycle and a person being pulled by a bicycle (e.g., in a wagon or bike trailer).

07 (Other Cyclist) is used for unicycles and tricycles.

10 (Persons In/On Buildings) is used for a person inside of or on a building who is struck by a motor vehicle directly or by way of an object set in motion (e.g., crash debris as a vehicle penetrates a wall). 10 (Persons In/On Buildings) takes precedence over attributes "05-07 and 11-13."

NOTE about personal conveyances: A personal conveyance is a device, other than a transport device, used by a pedestrian for personal mobility assistance or recreation. These devices can be motorized or human powered, but not propelled by pedaling.

Inclusions:

- 1. Rideable toys
 - a. Roller skates, in-line skates
 - b. Skateboards
 - c. Skates
 - d. Baby carriage
 - e. Scooters
 - f. Toy wagons
- 2. Motorized rideable toys
 - a. Motorized skateboard
 - b. Motorized toy car
 - c. Motorized kick scooter
- 3. Devices for personal mobility assistance
 - a. Self-balancing personal conveyance (e.g., Segway-style device)
 - b. Motorized and non-motorized wheelchairs
 - c. Mobility aid scooters

Exclusions:

- 1. Golf cart
- 2. Low speed vehicles (LSVs)
- 3. Go-carts
- 4. Minibike
- 5. "Pocket" motorcycles
- 6. Motor scooters
- 7. Moped

Wheelchair: use the term, "wheelchair" as follows:

"Wheelchair - A mobility aid, usable indoors, and designed for and used by individuals with mobility impairments, whether operated manually or powered." Therefore, all wheelchair users, motorized or not, are **People on Personal Conveyances**.

RATIONALE:

Some States have passed legislation to classify operators of motorized wheelchairs as "pedestrians" and others as "motor vehicles." Also, there seems to be an increase in the variety of forms these

devices take (if not in the actual number in use). Some resemble three-wheeled scooters; others small four-wheel carts; still others look like the typical human-powered wheelchair. They are in use by individuals who are unable to walk, who have limited walking ability, or who need to avoid walking for reasons of health or stamina. Since these devices simply supply a form of assisted "walking" for such people, their legitimate users may be seen as "other people on personal conveyances" just as other non-motorists moving along a sidewalk, walking with or against traffic on the edge of a road, crossing the roadway, or turning into a driveway.

11 (Person on Motorized Personal Conveyance) is used when the non-motorist was using a personal conveyance equipped with a motor to assist or assume control of propelling the conveyance. Use this code anytime the device has a motor. If the motor was not in use or it is unknown if the motor was in use at the time of the crash, then this attribute still applies. Examples: motorized skateboard, motorized wheelchair or mobility aid scooters, motorized e-scooters, self-balancing personal conveyances (e.g., hoverboard or Segway-style device), etc.

NOTE: Motorized bicycles and e-bikes are considered motor vehicles. See NCSA BODY TYPE <u>81</u> (<u>Moped or Motorized Bicycle</u>). Likewise, a person riding one of these vehicles is considered a Motor Vehicle Occupant.

- 12 (Person on Non-Motorized Personal Conveyance) is used when the non-motorist was using a personal conveyance not equipped with a motor to assist or assume control of propelling the conveyance. Examples: non-motorized roller skates or in-line skates, non-motorized skateboard, baby carriage, non-motorized scooter, non-motorized wheelchair, etc.
- 13 (Person on Personal Conveyance, Unknown if Motorized or Non-Motorized) is used when it is known that the non-motorist was using a personal conveyance at the time of the crash, but it is unknown whether the device was motorized or non-motorized (i.e., code 11 or code 12).
- **19** (**Unknown Type of Non-Motorist**) is used only when it cannot be determined which attribute is applicable for people not in motor vehicles.

Error ID	IF	THEN
050P	PERSON TYPE equals 04-07, 10-19, and NUMBER OF VEHICLE FORMS SUBMITTED equals 001,	VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST must equal 001.
1M1F	RELATED FACTORS-PERSON LEVEL (Not a MV Occupant) equals <i>0</i> 13,	PERSON TYPE should equal 11.
1M2F	at least one RELATED FACTORS - PERSON (NOT A MOTOR VEHICLE OCCUPANT) LEVEL equals 101,	PERSON TYPE must not equal 04 or 10.
1M3F	at least one RELATED FACTORS - PERSON (NOT A MOTOR VEHICLE OCCUPANT) LEVEL equals 100,	PERSON TYPE should equal 06, 11, 12, or 13.
1N0F	PERSON TYPE equals 06,	RELATED FACTORS-PERSON LEVEL (Not a MV Occupant) must not equal 009, 013, 069, 070, 090, 094-097.

Error ID	IF	THEN
1N1F	PERSON TYPE equals 10,	RELATED FACTORS-PERSON LEVEL (Not a MV Occupant) must not equal 009, 021, 037, 040-042, 051, 052, 053, 054, 055, 056, 057, 060-070, 072-078, 080-083, 090, 091, 100, or 101.
1P0G	PERSON TYPE equals 05,	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must not equal 07, 08, 10, 13-18, 20.
1P1F	PERSON TYPE equals 04, 05, 10, 11, 12, 13, or 19,	NON-MOTORIST LOCATION AT TIME OF CRASH should not equal 16 for this person.
1P1G	PERSON TYPE equals 19,	NON-MOTORIST ACTION/CIRCUMSTANCES should not equal 11, 12.
1P2F	PERSON TYPE equals 10,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 25.
1P3F	PERSON TYPE (NM7) equals 10,	NON-MOTORIST ACTION/CIRCUMSTANCES (NM11) must not equal 01-12, 16, and NON-MOTORIST CONTRIBUTING CIRCUMSTANCES (NM12) must not equal 01-20.
1P3G	PERSON TYPE equals 04, 06, 07,	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES should not equal 04.
1P4F	PERSON TYPE equals 04,	NON-MOTORIST ACTION/CIRCUMSTANCES must not equal 04, 12.
1P4G	PERSON TYPE equals 04, 06, <i>07</i> , <i>11</i> , <i>12</i> , <i>13</i> , 19,	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES should not equal 05.
1P5F	PERSON TYPE equals 06, 07, 11, 12, 13, or 19,	NON-MOTORIST ACTION/CIRCUMSTANCES must not equal 04.
1P5G	PERSON TYPE equals 11, 12, or 13,	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES should not equal 20.
1P6G	PERSON TYPE equals 04, 06, 07, 11, 12, 13, or 19,	CONDITION (IMPAIRMENT) AT TIME OF CRASH must not equal 03.
1P7F	PERSON TYPE equals 04,	NON-MOTORIST ACTION/CIRCUMSTANCES should not equal 10, 11.
1P7G	PERSON TYPE equals 05-07, 19,	CONDITION (IMPAIRMENT) AT TIME OF CRASH should not equal 04.

Error ID	IF	THEN
1P8F	PERSON TYPE equals 06, 07,	NON-MOTORIST ACTION/CIRCUMSTANCES should not equal 10-12.
1P8G	PERSON TYPE equals 10,	CONDITION (IMPAIRMENT) AT TIME OF CRASH should not equal 01-10, 96.
1P9F	PERSON TYPE equals 11, 12, or 13,	NON-MOTORIST ACTION/CIRCUMSTANCES should not equal 11.
1PJ1	NON-MOTORIST LOCATION AT TIME OF CRASH equals 16,	the PERSON TYPE for this person should equal 06 or 07.
2P0G	CONDITION (IMPAIRMENT) AT TIME OF CRASH equals 03,	PERSON TYPE must be 05, 10, 11, 12, 13, or 19.
2P1F	PERSON TYPE equals 04, 06, 07, or 10,	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must not equal 12.
3B1Q	CRITICAL EVENT - PRECRASH (EVENT) equals 81 or 82,	at least one PERSON TYPE should equal 05.
3B2Q	CRITICAL EVENT - PRECRASH (EVENT) equals 83 and PRE-IMPACT LOCATION does not equal 4,	at least one PERSON TYPE should equal 04, 06, 07, 11, 12, 13, or 19.
3B3Q	CRITICAL EVENT - PRECRASH (EVENT) equals 84 or 85,	at least one PERSON TYPE should equal 04, 06, 07, <i>11</i> , <i>12</i> , <i>13</i> , or 19.
3P0F	PERSON TYPE equals 03-07, 10, 11, 12, 13, or 19,	INJURY SEVERITY should not equal 6.
4W4P	RELATED FACTORS-PERSON LEVEL (Not a MV Occupant) equals 053, 054, 055, and PERSON TYPE does not equal 05,	at least one NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must equal 18.
4W5P	RELATED FACTORS-PERSON LEVEL (Not a MV Occupant) equals 053, 054, 055, and PERSON TYPE equals 05,	at least one NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must equal 21.
4X3A	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES equals 11,	PERSON TYPE must equal 05.
550F	FIRST HARMFUL EVENT equals 08,	at least one person must have PERSON TYPE equal 05, 10.
560F	FIRST HARMFUL EVENT equals 09,	at least one person must have PERSON TYPE equal to 06, 07.
590F	FIRST HARMFUL EVENT equals 15,	at least one Person Level form must have a PERSON TYPE code of 11, 12, or 13.

Error ID	IF	THEN
5M2G	SPECIAL USE equals 06, and PERSON TYPE equals 02, and SEATING POSITION equals 51,	at least one RELATED FACTORS - PERSON LEVEL should equal 092 or 094.
5M3G	SPECIAL USE equals 06, and PERSON TYPE equals 01 or 02, and SEATING POSITION equals 11-19,	at least one RELATED FACTORS - PERSON LEVEL should equal 094, or at least one RELATED FACTORS - DRIVER LEVEL should equal 094.
5Z0F	SEQUENCE OF EVENTS equals 08,	at least one person must have PERSON TYPE equal to 05, 10.
6Z0F	SEQUENCE OF EVENTS equals 09,	at least one person must have PERSON TYPE equal to 06, 07.
880F	RELATED FACTORS-CRASH LEVEL equals 016,	there must be a Person Level (NOT A MV OCCUPANT) form with PERSON TYPE equal to 04-07, 11, 12, 13, or 19.
890F	RELATED FACTORS-CRASH LEVEL equals 015,	there must be a Person Level (NOT A MV OCCUPANT) form with PERSON TYPE equal to 04-07, 10-13, or 19.
8M0F	PERSON TYPE equals 04,	RELATED FACTORS-PERSON LEVEL (NOT A MV OCCUPANT) must not equal 013, 053, 054, 055, 090, 094-097, or 101.
8Q0F	PERSON TYPE equals 11, 12, or 13,	RELATED FACTORS-PERSON (NOT A MV OCCUPANT) LEVEL must not equal 009, 090, or 094-097.
8T0F	NON-MOTORIST SAFETY EQUIPMENT Subfield 1 Non-Motorist Helmet Use equals 2,	PERSON TYPE should equal 06, 07, 11, 12, or 13.
8Z0F	any SEQUENCE OF EVENTS equals 15,	at least one Person Level (Not a MV Occupant) form must have a PERSON TYPE code of 11, 12, or 13.
9M0F	PERSON TYPE equals 05,	RELATED FACTORS-PERSON LEVEL (NOT A MV OCCUPANT) must not equal 013, 021, 026, 040, 042, 051, 052, 057, 068-070, 073-083, or 100.
A612	PERSON TYPE equals 04, and VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST equals,	at least one SEQUENCE OF EVENTS must equal 10, 49, or 74 for that vehicle number in the CRASH EVENTS table.
A613	PERSON TYPE equals 05, and VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST equals,	at least one SEQUENCE OF EVENTS must equal 08 for that vehicle number in the CRASH EVENTS table.
A614	PERSON TYPE equals 06, and VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST equals,	at least one SEQUENCE OF EVENTS must equal 09 for that vehicle number in the CRASH EVENTS table.

Error ID	IF	THEN
A615	PERSON TYPE equals 07, and VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST equals,	at least one SEQUENCE OF EVENTS must equal 09 for that vehicle number in the CRASH EVENTS table.
A616	PERSON TYPE equals 11, 12, or 13, and VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST equals,	at least one SEQUENCE OF EVENTS must equal 15 for that vehicle number in the CRASH EVENTS table.
A617	PERSON TYPE equals 10, and VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST equals,	at least one SEQUENCE OF EVENTS must equal 08 for that vehicle number in the CRASH EVENTS table.
A618	PERSON TYPE equals 19, and VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST equals,	at least one SEQUENCE OF EVENTS must equal 99 for that vehicle number in the CRASH EVENTS table.
A619	the total count of persons with PERSON TYPE equal to 05 that have the same VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is,	the number of events equal to 08 for that vehicle in the CRASH EVENTS table should equal
A61A	the total count of PERSON TYPE is equal to 11, 12, or 13 for the vehicle in VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is,	the number of events equal to 15 in the CRASH EVENTS table should equal for that vehicle.
A61B	the total count of PERSON TYPE is equal to 10 for the vehicle in VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is,	the number of events equal to 08 in the CRASH EVENTS table should equal for that vehicle.
A61G	the FIRST HARMFUL EVENT equals 08, and PERSON TYPE equals 05, and NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 21, 22, 24, 25, 28, and the VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is involved in the FIRST HARMFUL EVENT,	CRASH TYPE should not equal 13 for this vehicle.
A61H	the FIRST HARMFUL EVENT equals 09, and PERSON TYPE equals 06, 07, and NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 21, 22, 24, 25, 28, and the VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is involved in the FIRST HARMFUL EVENT,	CRASH TYPE should not equal 13 for this vehicle.

Error ID	IF	THEN
A61J	the FIRST HARMFUL EVENT equals 15, and PERSON TYPE equals 11, 12, or 13, and NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 21, 22, 24, 25, 28, and the VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is involved in the FIRST HARMFUL EVENT,	CRASH TYPE should not equal 13 for this vehicle.
A61K	the FIRST HARMFUL EVENT equals 49, and PERSON TYPE equals 04, and NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 21, 22, 24, 25, 28, and the VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is involved in the FIRST HARMFUL EVENT,	CRASH TYPE should not equal 13 for this vehicle.
BZ51	CRITICAL EVENT - PRECRASH (EVENT) equals 80 and PRE-IMPACT LOCATION does not equal 4,	at least one PERSON TYPE should equal 5.
CK0P	PERSON TYPE equals 07,	RELATED FACTORS-PERSON LEVEL (NOT A MV OCCUPANT) must not equal 0 09, 0 13, 0 69, 0 70, 0 87, 0 90, 0 94- 0 97.
CM0P	PERSON TYPE equals 19,	RELATED FACTORS-PERSON LEVEL (NOT A MV OCCUPANT) must not equal 0 13, 0 69, 0 70, 0 90.
FP0F	PERSON TYPE is blank,	case status is flawed.
FP9F	PERSON TYPE equals 05, 06, 07, 11, 12, or 13, and the PEDESTRIAN/BIKE - CRASH TYPE equals blank,	case status is flawed.
P071	PERSON TYPE equals 02, 04-07, 10, 11, 12, or 13, and INJURY SEVERITY does not equal 4,	ALCOHOL TEST STATUS should not equal 9, ALCOHOL TEST TYPE should not equal 99, and ALCOHOL TEST RESULT should not equal 999.
P074	PERSON TYPE equals 02, 04-07, 10, 11, 12, or 13, and INJURY SEVERITY does not equal 4,	ALCOHOL TEST STATUS must not equal 8, ALCOHOL TEST TYPE must not equal 95, and ALCOHOL TEST RESULT must not equal 995.
PB22	SCHOOL BUS RELATED equals 1, and PERSON TYPE equals 05, 11, 12, or 13,	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 342.
PB23	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 342, and PERSON TYPE equals 05, 11, 12, or 13,	SCHOOL BUS RELATED should equal 1.

Error ID	IF	THEN
PB24	PERSON TYPE equals 05, 11, 12, or 13, and NON-MOTORIST LOCATION AT TIME OF CRASH equals 14, 16, 20, 21, 22, 24, or 25,	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 230, 320, 330, 410, 420, 430, 440, 459, 510, 520, 590, 830, or 890.
PB25	PERSON TYPE equals 05, 11, 12, or 13, and NON-MOTORIST LOCATION AT TIME OF CRASH equals 01-03 or 09,	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 690, 710, 730, 741, 742, 760, 770, 781, 782, 791, 792, 794, 795, or 799.
PB26	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES equals 02, and PERSON TYPE equals 06 or 07,	PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLIST should equal 142, 144, 147, 153, 155, 156, 157, 159, 311, 312, 313, 318, 319, or 357.
PB27	NON-MOTORIST ACTION/CIRCUMSTANCES equals 05, and PERSON TYPE equals 05, 11, 12, or 13,	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 410 or 420.
PB28	NON-MOTORIST ACTION/CIRCUMSTANCES equals 06, and PERSON TYPE equals 05, 11, 12, or 13,	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 430 or 440.
PB29	NON-MOTORIST ACTION/CIRCUMSTANCES equals 04, and does not also equal 03, and PERSON TYPE equals 05, 11, 12, or 13,	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 410, 420, 430, 440, or 459.
PB36	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 250,	PERSON TYPE must equal 11, 12, or 13.
PB49	PERSON TYPE equals 05, 11, 12, or 13, and PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 13 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST,	at least one PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 211-214 or 219.
PB50	PERSON TYPE equals 05, 11, 12, or 13, and PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 10-12 or 16 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST,	at least one PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 461, 465, 469, 510, 781, 782, 791, 792, 794, 795, or 799.

Error ID	IF	THEN
PB52	PERSON TYPE equals 06 or 07, and PRE- EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 13 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON- MOTORIST,	at least one PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLIST should equal 610.
PB59	NON-MOTORIST ACTION/CIRCUMSTANCES equals 16, and PERSON TYPE equals 05, 11, 12, or 13,	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 459.
PB60	PERSON TYPE equals 05, 11, 12, or 13, and DRIVER PRESENCE equals 0 for the motor vehicle which strikes the non-motorist,	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 220.

Consistency Checks (FARS Only) (See Section 400):

Error ID	IF	THEN
P073	PERSON TYPE equals 02, 04-07, 10, 11, 12, or 13, and INJURY SEVERITY does not equal 4,	DRUG TEST STATUS should not equal 9 and any DRUG SPECIMEN should not equal 99, and any DRUG TEST RESULTS should not equal 999.
P075	PERSON TYPE equals 02, 04-07, 10, 11, 12, 13, or 19, and INJURY SEVERITY does not equal 4,	DRUG TEST STATUS must not equal 8, any DRUG SPECIMEN must not equal 96, and any DRUG TEST RESULTS must not equal 095.

NM8/P8 - Injury Severity

FORMAT: 1 numeric

SAS NAME: Person.INJ_SEV

ELEMENT VALUES:

Codes	Attributes
0	No Apparent Injury (O)
1	Possible Injury (C)
2	Suspected Minor Injury (B)
3	Suspected Serious Injury (A)
4	Fatal Injury (K)
5	Injured, Severity Unknown
6	Died Prior to Crash*
9	Unknown/Not Reported

Definition: This element describes the severity of the injury to this person in the crash.

Remarks: This element's values and remarks are identical to the Person Level (MV Occupant) Level element INJURY SEVERITY. Please see **INJURY SEVERITY** for remarks.

Error ID	IF	THEN
2U3F	INJURY SEVERITY equals 3,	TRANSPORTED TO FIRST MEDICAL FACILITY BY should not equal 0.
3P0F	PERSON TYPE equals 03-07, 10, 11, 12, 13, or 19,	INJURY SEVERITY should not equal 6.
FP8F	INJURY SEVERITY is blank,	case status is flawed.
P071	PERSON TYPE equals 02, 04-07, 10, 11, 12, or 13, and INJURY SEVERITY does not equal 4,	ALCOHOL TEST STATUS should not equal 9, ALCOHOL TEST TYPE should not equal 99, and ALCOHOL TEST RESULT should not equal 999.
P077	INJURY SEVERITY equals 4, and DIED AT SCENE/EN ROUTE equals 7 or 8,	ALCOHOL TEST Subfield 2 - Test Type should not equal 02, 10, or 11.
P090	INJURY SEVERITY equals 0,	TRANSPORTED TO FIRST MEDICAL FACILITY BY must equal 0.
P300	POLICE REPORTED ALCOHOL INVOLVEMENT equals 1, and INJURY SEVERITY equals 4,	ALCOHOL TEST STATUS should not equal 0.
U160	UNLIKELY: INJURY SEVERITY equals 6.	

Error ID	IF	THEN
U350	UNLIKELY: INJURY SEVERITY equals 1-6, and SEATING POSITION equals 98.	

Consistency Checks (FARS Only) (See Section 400):

Error ID	IF	THEN
1R1P	If DIED AT SCENE/EN ROUTE equals 7, 8,	INJURY SEVERITY must equal 4.
1U1F	INJURY SEVERITY equals 4,	DEATH DATE must not equal 88888888.
1U2F	INJURY SEVERITY equals 4,	DEATH TIME must not equal 8888.
2U1F	INJURY SEVERITY is not equal to 4,	DEATH DATE must equal 88888888.
2U2F	INJURY SEVERITY is not equal to 4,	DEATH TIME must equal 8888.
4V1F	INJURY SEVERITY equals 4,	DEATH DATE and DEATH TIME for this person must be within 720 hours of the CRASH DATE and CRASH TIME.
4U0F	Each original submission must have at least one Person Level form with INJURY SEVERITY coded 4.	
7E0P	INJURY SEVERITY equals 4,	DEATH CERTIFICATE NUMBER must NOT equal 0000-00-000000.
7E1P	INJURY SEVERITY equals 4,	RACE must not equal 00.
7E2P	INJURY SEVERITY equals 4,	HISPANIC ORIGIN must not equal 00.
7E3P	INJURY SEVERITY is not equal to 4,	RACE must equal 00 AND HISPANIC ORIGIN must equal 00.
7F0P	DEATH CERTIFICATE NUMBER is not blank or 0000-00-000000,	INJURY SEVERITY must equal 4.
7F1P	RACE equals 00,	INJURY SEVERITY must not equal 4.
7F2P	HISPANIC ORIGIN equals 00,	INJURY SEVERITY must not equal 4.
7F3P	RACE is not equal to 00, and HISPANIC ORIGIN is not equal to 00,	INJURY SEVERITY must equal 4.
7R0P	FATAL INJURY AT WORK equals 0, 1, 9,	INJURY SEVERITY must equal 4.
7W0P	FATAL INJURY AT WORK equals 8,	INJURY SEVERITY must not equal 4.
P073	PERSON TYPE equals 02, 04-07, 10, 11, 12, or 13, and INJURY SEVERITY does not equal 4,	DRUG TEST STATUS should not equal 9 and any DRUG SPECIMEN should not equal 99, and any DRUG TEST RESULTS should not equal 999.
P1A0	AGE is less than 012, and INJURY SEVERITY equals 4,	FATAL INJURY AT WORK should equal 0.
P53P	INJURY SEVERITY equals 0-3, 5, 6,	DIED AT SCENE/EN ROUTE must equal 0.

Consistency Check (CRSS Only) (See Section 400):

Error ID	Error Message	
4U2F	At least one INJURY SEVERITY should equal 1, 2, 3, 4, 5, or 9, or at least one EXTENT OF DAMAGE should equal 2, 4, 6, 8, or 9.	
P078	INJURY SEVERITY equals 4,	ALCOHOL TEST Subfield 2 - Test Type should not equal 02, 10, or 11.

NM9 - Pedestrian/Bike Typing

FORMAT: Elements Completed in *RBIS*

SAS NAME: Various

Definition: This element describes the precrash actions leading to crashes between motor vehicles and pedestrians or bicyclists.

Remarks: Pedestrian and Bicycle Crash Type describes the precrash actions of the involved parties to better define the sequence of events and precipitating actions leading to crashes between motor vehicles and pedestrians or bicyclists.

During the 1970s NHTSA developed methodologies for typing pedestrian and bicycle crashes. In the 1990s the methodologies were applied to more than 8,000 pedestrian and bicycle crashes in six States. The results provided a representative summary of the distribution of crash types experienced by pedestrians and bicyclists and, over time, this method has evolved and was refined. Pedestrian/Bike typing is offered as a tool to help overcome hindrances to the development of effective countermeasures to prevent bicyclist and pedestrian crashes.

In FARS and CRSS, Pedestrian and Bicycle Crash Typing is accomplished through a software application referred to as the **Ped/Bike Wizard**. By clicking on choices in the wizard, the analyst/coder enters data into the file without typing each specific data element's attribute (numeric code).

The elements, attributes, and remarks are not presented here in the main Coding and Validation manual, but rather in the detailed companion FARS/CRSS Pedestrian Bicyclist Manual.

The Pedestrian/Bike Typing application is presented for the following <u>person types</u>:

- Pedestrian,
- Person on Personal Conveyance,
- Bicyclist,
- Other Cyclist.

Error ID	IF	THEN
0PB1	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 741,	at least one NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must equal 11.
0PB2	PEDESTRIAN BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 760,	at least one NON-MOTORIST CONTRIBUTING CIRCUMSTANCES should equal 02.
1PK2	NON-MOTORIST LOCATION AT TIME OF CRASH equals 21,	SIDEWALK PRESENT must equal 1.
1PK3	NON-MOTORIST LOCATION AT TIME OF CRASH equals 01 or 10,	MARKED CROSSWALK PRESENT must equal 1.

Error ID	IF	THEN
FP9F	PERSON TYPE equals 05, 06, 07, 11, 12, or 13, and the PEDESTRIAN/ CRASH TYPE equals blank,	case status is flawed.
PB00	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 110-910,	at least one SEQUENCE OF EVENTS for the striking vehicle must equal 08 or 15.
PB02	PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE equals 111-980,	at least one SEQUENCE OF EVENTS for the striking vehicle must equal 09.
PB04	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN for a person involved in the first harmful event equals 211, 212, 461, 465, 680, 830, 890, 900 or 910,	RELATION TO JUNCTION (b) must not equal 02. Note: this edit is restricted to vehicles which are involved in only one event with pedestrian(s).
PB05	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN for a person involved in the first harmful event equals 311, 312 or 313,	RELATION TO TRAFFICWAY must equal 01 or 11. Note: this edit is restricted to vehicles which are involved in only one event with pedestrian(s).
PB06	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 730,	TRAFFIC CONTROL DEVICE for the striking vehicle must equal 01-03.
PB07	PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE for a person involved in the first harmful event equals 311, 312, 313, 321, 322 or 323,	RELATION TO JUNCTION (b) must equal 04 or 08. Note: this edit is restricted to vehicles which are involved in only one event with bicyclist(s).
PB08	PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE for a person involved in the first harmful event equals 141-144, 147, 151- 157 or 159,	RELATION TO JUNCTION (b) must equal 02 or 03. Note: this edit is restricted to vehicles which are involved in only one event with bicyclist(s).
PB09	PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE equals 141, 143, 151-158, 217 or 218,	TRAFFIC CONTROL DEVICE for the striking vehicle must not equal 00.
PB10	PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE equals 151, 156, 157, 217 or 218,	TRAFFIC CONTROL DEVICE for the striking vehicle must equal 01-03.
PB11	PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE equals 154,	TRAFFIC CONTROL DEVICE for the striking vehicle must equal 01-04, 08.
PB12	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN for a person involved in the first harmful event equals 510, 520, or 590,	RELATION TO TRAFFICWAY must not equal 01 or 11. Note: this edit is restricted to vehicles which are involved in only one event with pedestrian(s).
PB15	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 910,	at least one NON-MOTORIST ACTION/ CIRCUMSTANCES must equal 03.

Error ID	IF	THEN
PB16	PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE equals 142, 144, 147, 153, 155, 156, 157, 159, 311, 312, 313, 318, 319, or 357,	at least one NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must equal 02.
PB17	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN for a person involved in the first harmful event equals 211-214, or 219,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 08, 09, 13, or 98.
		Note: this edit is restricted to vehicles which are involved in only one event with pedestrian(s).
PB18	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 742,	at least one NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must equal 01.
PB19	NON-MOTORIST ACTION/CIRCUMSTANCES equals 08,	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN must not equal 510, 520, 590, 830, or 890.
PB20	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 510, 520, or 590,	at least one NON-MOTORIST ACTION/CIRCUMSTANCES must equal 02.
PB21	PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE equals 160,	TRAFFIC CONTROL DEVICE for the striking vehicle should equal 00.
PB22	SCHOOL BUS RELATED equals 1, and PERSON TYPE equals 05, 11, 12, or 13,	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 342.
PB23	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 342, and PERSON TYPE equals 05, 11, 12, or 13,	SCHOOL BUS RELATED should equal 1.
PB24	PERSON TYPE equals 05, 11, 12, or 13, and NON-MOTORIST LOCATION AT TIME OF CRASH equals 14, 16, 20, 21, 22, 24, or 25,	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 230, 320, 330, 410, 420, 430, 440, 459, 510, 520, 590, 830, or 890.
PB25	PERSON TYPE equals 05, 11, 12, or 13, and NON-MOTORIST LOCATION AT TIME OF CRASH equals 01-03 or 09,	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 690, 710, 730, 741, 742, 760, 770, 781, 782, 791, 792, 794, 795, or 799.
PB26	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES equals 02, and PERSON TYPE equals 06 or 07,	PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE should equal 142, 144, 147, 153, 155, 156, 157, 159, 311, 312, 313, 318, 319, or 357.
PB27	NON-MOTORIST ACTION/CIRCUMSTANCES equals 05, and PERSON TYPE equals 05, 11, 12, or 13,	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 410 or 420.

Error ID	IF	THEN
PB28	NON-MOTORIST ACTION/CIRCUMSTANCES equals 06, and PERSON TYPE equals 05, 11, 12, or 13,	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 430 or 440.
PB29	NON-MOTORIST ACTION/CIRCUMSTANCES equals 04, and does not also equal 03, and PERSON TYPE equals 05, 11, 12, or 13,	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 410, 420, 430, 440, or 459.
PB30	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 220,	at least one DRIVER PRESENCE must equal 0 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
PB31	PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE equals 147, 157, or 357,	at least one DRIVER'S VISION OBSCURED BY must equal 06 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON- MOTORIST.
PB32	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 742,	at least one DRIVER'S VISION OBSCURED BY must not equal 00 or 95 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
PB33	PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE equals 156,	DRIVER'S VISION OBSCURED BY for the striking vehicle must not equal 06.
PB34	NUMBER OF FORMS SUBMITTED FOR PERSONS NOT IN MOTOR VEHICLES equals 01, and FIRST HARMFUL EVENT equals 08, and RELATION TO JUNCTION (b) equals 02,	PEDESTRIAN/ BIKE TYPING - CRASH TYPE - PEDESTRIAN must not equal 320, 330, 360, 680, 830, 890, 900, or 910.
PB35	NUMBER OF FORMS SUBMITTED FOR PERSONS NOT IN MOTOR VEHICLES equals 01, and FIRST HARMFUL EVENT equals 08, and RELATION TO JUNCTION (b) equals 02,	PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN must equal 1.
PB36	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 250,	PERSON TYPE must equal 11, 12, or 13.
PB37	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 311, 312, or 313,	at least one NON-MOTORIST ACTION/CIRCUMSTANCES must equal 08 or 10.
PB38	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 410 or 420,	at least one NON-MOTORIST ACTION/ CIRCUMSTANCES must equal 05.
PB39	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 430 or 440,	at least one NON-MOTORIST ACTION/ CIRCUMSTANCES must equal 06.

Error ID	IF	THEN
PB40	PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE equals 610,	at least one PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 08, 09, or 13 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
PB41	PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE equals 215,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 08 or 09 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
PB42	PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE equals 111, 211, or 212,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 11, 16, or 17 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
PB43	PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE equals 112, 151, 213, 214, 217, or 218,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 10, 16, or 17 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
PB44	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 240,	EMERGENCY MOTOR VEHICLE USE should equal 2-6 for at least one vehicle.
PB45	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 781 or 782,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 11 or 17 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
PB46	PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE equals 221-225,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 01 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.

Error ID	IF	THEN
PB49	PERSON TYPE equals 05, 11, 12, or 13, and PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 13 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST,	at least one PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 211-214 or 219.
PB50	PERSON TYPE equals 05, 11, 12, or 13, and PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 10-12 or 16 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST,	at least one PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 461, 465, 469, 510, 781, 782, 791, 792, 794, 795, or 799.
PB52	PERSON TYPE equals 06 or 07, and PRE- EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 13 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON- MOTORIST,	at least one PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE should equal 610.
PB56	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 791, 792, 794, 795,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 10 or 17 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
PB59	NON-MOTORIST ACTION/CIRCUMSTANCES equals 16, and PERSON TYPE equals 05, 11, 12, or 13,	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 459.
PB60	PERSON TYPE equals 05, 11, 12, or 13, and DRIVER PRESENCE equals 0 for the motor vehicle which strikes the non-motorist,	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 220.
PB61	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 220,	DRIVER PRESENCE should equal 0 for the motor vehicle striking the non-motorist.
PB62	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 230,	at least one NON-MOTORIST ACTION/ CIRCUMSTANCES must equal 12.
PB63	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 230,	at least one RELATED FACTOR - CRASH LEVEL should equal 0 19 or 0 23.
PB66	PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 1,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 01, 02, 03, 09, or 22.

Error ID	IF	THEN
PB67	PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 2,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 10, 11, 13, 14, 16, 20-25, 28, 98, 99.
PB68	PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 3,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 10, 11, 13, 14, 16, 20-24, 28, 98, 99.
PB69	PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 4,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 24, 25, 98, 99.
PB70	PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 9,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 16, 22, 24, 98, or 99.
PB71	PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - BICYCLE equals 1,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 01, 02, 03, 09, 16, or 22.
PB72	PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - BICYCLE equals 2,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 10, 11, 13, 14, 16, 20, 21, 22, 23, 24, 25, 28, 98, 99.
PB73	PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - BICYCLE equals 3,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 10, 11, 13, 14, 16, 20, 21, 22, 23, 24, 28, 98, 99.
PB74	PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - BICYCLE equals 4,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 24, 25, 98, 99.
PB75	PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - BICYCLE equals 9,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 16, 22, 24, 98, or 99.
PB76	PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION equals 1,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 03.
PB77	PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION equals 2,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 01, 02, or 10.
PB78	PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION equals 3,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 11, 13.
PB79	PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION equals 4,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 14, 16, 20, 98, or 99.
PB80	PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION equals 5,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 21, 23, 24, 98, or 99.
PB81	PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION equals 6,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 20, 22, 28, 98, or 99.
PB82	PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION equals 7 or 8,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 25.
PB83	PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION equals 9,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 09, 20, 22, 28, 98, or 99.

Error ID	IF	THEN
PB84	PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION equals 1,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 03, 09, 11, or 13.
PB85	PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION equals 2,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 14, 16, or 20.
PB86	PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION equals 3,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 01, 02, 10, 21, 23, 98, or 99.
PB87	PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION equals 4,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 24.
PB88	PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION equals 5 or 6,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 25.
PB89	PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION equals 8,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 20, 22, 28, 98, or 99.
PB90	PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION equals 9,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 22, 98, or 99.
PB91	PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 1,	PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION must equal 1, 2, or 9.
PB92	PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 2,	PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION must equal 3, 4, 5, 6, 7, 8, or 9.
PB93	PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 3,	PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION must equal 2, 3, 4, 5, 6, or 9.
PB94	PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 4,	PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION must equal 7, 8, or 9.
PB95	PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 9,	PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION must equal 2, 5, or 9.
PB96	PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - BICYCLE equals 1,	PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION must equal 1, 2, 3, 8, or 9.
PB97	PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - BICYCLE equals 3,	PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION must equal 1, 2, 3, 4, 8, or 9.
PB98	PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - BICYCLE equals 4,	PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION must equal 4, 5, 6, or 9.
PB99	PEDESTRIAN/ BIKE TYPING - CRASH LOCATION-BICYCLE equals 9,	PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION must equal 9.

Error ID	IF	THEN
PBA0	PEDESTRIAN/ BIKE TYPING - CRASH TYPE - BICYCLE equals 111, 211, 212, and VEHICLE NUMBER - VEHICLE LEVEL equals VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 11.
PBA1	PEDESTRIAN/ BIKE TYPING - CRASH TYPE - BICYCLE equals 112, 151, 213, 214, 217, or 218, and VEHICLE NUMBER, VEHICLE LEVEL equals VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 10.
PBA2	PEDESTRIAN SCENARIO equals 1a, 1b, 1c, 1d, 3a, 3b, 3c, 3d, 5a, 5b, 5c, 5d, 7a, 7b, 7c, 7d, 9a, 9b, 9c, 9d, or 11a, 11b, 11c, 11d,	PEDESTRIAN POSITION must equal 2.
PBA3	CRASH LOCATION-PEDESTRIAN equals 1 (At Intersection) and PEDESTRIAN SCENARIO equals 2a, 2b, 2c, 2d, 4a, 4b, 4c, 4d, 6a, 6b, 6c, 6d, 8a, 8b, 8c, 8d, 10a, 10b, 10c, 10d, or 12a, 12b, 12c, 12d,	PEDESTRIAN POSITION must equal 1, 9.
PBA4	CRASH LOCATION-PEDESTRIAN equals 2 (Intersection-Related) and PEDESTRIAN SCENARIO equals 2a, 2b, 2c, 2d, 4a, 4b, 4c, 4d, 6a, 6b, 6c, 6d, 8a, 8b, 8c, 8d, 10a, 10b, 10c, 10d, or 12a, 12b, 12c, 12d,	PEDESTRIAN POSITION must equal 3-9.
PBA5	PEDESTRIAN SCENARIO equals 1a, 1b, 1c, 1d, 2a, 2b, 2c, 2d, 3a, 3b, 3c, 3d, 4a, 4b, 4c, 4d,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 01, 02, 03, 04, 06, 08, 09, 12, 13, 14, 15, 16, or 17 for the vehicle number that struck this non-motorist.
PBA6	PEDESTRIAN SCENARIO equals 5a, 5b, 5c, 5d, 6a, 6b, 6c, 6d, 7a, 7b, 7c, 7d, 8a, 8b, 8c, 8d,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 10 for the vehicle number that struck this non-motorist.
PBA7	PEDESTRIAN SCENARIO equals 9a, 9b, 9c, 9d, 10a, 10b, 10c, 10d, 11a, 11b, 11c, 11d, 12a, 12b, 12c, 12d,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 11 for the vehicle number that struck this non-motorist.
PBA9	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 741,	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must not equal 01.
PBB1	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 742,	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must not equal 11.

Error ID	IF	THEN
PBB2	CRASH LOCATION - PEDESTRIAN equals 1 or 2,	PEDESTRIAN INITIAL DIRECTION OF TRAVEL must equal 1-4, or 9, MOTORIST MANEUVER must equal 1-3, or 9, INTERSECTION LEG must equal 1, 2, or 9, and MOTORIST INITIAL DIRECTION OF TRAVEL must equal 1-4, or 9.
PBB3	PEDESTRIAN/BIKE TYPING-PEDESTRIAN CRASH TYPE equals 341 or 342,	RELATED FACTORS - CRASH LEVEL should equal 031.
PBB4	PEDESTRIAN/ BIKE TYPING - CRASH LOCATION -BICYCLE equals 1	NON-MOTORIST ACTION/CIRCUMSTANCES should not equal 05, 06, or 16
PBB5	PEDESTRIAN/ BIKE TYPING - CRASH LOCATION -PEDESTRIAN equals 1	NON-MOTORIST ACTION/CIRCUMSTANCES should not equal 05, 06, or 16
PBC0	PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE equals 250,	at least one NON-MOTORIST CONTRIBUTING CIRCUMSTANCES should equal 09.
PBC1	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 410,	at least one NON-MOTORIST CONTRIBUTING CIRCUMSTANCES should equal 09.
PBC2	PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE equals 143,	TRAFFIC CONTROL DEVICE for the striking vehicle must equal 20, 21, 28, or 29.

NM10 - Non-Motorist Location at Time of Crash

FORMAT: 2 numeric

SAS NAME: Person.LOCATION

ELEMENT VALUES:

Codes	Attributes
01	At Intersection - In Marked Crosswalk
02	At Intersection - Unmarked/Unknown if Marked Crosswalk
03	At Intersection - Not in Crosswalk
09	At Intersection - Unknown Location
10	Not At Intersection - In Marked Crosswalk
11	Not At Intersection - On Roadway, Not in Marked Crosswalk
13	Not At Intersection - On Roadway, Crosswalk Availability Unknown
14	Parking Lane/Zone
16	Bicycle Lane
20	Shoulder/Roadside
21	Sidewalk
22	Median/Crossing Island
23	Driveway Access
24	Shared-Use Path
25	Non-Trafficway Area
28	<u>Other</u>
98	Not Reported
99	Reported as Unknown Location

Definition: This element identifies the location of the non-motorist with respect to the roadway at the time of the crash.

Remarks: "At intersection" means: The person is **on a roadway** (travel lane) either (1) in the intersection, (2) in an area between a crosswalk and the perimeter of the intersection, or (3) in a crosswalk (whether marked or unmarked) adjacent to an intersection. If there are no crosswalks, "at intersection" means only the intersection, which is the area embraced within the prolongation of the lateral curb lines or, if none, the lateral boundary lines of the roadways. See the <u>Coding Guide:</u> <u>Intersections for helpful information.</u>

Crosswalk is (1) that part of a roadway at an intersection included within the connections of the lateral lines of the sidewalks on opposite sides of the highway measured from the curbs or, in the absence of curbs, from the edges of the traversable roadway, and in the absence of a sidewalk on one side of the highway, that part of the highway included within the extension of the lateral line of the existing

sidewalk to the side of the highway without the sidewalk, with such extension forming a right angle to the centerline of the highway; or (2) Any portion of a roadway at an intersection or elsewhere distinctly indicated for pedestrian crossing by lines or other markings on the surface of the roadway placed in accordance with the provisions in the Manual of Uniform Traffic Control Devices.

Intersection is an area that (1) contains a crossing or connection of two or more roadways not classified as driveway access (2) is embraced within the prolongation of the lateral curb lines, or, if none, the lateral boundary lines of the roadways.

01 (At Intersection-In Marked Crosswalk) is used when a person is in that portion of a roadway at an intersection that is distinctly indicated for pedestrian crossing by lines or other markings on the surface of the roadway. This attribute includes shared-use path crossings. This does not include crosswalks located in mid-blocks.

02 (At Intersection-In Unmarked/Unknown if Marked Crosswalk) is used when the person is "at intersection" within the prolongations of the sidewalk edges but there are no lines or other markings on the surface of the roadway (unmarked crosswalk). There must be a sidewalk or improved path present on one side of the leg of the trafficway that this person is crossing for there to be an unmarked crosswalk. If there are no sidewalks, there are no crosswalks. If it is unknown if the crosswalk is marked or unmarked, default to unmarked.

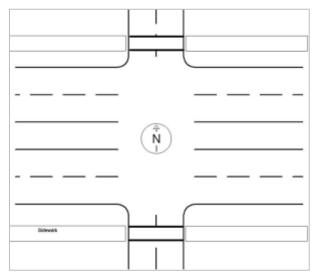


Figure 28: Intersection With Only Two Crosswalks

In a four-way intersection with sidewalks running along the East/West trafficway and no sidewalks on the North/South trafficway, the intersection area would only have two crosswalks. The two that allow crossing of the North/South trafficway. (See Figure 28 above)

03 (At Intersection-Not in Crosswalk) refers to a person in a travel lane that is not using an available crosswalk or there is not a crosswalk at this location.

- For people other than pedalcyclists in a marked bicycle lane or an unmarked prolongation of the bicycle lane in an intersection, use **03** (At Intersection-Not in Crosswalk).
- For pedalcyclists in a marked bicycle lane or an unmarked prolongation of the bicycle lane in an intersection, use 16 (Bicycle Lane).

- If you do not know if there is a bike lane through the intersection, then default to **03** (At Intersection-Not in Crosswalk).
- **09** (**At Intersection-Unknown Location**) is used when a person is known to be at an intersection, but it cannot be determined whether the person was in a crosswalk area (marked or unmarked) or the intersection.
- **10** (Not at Intersection-In Marked Crosswalk) is used when a person is in the portion of the roadway, not at an intersection, that is distinctly indicated for pedestrian crossing by lines or other markings on the surface of the roadway (i.e., the case identifies a mid-block crosswalk exists and the person is using it.). This attribute includes shared-use path crossings.
- 11 (Not at Intersection-On Roadway, Not in Marked Crosswalk) is used when a person is in the portion of the roadway, not at an intersection, and either:
 - 1. the case identifies a mid-block crosswalk exists and the person is not using it (e.g., the person is jaywalking when a mid-block crosswalk is available),
 - 2. there is not a crosswalk at this location, or
 - 3. the person is crossing at a location where a mid-block crosswalk would not be expected to exist (e.g., a rural roadway or interstate).
- **13** (Not at Intersection On Roadway, Crosswalk Availability Unknown) is used when it cannot be determined if a crosswalk was available (e.g., there is some information (possibly conflicting) that leads you to believe that there may be a mid-block crosswalk at this location, but there is not sufficient information about the location to be able to make a determination).
- **14** (**Parking Lane/Zone**) refers to a person in an area on the roadway, or next to the roadway, on which parking is permitted in marked or unmarked spaces. This includes curbside and edge of roadway parking (for example, legal residential parking, city-street parking, etc.). Sometimes a strip of roadway can be designated for parking at certain hours of the day (parking lane) and for regular travel at other hours (travel lane). This code should NOT be used during hours when parking is NOT permitted (see <a href="https://linearchy.com/11/10/2016/nat/11/2016/nat/201
- **16** (**Bicycle Lane**) is used when a person is adjacent to travel lanes in a bikeway that has been designated for preferential or exclusive use by pedalcyclists through striping, signage, or pavement markings.
 - For people other than pedalcyclists in a marked bicycle lane or an unmarked prolongation of the bicycle lane in an intersection, use **03** (At Intersection-Not in Crosswalk).
 - For pedalcyclists in a marked bicycle lane or an unmarked prolongation of the bicycle lane in an intersection use **16** (**Bicycle Lane**).
 - When at an intersection, if you do not know if there is a bike lane through the intersection, then default to 03 (At Intersection-Not in Crosswalk).
- **20** (**Shoulder/Roadside**) Shoulder is that part of a trafficway contiguous with the roadway for emergency use, for accommodation of stopped motor vehicles, and lateral support of the roadway structure. Roadside is the outermost part of the trafficway from the property line or other boundary in to the edge of the first road. For people on a sidewalk on the roadside select **21** (**Sidewalk**).

- 21 (Sidewalk) is any improved surface primarily constructed for use by pedestrians. Do not select this attribute for sidewalks within a 23 (Driveway Access), 22 (Median/Crossing Island), 25 (Non-Trafficway Area).
- 22 (Median/Crossing Island) is used when a person is in a median or crossing island. Median is an area of trafficway between parallel roads separating travel in opposite directions. A median should be four or more feet wide. Crossing Island is a cement or grassy area in the middle of a trafficway. This attribute excludes crosswalk areas that pass through a median, crossing or traffic island (i.e., select <a href="Otolor of traffic or of traffic o
- **23** (**Driveway Access**) is a portion of the trafficway at the end of a driveway providing access to property adjacent to a trafficway. This includes the driveway crossing that is the portion of the driveway access where a sidewalk or shared-use path crosses over the driveway access.
- **24** (**Shared-Use Path**) is used when a person on a bikeway physically separated from motorized vehicular traffic by an open space or barrier and either within the highway right-of-way or an independent right-of-way. Shared-Use Paths will also be used by pedestrians, skaters, wheelchairs, joggers, and other non-motorized users. Shared-use path **crossings** are coded under **01** (**At Intersection-In Marked Crosswalk**) or **10** (**Not At Intersection-In Marked Crosswalk**).
- **25** (**Non-Trafficway Area**) is not physically located on any land way open to the public as a matter of right or custom for moving people or property from one place to another. For example: a person in a parking lot, a yard, a person in a closed portion of a work zone, or in a house.
- **28** (**Other**) is used when a person is at a location stated in the case material that is not reflected in the listed attributes for this data element. These would be people within the trafficway (i.e., not element value **25** (**Non-Trafficway Area**)). Examples include central islands of rotary intersections, gores, separators, or directional/channelizing islands.

If a police crash report data element is coded with the attribute "Other" but the officer does not specify what this refers to:

- 1. Code **28** (**Other**) if the police crash report attribute choices can be matched to or include all the attributes in FARS/CRSS.
- 2. Code **98** (**Not Reported**) if the police crash report choices cannot be matched to or include all the attributes in FARS/CRSS.

98 (Not Reported) Check to see if <u>99 (Reported as Unknown Location)</u> is more appropriate for the situation.

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks is NOT considered "**Not Reported**."

Code **98** (**Not Reported**) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the

State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).

99 (**Reported as Unknown Location**) is used when the case material states that the location of the non-motorist was unknown at the time of the crash.

Error ID	IF	THEN
1P0H	NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 21,	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must not equal 02-04, 07- 10, 15, 16, 20.
1P1F	PERSON TYPE equals 04, 05, 10, 11, 12, 13, or 19,	NON-MOTORIST LOCATION AT TIME OF CRASH should not equal 16 for this person.
1P1H	NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 22,	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must not equal 01, 02, 04, 07, 08, 11, 15, 20.
1P2F	PERSON TYPE equals 10,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 25.
1P2H	NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 23,	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must not equal 12, 15.
1P3H	NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 24,	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must not equal 01, 03, 04, 10, 11.
1P4H	NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 25,	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must not equal 01-04, 10, 11, 12, 15-17, 20.
1P5H	NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 28, 98, 99,	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES should not equal 01, 03, 04, 10, 11, 12, 15, 16, 20.
1P6H	NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 16,	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES should not equal 04, 16.
1P7H	NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 21,	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES should not equal 01, 05, 11, 12, 17.
1P8H	NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 23,	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES should not equal 02.
1P9G	NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 20,	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must not equal 02-04, 15.
1Р9Н	NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 24,	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES should not equal 02, 05, 12, 15, 16.

Error ID	IF	THEN
1PH0	NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 25,	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES should not equal 07-09.
1PJ1	NON-MOTORIST LOCATION AT TIME OF CRASH equals 16,	the PERSON TYPE for this person should equal 06 or 07.
1PK2	NON-MOTORIST LOCATION AT TIME OF CRASH equals 21,	SIDEWALK PRESENT must equal 1.
1PK3	NON-MOTORIST LOCATION AT TIME OF CRASH equals 01 or 10,	MARKED CROSSWALK PRESENT must equal 1.
440F	FIRST HARMFUL EVENT equals 08, 09, 15, and RELATION TO TRAFFICWAY equals 01,	there must be at least one Person Level (Not a MV Occupant) form with NON-MOTORIST LOCATION AT TIME OF CRASH equal to 01-03, 09-11, 13, 16, 23, 98 or 99.
450F	FIRST HARMFUL EVENT equals 08, 09, 15, and RELATION TO TRAFFICWAY equals 07,	there must be at least one Person Level (Not a MV Occupant) form with NON-MOTORIST LOCATION AT TIME OF CRASH equal to 14.
460F	FIRST HARMFUL EVENT equals 08, 09, 15, and RELATION TO TRAFFICWAY equals 02,	there must be at least one Person Level (Not a MV Occupant) form with NON-MOTORIST LOCATION AT TIME OF CRASH equal to 02, 20.
470F	FIRST HARMFUL EVENT equals 08, 09, 15, and RELATION TO TRAFFICWAY equals 03, 08, 10, 12,	there must be at least one Person Level (Not a MV Occupant) form with NON-MOTORIST LOCATION AT TIME OF CRASH equal to 20, 22, 28, 98, 99.
480F	FIRST HARMFUL EVENT equals 08, 09, 15, and RELATION TO TRAFFICWAY equals 04, 06,	there must be at least one Person Level (Not a MV Occupant) form with NON-MOTORIST LOCATION AT TIME OF CRASH equal to 09, 16, 20, 21, 24, 25, 28, 98, 99.
490F	FIRST HARMFUL EVENT equals 08, 09, 15, and RELATION TO TRAFFICWAY equals 05,	there must be at least one Person Level (Not a MV Occupant) form with NON-MOTORIST LOCATION AT TIME OF CRASH equal to 24, 25.
4A0F	FIRST HARMFUL EVENT is 08, 09, 15, or 49 and RELATION TO TRAFFICWAY is 12,	at least one NON-MOTORIST LOCATION AT TIME OF CRASH must equal 22 or 28.
530F	FIRST HARMFUL EVENT equals 08, 09, 15, and RELATION TO TRAFFICWAY equals 99,	there must be at least one Person Level (Not a MV Occupant) form with NON-MOTORIST LOCATION AT TIME OF CRASH equal to 09, 98, 99.

Error ID	IF	THEN
531F	FIRST HARMFUL EVENT equals 08, 09, 15, and RELATION TO TRAFFICWAY equals 11,	there must be at least one Person Level (Not a MV Occupant) form with NON-MOTORIST LOCATION AT TIME OF CRASH equal to 11.
A61G	the FIRST HARMFUL EVENT equals 08, and PERSON TYPE equals 05, and NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 21, 22, 24, 25, 28, and the VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is involved in the FIRST HARMFUL EVENT,	CRASH TYPE should not equal 13 for this vehicle.
A61H	the FIRST HARMFUL EVENT equals 09, and PERSON TYPE equals 06, 07, and NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 21, 22, 24, 25, 28, and the VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is involved in the FIRST HARMFUL EVENT,	CRASH TYPE should not equal 13 for this vehicle.
A61J	the FIRST HARMFUL EVENT equals 15, and PERSON TYPE equals 11, 12, or 13, and NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 21, 22, 24, 25, 28, and the VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is involved in the FIRST HARMFUL EVENT,	CRASH TYPE should not equal 13 for this vehicle.
A61K	the FIRST HARMFUL EVENT equals 49, and PERSON TYPE equals 04, and NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 21, 22, 24, 25, 28, and the VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is involved in the FIRST HARMFUL EVENT,	CRASH TYPE should not equal 13 for this vehicle.
PB24	PERSON TYPE equals 05, 11, 12, or 13, and NON-MOTORIST LOCATION AT TIME OF CRASH equals 14, 16, 20, 21, 22, 24, or 25,	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 230, 320, 330, 410, 420, 430, 440, 459, 510, 520, 590, 830, or 890.
PB25	PERSON TYPE equals 05, 11, 12, or 13, and NON-MOTORIST LOCATION AT TIME OF CRASH equals 01-03 or 09,	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 690, 710, 730, 741, 742, 760, 770, 781, 782, 791, 792, 794, 795, or 799.
PB66	PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 1,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 01, 02, 03, 09, or 22.

Error ID	IF	THEN
PB67	PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 2,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 10, 11, 13, 14, 16, 20-25, 28, 98, 99.
PB68	PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 3,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 10, 11, 13, 14, 16, 20-24, 28, 98, 99.
PB69	PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 4,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 24, 25, 98, 99.
PB70	PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 9,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 16, 22, 24, 98, or 99.
PB71	PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - BICYCLE equals 1,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 01, 02, 03, 09, 16, or 22.
PB72	PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - BICYCLE equals 2,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 10, 11, 13, 14, 16, 20, 21, 22, 23, 24, 25, 28, 98, 99.
PB73	PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - BICYCLE equals 3,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 10, 11, 13, 14, 16, 20, 21, 22, 23, 24, 28, 98, 99.
PB74	PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - BICYCLE equals 4,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 24, 25, 98, 99.
PB75	PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - BICYCLE equals 9,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 16, 22, 24, 98, or 99.
PB76	PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION equals 1,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 03.
PB77	PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION equals 2,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 01, 02, or 10.
PB78	PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION equals 3,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 11, 13.
PB79	PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION equals 4,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 14, 16, 20, 98, or 99.
PB80	PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION equals 5,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 21, 23, 24, 98, or 99.
PB81	PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION equals 6,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 20, 22, 28, 98, or 99.
PB82	PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION equals 7 or 8,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 25.
PB83	PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION equals 9,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 09, 20, 22, 28, 98, or 99.

Error ID	IF	THEN
PB84	PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION equals 1,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 03, 09, 11, or 13.
PB85	PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION equals 2,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 14, 16, or 20.
PB86	PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION equals 3,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 01, 02, 10, 21, 23, 98, or 99.
PB87	PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION equals 4,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 24.
PB88	PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION equals 5 or 6,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 25.
PB89	PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION equals 8,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 20, 22, 28, 98, or 99.
PB90	PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION equals 9,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 22, 98, or 99.
PBA8	NUMBER OF FORMS SUBMITTED FOR PERSONS NOT IN MOTOR VEHICLES equals 1, and the FIRST HARMFUL EVENT equals 08, 09, or 15, and NON-MOTORIST LOCATION AT TIME OF CRASH equals 01 or 02;	RELATION TO JUNCTION (SPECIFIC LOCATION) must equal 3.
U150	UNLIKELY: NON-MOTORIST LOCATION AT TIME OF CRASH equals 16, 25.	

NM11 - Non-Motorist Action/Circumstances

FORMAT: 2 numeric. Select All That Apply.

SAS NAME: NMPrior.NMACTION

ELEMENT VALUES:

Codes	Attributes
01	Going to or from School (K-12)
02	Waiting to Cross Roadway
03	Crossing Roadway
04	Jogging/Running
05	Movement Along Roadway with Traffic (in or Adjacent to Travel Lane)
06	Movement Along Roadway Against Traffic (in or Adjacent to Travel Lane)
16	Movement Along Roadway - Direction Unknown
08	In Roadway - Other (Working, Playing, etc.)
09	Stationary and Adjacent to Roadway (e.g., Shoulder, Median, Sidewalk)
10	Working in Trafficway (Incident Response)
11	Entering/Exiting Parked or Stopped Vehicle
12	Disabled Vehicle Related (Working on, Pushing, Leaving/Approaching)
14	Other (Specify:)
98	Not Reported
99	Reported as Unknown

Definition: This element describes the action(s) of the non-motorist at the time of their involvement in the crash.

Remarks: As a "Select All That Apply" element, attributes can be used in combination.

- **01** (**Going to or from School [K-12]**) includes person age 5-18 or an adult supervising people age 5-18 going to or from a school for any reason. Examples are going to a school dance, sports practice, or extracurricular activities.
- **02** (Waiting to Cross Roadway) is used when the non-motorist is near the curb or the roadway edge waiting to cross a roadway anywhere along the roadway. If the pedestrian began to cross the roadway, stopped, and then was struck select **03** (Crossing the Roadway). For people adjacent to the roadway where their intent to cross is not identified, use **09** (Stationary and Adjacent to Roadway [e.g., Shoulder, Median, Sidewalk).
- **03** (Crossing Roadway) is used when the non-motorist was moving across or in the travel lanes with the goal of crossing the roadway.
- **04** (**Jogging/Running**) is used when the pedestrian was running or jogging.

- **05** (Movement Along Roadway with Traffic [In or Adjacent to Travel Lane]) is used when the non-motorist was moving in the same direction as the flow of traffic, either in the travel lane or adjacent to it (e.g., jogging or walking on shoulder or roadside). This also includes situations where the person's action/intent was traveling along the roadway. For example, a person stopped momentarily when they were struck (e.g., to tie shoes, talk on mobile phone) or someone that moved out into the path of a vehicle to avoid an obstacle along the roadside. This may include the roadway edge, shoulder (paved or unpaved), sidewalk, roadside, median or driveway access, etc. *Note: This excludes At Intersection location where the non-motorist is crossing. See <u>03</u> (Crossing Roadway).*
- **06** (Movement Along Roadway Against Traffic [In or Adjacent to Travel Lane]) is used when the non-motorist was moving in the opposite direction of the flow of traffic (facing oncoming vehicles), either in the travel lane or adjacent to it (e.g., jogging or walking on shoulder or roadside). This also includes situations where the person's action/intent was traveling along the roadway. For example, a person stopped momentarily when they were struck (e.g., to tie shoes, talk on mobile phone) or someone that moved out into the path of a vehicle to avoid an obstacle along the roadside. This may include the roadway edge, shoulder (paved or unpaved), sidewalk, roadside, median, or driveway access, etc. *Note: This excludes At Intersection location where the non-motorist is crossing. See* <u>03</u> (Crossing Roadway).
- **16** (**Movement Along Roadway Direction Unknown**) is used when the non-motorist was moving in or adjacent to a travel lane but their direction with respect to the flow of traffic is unknown (e.g., jogging or walking on shoulder or roadside). This may include the roadway edge, shoulder (paved or unpaved), sidewalk, roadside, median, or driveway access, etc. *Note: This excludes At Intersection location where the non-motorist is crossing. See 03 (Crossing Roadway*).
- **08** (**In Roadway Other [Working, Playing, etc.**]) is used when the non-motorist was in the roadway but not crossing it. Examples include conducting maintenance, playing in the roadway, operating a snow blower or lawn care equipment, or lying in the roadway. For cases involving a non-motorist working within a closed portion of a work zone area, use attribute **14** (**Other [Specify:]**).
- **09** (Stationary and Adjacent to Roadway [e.g., Shoulder, Median, Sidewalk]) is used when the non-motorist was not moving and not in the roadway but in an area immediately adjacent to the roadway, such as a median, shoulder, sidewalk, pedestrian refuge, traffic island, etc.
- 10 (Working in Trafficway [Incident Response]) is used when the non-motorist was in the roadway as part of an official response to an incident, such as a firefighter moving between an emergency vehicle and a crash involved vehicle. Also see RELATED FACTORS PERSON (NOT A MOTOR VEHICLE OCCUPANT) LEVEL codes <u>087</u> (Police or Law Enforcement Officer), <u>094</u> (Emergency Medical Services Personnel), <u>095</u> (Fire Personnel), <u>096</u> (Tow Operator), or <u>097</u> (Transportation) to see if any apply.
- 11 (Entering/Exiting Parked/Stopped Vehicle) is used when a pedestrian was adjacent to a stopped or parked vehicle and in the process of getting into or had just exited that stopped or parked vehicle. This does not include crashes involving pedestrians performing other actions such as crossing the roadway to/from a parked vehicle or other movements that occurred after the pedestrian exited the vehicle.
- 12 (Disabled Vehicle Related [Working on, Pushing, Leaving/Approaching]) is used when the pedestrian was outside of a disabled *or inoperative* vehicle for any of a number of reasons, including working on it, pushing it, leaving it, or approaching it. *For vehicles in a previous crash, it is not necessary to know the damage severity.*

14 (Other [Specify:]) is used when the actions or circumstances stated in the case material does not reflect the listed attributes for this data element. This includes non-motorists working within a closed portion of a work zone area.

Note: For attributes with a "Specify:" designation, a fill-in text box will open in *RBIS*. This text box should be used to provide additional detail about the attribute selection. Please include a specific reason for this selection.

98 (Not Reported) Check to see if 99 (Reported as Unknown) is more appropriate for the situation.

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**."

Code **98** (**Not Reported**) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).

99 (**Reported as Unknown**) is used when the case material states that the action or circumstances of the non-motorist prior to the crash was unknown.

Error ID	IF	THEN
1P1G	PERSON TYPE equals 19,	NON-MOTORIST ACTION/CIRCUMSTANCES should not equal 11, 12.
1P3F	PERSON TYPE (NM7) equals 10,	NON-MOTORIST ACTION/CIRCUMSTANCES (NM11) must not equal 01-12, 16, and NON-MOTORIST CONTRIBUTING CIRCUMSTANCES (NM12) must not equal 01-20.
1P4F	PERSON TYPE equals 04,	NON-MOTORIST ACTION/CIRCUMSTANCES must not equal 04, 12.
1P5F	PERSON TYPE equals 06, 07, 11, 12, 13, or 19,	NON-MOTORIST ACTION/CIRCUMSTANCES must not equal 04.
1P7F	PERSON TYPE equals 04,	NON-MOTORIST ACTION/CIRCUMSTANCES should not equal 10, 11.

Error ID	IF	THEN
1P8F	PERSON TYPE equals 06, 07,	NON-MOTORIST ACTION/CIRCUMSTANCES should not equal 10-12.
1P9F	PERSON TYPE equals 11, 12, or 13,	NON-MOTORIST ACTION/CIRCUMSTANCES should not equal 11.
4X2G	any NON-MOTORIST ACTION/ CIRCUMSTANCES equals 08,	the NON-MOTORIST ACTION/CIRCUMSTANCES must not also equal 03 for this person.
4X3G	any NON-MOTORIST ACTIONS CIRCUMSTANCES equals 03,	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must not equal 04 for this Person (Not a Motor Vehicle Occupant).
4X5F	NON-MOTORIST ACTION/CIRCUMSTANCES equals 04 and does not also equal 03,	NON-MOTORIST ACTION/CIRCUMSTANCES should also equal 05, 06, or 16.
4X7F	any NON-MOTORIST ACTION/ CIRCUMSTANCES equals 98 or 99,	only that one code and no other must be coded for this person.
PB15	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 910,	at least one NON-MOTORIST ACTION/CIRCUMSTANCES must equal 03.
PB19	NON-MOTORIST ACTION/CIRCUMSTANCES equals 08,	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN must not equal 510, 520, 590, 830, or 890.
PB20	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 510, 520, or 590,	at least one NON-MOTORIST ACTION/CIRCUMSTANCES must equal 02.
PB27	NON-MOTORIST ACTION/CIRCUMSTANCES equals 05, and PERSON TYPE equals 05, 11, 12, or 13,	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 410 or 420.
PB28	NON-MOTORIST ACTION/CIRCUMSTANCES equals 06, and PERSON TYPE equals 05, 11, 12, or 13,	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 430 or 440.
PB29	NON-MOTORIST ACTION/CIRCUMSTANCES equals 04, and does not also equal 03, and PERSON TYPE equals 05, 11, 12, or 13,	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 410, 420, 430, 440, or 459.
PB37	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 311, 312, or 313,	at least one NON-MOTORIST ACTION/CIRCUMSTANCES must equal 08 or 10.
PB38	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 410 or 420,	at least one NON-MOTORIST ACTION/ CIRCUMSTANCES must equal 05.

Error ID	IF	THEN
PB39	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 430 or 440,	at least one NON-MOTORIST ACTION/ CIRCUMSTANCES must equal 06.
PB58	NON-MOTORIST ACTION/CIRCUMSTANCES must not equal 05, 06, or 16 in combination.	
PB59	NON-MOTORIST ACTION/ CIRCUMSTANCES equals 16, and PERSON TYPE equals 05, 11, 12, or 13,	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 459.
PB62	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 230,	at least one NON-MOTORIST ACTION/ CIRCUMSTANCES must equal 12.
PB64	any NON-MOTORIST ACTION/ CIRCUMSTANCES equals 03 or 09,	the NON-MOTORIST ACTION/ CIRCUMSTANCES must not also equal 05, 06, or 16 for this person.
PBB4	PEDESTRIAN/ BIKE TYPING - CRASH LOCATION -BICYCLE equals 1,	NON-MOTORIST ACTION/CIRCUMSTANCES should not equal 05, 06, or 16.
PBB5	PEDESTRIAN/ BIKE TYPING - CRASH LOCATION -PEDESTRIAN equals 1,	NON-MOTORIST ACTION/CIRCUMSTANCES should not equal 05, 06, or 16.
PBB6	PEDESTRIAN CRASH GROUP equals 750 or 790	NM ACTION/CIRCUMSTANCES must not equal 08 (In Roadway – Other [Working, Playing, etc.]).
PBB7	PEDESTRIAN CRASH GROUP equals 750 or 790	at least one NM ACTION/CIRCUMSTANCES should equal 03 (Crossing Roadway).

NM12 - Non-Motorist Contributing Circumstances

FORMAT: 2 numeric. Select All That Apply.

SAS NAME: NMCrash.NMCC

ELEMENT VALUES:

Codes	Attributes
00	None Noted
01	Dart-Out - Visual Obstruction Noted
11	Dash - Run, No Visual Obstruction Noted
02	Failure to Yield Right-of-Way
03	Failure to Obey Traffic Signs, Signals, or Officer
04	In Roadway Improperly (Standing, Lying, Working, Playing, etc.)
05	Entering/Exiting Parked or Stopped Vehicle
06	Inattentive (Talking, Eating, etc.)
07	Improper Turn/Merge
08	Improper Passing
09	Wrong-Way Riding or Walking
10	Riding on Wrong Side of Road
12	Improper Crossing of Roadway or Intersection (Jaywalking)
13	Failing to Have Lights on When Required
14	Operating Without Required Equipment
15	Improper or Erratic Lane Changing
16	Failure to Keep in Proper Lane or Running Off Road
17	Making Improper Entry to or Exit from Trafficway
18	Operating in Other Erratic, Reckless, Careless, or Negligent Manner
19	Not Visible (Dark Clothing, No Lighting, etc.)
20	Passing with Insufficient Distance or Inadequate Visibility or Failing to Yield to Overtaking
21	<u>Vehicle</u>
21	Other (Specify:)
99	Reported as Unknown

Definition: This element describes the action(s) and/or circumstances of the non-motorist that law enforcement indicated may have contributed to the crash.

Remarks: As a "Select All That Apply" element, attributes can be used in combination.

- **00** (**None Noted**) is used when no contributing circumstances or improper actions are noted by the officer for this non-motorist. "Not Reported" is coded here. If this attribute is used no other attribute may be selected.
- **01** (**Dart-Out Visual Obstruction Noted**) is used when a person entered the roadway and was involved in a collision with a vehicle where the driver's view of the person was blocked until an instant before impact. A dart-out can only occur if there is some documented visual obstruction (*i.e.*, **DRIVER'S VISION OBSCURED BY must not equal** <u>**00** (No Obstruction Noted</u>), <u>**95** (No Driver Present/Unknown if Driver Present)</u>, or <u>**99** (Reported as Unknown)</u> for the driver of the vehicle that struck this Non-Motorist).
- 11 (Dash Run, No Visual Obstruction Noted) is used when a person ran into the roadway and was involved in a collision with a vehicle. There is no mention in the case material that the driver's view of the person was obstructed. The case material should state that the person ran.

Examples of proper use include:

- A person's activity prior to the crash is jogging or running, but just prior to the impact the non-motorist darted into the roadway.
- Children seen playing in a front yard, who suddenly run into the road to retrieve an object associated with their play (e.g., a ball).

02 (Failure to Yield Right-of-Way) is used when a person fails to yield the right-of-way as indicated in the case material. A citation need not be issued, only that a failure to yield by the person was represented on the police crash report through the crash description, diagram, and or coded boxes. The officer does not have to make the specific statement "failed to yield." For example, a person crossing in the path of a vehicle outside of an intersection and not in a crosswalk would be failing to yield.

Examples include:

- Failure to yield when exiting a driveway.
- Mid-block crossings not at a crosswalk.
- Not clearing an intersection before the light turns green for crossing traffic.
- Failure to yield at an intersection not controlled by a stop sign or flashing red lights.
- A bicyclist who stopped at the stop sign but did not realize it was a 2-way stop rather than a 4-way stop control and proceeded into the intersection without yielding to traffic on the through trafficway.

Failure to obey a traffic control device is coded as **03** (Failure to Obey Traffic Signs, Signals, or Officer).

- **03** (**Failure to Obey Traffic Signs, Signals, or Officer**) is used when a person fails to obey a traffic control device as indicated in the case material. Examples include person does not obey traffic signs, traffic control devices (including pedestrian signals), traffic officers, or safety zones; or passes around railroad gates.
- **04** (**In Roadway Improperly [Standing, Lying, Working, Playing, etc.**]) is used when a person was indicated to have been in the roadway improperly other than making an improper crossing as in code <u>12</u> (**Improper Crossing of Roadway or Intersection [Jaywalking])**.

Examples include:

- Playing in the road before the vehicle arrived. The person must not have just run into the roadway after a ball, which would be coded <u>01 (Dart-Out Visual Obstruction Noted)</u> or <u>11 (Dash Run, No Visual Obstruction Noted)</u>.
- Working in the road other than because of the requirement of his/her job, (e.g., someone walking backwards into the roadway with a snow blower or lawn care equipment).
- In the street voluntarily, such as a civilian directing traffic at the scene of a crash.
- Attempting to hail a cab, flag down assistance, or flag down a transit bus between designated stops.
- Sitting, getting up, asleep/unconscious, kneeling, etc.
- **05** (Entering/Exiting Parked or Stopped Vehicle) is used when a pedestrian was adjacent to a stopped or parked vehicle and in the process of getting into or had just exited that stopped or parked vehicle. This does not include crashes involving pedestrians performing other actions such as crossing the roadway to/from a parked vehicle or other movements that occurred after the pedestrian exited the vehicle.
- **06** (**Inattentive** [**Talking**, **Eating**, **etc.**]) is used when the case material specifically state a person is inattentive, lost in thought or distracted. Examples include using any electronic devices (mobile phone, video game, e-reader), using earbuds on a music player while jogging, chatting with a neighbor, caring for a baby in a stroller, admiring a garden, etc.
- **07** (**Improper Turn/Merge**) is used when the case material indicate the bicyclist/operator made an improper turn or merge. Examples of an improper turn include too wide right or left turns, making a right turn from the left lane, a left turn from the right lane or unsafe U-turns. An example of an improper merge is when the bicycle lane ends and the bicyclist merges into the path of a vehicle without leaving sufficient space.
- **08** (**Improper Passing**) is used when the case material indicate the bicyclist/operator made an improper passing maneuver. The bicyclist/operator may be passing a motor vehicle or another bicyclist. Actions include passing on the right, and where prohibited by signs, pavement markings, or a stopped school bus, (i.e., mainly violations as designated by traffic controls). Improper passing that is based on faulty judgment errors such as insufficient distance, or inadequate visibility are captured by **20** (**Passing with Insufficient Distance or Inadequate Visibility or Failing to Yield to Overtaking Vehicle**).
- **09** (Wrong-Way Riding or Walking) is used when a person was identified in the case material to have been traveling the wrong way.
- 10 (Riding on Wrong Side of Road) is used when a bicyclist was identified in the case material to have been traveling on the wrong side of the road.
- 12 (Improper Crossing of Roadway or Intersection [Jaywalking]) is used when a person is engaged in crossing a road but is not doing so properly. This includes mid-block crossings outside a crosswalk and crossing at an intersection by cutting on a diagonal through it. The officer's representation of either circumstance on the diagram or in the narrative substantiates the use of this attribute. The person may be engaged in other activities such as the continuation of jogging/running or a "sudden or impulsive" dart, run, etc. This attribute should not be used in conjunction with 04 (In Roadway Improperly [Standing, Lying, Working, Playing, etc.]).

- 13 (Failing to Have Lights on When Required) is used when the case material indicate the operator of a bicycle, animal-drawn conveyance, or personal conveyance failed to have lights on when required. This also includes not having lights available to turn on and may be used with 14 (Operating Without Required Equipment).
- **14** (**Operating Without Required Equipment**) is used when the case material indicate that the bicycle, animal-drawn conveyance, or person conveyance, was being operated without the proper equipment such as headlights, taillights, etc. Helmet use is captured under NON-MOTORIST SAFETY **EQUIPMENT**.
- **15** (**Improper or Erratic Lane Changing**) is used when a bicyclist, operator of horse-drawn vehicle, rollerblader, or skateboard rider was weaving in and out of traffic. This includes maneuvering between vehicles and in-and-out of a bike lane.
- **16** (**Failure to Keep in Proper Lane or Running Off Road**) is used when a bicyclist/operator fails to stay in the proper lane or runs off the road. For example, a bicyclist fails to keep in bicycle lane or operator of horse-drawn vehicle goes straight in a turn lane. This includes running into a median or drifting into a parking lane.
- 17 (Making Improper Entry to or Exit from Trafficway) is used when a person is engaged in entering or exiting the trafficway but is not doing so properly, or in a manner that would be anticipated by others. This includes entering or exiting the trafficway midblock between driveway accesses, improper use of ramps and turn-bays to enter or exit, and or cutting on a diagonal across a lawn or parking lot to enter a trafficway. This may be used in conjunction with <u>02 (Failure to Yield Right-of-Way)</u>, <u>03 (Failure to Obey Traffic Signs, Signals, or Officer)</u>, <u>07 (Improper Turn/Merge)</u>, and/or <u>09 (Wrong-Way Riding or Walking)</u> if they apply. This code does not apply to <u>PERSON TYPES</u> <u>05 (Pedestrian)</u> or <u>10 (Persons In/On Buildings)</u>.
- **18** (Operating in Other Erratic, Reckless, Careless or Negligent Manner) is used when explicitly stated in the case material. Examples include bicyclists doing wheelies, attempting to grab on to a vehicle for motion ("skitching"), or skateboard racing.
- 19 (Not Visible [Dark Clothing, No Lighting, etc.]) is used when the non-motorist was not visible to the motorist because of blocked views, insufficient lighting, or other reasons such as clothing that blends in with the surroundings at any time of the day (camouflage) or dark clothing in the rain at night. The officer must indicate that the non-motorist was not visible.
- **20** (Passing with Insufficient Distance or Inadequate Visibility or Failing to Yield to Overtaking Vehicle) is used when an improper passing maneuver is indicated in the case material for the non-motorist. This indicates passing violations based on faulty judgment. This may be used in conjunction with **08** (Improper Passing) if both apply.
- **21** (**Other, Specify:**) is used when the case material states that an action(s)/circumstance(s) by the non-motorist may have contributed to the crash, but are not listed in these attributes. Examples include being pushed into the roadway, falling from a bicycle, traveling on a prohibited roadway.
 - *Note: For attributes with a "Specify:" designation, a fill-in text box will open in *RBIS*. This text box should be used to provide additional detail about the attribute selection. Please include a specific reason for this selection.

99 (**Reported as Unknown**) is used when the officer indicated unknown in the case material's contributing circumstances field or the narrative and no other information is available. If this attribute is used no other attribute may be selected.

Error ID	IF	THEN
0PB1	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 741,	at least one NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must equal 11.
0PB2	PEDESTRIAN BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 760,	at least one NON-MOTORIST CONTRIBUTING CIRCUMSTANCES should equal 02.
1N4F	NON-MOTORIST SAFETY EQUIPMENT Subfield 5- Non-Motorist Use of Lighting equals 2,	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES should not equal 13.
1P0G	PERSON TYPE equals 05,	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must not equal 07, 08, 10, 13-18, 20.
1P0H	NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 21,	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must not equal 02-04, 07- 10, 15, 16, 20.
1P1H	NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 22,	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must not equal 01, 02, 04, 07, 08, 11, 15, 20.
1P2H	NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 23,	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must not equal 12, 15.
1P3F	PERSON TYPE (NM7) equals 10,	NON-MOTORIST ACTION/CIRCUMSTANCES (NM11) must not equal 01-12, 16, and NON-MOTORIST CONTRIBUTING CIRCUMSTANCES (NM12) must not equal 01-20.
1P3G	PERSON TYPE equals 04, 06, 07,	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES should not equal 04.
1Р3Н	NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 24,	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must not equal 01, 03, 04, 10, 11.
1P4G	PERSON TYPE equals 04, 06, <i>07</i> , <i>11</i> , <i>12</i> , <i>13</i> , 19,	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES should not equal 05.
1P4H	NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 25,	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must not equal 01-04, 10, 11, 12, 15-17, 20.

Error ID	IF	THEN
1P5G	PERSON TYPE equals 11, 12, or 13,	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES should not equal 20.
1P5H	NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 28, 98, 99,	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES should not equal 01, 03, 04, 10, 11, 12, 15, 16, 20.
1P6H	NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 16,	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES should not equal 04, 16.
1P7H	NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 21,	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES should not equal 01, 05, 11, 12, 17.
1P8H	NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 23,	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES should not equal 02.
1P9G	NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 20,	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must not equal 02-04, 15.
1Р9Н	NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 24,	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES should not equal 02, 05, 12, 15, 16.
1PH0	NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 25,	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES should not equal 07-09.
2P1F	PERSON TYPE equals 04, 06, 07, or 10,	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must not equal 12.
4W4P	RELATED FACTORS-PERSON LEVEL (Not a MV Occupant) equals 053, 054, 055, and PERSON TYPE does not equal 05,	at least one NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must equal 18.
4W5P	RELATED FACTORS-PERSON LEVEL (Not a MV Occupant) equals 053, 054, 055, and PERSON TYPE equals 05,	at least one NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must equal 21.
4X2A	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES equals 19,	NON-MOTORIST SAFETY EQUIPMENT Subfield 4-Non-Motorist Use of Reflective Clothing/Carried Item should not equal 2.
4X2B	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES equals 19,	NON-MOTORIST SAFETY EQUIPMENT Subfield 5- Non-Motorist Use of Lighting should not equal 2.
4X2C	any NON-MOTORIST CONTRIBUTING CIRCUMSTANCES equals 06,	NON-MOTORIST DISTRACTED BY must not equal 00 or 96 or 99.
4X3A	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES equals 11,	PERSON TYPE must equal 05.

Error ID	IF	THEN
4X3G	any NON-MOTORIST ACTIONS CIRCUMSTANCES equals 03,	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must not equal 04 for this Person (Not a Motor Vehicle Occupant).
4X4A	any NON-MOTORIST DISTRACTED BY equals 00, 96, or 99,	none of the NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must equal 06.
4X5A	NON-MOTORIST DISTRACTED BY does not equal 00, 96, or 99,	at least one NON-MOTORIST CONTRIBUTING CIRCUMSTANCES should equal 06.
4X8F	any NON-MOTORIST CONTRIBUTING CIRCUMSTANCES equals 00 or 99,	only that one code and no other must be coded for this person.
4X8G	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must not equal 01 and 11 for the same person.	
4X8H	any NON-MOTORIST CONTRIBUTING CIRCUMSTANCES equals 01,	DRIVER'S VISION OBSCURED BY must not equal 00, 95, or 99 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
PB16	PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLIST equals 142, 144, 147, 153, 155, 156, 157, 159, 311, 312, 313, 318, 319, or 357,	at least one NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must equal 02.
PB18	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 742,	at least one NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must equal 01.
PB26	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES equals 02, and PERSON TYPE equals 06 or 07,	PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLIST should equal 142, 144, 147, 153, 155, 156, 157, 159, 311, 312, 313, 318, 319, or 357.
PBA9	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 741,	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must not equal 01.
PBB1	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 742,	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must not equal 11.
PBC0	PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE equals 250,	at least one NON-MOTORIST CONTRIBUTING CIRCUMSTANCES should equal 09.
PBC1	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 410,	at least one NON-MOTORIST CONTRIBUTING CIRCUMSTANCES should equal 09.

NM13 - Non-Motorist Distracted By

FORMAT: 2 numeric. Select All That Apply.

SAS NAME: Nmdistract.NMDISTRACT

ELEMENT VALUES:

Codes	Attributes
00	Not Distracted
02	By Other Non-Motorist(s)
03	By a Driver or Occupant of a Motor Vehicle
12	Distracted by Animal, Other Object, Event, or Activity
05	While Talking or Listening to Mobile Phone
06	While Manipulating Mobile Phone
15	Other Mobile Phone Related
07	Adjusting or Listening to Portable Audio Device (Other than on a Mobile Phone)
08	Adjusting, Talking to, or Manipulating Other Portable Electronic Device
13	Eating or Drinking
14	Smoking Related
17	<u>Distraction/Inattention</u>
18	<u>Distraction/Careless</u>
19	<u>Careless/Inattentive</u>
92	<u>Distraction (Distracted), Details Unknown</u>
93	Inattention (Inattentive), Details Unknown
97	Lost in Thought/Day Dreaming
98	Other Distraction (Specify:)
96	Not Reported
99	Reported as Unknown if Distracted

Definition: This element identifies the attribute(s) that best describe this non-motorist's attention prior to the non-motorist's involvement in this crash. This element reports on the presence of any distractions that may or may not have contributed to the crash. Distraction for a non-motorist occurs when a non-motorist's attention is diverted from the task of navigating in public to some other activity. Also, NHTSA identifies daydreaming or lost in thought as distractions. NHTSA does not identify physical conditions/impairments (fatigue, alcohol, medical condition, etc.) or psychological states (anger, emotional, depressed, etc.) as distractions.

NOTE: "Presence" is not the same as an activity associated with the person or item. The non-motorist needs to be engaged in some activity associated with the thing that is causing a distraction. Just having a mobile phone, sandwich, other non-motorist, etc., nearby isn't a distraction. The

distraction is when the non-motorist's attention is diverted from the task of navigating in public to using the phone, eating the sandwich, turning to talk to another non-motorist, etc. It doesn't have to be a contributing factor in the crash, but it does have to be in use, engaged, the person was doing it at the time, etc. for it to have been a distraction.

Remarks: Record the attribute(s) that best describe this non-motorist's attention prior to the non-motorist's involvement in this crash. Intoxication, ill, blackout, asleep, or fatigued are not considered distractions. This information is captured under the data element <u>CONDITION (IMPAIRMENT) AT TIME OF CRASH.</u>

NON-MOTORIST DISTRACTED BY is a "Select All That Apply" element. If the element values <u>00</u> (<u>Not Distracted</u>), <u>17 (Distraction/Inattention</u>), <u>18 (Distraction/Careless)</u>, <u>19 (Careless/Inattentive</u>), <u>92 (Distracted</u>], <u>Details Unknown</u>), <u>93 (Inattention [Inattentive]</u>, <u>Details Unknown</u>), <u>96 (Not Reported</u>), or <u>99 (Reported as Unknown if Distracted</u>) are selected, then only that one element value may be used.

Witness Statements:

See clarification on the use of information provided by witnesses in section 103. Data Sources.

00 (Not Distracted)

- When the case material indicate that the individual was completely attentive.
- When the case material does not indicate a distraction in an available field, and not reporting a distraction in that field indicates 00 (Not Distracted).
- For omission of information see 96 (Not Reported) guidance below.
- **02** (**By Other Non-Motorist**[s]) is used when the non-motorist was distracted by another non-motorist prior to becoming involved. Examples include conversing with, looking at, or otherwise interacting with another Non-Motorist.
- **03** (**By a Driver or Occupant of a Motor Vehicle**) is used when the non-motorist was distracted by a Driver or Occupant of a Motor Vehicle prior to becoming involved (e.g., conversing with, watching, other interactions).
- **12** (**Distracted by Animal, Other Object, Event, or Activity**) is used when the non-motorist was distracted by an animal, object, event, or activity prior to becoming involved in the crash. Examples include, distractions related to pet walking, animals on the roadside, a previous crash, non-traffic related signs (advertisements, electronic billboards, etc.) grooming activities, opening an umbrella, flying insects, etc.
- **05** (While Talking or Listening to Mobile Phone) is used when the non-motorist is talking or listening on a mobile phone. This attribute includes talking or listening on a "hands-free" or Bluetooth enabled phone. This attribute also includes listening to audio on a Mobile phone. For distractions related to manipulating the audio on a mobile phone, see <u>06</u> (While Manipulating Mobile Phone). For distractions related to audio on a device other than a mobile phone, see <u>07</u> (Adjusting or listening to Audio Device [Other than Mobile Phone]).
- **06** (While Manipulating Mobile Phone) is used when the non-motorist is dialing or text messaging (texting) on a mobile phone. Any manual button/control actuation on the phone qualifies. Examples include checking email, using the camera function to take a picture or record a video, manipulating audio, using the internet, GPS navigation, fitness apps, playing a game, etc. on the mobile phone. For

- distractions related to listening to audio on a mobile phone, see <u>05 (While Talking or Listening to Mobile Phone)</u>.
- **15** (**Other Mobile Phone Related**) is used when the case material indicates the non-motorist was distracted due to mobile phone involvement, but none of the specified codes are applicable (reaching for mobile phone, etc.). This attribute is also applied when specific details regarding mobile phone distraction/usage are not provided (*e.g.*, *email*, *nonspecific mobile phone use*).
- **07** (**Adjusting or Listening to Portable Audio Device [Other than on a Mobile Phone]**) is used when the non-motorist was distracted while adjusting, listening to, or using a radio, cassette player, CD player, or MP3 player (not on a mobile phone). For distractions related to audio on a mobile phone, see code **05** (While Talking or Listening to Mobile Phone) and **06** (While Manipulating Mobile Phone).
- **08** (Adjusting, Talking to, or Manipulating Other Portable Electronic Device) is used when the non-motorist is distracted while adjusting, talking to, or otherwise manipulating a portable electronic device that is not a mobile phone or audio player. Examples include digital camera, bike ride tracker, pedometer, laptop or tablet computer, gaming device, GPS navigation, etc.
- 13 (Eating or Drinking) is used when the non-motorist is eating or drinking or involved in an activity related to these actions (picking up food from a handheld carton, reaching to throw out used food wrapper, etc.).
- **14** (**Smoking Related**) is used when the non-motorist is smoking or involved in an activity related to smoking, such as lighting a cigarette, putting ashes in an outdoor ash tray, vaping, etc. Any method of lighting the cigarette would be coded **14** (**Smoking Related**). Chewing tobacco related distractions are coded under **98** (**Other Distraction [Specify:]**).
- 17 (Distraction/Inattention) is used exclusively when "Distraction/Inattention" or "Inattention/Distraction" are noted in the case material as one combined attribute and it cannot be determined which NON-MOTORIST DISTRACTED BY attribute is intended, <u>92 (Distraction [Distracted], Details Unknown)</u> or <u>93 (Inattention [Inattentive], Details Unknown)</u>.
- **18** (**Distraction/Careless**) is used exclusively when "Distraction/Careless" or "Careless/Distraction" are noted in the case material as one combined attribute and it cannot be determined which NON-MOTORIST DISTRACTED BY attribute applies.
- **19** (Careless/Inattentive) is used exclusively when "Careless/Inattentive" or "Inattentive/ Careless" are noted in the case material as one combined attribute and it cannot be determined which NON-MOTORIST DISTRACTED BY attribute applies.
- **92** (**Distraction** [**Distracted**], **Details Unknown**) is used when "distraction" or "distracted" are noted in the case material, but specific distraction(s) cannot be identified. For non-specific "inattention" see attribute
- 93 (Inattention [Inattentive], Details Unknown).
- **93** (**Inattentive**], **Details Unknown**) is used when "inattention" or "inattentive" are noted in the case material, but it cannot be identified if this refers to a distraction(s).

97 (**Lost in Thought/Day Dreaming**) is used when the non-motorist is not completely attentive because he/she is thinking about items other than being aware of their surroundings. For non-specific "distraction" see element value **92** (**Distraction [Distracted], Details Unknown**). For non-specific "inattention" see element value **93** (**Inattention [Inattentive], Details Unknown**).

98 (Other Distraction [Specify:]) is used when details regarding this non-motorist's distraction are known but none of the specified codes are applicable (e.g., chewing tobacco related).

*Note: For attributes with a "Specify:" designation, a fill-in text box will open in *RBIS*. This text box should be used to provide additional detail about the attribute selection. Please include a specific reason for this selection.

96 (Not Reported) Check to see if <u>00 (Not Distracted)</u> or <u>99 (Reported as Unknown if Distracted)</u> are more appropriate for the situation.

If a State's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "Not Reported."

Code **96** (**Not Reported**) in these two situations:

- 1. No field or coding block exists on the State's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case material).
- 2. A field or coding block exists on the State's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the State's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case material).

99 (**Reported as Unknown if Distracted**) is used when the case material specifically indicate unknown. **Consistency Checks** (*See Section 400*):

Error ID	IF	THEN
4W3P	RELATED FACTORS - PERSON (NOT A MOTOR VEHICLE OCCUPANT) LEVEL equals 0 91,	NON-MOTORIST DISTRACTED BY should equal 05, 06, 07, 08, or 15.
4X0A	NON-MOTORIST DISTRACTED BY equals 05, 06, 07, 08, or 15,	at least one RELATED FACTORS - PERSON (NOT A MOTOR VEHICLE OCCUPANT) LEVEL must equal <i>0</i> 91.
4X1A	any NON-MOTORIST DISTRACTED BY equals 00, 17, 18, 19, 92, 93, 96, or 99,	only that one code and no other must be used.
4X2C	any NON-MOTORIST CONTRIBUTING CIRCUMSTANCES equals 06,	NON-MOTORIST DISTRACTED BY must not equal 00 or 96 or 99.
4X4A	any NON-MOTORIST DISTRACTED BY equals 00, 96, or 99,	none of the NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must equal 06.

Error ID	IF	THEN
4X5A	NON-MOTORIST DISTRACTED BY does not equal 00, 96, or 99,	at least one NON-MOTORIST CONTRIBUTING CIRCUMSTANCES should equal 06.
4X6A	NON-MOTORIST DISTRACTED BY equals 17,	STATE should equal GA, MN, MO, NV, NY, or SC.
U300	Unlikely NON-MOTORIST DISTRACTED BY equals 18 or 19.	

NM14 - Non-Motorist Safety Equipment

FORMAT: 6 Sets, 1 numeric.

SAS NAMES: Safetyeq.NMHELMET, Safetyeq.NMPROPAD, Safetyeq.NMOTHPRO,

Safetyeq.NMREFCLO, Safetyeq.NMLIGHT, Safetyeq.NMOTHPRE

ELEMENT VALUES:

PROTECTIVE Non-Motorist Safety Equipment

Subfield 1 - Non-Motorist Helmet Use

Codes	Attributes
1	<u>No</u>
2	Yes
8	Not Reported
9	Reported as Unknown

Subfield 2-Non-Motorist Use of Protective Pads

Codes	Attributes
1	<u>No</u>
2	Yes
8	Not Reported
9	Reported as Unknown

Subfield 3- Non-Motorist Use of Other Protective Safety Equipment

Codes	Attributes
1	<u>No</u>
2	<u>Yes</u>
8	Not Reported
9	Reported as Unknown

PREVENTIVE Non-Motorist Safety Equipment

Subfield 4-Non-Motorist Use of Reflective Clothing/Carried Item

Codes	Attributes
1	<u>No</u>
2	Yes
8	Not Reported
9	Reported as Unknown

Subfield 5-Non-Motorist Use of Lighting

Codes	Attributes
1	<u>No</u>
2	Yes
8	Not Reported
9	Reported as Unknown

Subfield 6-Non-Motorist Use of Other Preventive Safety Equipment

Codes	Attributes
1	<u>No</u>
2	<u>Yes</u>
8	Not Reported
9	Reported as Unknown

Definition: This element identifies the safety equipment that was used and not used by this non-motorist as reflected in the case material.

Remarks: The applicable attribute may be determined using various items in the case material such as a crash report field, the officer narrative, a fatal crash supplement, etc. Each subfield is recorded separately using the same attribute choices (No, Yes, Not Reported, and Reported as Unknown).

General Guidance:

- 1. Review the State police crash report fields, narrative, and diagram for indications of any safety equipment used.
- 2. The element allows for collecting any safety equipment in use if it can be classified as protective or preventive. Protective equipment is designed to mitigate injury, while preventive equipment is intended to avoid a crash from occurring. Examples of equipment that may be noted, and proper classification, are below.

	Protective Subfields			Preventive Subfields		
Safety Equipment Described	1-Helmet	2-Pads	3-Other	4-Clothing	5-Lighting	6-Other
Helmet on a horseback rider	2 (Yes)					
Reflective helmet	2 (Yes)			2 (Yes)		
Personal inflatable devices			2 (Yes)			
Lap belt in use on a wheelchair			2 (Yes)			
Child seat used in an Amish buggy			2 (Yes)			
3-Point belt used by toddler in a bicycle trailer			2 (Yes)			
Bicycle reflectors or flags						2 (Yes)
Safety flags or triangles on a non- motorist conveyance						2 (Yes)
Day-Glo/Hi-Glo clothing						2 (Yes)
"Mr. Johnson was wearing a Hi-Glo orange hunting vest."						2 (Yes)
"The pedestrian was not using any safety equipment."	1 (No)	1 (No)	1 (No)	1 (No)	1 (No)	1 (No)
The cyclist didn't use a headlight and was in violation of "Required to Use a Headlight at Night."					8 (N/R) ¹	
"Other" checked, not specified			8 (N/R) ²			8 (N/R) ³
"No Helmet" or "Not wearing a Helmet" is the ONLY indication on a crash report where only one field may be checked.	1 (No)	8 (N/R)	8 (N/R)	8 (N/R)	8 (N/R)	8 (N/R)
"It's unknown if the cyclist was using any safety equipment"	9 (R/U)	9 (R/U)	9 (R/U)	9 (R/U)	9 (R/U)	9 (R/U)
"Contrasting Clothing"	8 (N/R)	8 (N/R)	8 (N/R)	8 (N/R)	8 (N/R)	8 (N/R)

- 1. Knowing that a headlight was not in use does not mean that the cyclist was not using any lighting.
- 2. Unless another piece of protective equipment was checked as "Used" in a crash report field that would translate to a FARS/CRSS "Other" protective, e.g., a field labeled "Eyewear."
- 3. Unless another piece of preventive equipment was checked as "Used" in a crash report field that would translate to a FARS/CRSS "Other" preventive, e.g., a field labeled "Rollerblade Stoppers."
- 3. N/R: Not Reported
- 4. R/U: Reported as Unknown
- 3. Note that when a piece of safety equipment noted is mentioned only as "Other" and is not specified anywhere in the case material, both the Protective and Preventive subfields for "Other" must be coded as **8** (Not Reported), unless another piece of equipment is mentioned that qualifies for the FARS/CRSS code "Other." The reason for this is that there is no analytical value to collecting unknown equipment in use without a minimum classification of Protective or Preventive. See *table notes* two and three above.

4. Complete the Protective and Preventive equipment subfields in *RBIS*, assessing whether each category of safety equipment was used <u>2 (Yes)</u>, not used <u>1 (No)</u>, there is no information regarding the category <u>8 (Not Reported)</u>, or the officer indicated that safety equipment use was unknown <u>9 (Reported as Unknown)</u>.

PROTECTIVE Non-Motorist Safety Equipment

Subfield 1- Non-Motorist Helmet Use is used to identify if the case material indicate the non-motorist was wearing a safety helmet. The non-motorist does not have to be riding a bicycle at the time of the crash to code this subfield as 2 (Yes).

2 (Yes) includes all helmets (bicycle helmet, motorcycle helmet, racing helmets, etc.). If the non-motorist was wearing a motorcycle helmet, see <u>RELATED FACTORS - PERSON (NOT A MOTOR VEHICLE OCCUPANT) LEVEL</u> attribute <u>093 (Non-Motorist Wearing Motorcycle Helmet)</u>. For example, a pedestrian that previously was riding a motorcycle gets struck while still wearing their helmet.

Subfield 2- Non-Motorist Use of Protective Pads is used to identify if the case material indicate the non-motorist was wearing padded, shaped attachments to protect specific areas of the body (elbows, knees, shins, etc.) from injury.

Subfield 3- Non-Motorist Use of Other Protective Safety Equipment is used to identify if the case material indicate the non-motorist was using protective safety equipment other than a helmet or pads (eye wear/face shields, gloves, wrist guards, etc.). If other safety equipment is noted in the case material and it cannot be determined if it is preventive or protective, use code **8 (Not Reported).**

PREVENTIVE Non-Motorist Safety Equipment

Subfield 4-Non-Motorist Use of Reflective Clothing/Carried Item is used to identify if the case material indicate the non-motorist was wearing or carrying some type of reflective item (jacket, backpack, vest, etc.). The emphasis is on the reflective property of the clothing or carried item and does not include devices that give off light under their own power (e.g., flashlights). For lighting, use Subfield 5-Non-Motorist Use of Lighting. The reflective item can be reflective tape affixed to regular clothing, special reflective clothing, a reflective device that is worn or a reflective device that is carried. It can be made by the non-motorist and does not have to be specially designed as a safety device.

Do not code bicycle reflectors or clothing that is non-reflective but considered to be safety equipment (hi-glo orange clothing) here, use <u>Subfield 6- Non-Motorist Use of Other Preventive Safety Equipment</u> instead. Subfield 4 is used only for clothing or equipment that is both reflective and worn or carried.

Subfield 5- Non-Motorist Use of Lighting is used to identify if the case material indicate the non-motorist was using a light on his/her person or on a pedalcycle or personal conveyance for safety purposes, to include flashlights.

Subfield 6- Non-Motorist Use of Other Preventive Safety Equipment is used to identify if the case material indicate the non-motorist was using preventive safety equipment other than a reflective clothing/carried item or light (bicycle reflectors and flags, reflectors and triangles on a buggy, Hi-Glo orange clothing, rollerblade stoppers, etc.). If other safety equipment is noted in the case material and it cannot be determined if it is preventive or protective, use code **8 (Not Reported)**.

The following attributes apply to all 6 subfields:

- 1 (No) is used when the case material identifies this non-motorist did not use this type of safety equipment.
- 2 (Yes) is used when the case material identifies this non-motorist used this type of safety equipment.
- 8 (Not Reported) is used when the case material does not provide sufficient information to identify if this non-motorist did 2(Yes) or did not 1 (No) use this type of safety equipment. Check to see if 1 (No) or 9 (Reported as Unknown) are more appropriate for the situation.
- **9 (Reported as Unknown)** is used when the case material identifies it is unknown if this non-motorist used this type of safety equipment.

Error ID	IF	THEN
1N4F	NON-MOTORIST SAFETY EQUIPMENT Subfield 5- Non-Motorist Use of Lighting equals 2,	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES should not equal 13.
4X2A	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES equals 19,	NON-MOTORIST SAFETY EQUIPMENT Subfield 4-Non-Motorist Use of Reflective Clothing/Carried Item should not equal 2.
4X2B	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES equals 19,	NON-MOTORIST SAFETY EQUIPMENT Subfield 5- Non-Motorist Use of Lighting should not equal 2.
4W2P	RELATED FACTORS - PERSON (NOT A MV OCCUPANT) LEVEL equals 0 93,	NON-MOTORIST SAFETY EQUIPMENT Subfield 1 Non-Motorist Helmet Use must equal 2.
8T0F	NON-MOTORIST SAFETY EQUIPMENT Subfield 1 Non-Motorist Helmet Use equals 2,	PERSON TYPE should equal 06, <i>07</i> , <i>11</i> , <i>12</i> , <i>or 13</i> .

NM15/D23 - Condition (Impairment) at Time of Crash

FORMAT: 2 numeric. Select All That Apply.

SAS NAME: Nmimpair.NMIMPAIR

ELEMENT VALUES:

Codes	Attributes
00	None/Apparently Normal
01	Ill, Blackout
02	Asleep or Fatigued
03	Walking with a Cane or Crutches, etc.
04	Paraplegic or in a Wheelchair
05	Impaired Due to Previous Injury
06	<u>Deaf</u>
07	Blind
08	Emotional (Depressed, Angry, Disturbed, etc.)
09	<u>Under the Influence of Alcohol, Drugs, or Medication</u>
10	Physical Impairment - No Details
96	Other Physical Impairment
98	Not Reported
99	Reported as Unknown if Impaired

Definition: This element attempts to identify any physical impairment to this non-motorist who may have contributed to the cause of the crash.

Remarks: Select All That Apply.

This element's values and remarks are identical to the Driver Level element CONDITION (IMPAIRMENT) AT TIME OF CRASH. Please see **CONDITION (IMPAIRMENT) AT TIME OF CRASH** for remarks.

Error ID	IF	THEN
1P6G	PERSON TYPE equals 04, 06, 07, 11, 12, 13, or 19,	CONDITION (IMPAIRMENT) AT TIME OF CRASH must not equal 03.
1P7G	PERSON TYPE equals 05-07, 19,	CONDITION (IMPAIRMENT) AT TIME OF CRASH should not equal 04.
1P8G	PERSON TYPE equals 10,	CONDITION (IMPAIRMENT) AT TIME OF CRASH should not equal 01-10, 96.

Error ID	IF	THEN
2P0G	CONDITION (IMPAIRMENT) AT TIME OF CRASH equals 03,	PERSON TYPE must be 05, 10, 11, 12, 13, or 19.
4X3F	any CONDITION (IMPAIRMENT) AT TIME OF CRASH equals 00 or 98 or 99,	only that one code and no other must be coded for this person.
4X6F	any CONDITION (IMPAIRMENT) AT TIME OF CRASH equals 09,	POLICE REPORTED ALCOHOL INVOLVEMENT or POLICE REPORTED DRUG INVOLVEMENT must equal 1 for this person.
U590	UNLIKELY: any CONDITION (IMPAIRMENT) AT TIME OF CRASH equals 05 or 07.	

NM16/P16 - Police Reported Alcohol Involvement

FORMAT: 1 numeric

SAS NAME: Person.DRINKING

ELEMENT VALUES:

Codes	Attributes
0	No (Alcohol Not Involved)
1	Yes (Alcohol Involved)
8	Not Reported
9	Reported as Unknown

Definition: This data element reflects only **the judgment of law enforcement** as to whether alcohol was involved or not for this person.

Remarks: This element's values and remarks are identical to the Person Level (MV Occupant) Level element POLICE REPORTED ALCOHOL INVOLVEMENT. Please see **POLICE REPORTED ALCOHOL INVOLVEMENT** for remarks.

Error ID	IF	THEN
4X6F	any CONDITION (IMPAIRMENT) AT TIME OF CRASH equals 09,	POLICE REPORTED ALCOHOL INVOLVEMENT or POLICE REPORTED DRUG INVOLVEMENT must equal 1 for this person.
D090	VIOLATIONS CHARGED equals 11-19, and PERSON TYPE equals 01, 03,	POLICE REPORTED ALCOHOL INVOLVEMENT should equal 1, or POLICE REPORTED DRUG INVOLVEMENT should equal 1.
P072	PERSON TYPE equals 02, 03, and INJURY SEVERITY equals 0, and ALCOHOL TEST RESULT equals 996,	POLICE REPORTED ALCOHOL INVOLVEMENT should equal 0, 8.
P076	ALCOHOL TEST Subfield 2 - Test Type equals 02, 10, or 11,	POLICE REPORTED ALCOHOL INVOLVEMENT should not equal 8 or 9, and METHOD OF ALCOHOL DETERMINATION BY POLICE should equal 1 or 2.
P300	POLICE REPORTED ALCOHOL INVOLVEMENT equals 1, and INJURY SEVERITY equals 4,	ALCOHOL TEST STATUS should not equal 0.

Consistency Checks (FARS Only) (See Section 400):

Error ID	IF	THEN
P110	METHOD OF ALCOHOL DETERMINATION BY POLICE equals 1-5, 8,	POLICE REPORTED ALCOHOL INVOLVEMENT should equal 0, 1.
P200	POLICE REPORTED ALCOHOL INVOLVEMENT equals 8, 9,	METHOD OF ALCOHOL DETERMINATION BY POLICE should equal 9.

NM17/P17 - Method of Alcohol Determination by Police - FARS Only

FORMAT: 1 numeric

SAS NAME: Person.ALC_DET

ELEMENT VALUES:

Codes	Attributes
1	Evidential Test (breath, blood, urine)
2	Preliminary Breath Test (PBT)
3	Standard Field Sobriety Test
4	Passive Alcohol Sensor (PAS)
5	<u>Observed</u>
8	Other (e.g., Saliva test)
9	Not Reported

Definition: This element describes **the method by which the police made the determination** as to whether alcohol was involved or not for this person.

Remarks: This element's values and remarks are identical to the Person Level (MV Occupant) Level element METHOD OF ALCOHOL DETERMINATION BY POLICE. Please see METHOD OF ALCOHOL DETERMINATION BY POLICE for remarks.

Error ID	IF	THEN
P076	ALCOHOL TEST Subfield 2 - Test Type equals 02, 10, or 11,	POLICE REPORTED ALCOHOL INVOLVEMENT should not equal 8 or 9, and METHOD OF ALCOHOL DETERMINATION BY POLICE should equal 1 or 2.
P110	METHOD OF ALCOHOL DETERMINATION BY POLICE equals 1-5, 8,	POLICE REPORTED ALCOHOL INVOLVEMENT should equal 0, 1.
P200	POLICE REPORTED ALCOHOL INVOLVEMENT equals 8, 9,	METHOD OF ALCOHOL DETERMINATION BY POLICE should equal 9.
P400	METHOD OF ALCOHOL DETERMINATION BY POLICE equals 1 or 2,	ALCOHOL TEST Subfield 1-Test Status must be 2.
U681	UNLIKELY: METHOD OF ALCOHOL DETERMINATION BY POLICE equals 8.	

NM18/P18 - Alcohol Test

FORMAT: 3 sets: 1 set, 1 numeric, 1 set, 2 numeric, 1 set, 3 numeric

SAS NAME: Person.ALC_STATUS, Person.ATST_TYP, Person.ALC_RES

ELEMENT VALUES:

Subfield 1 - Test Status

Codes	Attributes
0	Test Not Given
2	Test Given
8	Not Reported
9	Reported as Unknown if Tested

Subfield 2 - Test Type

Codes	Attributes
00	Test Not Given
01	Blood
02	Breath Test (AC)
10	Preliminary Breath Test (PBT)
11	Breath Test, Unknown Type
03	<u>Urine</u>
04*	Vitreous
05*	Blood Plasma/Serum
06*	Blood Clot
07*	Liver
08	Other Test Type
98	<u>Unknown Test Type</u>
95	Not Reported
99	Reported as Unknown if Tested

*FARS ONLY ATTRIBUTES

Subfield 3 - Test Result

Codes	Attributes
000-939	Actual Value
940	.94 or Greater
996	Test Not Given
997	AC Test Performed, Results Unknown
998	Positive Reading with No Actual Value
995	Not Reported
999	Reported as Unknown if Tested

Definition for Alcohol Test Status: This element identifies if an alcohol (ethanol) test was given to this person.

Definition for Alcohol Test Type: This element identifies the type of the alcohol (ethanol) test that was used for this person.

Definition for Alcohol Test Result: This element identifies the alcohol (ethanol) test result for this person.

Remarks: This element's values and remarks are identical to the Person Level (MV Occupant) Level element ALCOHOL TEST. Please see <u>ALCOHOL TEST</u> for remarks.

Error ID	IF	THEN
5T7P	ALCOHOL TEST STATUS equals 0,	ALCOHOL TEST TYPE must equal 00, and ALCOHOL TEST RESULT must equal 996.
5T8P	ALCOHOL TEST STATUS equals 9,	ALCOHOL TEST TYPE must equal 99, and ALCOHOL TEST RESULT must equal 999.
5T9P	ALCOHOL TEST STATUS equals 2,	ALCOHOL TEST TYPE must equal 01-11, 95, 98, and ALCOHOL TEST RESULT must equal 000-940, 997, 998.
5TCP	ALCOHOL TEST STATUS equals 8,	ALCOHOL TEST TYPE must equal 95, and ALCOHOL TEST RESULT must equal 995.
P071	PERSON TYPE equals 02, 04-07, 10, 11, 12, or 13, and INJURY SEVERITY does not equal 4,	ALCOHOL TEST STATUS should not equal 9, ALCOHOL TEST TYPE should not equal 99, and ALCOHOL TEST RESULT should not equal 999.
P074	PERSON TYPE equals 02, 04-07, 10, 11, 12, or 13, and INJURY SEVERITY does not equal 4,	ALCOHOL TEST TYPE must not equal 8, ALCOHOL TEST TYPE must not equal 95, and ALCOHOL TEST RESULT must not equal 995.

Error ID	IF	THEN
P076	ALCOHOL TEST Subfield 2 - Test Type equals 02, 10, or 11,	POLICE REPORTED ALCOHOL INVOLVEMENT should not equal 8 or 9, and METHOD OF ALCOHOL DETERMINATION BY POLICE should equal 1 or 2.
P077	INJURY SEVERITY equals 4, and DIED AT SCENE/EN ROUTE equals 7 or 8,	ALCOHOL TEST Subfield 2 - Test Type should not equal 02, 10, or 11.
P300	POLICE REPORTED ALCOHOL INVOLVEMENT equals 1, and INJURY SEVERITY equals 4,	ALCOHOL TEST STATUS should not equal 0.
P400	METHOD OF ALCOHOL DETERMINATION BY POLICE equals 1 or 2,	ALCOHOL TEST Subfield 1-Test Status must be 2.
U689	UNLIKELY: ALCOHOL TEST Subfield 3- Test Result equals 001-009.	
U691	UNLIKELY: ALCOHOL TEST Subfield 3- Test Result equals 010-019.	
U692	UNLIKELY: ALCOHOL TEST Subfield 3- Test Result equals 020-029.	
U693	UNLIKELY: ALCOHOL TEST Subfield 3- Test Result equals 030-039.	
U696	UNLIKELY: ALCOHOL TEST TYPE equals 01, 03, 04, 05, 06, 07, or 08, and ALCOHOL TEST RESULTS is greater than 600, and ALCOHOL TEST RESULTS not equal to 995, 996, 997, 998, or 999.	
U697	UNLIKELY: ALCOHOL TEST TYPE equals 02, 10, or 11, and ALCOHOL TEST RESULTS is greater than 300, and ALCOHOL TEST RESULTS not equal to 995, 996, 997, 998, or 999.	

Consistency Checks (CRSS Only) (See Section 400):

Error ID	IF	THEN
P078	INJURY SEVERITY equals 4,	ALCOHOL TEST Subfield 2 - Test Type should not equal 02, 10, or 11.

NM19/P19 - Police Reported Drug Involvement

FORMAT: 1 numeric

SAS NAME: Person.DRUGS

ELEMENT VALUES:

Codes	Attributes
0	No (Drugs Not Involved)
1	Yes (Drugs Involved)
8	Not Reported
9	Reported as Unknown

Definition: This data element reflects only **the judgment of law enforcement** as to whether drugs were involved or not for this person.

Remarks: This element's values and remarks are identical to the Person Level (MV Occupant) Level element POLICE REPORTED DRUG INVOLVEMENT. Please see POLICE REPORTED DRUG INVOLVEMENT for remarks.

Consistency Checks (See Section 400):

Error ID	IF	THEN
4X6F	any CONDITION (IMPAIRMENT) AT TIME OF CRASH equals 09,	POLICE REPORTED ALCOHOL INVOLVEMENT, or POLICE REPORTED DRUG INVOLVEMENT must equal 1 for this person.
D090	VIOLATIONS CHARGED equals 11-19, and PERSON TYPE equals 01, 03,	POLICE REPORTED ALCOHOL INVOLVEMENT should equal 1, or POLICE REPORTED DRUG INVOLVEMENT should equal 1.

Consistency Checks (FARS Only) (See Section 400):

Error ID	IF	THEN
BQ0P	METHOD OF DRUG DETERMINATION BY POLICE equals 8,	POLICE REPORTED DRUG INVOLVEMENT must equal 0, 1, 8, 9.
BR0P	METHOD OF DRUG DETERMINATION BY POLICE equals 1-7,	POLICE REPORTED DRUG INVOLVEMENT must equal 0, 1, 8.
P140	POLICE REPORTED DRUG INVOLVEMENT equals 8, 9,	METHOD OF DRUG DETERMINATION BY POLICE should equal 8.

Error ID	IF	THEN
P150	POLICE REPORTED DRUG INVOLVEMENT equals 1, and METHOD OF DRUG DETERMINATION BY POLICE equals 2,	DRUG TEST STATUS should not equal 0.
P160	POLICE REPORTED DRUG INVOLVEMENT equals 1, and METHOD OF DRUG DETERMINATION BY POLICE equals 2,	not all DRUG TEST RESULTS should equal 001.
P170	METHOD OF DRUG DETERMINATION BY POLICE equals 1-7,	POLICE REPORTED DRUG INVOLVEMENT should equal 0, 1.

NM20/P20 - Method of Drug Determination by Police - FARS Only

FORMAT: 1 numeric

SAS NAME: Person.DRUG_DET

ELEMENT VALUES

Codes	Attributes
1	Evidential Test (Blood, Urine)
2	Drug Recognition Expert (or Evaluator) (DRE)
3	Observed Behavior or SFST
7	<u>Other</u>
8	Not Reported

Definition: This element identifies **the method by which the police made the determination** as to whether drugs were involved or not for this person.

Remarks: This element's values and remarks are identical to the Person Level (MV Occupant) Level element METHOD OF DRUG DETERMINATION BY POLICE. Please see METHOD OF DRUG DETERMINATION BY POLICE for remarks.

Error ID	IF	THEN
BQ0P	METHOD OF DRUG DETERMINATION BY POLICE equals 8,	POLICE REPORTED DRUG INVOLVEMENT must equal 0, 1, 8, 9.
BR0P	METHOD OF DRUG DETERMINATION BY POLICE equals 1-7,	POLICE REPORTED DRUG INVOLVEMENT must equal 0, 1, 8.
P140	POLICE REPORTED DRUG INVOLVEMENT equals 8, 9,	METHOD OF DRUG DETERMINATION BY POLICE should equal 8.
P150	POLICE REPORTED DRUG INVOLVEMENT equals 1 and METHOD OF DRUG DETERMINATION BY POLICE equals 2,	DRUG TEST STATUS should not equal 0.
P160	POLICE REPORTED DRUG INVOLVEMENT equals 1, and METHOD OF DRUG DETERMINATION BY POLICE equals 2,	not all DRUG TEST RESULTS should equal 001.
P170	METHOD OF DRUG DETERMINATION BY POLICE equals 1-7,	POLICE REPORTED DRUG INVOLVEMENT should equal 0, 1.
P401	METHOD OF DRUG DETERMINATION BY POLICE equals 1,	DRUG TOXICOLOGY RESULTS Subfield 1-Test Status must be 2.

NM21/P21 - Drug Toxicology Results - FARS Only

FORMAT: 1 set 1 numeric; Unlimited, 2 numeric; Unlimited, 3 numeric

SAS NAME: Person.DSTATUS, Drugs.DRUGSPEC, Drugs.DRUGRES

ELEMENT VALUES:

Subfield 1 - Drug Test Status

FARS Codes	Attributes
0	Test Not Given
2	<u>Test Given</u>
8	Not Reported
9	Reported as Unknown if Tested

Subfield 2 - Drug Specimen

FARS Codes	Attributes
00	Test Not Given
01	Whole Blood
02	<u>Urine</u>
11	Blood Plasma/Serum
12	Blood Clot
13	Oral Fluids
14	Vitreous
15	Liver
97	<u>Unknown Specimen</u>
98	Other Specimen
96	Not Reported
99	Reported as Unknown if Tested

Subfield 3 - Drug Test Result**

FARS Codes	Attributes
000	Test Not Given
001	Tested, No Drugs Found/Negative
100-295	Narcotic*

FARS Codes	Attributes
300-399	Depressant*
400-495	Stimulant*
500-595	Hallucinogen*
600-695	Cannabinoid*
700-795	Phencyclidine (PCP)*
800-895	Anabolic Steroid*
900-995	Inhalant*
996	Other Drug
997	Tested for Drugs, Results Unknown
998	Tested for Drugs, Drugs Found, Type Unknown/Positive
095	Not Reported
999	Reported as Unknown If Tested for Drugs

^{*} See Specific Drug Listings

Definition for Drug Test Status: This element identifies if a chemical test for the presence of drugs was given to this person.

Definition for Drug Specimen: This element identifies the bodily tissue or fluid used to perform a chemical test for the presence of drugs in this person.

Definition for Drug Test Result: This element records the result of a chemical test for the presence of drugs in this person.

Remarks: This element's values and remarks are identical to the Person Level (MV Occupant) Level element DRUG TOXICOLOGY RESULTS. Please see DRUG TOXICOLOGY RESULTS for remarks.

See <u>Alphabetical Drug Index</u> and <u>Drugs by Category</u> under element DRUG TOXICOLOGY RESULTS. Also reference "<u>Examples for Interpreting Drug Tests</u>" under element DRUG TOXICOLOGY RESULTS.

Error ID	IF	THEN
7M1F	PERSON TYPE equals 03, and SEATING POSITION is not equal to 11 or 13, and INJURY SEVERITY does not equal 4,	DRUG TEST STATUS must not equal 8, any DRUG SPECIMEN must not equal 96, and any DRUG TEST RESULTS must not equal 095.
ВТОР	DRUG TEST STATUS equals 2,	any DRUG SPECIMEN must not equal 00 or 99 and any DRUG TEST RESULT must not equal 000 or 999.

^{**} Test Result does not include aspirin, nicotine, or ethanol. Alcohols reported other than ethanol would be classified under 996 (Other Drug).

Error ID	IF	THEN
BT1P	DRUG TEST STATUS equals 0,	there must exist only one DRUG SPECIMEN equal to 00 and one DRUG TEST RESULT equal to 000 for this person.
BT2P	DRUG TEST STATUS equals 8,	there must exist only one DRUG SPECIMEN equal to 96 and one DRUG TEST RESULT equal to 095 for this person.
ВТЗР	DRUG TEST STATUS equals 2,	at least one DRUG SPECIMEN must equal 01, 02, 11-15, 96, 97, 98, and one corresponding DRUG TEST RESULT must equal 001, 095, 100-295, 300-395, 400-495, 500-595, 600-695, 700-795, 800-895, 900-995, 996-998.
BT6P	DRUG TEST STATUS equals 9,	there must exist only one DRUG SPECIMEN equal to 99 and one DRUG TEST RESULT equal to 999 for this person.
BT8P	DRUG TEST RESULT does not equal 996,	only one record with the same DRUG SPECIMEN and DRUG TEST RESULT must exist.
P073	PERSON TYPE equals 02, 04-07, 10, 11, 12, or 13, and INJURY SEVERITY does not equal 4,	DRUG TEST STATUS should not equal 9, and any DRUG SPECIMEN should not equal 99, and any DRUG TEST RESULTS should not equal 999.
P075	PERSON TYPE equals 02, 04-07, 10, 11, 12, 13, or 19, and INJURY SEVERITY does not equal 4,	DRUG TEST STATUS must not equal 8, any DRUG SPECIMEN must not equal 96, and any DRUG TEST RESULTS must not equal 095.
P150	POLICE REPORTED DRUG INVOLVEMENT equals 1 and METHOD OF DRUG DETERMINATION BY POLICE equals 2,	DRUG TEST STATUS should not equal 0.
P160	POLICE REPORTED DRUG INVOLVEMENT equals 1, and METHOD OF DRUG DETERMINATION BY POLICE equals 2,	not all DRUG TEST RESULTS should equal 001.
P401	METHOD OF DRUG DETERMINATION BY POLICE equals 1,	DRUG TOXICOLOGY RESULTS Subfield 1-Test Status must be 2.

NM22/P22 - Transported to First Medical Facility By

FORMAT: 1 numeric

SAS NAME: Person.HOSPITAL

ELEMENT VALUES:

Codes	Attributes
0	Not Transported for Treatment
1	EMS Air
5	EMS Ground
3	EMS Unknown Mode
2	<u>Law Enforcement</u>
4	Transported Unknown Source
6	<u>Other</u>
8	Not Reported
9	Reported as Unknown

Definition: This element identifies the method of transportation this person was provided to receive treatment at the first hospital or medical facility.

Remarks: This element's values and remarks are identical to the Person Level (MV Occupant) Level element TRANSPORTED TO FIRST MEDICAL FACILITY BY. Please see **TRANSPORTED TO FIRST MEDICAL FACILITY BY** for remarks.

Consistency Checks (See Section 400):

Error ID	IF	THEN
2U3F	INJURY SEVERITY equals 3,	TRANSPORTED TO FIRST MEDICAL FACILITY BY should not equal 0.
P090	INJURY SEVERITY equals 0,	TRANSPORTED TO FIRST MEDICAL FACILITY BY must equal 0.

Consistency Checks (FARS Only) (See Section 400):

Error ID	IF	THEN
A551	EMS TIME AT HOSPITAL equals 8888, 9997, 9998,	TRANSPORTED TO FIRST MEDICAL FACILITY BY should not equal 1, 3, 5 for any person.
P091	TRANSPORTED TO FIRST MEDICAL FACILITY BY equals 1, 3, 5,	EMS TIME AT HOSPITAL should not equal 8888, 9997, 9998.

Error ID	IF	THEN
P093	all persons TRANSPORTED TO FIRST MEDICAL FACILITY BY equals 2, <i>or 6</i> ,	NOTIFICATION TIME EMS, ARRIVAL TIME EMS, EMS TIME AT HOSPITAL must equal 8888.
P095	TRANSPORTED TO FIRST MEDICAL FACILITY BY equals 0 for every person in the case,	EMS TIME AT HOSPITAL must not equal 0000-2399, 9999.
P520	CRASH DATE and DEATH DATE are the same, and CRASH TIME AND DEATH TIME are the same,	TRANSPORTED TO FIRST MEDICAL FACILITY BY should equal 0 and DIED AT SCENE/EN ROUTE should equal 7.
P50P	DIED AT SCENE/EN ROUTE equals 7,	TRANSPORTED TO FIRST MEDICAL FACILITY BY must equal 0.
P51P	DIED AT SCENE/EN ROUTE equals 8,	TRANSPORTED TO FIRST MEDICAL FACILITY BY must equal 1-6.
P52P	DIED AT SCENE/EN ROUTE equals 9,	TRANSPORTED TO FIRST MEDICAL FACILITY BY must equal 8 or 9.
P55P	TRANSPORTED TO FIRST MEDICAL FACILITY BY equals 9,	DIED AT SCENE/EN ROUTE must equal 0, 9.

NM23/P23 - Died at Scene/En Route - FARS Only

FORMAT: 1 numeric

SAS NAME: Person.DOA

ELEMENT VALUES:

Codes	Attributes
0	Not Applicable
7	Died at Scene
8	<u>Died En Route</u>
9	<u>Unknown</u>

Definition: This element identifies if this person died at the scene of the crash or en route to a hospital or treatment facility.

Remarks: This element's values and remarks are identical to the Person Level (MV Occupant) Level element DIED AT SCENE/EN ROUTE. Please see **DIED AT SCENE/EN ROUTE** for remarks.

Error ID	IF	THEN
1R1P	If DIED AT SCENE/EN ROUTE equals 7, 8,	INJURY SEVERITY must equal 4.
P077	INJURY SEVERITY equals 4, and DIED AT SCENE/EN ROUTE equals 7 or 8,	ALCOHOL TEST Subfield 2 - Test Type should not equal 02, 10, or 11.
P50P	DIED AT SCENE/EN ROUTE equals 7,	TRANSPORTED TO FIRST MEDICAL FACILITY BY must equal 0.
P510	EMS TIME AT HOSPITAL equals 8888, 9997, 9998,	DIED AT SCENE/EN ROUTE should not equal 8 for any PERSON.
P51P	DIED AT SCENE/EN ROUTE equals 8,	TRANSPORTED TO FIRST MEDICAL FACILITY BY must equal 1-6.
P520	CRASH DATE and DEATH DATE are the same, and CRASH TIME AND DEATH TIME are the same,	TRANSPORTED TO FIRST MEDICAL FACILITY BY should equal 0 and DIED AT SCENE/EN ROUTE should equal 7.
P52P	DIED AT SCENE/EN ROUTE equals 9,	TRANSPORTED TO FIRST MEDICAL FACILITY BY must equal 8 or 9.
P530	EMS TIME AT HOSPITAL equals 9996,	DIED AT SCENE/EN ROUTE must equal 8 for at least one person.
P53P	INJURY SEVERITY equals 0-3, 5, 6,	DIED AT SCENE/EN ROUTE must equal 0.
P54P	DIED AT SCENE/EN ROUTE equals 8,	EMS TIME AT HOSPITAL should not equal 8888, 9997, 9998.

Error ID	IF	THEN
P55P	TRANSPORTED TO FIRST MEDICAL FACILITY BY equals 9,	DIED AT SCENE/EN ROUTE must equal 0, 9.
P56P	DIED AT SCENE/EN ROUTE equals 7,	DEATH TIME should be within 30 minutes of the CRASH TIME.

NM24/P24 - Death Date - FARS Only

FORMAT: 2 sets of 2 numeric, 1 set of 4 numeric

SAS NAME: Person.DEATH_DA, Person.DEATH_MO, Person.DEATH_YR

ELEMENT VALUES:

Month:

Codes	Attributes
88	Not Applicable (Non-fatal)
01-12	Month of the Year
99	Unknown

Day:

Codes	Attributes
88	Not Applicable (Non-fatal)
01-31	Day of the Month
99	Unknown

Year:

Codes	Attributes
8888	Not Applicable (Non-fatal)
	Actual Year of Death
9999	Unknown

Definition: This element records the month, day, and year of this person's death.

Remarks: This element's values and remarks are identical to the Person Level (MV Occupant) Level element DEATH DATE. Please see **DEATH DATE** for remarks.

Error ID	IF	THEN
1U1F	INJURY SEVERITY equals 4,	DEATH DATE must not equal 88888888.
1V0P	DEATH MONTH or DAY equals 88, or DEATH YEAR equals 8888,	all must equal 8s.
2U1F	INJURY SEVERITY is not equal to 4,	DEATH DATE must equal 88888888.
2V0P	DEATH DAY is 01-31, and DEATH MONTH is 01-12,	DEATH DAY must be a valid day for DEATH MONTH.

Error ID	IF	THEN
3U1P	DEATH DATE equals CRASH DATE, and CRASH HOUR is not equal to 99,	DEATH HOUR must not be less than CRASH HOUR.
3U2P	DEATH DATE equals CRASH DATE, and DEATH HOUR equals CRASH HOUR and CRASH MINUTE is not equal to 99,	DEATH MINUTE must not be less than CRASH MINUTE.
4V1F	INJURY SEVERITY equals 4,	DEATH DATE and DEATH TIME for this person must be within 720 hours of the CRASH DATE and CRASH TIME.
4V2F	CRASH MONTH equals 12, and DEATH MONTH equals 01,	DEATH YEAR must equal CRASH YEAR plus 1.
4V3F	CRASH MONTH equals 12,	DEATH MONTH must equal 01, 12, 88, 99.
4V4F	CRASH MONTH equals 02-11, and DEATH MONTH is not equal to 88 or 99,	DEATH MONTH must equal CRASH MONTH or CRASH MONTH plus 1.
4V5F	CRASH MONTH equals 01, and DEATH MONTH is not equal to 88 or 99,	DEATH MONTH must equal CRASH MONTH or CRASH MONTH plus 1 or CRASH MONTH plus 2.
4V6P	DEATH MONTH is not equal to blanks,	DEATH DAY and DEATH YEAR must not equal blanks.
4V7P	DEATH DAY is not equal to blanks,	DEATH MONTH and DEATH YEAR must not equal blanks.
4V8P	DEATH YEAR is not equal to blanks,	DEATH MONTH and DEATH DAY must not equal blanks.
6V0P	DEATH DATE must not be less than CRASH DATE.	
7V0F	DEATH YEAR equals 9999,	CRASH MONTH must not be 01-11.
8V0P	DEATH YEAR equals 9999,	DEATH MONTH and DEATH DAY must equal 99.
9V0P	DEATH MONTH equals 99,	DEATH DAY must equal 99.
P520	CRASH DATE and DEATH DATE are the same, and CRASH TIME and DEATH TIME are the same,	TRANSPORTED TO FIRST MEDICAL FACILITY BY should equal 0 and DIED AT SCENE/EN ROUTE should equal 7.
P56P	DIED AT SCENE/EN ROUTE equals 7,	DEATH TIME should be within 30 minutes of the CRASH TIME.

NM25/P25 - Death Time - FARS Only

FORMAT: 4 numeric

SAS NAME: Person.DEATH_HR, Person.DEATH_MN, Person.DEATH_TM

ELEMENT VALUES:

Codes	Attributes
8888	Not Applicable (Non-fatal)
0000-2359	Valid Military Time
0099-2399	Known Hour but Unknown Minutes
9999	<u>Unknown</u>

Definition: This element identifies the hour and minute of this person's death using the 24-hour clock format.

Remarks: This element's values and remarks are identical to the Person Level (MV Occupant) Level element DEATH TIME. Please see **DEATH TIME** for remarks.

See the <u>Coding Guide: TIME: Crash Times, EMS Times, Death Times</u> for helpful information. Consistency Checks (<u>See Section 400</u>):

Error ID	IF	THEN
1U2F	INJURY SEVERITY equals 4,	DEATH TIME must not equal 8888.
2U2F	INJURY SEVERITY is not equal to 4,	DEATH TIME must equal 8888.
3U1P	DEATH DATE equals CRASH DATE, and CRASH HOUR is not equal to 99,	DEATH HOUR must not be less than CRASH HOUR.
3U2P	DEATH DATE equals CRASH DATE, and DEATH HOUR equals CRASH HOUR and CRASH MINUTE is not equal to 99,	DEATH MINUTE must not be less than CRASH MINUTE.
4V1F	INJURY SEVERITY equals 4,	DEATH DATE and DEATH TIME for this person must be within 720 hours of the CRASH DATE and CRASH TIME.
P520	CRASH DATE and DEATH DATE are the same, and CRASH TIME AND DEATH TIME are the same,	TRANSPORTED TO FIRST MEDICAL FACILITY BY should equal 0 and DIED AT SCENE/EN ROUTE should equal 7.
P56P	DIED AT SCENE/EN ROUTE equals 7,	DEATH TIME should be within 30 minutes of the CRASH TIME.

NM26 - Related Factors - Person (Not A Motor Vehicle Occupant) Level

FORMAT: 3 numeric. Select All That Apply.

SAS NAME: PersonRF.PERSONRF

ELEMENT VALUES:

Codes	Attributes
000	None
* 0 08	Mentally Challenged
0 09	Construction/Maintenance/Utility Worker
0 10	Alcohol and/or Drug Test Refused
0 13	Motorized Wheelchair Rider
* 0 18	Mother of Dead Fetus/ Mother of Infant Born Post Crash
* 0 21	Overloading or Improper Loading of Vehicle with Passengers or Cargo
* 0 26	Following Improperly
* 0 37	Traveling on Prohibited Trafficways
* 0 40	Passing Through or Around Barrier
* 0 41	Failure to Observe Warnings or Instructions on Vehicles Displaying Them
* 0 42	Failure to Signal Intentions
* 0 51	Operator Inexperience
* 0 52	Unfamiliar with Roadway
0 53	Non-Motorist Previously Used a Motor Vehicle for Motion
0 54	Non-Motorist Attempting to Use a Motor Vehicle for Motion
0 55	Non-Motorist Attempting to Use or Previously Used a Motor Vehicle for Motion, Details Not Reported
0 56	Non-Driver Flees Scene
* 0 57	Improper Tire Pressure
100	Using a Shared Micromobility Device

Vision Obscured By:

Codes	Attributes
* 0 60	Rain, Snow, Fog, Smoke, Sand, Dust
* 0 61	Reflected Glare, Bright Sunlight, Headlights
* 0 62	Curve, Hill, or Other Design Features (including traffic signs, embankment)
* 0 63	Building, Billboard, Other Structures

Codes	Attributes
* 0 64	Trees, Crops, Vegetation
* 0 65	Motor Vehicle (including load)
* 0 66	Parked Vehicle
* 0 67	Splash or Spray of Passing Vehicle
* 0 68	Inadequate Lighting System
* 0 69	Obstructing Angles on Vehicle
* 0 70	<u>Mirrors</u>
* 0 72	Other Visual Obstruction

Skidding, Swerving, Sliding Due To:

Codes	Attributes
* 0 73	Severe Crosswind
* 0 74	Wind from Passing Truck
* 0 75	Slippery or Loose Surface
* 0 76	Tire Blowout or Flat
* 0 77	Debris or Objects in Road
* 0 78	Ruts, Holes, Bumps in Road
* 0 80	Vehicle in Road
* 0 81	Phantom Vehicle
* 0 82	Pedestrian, Pedal Cyclists, or Other Non-Motorist
* 0 83	Ice, Snow, Slush, Water, Sand, Dirt, Oil, Wet Leaves on Road

Other Non-Motorist Factors:

Codes	Attributes
0 87	Police or Law Enforcement Officer
0 94	Emergency Medical Services Personnel
0 95	Fire Personnel
0 96	Tow Operator
0 97	Transportation (i.e., maintenance workers, safety service patrol operators, etc.)
0 90	Non-Motorist Pushing a Vehicle
0 91	Portable Electronic Devices
0 93	Non-Motorist Wearing Motorcycle Helmet

Codes	Attributes
0 31	Default Code Used for Vehicle Numbering
101	Obstructed Sidewalk (for this Person)
9 99	Reported as Unknown

*FARS ONLY ATTRIBUTES

Definition: This element identifies factors related to people not in a motor vehicle expressed in the case material.

Remarks: Code information provided in the case material associated with this person.

The following lists those related factors that may be used for each **PERSON TYPE**:

Person Type	Valid Related Factors
04 (Occupant of a Non-Motor Vehicle Transport Device)	000, 008, 009, 010, 018, 021, 026, 031, 037, 040-042, 051, 052, 056, 057, 060-070, 072-078, 080-083, 087, 091, 093, 097, 999
05 (Pedestrian)	000, 008, 009, 010, 018, 031, 037, 041, 053-056, 060-067, 072, 087, 090, 091, 093-097, 101, 999
06 (Bicyclist)	000, 008, 010, 018, 021, 026, 031, 037, 040-042, 051-057, 060-068, 072-078, 080-083, 087, 091, 093-097, 100, 101, 999
07 (Other Cyclist)	000, 008, 010, 018, 021, 026, 031, 037, 040-042, 051-057, 060-068, 072-078, 080-083, 091, 093, 101, 999
10 (Persons In/On Buildings)	000, 008, 010, 013, 018, 026, 031, 087, 093, 999
11 (Person on Motorized Personal Conveyance)	000, 008, 010, 013, 018, 021, 026, 031, 037, 040-042, 051-057, 060-070, 072-078, 080-083, 087, 091, 093, 100, 101, 999
12 (Person on Non-Motorized Personal Conveyance)	000, 008, 010, 018, 021, 026, 031, 037, 040-042, 051-057, 060-070, 072-078, 080-083, 087, 091, 093, 100, 101, 999
13 (Person on Personal Conveyance, Unknown if Motorized or Non- Motorized)	000, 008, 010, 018, 021, 026, 031, 037, 040-042, 051-057, 060-070, 072-078, 080-083, 087, 091, 093, 100, 101, 999
09 (Unknown Type of Non-Motorist)	000, 008, 009, 010, 018, 021, 026, 031, 037, 040-042, 051-057, 060-068, 072-078, 080-083, 086, 087, 091, 093-097, 101, 999

000 (None) is used when no applicable related factors are noted in the crash report for this person.

*008 (Mentally Challenged) is used when the case material identifies this person has an intellectual, cognitive, or developmental disability.

009 (Construction/Maintenance/Utility Worker) is used when the case material identifies that this was a non-motorist working with the highway department, a contractor, or a utility company at the time of the crash.

010 (Alcohol and/or Drug Test Refused) is used when the officer notes that this person refused to take an alcohol and/or a drug test. Refusing a test does not necessarily mean that a test was not given. It is possible that after a refusal, the officer may have obtained a warrant or some other authorization to

administer a test post-refusal. This includes when the person initially refuses and later consents. Because of this, it is possible to code $\theta 10$ (Alcohol and/or Drug Test Refused) and also code an actual test with results for the same person.

013 (Motorized Wheelchair Rider) is used when the case material identifies the non-motorist is in a motorized wheelchair (personal conveyance). The PERSON TYPE for this person must be 11 (Person on Motorized Personal Conveyance).

*018 (Mother of Dead Fetus/Mother of Infant Born Post Crash) is used when the case material identifies that this non-motorist is the mother of a fetus that died in or as a result of this crash or it is identified that this non-motorist gave birth after the crash whether the child survives or not. Note that for crash classification purposes, a fetus is considered to be part of a pregnant woman rather than a separate individual and, thus, is not counted as a separate person in the crash.

*021 (Overloading or Improper Loading of Vehicle with Passengers or Cargo) is used when the case material describe more than one non-motorist is occupying one seating position at the time of the crash. For example, overloading a bicycle with a passenger riding on the handlebars.

*026 (Following Improperly) is used when the case material identifies that this non-motorist was following a bicyclist, motor vehicle, non-motor vehicle transport device, or person on a personal conveyance too closely as to create a dangerous situation.

Examples include:

- A non-motorist (bicyclist, skateboard rider, rollerblader, etc.) who attempts to grab on to a motor vehicle that is in-transport.
- A bicyclist is following a vehicle so closely that as it passes or takes an avoidance maneuver
 around one vehicle going in the same direction as the bicyclist, the bicyclist strikes the rear of
 the vehicle it was attempting to pass or the rear of another vehicle in the adjacent lane also
 going the same direction.

*037 (Traveling on Prohibited Trafficways) is used when the case material identifies that this non-motorist was traveling on an open trafficway that prohibited travel for their mode of transportation. This applies to all forms of pedestrian travel (skateboard riders, rollerbladers, etc.), as well as horseback riders, carriages, bicyclists, etc.

*040 (Passing Through or Around Barrier) is used when the case material identifies this non-motorist was traveling through or around a "demarcated" area to be in a prohibited area (street closed for a parade, construction, sidewalk closed, etc.).

*041 (Failure to Observe Warnings or Instructions on Vehicles Displaying Them) is used when the case material identifies this non-motorist failed to heed warnings or follow instructions displayed on other vehicles.

Examples include:

- A non-motorist failed to follow construction instructions (e.g., arrows directing traffic mounted on a vehicle) or instructions on emergency vehicles (ambulances, fire trucks, police cars).
- A non-motorist failed to observe right-turn warning on a truck or buses.
- A bicyclist failed to heed hazard lights on a disabled vehicle.

• A child failed to walk around the school bus arm that was extended into the travel lane that permitted the bus driver to see the child in the roadway.

*042 (Failure to Signal Intentions) is used when the case material identifies this non-motorist failed to signal their intentions as required. This attribute includes a failure to signal by either lamp turn signal or hand.

*051 (Operator Inexperience) is used when the case material identifies this non-motorist's (horseback rider, skate boarder, bicyclist without training wheels, etc.) lack of experience contributed to their involvement. Should be expressed by officer and not presumed based on age.

*052 (Unfamiliar with Roadway) is used when the case material identifies this non-motorist's (horseback rider, skate boarder, bicyclist without training wheels, etc.) lack of familiarity with the area/location where the crash occurred contributed to their involvement. Should be expressed by officer and not presumed based on age.

053 (NM Previously Used a Motor Vehicle for Motion) is used when the case material identifies this Non-Motorist was known to have been using a motor vehicle in-transport for the purpose of motion just prior to the onset of the unstabilized situation (e.g., "skitching"). This person may have been connected to the motor vehicle in-transport by any means (hand grasp, tow rope, etc.) and could be or could have been using a non-motorist device (bicycle, skateboard, hoverboard, sled, etc.) while connected. It must be clear that the person was no longer connected at the onset of the unstabilized situation. Also see NON-MOTORIST CONTRIBUTING CIRCUMSTANCES code 18 (Operating in Other Erratic, Reckless, Careless, or Negligent Manner) to see if it applies. Unintentionally losing connection to a motor vehicle must not be the onset of the unstabilized situation (see SEATING POSITION 56 [Appended to a Motor Vehicle for Motion]).

054 (NM Attempting to Use a Motor Vehicle for Motion) is used when the case material identifies this Non-Motorist was known to have been attempting to use a motor vehicle for the purpose of motion prior to the onset of the unstabilized situation (e.g., "skitching"). This person could have been attempting to connect to the motor vehicle in-transport by any means (hand grasp, tow rope, etc.) and could be or could have been using a non-motorist device (bicycle, skateboard, hoverboard, sled, etc.) while attempting to make connection. It must be clear that the non-motorist was attempting to connect and not already connected or previously connected at the onset of the unstabilized situation. Also see NON-MOTORIST CONTRIBUTING CIRCUMSTANCES code 18 (Operating in Other Erratic, Reckless, Careless, or Negligent Manner) to see if it applies.

055 (NM Attempting to Use or Previously Used a Motor Vehicle for Motion, Details Not Reported) is used when the case material identifies this Non-Motorist was known to have been either previously using or attempting to use a motor vehicle in-transport for the purpose of motion prior to the onset of the unstabilized situation (Code 053 or Code 054); however, the case material does not provide enough information to specify one code or the other. It must be clear that the person was not connected to a motor vehicle in-transport at the onset of the unstabilized situation. (See SEATING POSITION 56 [Appended to a Motor Vehicle for Motion].) Also see NON-MOTORIST CONTRIBUTING CIRCUMSTANCES code 18 (Operating in Other Erratic, Reckless, Careless, or Negligent Manner) to see if it applies.

056 (Non-Driver Flees Scene) is used when the case material identifies this non-motorist left the scene of a hit-and-run crash.

Examples Include:

- A bicyclist clipped by a vehicle that runs off the road and overturns, leaves the scene on their bike.
- A pedestrian is pushing an occupied wheelchair, which is struck by a motor vehicle. The pedestrian panics and flees the scene.

*057 (Improper Tire Pressure) is used when the case material identifies that improper tire pressure was present on one or more tires of a bicycle, non-motor vehicle transport device, or personal conveyance in use by this non-motorist. It signifies that improper tire pressure is not a defect, but rather the irresponsibility of this person.

100 (Using a Shared Micromobility Device) is used when this non-motorist was riding a device (non-motorized bicycle, e-scooter, etc.) that was part of a micromobility ride-share, transportation network company (TNC), mobility service provider (MSP), or similar, which connects paying customers seeking transportation with personal conveyances or non-motorized bicycles via websites and mobile apps.

NOTE: Motorized bicycles and e-bikes are considered motor vehicles. See NCSA BODY TYPE <u>81</u> (<u>Moped or Motorized Bicycle</u>). Likewise, a person riding an e-bike would be considered a Motor Vehicle Occupant.

Vision Obscured By:

The following set of attributes identifies visual obstructions noted in the case material applicable to this non-motorist.

- *060 (Rain, Snow, Fog, Smoke, Sand, Dust)
- *061 (Reflected Glare, Bright Sunlight or Headlights)
- *062 (Curve, Hill, or Other Design Features [including traffic signs, embankment])
- *063 (Building, Billboard or Other Structures)
- *064 (Trees, Crops or Vegetation)
- *065 (Motor Vehicle [including load])

Examples include:

- A car stopped on the roadway.
- A tractor-trailer in-transport on the road.
- A school bus stopped for the purpose of loading and/or unloading children.
- *066 (Parked Vehicle)
- *067 (Splash or Spray of a Passing Vehicle)
- *068 (Inadequate Lighting System)

*069 (Obstructing Angles on the Vehicle) is used when the case material identifies obstructing angles on this person's vehicle. This attribute should not be confused with visual obstructions from other vehicles. (See 065 (Motor Vehicle [including load]) and 066 (Parked Vehicle).

*070 (Mirrors) is used when the case material identifies that this non-motorist's vision was obscured by any type of mirror.

*072 (Other Visual Obstruction) is used when the case material identifies that this non-motorist's vision was obscured by something other than previously listed. For example, a trailer that has been left parked on the side of the road by a truck or vehicle.

Skidding, Swerving, Sliding Due To:

This set of attributes is applicable to a non-motorist that attempted to avoid and/or lost control due to one of the following—and resulted in that non-motorist's skidding, swerving, or sliding.

*073 (Severe Crosswind) is used when the case material identifies this non-motorist's control loss was related to severe crosswinds.

*074 (Wind from Passing Truck) is used when the case material identifies this non-motorist's control loss was related to winds produced by a passing truck.

*075 (Slippery or Loose Surface) is used when the case material identifies this non-motorist's control loss was related to the surface composition of the roadway and/or the condition of that composition. Not to be used when the surface is slippery due to environment conditions such as rain, ice or snow (see 083 (Ice, Snow, Slush, Water, Sand, Dirt, Oil, Wet Leaves on Road).

Examples include:

- A slippery surface that is old or worn resulting in loose gravel on the roadway.
- Blacktop that is slick as a newly paved surface.

*076 (Tire Blowout or Flat) is used when the case material identifies this non-motorist's control loss was related to a tire blowout or flat.

*077 (**Debris or Objects in Road**) is used when the case material identifies this non-motorist attempted to avoid or lost control as a result of debris in the road. Examples would include nails, glass, trash cans, tire retread, trash, dead animals, pile of sand, barricades, etc.

*078 (Ruts, Holes, Bumps in Road) is used when the case material identifies this non-motorist attempted to avoid or lost control as a result of a road surface anomalies such as ruts, holes, dips, or bumps.

*080 (Vehicle in Road) is used when the case material identifies this non-motorist attempted to avoid or lost control as a result of another vehicle in the road. This includes both contact and non-contact vehicles that remain at the scene.

*081 (Phantom Vehicle) is used when the case material identifies this non-motorist attempted to avoid or lost control as a result of a non-contact vehicle that left the scene as described by the police officer.

*082 (Pedestrian, Pedal Cyclist, or Other Non-Motorist) is used when the case material identifies this non-motorist attempted to avoid or lost control as a result of a pedestrian, a pedalcyclist, or other type of non-motorist.

*083 (Ice, Snow, Slush, Water, Sand, Dirt, Oil, Wet Leaves on Road) is used when the case material identifies this non-motorist's control loss was related to a substance on the roadway that caused the roadway to be slick, which may interfere with the traction of the vehicle. This attribute does not include part of the roadway composition. For cases involving roadway composition issues, see 075 (Slippery or Loose Surface).

Other Non-Motorist Factors:

- **087** (**Police or Law Enforcement Officer**) is used when the case material identifies that this non-motorist was a police or law enforcement officer **working** at the time of the crash. The officer may be affiliated at the Federal, State, or local law enforcement level. This would also include military and park police, border patrol officers, and all other sworn law enforcement officers.
- **094** (Emergency Medical Services Personnel) is used when the case material identifies that this person was described as emergency medical services (EMS) personnel.
- 095 (Fire Personnel) is used when the case material identifies that this person was fire personnel.
- **096** (**Tow Operator**) is used when the case material identifies that this person was an operator of a tow truck.
- 097 (Transportation (i.e., maintenance workers, safety service patrol operators, etc.)) is used when the case material indicate this person was working to assist with detouring traffic, maintaining roadway damage, or a safety service patrol operator, etc.
- **090** (Non-Motorist Pushing a Vehicle) is used when the case material identifies the non-motorist was pushing a vehicle.
- **091** (**Portable Electronic Devices**) is used when the case material identifies that this non-motorist was using an electronic device (mobile phone, MP3 player, PDA, etc.) that was somehow related to the crash occurrence.
- **093** (Non-Motorist Wearing Motorcycle Helmet) is used when the materials identify that this non-motorist was wearing a motorcycle helmet. This can apply to a pedestrian, bicyclist, or other non-motorist. For example, a pedestrian that previously was riding a motorcycle gets struck while still wearing their helmet.
- *031* (**Default Code Used for Vehicle Numbering**) is used when it cannot be determined from the case material which vehicle hit the non-motorist. See guidance under <u>VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST</u>.
- 101 (Obstructed Sidewalk (for this Person)) is used when the case material indicate that a sidewalk was in the vicinity of the crash but was not available for use for this person because it was somehow obstructed. For example, the obstruction could be due to construction, snow or ice, people, or other objects preventing the use of the sidewalk.
- **999** (**Reported as Unknown**) is used when the circumstances surrounding the crash are unknown and reported as "unknown" by the investigating officer.

Consistency Checks (See Section 400):

Error ID	IF	THEN
1M1F	RELATED FACTORS-PERSON LEVEL (Not a MV Occupant) equals <i>0</i> 13,	PERSON TYPE should equal 11.
1M2F	at least one RELATED FACTORS - PERSON (NOT A MOTOR VEHICLE OCCUPANT) LEVEL equals 101,	PERSON TYPE must not equal 04 or 10.
1M3F	at least one RELATED FACTORS - PERSON (NOT A MOTOR VEHICLE OCCUPANT) LEVEL equals 100,	PERSON TYPE should equal 06, 11, 12, or 13.
1N0F	PERSON TYPE equals 06,	RELATED FACTORS-PERSON (NOT A MV OCCUPANT) LEVEL must not equal 0 09, 0 13, 0 69, 0 70, 0 90, 0 94- 0 97.
1N1F	PERSON TYPE equals 10,	RELATED FACTORS-PERSON LEVEL (NOT A MV OCCUPANT) must not equal 009, 021, 037, 040-042, 051, 052, 053, 054, 055, 056, 057, 060-070, 072-078, 080-083, 090, 091, 100, or 101.
1W0P	any RELATED FACTORS-PERSON LEVEL equals <i>000 or 9</i> 99,	only that one code and no other must be coded.
4W1P	Any RELATED FACTORS-PERSON (NOT A MV OCCUPANT) LEVEL can be used only once per person form.	
4W2P	RELATED FACTORS - PERSON (NOT A MV OCCUPANT) LEVEL equals 0 93,	NON-MOTORIST SAFETY EQUIPMENT Subfield 1 Non-Motorist Helmet Use must equal 2.
4W3P	RELATED FACTORS - PERSON (NOT A MOTOR VEHICLE OCCUPANT) LEVEL equals 0 91,	NON-MOTORIST DISTRACTED BY should equal 05, 06, 07, 08, or 15.
4W4P	RELATED FACTORS-PERSON LEVEL (Not a MV Occupant) equals 053, 054, 055, and PERSON TYPE does not equal 05,	at least one NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must equal 18.
4W5P	RELATED FACTORS-PERSON LEVEL (Not a MV Occupant) equals 053, 054, 055, and PERSON TYPE equals 05,	at least one NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must equal 21.
4X0A	NON-MOTORIST DISTRACTED BY equals 05, 06, 07, 08, or 15,	at least one RELATED FACTORS - PERSON (NOT A MOTOR VEHICLE OCCUPANT) LEVEL must equal 0 91.
5M2G	SPECIAL USE equals 06, and PERSON TYPE equals 02, and SEATING POSITION equals 51,	at least one RELATED FACTORS - PERSON LEVEL should equal 092 or 094.

Error ID	IF	THEN
5M3G	SPECIAL USE equals 06, and PERSON TYPE equals 01 or 02, and SEATING POSITION equals 11-19,	at least one RELATED FACTORS - PERSON LEVEL should equal 094, or at least one RELATED FACTORS - DRIVER LEVEL should equal 094.
8M0F	PERSON TYPE equals 04,	RELATED FACTORS-PERSON (NOT A MV OCCUPANT) LEVEL must not equal <i>0</i> 13, <i>0</i> 53, <i>0</i> 54, <i>0</i> 55, <i>0</i> 90, <i>0</i> 94- <i>0</i> 97, <i>or 101</i> .
8Q0F	PERSON TYPE equals 11, 12, or 13	RELATED FACTORS-PERSON (NOT A MV OCCUPANT) LEVEL must not equal <i>0</i> 09, <i>0</i> 90, or <i>0</i> 94- <i>0</i> 97.
9M0F	PERSON TYPE equals 05,	RELATED FACTORS-PERSON (NOT A MV OCCUPANT) LEVEL must not equal <i>0</i> 13, <i>0</i> 21, <i>0</i> 26, <i>0</i> 40, <i>0</i> 42, <i>0</i> 51, <i>0</i> 52, <i>0</i> 57, <i>0</i> 68- <i>0</i> 70, <i>0</i> 73- <i>0</i> 83, <i>or 100</i> .
СКОР	PERSON TYPE equals 07,	RELATED FACTORS-PERSON (NOT A MV OCCUPANT) LEVEL must not equal <i>0</i> 09, <i>0</i> 13, <i>0</i> 69, <i>0</i> 70, <i>0</i> 87, <i>0</i> 90, <i>0</i> 94- <i>0</i> 97.
CM0P	PERSON TYPE equals 19,	RELATED FACTORS-PERSON LEVEL (NOT A MV OCCUPANT) LEVEL must not equal 013, 069, 070, 090.

Consistency Check (FARS Only) (See Section 400):

Error ID	IF	THEN
5W0P	RELATED FACTORS-PERSON (NOT A MV OCCUPANT) LEVEL equals <i>0</i> 18,	SEX must equal 2, and AGE must be greater than 012.

Supplemental Data Elements - FARS Only

Person Level Elements - Including Coding Instructions.

- SP1 Death Certificate Number
- SP2 Fatal Injury at Work
- SP3 Race/Hispanic Origin

SP1 - Death Certificate Number - FARS Only

FORMAT: Element Completed in RBIS

SAS NAME: Person.CERT_NO

ELEMENT VALUES:

Codes	Attributes
Os	Not Applicable (not a fatality)
	Any Numeric Characters
9s	Unknown

Definition: This element identifies the four-digit GSA code for the city where the death occurred, the two-digit State number, and the six-digit sequence number from the death certificate as assigned by the State Vital Statistics or Vital Records Department.

Remarks: Code the sequence number from the death certificate as assigned by your State Vital Statistics Department. The sequence number is six digits in length and is part of the State File Number.

The format for coding the numbers is as follows:

- First four digits _ _ _ City (where death occurred)
- Next two digits _ _ State (where death occurred)
- Last six digits _ _ _ _ Sequence Number (as assigned by State Vital Statistics Department)

If this person is not a fatality, zero-fill this element.

Use GSA codes for the city and State where the death occurred according to the death certificate. These are the same GSA codes used for the City variables in the Crash Level Form:

- 0000 Not a fatality or death not within city limits and no location code is available.
- 0001-9996 GSA Geographical Location Codes.
- 9997 Other (Death within city limits, but no GSA code available for this city).
- 9999 Unknown (City where death occurred cannot be found on death certificate).

The State codes are the same as those used for variables C1, V1, D1, PC1, P1, and NM1 State Number.

If the fatal crash occurred in your State, but the death occurred in a hospital of another State, please attempt to obtain the death certificate from that State and code the city and State where the death occurred.

If a person dies at the crash scene, code the appropriate city code or location code for the crash location. Code "0000" if the location is not within a city, and no geographical location code is available.

If the location is not within a city, but a geographical location code is available, use the location code.

If a person is transported by EMS and dies en route or at the hospital, use the city code for the hospital's location.

Code the exact sequence number as indicated on the death certificate. If the sequence number is less than six-digits long (e.g., the sequence number is "12345" (five digits)) right-justify your coded number and zero-fill the first (and/or second digit) (e.g., **0**12345).

Note that if you receive a copy of the death certificate from the medical examiner or coroner, it may not contain the sequence number. The sequence number needed is the one assigned by your State Vital Statistics or Vital Records Department, which is subsequently sent to the National Center for Health Statistics. In those instances, leave the sequence number blank until you are able to obtain it in a follow-up effort with your Vital Statistics Department.

If the sequence number contains a letter in it (e.g., N12345), simply ignore the letter and code the numbers only (right justified), (e.g., 012345).

If the death certificate number cannot be obtained, 9-fill this element.

If the death certificate number can be obtained, but is not yet received, leave this element blank until the number is available.

Consistency Checks (See Section 400):

Error ID	IF	THEN
7E0P	INJURY SEVERITY equals 4,	DEATH CERTIFICATE NUMBER must NOT equal 0000-00-000000.
7F0P	DEATH CERTIFICATE NUMBER is not blank or 0000-00-000000,	INJURY SEVERITY must equal 4.

SP2 - Fatal Injury At Work - FARS Only

FORMAT: 1 numeric

SAS NAME: Person.WORK_INJ

ELEMENT VALUES:

Codes	Attributes
0	<u>No</u>
1	Yes
8	Not Applicable (not a fatality)
9	<u>Unknown</u>

Definition: This element indicates if the death certificate identified this person as being "at work" at the time of the crash.

Remarks: THE DEATH CERTIFICATE INDICATES WHETHER THE VICTIM WAS ONTHE-JOB AT THE TIME OF FATAL INJURY.

0 (No) is used if the injury was not at work.

1 (Yes) is used if the injury was on the job.

8 (Not Applicable (not a fatality)) is used if the victim was not a fatality.

9 (Unknown) is used if the death certificate does not indicate whether the injury was at work or if you do not have access to death certificate information.

FATAL INJURY AT WORK SHOULD ONLY BE DETERMINED FROM THE DEATH CERTIFICATE, NOT FROM ANY OTHER SOURCE. HOWEVER, IT IS NOT NECESSARY TO HAVE A COPY OF THE DEATH CERTIFICATE.

Consistency Checks (See Section 400):

Error ID	IF	THEN
7R0P	FATAL INJURY AT WORK equals 0, 1, 9,	INJURY SEVERITY must equal 4.
7W0P	FATAL INJURY AT WORK equals 8,	INJURY SEVERITY must not equal 4.
P1A0	AGE is less than 012, and INJURY SEVERITY equals 4,	FATAL INJURY AT WORK should equal 0.

Error ID	IF	THEN
P130	vPIC BODY CLASS equals 011 (Truck), 016 (Bus), 068 (Streetcar / Trolley), 73 (Bus-School Bus), 066 (Truck-Tractor), 095 (Cargo Van), 111 (Step Van / Walk-in Van), 117 (Limousine), 126 (Off-road Vehicle - Farm Equipment), 127 (Off-road Vehicle - Construction Equipment), or FINAL STAGE BODY CLASS equals 011 (Truck), 016 (Bus), 068 (Streetcar / Trolley), 73 (Bus-School Bus), 066 (Truck-Tractor), 095 (Cargo Van), 111 (Step Van / Walk-in Van), or 117 (Limousine), and POWER UNIT GVWR_from and GVWR_to equals 13, 14, 15, 16, 17, or 18, and PERSON TYPE equals 01 or 03, and INJURY SEVERITY equals 4,	FATAL INJURY AT WORK should equal 1.

SP3 - Race/Hispanic Origin - FARS Only

FORMAT: 1 set, 3 numeric; 1 set, 2 numeric

SAS NAME: Race.ORDER, Race.MULTRACE, RACE.RACE

ELEMENT VALUES:

Single Race:

Codes	Attributes
000	Not a Fatality (not applicable)
001	White
002	Black or African American
003	North American Indian or Alaska Native
004	<u>Chinese</u>
005	<u>Japanese</u>
006	Native Hawaiian
007	<u>Filipino</u>
018	Asian Indian
019	Other Indian (includes South and Central America, any others, except North American or Asian Indians)
028	Korean
038	Samoan
048	<u>Vietnamese</u>
058	Guamanian or Chamorro
068	Other Asian or Pacific Islander
078	Asian or Pacific Islander, No Specific (individual) Race
097	Multiple Races Unspecified
098	Other Race
099	Unknown

Multiple Races

Codes	Attributes
201	Multiple Race - White
202	Multiple Race - Black or African American
203	Multiple Race - North American Indian or Alaska Native
204	Multiple Race - Chinese

Codes	Attributes	
205	Multiple Race - Japanese	
206	Multiple Race - Native Hawaiian	
207	Multiple Race - Filipino	
218	Multiple Race - Asian Indian	
219	Multiple Race - Other Indian (includes South and Central America, any others, except North American or Asian Indians)	
228	Multiple Race - Korean	
238	Multiple Race - Samoan	
248	Multiple Race - Vietnamese	
258	Multiple Race - Guamanian or Chamorro	
268	Multiple Race - Other Asian or Pacific Islander	
278	Multiple Race - Asian or Pacific Islander, No Specific (individual) Race	
298	Multiple Race - Other Races	

Hispanic Origin:

Codes	Attributes
00	Not a Fatality (not applicable)
01	Mexican
02	Puerto Rican
03	Cuban
04	Central or South American
05	European Spanish
06	Hispanic, Origin not Specified or Other Origin
07	Non-Hispanic
99	<u>Unknown</u>

Definition: This element indicates the Race and Hispanic origin of this person from the death certificate.

Remarks: Race and Hispanic Origin should be obtained from the death certificate only.

Both RACE and HISPANIC ORIGIN are coded for fatal victims only (<u>INJURY SEVERITY</u> on this person must be <u>Fatal Injury</u>). If INJURY SEVERITY is coded other than **Fatal Injury** on the Person Level, the *RBIS* will automatically enter "0s" in both the RACE and HISPANIC ORIGIN fields.

Single Race

If the death certificate lists only one race, select from the following list. If more than one race is listed on the death certificate for this person, see the guidance for <u>Multiple Races</u> below.

(White) should be coded for people listed as White, Mexican, Puerto Rican, Cuban, Caucasian, or similar for race.

(**Black or African American**) should be coded for people listed as Black, African American, or similar for race.

003 (North American Indian or Alaska Native) should be coded for people listed as Canadian Indian, Mexican Indian, American Indian, Native American, Alaska Native, or similar for race. See <u>18 (Asian Indian)</u> for people listed as Indian (from India) and Pakistani and <u>19 (Other Indian)</u> for South and Central American Indians and any other Indians.

(Chinese) should be coded for people listed as Chinese for race.

(**Japanese**) should be coded for people listed as Japanese for race.

(Native Hawaiian) should be coded for people listed as Hawaiian or Native Hawaiian for race.

(Filipino) should be coded for people listed as Filipino for race.

(Asian Indian) should be coded for people listed as Asian Indian, Indian (from India), Pakistani, or similar for race.

019 (Other Indian) includes South and Central America and any other Indians, except North American or Asian Indians. See **03** (North American Indian or Alaska Native) and **18** (Asian Indian).

(Korean) should be coded for people listed as Korean for race.

(Samoan) should be coded for people listed as Samoan for race.

(Vietnamese) should be coded for people listed as Vietnamese for race.

(Guamanian or Chamorro) should be coded for people listed as Guamanian or Chamorro for race.

068 (Other Asian or Pacific Islander) is used when a specific "Other Asian" or "Pacific Island" race is listed, and it is other than <u>04 (Chinese)</u>, <u>05 (Japanese)</u>, <u>06 (Native Hawaiian)</u>, <u>07 (Filipino)</u>, <u>18 (Asian Indian)</u>, <u>28 (Korean)</u>, <u>38 (Samoan)</u>, <u>48 (Vietnamese)</u>, or <u>58 (Guamanian or Chamorro)</u>. This attribute should be coded for people listed as Bangladeshi, Burmese (also Myanmar), Cambodian, Fijian, Indonesian, Laotian, Malaysian, Micronesian, Mongolian, Polynesian, Thai, Tibetan, Tongan, or similar for race.

(Asian or Pacific Islander, No Specific [individual] Race) should be coded for people listed as Asian, Cantonese, Eurasian, Pacific Islander, or similar for race.

097 (Multiple Races, Unspecified) is used when the death certificate indicates more than one race without specifying the individual races ("mixed," "multiple races," "multiracial," etc.).

098 (Other Race) is used if an individual race listed on the death certificate or report is not one of the other attributes.

Multiple Races

If the death certificate lists more than one race, select from the following list. If only one race is listed on the death certificate for this person, see the guidance for <u>Single Race</u> above. Codes selected from the Multiple Race table in *RBIS* must be accompanied by at least one other code in the table. The exceptions are **219** (Multiple Race - Other Indian), **268** (Multiple Race - Other Asian or Pacific Islander), and **298** (Multiple Race - Other Races) that can be used on their own or coded along with another code. Select all codes that apply to this person. Order your selections by the order they are presented on the death certificate.

(**Multiple Race - White**) should be coded for people listed as White, Mexican, Puerto Rican, Cuban, Caucasian, or similar for race.

(Multiple Race - Black or African American) should be coded for people listed as Black, African American, or similar for race.

203 (Multiple Race - North American Indian or Alaska Native) should be coded for people listed as Canadian Indian, Mexican Indian, American Indian, Native American, Alaska Native, or similar for race. See **218** (Multiple Race - Asian Indian) for people listed as Indian (from India) and Pakistani and **219** (Multiple Race - Other Indian) for South and Central American Indians and any other Indians.

(Multiple Race - Chinese) should be coded for people listed as Chinese for race.

(Multiple Race - Japanese) should be coded for people listed as Japanese for race.

(Multiple Race - Native Hawaiian) should be coded for people listed as Hawaiian or Native Hawaiian for race.

(Multiple Race - Filipino) should be coded for people listed as Filipino for race.

(Multiple Race - Asian Indian) should be coded for people listed as Asian Indian, Indian (from India), Pakistani, or similar for race.

219 (Multiple Race - Other Indian) includes South and Central America, any others, except North American or Asian Indians. See 203 (Multiple Race - North American Indian or Alaska Native) and 218 (Multiple Race - Asian Indian).

(Multiple Race - Korean) should be coded for people listed as Korean for race.

238 (Multiple Race - Samoan) should be coded for people listed as Samoan for race.

(Multiple Race - Vietnamese) should be coded for people listed as Vietnamese for race.

(Multiple Race - Guamanian or Chamorro) should be coded for people listed as Guamanian or Chamorro for race.

268 (Multiple Race - Other Asian or Pacific Islander) is used when a specific "Other Asian" or "Pacific Island" race is listed, and it is other than 204 (Multiple Race - Chinese), 205 (Multiple Race - Japanese), 206 (Multiple Race - Native Hawaiian), 207 (Multiple Race - Filipino), 218 (Multiple Race - Asian Indian), 228 (Multiple Race - Korean), 238 (Multiple Race - Samoan), 248 (Multiple Race - Vietnamese), or 258 (Multiple Race - Guamanian or Chamorro). This attribute should be coded for people listed as Bangladeshi, Burmese (also Myanmar), Cambodian, Fijian, Indonesian, Laotian, Malaysian, Micronesian, Mongolian, Polynesian, Thai, Tibetan, Tongan, or similar for race.

(Multiple Race - Asian or Pacific Islander, No Specific [individual] Race) should be coded for people listed as Asian, Cantonese, Eurasian, Pacific Islander, or similar for race.

298 (Multiple Race - Other Races) is used if an individual race listed on the death certificate or report is not one of the other attributes.

Below is guidance for mapping RACE using the Centers for Disease Control and Prevention (CDC) Standard Death Certificate Race selections to FARS attributes.

FARS Single Race	FARS Multiple Races	CDC Death Certificate RACE
01 White	201 Multiple Race - White	White
02 Black or African American	202 Multiple Race - Black or African American	Black or African American
03 North American Indian or Alaska Native	•203 Multiple Race - North American Indian or Alaska Native	American Indian or Alaska Native
• 19 (Other Indian)	•219 Multiple Race - Other Indian	
18 Asian Indian	218 Multiple Race - Asian Indian	Asian Indian
04 Chinese	204 Multiple Race - Chinese	Chinese
07 Filipino	207 Multiple Race - Filipino	Filipino
05 Japanese	205 Multiple Race - Japanese	Japanese
28 Korean	228 Multiple Race - Korean	Korean
48 Vietnamese	248 Multiple Race - Vietnamese	Vietnamese
68 Other Asian or Pacific Islander	268 Multiple Race - Other Asian or Pacific Islander	Other Asian
06 Native Hawaiian	206 Multiple Race - Native Hawaiian	Native Hawaiian
58 Guamanian or Chamorro	258 Multiple Race - Guamanian or Chamorro	Guamanian or Chamorro
38 Samoan	238 Multiple Race - Samoan	Samoan
68 Other Asian or Pacific Islander	268 Multiple Race - Other Asian or Pacific Islander	Other Pacific Islander
98 Other Race	298 Multiple Race - Other Races	Other

Hispanic Origin

06 (**Hispanic Origin Not Specified, or Other Origin**) This includes when you know they are Hispanic, but the specific origin is not specified (e.g., Hispanic, Latino, Latin American, South American).

99 (**Unknown**) This person could be Hispanic, or not. You don't have enough information to determine whether they are Hispanic (e.g., all you know is that Race is "White," "Black," "European," or "Indian," and no other information is provided) or not.

If you receive a listing from the Vital Statistics Department, be sure you request a translation table for the code structure.

Below is guidance for mapping Hispanic Origin using the CDC's Standard Death Certificate Hispanic Origin selections to FARS attributes.

CDC Death Certificate HISPANIC ORIGIN	Map to FARS HISPANIC ORIGIN
No, not Spanish/Hispanic/Latino	07 Non-Hispanic
Yes, Mexican, Mexican American, Chicano	01 Mexican
Yes, Puerto Rican	02 Puerto Rican
Yes, Cuban	03 Cuban
Yes, Other Spanish/Hispanic/Latino	06 Hispanic, Origin not Specified, or Other Origin

Consistency Checks (See Section 400):

Error ID	IF	THEN
7E1P	INJURY SEVERITY equals 4,	RACE must not equal 00.
7E2P	INJURY SEVERITY equals 4,	HISPANIC ORIGIN must not equal 00.
7E3P	INJURY SEVERITY is not equal to 4,	RACE must equal 00 AND HISPANIC ORIGIN must equal 00.
7F1P	RACE equals 00,	INJURY SEVERITY must not equal 4.
7F2P	HISPANIC ORIGIN equals 00,	INJURY SEVERITY must not equal 4.
7F3P	RACE is not equal to 00, and HISPANIC ORIGIN is not equal to 00,	INJURY SEVERITY must equal 4.

Appendix A: 2020 Coding Guides

How to Create a Coding Question in the CDAN Helpdesk

How to Create a Coding Question Ticket in RBIS

TIME: Crash Times, EMS Times, Death Time

Crash Events Table, Vehicle Placement

Critical Crash Envelope Timeline

Precrash Critical Event Category Flowchart

Interchanges

Intersections

Involved Vehicles and Contact Vehicles

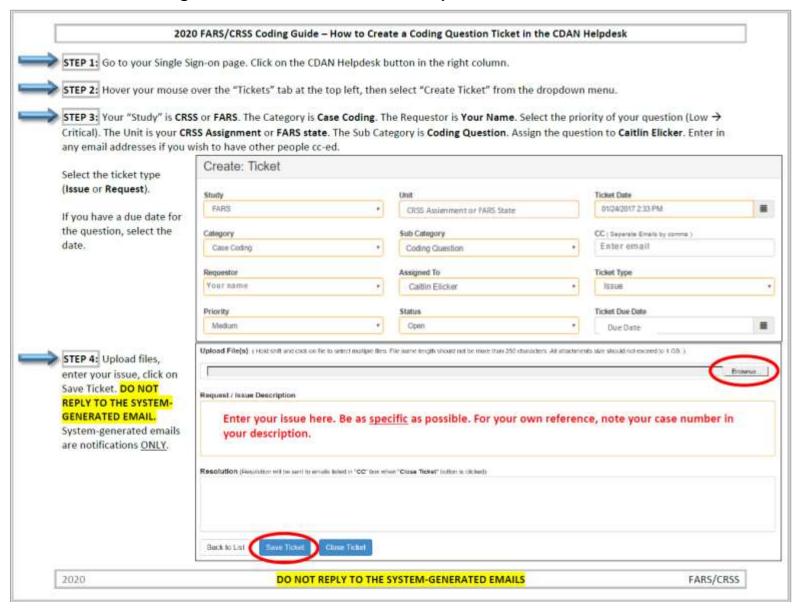
Qualifying Vehicles for Elements V23-V25

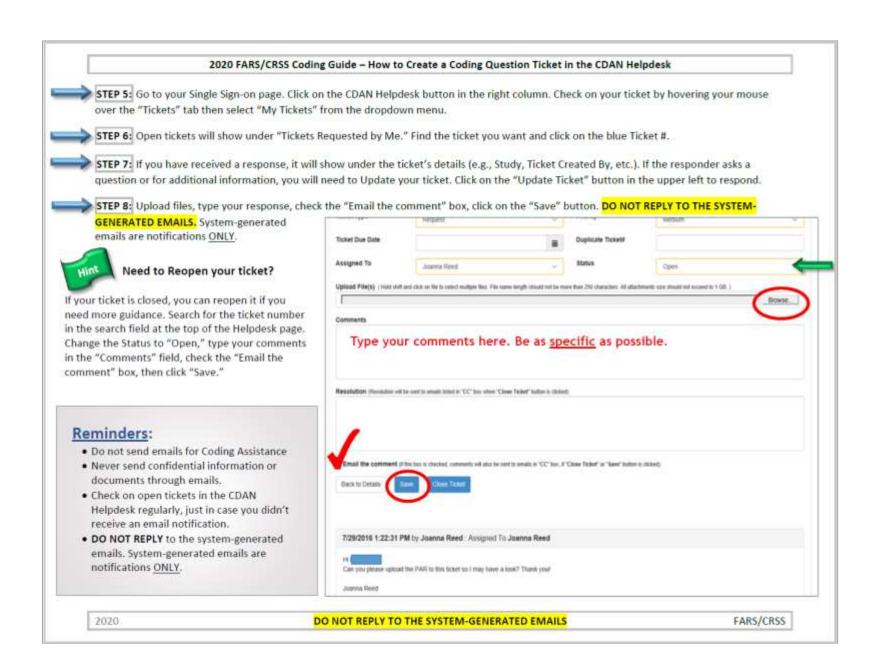
Total Lanes in Roadway

Trafficway Components

Vehicle Components and Areas of Impact

How to Create a Coding Question Ticket in the CDAN Helpdesk





How to Create a Coding Question Ticket in RBIS

With the new release of the Records-Based Information Solution (RBIS), you can ask a coding question while coding a case. It is important that you continue to upload any pertinent case material to the question you are submitting using the "Case Documents" section. In addition, it is important to note that the person answering the question you submitted may not have access to see your coding of the case.

You can still create a coding question through the CDAN Helpdesk. This process has not changed but it is important to remember to continue uploading your case material to better assist.

Step 1: When you are in RBIS, select "Ask a Coding Question" from the task bar on the right side of the RBIS case data entry screen and enter your question. You can copy other people on your question in the "CC" field.



Ask a Coding Question

CC (Please enter email addresses separated by comme)

Request / Issue Description

RECODE #11:

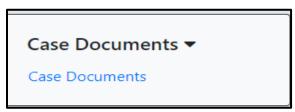
Note: Please upload any supporting case materials associated with your request into the "Case Documents" section after submitting your question using the link on the left side of your case data entry screen. Any screenables of RBS etc., can be uploaded here.

Click on Browse Files and pick the file you would like to upload. When you have selected the file, click Open in the browser window.

To drag and drop files from your computer, select files, drag them to into this location, and drop them.

Only files with the following extensions are allowed: bmp, civ. doc., doc., gif, jip; pdf, jing, tiff, tot, xls, xlsx.

Step 2: After submitting your question, be sure to upload all case material that are relevant. You must upload case material via the "Case Documents" button on the left side of the RBIS case data entry screen.



In order for the ticket to be answered in a timely manner, make sure all the information needed to answer the question is uploaded. The ticket is automatically assigned to Caitlin Elicker who will then reassign the ticket to the appropriate person.

Step 3: Be sure to check your ticket's status in the CDAN Helpdesk frequently. The assignee may need additional information or have questions which may need a response from the ticket creator before the ticket can be resolved.

Remember not to reply to the automated emails that are generated when you create a ticket. Any updates to your question must be completed directly in the CDAN Helpdesk ticket.

TIME: Crash Times, EMS Times, Death Times

2020 FARS/CRSS Coding Guide - TIME: Crash Time, EMS Times, Death Time

It is important to get the data elements that report Time from the correct source. Refer to the FARS/CRSS Coding and Validation Manual for detailed information. Below are general guidelines for all Time-related data elements.

Format: Code all official times in military times as received (00:00-23:59). All time formats are in hours and minutes. If you receive a time that includes the seconds' position, truncate to the reported minutes. Example: 10:51:35 would be 10:51.

How to Code Midnight:

In general, code midnight as 0000 in military time. Midnight is considered to be the beginning of a new day rather than the end of a day. One minute after midnight is 12:01 and is coded as 0001. However, there may be confusion over which day the source is referring to when "midnight" is cited or referred to without explanation. Our practice may not be the practice followed in your sources; therefore, you must determine which part of the day is being considered in your sources. The following are examples of midnight time references which do not easily translate to FARS and CRSS times.

- "midnight"
- 12:00-midnight
- 24:00

End of Day:

If your data sources give you a CRASH DATE and are consistent in talking about the end of that day, when they give a non-translatable "midnight" time reference of the crash, then you should code Crash Time as 2359.

Beginning of Day:

If your sources give a CRASH DATE and are consistent in referring to the beginning or early moments of that day when they give a non-translatable "midnight" crash time, code "midnight" as **0000**.

AM - Starts at 00:00 Midnight

PM - Starts at 12:00 Noon

Crash Time



Definition: This element identifies the time at which the crash occurred. Enter the time at which the crash occurred as shown on the Police Crash Report. This is the preferred time in all cases. If the crash time is not reported, unknown, or known to be in error, then all available information in the case materials should be used to determine Crash Time. If the hour cannot be determined, then enter 9999 (Unknown).

If the Police Crash Report indicates the crash occurred during some time interval of greater than one hour (e.g., 8:00 PM to 6:00 AM, or 8:00 AM to 5:00 PM), enter 9999 (Unknown). However, if the interval is one hour or less, code the midpoint of the interval.

Examples:

- 8:00 PM to 9:00 PM, enter 2030
- 8:30 PM to 9:30 PM, enter 2100
- 8:50 PM to 9:30 PM, enter 2110

When the time is available, but AM versus PM is not shown on the Police Crash Report, base the time on the element LIGHT CONDITION (e.g., time is 10:00, LIGHT CONDITION is 2 (Dark - Not Lighted); code as 2200).

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FARS/CRSS

2020 FARS/CRSS Coding Guide – TIME: Crash Time, EMS Times, Death Time

Notification Time EMS – FARS Only

Definition: NOTIFICATION TIME EMS is the time Emergency Medical Service was notified.

Code NOTIFICATION TIME EMS and ARRIVAL TIME EMS no matter how much time has elapsed since the CRASH TIME. Do not alter the times because of discrepancies with the CRASH TIME. Code Notification Time of the FIRST EMS unit to arrive on the scene. If unknown minutes, code the actual hour and "99" for the minutes.

If the day of the crash and the day of EMS Notification have different dates, then be sure to see code 18 (Date of Crash and Date of EMS Notification Were Not the Same Day) in RELATED FACTORS-CRASH LEVEL in the Coding Manual to see if it applies.

Arrival Time EMS - FARS Only

Definition: ARRIVAL TIME EMS is the time Emergency Medical Service arrived on the crash scene.

Code NOTIFICATION TIME EMS and ARRIVAL TIME EMS no matter how much time has elapsed since the CRASH TIME. Do not alter the times because of discrepancies with the CRASH TIME. Code the arrival time of the FIRST EMS unit to arrive on the scene. If unknown minutes, code the actual hour and "99" for the minutes.

EMS Time at Hospital - FARS Only



Definition: EMS TIME AT HOSPITAL is the time Emergency Medical Service arrived at the treatment facility (hospital, clinic, trauma center, etc.) to which it was transporting victims of the crash.

Code the EMS time at hospital of the unit transporting the most severely injured victim. The most severely injured victim includes (and usually is) the victim who dies en route to the treatment facility or later, but not the one who dies on-scene. Do not alter the times because of discrepancies with the CRASH TIME. If unknown minutes, code the actual hour and "99" for the minutes.

Death Time - FARS Only



Definition: This element identifies the hour and minute of this person's death utilizing the 24-hour clock format.

If minutes are unknown, code the actual hour and "99" for the minutes.

Normally, the medical examiner or coroner is the source of data for death time. If there are no data inconsistencies or errors, use the official death time as recorded on the Death Certificate. Do not change the official death time without good cause.

If it is known that the person died at the scene and the official death time or "pronounced death time" (on the Death Certificate) is known to be in error or is greater than 30 minutes after the crash time, then CRASH TIME is the appropriate DEATH TIME to be used. If it is known the person died at the scene, and the Time of Death is pronounced at the scene by a paramedic or firefighter, and this pronounced time does not contradict other case information, use this time.

9999 (Unknown) If the Death Certificate indicates the hour of death is unknown or provides a range greater than an hour, enter 9999 (Unknown).

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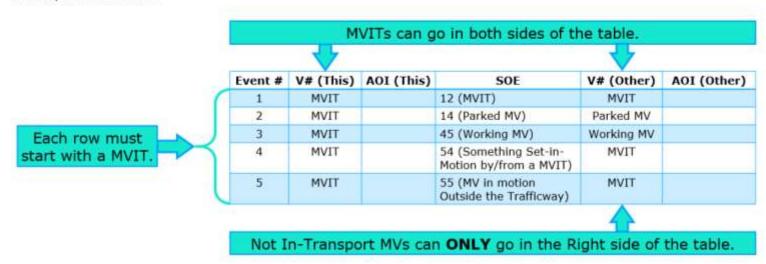
FARS/CRSS

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Crash Events Table, Vehicle Placement

2020 FARS/CRSS Coding Guide - Crash Events Table, Vehicle Placement

The **Crash Events Table** is filled out from the point of view of the **In-Transport Motor Vehicles** (Unit Type 1). Not In-Transport Motor Vehicles (Unit Types 2,3,4) are included in the table when they are <u>contacted</u> by an In-Transport Motor Vehicle or by something set-in-motion by an In-Transport Motor Vehicle.



Reminders:

- Coding of the Crash Events Table ends at the last Harmful Event in the crash.
- Not In-Transport Motor Vehicles cannot have Non-Harmful Events (e.g., Run off Roadway, Cross Centerline, etc.) in the Crash Events Table.
- SOE code 54 is ONLY for two Motor Vehicles In-Transport when one sets something into motion that strikes or is struck by the other.
- AOI code 18 is for cargo or vehicle parts set in motion, AOI code 19 is for something other than Cargo or vehicle parts (including people), and
 AOI code 20 is if you don't have enough information to tell if the thing(s) set-in-motion is/are 18 or 19.
- SOE is coded for vehicles, not their loads. For example, if the load of a vehicle (e.g., cargo, trailer, person, garbage can) crosses the centerline
 or goes off the roadway, it does not get coded in the Crash Events Table.
- Code 65 (Cross Median) is only used if the vehicle completely crosses the median and enters the opposing road.
- Code 69 (Re-entering Roadway) is only used if the vehicle departs its original roadway and then returns to that same roadway.

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FARS/CRSS

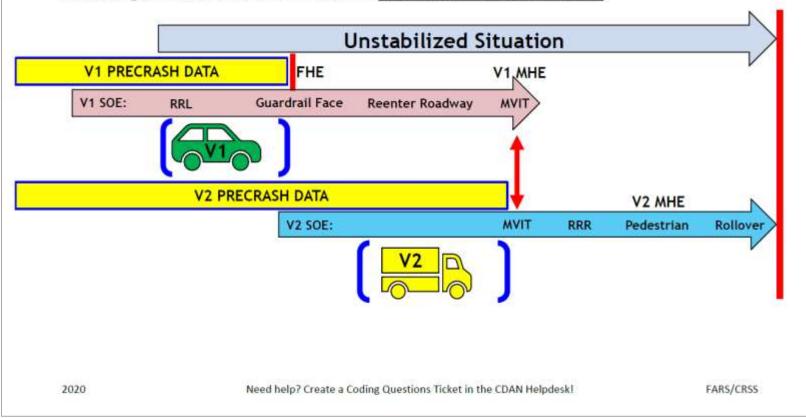
Critical Crash Envelope Timeline

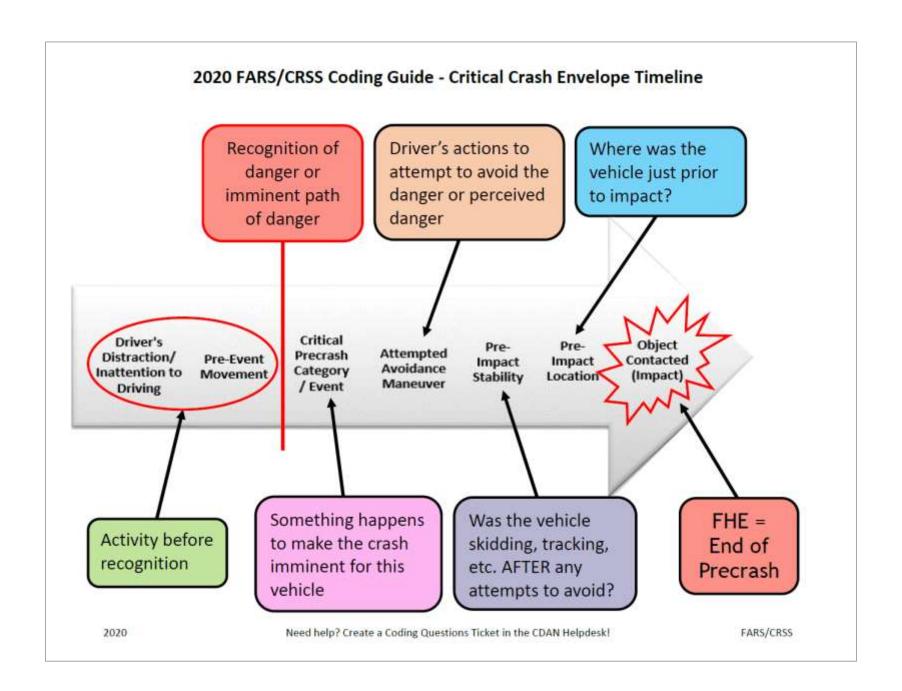
2020 FARS/CRSS Coding Guide - Critical Crash Envelope Timeline

Narrative: V1 went out of control on a wet roadway and struck the median guardrail with the front left side. The vehicle was redirected by the guardrail and re-entered the roadway, where it struck V2 on the driver side door with its front. V1 spun to a stop in the roadway. V2, out-of-control, ran off the right side of the roadway, struck and killed a pedestrian with its front, and then rolled over.

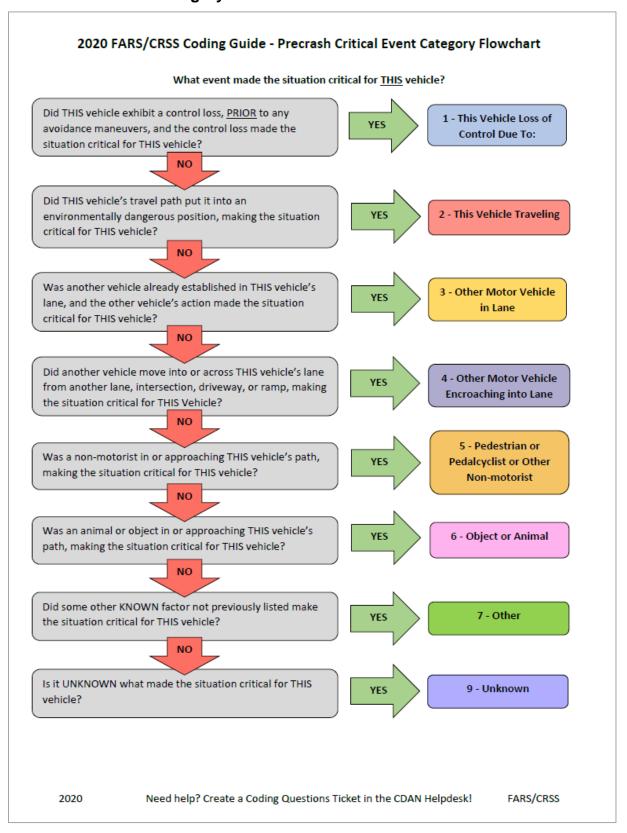
The Blue Brackets represent the beginning and ending of each vehicle's Critical Crash Envelope.

The coding for FARS/CRSS events ends at the LAST Harmful Event in the Crash.





Precrash Critical Event Category Flowchart



Interchanges

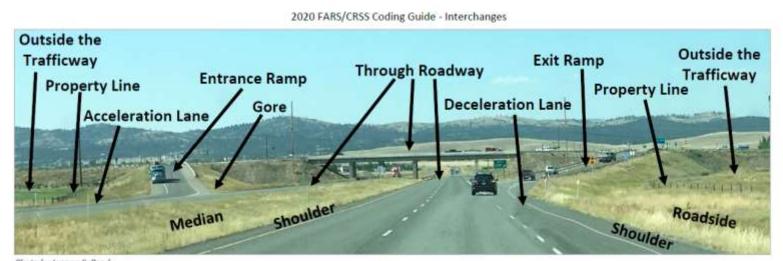
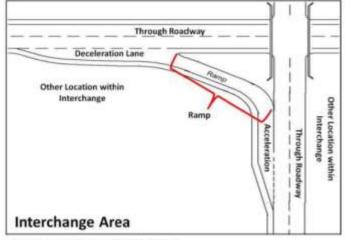


Photo by Joanna S. Reed



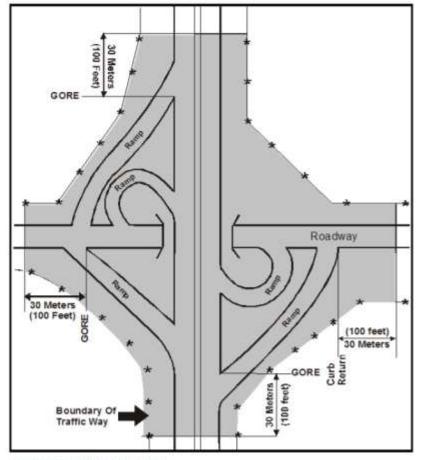
- 2.5.14 grade separation: A grade separation is a crossing at different levels of two trafficways, or a trafficway and a railway.
- **2.5.16 interchange:** An interchange is a system of interconnecting roadways in conjunction with one or more grade separations, providing for the movement of traffic between two or more roadways on different levels.
- 2.5.17 ramp, exit/entrance: An exit/entrance ramp is an auxiliary roadway used for entering or leaving through-traffic lanes.

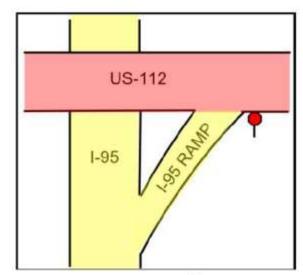
Interchange Area: ANSI D16.1 - 2007, 7th ed. ANSI D16.1 - 2017, 8th ed.

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FARS/CRSS

2020 FARS/CRSS Coding Guide - Interchanges





A ramp or connecting road at an intersection or interchange is presumed to be part of the highest class of trafficway with which it connects.

Interchange: ANSI D16.1 2017, 8th ed.

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FARS/CRSS

Intersections

2020 FARS/CRSS Coding Guide - Intersections

C21b RELATION TO JUNCTION

02 (Intersection)



02 (Intersection) is used when the FIRST HARMFUL EVENT occurs in an area which:

- contains a crossing or connection of two or more roadways not classified as a driveway access, <u>and</u>
- (2) is embraced within the prolongation of the lateral curb lines or, if none, the lateral boundary lines of the roadways.

03 (Intersection-Related)



03 (Intersection-Related) means that the FIRST HARMFUL EVENT:

- (1) occurs on an approach to or exit from an intersection and
- (2) results from an activity, behavior, or control related to the movement of traffic units through the intersection.

於 NM10 NON-MOTORIST LOCATION AT TIME OF CRASH 秀

AT INTERSECTION



"At intersection" means: The <u>person</u> is on a roadway (travel lanes) either:

- (1) in the intersection,
- (2) in an area between a crosswalk and the perimeter of the intersection, <u>or</u>
- (3) in a crosswalk (whether marked or unmarked) adjacent to an intersection. If there are no crosswalks, "at intersection" means only the intersection, which is the area embraced within the prolongation of the lateral curb lines or, if none, the lateral boundary lines of the roadways.

NOT AT INTERSECTION



The <u>person</u> is on a roadway (travel lanes), but not "At Intersection."

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2020 FARS/CRSS Coding Guide - Intersections

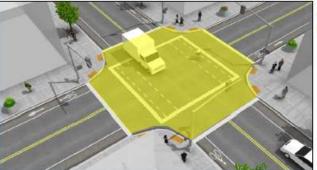


🏂 🐔 PB31/PB31b Pedestrian/Bicycle Crash Location 🏂 🐔





AT INTERSECTION



- 1 (At Intersection) is used when a person is on a roadway (travel lanes):
 - (1) in the intersection,
 - (2) in an area between a crosswalk and the perimeter of the intersection,

(3) in a crosswalk (whether marked or unmarked) adjacent to an intersection.

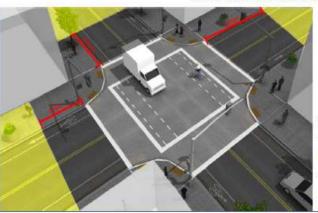
INTERSECTION RELATED



- 2 (Intersection-Related) is used when a person is:
- · within the trafficway 50 feet out from the perimeter of an "At intersection" area including the entire cross section of the trafficway (e.g., medians, turn lanes, bike lanes, parking lanes, shoulders, sidewalks, etc.)

. the crash is related to the flow of traffic through an intersection (e.g., the result of queuing traffic).

NOT AT INTERSECTION



- 3 (Not At Intersection) is used when a person is:
- · within the trafficway more than 50 feet out from the perimeter of an "At Intersection" area
- the crash is not identified as related to the movement of the traffic units through an intersection.

This includes the entire cross section of the trafficway (e.g., medians, turn lanes, bike lanes, parking lanes, shoulders, sidewalks, etc.).

This attribute is the default when the case materials give no indication that the crash is within 50 feet of an intersection.

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Involved Vehicles and Contact Vehicles

2020 FARS/CRSS Coding Guide - Involved Vehicles and Contact Vehicles

Throughout the Coding and Validation manual, training, and other materials, the phrases "involved vehicle," "involved motor vehicle in-transport," "contact vehicle," etc. are frequently used. These do not mean the same as "contributed to the crash," but relate to whether this vehicle had a noncollision event or contact with something else during the crash producing or incurring harm. These contact vehicles will therefore have information collected for them in FARS, CRSS, and NTS. Note that this contact may be through:

2.4.7: "A contact vehicle is any road vehicle which comes in contact with one or more road vehicles, non-motorists or property in a collision crash, or has a noncollision crash. A contact vehicle is directly involved in a crash."

ANSI D16 8th Edition



· directly touching another vehicle, non-motorist, or property (collision event);



 striking or being struck by cargo, persons, or objects set in-motion by another motor vehicle;



 setting cargo, persons, or objects into motion which strikes or is struck by another motor vehicle (collision event/set-in-motion); or



 by having a noncollision harmful event (e.g., fire, immersion, person falling out of vehicle, etc.).

Note on identifying contact vehicles: When the vehicle information section is not completed on the Police Crash Report for a vehicle noted to be involved in a minor harmful event in the diagram or narrative, the vehicle may still be a contact vehicle in the crash. This contact vehicle should be included, even if the amount of damage sustained is below the state threshold and there are no injuries in the vehicle.

Consider the following examples:

- Example 1: V1 crosses over the centerline and collides with V2. This crash involves two contact vehicles.
- Example 2: V1 strikes a Pedestrian crossing the road. This crash involves one contact vehicle.
- Example 3: V1 swerves across the centerline to avoid a vehicle stopped in its lane, and collides with V2. This crash
 involves two contact vehicles. The vehicle stopped in V1's lane was indirectly involved but was not a contact vehicle
 because it did not:
 - o sustain any injury or damage,
 - strike any vehicle, cargo, or persons, or set objects in-motion striking another motor vehicle,
 - o get struck by a vehicle, cargo, or persons, or objects set in-motion by another motor vehicle.
- Example 4: Crash report sections are completed for a vehicle which rear-ends a school bus stopped at a light; however, the narrative reports that crash debris scratched an additional vehicle stopped in the adjacent lane. This crash involves three contact vehicles.
- Example 5: V1, a tractor-trailer, drifts into lane 2. V2, a passenger car traveling in lane 2, swerves left to avoid V1, but in doing so crashes into the center guardrail. V1 continues traveling on down the road. This crash involves one contact vehicle. The tractor-trailer was indirectly involved but was not a contact vehicle because it did not:
 - sustain any injury or damage,
 - o strike any vehicle, cargo, or persons, or set objects in-motion striking another motor vehicle,
 - o get struck by a vehicle, cargo, or persons, or objects set in-motion by another motor vehicle.

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2020 FARS/CRSS Coding Guide - Involved Vehicles and Contact Vehicles

- Example 6: V1, a truck with a flatbed trailer hauling cargo, is traveling in lane 2. V2, a passenger car, is traveling in lane 1. A large piece of cargo falls off the flatbed of V1 and into the path of V2. V2 immediately strikes the piece of cargo which fell into its lane. V1 continues traveling on down the road. This crash involves two contact vehicles.
 - V1 is a contact vehicle because it set something into motion which struck or was struck by another motor vehicle in-transport.
 - V2 is a contact vehicle because it struck or was struck by something set in motion by another motor vehicle in-transport.
- Example 7: V1 is driving down the road when it bursts into flames. Even though the vehicle does not touch another
 motor vehicle, object, or persons, or anything set in motion by another vehicle, it did have a harmful event (fire).
 This crash involves one contact vehicle.
- Example 8: V1 runs off the road, into a river, immediately sinking and drowning the occupants. Even though the
 vehicle does not touch another motor vehicle, object, or persons, or anything set in motion by another vehicle, it did
 have a harmful event (immersion). This crash involves one contact vehicle.
- Example 9: V1, a pickup, is driving down the road when a person standing in the back bed of the truck loses his
 balance, falls out, and strikes his head on the pavement. The person receives serious injuries. Even though the
 vehicle does not touch another motor vehicle, object, or persons, or anything set in motion by another vehicle, it did
 have a harmful event (the occupant falling out of the vehicle). This crash involves one contact vehicle.
- Example 10: V1 drifts onto the right shoulder and strikes a parked vehicle. This crash involves two contact vehicles.
- Example 11: V1 drifts onto the right shoulder and strikes a parked vehicle. The parked vehicle is pushed forward into
 another parked vehicle. V1 and both parked vehicles sustain damage. This crash involves three contact vehicles.
- Example 12: V1 drifts off the right side of the roadway and strikes the guardrail face. The impact was strong enough
 to send debris flying over the guardrail and into an adjacent car dealership parking lot. The debris struck five vehicles
 parked in the lot, causing damage to all five. This crash involves six contact vehicles.
- Example 13: V2 is approaching an intersection, traveling east. V3 is following V1 approaching the intersection, traveling north. As V2 collides with V1 in the intersection, V3 immediately swerves to avoid the crash. V3, departs the road and into a traffic signal pole. Even though V3 did not make physical contact with V1 or V2, its harmful event occurred as part of the same unstabilized situation. This crash involves three contact vehicles.
- Example 14: V1 and V2, both motorcycles, are traveling north at high speeds. V1 loses control on uneven pavement
 and begins to slide sideways launching the driver off the motorcycle and across the pavement. The driver of V2
 immediately swerves to the right to avoid striking V1, loses control, runs off the road, and into a ditch where the
 driver flies off and impacts an embankment. Even though the two motorcycles did not make physical contact with
 each other, both vehicles had harmful events as part of the same unstabilized situation. The crash involves two
 contact vehicles.
- Example 15: V1 traveling on the roadway, slams on the brakes to avoid rear-ending another vehicle. The unbelted
 passenger in the back seat is thrown forward, striking their head on the front seat back and receives an "A" injury.
 There was no contact between the two vehicles, but there is an unstabilized situation where an injury occurred
 involving a motor vehicle in-transport on a trafficway. This crash involves one contact vehicle.

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FARS/CRSS

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Qualifying Vehicles for Elements V23-V25

2020 FARS/CRSS Coding Guide - Qualifying Vehicles for Elements V23-V25

Qualifying Vehicles for Data Elements V23-V25 are:

- 1. A vehicle pulling a trailer with Gross Combination Weight Rating (GCWR) greater than 10,000 lbs.
- 2. A single vehicle with a GVWR greater than 10,000 lbs.
- 3. A vehicle with 9 or more seats (including the driver).
- 4. A vehicle displaying a hazardous materials placard.

Notes about GVWR/GCWR:

Gross Vehicle Weight Rating (GVWR) is for a SINGLE vehicle or trailer. Gross Combination Weight Rating (GCWR) is for a COMBINATION vehicle. GCWR is the sum of the Gross Vehicle Weight Ratings of all units.



GVWR is available by decoding the VIN.



	V23 MOTOR CARRIER ID# - 0s, 8s, 7s, 9s	
Is the vehicle one of the above Qualifying Vehicles?	Applicability	V23 Code/Attribute
NO	The vehicle is NOT a Qualifying Vehicle	00/0s (Not Applicable)
YES	The vehicle IS a Qualifying Vehicle, BUT it is identifiable as: Not properly marked, or Exempt because of the activity and/or state statute (e.g., personal use vehicles, construction equipment, farm equipment, non-regulated intrastate-only, government owned/operated)	88/8s (None)
YES	The vehicle <u>IS</u> a Qualifying Vehicle, <u>BUT</u> the carrier info is blank and no further info is given (i.e., absence of info)	77/7s (Not Reported)
YES or UNKNOWN	 The vehicle IS a Qualifying Vehicle, BUT the officer reports the MC ID# is "Unknown" The NCSA BODY TYPE of the vehicle is unknown or not reported It cannot be determined if the vehicle qualifies for this data element (e.g., a light pickup truck pulling a trailer where the GCWR is not known). 	99/9s (Unknown)

V24 VEHICLE CONFIGURATION

01 (Single-Unit Truck [2-axle and GVWR more than 10,000 lbs.])

This code includes personally owned Qualifying Vehicles (not towing anything).



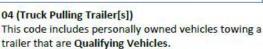








02 (Single-Unit Truck [3 or more axles])





06 (Truck Tractor with a Semi-Trailer)









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2020 FARS/CRSS Coding Guide - Qualifying Vehicles for Elements V23-V25

V25 CARGO BODY TYPE

01 (Van/Enclosed Box)*







11 (Intermodal Container Chassis) The chassis is specifically designed to have a rail or shipping container mounted directly on it. Intermodal means the container can be used across different forms (or modes) of transport (i.e., rail, ship, truck). If the container is being carried on a flatbed trailer instead of this specially designed chassis, use the code 03 Flatbed. Don't confuse with a Truck Tractor hauling a semi-trailer which would be coded 01 Van/Enclosed Box.











96 (No Cargo Body Type)*









- *NOTE: For truck/trailer vehicle configurations where the power unit and trailer have different cargo body types, code the cargo body type of the power unit. For example, a dump truck pulling a flatbed trailer should be coded as 04 (Dump).

 EXCEPTION: truck/trailer vehicle configurations where the power unit's Cargo Body Type would be coded 96 (No Cargo Body Type) or 97 (Other), code the cargo body of the trailer. For example: a dual-rear-wheel pickup truck pulling a flatbed trailer should be coded as 03 (Flatbed).
- **97 (Other) is used when the CARGO BODY TYPE is other than the types listed in the other attributes. This includes pickups greater than 10,000 lbs. without a trailer. If a pickup is pulling a trailer, code the CARGO BODY TYPE of the attached trailer instead of the CARGO BODY TYPE of the pickup. This attribute would also include motor homes.

CODING EXAMPLES

Example 1:

Chevrolet Silverado, GVWR: 8,900 lbs. Personally owned, not commercial

Pulling a boat trailer, Trailer GVWR: 3,943 lbs.

GCWR = 8,900 + 3,943 = 12,843 lbs, which IS Qualifying

V16 NCSA Body Type: 34 (Light Pickup) V23 Motor Carrier ID #: 88/8s (None)

V24 Vehicle Configuration: 04 (Truck Pulling Trailer[s])

V25 Cargo Body Type: 97 (Other)

If you get Edit Checks V507, V640, and V660, recheck to be sure your coding is correct before overriding.

Example 2:

Ford Super Duty, Full-size Pickup, GVWR: 14,000 lbs. Identifiable as commercial, but no carrier information.

Not pulling a trailer or anything else

V16 NCSA Body Type: 67 (M/H Pickup [greater than 10,000 lbs. GVWR])

V23 Motor Carrier ID #: 77/7s (Not Reported)

V24 Vehicle Configuration: 01 (Single-Unit Truck [2-axle

and GVWR more than 10,000 lbs.]) V25 Cargo Body Type: 97 (Other)

Example 3:

Toyota Tacoma, GVWR: 5,500 lbs. Personally owned, not commercial

Pulling a trailer, Trailer GVWR not reported

GCWR = 5,500 + ? = Unknown if a Qualifying Vehicle

V16 NCSA Body Type: 34 (Light Pickup)
V23 Motor Carrier ID #: 99/9s (Unknown)
V24 Vehicle Configuration: 99 (Unknown)

V25 Cargo Body Type: 99 (Unknown)

Example 4:

Peterbilt Truck Tractor, GVWR 26,001 lbs. or more Commercial operation, hauling unknown type of trailer

Trailer GVWR not reported

V16 NCSA Body Type: 66 (Truck-Tractor)

V23 Motor Carrier ID #: enter the number provided or if

missing use 77/7s (Not Reported)

V24 Vehicle Configuration: 06 (Truck Tractor/Semi-

Trailer)

V25 Cargo Body Type: 98 (Unknown Cargo Body Type)

2020

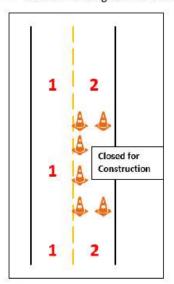
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Total Lanes in Roadway

2020 FARS/CRSS Coding Guide - Total Lanes in Roadway

REMINDERS:

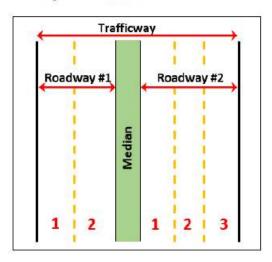
- The number of lanes counted does not include any of which are rendered unusable by restriction of the right-of-way (e.g., closed due to construction).
- Trafficways are not physically divided unless the divider is a median, barrier, or other constructed device
- · Painted markings on the roadway less than 4 feet wide are not medians.



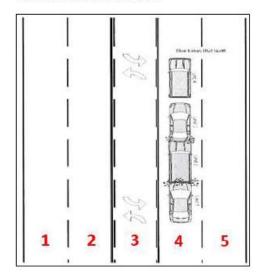
If Trafficway Description is 1 (Two Way- Not Divided), all open lanes are counted.

In this diagram, before the closed portion, count both lanes. Next to the closed portion, count only the one lane that is open. After the closed portion, count both lanes.

If Trafficway Description is 2 (Two Way, Divided, Unprotected Median) or 3 (Two-way, Divided, Positive Median Barrier, only the open lanes on the Roadway that THIS vehicle was originally traveling on are counted.



If Trafficway Description is 5 (Two-Way, Not Divided with a Continuous Left-Turn Lane):
All open lanes are counted. Continuous Left Turn Lanes are NOT medians.

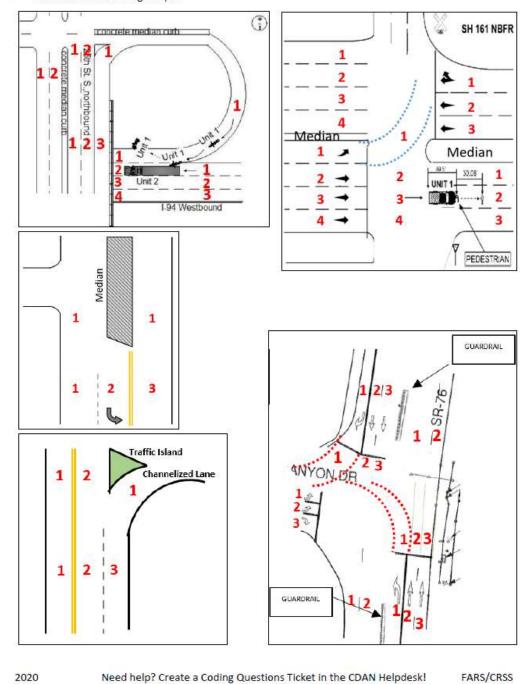


2020

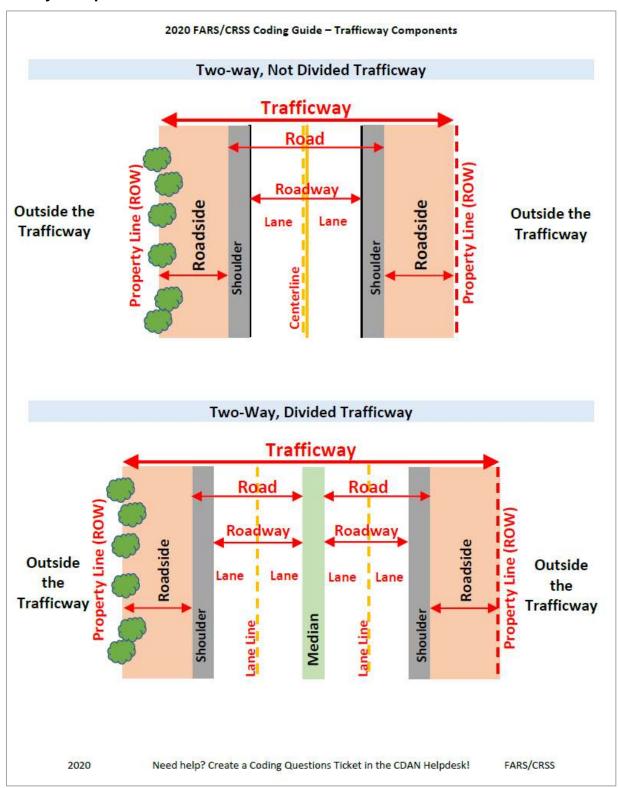
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2020 FARS/CRSS Coding Guide - Total Lanes in Roadway

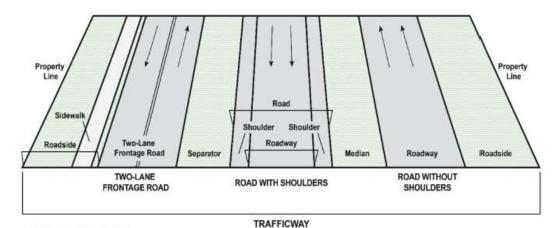
- . Be mindful of turn lanes before the intersection and in the intersection.
- Watch out for channelized lanes and turn bays.
- Take care when coding ramps.



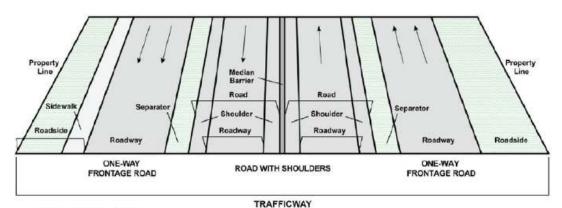
Trafficway Components



2020 FARS/CRSS Coding Guide - Trafficway Components



ANSI D.16.1 8th Ed., 2017



ANSI D.16.1 8th Ed., 2017

Reminders:

- The Roadway is the traveled portion of the Trafficway (Travel Lanes).
- · Travel lanes can be either through travel lanes or turn lanes (regular left turn or continuous left turn lanes).
- · Continuous Left Turn Lanes are NOT Medians.
- · An undivided Trafficway has one Roadway.
- A divided Trafficway has more than one Roadway.
- · The Shoulder is not part of the Roadway.
- . The Shoulder and the Roadway combine to make up the ROAD.
- The property beyond the Shoulder, but within the Trafficway, is the Roadside.
- The Trafficway extends from the Property Line (or Right-of-Way Line) on one side to the Property Line (or Right-of-Way Line) on the other side and includes all the components within.

2020 Need help? Create a Coding Questions Ticket in the CDAN Helpdesk! FARS/CRSS

Vehicle Components and Areas of Impact

2020 FARS/CRSS Coding Guide - Vehicle Components

Officers may refer to vehicle components associated with impacts in a crash. For example, "V1 struck V2 at the A-pillar."

Pillars – The vertical or near vertical supports of a car's window area or greenhouse designated respectively as the A, B, C, or (in larger cars) D-pillar, moving from the front to rear, in profile view. They are important for holding glass in place and adding structural integrity to a vehicle, primarily the roof. Not all vehicles have the same number of pillars.

Greenhouse – Also referred to as "glasshouse" includes the car's roof, windshield, rear and side windows, and the pillars separating them, starting from the car's front (i.e., A- pillar, B-pillar).

A-pillar - The front pillar on a car's greenhouse that holds the windshield in place.

B-pillar – The second pillar of a car's greenhouse, usually separating the front and rear door on a standard 4-door style sedan. It starts at the end of the first door. It is the main support for the midsection of the vehicle. B-pillar is also responsible for where a door's latch connects to the body. Can sometimes be referred to as "posts."

C-pillar – The third of a car's greenhouse, located behind the rear seat. It is the final pillar when it comes to sedans, hatchbacks, and small SUVs.

D-pillar - The pillar located behind the third row of seating in vehicles like minivans or large SUVs.

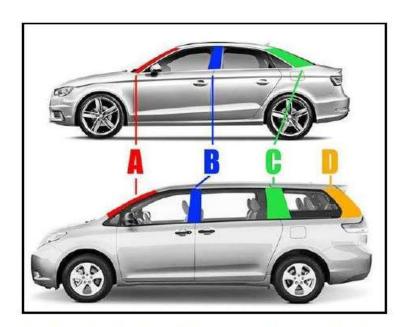


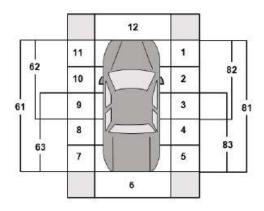
Image source: https://www.wheelswisdom.com/blogs/car-driving/your-cars-pillars-of-support/

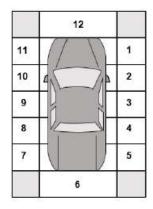
2020 Need help? Create a Coding Questions Ticket in the CDAN Helpdesk!

2020 FARS/CRSS Coding Guide - Areas of Impact

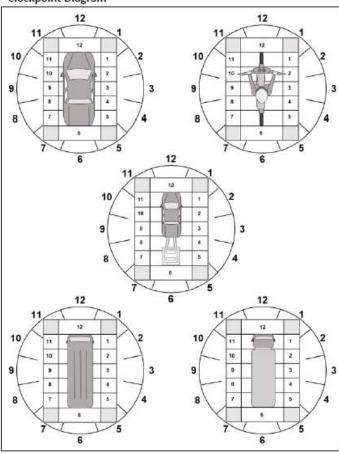
AOI-Initial Contact Point, Element Values Diagram

AOI-Damaged Areas, Element Values Diagram





Clockpoint Diagram



Guideline for Resolving Ambiguous Information

If the language in the narrative is ambiguous AND the diagram or other case information don't provide resolution, use the area indicated first in the narrative wording to select the Area of Impact to code.

See examples table below.

Examples:

Narrative Description	Coding
Front, left	12
Left, front	62
Front, corner	12
Right, rear	83
Back, right side	06

2020

Need help? Create a Coding Questions Ticket in the CDAN Helpdesk!

Appendix B: 2020 Consistency Checks

<u>0 Series</u>	A Series
1 Series	B Series
2 Series	<u>C Series</u>
3 Series	D Series
4 Series	E Series
<u>5 Series</u>	F Series
<u>6 Series</u>	G Series
7 Series	P Series
8 Series	<u>U Series</u>
9 Series	V Series

The following pages contain Consistency Checks arranged in alpha/numeric order. For help with consistency checks, see section 400. Understanding and Managing Consistency Checks.

All questions concerning the FARS/CRSS Coding Manual and coding issues should be directed through the CDAN Helpdesk, to Coding Questions. See the <u>Coding Guide: How to Create a Coding Question</u> <u>Ticket in the CDAN Helpdesk for helpful information</u>.

0 Series

Error ID	Error Message
050P	If PERSON TYPE equals 04-07, 10-19, and NUMBER OF VEHICLE FORMS SUBMITTED equals 001, then VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST must equal 001.
060P	If VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is not equal to 000, then the VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST must equal some VEHICLE NUMBER in the case, and the UNIT TYPE must equal 1.
0PB1	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 741, then at least one NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must equal 11.
0PB2	If PEDESTRIAN BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 760, then at least one NON-MOTORIST CONTRIBUTING CIRCUMSTANCES should equal 02.

Error	Error Message	
ID		
170F	If CRASH MONTH equals current month, then CRASH DAY should be at least 2 days prior to current day or 99.	
1A0P	If RELATED FACTORS-CRASH LEVEL equals 014, then NUMBER OF VEHICLE FORMS SUBMITTED must be greater than 001.	
1A1P	If RELATED FACTORS-CRASH LEVEL equals 005, then ROADWAY SURFACE CONDITIONS must equal 06 for at least one vehicle.	
1C0P	If the VEHICLE MODEL YEAR is not equal to 9998 or 9999, then the VEHICLE MODEL YEAR must not be greater than CRASH YEAR plus ONE.	

Error ID	Error Message
1C1P	If [[VEHICLE MODEL YEAR is greater than or equal to 2000 and vPIC BODY CLASS does not equal 004 (Low Speed Vehicle (LSV) / Neighborhood Electric Vehicle (NEV)), 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring / Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 (Off-Road Vehicle - Dirt Bike / Off-Road), 085 (Motorcycle - Dual Sport / Adventure / Supermoto / On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small / Minibike), 088 (Off-road Vehicle - Go Kart), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 097 (Off-road Vehicle - Snowmobile), 098 (Motorcycle - Street), 100 (Motorcycle - Enclosed Three Wheeled / Enclosed Autocycle), 103 (Motorcycle - Unenclosed Three Wheeled / Open Autocycle), 104 (Motorcycle - Moped), 105 (Off-road Vehicle - Recreational Off-Road Vehicle (ROV)), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcycle - Const Country), 110 (Motorcycle - Unknown Body Type), 126 (Off-road Vehicle - Farm Equipment), 127 (Off-road Vehicle - Construction Equipment), 996 (Motorcycle Bicycle), or 997 (Other)], or [vPIC BODY CLASS equals 006 (Motorcycle - Standard), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 085 (Motorcycle - Street), 109 (Motorcycle - Cross Country), or 125 (Motorcycle - Unknown Body Type), and VEHICLE MODEL YEAR is greater than 2020]], and STATE NUMBER does not equal 8 (CO), 17 (IL), 23 (ME), 26 (MI), or 28 (MS), then MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S) Subfield 1 should not equal 00 or 99.
1D0P	If SPECIAL USE equals 01 or 20, then vPIC Body Class should equal 002 (Minivan), 003 (Coupe), 005 (Hatchback/Liftback/Notchback), 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 008 (Crossover Utility Vehicle (CUV)), 09 (Van), 013 (Sedan/Saloon), 015 (Wagon), 060 (Pickup), or 119 (Sport Utility Truck (SUT)).
1D0Q	If SPECIAL USE equals 00-03, 19, 20-24, then EMERGENCY MOTOR VEHICLE USE must equal 0.
1D0R	If SPECIAL USE equals 23, then REGISTERED VEHICLE OWNER should equal 4.
1D0S	If SPECIAL USE equals 10, 11, 12, 21, 22, or 24, then REGISTERED VEHICLE OWNER should equal 3.
1D0T	If SPECIAL USE equals 19, then REGISTERED VEHICLE OWNER must not equal 1.
1D1P	If SPECIAL USE equals 24, then UNIT TYPE must equal 4.
1D2P	If SPECIAL USE equals 12 or 21, then at least one RELATED FACTORS - VEHICLE LEVEL must equal <i>0</i> 42.
1E0P	If SPECIAL USE equals 19, then vPIC Body Class must not equal a 011 (Truck), 016 (Bus), 066 (Truck-Tractor), 068 (Streetcar / Trolley), 073 (Bus - School Bus), 095 (Cargo Van), 111 (Step Van / Walk-in Van), 117 (Limousine), 126 (Off-road Vehicle - Farm Equipment), or 127 (Off-road Vehicle - Construction Equipment), and FINAL STAGE BODY CLASS must not equal 011 (Truck), 016 (Bus), 066 (Truck-Tractor), 068 (Streetcar / Trolley), 073 (Bus - School Bus), 095 (Cargo Van), 111 (Step Van / Walk-in Van), or 117 (Limousine).
1F1P	If RELATION TO JUNCTION (b) does not equal 02, 03, then the second TRAFFICWAY IDENTIFIER should be blank.

Error ID	Error Message
1G0P	If any RELATED FACTORS-VEHICLE LEVEL equals 000 or 999, then only that one code and no other must be coded.
1H0F	If DRIVER PRESENCE equals 0, 9, then PREVIOUS SPEEDING CONVICTIONS must be blank.
1H1F	If DRIVER PRESENCE equals 0, 9, then DRIVER'S LICENSE STATE must be blank.
1H2F	If DRIVER PRESENCE equals 0, 9, then LICENSE COMPLIANCE WITH CLASS OF VEHICLE must be blank.
1H3F	If DRIVER PRESENCE equals 0, 9, then NON-CDL LICENSE STATUS and COMMERCIAL MOTOR VEHICLE LICENSE STATUS must be blank.
1H4F	If DRIVER PRESENCE equals 0, 9, then COMPLIANCE WITH LICENSE RESTRICTIONS must be blank.
1H6F	If DRIVER PRESENCE equals 0, 9, then VIOLATIONS CHARGED must be blank.
1H7F	If DRIVER PRESENCE equals 0, 9, then PREVIOUS RECORDED CRASHES must be blank.
1H8F	If DRIVER PRESENCE equals 0, 9, then all three Subfields of PREVIOUS RECORDED SUSPENSIONS AND REVOCATIONS must be blank.
1H9F	If DRIVER PRESENCE equals 0, 9, then PREVIOUS DWI CONVICTIONS must be blank.
1HAF	If DRIVER PRESENCE equals 0, 9, then PREVIOUS OTHER MOVING VIOLATION CONVICTIONS must be blank.
1HBF	If DRIVER PRESENCE equals 0, 9, then DATE OF <i>MOST RECENT</i> CRASH, SUSPENSION, CONVICTION must be blank.
1HCF	If DRIVER PRESENCE equals 0, 9, then DATE OF <i>OLDEST</i> CRASH, SUSPENSION, CONVICTION must be blank.
1HDF	If DRIVER PRESENCE equals 0, 9, then DRIVER HEIGHT (feet and inches) must equal blank.
1HEF	If DRIVER PRESENCE equals 0, 9, then DRIVER WEIGHT must equal blank.
1HFF	If DRIVER PRESENCE equals 0, 9, then SPEEDING RELATED must be blank.
1HJF	If DRIVER'S VISION OBSCURED BY equals 95, then DRIVER PRESENCE must equal 0 or 9.
1IOP	If DRIVER'S LICENSE STATE equals 99, then NON-CDL LICENSE STATUS must not equal 0-4, 6, and COMMERCIAL MOTOR VEHICLE LICENSE STATUS must not equal 00-08.
1K0P	If DRIVER'S LICENSE STATE equals 99, then LICENSE COMPLIANCE WITH CLASS OF VEHICLE must not equal 0-3.
1L1P	If any RELATED FACTORS - DRIVER LEVEL equals 028, then there must not be any RELATED FACTORS - DRIVER LEVEL equal to 033 or 051.
1L2P	If any DRIVER'S VISION OBSCURED BY equals 00 or 95 or 99, then only that one code and no other must be coded for this vehicle.
1L4P	If any DRIVER'S VISION OBSCURED BY equals 09, then at least one CONTRIBUTING CIRCUMSTANCES, MOTOR VEHICLE must equal 97.
1L5P	If any DRIVER'S VISION OBSCURED BY equals 10, then at least one CONTRIBUTING CIRCUMSTANCES, MOTOR VEHICLE must equal 07 or 08 or 09.

Error ID	Error Message
1L6P	If RELATED FACTORS-DRIVER equals 33, then SCHOOL BUS RELATED should equal 1.
1M1F	If RELATED FACTORS-PERSON LEVEL (Not a MV Occupant) equals <i>0</i> 13, then PERSON TYPE should equal <i>11</i> .
1M2F	If at least one RELATED FACTORS - PERSON (NOT A MOTOR VEHICLE OCCUPANT) LEVEL equals 101, then PERSON TYPE must not equal 04 or 10.
<i>1M3F</i>	If at least one RELATED FACTORS - PERSON (NOT A MOTOR VEHICLE OCCUPANT) LEVEL equals 100, THEN PERSON TYPE should equal 06, 11, 12, or 13.
1N0F	If PERSON TYPE equals 06, then RELATED FACTORS-PERSON (Not a MV Occupant) LEVEL must not equal 0 09, 0 13, 0 69, 0 70, 0 90, 0 94- 0 97.
1N1F	If PERSON TYPE equals 10, then RELATED FACTORS-PERSON LEVEL must not equal 009, 021, 037, 040-042, 051, 052, 053, 054, 055, 056, 057, 060-070, 072-078, 080-083, 090, 091, 100, or 101.
1N4F	If NON-MOTORIST SAFETY EQUIPMENT Subfield 5- Non-Motorist Use of Lighting equals 2, then NON-MOTORIST CONTRIBUTING CIRCUMSTANCES should not equal 13.
1P0G	If PERSON TYPE equals 05, then NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must not equal 07, 08, 10, 13-18, 20.
1P0H	If NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 21, then NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must not equal 02-04, 07-10, 15, 16, 20.
1P1F	If PERSON TYPE equals 04, 05, 10, 11, 12, 13, or 19, then NON-MOTORIST LOCATION AT TIME OF CRASH should not equal 16 for this person.
1P1G	If PERSON TYPE equals 19, then NON-MOTORIST ACTION/ CIRCUMSTANCES should not equal 11, 12.
1P1H	If NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 22, then NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must not equal 01, 02, 04, 07, 08, 11,15, 20.
1P2F	If PERSON TYPE equals 10, then NON-MOTORIST LOCATION AT TIME OF CRASH must equal 25.
1P2H	If NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 23, then NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must not equal 12, 15.
1P3F	If PERSON TYPE (NM7) equals 10, then NON-MOTORIST ACTION/CIRCUMSTANCES (NM11) must not equal 01-12, 16, and NON-MOTORIST CONTRIBUTING CIRCUMSTANCES (NM12) must not equal 01-20.
1P3G	If PERSON TYPE equals 04, 06, 07, then NON-MOTORIST CONTRIBUTING CIRCUMSTANCES should not equal 04.
1P3H	If NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 24, then NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must not equal 01, 03, 04, 10, 11.
1P4F	If PERSON TYPE equals 04, then NON-MOTORIST ACTION/ CIRCUMSTANCES must not equal 04, 12.
1P4G	If PERSON TYPE equals 04, 06, 07, 11, 12, 13, 19, then NON-MOTORIST CONTRIBUTING CIRCUMSTANCES should not equal 05.

Error ID	Error Message
1P4H	If NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 25, then NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must not equal 01-04, 10, 11, 12, 15-17, 20.
1P5F	If PERSON TYPE equals 06, 07, 11, 12, 13, or 19, then NON-MOTORIST ACTION/CIRCUMSTANCES must not equal 04.
1P5G	If PERSON TYPE equals 11, 12, or 13, then NON-MOTORIST CONTRIBUTING CIRCUMSTANCES should not equal 20.
1P5H	If NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 28, 98, 99, then NON-MOTORIST CONTRIBUTING CIRCUMSTANCES should not equal 01, 03, 04, 10, 11, 12, 15, 16, 20.
1P6G	If PERSON TYPE equals 04, 06, 07, 11, 12, 13, or 19, then CONDITION (IMPAIRMENT) AT TIME OF CRASH must not equal 03.
1P6H	If NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 16, then NON-MOTORIST CONTRIBUTING CIRCUMSTANCES should not equal 04, 16.
1P7F	If PERSON TYPE equals 04, then NON-MOTORIST ACTION/ CIRCUMSTANCES should not equal 10, 11.
1P7G	If PERSON TYPE equals 05-07, 19, then CONDITION (IMPAIRMENT) AT TIME OF CRASH should not equal 04.
1P7H	If NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 21, then NON-MOTORIST CONTRIBUTING CIRCUMSTANCES should not equal 01, 05, 11, 12, 17.
1P8F	If PERSON TYPE equals 06, 07, then NON-MOTORIST ACTION/CIRCUMSTANCES should not equal 10-12.
1P8G	If PERSON TYPE equals 10, then CONDITION (IMPAIRMENT) AT TIME OF CRASH should not equal 01-10, 96.
1P8H	If NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 23, then NON-MOTORIST CONTRIBUTING CIRCUMSTANCES should not equal 02.
1P9F	If PERSON TYPE equals 11, 12, or 13, then NON-MOTORIST ACTION/ CIRCUMSTANCES should not equal 11.
1P9G	If NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 20, then NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must not equal 02-04, 15.
1P9H	If NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 24, then NON-MOTORIST CONTRIBUTING CIRCUMSTANCES should not equal 02, 05, 12, 15, 16.
1PH0	If NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 25, then NON-MOTORIST CONTRIBUTING CIRCUMSTANCES should not equal 07-09.
1PJ1	If NON-MOTORIST LOCATION AT TIME OF CRASH equals 16, then the PERSON TYPE for this person should equal 06 or 07.
1PK2	If NON-MOTORIST LOCATION AT TIME OF CRASH equals 21, then SIDEWALK PRESENT must equal 1.

Error ID	Error Message
1PK3	If NON-MOTORIST LOCATION AT TIME OF CRASH equals 01 or 10, then MARKED CROSSWALK PRESENT must equal 1.
1Q0F	If PERSON TYPE equals 01, and vPIC BODY CLASS equals 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 69 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport/Adventure/Supermoto/On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 90 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 104 (Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle), then SEATING POSITION must not equal 12-56, 99.
1R0P	If SEATING POSITION equals 51, and vPIC BODY CLASS equals 016 (Bus), 068 (Streetcar / Trolley), or 73 (Bus-School Bus), or FINAL STAGE BODY CLASS equals 016 (Bus), 068 (Streetcar / Trolley), or 73 (Bus-School Bus), then INJURY SEVERITY must not equal 0, 9.
1R1P	If DIED AT SCENE/EN ROUTE equals 7, 8, then INJURY SEVERITY must equal 4.
1T0P	If SPEED LIMIT for every vehicle is greater than 55, and not equal to 98 or 99, then LAND USE AND FUNCTIONAL SYSTEM (a) should not equal 2 or 6, and LAND USE AND FUNCTIONAL SYSTEM (b) should not equal 06, 07, or 96.
1U1F	If INJURY SEVERITY equals 4, then DEATH DATE must not equal 88888888.
1U2F	If INJURY SEVERITY equals 4, then DEATH TIME must not equal 8888.
1V0P	If DEATH MONTH or DAY equals 88, or DEATH YEAR equals 8888, then all must equal 8s.
1W0P	If any RELATED FACTORS-PERSON LEVEL equals 000 or 999, then only that one code and no other must be coded.
1Y0P	If RELATION TO JUNCTION (b) equals 06, then RAIL GRADE CROSSING IDENTIFIER must not equal 0000000.
1Z0N	SEQUENCE OF EVENTS for this vehicle should not include more than one occurrence of 01. Please see SEQUENCE OF EVENTS remarks for <u>01 (Rollover/Overturn)</u> to confirm coding.
1Z1N	SEQUENCE OF EVENTS for this vehicle should not equal 01, 67 consecutively or 67, 01 consecutively.
1Z1P	If any SEQUENCE OF EVENTS equals 66, then ROADWAY GRADE should equal 6 for this vehicle.

Error ID	Error Message
1Z2P	If any SEQUENCE OF EVENTS equals 01 and vPIC BODY CLASS does not equal 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport / Adventure / Supermoto / On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 104 (Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle), or any RELATED FACTORS-VEHICLE LEVEL equals 030, then ROLLOVER must equal 1, 2, or 9.

Error ID	Error Message
200P	If CITY is greater than 0000 and less than 9997, and COUNTY is greater than 000 and less than 997, then COUNTY and CITY must be valid codes for the STATE.
210P	If CITY is greater than 0000 and less than 9997, then COUNTY must not equal 999.
220P	If LIGHT CONDITION equals 4, and STATE is not equal to 02, then CRASH TIME must equal 0300-0900, 9999.
2300	If LIGHT CONDITION equals 5, and STATE is not equal to 02, then CRASH TIME should equal 1600-2200, 9999.
250P	If RELATION TO JUNCTION (b) equals 01, 02, 04, 06, 07, 16-19, 98, 99, and RELATION TO TRAFFICWAY equals 03, then TRAFFICWAY DESCRIPTION should equal 2, 3 for at least one vehicle involved in the first harmful event.
251P	If RELATION TO TRAFFICWAY equals 98, 99, then TYPE OF INTERSECTION should equal 98, 99.
252P	If RELATION TO TRAFFICWAY equals 01, 02, 03, 04, 07, 08, 10, 11, 12, 98, or 99, then UNIT TYPE for VEHICLE NUMBER (OTHER VEHICLE) involved in the FIRST HARMFUL EVENT must not equal 3.
253P	If RELATION TO TRAFFICWAY equals 03, then CRASH TYPE should equal 06-10, 98 or 99 for the in-transport vehicles involved in the FIRST HARMFUL EVENT.
254P	If RELATION TO TRAFFICWAY equals 01, and RELATION TO JUNCTION (b) equals 20, then TRAFFICWAY DESCRIPTION must equal 6 for at least one vehicle involved in the FIRST HARMFUL EVENT.
255P	If RELATION TO TRAFFICWAY equals 01 or 11, then UNIT TYPE for VEHICLE NUMBER (THIS VEHICLE) involved in the FIRST HARMFUL EVENT must equal 1.
256P	If RELATION TO TRAFFICWAY equals 01 or 11, then UNIT TYPE for VEHICLE NUMBER (OTHER VEHICLE) involved in the FIRST HARMFUL EVENT should equal 1 or 4.
257P	If RELATION TO TRAFFICWAY equals 05, then UNIT TYPE for VEHICLE NUMBER (OTHER VEHICLE) involved in the FIRST HARMFUL EVENT must equal 1, 3 or 4.

Error ID	Error Message
258P	If RELATION TO JUNCTION (b) is 05 or 20, then TRAFFICWAY DESCRIPTION should equal 6 for <i>at least one</i> vehicle involved in the FIRST HARMFUL EVENT.
260P	If ROUTE SIGNING equals 1, then NATIONAL HIGHWAY SYSTEM must equal 1.
2B0P	If JACKKNIFE equals 1-3, then VEHICLE TRAILING must not equal 0, 9.
2D0P	If SPECIAL USE equals 02, then vPIC Body Class should equal 002 (Minivan), 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 008 (Crossover Utility Vehicle (CUV)), 009 (Van), 016 (Bus), 073 (Bus - School Bus), or 119 (Sport Utility Truck (SUT)), or FINAL STAGE BODY CLASS should equal 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 008 (Crossover Utility Vehicle (CUV)), 009 (Van), 016 (Bus), or 073 (Bus - School Bus).
2F0F	If NUMBER OF OCCUPANTS equals 00, then DRIVER PRESENCE must equal 0.
2H0F	If DRIVER PRESENCE equals 0, 9, then RELATED FACTORS-DRIVER LEVEL must not equal 004, 008, 010, 012, 013, 015, 016, 019, 052, 053, 058, 059, 073, 074, 077-088, 094-097.
2H1F	If UNIT TYPE equals 1 and DRIVER PRESENCE equals 0 or 9, then DRIVER'S VISION OBSCURED BY must equal 95.
2I0P	If DRIVER'S LICENSE STATE equals 99, then COMPLIANCE WITH LICENSE RESTRICTIONS must not equal 0-3.
2J0P	If all counters are not blanks and PREVIOUS RECORDED CRASHES is not equal to 98 and any counters are not equal to 00, 99, then DATE OF <i>MOST RECENT</i> CRASH, SUSPENSION, CONVICTION must not equal 000000, 999999.
2J1P	If all counters are not blanks and PREVIOUS RECORDED CRASHES is not equal to 98, and any counters are not equal to 00, 99, then DATE OF <i>OLDEST</i> CRASH, SUSPENSION, CONVICTION must not equal 000000, 999999.
2K0P	DATE OF <i>OLDEST</i> CRASH, SUSPENSION, CONVICTION must be less than or equal to DATE OF <i>MOST RECENT</i> CRASH, SUSPENSION, CONVICTION.
2L0P	If any RELATED FACTORS-DRIVER LEVEL equal 000 or 999, only that one code and no other must be coded.
2M0F	If PERSON TYPE equals 01, then SEATING POSITION must not equal 21-56, 98, or 99.
2P0G	If CONDITION (IMPAIRMENT) AT TIME OF CRASH equals 03, then PERSON TYPE must be 05, 10, 11, 12, 13, or 19.
2P1F	If PERSON TYPE equals 04, 06, 07, or 10, then NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must not equal 12.
2Q0F	If PERSON TYPE equals 02 or 03, and vPIC BODY CLASS equals 001 (Convertible/Cabriolet), 003 (Coupe), 005 (Hatchback/Liftback/Notchback), 010 (Roadster), 013 (Sedan/Saloon), 060 (Pickup), 095 (Cargo Van), 105 (Off-road Vehicle - Recreational Off-Road Vehicle (ROV)), 108 (Motorhome), 111 (Step Van / Walk-in Van), 117 (Limousine), 126 (Off-road Vehicle - Farm Equipment), or 127 (Off-road Vehicle - Construction Equipment), or FINAL STAGE BODY CLASS equals 060 (Pickup) 095 (Cargo Van), 108 (Motorhome), 111 (Step Van / Walk-in Van), or 117 (Limousine), then SEATING POSITION must not equal 31-50.

Error ID	Error Message
2R0P	If RESTRAINT SYSTEM USE Subfield 1 Type of Restraint System in Use equals 01-06 or 08-12, then vPIC BODY CLASS must not equal 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport/Adventure/Supermoto/On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 097 (Off-road Vehicle - Snowmobile), 098 (Motorcycle - Street), 104 (Motorcycle - Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle).
2R1P	If RESTRAINT SYSTEM USE Subfield 2 Any Indication of Mis-Use equals 1, then RESTRAINT SYSTEM USE Subfield 1 Type of Restraint System in Use must equal 01-06, 08-12, 97.
2R3P	If RESTRAINT SYSTEM USE Subfield 1-Type of Restraint System in Use equals 1-4, 6, 8, 10-12, or 97; then RESTRAINT SYSTEM USE Subfield 2 - Any Indication of Mis-Use must equal 0 or 1.
2S0P	If HELMET USE Subfield 1 Helmet Use equals 05, 16, 17, 19, or 99, then AIR BAG DEPLOYED should equal 20, 98.
2S1P	If HELMET USE Subfield 1 Helmet Use equals 17, 98, or 99, then HELMET USE Subfield 2 Any Indication of Mis-Use must equal 7.
2S2P	If HELMET USE Subfield 2-Any Indication of Mis-Use equals 1, then HELMET USE Subfield 1 - Helmet Use must equal 05, 16, or 19.
2S3P	If RESTRAINT SYSTEM USE Subfield 1-Type of Restraint System in Use equals 20, 98, or 99, then RESTRAINT SYSTEM USE Subfield 2 - Any Indication of Mis-Use must equal 7.
2S4P	If AGE equals 0-4 and RESTRAINT SYSTEM USE Subfield 1-Type of Restraint System in Use does not equal 04, 10, 11, 12, 20, 98, or 99, then RESTRAINT SYSTEM USE Subfield 2 - Any Indication of Mis-Use must equal 1.
2S5P	If AGE equals 5-7 and RESTRAINT SYSTEM USE Subfield 1-Type of Restraint System in Use does not equal 04, 10, 12, 20, 98, or 99, then RESTRAINT SYSTEM USE Subfield 2 - Any Indication of Mis-Use must equal 1.
2S6P	If HELMET USE Subfield 1 Helmet Use equals 5, 16, or 19, then HELMET USE Subfield 2 Any Indication of Mis-Use must equal 0 or 1.

Error ID	Error Message
2U0P	If vPIC BODY CLASS equals 004 (Low Speed Vehicle (LSV)/Neighborhood Electric Vehicle (NEV)), 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport/Adventure/Supermoto/On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 088 (Off-road Vehicle - Go Kart), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 097 (Off-road Vehicle - Snowmobile), 098 (Motorcycle - Street), 100 (Motorcycle - Enclosed Three Wheeled / Enclosed Autocycle), 103 (Motorcycle - Unenclosed Three Wheeled / Open Autocycle), 104 (Motorcycle - Moped), 105 (Off-road Vehicle - Recreational Off-Road Vehicle (ROV)), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 124 (Off-road Vehicle - Golf Cart), 125 (Motorcycle - Unknown Body Type), 126 (Off-road Vehicle - Farm Equipment), 127 (Off-road Vehicle - Construction Equipment), 996 (Motorized Bicycle), or 997 (Other), or FINAL STAGE BODY CLASS equals 004 (Low Speed Vehicle (LSV)/Neighborhood Electric Vehicle (NEV)), then AIR BAG DEPLOYED should equal 20 or 98.
2U0Q	If vPIC BODY CLASS equals 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport / Adventure / Supermoto / On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small / Minibike), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 104 (Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle), then AREAS OF IMPACT - INITIAL CONTACT POINT should not equal 14.
2U1F	If INJURY SEVERITY is not equal to 4, then DEATH DATE must equal 88888888.
2U2F	If INJURY SEVERITY is not equal to 4, then DEATH TIME must equal 8888.
2U3F	If INJURY SEVERITY equals 3, then TRANSPORTED TO FIRST MEDICAL FACILITY BY should not equal 0.
2V0P	If DEATH DAY is 01-31, and DEATH MONTH is 01-12, then DEATH DAY must be a valid day for DEATH MONTH.
2Z0F	If any SEQUENCE OF EVENTS equals 12, 14, 45, 54, 55, then NUMBER OF VEHICLE FORMS SUBMITTED must be greater than 001.

Error ID	Error Message
300P	If NATIONAL HIGHWAY SYSTEM equals 0, 9, then LAND USE AND FUNCTIONAL SYSTEM (b) must not equal 01.
320P	If LAND USE AND FUNCTIONAL SYSTEM (b) equals 01, and ROUTE SIGNING does not equal 7, then NATIONAL HIGHWAY SYSTEM must equal 1.
330P	If NATIONAL HIGHWAY SYSTEM equals 0, 9, then ROUTE SIGNING must not equal 1.
340P	If ROUTE SIGNING equals 1, then the first position of TRAFFICWAY IDENTIFIER #1 must be "I" and the second position must be "-".
341P	If the first position of TRAFFICWAY IDENTIFIER No. 1 equals "I" and the second position equals "-", then ROUTE SIGNING must equal 1 or 7.
350P	If ROUTE SIGNING is 2, then the first two positions of TRAFFICWAY IDENTIFIER No. 1 must be "US" and the third position must be "-".
351P	If the first two positions of TRAFFICWAY IDENTIFIER #1 equals "US" and third position equals "-", then ROUTE SIGNING must equal 2 or 7.
360P	If ROUTE SIGNING equals 3, then the first two positions of TRAFFICWAY IDENTIFIER No. 1 must be "SR" and the third position must be "-".
361P	If the first two positions of TRAFFICWAY IDENTIFIER #1 equals "SR" and third position equals "-", then ROUTE SIGNING must equal 3 or 7.
362P	If ROUTE SIGNING equals 4, then the first two positions of TRAFFICWAY IDENTIFIER #1 must be "CR" and the third position must be "-".
39IP	If TRAVEL SPEED is equal to 000 and ATTEMPTED AVOIDANCE MANEUVER equals 01, then PRE-IMPACT STABILITY must equal 1.
3A0P	If SPECIAL USE equals 07, then vPIC BODY CLASS must equal 011 (Truck), or FINAL STAGE BODY CLASS must equal 997 (Other (Specify:)).
3B0P	If JACKKNIFE equals 2, 3, then TRAVEL SPEED must not equal 000.
3B1P	If CRASH TYPE equals 21-23, then TRAVEL SPEED must equal 000 for this vehicle.
3B1Q	If CRITICAL EVENT - PRECRASH (EVENT) equals 81 or 82, then at least one PERSON TYPE should equal 05.
3B2P	If CRASH TYPE equals 20, 24, 28, 34, 36, 38, 40, 50-54, 56, 58 or 60, then AREA OF IMPACT-INITIAL CONTACT POINT must equal 12 for this vehicle.
3B2Q	If CRITICAL EVENT - PRECRASH (EVENT) equals 83 and PRE-IMPACT LOCATION does not equal 4, then at least one PERSON TYPE should equal 04, 06, 07, 11, 12, 13, or 19.
3B3P	If CRASH TYPE equals 21-23, 25-27, 29-31, 35, 37, 39 or 41, then AREAS OF IMPACT-INITIAL CONTACT POINT must equal 6 for this vehicle.
3B3Q	If CRITICAL EVENT - PRECRASH (EVENT) equals 84 or 85, then at least one PERSON TYPE should equal 04, 06, 07, 11, 12, 13, or 19.
3B4P	If PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 10, then CRASH TYPE must not equal 44-69, 71-73, 76, 77, 79, 81-83, 86-92.

Error ID	Error Message
3B5P	If PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 11, then CRASH TYPE must not equal 44-67, 69-71, 73, 77-81, 83, 86-92.
3B6P	If CRASH TYPE equals 87, then AREAS OF IMPACT-INITIAL CONTACT POINT must equal 01-05, 81-83 for this vehicle.
3B7P	If CRASH TYPE equals 89, then AREAS OF IMPACT-INITIAL CONTACT POINT must equal 07-11, 61-63 for this vehicle.
3B8P	If CRITICAL EVENT - PRECRASH (EVENT) equals 20, then CRASH TYPE for this vehicle should equal 92.
3BAP	If UNIT TYPE equals 1, and DRIVER PRESENCE equals 0, then CRASH TYPE must equal 00, 04, 09, 15, 32, 42, 48, 52, 62, 66, 74, 84, 90, 93 or 98.
3ВСР	If CRASH TYPE equals 34, 36, 38, 40, 54, 56, 58 or 60, then DRIVER MANEUVERED TO AVOID must not equal 00.
3BDP	If CRASH TYPE equals 46, 47, and ATTEMPTED AVOIDANCE MANEUVER equals 01 or 99, then PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must not equal 01.
3BEP	If CRASH TYPE equals 01 or 06, and ATTEMPTED AVOIDANCE MANEUVER equals 01, then PRE-IMPACT STABILITY should not equal 2-5 or 7.
3BFP	If PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 08 or 09, then CRASH TYPE must not equal 46 or 47.
3BGP	If PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 00, then DRIVER PRESENCE must equal 0 or 9.
ЗВНР	If ATTEMPTED AVOIDANCE MANEUVER does not equal 05-12, 15, 16, 98, then PRE - IMPACT STABILITY must not equal 7.
3C00	If CRASH TYPE equals 68, 72, 76 or 82, then PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 11 or 98.
3C10	If CRASH TYPE equals 70, 78 or 80, then PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 10 or 98.
3C1Q	If EXTENT OF DAMAGE equals 0, 2, 4, then VEHICLE REMOVAL must equal 3, 5, 8, or 9.
3C20	If this vehicle is involved in the FIRST HARMFUL EVENT and its CRASH TYPE equals 29-31, then this vehicle's PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 02.
3C2Q	If EXTENT OF DAMAGE equals 8, 9, then VEHICLE REMOVAL should equal 5, 7, 8, 9.
3C30	If PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 12, then CRASH TYPE should equal 98.
3C3P	If EXTENT OF DAMAGE equals 6, then VEHICLE REMOVAL must equal 2, 5, 8, or 9.
3C40	If CRASH TYPE equals 46, then PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 06, 15, 16, or ATTEMPTED AVOIDANCE MANEUVER should equal 07, 09, or 12.

Error ID	Error Message
3C50	If CRASH TYPE equals 92, then PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 08, 09, 13, 99.
3C60	If CRASH TYPE equals 25-27, 29-31, then PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should not equal 05 or 07.
3C70	If PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 13, then CRASH TYPE should equal 92 or 98.
3C80	If CRASH TYPE equals 47, then PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 06, 15, 16, or ATTEMPTED AVOIDANCE MANEUVER should equal 06, 08 or 11.
3CA0	If EXTENT OF DAMAGE for this vehicle equals 0, then DAMAGED AREAS must equal only 15.
3D00	If CRASH TYPE equals 20-49, and ATTEMPTED AVOIDANCE MANEUVER equals 00, 01, then CRITICAL EVENT - PRECRASH (EVENT) should not equal 12-14, 54, 62, 63, 66-68, 71-73 or 80-85.
3D0P	If SPECIAL USE for any vehicle equals 02, then SCHOOL BUS RELATED must equal 1.
3D10	If CRASH TYPE equals 50-67, and ATTEMPTED AVOIDANCE MANEUVER equals 00-01, then CRITICAL EVENT - PRECRASH (EVENT) should not equal 12-14, 51-53, 60, 61, 65, 66, 70, 71, 80-85 or 87-92.
3D20	If CRASH TYPE equals 14 and ATTEMPTED AVOIDANCE MANEUVER equals 01, then CRITICAL EVENT PRECRASH (EVENT) should equal 14.
3D50	If PRE-IMPACT STABILITY equals 1, then CRASH TYPE should not equal 02, 07, 34, 36, 54 or 56.
3D60	If CRASH TYPE equals 46 or 47, then PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should not equal 01.
3D70	If CRITICAL EVENT - PRECRASH (EVENT) equals 01-04, then CONTRIBUTING CIRCUMSTANCES, MOTOR VEHICLE must not equal 00.
3D80	If CRITICAL EVENT: PRECRASH (EVENT) equals 08 for this vehicle, and CONDITION (IMPAIRMENT) AT TIME OF CRASH equals 09 for this vehicle's driver, and RELATED FACTORS - PERSON (MV OCCUPANT) LEVEL for this vehicle is not equal 005 for any occupants of this vehicle, then another CONDITION (IMPAIRMENT) AT TIME OF CRASH for this vehicle's driver should equal 01.
3D90	If CRASH TYPE equals 68-75, then CRITICAL EVENT – PRECRASH (EVENT) must not equal 65-68.
3DB0	If any CONTRIBUTING CIRCUMSTANCES, MOTOR VEHICLE equal 00 or 99, then only that one code and no other must be coded for this vehicle.
3E00	If CRITICAL EVENT - PRECRASH (EVENT) equals 65-68 or 70-73 for a vehicle involved in the FIRST HARMFUL EVENT, then RELATION TO JUNCTION (b) should not equal 01 or 18.
3E10	If CRITICAL EVENT - PRECRASH (EVENT) equals 15 or 16, then PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should not equal 01.
3E11	If PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITCAL EVENT) equals 01, then CRITICAL EVENT - PRECRASH (EVENT) should not equal 15 or 16.

Error ID	Error Message
3F00	If CRASH TYPE equals 76-85, then CRITICAL EVENT – PRECRASH (EVENT) must not equal 60-64.
3H0F	If DRIVER PRESENCE equals 1, then there must be one and only one Person Level form for that vehicle with PERSON TYPE equal to 01, or there must be no Person Level form for that vehicle with PERSON TYPE equal to 01, and at least two Person Level forms for that vehicle with PERSON TYPE equal to 09.
3I2P	If DRIVER'S LICENSE STATE equals 98, 99, then all driver history counters must equal 99.
3J0P	If all counters equal 00, then DATE OF <i>MOST RECENT</i> CRASH, SUSPENSION, CONVICTION must equal 000000.
3J1P	If all counters equal 00, then DATE OF <i>OLDEST</i> CRASH, SUSPENSION, CONVICTION must equal 000000.
3K0P	If DATE OF <i>MOST RECENT</i> CRASH [Year], SUSPENSION, CONVICTION is not equal to 9999 and DATE OF <i>MOST RECENT</i> CRASH [Month], SUSPENSION, CONVICTION is not equal to 99; then DATE OF <i>MOST RECENT</i> CRASH, SUSPENSION, CONVICTION must be less than or equal to CRASH DATE.
3M0F	If PERSON TYPE equals 01, then RESTRAINT SYSTEM USE Subfield 1 Type of Restraint System in Use must not equal 04, 10-12.
3P0F	If PERSON TYPE equals 03-07, 10, 11, 12, 13, or 19, then INJURY SEVERITY should not equal 6.
3Q0F	If SEATING POSITION equals 50 (Sleeper Section of Cab [Truck]), then vPIC BODY CLASS should equal 011 (Truck) or 066 (Truck-Tractor), or FINAL STAGE BODY CLASS should equal 011 (Truck) or 066 (Truck-Tractor), and POWER UNIT GVWR_FROM and POWER UNIT GVWR_To should equal 13-18.
3R0P	If AIR BAG DEPLOYED does not equal 20, 98, or 99, then SEATING POSITION should not equal 12, 22, 32, 41-56.
3S0P	If SEATING POSITION equals 55, 56, then EJECTION must equal 8.
3U1P	If DEATH DATE equals CRASH DATE, and CRASH HOUR is not equal to 99, then DEATH HOUR must not be less than CRASH HOUR.
3U2P	If DEATH DATE equals CRASH DATE, and DEATH HOUR equals CRASH HOUR and CRASH MINUTE is not equal to 99, then DEATH MINUTE must not be less than CRASH MINUTE.

Error ID	Error Message
40IP	If TRAVEL SPEED is equal to 000, then ATTEMPTED AVOIDANCE MANEUVER should equal 00 or 01.
41IP	If TRAVEL SPEED is equal to 000, then DRIVER MANEUVERED TO AVOID should equal 00 or 95.
420P	If MANNER OF COLLISION OF THE FIRST HARMFUL EVENT equals 07, 08, then there must be at least two vehicle forms with AREAS OF IMPACT-INITIAL CONTACT POINT equal to 01-05, 07-11, 61-63, 81-83, 98, 99.
421P	If MANNER OF COLLISION OF THE FIRST HARMFUL EVENT equals 01, then AREAS OF IMPACT-INITIAL CONTACT POINT for one vehicle in the first harmful event must equal 12, and AREAS OF IMPACT- INITIAL CONTACT POINT for the other vehicle in the first harmful event must equal 06.
422P	If MANNER OF COLLISION OF THE FIRST HARMFUL EVENT equals 02, then AREAS OF IMPACT-INITIAL CONTACT POINT for one vehicle in the first harmful event must equal 12, and AREAS OF IMPACT- INITIAL CONTACT POINT for the other vehicle in the first harmful event must equal 12.
423P	If MANNER OF COLLISION OF THE FIRST HARMFUL EVENT equals 06, then AREAS OF IMPACT-INITIAL CONTACT POINT for one vehicle in the first harmful event must equal 01, 11, 12, 98, 99, and AREAS OF IMPACT- INITIAL CONTACT POINT for the other vehicle in the first harmful event must equal 01-05, 07-11, 61-63, 81-83, 98, 99.
424P	If MANNER OF COLLISION OF THE FIRST HARMFUL EVENT equals 09, then AREAS OF IMPACT- CONTACT POINT for one vehicle in the first harmful event must equal 06, and AREAS OF IMPACT- INITIAL CONTACT POINT for the other vehicle in the first harmful event must equal 01-05, 07-11, 61-63, 98, 99.
425P	If MANNER OF COLLISION OF THE FIRST HARMFUL EVENT equals 10, then AREAS OF IMPACT-INITIAL CONTACT POINT for one vehicle in the first harmful event must equal 06, and AREAS OF IMPACT- INITIAL CONTACT POINT for the other vehicle in the first harmful event must equal 06, 98, 99.
426P	If MANNER OF COLLISION OF THE FIRST HARMFUL EVENT equals 02, then CRASH TYPE must not equal 64-67 for the vehicles involved in the FIRST HARMFUL EVENT.
427P	If MANNER OF COLLISION OF THE FIRST HARMFUL EVENT equals 06, then CRASH TYPE must not equal 20-43 or 50-53 for the vehicles involved in the FIRST HARMFUL EVENT.
428P	If CRASH TYPE equals 20-91, then NUMBER OF VEHICLE FORMS SUBMITTED must be greater than 001.
429P	If NUMBER OF VEHICLE FORMS SUBMITTED equals 001, then CRASH TYPE must equal 00, 01-16, 92, 98, 99.
42AP	If NUMBER OF MOTOR VEHICLES FORMS SUBMITTED equals 001, and RELATION TO TRAFFICWAY equals 02, 04, 06-08, 12, and ATTEMPTED AVOIDANCE MANEUVER equals 00 or 01, then CRITICAL EVENT - PRECRASH (EVENT) should equal 01-06, 08-14 or 19.

Error ID	Error Message
42BP	If there is only one vehicle involved in the First Harmful Event where UNIT TYPE equals 1, then the number of vehicles where CRASH TYPE is coded 00, 1-16, 92, 93 or 99 (excluding from the vehicles being counted, those where CRASH TYPE equals 98) must not equal 0 or be greater than 1.
42CP	If there are two vehicles involved in the FIRST HARMFUL EVENT, then those two vehicles' CRASH TYPES must belong to the same CRASH TYPE Configuration.
42IP	If TRAVEL SPEED equals 000, then PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 00, 05, 07, 17, 98, or 99.
431P	If NUMBER OF VEHICLE FORMS SUBMITTED equals 002 and UNDERRIDE/OVERRIDE equals 1-8, 9 for one vehicle, then UNDERRIDE/OVERRIDE for the other vehicle must equal 0.
432P	If NUMBER OF VEHICLE FORMS SUBMITTED equals 001, then UNDERRIDE/OVERRIDE must equal 0.
440F	If FIRST HARMFUL EVENT equals 08, 09, 15, and RELATION TO TRAFFICWAY equals 01, then there must be at least one Person Level (Not a MV Occupant) form with NON-MOTORIST LOCATION AT TIME OF CRASH equal to 01-03, 09-11, 13, 16, 23, 98 or 99.
440P	If VEHICLE UNDERRIDE/OVERRIDE equals 7, then VEHICLE SEQUENCE OF EVENTS must not equal 12, 14, 45, or 55, or CRASH EVENTS equals 12, 14, 45, or 55 for that vehicle, AND the vPIC BODY CLASS for at least one of the corresponding vehicles (THIS VEHICLE or OTHER VEHICLE) in that row equals 006 (Motorcycle – Standard), 012 (Motorcycle – Scooter), 069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring / Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 (Off-road Vehicle - Dirt Bike / Off-Road), 085 (Motorcycle - Dual Sport / Adventure / Supermoto / On/Off-Road), 086 (Off-road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small / Minibike), 088 (Off-road Vehicle - Go Kart), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 097 (Off-road Vehicle - Snowmobile), 098 (Motorcycle - Street), 104 (Motorcycle - Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motocross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle).
450F	If FIRST HARMFUL EVENT equals 08, 09, 15, and RELATION TO TRAFFICWAY equals 07, then there must be at least one Person Level (Not a MV Occupant) form with NON-MOTORIST LOCATION AT TIME OF CRASH equal to 14.
460F	If FIRST HARMFUL EVENT equals 08, 09, 15, and RELATION TO TRAFFICWAY equals 02, then there must be at least one Person Level (Not a MV Occupant) form with NON-MOTORIST LOCATION AT TIME OF CRASH equal to 02, 20.
470F	If FIRST HARMFUL EVENT equals 08, 09, 15, and RELATION TO TRAFFICWAY equals 03, 08, 10, 12, then there must be at least one Person Level (Not a MV Occupant) form with NON-MOTORIST LOCATION AT TIME OF CRASH equal to 20, 22, 28, 98, 99.
480F	If FIRST HARMFUL EVENT equals 08, 09, 15, and RELATION TO TRAFFICWAY equals 04, 06, then there must be at least one Person Level (Not a MV Occupant) form with NON-MOTORIST LOCATION AT TIME OF CRASH equal to 09, 16, 20, 21, 24, 25, 28, 98, 99.
490F	If FIRST HARMFUL EVENT equals 08, 09, 15, and RELATION TO TRAFFICWAY equals 05, then there must be at least one Person Level (Not a MV Occupant) form with NON-MOTORIST LOCATION AT TIME OF CRASH equal to 24, 25.

Error ID	Error Message
4A0F	If FIRST HARMFUL EVENT is 08, 09, 15, or 49 and RELATION TO TRAFFICWAY is 12, then at least one NON-MOTORIST LOCATION AT TIME OF CRASH must equal 22 or 28.
4A0P	If vPIC BODY CLASS equals 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport / Adventure / Supermoto / On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 097 (Off-road Vehicle - Snowmobile), 098 (Motorcycle - Street), 100 (Motorcycle - Enclosed Three Wheeled / Enclosed Autocycle), 103 (Motorcycle - Unenclosed Three Wheeled / Open Autocycle), 104 (Moped), 105 (Off-road Vehicle - Recreational Off-Road Vehicle (ROV)), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 124 (Off-road Vehicle - Golf Cart), 125 (Motorcycle - Unknown Body Type), 126 (Off-road Vehicle - Farm Equipment), 127 (Off-road Vehicle - Construction Equipment), or 996 (Motorized Bicycle), then SPECIAL USE must not equal 01-03, 06, 07, 12, or 20-24.
4D0P	If SPECIAL USE equals 03, then vPIC BODY CLASS must equal 009 (Van), 016 (Bus), 068 (Streetcar / Trolley), 073 (Bus-School Bus), or 117 (Limousine), or FINAL STAGE BODY CLASS must equal 009 (Van), 016 (Bus), 068 (Streetcar / Trolley), 073 (Bus-School Bus), or 117 (Limousine).
4E1P	If VEHICLE TRAILING equals 4, then TRAILER VEHICLE IDENTIFICATION NUMBER must not equal 7s for any of the three sets.
4F3P	If NUMBER OF OCCUPANTS is 01-98, and <i>vPIC BODY CLASS</i> equals <i>117 (Limousine)</i> , then NUMBER OF OCCUPANTS <i>should</i> not be greater than <i>16</i> .
4G0P	A RELATED FACTORS-VEHICLE LEVEL between 0 30 and 0 45 can be used only once per vehicle form.
4H0F	If DRIVER PRESENCE equals 0, 9, then there must not be a Person Level form for that vehicle with PERSON TYPE equal to 01.
4H1P	If DRIVER HEIGHT/INCHES is less than 12, then DRIVER HEIGHT/FEET must not be blank nor equal to 0.
4H2P	If DRIVER HEIGHT/INCHES is greater than 11, then DRIVER HEIGHT/FEET must equal 0.
4H3P	If DRIVER HEIGHT/FEET is 2-8, then DRIVER HEIGHT/ INCHES must equal 00-11.
4H4P	If DRIVER HEIGHT/FEET equals 9, then DRIVER HEIGHT/ INCHES must equal 99.
4H5P	If DRIVER HEIGHT/INCHES equals 99, then DRIVER HEIGHT/ FEET must equal 9.
4H6P	If DRIVER HEIGHT/INCHES equals 98, then DRIVER HEIGHT/FEET must equal 0.
4H7P	If DRIVER HEIGHT/FEET is 0, then DRIVER HEIGHT/INCHES must equal 24-96, 98.
4J0P	If all counters are not blanks, and the sum of all counters less than 98 is equal to 1, then DATE OF <i>MOST RECENT</i> CRASH, SUSPENSION, CONVICTION must equal DATE OF <i>OLDEST</i> CRASH, SUSPENSION, CONVICTION.
4K0P	If Month of DATE OF <i>MOST RECENT</i> CRASH, SUSPENSION, CONVICTION equals 00, then Year (of same) must equal 0000.

Error ID	Error Message
4K1P	If Year of DATE OF <i>MOST RECENT</i> CRASH, SUSPENSION, CONVICTION equals 0000, then Month (of same) must equal 00.
4K2P	If Month of DATE OF <i>OLDEST</i> CRASH, SUSPENSION, CONVICTION equals 00, then Year (of same) must equal 0000.
4K3P	If Year of DATE OF <i>OLDEST</i> CRASH, SUSPENSION, CONVICTION equals 0000, then Month (of same) must equal 00.
4L0P	If any RELATED FACTORS-DRIVER LEVEL equals <i>0</i> 39 for this vehicle, then TRAFFIC CONTROL DEVICE should not equal 00 for this vehicle.
4N1P	If VEHICLE CONFIGURATION does not equal 00, then MOTOR CARRIER IDENTIFICATION NUMBER must not equal 00-000000000.
4N2P	If MOTOR CARRIER IDENTIFICATION NUMBER equals 00-000000000, then VEHICLE CONFIGURATION must equal 00.
4N3P	If MOTOR CARRIER IDENTIFICATION NUMBER (Identification Number) equals 000000000, then MOTOR CARRIER IDENTIFICATION NUMBER (Issuing Authority) must equal 00.
4N4P	If MOTOR CARRIER IDENTIFICATION NUMBER does not equal 00-000000000 or 99-99999999, then POWER UNIT GVWR_From and POWER UNIT GVWR_To must equal 13-18, or VEHICLE TRAILING must equal 1-6, or CARGO BODY TYPE must equal 22, or HM2 must equal 2.
4N5P	If POWER UNIT GVWR_From and POWER UNIT GVWR_To do not equal 13-18, and VEHICLE TRAILING does not equal 1-6, and CARGO BODY TYPE does not equal 22, and HM2 does not equal 2, then MOTOR CARRIER IDENTIFICATION NUMBER must equal 00-000000000, 99-999999999.
4N7P	If MOTOR CARRIER IDENTIFICATION NUMBER (Identification Number) equals 888888888 or 777777777 or 999999999, then MOTOR CARRIER IDENTIFICATION NUMBER (Issuing Authority) should be filled respectively as 88 or 77 or 99.
4N8P	If any one of the fields MOTOR CARRIER IDENTIFICATION NUMBER, VEHICLE CONFIGURATION, and CARGO BODY TYPE equals Unknown [MOTOR CARRIER IDENTIFICATION NUMBER (99-99999999), VEHICLE CONFIGURATION (99), CARGO BODY TYPE (99)], then the other two should also equal Unknown and HM1 must equal 1.
4NAP	If MOTOR CARRIER IDENTIFICATION NUMBER (Issuing Authority) equals 01-58, 95, 96, then MOTOR CARRIER IDENTIFICATION NUMBER (Identification Number) should not equal 88888888, 777777777, 999999999, 999999999.
4NBP	If MOTOR CARRIER IDENTIFICATION NUMBER (Issuing Authority) 01-58, 95, 96, then MOTOR CARRIER IDENTIFICATION NUMBER (Identification Number) must not equal 000000000.
4NCP	If MOTOR CARRIER IDENTIFICATION NUMBER (Issuing Authority) is 00 or 77 or 88 or 99, then MOTOR CARRIER IDENTIFICATION NUMBER (Identification Number) must be filled respectively as 000000000 or 777777777 or 88888888 or 999999999.

Error ID	Error Message
4Q0F	If PERSON TYPE equals 02, and vPIC BODY CLASS equals 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport/Adventure/Supermoto/On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 90 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 100 (Motorcycle - Enclosed Three Wheeled / Enclosed Autocycle), 103 (Motorcycle - Unenclosed Three Wheeled / Open Autocycle), 104 (Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle), then SEATING POSITION should equal 13, 21, 54, 55, or 56.
4R0P	If SEATING POSITION equals 54, then VEHICLE TRAILING must not equal 0 or 9.
4S0P	If vPIC BODY CLASS equals 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport/Adventure/Supermoto/On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 104 (Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle), then EJECTION must equal 8.
4S1P	If vPIC BODY CLASS does equal 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport/Adventure/Supermoto/On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 100 (Motorcycle - Enclosed Three Wheeled / Enclosed Autocycle), 103 (Motorcycle - Unenclosed Three Wheeled / Open Autocycle), 104 (Moped), 105 (Off-road Vehicle - Recreational Off-Road Vehicle (ROV)), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle), and HM1 does not equal 1, then COMPLIANCE WITH CDL ENDORSEMENTS MUST equal 0.
4U0F	Each original submission must have at least one Person Level form with INJURY SEVERITY coded 4.
4U2F	At least one INJURY SEVERITY should equal 1, 2, 3, 4, 5, or 9, or at least one EXTENT OF DAMAGE should equal 2, 4, 6, 8, or 9.
4V1F	If INJURY SEVERITY equals 4, then DEATH DATE and DEATH TIME for this person must be within 720 hours of the CRASH DATE and CRASH TIME.
4V2F	If CRASH MONTH equals 12, and DEATH MONTH equals 01, then DEATH YEAR must equal CRASH YEAR plus 1.
4V3F	If CRASH MONTH equals 12, then DEATH MONTH must equal 01, 12, 88, 99.

Error ID	Error Message
4V4F	If CRASH MONTH equals 02-11, and DEATH MONTH is not equal to 88 or 99, then DEATH MONTH must equal CRASH MONTH or CRASH MONTH plus 1.
4V5F	If CRASH MONTH equals 01, and DEATH MONTH is not equal to 88, or 99, then DEATH MONTH must equal CRASH MONTH or CRASH MONTH plus 1 or CRASH MONTH plus 2.
4V6P	If DEATH MONTH is not equal to blanks, then DEATH DAY and DEATH YEAR must not equal blanks.
4V7P	If DEATH DAY is not equal to blanks, then DEATH MONTH and DEATH YEAR must not equal blanks.
4V8P	If DEATH YEAR is not equal to blanks, then DEATH MONTH and DEATH DAY must not equal blanks.
4W0P	Any RELATED FACTORS-PERSON (MV Occupant) LEVEL can be used only once per person form.
4W1P	Any RELATED FACTORS-PERSON (NOT A MV OCCUPANT) LEVEL can be used only once per person form.
4W2P	If RELATED FACTORS - PERSON (NOT A MV OCCUPANT) LEVEL equals <i>0</i> 93, then NON-MOTORIST SAFETY EQUIPMENT Subfield 1 Non-Motorist Helmet Use must equal 2.
4W3P	If RELATED FACTORS - PERSON (NOT A MOTOR VEHICLE OCCUPANT) LEVEL equals 0 91, then NON-MOTORIST DISTRACTED BY should equal 05, 06, 07, 08, or 15.
4W4P	If RELATED FACTORS-PERSON LEVEL (Not a MV Occupant) equals 053, 054, 055, and PERSON TYPE does not equal 05, then at least one NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must equal 18.
4W5P	If RELATED FACTORS-PERSON LEVEL (Not a MV Occupant) equals 053, 054, 055, and PERSON TYPE equals 05, then at least one NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must equal 21.
4W6P	If any RELATED FACTORS-PERSON LEVEL (MV Occupant) equals <i>0</i> 21 or <i>0</i> 89, then PERSON TYPE must equal 3, SEATING POSITION must equal 11, and UNIT TYPE must equal 2, 3, or 4.
4X0A	If NON-MOTORIST DISTRACTED BY equals 05, 06, 07, 08, or 15, then at least one RELATED FACTORS - PERSON (NOT A MOTOR VEHICLE OCCUPANT) LEVEL must equal 0 91.
4X1A	If any NON-MOTORIST DISTRACTED BY equals 00, 17, 18, 19, 92, 93, 96, or 99, then only that one code and no other must be used.
4X2A	If NON-MOTORIST CONTRIBUTING CIRCUMSTANCES equals 19, then NON-MOTORIST SAFETY EQUIPMENT Subfield 4-Non-Motorist Use of Reflective Clothing/Carried Item should not equal 2.
4X2B	If NON-MOTORIST CONTRIBUTING CIRCUMSTANCES equals 19, then NON-MOTORIST SAFETY EQUIPMENT Subfield 5- Non-Motorist Use of Lighting should not equal 2.
4X2C	If any NON-MOTORIST CONTRIBUTING CIRCUMSTANCES equals 06, then NON-MOTORIST DISTRACTED BY must not equal 00 or 96 or 99.

Error ID	Error Message
4X2F	If any CONDITION (IMPAIRMENT) AT TIME OF CRASH (D23) equals 00 or 98 or 99, then only that one code and no other must be coded for this driver.
4X2G	If any NON-MOTORIST ACTION/CIRCUMSTANCES equals 08, then the NON-MOTORIST ACTION/CIRCUMSTANCES must not also equal 03 for this person.
4X3A	If NON-MOTORIST CONTRIBUTING CIRCUMSTANCES equals 11, then PERSON TYPE must equal 05.
4X3F	If any CONDITION (IMPAIRMENT) AT TIME OF CRASH equals 00 or 98 or 99, then only that one code and no other must be coded for this person.
4X3G	If any NON-MOTORIST ACTIONS CIRCUMSTANCES equals 03, then NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must not equal 04 for this Person (Not a Motor Vehicle Occupant).
4X4A	If any NON-MOTORIST DISTRACTED BY equals 00, 96, or 99, then none of the NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must equal 06.
4X4F	If any CONDITION (IMPAIRMENT) AT TIME OF CRASH (D23) equals 09, then POLICE REPORTED ALCOHOL INVOLVEMENT (P16) or POLICE REPORTED DRUG INVOLVEMENT (P19) should equal 1 for this person.
4X5A	If NON-MOTORIST DISTRACTED BY does not equal 00, 96, or 99, then at least one NON-MOTORIST CONTRIBUTING CIRCUMSTANCES should equal 06.
4X5F	If NON-MOTORIST ACTION/CIRCUMSTANCES <i>equals</i> 04 <i>and does not also equal</i> 03, then NON-MOTORIST ACTION/CIRCUMSTANCES <i>should also equal</i> 05 or 06 or 16.
4X6A	If NON-MOTORIST DISTRACTED BY equals 17, then STATE should equal GA, MN, MO, NV, NY, or SC.
4X6F	If any CONDITION (IMPAIRMENT) AT TIME OF CRASH equals 09, then POLICE REPORTED ALCOHOL INVOLVEMENT or POLICE REPORTED DRUG INVOLVEMENT should equal 1 for this person.
4X7F	If any NON-MOTORIST ACTION/CIRCUMSTANCES equals 98 or 99, then only that one code and no other must be coded for this person.
4X8F	If any NON-MOTORIST CONTRIBUTING CIRCUMSTANCES equals 00 or 99, then only that one code and no other must be coded for this person.
4X8G	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must not equal 01 and 11 for the same person.
4X8H	If any NON-MOTORIST CONTRIBUTING CIRCUMSTANCES equals 01, then DRIVER'S VISION OBSCURED BY must not equal 00, 95, or 99 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
4Z0P	If SEQUENCE OF EVENTS equals 02, then FIRE OCCURRENCE for this vehicle must equal 1.
4Z1P	If UNIT TYPE equals 1 and FIRE OCCURRENCE equals 1, then at least one SEQUENCE OF EVENTS must equal 02.
4Z2P	If UNIT TYPE equals 4, then there must be at least one record in CRASH EVENTS TABLE with SEQUENCE OF EVENT equal to 45 for that vehicle VEHICLE NUMBER (OTHER VEHICLE).

Error ID	Error Message
4Z3P	If UNIT TYPE equals 2 or 3, then there must be at least one record in CRASH EVENTS TABLE with SEQUENCE OF EVENT equal to 14 for that vehicle VEHICLE NUMBER (OTHER VEHICLE).

Error ID	Error Message
500F	If FIRST HARMFUL EVENT equals 01-11, 14-21, 23-26, 30-35, 44-53, 57-59, 72, 73, or 98 then MANNER OF COLLISION OF THE FIRST HARMFUL EVENT must not equal 01, 02, 06-11, 98, 99.
510F	If FIRST HARMFUL EVENT equals 12, 54, 55, then MANNER OF COLLISION OF THE FIRST HARMFUL EVENT must not equal 00.
520F	If FIRST HARMFUL EVENT equals 10, then TRAFFIC CONTROL DEVICE <i>should</i> not equal 01-04, 07-09, 20, 21, 23, 28, 29, 50, 98 for the vehicle involved in the FIRST HARMFUL EVENT.
530F	If FIRST HARMFUL EVENT equals 08, 09, 15, and RELATION TO TRAFFICWAY equals 99, then there must be at least one Person Level (Not a MV Occupant) form with NON-MOTORIST LOCATION AT TIME OF CRASH equal to 09, 98, 99.
531F	If FIRST HARMFUL EVENT equals 08, 09, 15, and RELATION TO TRAFFICWAY equals 11, then there must be at least one Person Level (Not a MV Occupant) form with NON-MOTORIST LOCATION AT TIME OF CRASH equal to 11.
532F	If FIRST HARMFUL EVENT equals 14, and RELATION TO TRAFFICWAY equals 07, then at least one previous CRASH EVENTS-SEQUENCE OF EVENTS should equal 63, 64, 71, or 79 for the motor vehicle in transport involved in the FIRST HARMFUL EVENT.
540F	If FIRST HARMFUL EVENT equals 02, then the vehicle involved in the FIRST HARMFUL EVENT must have FIRE OCCURRENCE equal to 1.
550F	If FIRST HARMFUL EVENT equals 08, then at least one person must have PERSON TYPE equal 05, 10.
560F	If FIRST HARMFUL EVENT equals 09, then at least one person must have PERSON TYPE equal to 06, 07.
570F	If FIRST HARMFUL EVENT equals 05, 06, then at least one PERSON TYPE equal to 01-03, 09 must have INJURY SEVERITY equal to 1-5, or blank.
580F	If FIRST HARMFUL EVENT equals 14, and RELATED FACTORS - PERSON (MV OCCUPANT) LEVEL does not equal 032, 089 for at least one occupant in the not in-transport motor vehicle involved in the FIRST HARMFUL EVENT, then RELATION TO TRAFFICWAY should not equal 01.
590F	If FIRST HARMFUL EVENT equals 15, then at least one Person Level form must have a PERSON TYPE code of 11, 12, or 13.

Error ID	Error Message
5A0P	If vPIC BODY CLASS equals 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport / Adventure / Supermoto / On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 104 (Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle), and any RELATED FACTORS - VEHICLE LEVEL does not equal 030, then ROLLOVER must equal 0.
5AAP	The Final STRATUM should equal the Original STRATUM.
5B0Q	If JACKKNIFE equals 0, then VEHICLE TRAILING must equal 0, 5, 6, or 9.
5D0P	If SPECIAL USE equals 04, then vPIC BODY CLASS should equal 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 009 (Van), 011 (Truck), 016 (Bus), 060 (Pickup), 066 (Truck-Tractor), 095 (Cargo Van), 119 (Sport Utility Truck (SUT)), 997 (Other (Specify:)), or 999 (Unknown), or FINAL STAGE BODY CLASS should equal 009 (Van), 011 (Truck), 016 (Bus), 060 (Pickup), 066 (Truck-Tractor), 095 (Cargo Van), 119 (Sport Utility Truck (SUT)), 997 (Other (Specify:)), or 999 (Unknown).
5F0F	If NUMBER OF OCCUPANTS equals 00-98, and vPIC BODY CLASS does not equal 016 (Bus), 068 (Streetcar / Trolley), or 73 (Bus-School Bus), and FINAL STAGE BODY CLASS does not equal 016 (Bus), 068 (Streetcar / Trolley), or 73 (Bus-School Bus), then the number of Person Level forms for that vehicle must be equal to the NUMBER OF OCCUPANTS.
5I0P	If NON-CDL LICENSE STATUS equals 0, then COMPLIANCE WITH LICENSE RESTRICTIONS must not equal 1-3, 9.
5I1P	If NON-CDL LICENSE STATUS for this person equals 9, then COMMERCIAL MOTOR VEHICLE LICENSE STATUS should equal 99.
5J0P	If the sum of all counters less than 98 is greater than fifteen, then DATE OF <i>MOST RECENT</i> CRASH, SUSPENSION, CONVICTION must not equal DATE OF <i>OLDEST</i> CRASH, SUSPENSION, CONVICTION.
5K0P	The Year of DATE OF <i>OLDEST</i> CRASH, SUSPENSION, CONVICTION must be within five years of the Year of CRASH DATE.
5L0F	If RELATED FACTORS-DRIVER LEVEL equals 020, then DRIVER PRESENCE must not equal 1, 9.
5L0P	If any RELATED FACTORS-DRIVER LEVEL equals 010, then DRIVER DISTRACTED BY must equal 00.
5L1F	If RELATED FACTORS-DRIVER LEVEL equals 0 04, 0 08, 0 10, 0 12, 0 13, 0 15, 0 16, 0 19, 0 52, 0 53, 0 58, 0 59, 0 73, 0 74, 0 77- 0 88, 0 94- 0 97, then DRIVER PRESENCE must not equal 0 or 9.
5M0F	If PERSON TYPE equals 01, then RELATED FACTORS-PERSON LEVEL (MV Occupant) must equal 0 00.
5M0G	If SPECIAL USE equals 06, and PERSON TYPE equals 02 or 09, then RELATED FACTORS - PERSON (MV OCCUPANT) LEVEL should equal 0 92, 0 94, or 0 95.
5M1G	If SPECIAL USE equals 21 and PERSON TYPE equals 01, then SEATING POSITION should equal 13.

Error ID	Error Message
5M2G	If SPECIAL USE equals 06, and PERSON TYPE equals 02, and SEATING POSITION equals 51, then at least one RELATED FACTORS - PERSON LEVEL should equal 092 or 094.
<i>5M3G</i>	If SPECIAL USE equals 06, and PERSON TYPE equals 01 or 02, and SEATING POSITION equals 11-19, then at least one RELATED FACTORS - PERSON LEVEL should equal 094, or at least one RELATED FACTORS - DRIVER LEVEL should equal 094.
5N0F	If PERSON TYPE equals 02, then any RELATED FACTORS-PERSON LEVEL (MV Occupant) must not equal 021, 026, 028, 029, 033, 037, 040-042, 044, 045, 047, 051, 052, 057-070, 072-078, or 080-083.
5Q0F	If PERSON TYPE equals 02, and vPIC BODY CLASS equals 016 (Bus), 068 (Streetcar / Trolley), or 73 (Bus-School Bus), or FINAL STAGE BODY CLASS equals 016 (Bus), 068 (Streetcar / Trolley), or 73 (Bus-School Bus), then SEATING POSITION must equal 12-18, 51, 52, 54, 55, 56, 98, or 99.
5S0P	If vPIC BODY CLASS equals 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport/Adventure/Supermoto/On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 104 (Motorcycle - Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle), then EXTRICATION must equal 0.
5T7P	If ALCOHOL TEST STATUS equals 0, then ALCOHOL TEST TYPE must equal 00, and ALCOHOL TEST RESULT must equal 996.
5T8P	If ALCOHOL TEST STATUS equals 9, then ALCOHOL TEST TYPE and ALCOHOL TEST RESULT must equal 999.
5T9P	If ALCOHOL TEST STATUS equals 2, then ALCOHOL TEST TYPE must equal 01-11, 95, 98, and ALCOHOL TEST RESULT must equal 000-940, 997, 998.
5TCP	If ALCOHOL TEST STATUS equals 8, then ALCOHOL TEST TYPE must equal 95 and ALCOHOL TEST RESULT must equal 995.
5W0P	If RELATED FACTORS-PERSON LEVEL equals <i>0</i> 18, then SEX must equal 2, and AGE must be greater than 012.
5Y0F	If FIRST HARMFUL EVENT equals 08, 09, 15, then NUMBER OF FORMS SUBMITTED FOR PERSONS NOT IN MOTOR VEHICLES must not equal 00.
5Z0F	If SEQUENCE OF EVENTS equals 08, then at least one person must have PERSON TYPE equal to 05, 10.

Error ID	Error Message
610P	If TRAFFIC CONTROL DEVICE equals 00, then DEVICE FUNCTIONING must equal 0.
622P	If HIT-AND-RUN equals 1, then it is unlikely that NUMBER OF OCCUPANTS equals 0-98.
640F	If TRAFFIC CONTROL DEVICE equals 23 for any vehicle, then RELATED FACTORS-CRASH LEVEL should equal 021.
641F	If RELATED FACTORS-CRASH LEVEL equals 021, then TRAFFIC CONTROL DEVICE should not equal 00 for every vehicle.
642F	If TRAFFIC CONTROL DEVICE equals 00 for every vehicle, then RELATED FACTORS-CRASH LEVEL should not equal 0 21.
650P	If TRAFFIC CONTROL DEVICE equals 65 for any vehicle, then RAIL GRADE CROSSING IDENTIFIER must not equal 0000000.
651P	RAIL GRADE CROSSING IDENTIFIER must equal BLANKS, 0000000, 9999999, or nnnnnA; where n is a numeric character and A is an uppercase alphabetic character.
660P	If TRAFFIC CONTROL DEVICE is not equal to 00, then DEVICE FUNCTIONING must not equal 0.
660Q	If TRAFFIC CONTROL DEVICE does not equal 97, then it is unlikely that DEVICE FUNCTIONING equals 8.
661P	If TRAFFIC CONTROL DEVICE equals 97, then DEVICE FUNCTIONING must equal 8.
662P	If TRAFFIC CONTROL DEVICE is not equal to 00 and CRASH TYPE is 14, then at least one RELATED FACTORS - DRIVER LEVEL should equal <i>0</i> 39.
670F	If FIRST HARMFUL EVENT equals 12, 14, 45, 54, 55, then NUMBER OF VEHICLE FORMS SUBMITTED must be greater than 001.
671F	If the only harmful event in SEQUENCE OF EVENTS for this vehicle equals 02 or 04, then CRITICAL EVENT - PRECRASH (EVENT) must equal 98.
6A1P	If UNDERRIDE/OVERRIDE equals 1-8, then <i>NCSA</i> BODY TYPE must not equal 80-84, 88-91.
6D0P	If SPECIAL USE equals 05, then vPIC BODY CLASS should equal 006 (Motorcycle - Standard), 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 008 (Crossover Utility Vehicle (CUV)), 009 (Van), 013 (Sedan/Saloon), 015 (Wagon), 060 (Pickup), 081 (Motorcycle - Touring / Sport Touring), 082 (Motorcycle - Cruiser), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 119 (Sport Utility Truck (SUT)), or 125 (Motorcycle - Unknown Body Type).
6G0P	If RELATED FACTORS-VEHICLE LEVEL equals <i>0</i> 32, then REGISTRATION STATE must not equal 00, 92.

Error ID	Error Message
6G0Q	If any RELATED FACTORS - VEHICLE LEVEL equals 030, then vPIC BODY CLASS must equal 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport / Adventure / Supermoto / On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 104 (Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle) for this vehicle.
6H0P	If DRIVER PRESENCE equals 0, 9, then DRIVER'S ZIP CODE must be blank.
6H1P	If DRIVER PRESENCE equals 0, 9, then CONDITION (IMPAIRMENT) AT TIME OF CRASH (D23) must be blank.
6I0P	If NON-CDL LICENSE STATUS equals 9, and COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 00, then COMPLIANCE WITH LICENSE RESTRICTIONS must not equal 1-3.
6K0P	If VIOLATION CHARGED equals 71, then RELATED FACTORS-DRIVER LEVEL must not equal <i>0</i> 19.
6L0P	If COMPLIANCE WITH LICENSE RESTRICTIONS equals 1, and RELATED FACTORS-DRIVER LEVEL equals 019, then LICENSE COMPLIANCE WITH CLASS OF VEHICLE must equal 3.
6Q0F	If PERSON TYPE equals 02 or 03, and vPIC BODY CLASS equals 011 (Truck) or 066 (Truck-Tractor), or FINAL STAGE BODY CLASS equals 011 (Truck) or 066 (Truck-Tractor), then SEATING POSITION must not equal 31-49.
6S0P	If EJECTION equals 1, then EXTRICATION must not equal 1, 9.
6V0P	DEATH DATE must not be less than CRASH DATE.
6Z0F	If SEQUENCE OF EVENTS equals 09, then at least one person must have PERSON TYPE equal to 06, 07.

Error	Error Message
ID	
740P	If RELATION TO JUNCTION (b) equals 07, then TRAFFICWAY DESCRIPTION must equal 2, 3 for at least one vehicle.
750P	If RELATION TO JUNCTION (b) equals 07, then RAIL GRADE CROSSING IDENTIFIER must equal 0000000.
770P	If RELATION TO TRAFFICWAY equals 07, then RELATION TO JUNCTION (b) must equal 01, 03, 08, 19, 98, 99.
772P	If RELATION TO TRAFFICWAY equals 07, then RELATION TO JUNCTION (a) must not equal 1.

Error ID	Error Message
773P	If RELATION TO JUNCTION (b) equals 01, then RELATION TO JUNCTION (a) must equal 0.
773Q	If RELATION TO JUNCTION(b) equals 04, 06, 07, or 16, then RELATION TO JUNCTION (a) should not equal 1.
775P	If RELATION TO JUNCTION (b) equals 17 or 18 or 19, then RELATION TO JUNCTION (a) must equal 1.
778P	If RELATION TO JUNCTION (b) equals 01, 04-08, 16-20, then TYPE OF INTERSECTION must equal 01.
77AP	If CRASH TYPE equals 14, then RELATION TO JUNCTION (b) must not equal 02.
77BP	If CRASH TYPE equals 68-91, then RELATION TO JUNCTION (b) should not equal 01.
77CP	If CRASH TYPE equals 14, then RELATION TO JUNCTION (b) should equal 01, 03, 19.
77DP	If RELATION TO TRAFFICWAY equals 07, and RELATION TO JUNCTION (a) equals 1, then RELATION TO JUNCTION (b) should not equal 03, 08.
780P	If RELATION TO TRAFFICWAY equals 10, then RELATION TO JUNCTION (b) must not equal 02, 04, 08.
781P	If TYPE OF INTERSECTION equals 02-07, 10, <i>or 11</i> , then TRAFFICWAY IDENTIFIER (b) should not be blank.
782P	If TYPE OF INTERSECTION equals 02-07, 10, or 11, then RELATION TO JUNCTION (b) must equal 02, 03.
783P	If RELATION TO JUNCTION (b) equals 98, 99, then TYPE OF INTERSECTION should equal 01, 98, 99.
784P	If TYPE OF INTERSECTION equals 01, then RELATION TO JUNCTION (b) must not equal 02, 03.
7B0F	If JACKKNIFE equals 2, 3, then DRIVER PRESENCE must equal 1.
7D0P	If SPECIAL USE equals 06, then <i>NCSA</i> BODY TYPE must equal 11, 14-17, 19, 21, 22, 28, 29, 40, 41, 45, 48, 49, 61, 62, 64, 79, 97, 99.
7E0P	If INJURY SEVERITY equals 4, then DEATH CERTIFICATE NUMBER must NOT equal 0000-00-000000.
7E1P	If INJURY SEVERITY equals 4, then RACE must not equal 00.
7E2P	If INJURY SEVERITY equals 4, then HISPANIC ORIGIN must not equal 00.
7E3P	If INJURY SEVERITY is not equal to 4, then RACE must equal 00 AND HISPANIC ORIGIN must equal 00.
7F0P	If DEATH CERTIFICATE NUMBER is not blank or 0000-00-000000, then INJURY SEVERITY must equal 4.
7F1P	If RACE equals 00, then INJURY SEVERITY must not equal 4.
7F2P	If HISPANIC ORIGIN equals 00, then INJURY SEVERITY must not equal 4.

Error ID	Error Message
7F3P	If RACE is not equal to 00, and HISPANIC ORIGIN is not equal to 00, then INJURY SEVERITY must equal 4.
7I0P	If COMPLIANCE WITH LICENSE RESTRICTIONS equals 1, and RELATED FACTORS-DRIVER LEVEL equals 019, then NON-CDL LICENSE STATUS must equal 6.
7K0P	If any VIOLATIONS CHARGED equals 71, then NON-CDL LICENSE STATUS must equal 0, 1, 2, or COMMERCIAL MOTOR VEHICLE LICENSE STATUS must equal 01, 02, 05.
7K1P	VIOLATIONS CHARGED code 99 must not be used more than once per driver.
7L0P	Any RELATED FACTORS-DRIVER LEVEL can be used only once per driver form.
7M0F	If any RELATED FACTORS-PERSON LEVEL (MV Occupant) equals <i>0</i> 26, <i>0</i> 28, <i>0</i> 29, <i>0</i> 33, <i>0</i> 37, <i>0</i> 40- <i>0</i> 42, <i>0</i> 44, <i>0</i> 45, <i>0</i> 47, <i>0</i> 51, <i>0</i> 52, <i>0</i> 57- <i>0</i> 70, <i>0</i> 72- <i>0</i> 78, or <i>0</i> 80- <i>0</i> 83, then PERSON TYPE must equal 03, SEATING POSITION must equal 11, and UNIT TYPE must equal 4.
7M1F	If PERSON TYPE equals 03, and SEATING POSITION is not equal to 11 or 13, and INJURY SEVERITY does not equal 4, then DRUG TEST STATUS must not equal 8, any DRUG SPECIMEN must not equal 96, and any DRUG TEST RESULTS must not equal 095.
7P0F	If PERSON TYPE equals 01, then AGE must not be less than 002.
7Q0F	If PERSON TYPE equals 09, then SEATING POSITION must equal 19, 98, or 99.
7R0P	If FATAL INJURY AT WORK equals 0, 1, 9, then INJURY SEVERITY must equal 4.
7V0F	If DEATH YEAR equals 9999, then CRASH MONTH must not be 01-11.
7W0P	If FATAL INJURY AT WORK equals 8, then INJURY SEVERITY must not equal 4.
7Z0F	If any SEQUENCE OF EVENTS equals 05, 06, then at least one occupant of this vehicle (PERSON TYPES 01, 02, 09) must have INJURY SEVERITY equal to 1-5, or blank.

Error ID	Error Message
840P	If any RELATED FACTORS-CRASH LEVEL equals 000 or 999, then only that one code and no other must be coded.
870P	A RELATED FACTORS-CRASH LEVEL 0 01- 0 07, 0 12- 0 28 can be used only once per crash.
880F	If RELATED FACTORS-CRASH LEVEL equals <i>0</i> 16, then there must be a Person Level (Not a MV Occupant) form with PERSON TYPE equal to 04- <i>0</i> 7, <i>11</i> , <i>12</i> , <i>13</i> , <i>or</i> 19.
881P	If RELATED FACTOR - CRASH LEVEL equals 024, then RELATION TO TRAFFICWAY must not equal 01 or 11.
890F	If RELATED FACTORS-CRASH LEVEL equals <i>0</i> 15, then there must be a Person Level (Not a MV Occupant) form with PERSON TYPE equal to 04- <i>0</i> 7, 10- <i>1</i> 3, <i>or</i> 19.

Error ID	Error Message
8D0P	If SPECIAL USE equals 08, then vPIC BODY CLASS should equal 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 011 (Truck), 060 (Pickup), or 119 (Sport Utility Truck (SUT)), or FINAL STAGE BODY CLASS should equal vPIC BODY CLASS should equal 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 011 (Truck), 060 (Pickup), or 119 (Sport Utility Truck (SUT)), and POWER UNIT GVWR_FROM and POWER UNIT GVWR_TO should be in 11-12.
8I0P	If NON-CDL LICENSE STATUS equals 0-4, 9, then RELATED FACTORS-DRIVER LEVEL must not equal <i>0</i> 19.
8J0P	If NON-CDL LICENSE TYPE equals 0, then NON-CDL LICENSE STATUS must equal 0.
8J1P	If NON-CDL LICENSE STATUS equals 0, then NON-CDL LICENSE TYPE must equal 0.
8J2P	If RELATED FACTORS-DRIVER LEVEL equals 073, 074, then COMPLIANCE WITH LICENSE RESTRICTIONS must equal 2.
8K0P	If VIOLATIONS CHARGED equals 07, 08, then HIT-AND-RUN must not equal 0.
8L0P	If LICENSE COMPLIANCE WITH CLASS OF VEHICLE equals 0-2, 9, then RELATED FACTORS-DRIVER LEVEL must not equal θ 19.
8L8Q	If AREAS OF IMPACT (THIS VEHICLE) equals 18, 19, or 20 in the CRASH EVENTS, then the corresponding event in that row must not equal 12 or 55.
8L8R	If the CRASH EVENTS event equals 54, then AREAS OF IMPACT (THIS VEHICLE) must equal 18, 19, or 20 in that row.
8L8S	If AREAS OF IMPACT (THIS VEHICLE) equals 18, 19, or 20 in the CRASH EVENTS and the corresponding event in that row equals 14, 45 or 54, then RELATED FACTORS-CRASH LEVEL must equal 014.
8L8T	If RELATED FACTORS-CRASH LEVEL equals 014, then there must exist at least one event in the CRASH EVENTS where AREAS OF IMPACT (THIS VEHICLE or OTHER VEHICLE) equals 18, 19, or 20 and the corresponding event in that row equals 14, 45 or 54.
8L8U	If AREAS OF IMPACT (THIS VEHICLE) equals 18, 19, or 20 in the CRASH EVENTS and the corresponding event in that row equals 08, 09, 15, 49, then RELATED FACTORS-CRASH LEVEL must equal <i>0</i> 15.
8L8V	If RELATED FACTORS-CRASH LEVEL equals 015, then there must exist at least one event in the CRASH EVENTS where AREAS OF IMPACT (THIS VEHICLE) equals 18, 19, or 20, and the corresponding event in that row equals 08-10, 15, 18, 49, or 91.
8L8W	If SEQUENCE OF EVENTS is not equal to 45, then AREAS OF IMPACT (OTHER VEHICLE) should not equal 18 or 19.
8L8X	If AREAS OF IMPACT (THIS VEHICLE) equals 18, then there should be a previous event involving that vehicle where the CRASH EVENTS event equals 60, 61, 62, or 72.
8L8Y	If SEQUENCE OF EVENTS is equal to 45 (Working Motor Vehicle), then AREAS OF IMPACT (THIS VEHICLE) and AREAS OF IMPACT (OTHER VEHICLE) should not both equal 18 or 19 in that same event row.

Error ID	Error Message
8L9P	If vPIC BODY CLASS does not equal 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring / Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 Off-road Vehicle - Dirt Bike / Off-Road), 085 (Motorcycle - Dual Sport / Adventure / Supermoto / On/Off-Road), 086 (Off-road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small / Minibike), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 097 (Off-road Vehicle - Snowmobile), 098 (Motorcycle - Street), 104 (Motorcycle - Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motocross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle), and the CRASH EVENTS event equals 54, and the corresponding AREAS OF IMPACT (THIS VEHICLE) equals 19 or 20 in that row, then there should be a previous event with CRASH EVENTS event equal to 18, 73, 91, or 98 involving that vehicle.
8M0F	If PERSON TYPE equals 04, then RELATED FACTORS-PERSON LEVEL (NOT A MV OCCUPANT) must not equal 013, 053, 054, 055, 090, 094-097, or 101.
8P0P	If PERSON TYPE equals 01, and AGE is less than 008, then vPIC BODY CLASS must equal 4 (Low Speed Vehicle (LSV) / Neighborhood Electric Vehicle (NEV)), 12 (Motorcycle - Scooter), 87 (Motorcycle - Small / Minibike), 88 (Off-road Vehicle - Go Kart), 97 (Off-road Vehicle - Snowmobile), 069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)) and 105 (Off-road Vehicle - Recreational Off-Road Vehicle (ROV)), 124 (Off-road Vehicle - Golf Cart), 125 (Motorcycle - Unknown Body Type), 997 (Other), 998 (Not Reported), or 999 (Unknown).
8Q0F	If PERSON TYPE equals 11, 12, or 13 then RELATED FACTORS-PERSON (NOT A MV OCCUPANT) LEVEL must not equal 009, 090, or 094-097.
8T0F	If NON-MOTORIST SAFETY EQUIPMENT Subfield 1 Non-Motorist Helmet Use equals 2, then PERSON TYPE should equal 06, 07, 11, 12, or 13.
8V0P	If DEATH YEAR equals 9999, then DEATH MONTH and DEATH DAY must equal 99.
8Z0F	If any SEQUENCE OF EVENTS equals 15, then at least one Person Level (Not a MV Occupant) form must have a PERSON TYPE code of 11, 12, or 13.

Error	Error Message
ID	
900P	If VEHICLE IDENTIFICATION NUMBER (VIN) does not equal 0s, 8s or 9s, and VEHICLE MODEL YEAR is a valid year and greater than or equal to 1980 and VEHICLE MODEL YEAR
	equals, then the 10th digit of the valid VEHICLE IDENTIFICATION NUMBER (VIN) should equal (contact NHTSA Headquarters for VIN Assistance).
902P	If VEHICLE MODEL YEAR > 1980, VEHICLE MODEL YEAR is not equal to 9998 or 9999, and VEHICLE IDENTIFICATION NUMBER is not equal to all 0s, 8s, or 9s; then VEHICLE IDENTIFICATION NUMBER positions 1-8, 11-14 should equal A-H, J-N, P, R-Z, 0-9, or, *; VEHICLE IDENTIFICATION NUMBER position 9 should equal 0-9, X, or *; VEHICLE IDENTIFICATION NUMBER position 10 should equal A-H, J-N, P, R-T, V-Y, 1-9, or *; VEHICLE IDENTIFICATION NUMBER positions 15-17 should equal 0-9 or *.

Error ID	Error Message
903P	If VEHICLE MODEL YEAR > 1980, VEHICLE MODEL YEAR is not equal to 9998 or 9999, and VEHICLE IDENTIFICATION NUMBER is not equal to all 0s, 8s, or 9s, then VEHICLE IDENTIFICATION NUMBER positions 1-8, 11 should equal A-H, J-N, P, R-Z, or 0-9; VEHICLE IDENTIFICATION NUMBER position 9 should equal 0-9, or X; VEHICLE IDENTIFICATION NUMBER position 10 should equal A-H, J-N, P, R-T, V-Y, or 1-9; VEHICLE IDENTIFICATION NUMBER positions 12-14 should equal A-H, J-N, P, R-Z, 0-9 or *; VEHICLE IDENTIFICATION NUMBER positions 15-17 should equal 0-9 or *.
904P	If TRAILER VEHICLE IDENTIFICATION NUMBER is not equal to all 0s, 7s, 8s, or 9s, then TRAILER VEHICLE IDENTIFICATION NUMBER positions 1-8, 11-14 should equal A-H, J-N, P, R-Z, 0-9, or, *; TRAILER VEHICLE IDENTIFICATION NUMBER position 9 should equal 0-9, X, or *; TRAILER VEHICLE IDENTIFICATION NUMBER position 10 should equal A-H, J-N, P, R-T, V-Y, 1-9, or *; TRAILER VEHICLE IDENTIFICATION NUMBER positions 15-17 should equal 0-9 or *.
905P	If TRAILER VEHICLE IDENTIFICATION NUMBER is not equal to all 0s, 7s, 8s, or 9s, then TRAILER VEHICLE IDENTIFICATION NUMBER positions 1-8, 11 should equal A-H, J-N, P, R-Z, 0-9, or *; TRAILER VEHICLE IDENTIFICATION NUMBER position 9 should equal 0-9, X, or *; TRAILER VEHICLE IDENTIFICATION NUMBER position 10 should equal A-H, J-N, P, R-T, V-Y, 1-9, or *; TRAILER VEHICLE IDENTIFICATION NUMBER positions 12-14 should equal A-H, J-N, P, R-Z, 0-9, or *; TRAILER VEHICLE IDENTIFICATION NUMBER positions 15-17 should equal 0-9 or *.
907P	If VEHICLE IDENTIFICATION NUMBER (VIN) does not equal 0s, 8s, or 9s, then vPIC Body Class must not equal "Trailer" or "Incomplete - Trailer Chassis."
908P	If TRAILER VEHICLE IDENTIFICATION NUMBER (VIN) does not equal 0s, 7s, 8s, or 9s, then <i>the trailer VIN decode</i> VPIC Body Class must equal "Trailer" or "Incomplete - Trailer Chassis."
909P	If STATE or PSU_STATE is equal to GA, and any VEHICLE IDENTIFICATION NUMBER (VIN) does not equal 0s, 8s, or 9s, then VEHICLE IDENTIFICATION NUMBER (VIN) should be unique within a crash.
920P	If any one of the fields <i>NCSA</i> MAKE, <i>NCSA</i> MODEL, <i>NCSA</i> BODY TYPE, and <i>VEHICLE</i> MODEL YEAR, equals Not Reported [<i>NCSA</i> MAKE (97), <i>NCSA</i> MODEL (997), <i>NCSA</i> BODY TYPE (98), and <i>VEHICLE</i> MODEL YEAR (9998)], then the other three must also equal Not Reported.
921P	If <i>NCSA</i> MAKE is not 97, 98, 99, and equals, and <i>NCSA</i> MODEL equals, then <i>VEHICLE</i> MODEL YEAR must equal, or CRASH YEAR plus 1.
930P	If any one of the fields <i>NCSA</i> MAKE, <i>NCSA</i> MODEL, <i>NCSA</i> BODY TYPE, and <i>VEHICLE</i> MODEL YEAR, does not equal Not Reported [<i>NCSA</i> MAKE (97), <i>NCSA</i> MODEL (997), <i>NCSA</i> BODY TYPE (98), and <i>VEHICLE</i> MODEL YEAR (9998)], then the other three must also not be coded as Not Reported.
960P	If <i>NCSA</i> MAKE is not 98, 99, and equals, and <i>NCSA</i> MODEL equals, then <i>NCSA</i> BODY TYPE must equal (<i>NCSA</i> MAKE, <i>NCSA</i> MODEL, and <i>NCSA</i> BODY <i>TYPE</i> must be valid according to Vehicle Tables).

Error ID	Error Message
981P	If vPIC BODY CLASS equals 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport/Adventure/Supermoto/On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 097 (Off-road Vehicle - Snowmobile), 098 (Motorcycle - Street), 104 (Moped), 105 (Off-road Vehicle - Recreational Off-Road Vehicle (ROV)), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle), then HELMET USE Subfield 1 Helmet Use must equal 05, 16, 17, 19, 98, or 99.
982P	If vPIC BODY CLASS does not equal 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport/Adventure/Supermoto/On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 097 (Off-road Vehicle - Snowmobile), 098 (Motorcycle - Street), 100 (Motorcycle - Enclosed Three Wheeled / Enclosed Autocycle), 103 (Motorcycle - Unenclosed Three Wheeled / Open Autocycle), 104 (Moped), 105 (Off-road Vehicle - Recreational Off-Road Vehicle (ROV)), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 124 (Off-road Vehicle - Go Kart), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle), then HELMET USE Subfield 1 Helmet Use must equal 20 and HELMET USE Subfield 2 Any Indication of Mis-Use must equal 7.
990P	If any counter equals 99, then all counters must equal 99 and DATE OF <i>MOST RECENT</i> CRASH, SUSPENSION, CONVICTION and DATE OF <i>OLDEST</i> CRASH, SUSPENSION, CONVICTION must equal 9999 [year]/99 [month].
9A2P	If UNIT TYPE equals 2, 3, then REGISTERED VEHICLE OWNER must equal 6.
9A3P	If UNIT TYPE equals 2-4, then DRIVER PRESENCE must equal 0.
9A5P	If PERSON TYPE equals 03, then UNIT TYPE must equal 2-4.
9B3P	If UNDERRIDE/OVERRIDE equals 7, then there must be at least one vehicle with UNIT TYPE equal to 1.
9B4P	If UNDERRIDE/OVERRIDE equals 8, then there must at least one vehicle with UNIT TYPE equal 2-4.
9B5P	If UNIT TYPE equals 2, 3, then UNDERRIDE/OVERRIDE must equal 0.
9B7P	If UNIT TYPE equals 2-4, then PERSON TYPE of all occupants of this vehicle must equal 03.
9B9P	If any SEQUENCE OF EVENTS equals 55, then there must be at least one other vehicle with UNIT TYPE equal to 1.

Error ID	Error Message
9BAP	If MANNER OF COLLISION OF THE FIRST HARMFUL EVENT equals 07, and PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 10 or 11 for neither one of the vehicles involved in the FIRST HARMFUL EVENT, then CRASH TYPE should equal 44-49, 98, 99 for the vehicles involved in the FIRST HARMFUL EVENT.
9ВСР	If MANNER OF COLLISION OF THE FIRST HARMFUL EVENT equals 08, and PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 10 or 11 for neither one of the vehicles involved in the FIRST HARMFUL EVENT, then CRASH TYPE should equal 64-67, 98, 99 for the vehicles involved in the FIRST HARMFUL EVENT.
9BDP	If MANNER OF COLLISION OF THE FIRST HARMFUL EVENT equals 01, then CRASH TYPE should not equal 44-49 for the vehicles involved in the FIRST HARMFUL EVENT.
9C0P	If FIRST HARMFUL EVENT equals 55, then there must be at least one vehicle with UNIT TYPE equal to 1.
9C1P	If UNIT TYPE equals 4, then RELATED FACTORS-VEHICLE LEVEL must not equal 039.
9C4P	If UNIT TYPE equals 1, and DRIVER PRESENCE equals 0 or 9, then DRIVER MANEUVERED TO AVOID must only equal 95.
9C5P	If DRIVER MANEUVERED TO AVOID equals 95, then DRIVER PRESENCE must equal 0 or 9.
9C6P	If UNIT TYPE equals 2-4, then RELATED FACTORS-DRIVER LEVEL must equal 000.
9J0P	If LICENSE COMPLIANCE WITH CLASS OF VEHICLE equals 0-1, then COMPLIANCE WITH LICENSE RESTRICTIONS must not equal 1-3, 9.
9K0P	If HM2 equals 2, then REGISTRATION STATE must not equal 00.
9L0F	If PERSON TYPE equals 01, and RELATED FACTORS-DRIVER LEVEL equals θ 12, then SEX must equal 2, and AGE must be greater than θ 12.
9L0P	If any RELATED FACTORS-DRIVER LEVEL equals 010, then ATTEMPTED AVOIDANCE MANEUVER must equal 01.
9M0F	If PERSON TYPE equals 05, then RELATED FACTORS-PERSON LEVEL (Not a MV Occupant) must not equal 013, 021, 026, 040, 042, 051, 052, 057, 068-070, 073-083, or 100.
9V0P	If DEATH MONTH equals 99, then DEATH DAY must equal 99.

A Series

Error ID	Error Message
A010	If STATE equals 02, and LIGHT CONDITION equals 4, then CRASH TIME should equal 0300-1000, 9999.
A020	If STATE equals 02, and LIGHT CONDITION equals 5, then CRASH TIME should equal 1500-2359, 9999.
A030	If CRASH MONTH equals 05-09, then ATMOSPHERIC CONDITIONS should not equal 03, 04, 11, 12.
A040	If CRASH MONTH equals 05-09, then ROADWAY SURFACE CONDITIONS should not equal 03, 04, 10.
A041	If CRASH MONTH equals 05-09, then SEQUENCE OF EVENTS, FIRST HARMFUL EVENT, MOST HARMFUL EVENT should not equal 48.
A042	If CRASH EVENTS-SEQUENCE OF EVENTS equals 14, 17, 19-21, 23-26, 30-35, 38-43, 46, 52, 53, 57-59, 65, or 93 for a vehicle, then at least one previous CRASH EVENTS-SEQUENCE OF EVENTS should equal 63, 64, 71, or 79 for this vehicle.
A043	SEQUENCE OF EVENTS for the last event in the CRASH EVENTS TABLE must not equal 60-71, 79.
A044	If CRASH EVENTS TABLE - SEQUENCE OF EVENT equals 45, then the UNIT TYPE for VEHICLE NUMBER (OTHER VEHICLE) must equal 4.
A045	If CRASH EVENTS TABLE - SEQUENCE OF EVENT equals 14, then the UNIT TYPE for VEHICLE NUMBER (OTHER VEHICLE) must equal 2 or 3.
A046	The UNIT TYPE for VEHICLE NUMBER (THIS VEHICLE) in the CRASH EVENTS must equal 1.
A047	If CRASH EVENTS TABLE - VEHICLE NUMBER (OTHER VEHICLE) UNIT TYPE is 1, then SEQUENCE OF EVENT must equal 12, 54, or 55 for that row.
A050	If CRASH TIME equals 0900-1600, then LIGHT CONDITION should not equal 2-6.
A060	If CRASH TIME equals 2300-0400, then LIGHT CONDITION should not equal 1, 4, 5, 9.
A070	If NOTIFICATION TIME EMS is not 8888, 9998, or 9999, then NOTIFICATION TIME EMS should not be more than 120 minutes later than CRASH TIME.
A080	If DRIVER PRESENCE equals 0, and FIRST HARMFUL EVENT equals 12, and NUMBER OF VEHICLE FORMS SUBMITTED equals 002, then one RELATED FACTORS-DRIVER LEVEL should equal 020 or 054.
A090	If NUMBER OF VEHICLE FORMS SUBMITTED is greater than 001, then there should be at least one vehicle with TRAVEL SPEED of 001-151, 997-999, or blanks.
A091	If NUMBER OF VEHICLE FORMS SUBMITTED is greater than one, and CRITICAL EVENT – PRECRASH (EVENT) equals 70-73, then TRAFFICWAY DESCRIPTION should equal 0 for at least one other vehicle in the crash.
A100	If FIRST HARMFUL EVENT is not equal to 02, 04, 05, 10, 16, then there should be one vehicle with TRAVEL SPEED of 001-151, 997-999, or blanks.

Error ID	Error Message
A110	If FIRST HARMFUL EVENT equals 10, then LAND USE AND FUNCTIONAL SYSTEM (b) should not equal 01-03.
A11A	If FUNCTIONAL SYSTEM (b) equals 01, then OWNERSHIP must equal 01 or 31.
A12A	If either FUNCTIONAL SYSTEM (b) or OWNERSHIP equals 96, then both must equal 96.
A131	If RELATION TO JUNCTION (b) equals 02, 04, 06, 16, 17, or 20, then RELATION TO TRAFFICWAY must equal 01.
A13A	If LAND USE (a) equals 6, then FUNCTIONAL SYSTEM (b) must equal 96.
A141	If RELATION TO JUNCTION (b) equals 18, then RELATION TO TRAFFICWAY must equal 01 or 11.
A14A	If FUNCTIONAL SYSTEM (b) equals 96, then LAND USE a must equal 6.
A150	If LAND USE AND FUNCTIONAL SYSTEM (b) equals 01, 02, and RELATION TO JUNCTION (a) equals 0, then RELATION TO JUNCTION should not equal 02-04, 06, 08.
A15A	If FUNCTIONAL SYSTEM (b) equals 99, then LAND USE (a) should equal 9, OWNERSHIP should equal 99, and NATIONAL HIGHWAY SYSTEM should equal 9.
A160	If LAND USE AND FUNCTIONAL SYSTEM (b) equals 01-06, then ROADWAY SURFACE TYPE should equal 1, 2, 8 or 9 for at least one vehicle.
A16A	If FUNCTIONAL SYSTEM equals 1, and STATE does not equal 02, and RELATION TO JUNCTION equals 01, 07, 18, or 19, then TRAFFICWAY DESCRIPTION should equal 2 or 3.
A170	If ROADWAY SURFACE TYPE equals 3-5 for every vehicle, then LAND USE AND FUNCTIONAL SYSTEM (b) should not equal 01-06.
A180	If LAND USE AND FUNCTIONAL SYSTEM (b) equals 01, then SPECIAL JURISDICTION should not equal 1-5, 8, 9.
A190	If LAND USE AND FUNCTIONAL SYSTEM (b) equals 02, then SPECIAL JURISDICTION should not equal 4.
A1A0	If ROADWAY SURFACE CONDITIONS equals 01 for a vehicle involved in the FIRST HARMFUL EVENT, then ATMOSPHERIC CONDITIONS should not equal 02-04, 11, 12.
A1B0	If TRAFFIC CONTROL DEVICE equals 20, 21 for a vehicle involved in the FIRST HARMFUL EVENT, then RELATION TO JUNCTION (b) should not equal 01, 18.
A1C0	If ROADWAY SURFACE CONDITIONS equals 01, then DRIVER'S VISION OBSCURED BY should not equal 08.
A1E0	If RELATION TO JUNCTION (b) equals 19, then RELATION TO TRAFFICWAY must not equal 01, 11, 98, <i>or</i> 99.
A200	If RELATION TO JUNCTION (b) equals 07, then LAND USE AND FUNCTIONAL SYSTEM (b) should not equal 06, 07 or 96.
A210	If LAND USE AND FUNCTIONAL SYSTEM (b) equals 01, 02, and RELATION TO JUNCTION (a) equals 0, then TRAFFIC CONTROL DEVICE should not equal 01-04, 07, 20, 23, 40, 50, 65.
A220	If LAND USE AND FUNCTIONAL SYSTEM (b) equals 01, 02, and RELATION TO JUNCTION (a) equals 0, then SPEED LIMIT should not equal 05-40 for any vehicle.

Error ID	Error Message
A230	If SEQUENCE OF EVENTS equals 10, then LAND USE AND FUNCTIONAL SYSTEM (b) should not equal 01-03.
A240	If LAND USE AND FUNCTIONAL SYSTEM (b) equals 01, and RELATION TO JUNCTION (a) equals 0, then TRAVEL SPEED should not equal 005-040 for any vehicle.
A250	If LAND USE AND FUNCTIONAL SYSTEM (b) equals 01-03, and RELATION TO JUNCTION (a) equals 1, and RELATION TO JUNCTION (b) does not equal 03, 05, 20, then TOTAL LANES IN ROADWAY should not equal 1 for the vehicles involved in the FIRST HARMFUL EVENT.
A270	If any VIOLATIONS CHARGED equals 31 or 33, then TRAFFIC CONTROL DEVICE should equal 01-03 for this vehicle.
A271	If VIOLATIONS CHARGED equals 32 or 34, then TRAFFIC CONTROL DEVICE should equal 04, for this vehicle.
A272	If VIOLATIONS CHARGED equals 35, then TRAFFIC CONTROL DEVICE should equal 01-09, for this vehicle.
A273	If VIOLATIONS CHARGED equals 36, then TRAFFIC CONTROL DEVICE should equal 65, for this vehicle.
A274	If VIOLATIONS CHARGED equals 37, then TRAFFIC CONTROL DEVICE should equal 20, for this vehicle.
A275	If VIOLATIONS CHARGED equals 38, then TRAFFIC CONTROL DEVICE should equal 21, for this vehicle.
A276	If VIOLATIONS CHARGED equals 39, then TRAFFIC CONTROL DEVICE must not equal 00, for this vehicle.
A280	If ROUTE SIGNING equals 1, then SPECIAL JURISDICTION should not equal 1-5, 8, 9.
A290	If ROUTE SIGNING equals 1 and RELATION TO JUNCTION (a) equals 0, then RELATION TO JUNCTION (b) should not equal 02-04, 06, 08, 16.
A291	If RELATION TO JUNCTION (b) equals 07, then ROUTE SIGNING should not equal 5, 6.
A292	If any TRAFFICWAY DESCRIPTION, TOTAL LANES IN ROADWAY, ROADWAY ALIGNMENT, ROADWAY GRADE, ROADWAY SURFACE TYPE, or ROADWAY SURFACE CONDITIONS equals 0, 00, then all must equal 0, 00, and SPEED LIMIT must equal 00 for this vehicle.
A293	If WORK ZONE equals 1-3, and RELATION TO JUNCTION (b) equals 02, 03, then TRAFFIC CONTROL DEVICE should equal 01-03, 20, 40, 97 or 98 for the vehicle(s) involved in the FIRST HARMFUL EVENT.
A294	If WORK ZONE equals 1-3, and RELATION TO JUNCTION (b) equals 01, 04, 05, 08, 17-19, then TRAFFIC CONTROL DEVICE should equal 00, 21, 28, 40, 50, 97 or 98 for the vehicle(s) involved in the FIRST HARMFUL EVENT.
A300	If ROUTE SIGNING equals 1, then TRAFFICWAY DESCRIPTION should equal 2, 3, 6 for at least one vehicle.

Error ID	Error Message
A310	If ROUTE SIGNING equals 1, and RELATION TO JUNCTION (a) equals 0, then TOTAL LANES IN ROADWAY should not equal 1 for any vehicle.
A320	If ROUTE SIGNING equals 1 and RELATION TO JUNCTION (a) equals 0, then SPEED LIMIT should not equal 05-40 for any vehicle.
A330	If ROUTE SIGNING equals 1, 2, then ROADWAY SURFACE TYPE should equal 1, 2, 8 for at least one vehicle.
A350	If ROUTE SIGNING equals 1, then FIRST HARMFUL EVENT should not equal 10.
A360	If RELATION TO JUNCTION (b) equals 07, then ROUTE SIGNING should not equal 4-8.
A370	If FIRST HARMFUL EVENT equals 99, then MANNER OF COLLISION OF THE FIRST HARMFUL EVENT should not equal 00, 01-11.
A380	If FIRST HARMFUL EVENT equals 01 and this vehicle is involved in the FIRST HARMFUL EVENT and vPIC BODY CLASS does not equal 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring / Sport Touring), 082 (Motorcycle - Cruiser), 084 Off-road Vehicle - Dirt Bike / Off-Road), 085 (Motorcycle - Dual Sport / Adventure / Supermoto / On/Off-Road), 086 (Off-road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small / Minibike), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 104 (Motorcycle - Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motocross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle), for this vehicle, and RELATION TO TRAFFICWAY equals, then LOCATION OF ROLLOVER should equal respectively.
A390	If FIRST HARMFUL EVENT equals 17, 19-21, 23-26, 30-35, 38-43, 52, 53, 57, 58 , 93, then RELATION TO TRAFFICWAY should not equal 01, 02, 07, 11.
A3C0	If FIRST HARMFUL EVENT equals 02-07, 16, 44, 51, 72, then CRASH TYPE must equal 00 for the vehicle involved in the FIRST HARMFUL EVENT.
A3D0	If FIRST HARMFUL EVENT equals 01-07, 16, 44, 51, 72, then CRASH TYPE must not equal 20-91.
A3E0	If CRASH TYPE equals 13, then FIRST HARMFUL EVENT must equal 08, 09, 11, 15 or 49.
A3G0	If INTERSTATE HIGHWAY equals 1, RELATION TO JUNCTION (a) equals 1, and RELATION TO JUNCTION (b) is not equal to 03 or 05 or 20, then TOTAL LANES IN ROADWAY should not equal 1 for at least one vehicle involved in the FIRST HARMFUL EVENT.
АЗНО	If INTERSTATE HIGHWAY equals 1, RELATION TO JUNCTION (a) equals 1, and RELATION TO JUNCTION (b) is not equal to 03 or 05 or 20, then TRAFFICWAY DESCRIPTION should not equal 4 for at least one vehicle involved in the FIRST HARMFUL EVENT.
A3I0	If INTERSTATE HIGHWAY equals 1, then RELATION TO JUNCTION (b) should not equal 02, 04, 06, 08, or 16.

Error ID	Error Message
A3J0	If INTERSTATE HIGHWAY equals 1, RELATION TO JUNCTION (a) equals 1, and RELATION TO JUNCTION (b) is not equal to 03 or 05 or 20, then SPEED LIMIT should not equal 01-40 for at least one vehicle involved in the FIRST HARMFUL EVENT.
A3K0	If FIRST HARMFUL EVENT equals 10, then INTERSTATE HIGHWAY should not equal 1.
A41A	If FIRST HARMFUL EVENT equals 02, 04, 07, 16, 44 or 54, then CRITICAL EVENT - PRECRASH (EVENT) should equal 98 for the vehicles involved in the FIRST HARMFUL EVENT.
A420	If FIRST HARMFUL EVENT equals 10, then RELATION TO JUNCTION (b) should equal 06.
A421	If FIRST HARMFUL EVENT equals 20 , 21 , 23 , 24, 25, 26 , 30, 32 , 33, 34, 35, 40, 46, 52, 53 , 57, 59, then RELATION TO TRAFFICWAY should equal 03, 04, 08, 10, or 12.
A430	If PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 10-11 for a vehicle involved in the FIRST HARMFUL EVENT, then RELATION TO JUNCTION (b) should not equal 01, 18.
A440	If RELATION TO JUNCTION (b) equals 06, then TRAFFIC CONTROL DEVICE should equal 65 for any vehicle involved in the FIRST HARMFUL EVENT.
A470	If WORK ZONE equals 0, and TRAFFICWAY DESCRIPTION equals 1-3, 5, then TOTAL LANES IN ROADWAY should not equal 1.
A480	If CRASH TYPE equals 00, then FIRST HARMFUL EVENT must equal 02-07, 16, 44, 51, 72.
A481	If TRAFFICWAY DESCRIPTION equals 6, and RELATION TO JUNCTION (b) does not equal 02, 03, then TOTAL LANES IN ROADWAY should equal 1, 2, 8, 9.
A482	If TRAFFICWAY DESCRIPTION equals 4 or 6, then TOTAL LANES IN ROADWAY should not equal 5-7.
A490	If TRAFFICWAY DESCRIPTION equals 2, 3, 5, then ROADWAY SURFACE TYPE should not equal 4, 5, 7.
A491	If TRAFFICWAY DESCRIPTION equals 2 or 3, then TOTAL LANES IN ROADWAY should not equal 7.
A492	If TRAFFICWAY DESCRIPTION equals 2, 3, 5, 6, then SPEED LIMIT must not equal 00.
A493	If TRAFFICWAY DESCRIPTION equals 2, 3, 5, then SPEED LIMIT should be greater than 15.
A494	If TRAFFICWAY DESCRIPTION equals 6, then ROADWAY GRADE should not equal 3, 4.
A495	If TRAFFICWAY DESCRIPTION equals 0, then the first event in SEQUENCE OF EVENTS for this vehicle should not equal 63, 64, 69 or 71.
A496	If <i>RELATION TO JUNCTION</i> (b) does not equal 02 or 03, and TRAFFICWAY DESCRIPTION equals 5, then TOTAL LANES IN ROADWAY should not equal 1, 2, 4, or 6.
A4A0	If CRASH TYPE equals 01-16, then FIRST HARMFUL EVENT must not equal 12.
A4B0	If CRASH TYPE equals 01-10 or 14, then RELATION TO TRAFFICWAY must not equal 01, 02, 07 or 11. If the FHE occurs on a different road than the road it departed, see 98 (Other Crash Type).
A4B2	If CRASH TYPE equals 11, then RELATION TO TRAFFICWAY must not equal 01, 03, 04, 05, 08, 10, 11, or 12.

Error ID	Error Message
A4B3	If CRASH TYPE equals 12 or 13, then RELATION TO TRAFFICWAY must not equal 03, 05, 08, 10, or 12.
A4B4	If CRASH TYPE equals 12 (Stationary Object on Road) or 13 (Pedestrian/Animal on Road), then RELATION TO TRAFFICWAY should not equal 04 (On Roadside) unless the FIRST HARMFUL EVENT occurs in a bicycle lane.
A4BP	If FIRST HARMFUL EVENT equals 54 or 55, then CRASH TYPE must equal 98 for the vehicles involved in the FIRST HARMFUL EVENT.
A4C0	If RELATION TO JUNCTION (b) equals 04, then at least one PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) for the vehicles involved in the FIRST HARMFUL EVENT should equal 10, 11, 13 or 98.
A4D0	If PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 14, then ROADWAY ALIGNMENT must equal 2-4.
A4D1	If PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 01, then ROADWAY ALIGNMENT should not equal 2-4.
A4DP	If CRASH TYPE equals 20-91, then FIRST HARMFUL EVENT must equal 12.
A4EP	If CRASH TYPE equals 11, then FIRST HARMFUL EVENT must equal 14.
A500	If TOTAL LANES IN ROADWAY equals 3-7, then ROADWAY SURFACE TYPE should not equal 4, 5, 7.
A510	If any ATMOSPHERIC CONDITIONS equals 02-04, 11, 12, then ROADWAY SURFACE CONDITIONS should not equal 01, 07, 08, 99 for any vehicle.
A520	If SEQUENCE OF EVENTS equals 10, then TRAFFIC CONTROL DEVICE should not equal 01-09, 20-29, 40-50, 98.
A521	If any SEQUENCE OF EVENTS equals 46, then SPEED LIMIT should equal 05-55, 98, or 99 for this vehicle.
A540	If NOTIFICATION TIME EMS is not 8888, 9998, or 9999, and ARRIVAL TIME EMS is not 8888, 9997, 9998, 9999, then ARRIVAL TIME EMS should not be more than 120 minutes later than NOTIFICATION TIME EMS.
A550	If ARRIVAL TIME EMS is not 8888, 9997, 9998, or 9999, and EMS TIME AT HOSPITAL is not 8888, 9997, 9998, then EMS TIME AT HOSPITAL should not be more than 60 minutes later than ARRIVAL TIME EMS.
A551	If EMS TIME AT HOSPITAL equals 8888, 9997, 9998, then TRANSPORTED TO FIRST MEDICAL FACILITY BY should not equal 1, 3, 5 for any person.
A560	If NOTIFICATION TIME EMS is not 8888, 9998, or 9999, and EMS TIME AT HOSPITAL is not 8888, 9997, 9998, 9999, then EMS TIME AT HOSPITAL should not be more than 180 minutes later than NOTIFICATION TIME EMS.
A60F	If FIRST HARMFUL EVENT equals 14, then CRASH TYPE should equal 01-11, 14, 15, 92, 98, 99.
A610	If RELATION TO TRAFFICWAY equals 01, and RELATION TO JUNCTION (b) equals 05, then TRAFFICWAY DESCRIPTION should equal 6 for at least one vehicle involved in the FIRST HARMFUL EVENT.
A611	If TRAFFICWAY DESCRIPTION equals 6 for at least one vehicle involved in the FIRST HARMFUL EVENT, then RELATION TO JUNCTION (b) should equal 02, 03, 05, 17-20.

Error ID	Error Message
A612	If PERSON TYPE equals 04, and VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST equals, then at least one SEQUENCE OF EVENTS must equal 10, 49, or 74 for that vehicle number in the CRASH EVENTS table.
A613	If PERSON TYPE equals 05, and VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST equals, then at least one SEQUENCE OF EVENTS must equal 08 for that vehicle number in the CRASH EVENTS table.
A614	If PERSON TYPE equals 06, and VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST equals, then at least one SEQUENCE OF EVENTS must equal 09 for that vehicle number in the CRASH EVENTS table.
A615	If PERSON TYPE equals 07, and VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST equals, then at least one SEQUENCE OF EVENTS must equal 09 for that vehicle number in the CRASH EVENTS table.
A616	If PERSON TYPE equals 11, 12, or 13, and VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST equals, then at least one SEQUENCE OF EVENTS must equal 15 for that vehicle number in the CRASH EVENTS table.
A617	If PERSON TYPE equals 10, and VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST equals, then at least one SEQUENCE OF EVENTS must equal 08 for that vehicle number in the CRASH EVENTS table.
A618	If PERSON TYPE equals 19, and VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST equals, then at least one SEQUENCE OF EVENTS must equal 99 for that vehicle number in the CRASH EVENTS table.
A619	If the total count of persons with PERSON TYPE equal to 05 that have the same VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is, then the number of events equal to 08 for that vehicle in the CRASH EVENTS table should equal
A61A	If the total count of PERSON TYPE is equal to <i>11</i> , <i>12</i> , <i>or 13</i> for the vehicle in VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is, then the number of events equal to 15 in the CRASH EVENTS table should equal for that vehicle.
A61B	If the total count of PERSON TYPE is equal to 10 for the vehicle in VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is, then the number of events equal to 08 in the CRASH EVENTS table should equal for that vehicle.
A61F	If FIRST HARMFUL EVENT equals 08, 09, 11, 15, 49, and RELATION TO TRAFFICWAY equals 01, 02, 07, 11, and PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) is not equal to 00, 13 for the vehicle involved in the FIRST HARMFUL EVENT, then CRASH TYPE should equal 13 for the vehicle involved in the FIRST HARMFUL EVENT.
A61G	If the FIRST HARMFUL EVENT equals 08, and PERSON TYPE equals 05, and NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 21, 22, 24, 25, 28, and the VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is involved in the FIRST HARMFUL EVENT, then CRASH TYPE should not equal 13 for this vehicle.

Error ID	Error Message
A61H	If the FIRST HARMFUL EVENT equals 09, and PERSON TYPE equals 06, 07, and NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 21, 22, 24, 25, 28, and the VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is involved in the FIRST HARMFUL EVENT, then CRASH TYPE should not equal 13 for this vehicle.
A61J	If the FIRST HARMFUL EVENT equals 15, and PERSON TYPE equals 11, 12, or 13, and NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 21, 22, 24, 25, 28, and the VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is involved in the FIRST HARMFUL EVENT, then CRASH TYPE should not equal 13 for this vehicle.
A61K	If the FIRST HARMFUL EVENT equals 49, and PERSON TYPE equals 04, and NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 21, 22, 24, 25, 28, and the VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is involved in the FIRST HARMFUL EVENT, then CRASH TYPE should not equal 13 for this vehicle.
A620	If CRASH TYPE equals 06-10, and TRAFFICWAY DESCRIPTION equals 3, then RELATION TO TRAFFICWAY should equal 03 or 12.
A62F	If FIRST HARMFUL EVENT equals 18, 43, 73, 91, or 93, and RELATION TO TRAFFICWAY equals 01, 02, or 11, then CRASH TYPE should equal 12 or 15 for the vehicle involved in the FIRST HARMFUL EVENT.
A62G	If FIRST HARMFUL EVENT equals 98 and RELATION TO TRAFFICWAY equals 01, 02, or 11, then CRASH TYPE must equal 16 for the vehicle involved in the FIRST HARMFUL EVENT.
A63F	If FIRST HARMFUL EVENT equals 01, then CRASH TYPE should equal 01-10, 98, 99 for the vehicle involved in the FIRST HARMFUL EVENT.
A65F	If FIRST HARMFUL EVENT equals 14, and RELATED FACTORS - PERSON (MV OCCUPANT) LEVEL equals 032 or 089 for an occupant of the parked vehicle involved in the FIRST HARMFUL EVENT, then CRASH TYPE should equal 15, 92 or 98 for the in-transport vehicle involved in the FIRST HARMFUL EVENT.
A66F	If FIRST HARMFUL EVENT equals 14 and CRASH TYPE equals 01-10 or 14, then RELATED FACTORS - PERSON (MV OCCUPANT) LEVEL must not equal 032 or 089 for any occupant of the parked vehicle involved in the FIRST HARMFUL EVENT.
A700	If SPEED LIMIT is greater than 65 for every vehicle and STATE NUMBER does not equal 48, then ROUTE SIGNING should equal 1-4.
A720	If LAND USE AND FUNCTIONAL SYSTEM (b) equals 01, 02, then TRAFFICWAY DESCRIPTION should equal 2, 3, 6 for at least one vehicle.
A770	If FIRST HARMFUL EVENT equals 46, then TRAFFIC CONTROL DEVICE should equal 01-04, 65 for the vehicle involved in the FIRST HARMFUL EVENT.
A780	If FIRST HARMFUL EVENT equals 46, then TRAFFIC CONTROL DEVICE should not equal 00 for the vehicle involved in the FIRST HARMFUL EVENT.
A790	If FIRST HARMFUL EVENT equals 46, then RELATION TO JUNCTION (b) should not equal 01, 07.
A800	If FIRST HARMFUL EVENT equals 46, then RELATION TO TRAFFICWAY should not equal 01, 02, 05, 07, 11.

Error ID	Error Message
A801	If FIRST HARMFUL EVENT equals 12, then RELATION TO TRAFFICWAY must not equal 5.
A810	If FIRST HARMFUL EVENT equals 46, and RELATION TO JUNCTION (a) equals 1, and RELATION TO JUNCTION (b) does not equal 02, 03, 05, then LAND USE AND FUNCTIONAL SYSTEM (b) should not equal 01.
A820	If FIRST HARMFUL EVENT equals 46, and RELATION TO JUNCTION (a) equals 1 and RELATION TO JUNCTION (b) does not equal 02, 03, 05, then ROUTE SIGNING should not equal 1.
A840	If ROUTE SIGNING equals 7, then LAND USE AND FUNCTIONAL SYSTEM (b) should equal 01-03.
A850	If LAND USE AND FUNCTIONAL SYSTEM (b) equals 02, and ROUTE SIGNING equals 2, then NATIONAL HIGHWAY SYSTEM should equal 1.
A860	If NATIONAL HIGHWAY SYSTEM equals 1, then LAND USE AND FUNCTIONAL SYSTEM (b) should equal 01-03.
A881	If RELATION TO TRAFFICWAY equals 11, then TRAFFICWAY DESCRIPTION should equal 5 for at least one vehicle.
A882	If RELATION TO TRAFFICWAY equals 07, then ROUTE SIGNING should not equal 1.
A883	If RELATION TO TRAFFICWAY equals 07, then LAND USE AND FUNCTIONAL SYSTEM (b) should not equal 01.
A890	If RELATION TO JUNCTION (b) equals 01, then TRAFFIC CONTROL DEVICE should not equal 01-04, 20, or 21 for any vehicle involved in the FIRST HARMFUL EVENT.
A891	If RELATION TO JUNCTION (b) equals 98 or 99, then TRAFFIC CONTROL DEVICE should not equal 01, 02, 03, 20, 21, or 65 for a vehicle involved in the FIRST HARMFUL EVENT.
A900	If SPEED LIMIT equals 60 <i>or</i> 65 for every vehicle and STATE NUMBER does not equal <i>20 or</i> 48, then LAND USE AND FUNCTIONAL SYSTEM (b) should not equal 04-07 or 96.
A910	If LAND USE AND FUNCTION SYSTEM (b) equals 04-07 or 96, then NATIONAL HIGHWAY SYSTEM should equal 0, 9.
A920	If NATIONAL HIGHWAY SYSTEM equals 0, 9, then LAND USE AND FUNCTIONAL SYSTEM (b) should not equal 02, and ROUTE SIGNING should not equal 2.
A930	If INTERSTATE HIGHWAY equals 1, and RELATION TO JUNCTION (a) equals 1, and RELATION TO JUNCTION (b) is not equal to 03, 05, or 20, then TRAFFIC CONTROL DEVICE should not equal 01-03, 20, 23 or 65 for at least one vehicle involved in the FIRST HARMFUL EVENT.
A940	If STATE NUMBER equals 11, then maximum SPEED LIMIT (not including 98 or 99) should equal 55.
A945	If STATE NUMBER equals 15, then maximum SPEED LIMIT (not including 98 or 99) should equal 60.
A950	If STATE NUMBER equals 02, 09, 10, 25, 34, 36, 41, 43, 44, 50, then maximum SPEED LIMIT (not including 98 or 99) should equal 65.
A955	If STATE NUMBER equals 01, 05, 06, 12, 13, 17, 18, 19, 21, 24, 26, 27, 28, 29, 33, 37, 39, 42, 45, 47, 51, 53, 54, 55, then maximum SPEED LIMIT (not including 98 or 99) should equal 70.

Error ID	Error Message
A960	If STATE NUMBER equals 04, 08, 20, 22, 23, 31, 35, <i>or</i> 38, then maximum SPEED LIMIT (not including 98 or 99) should equal 75.
A961	If STATE NUMBER equals 16, 30, 32, 40, 46, 49, 56, then maximum SPEED LIMIT (not including 98 or 99) should equal 80.
A962	If STATE NUMBER equals 48, then maximum SPEED LIMIT (not including 98 or 99) should equal 85.
A965	If PSU equals MA, VT, NY, NJ, OR, then maximum SPEED LIMIT (not including 98 or 99) should equal 65.
A970	If PSU equals AL, CA, FL, GA, IA, IL, KY, MD, MI, MN, NC, OH, PA, SC, TN, VA, WA, WI, then maximum SPEED LIMIT (not including 98 or 99) should equal 70.
A975	If PSU equals AZ, CO, LA, ME, OK, UT, then maximum SPEED LIMIT (not including 98 or 99) should equal 75.
A980	If PSU equals SD, then maximum SPEED LIMIT (not including 98 or 99) should equal 80.
A985	If PSU equals TX, then maximum SPEED LIMIT (not including 98 or 99) should equal 85.
AB1P	If VEHICLE CONFIGURATION equals 01, then CARGO BODY TYPE must NOT equal 22.
AC0A	If RELATION TO JUNCTION (b) equals 02, 03, then the second TRAFFICWAY IDENTIFIER should not be all blank.
AC1A	If FIRST HARMFUL EVENT equals 54, then MANNER OF COLLISION OF THE FIRST HARMFUL EVENT should equal 11.
AD0P	If VEHICLE CONFIGURATION equals 04, 06-08, then VEHICLE TRAILING must not equal 0.
AE0P	If VEHICLE CONFIGURATION equals 05 and CARGO BODY TYPE does not equal 12, then VEHICLE TRAILING must equal 0.
AE1P	If VEHICLE CONFIGURATION equals 05-08, then vPIC BODY CLASS must equal 066 (Truck-Tractor), or FINAL STAGE BODY CLASS must equal 066 (Truck-Tractor).
AF1P	If VEHICLE CONFIGURATION equals 20, 21, then CARGO BODY TYPE must equal 22.
AF2P	If VEHICLE CONFIGURATION equals 20, 21, then vPIC BODY CLASS must equal 009 (Van), 016 (Bus), 068 (Streetcar / Trolley), 073 (Bus-School Bus), 117 (Limousine), or FINAL STAGE BODY CLASS must equal 009 (Van), 016 (Bus), 068 (Streetcar / Trolley), 073 (Bus-School Bus), or 117 (Limousine).
АНОР	If VEHICLE CONFIGURATION does not equal 00 or 99, then vPIC BODY CLASS should equal 009 (Van), 011 (Truck), 016 (Bus), 060 (Pickup), 066 (Truck-Tractor), 068 (Streetcar / Trolley), 073 (Bus - School Bus), 095 (Cargo Van), 108 (Motorhome), 111 (Step Van / Walk-in Van), 117 (Limousine), 126 (Off-road Vehicle - Farm Equipment), 127 (Off-road Vehicle - Construction Equipment), or FINAL STAGE BODY CLASS should equal 009 (Van), 011 (Truck), 016 (Bus), 060 (Pickup), 066 (Truck-Tractor), 068 (Streetcar / Trolley), 073 (Bus-School Bus), 095 (Cargo Van), 108 (Motorhome), 111 (Step Van / Walk-in Van), 117 (Limousine), or 997 Other (Specify:), or HM2 should equal 2.

Error ID	Error Message
AH1P	If BUS USE equals 08, then vPIC BODY CLASS must equal 009 (Van), 016 (Bus), or 073 (Bus - School Bus), or FINAL STAGE BODY CLASS must equal 009 (Van), 016 (Bus), 073 (Bus - School Bus), 108 (Motorhome), or 997 Other (Specify:).
AH2P	If BUS USE equals 06, then vPIC BODY CLASS should equal 009 (Van) or 016 (Bus), or FINAL STAGE BODY CLASS should equal 009 (Van) or 016 (Bus).
AK00	If CARGO BODY TYPE equals 22, 96, then JACKKNIFE should equal 0.
AL0P	If CARGO BODY TYPE equals 22, then vPIC BODY CLASS must equal 009 (Van), 016 (Bus), 068 (Streetcar / Trolley), 073 (Bus-School Bus), or 117 (Limousine), or FINAL STAGE BODY CLASS must equal 009 (Van), 016 (Bus), 068 (Streetcar / Trolley), 073 (Bus-School Bus), or 117 (Limousine).
AL1P	If SEQUENCE OF EVENTS equals 51, 62, 70, then VEHICLE TRAILING must not equal 0.
AL2P	If SEQUENCE OF EVENTS equals 45, then WORK ZONE should equal 1-4.
AL3P	If UNIT TYPE equals 2-4, then MOST HARMFUL EVENT must not equal 54 for this vehicle.
AL5P	If UNIT TYPE equals 1, then at least one event in the SEQUENCE OF EVENTS must equal the MOST HARMFUL EVENT.
AL7P	If UNIT TYPE equals 2-4, then MOST HARMFUL EVENT should not equal 04-07, 16, 51, 72.
AL8P	If SEQUENCE OF EVENTS equals 51, 70, then JACKKNIFE must equal 2, 3.
AL9P	If there is one and only one parked vehicle (UNIT TYPE equals 2 or 3) in the crash, then MOST HARMFUL EVENT for the parked vehicle must not equal 14.
AM0P	If CARGO BODY TYPE does not equal 00 or 99, then vPIC BODY CLASS should equal 009 (Van), 011 (Truck), 016 (Bus), 060 (Pickup), 066 (Truck-Tractor), 068 (Streetcar / Trolley), 073 (Bus - School Bus), 095 (Cargo Van), 108 (Motorhome), 111 (Step Van / Walk-in Van), 117 (Limousine), 126 (Off-road Vehicle - Farm Equipment), 127 (Off-road Vehicle - Construction Equipment), or FINAL STAGE BODY CLASS should equal 009 (Van), 011 (Truck), 016 (Bus), 060 (Pickup), 066 (Truck-Tractor), 068 (Streetcar / Trolley), 073 (Bus-School Bus), 095 (Cargo Van), 108 (Motorhome), 111 (Step Van / Walk-in Van), or 117 (Limousine), or 997 Other (Specify:), or HM2 should equal 2.
AM1P	If FIRST HARMFUL EVENT equals 54, or SEQUENCE OF EVENTS equals 54 for any vehicle, then one RELATED FACTORS-CRASH LEVEL must equal 014.
AM2P	If any SEQUENCE OF EVENTS equals 25 or 57, then TRAFFICWAY DESCRIPTION should equal 3, 6.
AQ0P	If REGISTRATION STATE equals 00, 92, then REGISTERED VEHICLE OWNER must equal 0, 5, 6.
AR0P	If SPECIAL USE equals 04, then REGISTERED VEHICLE OWNER must not equal 0, 1, 2, 4.
AS0P	If RELATED FACTORS-VEHICLE LEVEL equals 032, then REGISTERED VEHICLE OWNER must not equal 0.
AT00	Any ATMOSPHERIC CONDITIONS 01-08, 10-12, 98, 99 can be used only once per crash.
AT01	Any ATMOSPHERIC CONDITIONS can be used only once per crash.
AT20	If <i>any</i> ATMOSPHERIC CONDITIONS equals 01-08, 10-12, then ATMOSPHERIC CONDITIONS must not <i>also</i> equal 99.

Error ID	Error Message
AT40	If any ATMOSPHERIC CONDITIONS equals 01, 98, or 99, then only that one code and no other must be coded.
AV0P	If REGISTERED VEHICLE OWNER equals 3, 4, then REGISTRATION STATE must not equal 99.
AZ20	If UNIT TYPE equals 1, and DRIVER PRESENCE equals 0 or 9, then PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 00.
AZ2P	If FIRST HARMFUL EVENT does not equal 02-07, 16, 44, 51, 72, and CRITICAL EVENT-PRECRASH (EVENT) equals 14, and ATTEMPTED AVOIDANCE MANEUVER equals 01, then CRASH TYPE must equal 14 for the vehicle involved in the first harmful event.
AZ30	If PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 00, then ATTEMPTED AVOIDANCE MANEUVER must equal 00.
AZ50	If PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 00, then PRE-IMPACT STABILITY must equal 0.
AZ5P	If CRITICAL EVENT-PRECRASH (EVENT) equals 70-73 for a vehicle involved in the FIRST HARMFUL EVENT, then RELATION TO JUNCTION (b) should equal 04 or 08.
AZ60	If PRE-IMPACT STABILITY equals 0, then PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 00.
AZ6P	If any DRIVER MANEUVERED TO AVOID equals 00, then PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must not equal 17.
AZ70	If PRE-IMPACT LOCATION equals 0, then PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 00.
AZ7P	If any DRIVER MANEUVERED TO AVOID equals 00 or 95 or 98 or 99, then only that one code and no other must be coded for this vehicle.
AZ80	If PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 00, then PRE-IMPACT LOCATION must equal 0.
AZ81	If PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 15, or CRITICAL EVENT - PRECRASH (EVENT) equals 10 or 11 for this vehicle, then PRE-IMPACT LOCATION should not equal 1 (Stayed in Original Travel Lane) for this vehicle.
AZA0	If PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 05 or 07, then TRAVEL SPEED must equal 000 for this vehicle.
AZA2	If PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) does not equal 10, 11, or 12, then RELATED FACTORS - DRIVER LEVEL should not equal 048.
AZA3	If RELATED FACTORS - DRIVER LEVEL equals 0 48, then PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 10, 11, or 12.
AZBP	If any DRIVER MANEUVERED TO AVOID equals 03, then CRITICAL EVENT - PRECRASH (EVENT) should equal 87-89.
AZCP	If any DRIVER MANEUVERED TO AVOID equals 05, then CRITICAL EVENT - PRECRASH (EVENT) should equal 80-85.
AZDQ	If DRIVER MANEUVERED TO AVOID equals 04, then NUMBER OF VEHICLE FORMS SUBMITTED must be greater than 001.

Error ID	Error Message
AZEP	If any DRIVER MANEUVERED TO AVOID equals 01, then CRITICAL EVENT - PRECRASH (EVENT) should equal 90-92.

B Series

Error ID	Error Message
B10P	If PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) does not equal 17, and ATTEMPTED AVOIDANCE MANEUVER equals 01, then DRIVER MANEUVERED TO AVOID should equal 00.
B15P	If CRITICAL EVENT-PRECRASH (EVENT) equals 91, and ATTEMPTED AVOIDANCE MANEUVER equals 00, 01, and the vehicle is involved in the FIRST HARMFUL EVENT, then CRASH TYPE should equal 15.
B16P	If CRITICAL EVENT-PRECRASH (EVENT) equals 90, and ATTEMPTED AVOIDANCE MANEUVER equals 01, and the vehicle is involved in the FIRST HARMFUL EVENT, then CRASH TYPE should equal 12 or 15.
B17P	If CONDITION (IMPAIRMENT) AT TIME OF CRASH (D23) equals 09 for this driver, then CRITICAL EVENT: PRECRASH (EVENT) should not equal 08 for this driver's vehicle.
B18P	If CRITICAL EVENT – PRECRASH (EVENT) equals 70-73, then TRAFFICWAY DESCRIPTION must not equal 0 for this vehicle.
BA0P	If EJECTION equals 0, 7, 8, or 9, then EJECTION PATH must equal 0.
BB0P	If EJECTION equals 1-3, then EJECTION PATH must equal 1-9.
BIOP	If DRIVER'S LICENSE STATE equals 99, then COMPLIANCE WITH CDL ENDORSEMENTS must not equal 1, 2.
BJ0P	If DRIVER PRESENCE equals 0, 9, then COMPLIANCE WITH CDL ENDORSEMENTS must be blank.
BJ1P	If UNIT TYPE equals 1, and DRIVER PRESENCE equals 0 or 9, then DRIVER DISTRACTED BY must equal 16.
BJ2P	If UNIT TYPE equals 1, and DRIVER PRESENCE equals 1, then DRIVER DISTRACTED BY must not equal 16 or blank.
ВЈЗР	If UNIT TYPE equals 1, and DRIVER DISTRACTED BY equals 16, then DRIVER PRESENCE must equal 0 or 9.
BJ4P	If any DRIVER DISTRACTED BY equals 03, then NUMBER OF OCCUPANTS must be greater than 01.
BJ5P	If UNIT TYPE equals 1 and HIT AND RUN equals 1, then DRIVER PRESENCE should not equal 0.
ВЈ7Р	If any DRIVER DISTRACTED BY equals 00 or 16 or 17 or 18 or 19 or 92 or 93 or 96 or 99, then only that one code and no other must be used.

Error ID	Error Message
BJ8P	If DRIVER DISTRACTED BY equals 17, then STATE should equal GA, MN, MO, NV, NY, or SC.
BK0P	If LICENSE COMPLIANCE WITH CLASS OF VEHICLE equals 1, then COMPLIANCE WITH CDL ENDORSEMENTS must not equal 1-3, 9.
BL0P	If COMPLIANCE WITH CDL ENDORSEMENTS equals 1, and any RELATED FACTORS-DRIVER LEVEL equals 019, then LICENSE COMPLIANCE WITH CLASS OF VEHICLE must equal 3.
BN0P	If DRIVER PRESENCE equals 0, 9, then COMMERCIAL MOTOR VEHICLE LICENSE STATUS must be blank.
BQ0P	If METHOD OF DRUG DETERMINATION BY POLICE equals 8, then POLICE-REPORTED DRUG INVOLVEMENT must equal 0, 1, 8, 9.
BR0P	If METHOD OF DRUG DETERMINATION BY POLICE equals 1-7, then POLICE-REPORTED DRUG INVOLVEMENT must equal 0, 1, 8.
BT0P	If DRUG TEST STATUS equals 2, then any DRUG SPECIMEN must not equal 00 or 99 and any DRUG TEST RESULT must not equal 000 or 999.
BT1P	If DRUG TEST STATUS equals 0, then there must exist only one DRUG SPECIMEN equal to 00 and one DRUG TEST RESULT equal to 000 for this person.
BT2P	If DRUG TEST STATUS equals 8, then there must exist only one DRUG SPECIMEN equal to 96 and one DRUG TEST RESULT equal to 095 for this person.
ВТЗР	If DRUG TEST STATUS equals 2, then at least one DRUG SPECIMEN must equal 01, 02, 11-15, 96, 97, 98, and one corresponding DRUG TEST RESULT must equal 001, 095, 100-295, 300-395, 400-495, 500-595, 600-695, 700-795, 800-895, 900-995, 996-998.
BT6P	If DRUG TEST STATUS equals 9, then there must exist only one DRUG SPECIMEN equal to 99 and one DRUG TEST RESULT equal to 999 for this person.
BT8P	If DRUG TEST RESULT does not equal 996, then only one record with the same DRUG SPECIMEN and DRUG TEST RESULT must exist.
BY0P	DRIVER'S ZIP CODE must be a valid code, blanks, 00000, 99998, or 99999.
BZ10	If CRITICAL EVENT- PRECRASH (EVENT) equals 53, then AREAS OF IMPACT-INITIAL CONTACT POINT should not equal 12 for this vehicle.
BZ20	If CRITICAL EVENT - PRECRASH (EVENT) equals 51, 52, then AREAS OF IMPACT-INITIAL CONTACT POINT should not equal 06 for this vehicle.
BZ40	If CRITICAL EVENT - PRECRASH (EVENT) equals 01, then at least one SEQUENCE OF EVENTS must equal 61 for this vehicle.
BZ50	If CRITICAL EVENT - PRECRASH (EVENT) equals 12, and PRE-IMPACT LOCATION is not equal to 5, then at least one SEQUENCE OF EVENTS must equal 64 for this vehicle.
BZ51	If CRITICAL EVENT - PRECRASH (EVENT) equals 80 and PRE-IMPACT LOCATION does not equal 4, then at least one PERSON TYPE should equal 5.
BZ60	If CRITICAL EVENT - PRECRASH (EVENT) equals 13, and PRE-IMPACT LOCATION is not equal to 5, then at least one SEQUENCE OF EVENTS must equal 63 for this vehicle.

Error ID	Error Message
BZ70	If CRITICAL EVENT - PRECRASH (EVENT) equals 14, then at least one SEQUENCE OF EVENTS must equal 71 for this vehicle.
BZ80	If MANNER OF COLLISION OF THE FIRST HARMFUL EVENT equals 00, then CRASH TYPE must equal 00, 01-16, 92, 98, 99 for the vehicle in the FIRST HARMFUL EVENT.
BZ90	If CRASH TYPE equals 01-05, and PRE-IMPACT LOCATION is not equal to 0 or 5, then at least one SEQUENCE OF EVENTS prior to the FIRST HARMFUL EVENT must equal 63.
BZ91	If CRASH TYPE equals 06-10, and PRE-IMPACT LOCATION is not equal to 0 or 5, then at least one SEQUENCE OF EVENTS prior to the FIRST HARMFUL EVENT must equal 64.
BZ92	If CRASH TYPE equals 14, then at least one CRASH EVENTS-SEQUENCE OF EVENTS must equal 71 for this vehicle.
BZ93	If PRE-IMPACT LOCATION equals 4, then at least one SEQUENCE OF EVENTS for this vehicle must equal 63, 64, 71, or 79.

C Series

Error ID	Error Message
CB0P	If REGISTERED VEHICLE OWNER equals 6, then DRIVER PRESENCE must equal 0.
CC0P	If COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 00, 99, then COMPLIANCE WITH CDL ENDORSEMENTS must not equal 1.
CG0P	If LICENSE COMPLIANCE WITH CLASS OF VEHICLE equals 0, then COMPLIANCE WITH CDL ENDORSEMENTS must not equal 1, 3.
CI0P	If VEHICLE TRAILING equals 1-4, then JACKKNIFE must not equal 0.
CJ00	If PREVIOUS RECORDED CRASHES equals 98, then DRIVER'S LICENSE STATE should equal 09, 13, 28, 30, 35, 49.
CJ01	If any driver history counter is not equal to 99, then DRIVER'S LICENSE STATE must not be 96, 97, 98, or 99.
CK0P	If PERSON TYPE equals 07, then RELATED FACTORS-PERSON (NOT A MV OCCUPANT) LEVEL must not equal 009, 013, 069, 070, 087, 090, 094-097.
CL0P	If PERSON TYPE equals 09, then any RELATED FACTORS-PERSON LEVEL (MV OCCUPANT) must not equal 021, 026, 028, 029, 033, 037, 040-042, 044, 045, 047, 051, 052, 056-070, 072-078, 080-083.
CM0P	If PERSON TYPE equals 19, then RELATED FACTORS-PERSON LEVEL (NOT A MV OCCUPANT) must not equal 013, 069, 070, 090.

D Series

Error ID	Error Message
D010	If DRIVER'S LICENSE STATE equals 96, 97, then PREVIOUS RECORDED CRASHES should equal 99.
D020	If DRIVER'S LICENSE STATE equals 96, 97, then all three Subfields of PREVIOUS RECORDED SUSPENSIONS AND REVOCATIONS should equal 99.
D030	If DRIVER'S LICENSE STATE equals 96, 97, then PREVIOUS DWI CONVICTIONS should equal 99.
D040	If DRIVER'S LICENSE STATE equals 96, 97, then PREVIOUS SPEEDING CONVICTIONS should equal 99.
D050	If DRIVER'S LICENSE STATE equals 96, 97, then PREVIOUS OTHER MOVING VIOLATION CONVICTIONS should equal 99.
D060	If NON-CDL LICENSE STATUS equals 1-4, 6, or COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 1-8, and PERSON TYPE equals 01, then AGE should not be less than 015.
D080	If VIOLATION CHARGED equals 01-06, 09, 31-69, 81-91, 98, then RELATED FACTORS-DRIVER LEVEL should not equal 0 00 or 9 99.
D081	If VIOLATIONS CHARGED equals 01-04, 09, 51, 52, 67, 81, 82, 84, 89, or 98, then RELATED FACTORS-DRIVER LEVEL should not equal 000 or 999.
D090	If VIOLATIONS CHARGED equals 11-19, and PERSON TYPE equals 01, 03, then POLICE-REPORTED ALCOHOL INVOLVEMENT should equal 1, or POLICE-REPORTED DRUG INVOLVEMENT should equal 1.
D093	If any VEHICLE LICENSE PLATE NUMBER that does not equal 000000000, 999999999, or 999999998, then VEHICLE LICENSE PLATE NUMBER must be unique within a crash.
D100	If NON-CDL LICENSE STATUS equals 9, then all driver history counters PREVIOUS RECORDED CRASHES should equal 99.
D110	If NON-CDL LICENSE STATUS equals 9, then all driver history counters should equal 99.
D120	If NON-CDL LICENSE STATUS equals 9, then all driver history counters PREVIOUS DWI CONVICTIONS should equal 99.
D130	If NON-CDL LICENSE STATUS equals 9, then all driver history counters PREVIOUS SPEEDING CONVICTIONS should equal 99.
D140	If NON-CDL LICENSE STATUS equals 9, then all driver history counters PREVIOUS OTHER MOVING VIOLATION CONVICTIONS should equal 99.
D150	If the sum of all counters less than 98 is greater than five but less than fifteen, then DATE OF <i>MOST RECENT</i> CRASH, SUSPENSION, CONVICTION should not equal DATE OF <i>OLDEST</i> CRASH, SUSPENSION, CONVICTION.
D160	If NON-CDL LICENSE STATUS does not equal 9, or COMMERCIAL MOTOR VEHICLE LICENSE STATUS does not equal 99, then DRIVER'S ZIP CODE should not equal 99998 or 99999.
D170	If DRIVER'S LICENSE STATE does not equal 93-99, Then DRIVER'S ZIP CODE should not equal 99998 or 99999.

Error ID	Error Message
D180	If DRIVER LICENSE STATE equals 95-97, then DRIVER ZIP CODE should equal 00000.
D260	If NON-CDL LICENSE STATUS equals 9, or COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 99, then COMPLIANCE WITH LICENSE RESTRICTIONS should not equal 0.
D270	If POWER UNIT GVWR_From and POWER UNIT GVWR_To equals 17-18, or VEHICLE CONFIGURATION equals 21, or HM2 equals 2, then COMMERCIAL MOTOR VEHICLE LICENSE STATUS should not equal 00.
D280	If VEHICLE CONFIGURATION equals 05-08, 21, or HM1 equals 2, then COMMERCIAL MOTOR VEHICLE LICENSE STATUS should not equal 00.
D300	If HM2 equals 2, then COMMERCIAL MOTOR VEHICLE LICENSE STATUS should not equal 00 or 99.
D310	If HM2 equals 2, then COMPLIANCE WITH CDL ENDORSEMENTS should equal 1-3.
D320	If DRIVER'S LICENSE STATE does not equal 93-99, then DRIVER'S ZIP CODE should equal 99998 , 99999, or be a valid ZIP code for DRIVER'S LICENSE STATE.
D330	If DRIVER PRESENCE equals 0, and REGISTRATION STATE is not equal to 00, 92, 99, then REGISTERED VEHICLE OWNER should equal 3-6.
D340	If NON-CDL LICENSE STATUS equals 1-4, 6, 9, or COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 01-08, 99, then LICENSE COMPLIANCE WITH CLASS OF VEHICLE should not equal 0.
D350	If VIOLATIONS CHARGED equals 71, then NON-CDL LICENSE STATUS should not equal 0, 3, 6, 9.
D380	If NON-CDL LICENSE STATUS equals 9, then LICENSE COMPLIANCE WITH CLASS OF VEHICLE should equal 1 or 9.
D390	If NON-CDL LICENSE STATUS equals 0, then LICENSE COMPLIANCE WITH CLASS OF VEHICLE should not equal 2, 3, 8, 9.
D400	If NON-CDL LICENSE STATUS equals 0-4, then LICENSE COMPLIANCE WITH CLASS OF VEHICLE should not equal 3, 8, 9.
D410	If LICENSE COMPLIANCE WITH CLASS OF VEHICLE equals 0, then COMPLIANCE WITH CDL ENDORSEMENTS should not equal 1-3, 9.
D420	If COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 00, then COMPLIANCE WITH CDL ENDORSEMENTS should not equal 1-3.
D430	If COMPLIANCE WITH CDL ENDORSEMENTS equals 1-3, then COMMERCIAL MOTOR VEHICLE LICENSE STATUS should not equal 00.
D440	If COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 00, then <i>POWER UNIT GVWR_From and POWER UNIT GVWR_To should not be in 17-18, VEHICLE CONFIGURATION should not equal 21</i> , and HM2 should not equal 2.
D450	If COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 00, then VEHICLE CONFIGURATION should not equal 05-08, 21, and HM2 should not equal 2.
D460	If COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 99, then COMPLIANCE WITH CDL ENDORSEMENTS should equal 0, 3, 9.

Error ID	Error Message
D470	If any RELATED FACTORS-DRIVER LEVEL equals 0 37, then at least one RELATED FACTORS-CRASH LEVEL should equal 0 20.
D480	If DRIVER'S LICENSE STATE equals 09, 28, 30, 35, 49, then PREVIOUS RECORDED CRASHES should equal 98.
D500	If VIOLATIONS CHARGED equals 05, then at least one RELATED FACTORS-CRASH LEVEL should equal 020.
D501	If at least one VIOLATIONS CHARGED equals 04, then at least one RELATED FACTORS - DRIVER LEVEL must equal 006 or 036.
D530	If any VIOLATIONS CHARGED equal 36 for a vehicle involved in the FIRST HARMFUL EVENT, then RELATION TO JUNCTION (b) should equal 06.
D560	If VIOLATIONS CHARGED equals 66, then vPIC BODY CLASS should equal 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport/Adventure/Supermoto/On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 104 (Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle).
D570	If any VIOLATIONS CHARGED equal 83, then not all occupants of this vehicle should have RESTRAINT SYSTEM USE Subfield 1-Type of Restraint System in Use equal to 01-06, 08, 10-12.
D580	If VIOLATIONS CHARGED equals 85, then HM1 should equal 2.
D5A0	If VIOLATIONS CHARGED equals 21-25, 29, then SPEEDING RELATED must equal 2-5.
D5B0	If any VIOLATIONS CHARGED equal 11-13, 18, 19, then at least one CONDITION (IMPAIRMENT) AT TIME OF CRASH (D23) should equal 09.
D5E0	If any VIOLATIONS CHARGED equal 00 or 97, then only that one code and no other must be coded for this driver.
D600	If DRIVER HEIGHT/INCHES is greater than 11, then DRIVER HEIGHT/INCHES should not be less than 48.
D610	If DRIVER HEIGHT/FEET is not blank and not equal to 0, then DRIVER HEIGHT/FEET should not be less than 3.
D620	If NON-CDL LICENSE TYPE equals 7, then AGE (for the driver) should equal 014-016.
D630	If NON-CDL LICENSE TYPE equals 2, then AGE (for the driver) should equal 015-017.
D640	If AGE equals 014-017, and PERSON TYPE equals 01, then NON-CDL LICENSE TYPE should equal 2, 7.
D650	If AGE equals 018-120, and PERSON TYPE equals 01, then NON-CDL LICENSE TYPE should equal 1.
D660	If VIOLATIONS equals 55, then SCHOOL BUS RELATED must equal 1.

Error ID	Error Message
D680	If NON-CDL LICENSE TYPE does not equal 0, 9, then NON-CDL LICENSE STATUS should not equal 0, 9.
D690	If NON-CDL LICENSE TYPE equals 2, 7, and COMPLIANCE WITH LICENSE RESTRICTIONS equals 2, then RELATED FACTORS-DRIVER LEVEL should equal 073, 074.
D700	If NON-CDL LICENSE TYPE equals 1, and COMPLIANCE WITH LICENSE RESTRICTIONS equals 2, then RELATED FACTORS-DRIVER LEVEL should equal <i>0</i> 74.
D710	If DRIVER'S LICENSE STATE equals 02, 04, 09, 15, 20, 30, 38, 40, then NON-CDL LICENSE TYPE should not equal 2.
D730	If RELATED FACTORS-DRIVER LEVEL equals 073, then COMPLIANCE WITH LICENSE RESTRICTIONS should equal 2, and NON-CDL LICENSE TYPE should equal 2, 7.
D733	If at least one RELATED FACTORS - DRIVER LEVEL equals 0 60 and PERSON TYPE equals 01, then ALCOHOL TEST RESULT should equal 995 or at least one DRUG TEST RESULT should equal 095.

E Series

Error ID	Error Message
E01P	If NOTIFICATION TIME EMS equals 9998, then ARRIVAL TIME EMS must equal 9998, and EMS TIME AT HOSPITAL must equal 8888 or 9998.
E02P	If ARRIVAL TIME EMS equals 9998, then EMS TIME AT HOSPITAL must equal 8888 or 9998.
E03P	If ARRIVAL TIME EMS equals 8888, then NOTIFICATION TIME EMS and EMS TIME AT HOSPITAL must equal 8888.
E04P	If NOTIFICATION TIME EMS equals 8888, then ARRIVAL TIME EMS and EMS TIME AT HOSPITAL must equal 8888.
E05P	If EMS TIME AT HOSPITAL equals 9997, then ARRIVAL TIME EMS must equal 9997.
E06P	If ARRIVAL TIME EMS equals 9997, then EMS TIME AT HOSPITAL must equal 9997.
E07P	If ARRIVAL TIME EMS equals 9997, then NOTIFICATION TIME EMS must not equal 8888, 9998.
E08P	If NOTIFICATION TIME EMS is not 8888, 9998, and EMS TIME AT HOSPITAL is not 8888, 9996, 9997, 9998, then ARRIVAL TIME EMS must not equal 9997 or 9998.
E09P	If ARRIVAL TIME EMS equals 0000-2359, CRASH TIME-hour equals ARRIVAL TIME EMS-hour, and ARRIVAL TIME EMS-minute is greater than CRASH TIME-minute; then NOTIFICATION TIME EMS-hour should not equal 99.

F Series

Error ID	Error Message
FA0F	If FIRST HARMFUL EVENT equals blank, then case status is flawed.
FA1F	CRASH TYPE for all in-transport vehicles not involved in the FIRST HARMFUL EVENT must equal 98.
FD0F	If DRIVER PRESENCE is blank, then case status is flawed.
FP0F	If PERSON TYPE is blank, then case status is flawed.
FP1F	If AREAS OF IMPACT - INITIAL CONTACT POINT equals blank, then case status is flawed.
FP2F	If UNIT TYPE equals 1, and CRASH TYPE equals blank, then case status is flawed.
FP3F	If UNIT TYPE is blank, then case status is flawed.
FP4F	If CRASH DATE is blank, then case status is flawed.
FP5F	If CRASH TIME is blank, then case status is flawed.
FP6F	If UNIT TYPE equals 1, and CRITICAL EVENT - PRECRASH (CATEGORY) equals blank, then case status is flawed.
FP7F	If UNIT TYPE equals 1, and CRITICAL EVENT - PRECRASH (EVENT) equals blank, then case status is flawed.
FP8F	If INJURY SEVERITY is blank, then case status is flawed.
FP9F	If PERSON TYPE equals 05, 06, 07, 11, 12, or 13, and the PEDESTRIAN/BIKE - CRASH TYPE equals blank, then case status is flawed.

G Series

Error ID	Error Message
G01P	If STATE is and GLOBAL POSITION - LATITUDE (degrees) is not equal to 77, 88, 99, then LATITUDE (degrees) must be equal to, or greater than (<u>1d</u>) and LATITUDE (degrees) must not be greater than (<u>2d</u>).
G02P	If STATE is and GLOBAL POSITION - LATITUDE (degrees) equals (<u>1d</u>), then LATITUDE (minutes) must be equal to, or greater than (<u>1s</u>).
G03P	If STATE is and GLOBAL POSITION - LATITUDE (degrees) equals (<u>2d</u>), then LATITUDE (minutes) must not be greater than (<u>2s</u>).
G04P	If STATE is and GLOBAL POSITION - LONGITUDE (degrees) is not equal to 777, 888, 999, then LONGITUDE (degrees) must be equal to, or greater than, (<u>3d</u>) and LONGITUDE (degrees) must not be greater than (<u>4d</u>).
G05P	If STATE is and GLOBAL POSITION - LONGITUDE (degrees) equals (<u>3d</u>), then LONGITUDE (minutes) must be equal to, or greater than (<u>3s</u>).
G06P	If STATE is and GLOBAL POSITION - LONGITUDE (degrees) equals (<u>4d</u>), then LONGITUDE (minutes) must not be greater than (<u>4s</u>).

Error ID	Error Message
G07P	If any part of GLOBAL POSITION - LATITUDE (degrees, minutes, or seconds) is all 8s, then all parts of LATITUDE must be all 8s.
G08P	If any part of GLOBAL POSITION - LONGITUDE (degrees, minutes, or seconds) is all 8s, then all parts of LONGITUDE must be all 8s.
G09P	If any part of GLOBAL POSITION - LATITUDE (degrees, minutes, or seconds) is all 9s, then all parts of LATITUDE must be all 9s.
G0AP	If any part of GLOBAL POSITION - LONGITUDE (degrees, minutes, or seconds) is all 7s, then all parts of LONGITUDE must be all 7s.
G0BP	If any part of GLOBAL POSITION - LATITUDE (degrees, minutes, or seconds) is all 7s, then all parts of LATITUDE must be all 7s.
G10P	If any part of GLOBAL POSITION - LONGITUDE (degrees, minutes, or seconds) is all 9s, then all parts of LONGITUDE must be all 9s.
G11P	If any part of GLOBAL POSITION - LATITUDE (degrees, minutes, or seconds) is blank, then all parts of LATITUDE must be blank.
G12P	If any part of GLOBAL POSITION - LONGITUDE (degrees, minutes, or seconds) is blank, then all parts of LONGITUDE must be blank.

P Series

Error	Error Message
ID	
P010	If PERSON TYPE equals 01, then AGE should not be less than 012.
P01F	If RESTRAINT SYSTEM USE Subfield-1 Type of Restraint System in Use equals 01-06, 08, <i>or</i> 10-12, then EJECTION should equal 0 or 7.
P020	If PERSON TYPE equals 02, 03, 09, and RESTRAINT SYSTEM USE Subfield-1 Type of Restraint System in Use equals 04, 10-12, then AGE should be less than 010, or equal to 998 or 999.
P030	If SPECIAL USE is not equal to 21 and PERSON TYPE equals 01, then SEATING POSITION should not equal 12-19.
P040	If PERSON TYPE equals 02, 09, then SEATING POSITION should not equal 11.
P050	If EJECTION equals 1, then RESTRAINT SYSTEM USE Subfield-1 Type of Restraint System in Use should not equal 01-06, 08, 10-12.
P060	If SEATING POSITION equals 18, 28, 38, 48, 50-54, then RESTRAINT SYSTEM USE Subfield-1 Type of Restraint System in Use should not equal 01, 03.
P061	If SEATING POSITION equals 55 or 56, then RESTRAINT SYSTEM USE Subfield 1-Type of Restraint System in Use must equal 20.
P062	If SEATING POSITION equals 56, then PERSON TYPE must equal 02.

Error ID	Error Message
P071	If PERSON TYPE equals 02, 04-07, 10, 11, 12, or 13, and INJURY SEVERITY does not equal 4, then ALCOHOL TEST STATUS should not equal 9, and ALCOHOL TEST TYPE should not equal 99, and ALCOHOL TEST RESULT should not equal 999.
P072	If PERSON TYPE equals 02, 03, and INJURY SEVERITY equals 0, and ALCOHOL TEST RESULT equals 996, then POLICE-REPORTED ALCOHOL INVOLVEMENT should equal 0, 8.
P073	If PERSON TYPE equals 02, 04-07, 10, 11, 12, or 13, and INJURY SEVERITY does not equal 4, then DRUG TEST STATUS should not equal 9, and any DRUG SPECIMEN should not equal 99, and any DRUG TEST RESULTS should not equal 999.
P074	If PERSON TYPE equals 02, 04-07, 10, 11, 12, or 13, and INJURY SEVERITY does not equal 4, then ALCOHOL TEST STATUS must not equal 8, ALCOHOL TEST TYPE must not equal 95, and ALCOHOL TEST RESULT must not equal 995.
P075	If PERSON TYPE equals 02, 04-07, 10, 11, 12, 13, or 19, and INJURY SEVERITY does not equal 4, then DRUG TEST STATUS must not equal 8, any DRUG SPECIMEN must not equal 96, and any DRUG TEST RESULTS must not equal 095.
P076	If ALCOHOL TEST Subfield 2 - Test Type equals 02, 10, or 11, then POLICE REPORTED ALCOHOL INVOLVEMENT should not equal 8 or 9, and METHOD OF ALCOHOL DETERMINATION BY POLICE should equal 1 or 2.
P077	If INJURY SEVERITY equals 4, and DIED AT SCENE/EN ROUTE equals 7 or 8, then ALCOHOL TEST Subfield 2 - Test Type should not equal 02, 10, or 11.
P078	If INJURY SEVERITY equals 4, then ALCOHOL TEST Subfield 2 - Test Type should not equal 02, 10, or 11.
P090	If INJURY SEVERITY equals 0, then TRANSPORTED TO FIRST MEDICAL FACILITY BY must equal 0.
P091	If TRANSPORTED TO FIRST MEDICAL FACILITY BY equals 1, 3, 5, then EMS TIME AT HOSPITAL should not equal 8888, 9997, 9998.
P093	If all persons TRANSPORTED TO FIRST MEDICAL FACILITY BY equals 2, or 6, then NOTIFICATION TIME EMS, ARRIVAL TIME EMS, EMS TIME AT HOSPITAL must equal 8888.
P094	If EJECTION equals 8, then SEATING POSITION must equal 55 or 56, or vPIC BODY CLASS must equal 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport/Adventure/Supermoto/On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 104 (Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle).
P095	If TRANSPORTED TO FIRST MEDICAL FACILITY BY equals 0 for every person in the case, then EMS TIME AT HOSPITAL must not equal 0000-2399, 9999.

Error ID	Error Message
P110	If METHOD OF ALCOHOL DETERMINATION BY POLICE equals 1-5, 8, then POLICE-REPORTED ALCOHOL INVOLVEMENT should equal 0, 1.
P130	If vPIC BODY CLASS equals 011 (Truck), 016 (Bus), 068 (Streetcar / Trolley), 73 (Bus-School Bus), 066 (Truck-Tractor), 095 (Cargo Van), 111 (Step Van / Walk-in Van), 117 (Limousine), 126 (Off-road Vehicle - Farm Equipment), 127 (Off-road Vehicle - Construction Equipment), or FINAL STAGE BODY CLASS equals 011 (Truck), 016 (Bus), 068 (Streetcar / Trolley), 73 (Bus-School Bus), 066 (Truck-Tractor), 095 (Cargo Van), 111 (Step Van / Walk-in Van), or 117 (Limousine), and POWER UNIT GVWR_from and GVWR_to equals 13, 14, 15, 16, 17, or 18, and PERSON TYPE equals 01 or 03, and INJURY SEVERITY equals 4, then FATAL INJURY AT WORK should equal 1.
P140	If POLICE-REPORTED DRUG INVOLVEMENT equals 8, 9, then METHOD OF DRUG DETERMINATION BY POLICE should equal 8.
P150	If POLICE-REPORTED DRUG INVOLVEMENT equals 1, and METHOD OF DRUG DETERMINATION BY POLICE equals 2, then DRUG TEST STATUS should not equal 0.
P160	If POLICE-REPORTED DRUG INVOLVEMENT equals 1, and METHOD OF DRUG DETERMINATION BY POLICE equals 2, then not all DRUG TEST RESULTS should equal 001.
P170	If METHOD OF DRUG DETERMINATION BY POLICE equals 1-7, then POLICE-REPORTED DRUG INVOLVEMENT should equal 0, 1.
P1A0	If AGE is less than 012, and INJURY SEVERITY equals 4, then FATAL INJURY AT WORK should equal 0.
P200	If POLICE-REPORTED ALCOHOL INVOLVEMENT equals 8, 9, then METHOD OF ALCOHOL DETERMINATION BY POLICE should equal 9.
P260	If SEATING POSITION equals 18, 19, or 99, then AIR BAG DEPLOYED should equal 20, 98, 99.
P270	If SEATING POSITION equals 21-23, 28, 29, 31-33, 38, 39, 41-43, 48, 49, 50, 54-56, 98, or 99, then AIR BAG DEPLOYED must not equal 01.
P280	If AIR BAG DEPLOYED equals 01, then SEATING POSITION must equal 11-19.
P290	If AIR BAG DEPLOYED equals 01-03, 07-09, and vPIC BODY CLASS equals 001 (Convertible/Cabriolet), 002 (Minivan), 003 (Coupe), 005 (Hatchback/Liftback/Notchback), 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 008 (Crossover Utility Vehicle (CUV)), 009 (Van), 010 (Roadster), 011 (Truck), 013 (Sedan/Saloon), 015 (Wagon), 060 (Pickup), 117 (Limousine), 119 (Sport Utility Truck (SUT)), or FINAL STAGE BODY CLASS equals 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 008 (Crossover Utility Vehicle (CUV)), 009 (Van), 011 (Truck), 015 (Wagon), 060 (Pickup), 117 (Limousine), or 119 (Sport Utility Truck (SUT)), and VEHICLE MODEL YEAR equals 1998 or newer, then SEATING POSITION should equal 11, 13, 21, 23, 31, or 33.
P300	If POLICE-REPORTED ALCOHOL INVOLVEMENT equals 1, and INJURY SEVERITY equals 4, then ALCOHOL TEST STATUS should not equal 0.
P340	If SEATING POSITION equals 50, 52-54, then RESTRAINT SYSTEM USE Subfield-1 Type of Restraint System in Use should equal 20.

Error ID	Error Message
P400	If METHOD OF ALCOHOL DETERMINATION BY POLICE equals 1 or 2, then ALCOHOL TEST Subfield 1-Test Status must be 2.
P401	If METHOD OF DRUG DETERMINATION BY POLICE equals 1, then DRUG TOXICOLOGY RESULTS Subfield 1-Test Status must be 2.
P50P	If DIED AT SCENE/EN ROUTE equals 7, then TRANSPORTED TO FIRST MEDICAL FACILITY BY must equal 0.
P510	If EMS TIME AT HOSPITAL equals 8888, 9997, 9998, then DIED AT SCENE/EN ROUTE should not equal 8 for any PERSON.
P51P	If DIED AT SCENE/EN ROUTE equals 8, then TRANSPORTED TO FIRST MEDICAL FACILITY BY must equal 1-6.
P520	If CRASH DATE and DEATH DATE are the same, and CRASH TIME and DEATH TIME are the same, then TRANSPORTED TO FIRST MEDICAL FACILITY BY should equal 0 and DIED AT SCENE/EN ROUTE should equal 7.
P52P	If DIED AT SCENE/EN ROUTE equals 9, then TRANSPORTED TO FIRST MEDICAL FACILITY BY must equal 8 or 9.
P530	If EMS TIME AT HOSPITAL equals 9996, then DIED AT SCENE/EN ROUTE must equal 8 for at least one person.
P53P	If INJURY SEVERITY equals 0-3, 5, 6, then DIED AT SCENE/EN ROUTE must equal 0.
P54P	If DIED AT SCENE/EN ROUTE equals 8, then EMS TIME AT HOSPITAL should not equal 8888, 9997, 9998.
P55P	If TRANSPORTED TO FIRST MEDICAL FACILITY BY equals 9, then DIED AT SCENE/EN ROUTE must equal 0, 9.
P56P	If DIED AT SCENE/EN ROUTE equals 7, then DEATH TIME should be within 30 minutes of the CRASH TIME.
PB00	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 110-910, then at least one SEQUENCE OF EVENTS for the striking vehicle must equal 08 or 15.
PB02	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE equals 111-980, then at least one SEQUENCE OF EVENTS for the striking vehicle must equal 09.
PB04	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN for a person involved in the first harmful event equals 211, 212, 461, 465, 680, 830, 890, 900 or 910, then RELATION TO JUNCTION (b) must not equal 02. Note: this edit is restricted to vehicles which are involved in only one event with pedestrian(s).
PB05	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN for a person involved in the first harmful event equals 311, 312 or 313, then RELATION TO TRAFFICWAY must equal 01 or 11. Note: this edit is restricted to vehicles which are involved in only one event with pedestrian(s).
PB06	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 730, then TRAFFIC CONTROL DEVICE for the striking vehicle must equal 01-03.

Error ID	Error Message
PB07	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE for a person involved in the first harmful event equals 311, 312, 313, 321, 322, or 323, then RELATION TO JUNCTION (b) must equal 04 or 08. Note: this edit is restricted to vehicles which are involved in only one event with bicyclist(s).
PB08	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE for a person involved in the first harmful event equals 141-144, 147, 151-157 or 159, then RELATION TO JUNCTION (b) must equal 02 or 03. Note: this edit is restricted to vehicles which are involved in only one event with bicyclist(s).
PB09	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE equals 141, 143, 151-158, 217 or 218, then TRAFFIC CONTROL DEVICE for the striking vehicle must not equal 00.
PB10	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE equals 151, 156, 157, 217 or 218, then TRAFFIC CONTROL DEVICE for the striking vehicle must equal 01-03.
PB11	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE equals 154, then TRAFFIC CONTROL DEVICE for the striking vehicle must equal 01-04, 08.
PB12	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN for a person involved in the first harmful event equals 510, 520 or 590, then RELATION TO TRAFFICWAY must not equal 01 or 11. Note: this edit is restricted to vehicles which are involved in only one event with pedestrian(s).
PB15	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 910, then at least one NON-MOTORIST ACTION/CIRCUMSTANCES must equal 03.
PB16	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLIST equals 142, 144, 147, 153, 155, 156, 157, 159, 311, 312, 313, 318, 319, or 357, then at least one NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must equal 02.
PB17	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN for a person involved in the first harmful event equals 211-214, or 219, then PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 08, 09, 13 or 98. Note: this edit is restricted to vehicles which are involved in only one event with pedestrian(s).
PB18	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 742, then at least one NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must equal 01.
PB19	If NON-MOTORIST ACTION/CIRCUMSTANCES equals 08, then PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN must not equal 510, 520, 590, 830, or 890.
PB20	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 510, 520, or 590, then at least one NON-MOTORIST ACTION/CIRCUMSTANCES must equal 02.
PB21	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE equals 160, then TRAFFIC CONTROL DEVICE for the striking vehicle should equal 00.
PB22	If SCHOOL BUS RELATED equals 1, and PERSON TYPE equals 05, 11, 12, or 13, then PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 342.
PB23	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 342, and PERSON TYPE equals 05, 11, 12, or 13, then SCHOOL BUS RELATED should equal 1.

Error ID	Error Message
PB24	If PERSON TYPE equals 05, 11, 12, or 13, and NON-MOTORIST LOCATION AT TIME OF CRASH equals 14, 16, 20, 21, 22, 24, or 25, then PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 230, 320, 330, 410, 420, 430, 440, 459, 510, 520, 590, 830, or 890.
PB25	If PERSON TYPE equals 05, 11, 12, or 13, and NON-MOTORIST LOCATION AT TIME OF CRASH equals 01-03 or 09, then PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 690, 710, 730, 741, 742, 760, 770, 781, 782, 791, 792, 794, 795, or 799.
PB26	If NON-MOTORIST CONTRIBUTING CIRCUMSTANCES equals 02, and PERSON TYPE equals 06 or 07, then PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLIST should equal 142, 144, 147, 153, 155, 156, 157, 159, 311, 312, 313, 318, 319, or 357.
PB27	If NON-MOTORIST ACTION/CIRCUMSTANCES equals 05, and PERSON TYPE equals 05, 11, 12, or 13, then PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 410 or 420.
PB28	If NON-MOTORIST ACTION/CIRCUMSTANCES equals 06, and PERSON TYPE equals 05, 11, 12, or 13, then PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 430 or 440.
PB29	If NON-MOTORIST ACTION/CIRCUMSTANCES equals 04, <i>and does not also equal 03</i> , and PERSON TYPE equals 05, <i>11</i> , <i>12</i> , <i>or 13</i> , then PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 410, 420, 430, 440, or 459.
PB30	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 220, then at least one DRIVER PRESENCE must equal 0 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
PB31	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLIST equals 147, 157, or 357, then at least one DRIVER'S VISION OBSCURED BY must equal 06 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
PB32	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 742, then at least one DRIVER'S VISION OBSCURED BY must not equal 00 or 95 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
PB33	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLIST equals 156, then DRIVER'S VISION OBSCURED BY for the striking vehicle must not equal 06.
PB34	If NUMBER OF FORMS SUBMITTED FOR PERSONS NOT IN MOTOR VEHICLES equals 01, and FIRST HARMFUL EVENT equals 08, and RELATION TO JUNCTION (b) equals 02, then PEDESTRIAN/ BIKE TYPING - CRASH TYPE - PEDESTRIAN must not equal 320, 330, 360, 680, 830, 890, 900, or 910.
PB35	If NUMBER OF FORMS SUBMITTED FOR PERSONS NOT IN MOTOR VEHICLES equals 01, and FIRST HARMFUL EVENT equals 08, and RELATION TO JUNCTION (b) equals 02, then PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN must equal 1.
PB36	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 250, then PERSON TYPE must equal 11, 12, or 13.
PB37	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 311, 312, or 313, then at least one NON-MOTORIST ACTION/CIRCUMSTANCES must equal 08 or 10.

Error ID	Error Message
PB38	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 410 or 420, then at least one NON-MOTORIST ACTION/CIRCUMSTANCES must equal 05.
PB39	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 430 or 440, then at least one NON-MOTORIST ACTION/CIRCUMSTANCES must equal 06.
PB40	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE equals 610, then at least one PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 08, 09, or 13 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
PB41	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLIST equals 215, then PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 08 or 09 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
PB42	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLIST equals 111, 211, or 212, then PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 11, 16, or 17 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
PB43	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLIST equals 112, 151, 213, 214, 217, or 218, then PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 10, 16, or 17 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
PB44	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 240, then EMERGENCY MOTOR VEHICLE USE should equal 2-6 for at least one vehicle.
PB45	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 781 or 782, then PRE- EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 11 or 17 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
PB46	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLIST equals 221-225, then PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 01 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
PB49	If PERSON TYPE equals 05, 11, 12, or 13, and PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 13 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST, then at least one PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 211-214 or 219.
PB50	If PERSON TYPE equals 05, 11, 12, or 13, and PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 10-12 or 16 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST, then at least one PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 461, 465, 469, 510, 781, 782, 791, 792, 794, 795, or 799.

Error ID	Error Message
PB52	If PERSON TYPE equals 06 or 07, and PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 13 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST, then at least one PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLIST should equal 610.
PB56	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 791, 792, 794, 795, then PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 10 or 17 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
PB58	NON-MOTORIST ACTION/CIRCUMSTANCES must not equal 05, 06, or 16 in combination.
PB59	If NON-MOTORIST ACTION/CIRCUMSTANCES equals 16, and PERSON TYPE equals 05, 11, 12, or 13, then PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 459.
PB60	If PERSON TYPE equals 05, 11, 12, or 13, and DRIVER PRESENCE equals 0 for the motor vehicle which strikes the non-motorist, then PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 220.
PB61	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 220, then DRIVER PRESENCE should equal 0 for the motor vehicle striking the non-motorist.
PB62	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 230, then at least one NON-MOTORIST ACTION/CIRCUMSTANCES must equal 12.
PB63	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 230, then at least one RELATED FACTOR - CRASH LEVEL should equal 0 19 or 0 23.
PB64	If any NON-MOTORIST ACTION/CIRCUMSTANCES equals 03 or 09, then the NON-MOTORIST ACTION/CIRCUMSTANCES must not also equal 05, 06, or 16 for this person.
PB66	If PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 1, then NON-MOTORIST LOCATION AT TIME OF CRASH must equal 01, 02, 03, 09, or 22.
PB67	If PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 2, then NON-MOTORIST LOCATION AT TIME OF CRASH must equal 10, 11, 13, 14, 16, 20-25, 28, 98, 99.
PB68	If PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 3, then NON-MOTORIST LOCATION AT TIME OF CRASH must equal 10, 11, 13, 14, 16, 20-24, 28, 98, 99.
PB69	If PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 4, then NON-MOTORIST LOCATION AT TIME OF CRASH must equal 24, 25, 98, 99.
PB70	If PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 9, then NON-MOTORIST LOCATION AT TIME OF CRASH must equal 16, 22, 24, 98, or 99.
PB71	If PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - BICYCLE equals 1, then NON-MOTORIST LOCATION AT TIME OF CRASH must equal 01, 02, 03, 09, 16, or 22.
PB72	If PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - BICYCLE equals 2, then NON-MOTORIST LOCATION AT TIME OF CRASH must equal 10, 11, 13, 14, 16, 20, 21, 22, 23, 24, 25, 28, 98, 99.

Error ID	Error Message
PB73	If PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - BICYCLE equals 3, then NON-MOTORIST LOCATION AT TIME OF CRASH must equal 10, 11, 13, 14, 16, 20, 21, 22, 23, 24, 28, 98, 99.
PB74	If PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - BICYCLE equals 4, then NON-MOTORIST LOCATION AT TIME OF CRASH must equal 24, 25, 98, 99.
PB75	If PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - BICYCLE equals 9, then NON-MOTORIST LOCATION AT TIME OF CRASH must equal 16, 22, 24, 98 or 99.
PB76	If PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION equals 1, then NON-MOTORIST LOCATION AT TIME OF CRASH must equal 03.
PB77	If PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION equals 2, then NON-MOTORIST LOCATION AT TIME OF CRASH must equal 01, 02, or 10.
PB78	If PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION equals 3, then NON-MOTORIST LOCATION AT TIME OF CRASH must equal 11, 13.
PB79	If PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION equals 4, then NON-MOTORIST LOCATION AT TIME OF CRASH must equal 14, 16, 20, 98, or 99.
PB80	If PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION equals 5, then NON-MOTORIST LOCATION AT TIME OF CRASH must equal 21, 23, 24, 98, or 99.
PB81	If PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION equals 6, then NON-MOTORIST LOCATION AT TIME OF CRASH must equal 20, 22, 28, 98, or 99.
PB82	If PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION equals 7 or 8, then NON-MOTORIST LOCATION AT TIME OF CRASH must equal 25.
PB83	If PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION equals 9, then NON-MOTORIST LOCATION AT TIME OF CRASH must equal 09, 20, 22, 28, 98, or 99.
PB84	If PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION equals 1, then NON-MOTORIST LOCATION AT TIME OF CRASH must equal 03, 09, 11, or 13.
PB85	If PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION equals 2, then NON-MOTORIST LOCATION AT TIME OF CRASH must equal 14, 16, or 20.
PB86	If PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION equals 3, then NON-MOTORIST LOCATION AT TIME OF CRASH must equal 01, 02, 10, 21, 23, 98, or 99.
PB87	If PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION equals 4, then NON-MOTORIST LOCATION AT TIME OF CRASH must equal 24.
PB88	If PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION equals 5 or 6, then NON-MOTORIST LOCATION AT TIME OF CRASH must equal 25.
PB89	If PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION equals 8, then NON-MOTORIST LOCATION AT TIME OF CRASH must equal 20, 22, 28, 98, or 99.
PB90	If PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION equals 9, then NON-MOTORIST LOCATION AT TIME OF CRASH must equal 22, 98, or 99.

Error ID	Error Message
PB91	If PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 1, then PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION must equal 1, 2, or 9.
PB92	If PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 2, then PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION must equal 3, 4, 5, 6, 7, 8, or 9.
PB93	If PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 3, then PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION must equal 2, 3, 4, 5, 6, or 9.
PB94	If PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 4, then PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION must equal 7, 8, or 9.
PB95	If PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 9, then PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION must equal 2, 5, or 9.
PB96	If PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - BICYCLE equals 1, then PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION must equal 1, 2, 3, 8, or 9.
PB97	If PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - BICYCLE equals 3, then PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION must equal 1, 2, 3, 4, 8, or 9.
PB98	If PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - BICYCLE equals 4, then PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION must equal 4, 5, 6, or 9.
PB99	If PEDESTRIAN/ BIKE TYPING - CRASH LOCATION-BICYCLE equals 9, then PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION must equal 9.
PBA0	If PEDESTRIAN/ BIKE TYPING - CRASH TYPE - BICYCLE equals 111, 211, 212, and VEHICLE NUMBER - VEHICLE LEVEL equals VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST, then PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 11.
PBA1	If PEDESTRIAN/ BIKE TYPING - CRASH TYPE - BICYCLE equals 112, 151, 213, 214, 217, or 218, and VEHICLE NUMBER - VEHICLE LEVEL equals VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST, then PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 10.
PBA2	If PEDESTRIAN SCENARIO equals 1a, 1b, 1c, 1d, 3a, 3b, 3c, 3d, 5a, 5b, 5c, 5d, 7a, 7b, 7c, 7d, 9a, 9b, 9c, 9d, or 11a, 11b, 11c, 11d, then PEDESTRIAN POSITION must equal 2.
PBA3	If CRASH LOCATION-PEDESTRIAN equals 1 (At Intersection) and PEDESTRIAN SCENARIO equals 2a, 2b, 2c, 2d, 4a, 4b, 4c, 4d, 6a, 6b, 6c, 6d, 8a, 8b, 8c, 8d, 10a, 10b, 10c, 10d, or 12a, 12b, 12c, 12d, then PEDESTRIAN POSITION must equal 1, 9.
PBA4	If CRASH LOCATION-PEDESTRIAN equals 2 (Intersection-Related) and PEDESTRIAN SCENARIO equals 2a, 2b, 2c, 2d, 4a, 4b, 4c, 4d, 6a, 6b, 6c, 6d, 8a, 8b, 8c, 8d, 10a, 10b, 10c, 10d, or 12a, 12b, 12c, 12d, then PEDESTRIAN POSITION must equal 3-9.
PBA5	If PEDESTRIAN SCENARIO equals 1a, 1b, 1c, 1d, 2a, 2b, 2c, 2d, 3a, 3b, 3c, 3d, 4a, 4b, 4c, 4d, then PRE-EVENT MOVEMENT should equal 01, 02, 03, 04, 06, 08, 09, 12, 13, 14, 15, 16, or 17 for the vehicle number that struck this non-motorist.
PBA6	If PEDESTRIAN SCENARIO equals 5a, 5b, 5c, 5d, 6a, 6b, 6c, 6d, 7a, 7b, 7c, 7d, 8a, 8b, 8c, 8d, then PRE-EVENT MOVEMENT should equal 10 for the vehicle number that struck this non-motorist.

Error ID	Error Message
PBA7	If PEDESTRIAN SCENARIO equals 9a, 9b, 9c, 9d, 10a, 10b, 10c, 10d, 11a, 11b, 11c, 11d, 12a, 12b, 12c, 12d, then PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 11 for the vehicle number that struck this non-motorist.
PBA8	If NUMBER OF FORMS SUBMITTED FOR PERSONS NOT IN MOTOR VEHICLES equals 1, and the FIRST HARMFUL EVENT equals 08, 09, or 15, and NON-MOTORIST LOCATION AT TIME OF CRASH equals 01 or 02; then RELATION TO JUNCTION (SPECIFIC LOCATION) must equal 3.
PBA9	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 741, then NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must not equal 01.
PBB1	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 742, then NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must not equal 11.
PBB2	If CRASH LOCATION - PEDESTRIAN equals 1 or 2, then PEDESTRIAN INITIAL DIRECTION OF TRAVEL must equal 1-4, or 9, MOTORIST MANEUVER must equal 1-3, or 9, INTERSECTION LEG must equal 1, 2, or 9, and MOTORIST INITIAL DIRECTION OF TRAVEL must equal 1-4, or 9.
PBB3	If PEDESTRIAN/BIKE TYPING-PEDESTRIAN CRASH TYPE equals 341 or 342, then RELATED FACTORS - CRASH LEVEL should equal <i>0</i> 31.
PBB4	If PEDESTRIAN/ BIKE TYPING - CRASH LOCATION -BICYCLE equals 1, then NON-MOTORIST ACTION/CIRCUMSTANCES should not equal 05, 06, or 16.
PBB5	If PEDESTRIAN/ BIKE TYPING - CRASH LOCATION -PEDESTRIAN equals 1, then NON-MOTORIST ACTION/CIRCUMSTANCES should not equal 05, 06, or 16.
PBB6	If PEDESTRIAN CRASH GROUP equals 750 or 790, then NM ACTION/CIRCUMSTANCES must not equal 08 (In Roadway – Other [Working, Playing, etc.]).
PBB7	If PEDESTRIAN CRASH GROUP equals 750 or 790, then at least one NM ACTION/CIRCUMSTANCES should equal 03 (Crossing Roadway).
PBC0	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE equals 250, then at least one NON-MOTORIST CONTRIBUTING CIRCUMSTANCES should equal 09.
PBC1	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 410, then at least one NON-MOTORIST CONTRIBUTING CIRCUMSTANCES should equal 09.
PBC2	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE equals 143, then TRAFFIC CONTROL DEVICE for the striking vehicle must equal 20, 21, 28, or 29.
PC20	If RELATION TO TRAFFICWAY equals 02-08, 10, or 12, then PRE-IMPACT LOCATION of the vehicle(s) involved in the FIRST HARMFUL EVENT should equal 0, 4, 5, or 9.
PC30	If PRE-IMPACT LOCATION for a vehicle involved in the first harmful event equals 4, 5, and RELATION TO JUNCTION (b) does not equal 04, 05, then RELATION TO TRAFFICWAY should not equal 01 or 11.
PC40	If PRE-IMPACT LOCATION for a vehicle involved in the first harmful event equals 1-3, 6, then RELATION TO TRAFFICWAY should equal 01 or 11.

Error ID	Error Message
PC50	If PRE-IMPACT LOCATION equals 2, then TOTAL LANES IN ROADWAY should not equal 1.

U Series

Error ID	Error Message
U010	UNLIKELY: SPECIAL JURISDICTION is equal to 4 or 5.
U020	UNLIKELY: FIRST HARMFUL EVENT equals 02, 04, 06, 51, or 72.
U030	UNLIKELY: FIRST HARMFUL EVENT equals 12, 55, and MANNER OF COLLISION OF THE FIRST HARMFUL EVENT equals 10, 11.
U361	UNLIKELY: HIT-AND-RUN equals 1, and vPIC BODY CLASS is not equal to 069, 084, 086, 088, 097, 105, 113, 124, 126, 127, and VEHICLE LICENSE PLATE NUMBER is equal to 0s.
U040	UNLIKELY: REGISTRATION STATE equals 97.
U050	UNLIKELY: SPECIAL USE equals 04, 08.
U070	UNLIKELY: More than one vehicle with HIT-AND-RUN equal to 1.
U080	If vPIC BODY CLASS does not equal 009 (Van), 016 (Bus), 068 (Streetcar / Trolley), or 073 (Bus-School Bus), and FINAL STAGE BODY CLASS does not equal 009 (Van), 016 (Bus), 068 (Streetcar / Trolley), or 073 (Bus-School Bus), then UNLIKELY: SPECIAL USE equals 02 or 03.
U111	Unlikely TRAVEL SPEED is 97, 98, or 99.
U120	UNLIKELY: AGE should not be greater than 094, unless equal to 998, 999.
U130	UNLIKELY: SEATING POSITION equals 41-43, 48.
U150	UNLIKELY: NON-MOTORIST LOCATION AT TIME OF CRASH equals 16, 25.
U160	UNLIKELY: INJURY SEVERITY equals 6.
U170	UNLIKELY: RESTRAINT SYSTEM USE Subfield-1 Type of Restraint System in Use equals 01.
U200	Unlikely DRIVER DISTRACTED BY equals 18 or 19.
U210	UNLIKELY: PREVIOUS RECORDED CRASHES is greater than 8 and less than 98.
U220	UNLIKELY: any Subfield of PREVIOUS RECORDED SUSPENSIONS AND REVOCATIONS is greater than 10 and less than 98.
U230	UNLIKELY: PREVIOUS DWI CONVICTIONS is greater than 8 and less than 98.
U240	UNLIKELY: PREVIOUS SPEEDING CONVICTIONS is greater than 8 and less than 98.
U250	UNLIKELY: PREVIOUS OTHER MOVING VIOLATION CONVICTIONS is greater than 8 and less than 98.
U260	UNLIKELY: DRIVER HEIGHT (in feet) is less than 3 feet or greater than 7 feet; verify data.
U280	UNLIKELY: DRIVER HEIGHT is less than 36 inches or greater than 84 inches; verify data.

Error ID	Error Message
U290	UNLIKELY: DRIVER WEIGHT is less than 50 lbs. or greater than 399 lbs.; verify data.
U300	Unlikely NON-MOTORIST DISTRACTED BY equals 18 or 19.
U340	UNLIKELY: HIT-AND-RUN equals 0, and SEX equals 9.
U350	UNLIKELY: INJURY SEVERITY equals 1-6, and SEATING POSITION equals 98.
U360	UNLIKELY: AGE equals 999 and HIT AND RUN is not equal to 1.
U370	UNLIKELY: EXTENT OF DAMAGE equals 8 if STATE does not equal <i>06</i> , 17, 18, 34, <i>36</i> , 48, 49, or 53.
U371	UNLIKELY: EXTENT OF DAMAGE equals 8 if PSU_STATE does not equal <i>CA</i> , IL, NJ, NY, TX, UT, or WA.
U390	UNLIKELY: LIGHT CONDITION equals 8.
U410	UNLIKELY: DRIVER'S LICENSE STATE equals 98 if HIT AND RUN does not equal 1.
U420	UNLIKELY: SPECIAL USE equals 98 unless STATE or PSU_STATE equals 25.
U430	UNLIKELY: VEHICLE REMOVAL equals 8 unless STATE equals TX.
U435	UNLIKELY: VEHICLE REMOVAL equals 8 unless <i>STATE</i> equals <i>TX</i> .
U440	UNLIKELY: VIOLATIONS CHARGED equals 97.
U450	UNLIKELY: REGISTRATION STATE equals 91 if HIT AND RUN does not equal 1.
U490	UNLIKELY: <i>POWER UNIT</i> GVWR_ <i>from and GVWR_to</i> equals <i>98</i> or <i>99</i> and VEHICLE MODEL YEAR is greater than 1980 and not equal to 9998 or 9999, and VIN is not equal to 0000000000000000, 8888888888888888, or 9999999999999, and VIN passes the check digit check (i.e., VIN is a Valid VIN).
U510	UNLIKELY: VEHICLE MODEL YEAR equals 9998 if HIT AND RUN does not equal 1.
U520	UNLIKELY: RESTRAINT SYSTEM USE Subfield-1 Type of Restraint System in Use equals 98 if not a created record and HIT AND RUN does not equal 1.
U530	UNLIKELY: any CONDITION (IMPAIRMENT) AT TIME OF CRASH (D23) equals 03, 05, or 07.
U590	UNLIKELY: CONDITION (IMPAIRMENT) AT TIME OF CRASH equals 05 or 07.
U640	UNLIKELY: FIRST HARMFUL EVENT equals 99.
U651	UNLIKELY: SEQUENCE OF EVENTS equals 62, 60 consecutively.
U652	UNLIKELY: SEQUENCE OF EVENTS equals 01, 58 or 58, 01 consecutively.
U653	UNLIKELY: SEQUENCE OF EVENTS equals 65, 69 consecutively.
U675	UNLIKELY: TRAFFICWAY DESCRIPTION equals 1, 4, or 5, and any SEQUENCE OF EVENTS equals 65 for this vehicle.
U680	UNLIKELY: MOTOR CARRIER IDENTIFICATION NUMBER (Identification Number) equals 999999997.
U681	UNLIKELY: METHOD OF ALCOHOL DETERMINATION BY POLICE equals 8.

Error ID	Error Message
U682	UNLIKELY: CRITICAL EVENT: PRECRASH (EVENT) equals 08 for this vehicle and CONDITION (IMPAIRMENT) AT TIME OF CRASH (D23) does not equal 01 for this vehicle's driver.
U683	UNLIKELY: OWNERSHIP equals 98 or 99 unless STATE equals 06, 12, or 48.
U684	UNLIKELY: LAND USE (a) equals 8.
U685	UNLIKELY: FUNCTIONAL SYSTEM (b) equals 98.
U686	UNLIKELY: LAND USE and FUNCTIONAL SYSTEM (a/b) equals 9, 99.
U687	UNLIKELY: TRAILER VEHICLE IDENTIFICATION NUMBER equal 0s for any of the three sets.
U689	UNLIKELY: ALCOHOL TEST Subfield 3-Test Result equals 001-009.
U690	UNLIKELY: UNIT TYPE equals 2-4 and HIT and RUN equals 1.
U691	UNLIKELY: ALCOHOL TEST Subfield 3-Test Result equals 010-019.
U692	UNLIKELY: ALCOHOL TEST Subfield 3-Test Result equals 020-029.
U693	UNLIKELY: ALCOHOL TEST Subfield 3-Test Result equals 030-039.
U694	UNLIKELY: AGE equals 0 and RESTRAINT SYSTEM USE Subfield-1 Type of Restraint System in Use equals 01-03, 06, 08, 20, 97, 98, 99, or blank and [SEX equals 2 and AGE equals 5-72 for at least one other occupant in the vehicle].
U695	UNLIKELY: AGE equals 0 for a person not in a motor vehicle and [SEX equals 2 and AGE equals 5-72 for at least one other person not in a motor vehicle].
U696	UNLIKELY: ALCOHOL TEST TYPE equals 01, 03, 04, 05, 06, 07, or 08, and ALCOHOL TEST RESULTS is greater than 600, and ALCOHOL TEST RESULTS not equal to 995, 996, 997, 998, or 999.
U697	UNLIKELY: ALCOHOL TEST TYPE equals 02, 10, or 11, and ALCOHOL TEST RESULTS is greater than 300, and ALCOHOL TEST RESULTS not equal to 995, 996, 997, 998, or 999.
U698	UNLIKELY: TYPE OF INTERSECTION equals 11.
U700	UNLIKELY: MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S)-Subfield 2 or MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S)-Subfield 3 equals 3, 4, or 5.
U710	UNLIKELY: MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S)-Subfield 1 equals 01 and VEHICLE MODEL YEAR is between 2000 and 2012.
U720	UNLIKELY: AGE equals 0 and HELMET USE Subfield 1-Helmet Use equals 05, 16, 17, 19, 98, 99, or blank and [SEX equals 2 and AGE equals 5-72 for at least one other occupant in the vehicle].
U730	UNLIKELY: HELMET USE Subfield 1-Helmet Use equals 98 <i>if not a created record and</i> HIT AND RUN does not equal 1.
U740	UNLIKELY: MILEPOINT is greater than 0500.0.
U750	UNLIKELY: If EMS TIME AT HOSPITAL equals 8888, then NOTIFICATION TIME EMS is unlikely to equal 8888.

Error ID	Error Message
U760	UNLIKELY: If EMS TIME AT HOSPITAL equals 8888, then ARRIVAL TIME EMS is unlikely to equal 8888.
U770	UNLIKELY: REGISTRATION STATE equals 98.

V Series

Error ID	Error Message
V010	VEHICLE MODEL YEAR should not be less than 1940.
V011	If VEHICLE MODEL YEAR is less than 1950, then VEHICLE IDENTIFICATION NUMBER must equal 0s.
V020	If VEHICLE TRAILING equals 1, then vPIC BODY CLASS should not equal 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 016 (Bus), 073 (Bus-School Bus), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring / Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 Off-road Vehicle - Dirt Bike / Off-Road), 085 (Motorcycle - Dual Sport / Adventure / Supermoto / On/Off-Road), 086 (Off-road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small / Minibike), 088 (Off-road Vehicle - Go Kart), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 097 (Off-road Vehicle - Snowmobile), 098 (Motorcycle - Street), 100 (Motorcycle - Enclosed Three Wheeled / Enclosed Autocycle), 103 (Motorcycle - Unenclosed Three Wheeled / Open Autocycle), 104 (Motorcycle - Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motocross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle), and FINAL STAGE BODY CLASS should not equal 016 (Bus) or 073 (Bus-School Bus).
V031	If RELATED FACTORS-VEHICLE LEVEL equals 039, then vPIC BODY CLASS should equal 011 (Truck), 060 (Pickup), 66 (Truck-Tractor), 095 (Cargo Van), 111 (Step Van / Walk-in Van), 127 (Off-road Vehicle - Construction Equipment), or 997 (Other), or FINAL STAGE BODY CLASS should equal 011 (Truck), 060 (Pickup), 66 (Truck-Tractor), 095 (Cargo Van), 111 (Step Van/Walk-in Van), or 997 (Other (Specify:)).
V032	If SPECIAL USE equals 10, 11, or 12, then vPIC BODY CLASS should equal 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 009 (Van), 011 (Truck), 060 (Pickup), or 119 (Sport Utility Truck (SUT)), or FINAL STAGE BODY CLASS should equal 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 009 (Van), 011 (Truck), 060 (Pickup), or 119 (Sport Utility Truck (SUT)).
V033	If RELATED FACTORS-VEHICLE LEVEL equals 045, then vPIC BODY CLASS must equal 060 (Pickup), or FINAL STAGE BODY CLASS must equal 060 (Pickup).

Error ID	Error Message
V050	If HELMET USE Subfield 1 Helmet Use equals 05, 16, 17, 19, or 99, then vPIC BODY CLASS must equal 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport/Adventure/Supermoto/On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 097 (Off-road Vehicle - Snowmobile), 098 (Motorcycle - Street), 100 (Motorcycle - Enclosed Three Wheeled / Enclosed Autocycle), 103 (Motorcycle - Unenclosed Three Wheeled / Open Autocycle), 104 (Moped), 105 (Off-road Vehicle - Recreational Off-Road Vehicle (ROV)), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 124 (Off-road Vehicle - Go Kart), 125 (Motorcycle - Unknown Body Type), 996 (Motorized Bicycle), or 997 (Other).
V051	If BUS USE equals 01, then vPIC BODY CLASS should equal 009 (Van), 016 (Bus), or 073 (Bus - School Bus), or FINAL STAGE BODY CLASS should equal 009 (Van), 016 (Bus), or 073 (Bus - School Bus).
V052	If BUS USE equals 04, then vPIC BODY CLASS should equal 016 (Bus), or FINAL STAGE BODY CLASS should equal 016 (Bus).
V053	If BUS USE equals 05, then vPIC BODY CLASS should equal 009 (Van), 016 (Bus), or 117 (Limousine), or FINAL STAGE BODY CLASS should equal 009 (Van), 016 (Bus), or 117 (Limousine).
V054	If BUS USE equals 07, then vPIC BODY CLASS must equal 009 (Van), 016 (Bus), 068 (Streetcar / Trolley), or 073 (Bus-School Bus), or FINAL STAGE BODY CLASS must equal 009 (Van), 016 (Bus), 068 (Streetcar / Trolley), or 073 (Bus-School Bus).
V055	If BUS USE equals 00, then vPIC BODY CLASS must not equal 016 (Bus) or 073 (Bus - School Bus), and FINAL STAGE BODY CLASS must not equal 016 (Bus) or 073 (Bus - School Bus).
V056	If SPECIAL USE equals 02, then BUS USE should equal 01.
V057	If SPECIAL USE equals 03, then BUS USE should equal 04-07, 98, or 99.
V058	If EMERGENCY MOTOR VEHICLE USE equals 2-6, then SPECIAL USE should equal 04-08, 10, 11, 12, or 24.
V059	If BUS USE equals 01, then SPECIAL USE must equal 02.
V060	If SPECIAL USE equals 04, then REGISTRATION STATE should equal 94.
V061	If BUS USE equals 04-07, then SPECIAL USE must equal 03.
V070	If HM1 equals 2, then REGISTRATION STATE should not equal 92.
V090	If HM1 equals 2, then COMMERCIAL MOTOR VEHICLE LICENSE STATUS should equal 06, 99.
V100	If HM1 equals 2, and RELATED FACTORS-DRIVER LEVEL does not equal 019, then COMMERCIAL MOTOR VEHICLE LICENSE STATUS should not equal 01, 02, 05.
V16P	If RELATED FACTORS-DRIVER LEVEL equals 0 88, then VEHICLE TRAILING must not equal 0, 9.

Error ID	Error Message
V170	If NUMBER OF OCCUPANTS equals 01-98, and vPIC BODY CLASS equals 001 (Convertible/Cabriolet), 003 (Coupe), 004 (Low Speed Vehicle (LSV) / Neighborhood Electric Vehicle (NEV)), 005 (Hatchback/Liftback/Notchback), 010 (Roadster), 013 (Sedan/Saloon), 060 (Pickup), 088 (Off-road Vehicle - Go Kart), 105 (Off-road Vehicle - Recreational Off-Road Vehicle (ROV)), 124 (Off-road Vehicle - Golf Cart), 126 (Off-road Vehicle - Farm Equipment), 127 (Off-road Vehicle - Construction Equipment), or 997 (Other), or FINAL STAGE BODY CLASS equals 004 (Low Speed Vehicle (LSV) / Neighborhood Electric Vehicle (NEV)) or 060 (Pickup), then NUMBER OF OCCUPANTS should not be greater than 6.
V190	If NUMBER OF OCCUPANTS is 01-98, and <i>FINAL STAGE BODY CLASS</i> equals <i>117</i> (<i>Limousine</i>), then NUMBER OF OCCUPANTS should not be greater than <i>30</i> .
V200	If NUMBER OF OCCUPANTS is 01-98, and vPIC BODY CLASS equals a motorcycle (006, 012, 080, 081, 082, 083, 084, 085, 086, 087, 090, 094, 098, 104, 109, 110, 113, 114, 125, 996), 100 (Motorcycle - Enclosed Three Wheeled / Enclosed Autocycle), 103 (Motorcycle - Unenclosed Three Wheeled / Open Autocycle), 069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)), or 097 (Off-road Vehicle - Snowmobile), then NUMBER OF OCCUPANTS should not be greater than 2.
V210	If NUMBER OF OCCUPANTS is 01-98, vPIC BODY CLASS equals 002 (Minivan), 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 008 (Crossover Utility Vehicle (CUV)), 009 (Van), 15 (Wagon), or 119 (Sport Utility Truck (SUT)), or FINAL STAGE BODY CLASS equals 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 008 (Crossover Utility Vehicle (CUV)), 15 (Wagon), or 119 (Sport Utility Truck), then NUMBER OF OCCUPANTS should not be greater than 15.
V220	If NUMBER OF OCCUPANTS is 01-98, and vPIC BODY CLASS equals 011 (Truck), 066 (Truck-Tractor), 095 (Cargo Van), 111 (Step Van / Walk-in Van), or FINAL STAGE BODY CLASS equals 011 (Truck), 066 (Truck-Tractor), 095 (Cargo Van), or 111 (Step Van / Walk-in Van), then NUMBER OF OCCUPANTS should not be greater than 4.
V260	If vPIC BODY CLASS equals 999 (Unknown), then NUMBER OF OCCUPANTS should equal 0-10 or 99.
V270	If VEHICLE MODEL YEAR is greater than 1980, then the VIN should be 17 characters, all characters should be alphanumeric (A-Z, a-z, 0-9), and no characters should equal I, O, or Q.
V271	If VEHICLE MODEL YEAR is greater than 1980 and PSU_STATE is equal to GA, then the first 11 characters of VEHICLE IDENTIFICATION NUMBER should be alphanumeric (A-Z, a-z, 0-9), and no characters should equal I, O, or Q.
V272	If VEHICLE MODEL YEAR is greater than 1980 and PSU_STATE is not equal to GA <i>or MN</i> , then the VEHICLE IDENTIFICATION NUMBER should be 17 characters, all characters should be alphanumeric (A-Z, a-z, 0-9), and no characters should equal I, O, or Q.
V280	If VEHICLE MODEL YEAR is greater than 1980 and VEHICLE IDENTIFICATION NUMBER is 17 characters, all characters are alphanumeric (A-Z, a-z, 0-9), and no characters are I, O, or Q, then the VIN should pass check digit calculation.

Error ID	Error Message
V281	If VEHICLE MODEL YEAR is greater than 1980 and VEHICLE IDENTIFICATION NUMBER is 17 characters and PSU_STATE is not equal to GA, all characters are alphanumeric (A-Z, a-z, 0-9), and no characters are I, O, or Q, then the VEHICLE IDENTIFICATION NUMBER should pass check digit calculation.
V300	Possible error in VIN Production Number.
V310	If SEATING POSITION equals 54 and VEHICLE TRAILING equals 1-4, then AIR BAG DEPLOYED must equal 20.
V320	If vPIC BODY CLASS equals 011 (Truck), 016 (Bus), 066 (Truck-Tractor), 068 (Streetcar / Trolley), 73 (Bus-School Bus), 95 (Cargo Van), 108 (Motorhome), or 111 (Step Van / Walk-in Van), or FINAL STAGE BODY CLASS equals 011 (Truck), 016 (Bus), 066 (Truck-Tractor), 068 (Streetcar / Trolley), 73 (Bus-School Bus), 95 (Cargo Van), 108 (Motorhome), or 111 (Step Van / Walk-in Van), and POWER UNIT GVWR_from and GVWR_to equals 13 to 18, and SEATING POSITION does not equal 11, 13, or 98, then AIR BAG DEPLOYED should equal 20 or 98.
V330	If SCHOOL BUS RELATED equals 1, then <i>vPIC BODY CLASS or FINAL STAGE BODY CLASS</i> of at least one of the involved vehicles should equal <i>073 (Bus - School Bus)</i> , or SPECIAL USE for at least one involved vehicle should equal 02, or BUS USE for at least one vehicle should equal 01.
V401	If NUMBER OF OCCUPANTS is 01-98, and vPIC BODY CLASS equals 108 (Motorhome), or FINAL STAGE BODY CLASS equals 108 (Motorhome), then NUMBER OF OCCUPANTS should not be greater than 8.
V402	If NUMBER OF OCCUPANTS is 01-98, and vPIC BODY CLASS equals 073 (Bus - School Bus), or FINAL STAGE BODY CLASS equals 073 (Bus - School Bus), then NUMBER OF OCCUPANTS should not be greater than 50.
V440	If <i>vPIC BODY CLASS or FINAL STAGE BODY CLASS</i> equals <i>073 (Bus - School Bus)</i> , then SCHOOL BUS RELATED should equal 1.
V450	If NUMBER OF OCCUPANTS is 01-98, and vPIC BODY CLASS equals equal 016 (Bus) or 068 (Streetcar / Trolley), or FINAL STAGE BODY CLASS equals 016 (Bus) or 068 (Streetcar / Trolley), then NUMBER OF OCCUPANTS should not be greater than 60.
V46P	If VEHICLE CONFIGURATION equals 21, then vPIC BODY CLASS must equal 009 (Van), 016 (Bus), 068 (Streetcar / Trolley), or 073 (Bus-School Bus), or FINAL STAGE BODY CLASS must equal 016 (Bus), 068 (Streetcar / Trolley), or 073 (Bus-School Bus).
V470	If VEHICLE CONFIGURATION equals 01, then CARGO BODY TYPE should be 01-05, 07, 12, 96-98.
V47P	If VEHICLE CONFIGURATION equals 21, then CARGO BODY TYPE must equal 22.
V504	If POWER UNIT GVWR equals 11 or 12 , then NCSA BODY TYPE must equal 01-22, 28-49, 80-90 , 91 , 94-96 or 97 .
V507	If NCSA BODY TYPE equals 01-22, 28-49, 80-90, 91, or 94-96, then POWER UNIT GVWR_From and Power Unit GVWR_To MUST be 11 or 12.
V509	If NCSA BODY TYPE equals 50-78, then POWER UNIT GVWR_FROM and POWER UNIT GVWR_TO must be in 13-18.

Error ID	Error Message
V531	If BUS USE equals 01, 04-07, 98, then VEHICLE CONFIGURATION should equal 20, 21, and CARGO BODY TYPE should equal 22.
V532	If VEHICLE CONFIGURATION equals 01, 02, 05-08, 19, 21, then POWER UNIT GVWR must not be 11 or 12.
V533	If CRASH TYPE equals 03, 08, 38, 40, 58 or 60, then ATTEMPTED AVOIDANCE MANEUVER must not equal 00 or 01.
V534	If CRASH TYPE equals 02 or 07, and ATTEMPTED AVOIDANCE MANEUVER equals 01, then PRE-IMPACT STABILITY should not equal 09.
V535	If ATTEMPTED AVOIDANCE MANEUVER equals 00, then PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 00.
V536	If CRASH TYPE equals 20-49, then TRAFFICWAY DESCRIPTION should be the same for the vehicles involved in the FIRST HARMFUL EVENT.
V537	If CRASH TYPE equals 68, 69, 82, 83, 86, 87, 88, or 89, then the vehicles involved in the FIRST HARMFUL EVENT should have a RELATION TO JUNCTION equal to 02, 04, or 08.
V538	If JACKKNIFE equals 2, then PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must not equal 04, 05, 07-09 or 13 for this vehicle.
V539	If CRASH TYPE equals 50-67, then ROADWAY ALIGNMENT should not equal 2 for both vehicles involved in the FIRST HARMFUL EVENT, and should not equal 3 for both vehicles involved in the FIRST HARMFUL EVENT.
V550	If REGISTRATION STATE equals 93, 94, then REGISTERED VEHICLE OWNER should equal 3, 4.
V560	If SPECIAL USE equals 04, then REGISTERED VEHICLE OWNER should equal 3, and REGISTRATION STATE should equal 94.
V56P	If VEHICLE CONFIGURATION equals 10, then POWER UNIT GVWR must equal 11-12 , and HM1 must equal 2.
V570	If HM1 equals 2, then REGISTERED VEHICLE OWNER should not equal 0, 1, 2, 4.
V57P	If VEHICLE CONFIGURATION equals 05, then CARGO BODY TYPE must equal 12 or 96.
V580	If HM1 equals 2, then REGISTERED VEHICLE OWNER should equal 3.
V58P	If VEHICLE CONFIGURATION equals 04, then vPIC BODY CLASS must not equal 066 (Truck-Tractor), and FINAL STAGE BODY CLASS must not equal 066 (Truck-Tractor).
V590	If RELATED FACTORS-VEHICLE LEVEL equals 032, then REGISTERED VEHICLE OWNER should equal 1-3.
V592	If RELATED FACTORS-VEHICLE LEVEL equals 037, then REGISTRATION STATE should not equal 00, 92.
V593	If RELATED FACTORS-VEHICLE LEVEL equals 037, then REGISTERED VEHICLE OWNER should not equal 0.
V594	If RELATED FACTORS - VEHICLE LEVEL equals <i>0</i> 29, then NUMBER OF VEHICLE FORMS SUBMITTED must be greater than 002.

Error ID	Error Message
V595	If RELATED FACTORS - VEHICLE LEVEL equals 0 29 for this vehicle, then at least one other vehicle in the crash must have an AREA OF IMPACT equal to 18, 19, or 20 associated with an event involving this vehicle in the crash events table.
V596	If SPECIAL USE equals 23, then <i>POWER UNIT GVWR_FROM and POWER UNIT GVWR_TO must be in 13-18, and vPIC BODY CLASS must equal 009 (Van), 011 (Truck), 060 (Pickup), or 095 (Cargo Van), or FINAL STAGE BODY CLASS must equal 009 (Van), 011 (Truck), 060 (Pickup), or 095 (Cargo Van).</i>
V59P	If VEHICLE CONFIGURATION equals 06, then vPIC BODY CLASS must equal 066 (Truck-Tractor), or FINAL STAGE BODY CLASS must equal 066 (Truck-Tractor), and VEHICLE TRAILING must equal 1.
V59Q	If ATTEMPTED AVOIDANCE MANEUVER equals 99, then DRIVER MANEUVERED TO AVOID should equal 00, 98, or 99.
V600	If REGISTERED VEHICLE OWNER equals 9, then REGISTRATION STATE should equal 99.
V60P	If VEHICLE CONFIGURATION equals 07, then <i>vPIC BODY CLASS must equal 066 (Truck-Tractor)</i> , or <i>FINAL STAGE BODY CLASS must equal 066 (Truck-Tractor)</i> , and VEHICLE TRAILING must equal 2.
V61P	If VEHICLE CONFIGURATION equals 08, then <i>vPIC BODY CLASS must equal 066 (Truck-Tractor)</i> , or <i>FINAL STAGE BODY CLASS must equal 066 (Truck-Tractor)</i> , and VEHICLE TRAILING must equal 3.
V620	If CRASH MONTH is between January and March, then the VEHICLE MODEL YEAR should NOT be greater than the CRASH YEAR unless it equals 9998 or 9999 (contact Coding Assistance through the CDAN Helpdesk).
V62P	If VEHICLE TRAILING equals 0 and CARGO BODY TYPE equals 01- 08 , 97, 98, and VEHICLE IDENTIFICATION NUMBER does not equal 8s or 9s, then POWER UNIT GVWR_ from and GVWR_to must equal 13 , 14 , 15 , 16 , 17 , or 18 .
V630	If REGISTRATION STATE equals 00, 92, then REGISTERED VEHICLE OWNER should NOT equal 5.
V65P	If POWER UNIT GVWR equals 13 , 14 , 15 , 16 , 17 , or 18 , then VEHICLE CONFIGURATION must not equal 00 and CARGO BODY TYPE must not equal 00.
V670	If REGISTERED VEHICLE OWNER equals 1, 2, then REGISTRATION STATE should NOT equal 99.
V68P	If CARGO BODY TYPE equals 12, then VEHICLE TRAILING must equal 5.
V700	If ROLLOVER equals 2, then CRASH TYPE should equal 01-10, 14, 98 or 99 for this vehicle.
V74P	If UNIT TYPE equals 1, and ROLLOVER equals 1, 2, 9, or LOCATION OF ROLLOVER equals 1-7, 9, then at least one SEQUENCE OF EVENTS must equal 01 for this vehicle.
V750	If UNDERRIDE/OVERRIDE equals 1-3, then FIRST HARMFUL EVENT or at least one SEQUENCE OF EVENTS (for this vehicle) should equal 12, 55.
V75P	If ROLLOVER is not blank, then LOCATION OF ROLLOVER must not be blank.
V760	If UNDERRIDE/OVERRIDE equals 4-6, then FIRST HARMFUL EVENT or at least one SEQUENCE OF EVENTS (for this vehicle) should equal 14, 45.

Error ID	Error Message
V76P	If ROLLOVER is blank, then LOCATION OF ROLLOVER must be blank.
V770	If UNDERRIDE/OVERRIDE equals 7, then at least one SEQUENCE OF EVENTS (for this vehicle) must equal 12, 55.
V77P	If ROLLOVER equals 1, 2, 9, then LOCATION OF ROLLOVER must equal 1-7, 9.
V780	If UNDERRIDE/OVERRIDE equals 8, then at least one SEQUENCE OF EVENTS (for this vehicle) must equal 14, 45.
V78P	If ROLLOVER equals 0, then LOCATION OF ROLLOVER must equal 0.
V790	If <i>vPIC BODY CLASS</i> equals <i>002 (Minivan)</i> , <i>and HM1 equals 1</i> , then VEHICLE CONFIGURATION should equal 00, and CARGO BODY TYPE should equal 00.
V791	If vPIC BODY CLASS equals 998 or 999 and POWER UNIT GVWR_From is equal to 98 or 99, AND POWER UNIT GVWR_To equals 98 or 99, then VEHICLE CONFIGURATION must equal 99 and CARGO BODY TYPE must equal 99.
V79P	If ROLLOVER equals 2, and FIRST HARMFUL EVENT equals 01, then CRASH TYPE must equal 01-10, 14, 15, or 98 for the vehicle involved in the FIRST HARMFUL EVENT.
V800	If <i>NCSA</i> BODY TYPE equals 21, 22, 28, 29, then VEHICLE CONFIGURATION should equal 00, 04, 10, 20, 21, 99, and CARGO BODY TYPE should equal 00, 01, 22, 99.
V810	If vPIC BODY CLASS equals 060 (Pickup), or FINAL STAGE BODY CLASS equals 060 (Pickup), and POWER UNIT GVWR_From equals 13, 14, or 15, and POWER UNIT GVWR_To equals 13, 14, or 15, and VEHICLE TRAILING equals 1-4, then VEHICLE CONFIGURATION should equal 04, and CARGO BODY TYPE should equal 01, 03, 04, 09.
V840	If vPIC BODY CLASS equals 016 (Bus), 068 (Streetcar / Trolley), or 073 (Bus-School Bus), or FINAL STAGE BODY CLASS equals 016 (Bus), 068 (Streetcar / Trolley), or 073 (Bus-School Bus), and POWR UNIT GVWR From_ and GVWR_To equals 13-18, then VEHICLE CONFIGURATION should equal 21, and CARGO BODY TYPE should equal 22.
V850	If vPIC BODY CLASS equals 111 (Step Van / Walk-in Van), or FINAL STAGE BODY CLASS equals 111 (Step Van / Walk-in Van), and POWER UNIT GVWR From_ and GVWR_To equals 13-18, then VEHICLE CONFIGURATION should equal 01 or 04, and CARGO BODY TYPE should equal 01.
V860	If HIT-AND-RUN equals 0, and <i>vPIC BODY CLASS equals 011 (Truck) or FINAL STAGE BODY CLASS equals 011 (Truck)</i> , then VEHICLE CONFIGURATION should equal 01, 02, <i>or</i> 04, and CARGO BODY TYPE should equal 01-10, 12, <i>or</i> 96-98.
V870	If vPIC BODY CLASS equals 108 (Motorhome), or FINAL STAGE BODY CLASS equals 108 (Motorhome), and POWER UNIT GVWR From_ and GVWR_To equals 13-18, then VEHICLE CONFIGURATION should equal 19, and CARGO BODY TYPE should equal 97.
V880	If <i>vPIC BODY CLASS equals 066 (Truck-Tractor), or FINAL STAGE BODY CLASS equals 066 (Truck-Tractor),</i> then VEHICLE CONFIGURATION should equal 05-08 <i>or</i> 19, and CARGO BODY TYPE should equal 01-04, 06-12, 96-98.
V881	If HIT AND RUN equals 1, then VEHICLE REMOVAL should not equal 8 or 9.

Error ID	Error Message
V900	If vPIC BODY CLASS equals 108 (Motorhome), or FINAL STAGE BODY CLASS equals 108 (Motorhome), and POWER UNIT GVWR equals 98 or 99, then VEHICLE CONFIGURATION should equal 99, and CARGO BODY TYPE should equal 99.
V910	If vPIC BODY CLASS equals 99 (Unknown), and POWER UNIT GVWR From_ and GVWR_To equals 13-18, then VEHICLE CONFIGURATION should equal 19, and CARGO BODY TYPE should equal 98.
V915	If vPIC BODY CLASS equals 060 (Pickup), or FINAL STAGE BODY CLASS equals 060 (Pickup), and POWER UNIT GVWR From_ and GVWR_To equals 13-18, and VEHICLE TRAILING equals 0, then VEHICLE CONFIGURATION should equal 01, and CARGO BODY TYPE should equal 97.
V920	If vPIC BODY CLASS equals 011 (Truck) or 060 (Pickup), or FINAL STAGE BODY CLASS equals 011 (Truck) or 060 (Pickup), and POWER UNIT GVWR From_ and GVWR_To equals 98 or 99, then VEHICLE CONFIGURATION should equal 04, 99, and CARGO BODY TYPE should equal 98 or 99.
V922	If <i>NCSA</i> MAKE equals 98, 99, and <i>NCSA</i> MODEL equals, then <i>VEHICLE</i> MODEL YEAR should equal (<i>NCSA</i> MODEL and <i>VEHICLE</i> MODEL YEAR should be valid according to Vehicle Tables).
V930	If VEHICLE CONFIGURATION equals 00, or CARGO BODY TYPE equals 00, then POWER UNIT GVWR From_ and GVWR_To must not equal 13-18.
V940	If HM1 equals 2, then VEHICLE CONFIGURATION should not equal 00, 99, and CARGO BODY TYPE should not equal 00, 99.
V941	If vPIC BODY CLASS equals 069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcyclestyle)), 084 (Off-road Vehicle - Dirt Bike / Off-Road), 086 (Off-road Vehicle - Enduro (Off-road long-distance racing)), 088 (Off-road Vehicle - Go Kart), 097 (Off-road Vehicle - Snowmobile), 113 (Off-road Vehicle - Motocross (Off-road, short-distance, closed track racing)), 126 (Off-road Vehicle - Farm Equipment), 127 (Off-road Vehicle - Construction Equipment), then VEHICLE LICENSE PLATE NUMBER should equal 0000000000.
V951	If vPIC BODY CLASS equals 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport/Adventure/Supermoto/On/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 097 (Off-road Vehicle - Snowmobile), 098 (Motorcycle - Street), 104 (Motorcycle - Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle),then RESTRAINT SYSTEM USE Subfield 1-Type of Restraint System in Use must equal 20 and Subfield 2 - Any Indication of Mis-Use must equal 7.
V960	If REGISTRATION STATE equals 99, then REGISTERED VEHICLE OWNER should equal 5, 6, 9.

Error ID	Error Message
V961	If <i>NCSA</i> MAKE equals 98, 99, and <i>NCSA</i> MODEL equals, then <i>NCSA</i> BODY TYPE should equal (<i>NCSA</i> MODEL and <i>NCSA</i> BODY TYPE should be valid according to the Vehicle Tables).
V980	If POWER UNIT GVWR_From and POWER UNIT GVWR_To equals 13-18, or VEHICLE CONFIGURATION equals 20 or 21, or HM1 equals 2, then MOTOR CARRIER IDENTIFICATION NUMBER must not equal 00-000000000 or 99-999999999.
V981	If VEHICLE CONFIGURATION equals 00, then MOTOR CARRIER IDENTIFICATION NUMBER <i>must</i> equal 00-000000000.
V982	If MOTOR CARRIER IDENTIFICATION NUMBER does not equal 00-000000000, then VEHICLE CONFIGURATION <i>must</i> not equal 00.
V983	If VEHICLE TRAILING equals 3, then STATE should equal 04, 08, 16, 18, 20, 30-32, 38-41, 46, 49.
V984	If STATE does not equal 04, 08, 16, 18, 20, 30-32, 38-41, 46, 49, then VEHICLE TRAILING should not equal 3.
V985	If VEHICLE TRAILING equals 5, then VEHICLE CONFIGURATION should not equal 00, 10, 19-21.
V986	If VEHICLE TRAILING equals 3, then PSU should equal OH, OK, SD, UT.
V987	If vPIC MAKE equals 99998 (Not Reported) or 99999 (Unknown) and vPIC MODEL equals 99998 (Not Reported) or 99999 (Unknown) and vPIC BODY CLASS equals 998 (Not Reported) or 999 (Unknown), then MOTOR CARRIER IDENTIFICATION NUMBER should equal 99-999999999.
V989	If vPIC MAKE equals 99998 (Not Reported) or 99999 (Unknown), and vPIC MODEL equals 99998 (Not Reported) or 99999 (Unknown), and vPIC BODY CLASS equals 998 (Not Reported) or 999 (Unknown), then BUS USE should equal 99.
V990	If any SEQUENCE OF EVENTS equals 61, then CONTRIBUTING CIRCUMSTANCES, MOTOR VEHICLE should not equal 00.
V991	If VEHICLE TRAILING equals 0, then VEHICLE CONFIGURATION must not equal 04, 06-08.
V992	If VEHICLE TRAILING equals 1, then VEHICLE CONFIGURATION must not equal 01, 02, 05, 07 or 08.
V993	If VEHICLE TRAILING equals 2, then VEHICLE CONFIGURATION must not equal 01, 02, 05, 06 or 08.
V994	If VEHICLE TRAILING equals 3, then VEHICLE CONFIGURATION must not equal 01, 02, 05-07.
V995	If VEHICLE TRAILING equals 4, then VEHICLE CONFIGURATION must not equal 01, 02, 05-08.
V997	If VEHICLE TRAILING equals 6, then VEHICLE CONFIGURATION must not equal 04, 06-08.
V998	If VEHICLE TRAILING equals 9, then VEHICLE CONFIGURATION must not equal 04-07 or 08.
VA00	If HM1 equals 1, then HM2, HM5 must equal 0, HM4 must equal 00 and HM3 must equal 0000.

Error ID	Error Message
VA10	If HM1 equals 2, then HM2, HM5 must not equal 0, HM4 must not equal 00 and HM3 must not equal 0000.
VA20	If any of HM2, HM5 equals 0, or HM4 equals 00 or HM3 equals 0000, then HM1 must equal 1.
VA30	If any of HM2, HM5 does not equal 0, or HM4 does not equal 00, or HM3 does not equal 0000, then HM1 must equal 2.
VA40	If HM5 equals 2, then HM3 should not equal 8888 or HM4 should not equal 88.
VA50	If HM3 equals 8888, and HM4 equals 88, then HM5 should not equal 2.
VA60	If HM3 does not equal 0000, 8888, or HM4 does not equal 00, 88, then HM2 should equal 2.
VA70	If POWER UNIT GVWR equals 11 or 12 , and HM2 equals 2, then VEHICLE CONFIGURATION must equal 10.
VA80	HM3 - 4-Digit Hazardous Materials Identification Number must contain 4 digits.
VA90	If MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S)-Subfield 1 equals 01, then MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S)-Subfield 2 and MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S)-Subfield 3 must not equal 00, 98, or 99.
VA91	If MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S)-Subfield 1 equals 00, then MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S)-Subfield 2 and MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S)-Subfield 3 must equal 00.
VA92	If MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S)-Subfield 1 equals 98, then MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S)-Subfield 2 and MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S)-Subfield 3 must equal 98.
VA93	If MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S)-Subfield 1 equals 99, then MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S)-Subfield 2 and MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S)-Subfield 3 must equal 99.
VA94	If MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S)-Subfield 1 equals 01 and MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S)-Subfield 2 equals [2-5], then MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S)-Subfield 3 must not be a greater number than Subfield 2 unless equal to 06, 09, or 90.
VA95	If VEHICLE MODEL YEAR is less than 2000, then MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S) Subfield 1 must equal 00.
VA96	If VEHICLE MODEL YEAR is between 2000 and 2012 and MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S)-Subfield 1 equals 01, then MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S)-Subfield 2 must equal 01.
VA97	If MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S)-Subfield 2 equals 1, then MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S)-Subfield 3 must equal 1, 09, 90.
VA98	If vPIC BODY CLASS equals 006 (Motorcycle - Standard), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring / Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 085 (Motorcycle - Dual Sport / Adventure / Supermoto / On/Off-Road), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 109 (Motorcycle - Cross Country), or 125 (Motorcycle - Unknown Body Type), and VEHICLE MODEL YEAR is less than 2021, then MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S) Subfield 1 must equal 00.

Error ID	Error Message
VA99	If vPIC BODY CLASS equals 04 (Low Speed Vehicle (LSV) / Neighborhood Electric Vehicle (NEV)), 012 (Motorcycle - Scooter), 069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)), 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 088 (Off-road Vehicle - Go Kart), 097 (Off-road Vehicle - Snowmobile), 104 (Moped), 105 (Off-road Vehicle - Recreational Off-Road Vehicle (ROV)), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 124 (Off-road Vehicle - Golf Cart), 126 (Off-road Vehicle - Farm Equipment), 127 (Off-road Vehicle - Construction Equipment), 996 (Motorized Bicycle), or 997 (Other), then MOTOR VEHICLE AUTOMATED DRIVING SYSTEM(S) Subfield 1 must equal 00.
VB60	If PRE-IMPACT STABILITY equals 0, then PRE-IMPACT LOCATION must equal 0.
VB70	If PRE-IMPACT STABILITY is not equal to 0, then PRE-IMPACT LOCATION must not equal 0.
VBA0	If PRE-IMPACT LOCATION equals 1, then PRE-IMPACT STABILITY should equal 1, 2, or 9.
VH06	If vPIC BODY CLASS equals 083 (Motorcycle - Trike), 100 (Motorcycle - Enclosed Three Wheeled / Enclosed Autocycle), or 103 (Motorcycle - Unenclosed Three Wheeled / Open Autocycle), then RELATED FACTORS-VEHICLE LEVEL must not equal 030.
VH10	If PRE-IMPACT LOCATION equals 0, then ATTEMPTED AVOIDANCE MANEUVER must equal 00.
VH20	If ATTEMPTED AVOIDANCE MANEUVER equals 00, then PRE-IMPACT LOCATION must equal 0.
VH25	If UNIT TYPE equals 4, then REGISTERED VEHICLE OWNER should not equal 6, 9.
VH70	If UNIT TYPE equals 2-4, then elements JACKKNIFE, TRAVEL SPEED, AND SEQUENCE OF EVENTS must all be left blank.
VH75	If UNIT TYPE equals 4, then VEHICLE CONFIGURATION should not equal 05, 20, 21, 10.
VH80	If UNIT TYPE equals 4, then CARGO BODY TYPE should not equal 06, 07, 11, 12, 22.
VH81	If any DAMAGED AREAS equals 15 or 99, then only that one value must be coded.
VH82	If EXTENT OF DAMAGE for this vehicle equals 2, 4, 6, then DAMAGED AREAS must not equal 15.
VH83	If the only harmful SEQUENCE OF EVENTS for this vehicle equals 04-06, then DAMAGED AREAS should equal 15.
VH84	If the only harmful SEQUENCE OF EVENTS for this vehicle equals 01-03, 16, 44, 51, 72, 98, then DAMAGED AREAS should not equal 15.
VH85	If AREAS OF IMPACT-INITIAL CONTACT POINT equals 61-63, then DAMAGED AREAS should include at least one of the codes 07-11, or DAMAGED AREAS should equal 15 or 99.
VH86	If AREAS OF IMPACT-INITIAL CONTACT POINT equals 81-83, then DAMAGED AREAS should include at least one of the codes 01-05, or DAMAGED AREAS should equal 15 or 99.
VH87	If HIT-AND-RUN equals 0, and AREAS OF IMPACT-INITIAL CONTACT POINT equals 01-14, then the corresponding code should be included in DAMAGED AREAS or DAMAGED AREAS should equal 15.

Error ID	Error Message
VP01	If VEHICLE IDENTIFICATION NUMBER is not equal to 000000000000000000, 888888888888888, or 999999999999999, Then vPIC BODY CLASS must not equal 61 (Trailer) or 116 (Incomplete Trailer Chassis).
VP02	If VEHICLE IDENTIFICATION NUMBER is not equal to 000000000000000000, 88888888888888, or 999999999999999, then vPIC MAKE must not equal to a Trailer Make.
VP03	If VEHICLE IDENTIFICATION NUMBER decodes with error code only in (1, 400), then VPIC MAKE, VPIC MODEL, VPIC BODY CLASS, NCSA MAKE, NCSA MODEL, and NCSA BODY TYPE must equal the corresponding decoded data values.
VP04	If any one of the fields vPIC MAKE, vPIC MODEL, vPIC BODY CLASS, VEHICLE MODEL YEAR, NCSA MAKE, NCSA MODEL, and NCSA BODY TYPE equals Not Reported (vPIC MAKE [99998], vPIC MODEL [99998], vPIC BODY CLASS [998], VEHICLE MODEL YEAR [9998], NCSA MAKE [97], NCSA MODEL [997], NCSA BODY TYPE [98]), then the other six must also equal Not Reported (vPIC MAKE [99998], vPIC MODEL [99998], vPIC BODY CLASS [998], VEHICLE MODEL YEAR [9998], NCSA MAKE [97], NCSA MODEL [997], NCSA BODY TYPE [98]).
VP05	If vPIC MAKE is not 99997, 99998, 99999, and equals, and vPIC MODEL equals, then VEHICLE MODEL YEAR must equal, or CRASH YEAR plus 1.
VP06	If any one of the fields vPIC MAKE, vPIC MODEL, vPIC BODY CLASS, VEHICLE MODEL YEAR, NCSA MAKE, NCSA MODEL and NCSA BODY TYPE does not equal Not Reported (vPIC MAKE [99998], vPIC MODEL [99998], vPIC BODY CLASS [998], VEHICLE MODEL YEAR [9998], NCSA MAKE [97], NCSA MODEL [997], NCSA BODY TYPE [98]), then the other six must also not be coded as Not Reported (vPIC MAKE [99998], vPIC MODEL [99998], vPIC BODY CLASS [998], VEHICLE MODEL YEAR [9998], NCSA MAKE [97], NCSA MODEL [997], NCSA BODY TYPE [98]).
VP07	UNLIKELY: vPIC MAKE equals 99998 if HIT AND RUN does not equal 1.
VP08	If vPIC MAKE equals 99999, then vPIC MODEL must equal 99999.
VP09	If vPIC MAKE equals 99997, then vPIC MODEL must equal 99997.
VP10	If vPIC MAKE equals 99997, then NCSA MAKE must equal 98 (Other Make).
VP11	If vPIC MAKE equals 99999, then NCSA MAKE must equal 99 (Unknown Make).
VP12	UNLIKELY: FINAL STAGE BODY CLASS equals 997.
VP13	UNLIKELY: vPIC MAKE equals 99997.
VP14	UNLIKELY: vPIC MODEL equals 99997 and vPIC MAKE does not equal 99997, 99998, or 99999.
VP15	UNLIKELY: vPIC MODEL equals 99997 and NCSA MODEL does not equal 398 (Other (Automobile)), 498 (Other (Light Trucks)), 598 (Other (Low Speed Vehicle (LSV)/Neighborhood Electric Vehicle (NEV))), 709 (Unknown cc (Motorcycles)), 739 (Unknown cc (ATV)), 898 (Other (Medium/Heavy Trucks)), 988 (Other (Bus)), or 998 (Other (Vehicle)).

Error ID	Error Message
VP16	UNLIKELY: vPIC MODEL equals 99999 and NCSA MODEL does not equal 399 (Unknown (Automobile)), 499 (Unknown (Light Trucks)), 599 (Unknown (Low Speed Vehicle (LSV)/Neighborhood Electric Vehicle (NEV))), 709 (Unknown cc (Motorcycles)), 739 (Unknown cc (ATV)), 884 (Medium/Heavy Trucks - Unknown engine location), 898 (Other, Unknown, truck over 10,000 lbs. GVWR), 989 (Unknown (Bus)), or 999 (Unknown).
VP17	If vPIC BODY CLASS equals 104 (Motorcycle - Moped), then NCSA BODY TYPE must equal 81 (Moped or Motorized Bicycle).
VP18	If vPIC BODY CLASS equals 012 (Motorcycle - Scooter), then NCSA BODY TYPE must equal 84 (Motor Scooter).
VP19	If vPIC BODY CLASS equals 103 (Motorcycle - Unenclosed Three Wheeled/Open Autocycle), then NCSA BODY TYPE must equal 85 (Unenclosed Three Wheel Motorcycle/Unenclosed Autocycle (1 Rear Wheel)).
VP20	If vPIC BODY CLASS equals 100 (Motorcycle - Enclosed Three Wheeled/Enclosed Autocycle), then NCSA BODY TYPE must equal 86 (Enclosed Three Wheel Motorcycle/Enclosed Autocycle (1 Rear Wheel)).
VP21	If vPIC BODY CLASS equals 105 (Off-road Vehicle - Recreational Off-Road Vehicle (ROV)), then NCSA BODY TYPE must equal 96 (Recreational Off-Highway Vehicle (ROV)).
VP22	If vPIC BODY CLASS equals 084 (Off-Road Vehicle - Dirt Bike/Off-Road), 086 (Off-Road Vehicle - Enduro (Off-road long-distance racing)), or 113 (Off-road Vehicle - Motorcross (Off-road short distance, closed track racing)), then NCSA BODY TYPE must equal 83 (Off-Road Motorcycle).
VP23	If vPIC BODY CLASS equals 088 (Off-road Vehicle - Go Kart), then NCSA BODY TYPE must equal 97 (Other Vehicle Type).
VP24	If vPIC BODY CLASS equals 069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcyclestyle)), then NCSA BODY TYPE must equal 90 (ATV/ATC (All-Terrain Cycle)).
VP25	If vPIC BODY CLASS equals 006 (Motorcycle - Standard), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 085 (Motorcycle - Dual Sport/Adventure/Supermoto/On/Off-Road), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 098 (Motorcycle - Street), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 114 (Motorcycle - Competition), or 125 (Motorcycle - Unknown Body Type), then NCSA BODY TYPE must equal 80 (Two Wheel Motorcycle (excluding motor scooters)) or 89 (Unknown Motored Cycle Type).
VP26	If vPIC BODY CLASS equals 087 (Motorcycle - Small/Minibike), then NCSA BODY TYPE must equal 88 (Other Motored Cycle (mini-bike, pocket motorcycles ''pocket bikes'')).
VP27	If vPIC BODY CLASS equals 083 (Motorcycle - Trike), then NCSA BODY TYPE must equal 82 (Three-Wheeled Motorcycle (2 Rear Wheels)) or 87 (Unknown Three Wheel Motorcycle Type).
VP28	If vPIC BODY CLASS equals 097 (Off-road Vehicle - Snowmobile), then NCSA BODY TYPE must equal 91 (Snowmobile).
VP29	If vPIC BODY CLASS equals 004 (Low Speed Vehicle (LSV)/Neighborhood Electric Vehicle (NEV)), then NCSA BODY TYPE must equal 94 (Low Speed Vehicle (LSV)/Neighborhood Electric Vehicle (NEV)).

Error ID	Error Message
VP30	If vPIC BODY CLASS equals 124 (Off-road Vehicle - Golf Cart), then NCSA BODY TYPE must equal 95 (Golf Cart).
VP31	If vPIC BODY CLASS equals 998 (Not Reported), then NCSA BODY TYPE must equal 98 (Not Reported).
VP32	If vPIC BODY CLASS equals 999 (Unknown), then NCSA BODY TYPE must equal 09 (Other or Unknown Automobile Type), 19 (Utility Vehicle, Unknown Body Type), 29 (Unknown van type), 39 (Unknown (pickup style)), 48 (Unknown light truck type), 49 (Unknown light vehicle type), 59 (Unknown Bus Type), 78 (Unknown medium/heavy truck type), 79 (Unknown truck type (light/medium/heavy), 87 (Unknown Three Wheel Motorcycle Type), 89 (Unknown motored cycle type), or 99 (Unknown Body Type).
VP33	If vPIC BODY CLASS equals 108 (Motorhome) or 078 (Incomplete - Motor Home Chassis) and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 13-18, then NCSA BODY TYPE must equal 65 (Medium/Heavy Vehicle Based Motor Home) or 58 (Other Bus Type).
VP34	If vPIC BODY CLASS equals 108 (Motorhome) or 078 (Incomplete - Motor Home Chassis) and POWER UNIT GVWR_From and POWER UNIT GVWR_To equal 11 or 12, then NCSA BODY TYPE must equal 42 (Light Vehicle Based Motor Home (chassis mounted)).
VP35	If vPIC BODY CLASS equals 066 (Truck-Tractor), then NCSA BODY TYPE must equal 66 (Truck-Tractor (Cab only or with any number of trailing units; any weight)).
VP36	If vPIC BODY CLASS equals 111 (Step Van/Walk-in Van) and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 13-18, then NCSA BODY TYPE must equal 60 (Step Van (GVWR Greater than 10,000 lbs.)).
VP37	If vPIC BODY CLASS equals 111 (Step Van/Walk-in Van) and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 11 or 12, then NCSA BODY TYPE must equal 22 (Step Van or Walk-In Van (GVWR less than or equal to 10,000 lbs.)).
VP38	If vPIC BODY CLASS equals 011 (Truck), and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 13-18, then NCSA BODY TYPE must equal 61 (Single-Unit Straight Truck or Cab-chassis (GVWR range 10,001 to 19,500 lbs.)), 62 (Single-Unit Straight Truck or Cab-chassis (GVWR range 19,501 to 26,000 lbs.)), 63 (Single-Unit Straight Truck or Cab-chassis (GVWR greater than 26,000 lbs.)), 64 (Single-Unit Straight Truck or Cab-Chassis (GVWR unknown)), 67 (Medium/Heavy Pickup (GVWR greater than 10,000 lbs.)), 71 (Unknown if single-unit or combination unit Medium Truck (GVWR range 10,001 lbs. to 26,000 lbs.), 72 (Unknown if single-unit or combination unit Heavy Truck (GVWR greater than 26,000 lbs.), or 78 (Unknown medium/heavy truck type).

Error ID	Error Message		
VP39	If vPIC BODY CLASS equals 074 (Incomplete - Chassis Cab (Number of Cab Unknown)), 070 (Incomplete - Chassis Cab (Double Cab)), 063 (Incomplete - Chassis Cab (Single Cab)), 112 (Incomplete - Commercial Chassis), 067 (Incomplete - Stripped Chassis), 065 (Incomplete), 064 (Incomplete - Glider), 062 (Incomplete - Cutaway) and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 13-18, then NCSA BODY TYPE must equal 50 (School Bus), 51 (Cross Country/Intercity Bus), 52 (Transit Bus (City Bus)), 55 (Van-Based Bus GVWR greater than 10,000 lbs.), 58 (Other Bus Type), 59 (Unknown Bus Type), 60 (Step Van (GVWR greater than 10,000 lbs.)), 61 (Single-Unit Straight Truck or Cab-chassis (GVWR range 19,501 to 26,000 lbs.)), 63 (Single-Unit Straight Truck or Cab-chassis (GVWR greater than 26,000 lbs.)), 64 (Single-Unit Straight Truck or Cab-chassis (GVWR greater than 26,000 lbs.)), 64 (Single-Unit Straight Truck or Cab-chassis (GVWR unknown)), 65 (Medium/Heavy Vehicle Based Motor Home), 66 (Truck-tractor (Cab only or with any number of trailing units; any weight)), 67 (Medium/Heavy Pickup (GVWR greater than 10,000 lbs.)), 71 (Unknown if single-unit or combination unit Medium Truck (GVWR range 10,001 lbs. to 26,000 lbs.), 72 (Unknown if single-unit or combination unit Heavy Truck (GVWR greater than 26,000 lbs.), 78 (Unknown medium/heavy truck type), or 99 (Unknown Body Type).		
VP40	If vPIC BODY CLASS equals 074 (Incomplete - Chassis Cab (Number of Cab Unknown)), 070 (Incomplete - Chassis Cab (Double Cab)), 063 (Incomplete - Chassis Cab (Single Cab)), 112 (Incomplete - Commercial Chassis), 067 (Incomplete - Stripped Chassis), 065 (Incomplete), 064 (Incomplete - Glider), 062 (Incomplete - Cutaway) and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 11-12, then NCSA BODY TYPE must equal 01 (Convertible (excludes sunroof, t-bar)), 02 (2-Door Sedan, Hardtop, Coupe), 03 (3-Door/2-Door Hatchback), 04 (4-Door Sedan, Hardtop), 05 (5-Door/4-Door Hatchback), 06 (Station Wagon (excluding van and truck based), 07 (Hatchback, Number of Doors Unknown), 08 (Sedan/Hardtop, Number of Doors Unknown), 09 (Other or Unknown Automobile Type), 10 (Auto-Based Pickup), 11 (Auto-Based Panel), 12 (Large Limousine), 13 (Three-Wheel Automobile or Automobile Derivative), 14 (Compact Utility), 15 (Large Utility), 16 (Utility Station Wagon), 17 (3-Door Coupe), 19 (Utility Vehicle, Unknown Body Type), 20 (Minivan), 21 (Large Van), 22 (Step-van or walk-in van (GVWR less than or equal to 10,000 lbs.)), 28 (Other van type), 29 (Unknown Van Type), 33 (Convertible pickup), 34 (Light Pickup), 39 (Unknown (pickup style) light conventional truck type), 40 (Cab Chassis Based), 41 (Truck Based Panel), 45 (Other light conventional truck type), 48 (Unknown light truck type), 49 (Unknown light vehicle type).		
VP41	If vPIC BODY CLASS equals 011 (Truck), and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 11-12, then NCSA BODY TYPE must equal 40 (Cab Chassis Based), 41 (Truck Based Panel), 45 (Other light conventional truck type), 48 (Unknown light truck type), or 49 (Unknown light vehicle type)).		
VP42	If vPIC BODY CLASS equals 060 (Pickup) and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 13-18, then NCSA BODY TYPE should equal 67 (Medium/Heavy Pickup (GVWR greater than 10,000 lbs.)).		
VP43	If vPIC BODY CLASS equals 060 (Pickup) and POWER UNIT GVWR_From and POWER UNIT GVWR_To equals 11 or 12, then NCSA BODY TYPE must equal 10 (Auto-Based Pickup), 33 (Convertible pickup), 34 (Light Pickup), or 39 (Unknown (pickup style) light conventional truck type).		
VP44	If vPIC BODY CLASS equals 071 (Incomplete - School Bus Chassis) or 073 (Bus - School Bus), then NCSA BODY TYPE must equal 50 (School Bus).		

Error ID	Error Message		
VP45	If vPIC BODY CLASS equals 009 (Van), 095 (Cargo Van), or 015 (Wagon), and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 13-18, then NCSA BODY TYPE must equal 55 (Van-Based Bus GVWR greater than 10,000 lbs.) or 61 (Single-Unit Straight Truck or Cab-chassis (GVWR range 10,001 to 19,500 lbs.)), 62 (Single-Unit Straight Truck or Cab-chassis (GVWR range 19,501 to 26,000 lbs.)), 63 (Single-Unit Straight Truck or Cab-chassis (GVWR greater than 26,000 lbs.)), or 64 (Single-Unit Straight Truck or Cab-Chassis (GVWR unknown)).		
VP46	If vPIC BODY CLASS equals 009 (Van) or 095 (Cargo Van) and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 11 or 12, then NCSA BODY TYPE must equal 06 (Station Wagon [excluding van and truck based]), 14 (Compact Utility), 20 (Minivan), 21 (Large Van), 28 (Other van type), or 29 (Unknown van type).		
VP47	If vPIC BODY CLASS equals 016 (Bus), 107 (Incomplete - Bus Chassis), 076 (Incomplete - Motor Coach Chassis), 077 (Incomplete - Shuttle Bus Chassis), 072 (Incomplete - Commercial Bus Chassis), 075 (Incomplete - Transit Bus Chassis), or 068 (Streetcar/Trolley) and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 13-18, then NCSA BODY TYPE must equal 51 (Cross Country/Intercity Bus), 52 (Transit Bus (City Bus)), 55 (Van-Based Bus GVWR greater than 10,000 lbs.), 58 (Other Bus Type), or 59 (Unknown Bus Type).		
VP48	If vPIC BODY CLASS equals 002 (Minivan), then NCSA BODY TYPE must equal 20 (Minivan).		
VP49	If vPIC BODY CLASS equals 001 (Convertible/Cabriolet), 003 (Coupe), 013 (Sedan/Saloon), on 010 (Roadster), then NCSA BODY TYPE should equal 01 (Convertible (excludes sunroof, t-bar)), 02 (2-Door Sedan, Hardtop, Coupe), 03 (3-Door/2-Door Hatchback), 04 (4-Door Sedan, Hardtop), 05 (5-Door/4-Door Hatchback), 06 (Station Wagon (excluding van and truck based), 07 (Hatchback, Number of Doors Unknown), 08 (Sedan/Hardtop, Number of Doors Unknown), 09 (Other or Unknown Automobile Type), 11 (Auto-Based Panel), 13 (Three-Wheel Automobile or Automobile Derivative), or 17 (3-Door Coupe).		
VP50	If vPIC BODY CLASS equals 117 (Limousine) and POWER UNIT GVWR_From and POWER UNIT GVWR_To equals 11 or 12, then NCSA BODY TYPE must equal 12 (Large Limousine) or 09 (Other or Unknown Automobile Type).		
VP51	If vPIC BODY CLASS equals 005 (Hatchback/Liftback/Notchback), then NCSA BODY TYPE must equal 03 (3-Door/2-Door Hatchback), 05 (5-Door/4-Door Hatchback), 06 (Station Wagon (excluding van and truck based), 07 (Hatchback, Number of Doors Unknown), 09 (Other or Unknown Automobile Type), 14 (Compact Utility), 19 (Utility Vehicle, Unknown Body Type), 26 (Minivan), 21 (Large Van), 48 (Unknown light truck type), or 49 (Unknown light vehicle type).		
VP52	If vPIC BODY CLASS equals 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 008 (Crossover Utility Vehicle (CUV)), or 119 (Sport Utility Truck (SUT)) and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 11 or 12, then NCSA BODY TYPE must equal 05 (5-Door/4-Door Hatchback), 06 (Station Wagon (excluding van and truck based)), 14 (Compact Utility), 15 (Large Utility), 16 (Utility Station Wagon), 19 (Utility Vehicle, Unknown Body Type), 34 (Light Pickup), 48 (Unknown light truck type), or 49 (Unknown light vehicle type [automobile, utility, van, or light truck]).		
VP53	If NCSA BODY TYPE equals 92 (Farm Equipment Other Than Trucks), then vPIC BODY CLASS must equal 126 (Off-road Vehicle - Farm Equipment).		

Error ID	Error Message	
VP54	If NCSA BODY TYPE equals 93 (Construction Equipment Other Than Trucks), then vPIC BODY CLASS must equal 127 (Off-road Vehicle - Construction Equipment).	
VP55	If vPIC BODY CLASS equals 062 (Incomplete - Cutaway), 063 (Incomplete - Chassis Cab (Single Cab)), 064 (Incomplete - Glider), 065 (Incomplete), 067 (Incomplete - Stripped Chassis 070 (Incomplete - Chassis Cab (Double Cab), 071 (Incomplete - School Bus Chassis), 072 (Incomplete - Commercial Bus Chassis), 074 (Incomplete - Chassis Cab (Number of Cab Unknown)), 075 (Incomplete - Transit Bus Chassis), 076 (Incomplete - Motor Coach Chassis), 077 (Incomplete - Shuttle Bus Chassis), 078 (Incomplete - Motor Home Chassis), 107 (Incomplete - Bus Chassis), or 112 (Incomplete - Commercial Chassis), then FINAL STAGE BODY CLASS must not equal 000 (Not Applicable).	
VP56	If vPIC BODY CLASS equals 016 (Bus), 107 (Incomplete - Bus Chassis), 076 (Incomplete - Motor Coach Chassis), 077 (Incomplete - Shuttle Bus Chassis), 072 (Incomplete - Commercial Bus Chassis), 075 (Incomplete - Transit Bus Chassis), or 068 (Streetcar/Trolley) and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 11-12, then NCSA BODY TYPE must equal 21 (Large Van).	
VP57	If vPIC BODY CLASS equals 117 (Limousine) and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 13-18, then NCSA BODY TYPE must equal 50 (School Bus), 51 (Cross Country/Intercity Bus), 52 (Transit Bus (City Bus)), 55 (Van-Based Bus GVWR greater than 10,000 lbs.), 58 (Other Bus Type), 59 (Unknown Bus Type), 60 (Step Van (GVWR greater than 10,000 lbs.)), 61 (Single-Unit Straight Truck or Cab-chassis (GVWR range 10,001 to 19,500 lbs.)), 62 (Single-Unit Straight Truck or Cab-chassis (GVWR greater than 26,000 lbs.)), 64 (Single-Unit Straight Truck or Cab-chassis (GVWR greater than 26,000 lbs.)), 64 (Single-Unit Straight Truck or Cab-chassis (GVWR unknown)), 66 (Truck-tractor (Cab only or with any number of trailing units; any weight)), 67 (Medium/Heavy Pickup (GVWR greater than 10,000 lbs.)), 71 (Unknown if single-unit or combination unit Medium Truck (GVWR greater than 26,000 lbs.), 72 (Unknown if single-unit or combination unit Heavy Truck (GVWR greater than 26,000 lbs.), 78 (Unknown medium/heavy truck type), 79 (Unknown truck type (light/medium/heavy).	
VP58	If vPIC BODY CLASS equals 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 008 (Crossover Utility Vehicle (CUV), or 119 (Sport Utility Truck (SUT) and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 13-18, then NCSA BODY TYPE must equal 50 (School Bus), 51 (Cross Country/Intercity Bus), 52 (Transit Bus (City Bus)), 55 (Van-Based Bus GVWR greater than 10,000 lbs.), 58 (Other Bus Type), 59 (Unknown Bus Type), 60 (Step Van (GVWR greater than 10,000 lbs.)), 61 (Single-Unit Straight Truck or Cab-chassis (GVWR range 10,001 to 19,500 lbs.)), 62 (Single-Unit Straight Truck or Cab-chassis (GVWR greater than 26,000 lbs.)), 63 (Single-Unit Straight Truck or Cab-chassis (GVWR unknown)), 66 (Trucktractor (Cab only or with any number of trailing units; any weight)), 67 (Medium/Heavy Pickup (GVWR greater than 10,000 lbs.)), 71 (Unknown if single-unit or combination unit Medium Truck (GVWR range 10,001 lbs. to 26,000 lbs.), 72 (Unknown if single-unit or combination unit Heavy Truck (GVWR greater than 26,000 lbs.), 78 (Unknown medium/heavy truck type), 79 (Unknown truck type (light/medium/heavy), or 99 (Unknown Body Type).	

Error ID	Error Message	
VP59	If vPIC BODY CLASS equals 072 (Incomplete - Commercial Bus Chassis), 075 (Incomplete - Transit Bus Chassis), 076 (Incomplete - Motor Coach Chassis), 077 (Incomplete - Shuttle Bus Chassis), or 107 (Incomplete - Bus Chassis), then FINAL STAGE BODY CLASS must equal 016 (Bus), 073 (Bus-School Bus), 997 (Other (Specify:)), 998 (Not Reported), or 999 (Unknown).	
VP60	If vPIC BODY CLASS equals 071 (Incomplete - School Bus Chassis), then FINAL STAGE BODY CLASS must equal 073 (Bus-School Bus), 997 (Other (Specify:)), 998 (Not Reported), or 999 (Unknown).	
VP61	If vPIC BODY CLASS equals 078 (Incomplete - Motor Home Chassis), then FINAL STAGE BODY CLASS must equal 108 (Motorhome), 997 (Other (Specify:)), 998 (Not Reported), or 999 (Unknown).	
VP62	If FINAL STAGE BODY CLASS equals 011 (Truck), 060 (Pickup), or 066 (Truck-Tractor), then vPIC BODY CLASS must equal 062 (Incomplete - Cutaway), 063 (Incomplete - Chassis Cab (Single Cab)), 064 (Incomplete - Glider), 065 (Incomplete), 067 (Incomplete - Stripped Chassis), 070 (Incomplete - Chassis Cab (Double Cab)), 074 (Incomplete - Chassis Cab (Number of Cab Unknown)), or 112 (Incomplete - Commercial Chassis).	
VP63	If FINAL STAGE BODY CLASS equals 004 (Low Speed Vehicle (LSV)), then vPIC BODY CLASS should not equal 063 (Incomplete - Chassis Cab (Single Cab)), 070 (Incomplete - Chassis Cab (Double Cab)), 071 (Incomplete - School Bus Chassis), 074 (Incomplete - Chassis Cab (Number of Cab Unknown)), 076 (Incomplete - Motor Coach Chassis).	
VP64	If FINAL STAGE BODY CLASS equals 009 (Van), 015 (Wagon), 007 (Sport Utility Vehicle (SUV)/Multi-Purpose Vehicle (MPV)), 008 (Crossover Utility Vehicle (CUV)), 068 (Streetcar/Trolley), 095 (Cargo Van), 111 (Step Van/Walk-in Van), then vPIC BODY CLASS should not equal 071 (Incomplete - School Bus Chassis), 076 (Incomplete - Motor Coach Chassis), or 078 (Incomplete - Motor Home Chassis).	
VP65	If FINAL STAGE BODY CLASS equals 117 (Limousine), then vPIC BODY CLASS should not equal 063 (Incomplete - Chassis Cab (Single Cab)), 070 (Incomplete - Chassis Cab (Double Cab)), 071 (Incomplete - School Bus Chassis), 074 (Incomplete - Chassis Cab (Number of Cab Unknown)), 075 (Incomplete - Transit Bus Chassis), or 077 (Incomplete - Shuttle Bus Chassis).	
VP66	If vPIC BODY CLASS equals 006 (Motorcycle - Standard), 012 (Motorcycle - Scooter), 069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring/Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle - Trike), 084 (Off-road Vehicle - Dirt Bike/Off-Road), 085 (Motorcycle - Dual Sport/Adventure/Supermoto/On/Off-Road), 086 (Off-road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small/Minibike), 088 (Off-road Vehicle - Go Kart), 090 (Motorcycle - Side Car), 094 (Motorcycle - Custom), 097 (Off-road Vehicle - Snowmobile), 098 (Motorcycle - Street), 100 (Motorcycle - Enclosed Three Wheeled/Enclosed Autocycle), 103 (Motorcycle - Unenclosed Three Wheeled/Open Autocycle), 104 (Motorcycle - Moped), 105 (Off-road Vehicle - Recreational Off-Road Vehicle (ROV)), 109 (Motorcycle - Cross Country), 110 (Motorcycle - Underbone), 113 (Off-road Vehicle - Motocross (Off-road short distance, closed track racing)), 114 (Motorcycle - Competition), 124 (Off-road Vehicle - Golf Cart), or 125 (Motorcycle - Unknown Body Type), then POWER UNIT GVWR_From and POWER UNIT GVWR_To must equal 11 or 99.	

Error ID	Error Message	
VP67	If vPIC BODY CLASS equals 001 (Convertible/Cabriolet), 003 (Coupe), 005 (Hatchback/Liftback/Notchback), 010 (Roadster), or 013 (Sedan/Saloon), then POWER UNIT GVWR_From and POWER UNIT GVWR_To must equal 11 or 12.	
VP68	If vPIC BODY CLASS equals 002 (Minivan), 008 (Crossover Utility Vehicle (CUV)), or 119 (Sport Utility Truck (SUT)), then POWER UNIT GVWR_From and POWER UNIT GVWR_To must equal 11, 12, 98, or 99.	
VP69	If vPIC BODY CLASS equals 060 (Pickup) or 095 (Cargo Van), then POWER UNIT GVWR_From and POWER UNIT GVWR_To should equal 11, 12, 13, 14, 98, or 99.	
VP70	If TRAILER VEHICLE IDENTIFICATION NUMBER is valid and decodes with error code only in 0, 1, or 400, then TRAILER VEHICLE IDENTIFICATION NUMBER decoded vPIC BODY CLASS must equal 061 (Trailer), 116 (Incomplete - Trailer Chassis), or 065 (Incomplete).	
VP73	UNLIKELY: TRAILER GVWR equals 0s for any of the three sets.	
VP74	If TRAILER VEHICLE IDENTIFICATION NUMBER equals 7s, then TRAILER GVWR must equal 77.	
VP75	If TRAILER VEHICLE IDENTIFICATION NUMBER equals 0s, then TRAILER GVWR must equal 00.	
VP76	If TRAILER VEHICLE IDENTIFICATION NUMBER equals 8s, then TRAILER GVWR should equal 98.	
VP77	If TRAILER VEHICLE IDENTIFICATION NUMBER equals 9s, then TRAILER GVWR should equal 99.	
VP78	If TRAILER VEHICLE IDENTIFICATION NUMBER is not equal to 0s, 7s, 8s or 9s, then TRAILER GVWR must equal 11-18 or 98.	
VP79	If VEHICLE TRAILING equals 1, then TRAILER VEHICLE IDENTIFICATION NUMBER must equal 7s for only two sets.	
VP80	If VEHICLE TRAILING equals 2, then TRAILER VEHICLE IDENTIFICATION NUMBER must equal 7s for only one set.	
VP81	If VEHICLE TRAILING equals 3, then TRAILER VEHICLE IDENTIFICATION NUMBER must not equal to 7s for any set.	
VP82	UNLIKELY: vPIC MODEL equals 99997.	
VP83	If POWER UNIT GVWR_From and POWER UNIT GVWR_To equal 13-18, then MOTOR CARRIER IDENTIFICATION NUMBER, VEHICLE CONFIGURATION, and CARGO BODY TYPE must not equal 00.	
VP84	If vPIC BODY CLASS equals 073, 066, or 068, then MOTOR CARRIER IDENTIFICATION NUMBER, VEHICLE CONFIGURATION, and CARGO BODY TYPE must not equal 00.	
VP85	If VEHICLE TRAILING equals 0 and POWER UNIT GVWR_From and POWER UNIT GVWR_To are either 11 or 12 and HM2 does not equal 2, then VEHICLE CONFIGURATION must equal 00, 20, or 99, and CARGO BODY TYPE must equal 00 or 22.	
VP86	POWER UNIT GVWR_FROM must be equal to or less than POWER UNIT VGWR_TO.	

Error ID	Error Message
VP87	If vPIC BODY CLASS equals 006 (Motorcycle – Standard), 012 (Motorcycle – Scooter), 069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring / Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle – Trike), 084 (Off-road Vehicle - Dirt Bike / Off-Road), 085 (Motorcycle - Dual Sport / Adventure / Supermoto / On/Off-Road), 086 (Off-road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small / Minibike), 088 (Off-road Vehicle - Go Kart), 090 (Motorcycle - Side Car), 094 (Motorcycle – Custom), 097 (Off-road Vehicle – Snowmobile), 098 (Motorcycle – Street), 104 (Motorcycle – Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle – Underbone), 113 (Off-road Vehicle - Motocross (Off-road short distance, closed track racing)), 114 (Motorcycle – Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle), then VEHICLE UNDERRIDE/OVERRIDE must equal 7.
VP88	If VEHICLE UNDERRIDE/OVERRIDE equals 1 or 2, then vPIC BODY CLASS must not equal 006 (Motorcycle – Standard), 012 (Motorcycle – Scooter), 069 (Off-road Vehicle - All Terrain Vehicle (ATV) (Motorcycle-style)), 080 (Motorcycle - Sport), 081 (Motorcycle - Touring / Sport Touring), 082 (Motorcycle - Cruiser), 083 (Motorcycle – Trike), 084 (Off-road Vehicle - Dirt Bike / Off-Road), 085 (Motorcycle - Dual Sport / Adventure / Supermoto / On/Off-Road), 086 (Off-road Vehicle - Enduro (Off-road long-distance racing)), 087 (Motorcycle - Small / Minibike), 088 (Off-road Vehicle - Go Kart), 090 (Motorcycle - Side Car), 094 (Motorcycle – Custom), 097 (Off-road Vehicle – Snowmobile), 098 (Motorcycle – Street), 104 (Motorcycle – Moped), 109 (Motorcycle - Cross Country), 110 (Motorcycle – Underbone), 113 (Off-road Vehicle - Motocross (Off-road short distance, closed track racing)), 114 (Motorcycle – Competition), 125 (Motorcycle - Unknown Body Type), or 996 (Motorized Bicycle).
VP89	If VPIC BODY CLASS equals 997, then NCSA BODY TYPE should be 09 or 97.
VP90	If vPIC BODY CLASS equals 015 (Wagon), and POWER UNIT GVWR_From and POWER UNIT GVWR_To in 11 or 12, then NCSA BODY TYPE must equal code 03 (3-Door/2-Door Hatchback), 05 (5-Door/4-Door Hatchback), 06 (Station Wagon (excluding van and truck based)), 09 (Other or Unknown Automobile Type), 14 (Compact Utility), 15 (Large Utility), 16 (Utility Station Wagon), 20 (Minivan), 19 (Utility Vehicle, Unknown Body Type), 21 (Large Van), 28 (Other van type), 29 (Unknown van type), 48 (Unknown light truck type), or 49 (Unknown light vehicle type).

Appendix C: VIN Decode Errors

Error ID	Error Message		
0	VIN decoded clean. Check Digit (9th position) is correct		
1	Check Digit (9th position) does not calculate properly		
2	VIN corrected, error in one position		
3	VIN corrected, error in one position (assuming Check Digit is correct)		
4	VIN corrected, error in one position only (indicated by ! in Suggested VIN), multiple matches found		
5	VIN has errors in few positions		
6	Incomplete VIN		
7	Manufacturer is not registered with NHTSA for sale or importation in the US for use on US roads; Please contact the manufacturer directly for more information		
8	No detailed data available currently		
9	Glider Error		
10	Off		
11	Incorrect Model Year, decoded data may not be accurate		
12	Model year entered does not match the model year based on the 10th character in VIN		
14	Unable to provide information for all the characters in the VIN.		
400	Invalid Characters Present (I, O, Q)		

Appendix D: Alphabetical Listing of NCSA Makes

FARS Make Code	Make	NCIC Code*
54	Acura	(ACUR)
31	Alfa Romeo	(ALFA)
03	AM General	(AMGN)
01	American Motors	(AMER)
69-031	Aston Martin	(ASTO)
32	<u>Audi</u>	(AUDI)
33	Austin/Austin Healey	(AUST)
29-001	Avanti	(AVTI)
98-802	Auto-Union-DKW	(AUTU)
69-042	Bentley	(BENT)
69-052	Bertone	(BERO)
90	Bluebird	(BLUI)
34	BMW	(BMW)
69-032	Bricklin	(BRIC)
80	Brockway	(BROC)
70	BSA	(BSA)
69-064	<u>Bugatti</u>	
18	Buick	(BUIC)
19	Cadillac	(CADI)
98-903	Carpenter	
69-062	Caterham	
29-002	Checker	(CHEC)
20	Chevrolet	(CHEV)
06	Chrysler	(CHRY)
69-033	Citroen	(CITR)
26	Coda	
98-904	Collins Bus	
64	Daewoo	(DAEW)
60	<u>Daihatsu</u>	(DAIH)
35	<u>Datsun</u>	(DATS)

FARS Make Code	Make	NCIC Code*
69-034	DeLorean	(DELO)
29-398	Desoto	(DESO)
69-048	<u>Desta</u>	
81	Diamond Reo or Reo	(DIAR)
98-905	DINA	(DINA)
98-803	Divco	(DIVC)
07	Dodge	(DODG)
71	<u>Ducati</u>	(DUCA)
10	Eagle	(EGIL)
91	Eagle Coach	
29-398	Excalibur	(EXCL)
69-035	<u>Ferrari</u>	(FERR)
36	<u>Fiat</u>	(FIAT)
69-398	<u>Fisker</u>	
12	Ford	(FORD)
82	Freightliner	(FRHT)
83	FWD	(FWD)
69-398	Gazelle	(GZL)
92	Gillig	
23	GMC	(GMC)
25	Grumman	(GRUM)
72	<u>Harley-Davidson</u>	(HD)
69-036	<u>Hillman</u>	(HILL)
98-806	<u>Hino</u>	(HINO)
37	<u>Honda</u>	(HOND)
29-398	Hudson	(HUDS)
55	Hyundai	(HYUN)
08	<u>Imperial</u>	(CHRY)
58	<u>Infiniti</u>	(INFI)

FARS Make Code	Make	NCIC Code*
84	International Harvester	(INTL)
38	<u>Isuzu</u>	(ISU)
88	Iveco/Magirus	(IVEC)
39	<u>Jaguar</u>	(JAGU)
69-037	<u>Jensen</u>	(JENS)
02	<u>Jeep</u>	(AMER)
02	Kaiser-Jeep	(AMER)
73	<u>Kawasaki</u>	(KAWK)
85	<u>Kenworth</u>	(KW)
63	<u>Kia</u>	(KIA)
69-058	Koenigsegg	
69-053	<u>Lada</u>	(LADA)
69-038	<u>Lamborghini</u>	(LAMO)
40	<u>Lancia</u>	(LNCI)
62	Land Rover	(LNDR)
59	Lexus	(LEXS)
13	Lincoln	(LINC)
69-039	Lotus	(LOTU)
86	Mack	(MACK)
69-061	<u>Mahindra</u>	
69-040	<u>Maserati</u>	(MASE)
69-056	<u>Maybach</u>	(MAYB)
41	<u>Mazda</u>	(MAZD)
69-063	McLaren	
93	MCI	(MCIN)
42	Mercedes-Benz	(MERZ)
14	Mercury	(MERC)
56	<u>Merkur</u>	(MERK)
98-302	Meyers Motors	
98-906	Mid Bus	
69-054	Mini-Cooper	(MNNI)

FARS Make Code	Make	NCIC Code*
43	MG	(MG)
52	<u>Mitsubishi</u>	(MITS)
69-055	Morgan	(MORG)
69-041	Morris	(MORR)
74	Moto-Guzzi	(MOGU)
84	Navistar	(NAVI)
98-902	Neoplan	(NEOP)
35	Nissan	(NISS)
75	Norton	(NORT)
21	Oldsmobile	(OLDS)
18	<u>Opel</u>	(OPEL)
98-907	Orion	(ONTR)
98-805	<u>Oshkosh</u>	(OSHK)
29-398	Packard	(PACK)
29-003	Panoz	(PANZ)
87	<u>Peterbilt</u>	(PTRB)
44	Peugeot	(PEUG)
09	<u>Plymouth</u>	(PLYM)
22	Pontiac	(PONT)
45	<u>Porsche</u>	(PORS)
69-049	Reliant (British)	(RELA)
46	Renault	(RENA)
69-042	Rolls Royce	(ROL)
47	Saab	(SAA)
29-004	Saleen	
24	<u>Saturn</u>	(STRN)
98-807	<u>Scania</u>	(SCAN)
67	Scion	(SCIO)
69-044	Simca	(SIM)
69-398	Singer	(SIN)
65	Smart	(SMRT)

FARS Make Code	Make	NCIC Code*
69-057	<u>Spyker</u>	
61	Sterling	(STLG)
98-809	Sterling	(STLG)
29-001	<u>Studebaker</u>	(STU)
29-398	Stutz	(STUZ)
48	Subaru	(SUBA)
69-045	Sunbeam	(SUNB)
53	<u>Suzuki</u>	(SUZI)
29-005	<u>Tesla</u>	
98-301	<u>Think</u>	
94	Thomas Built	(THMS)
49	<u>Toyota</u>	(TOYT)
50	<u>Triumph</u>	(TRIU)

FARS Make Code	Make	NCIC Code*
69-046	TVR	(TVR)
98-808	<u>UD</u>	(UD)
98-908	Van Hool	
77	Victory	(VCTY)
30	Volkswagen	(VOLK)
51	Volvo	(VOLV)
98-804	Western Star	(WSTR)
89	White/Autocar	(WHIT)
89	White/GMC	(WHGM)
02	Willys-Jeep	(AMER)
76	Yamaha	(YAMA)
57	Yugo	(YUGO)

Appendix E: Numerical Listing of NCSA Makes

FARS Make Code	Make	NCIC Code*
01	American Motors	(AMER)
02	<u>Jeep</u>	(AMER)
02	Kaiser-Jeep	(AMER)
02	Willys-Jeep	(AMER)
03	AM General	(AMGN)
06	Chrysler	(CHRY)
07	Dodge	(DODG)
08	<u>Imperial</u>	(CHRY)
09	Plymouth	(PLYM)
10	<u>Eagle</u>	(EGIL)
12	Ford	(FORD)
13	Lincoln	(LINC)
14	Mercury	(MERC)
18	Buick	(BUIC)
18	<u>Opel</u>	(OPEL)
19	Cadillac	(CADI)
20	Chevrolet	(CHEV)
21	Oldsmobile	(OLDS)
22	Pontiac	(PONT)
23	GMC	(GMC)
24	Saturn	(STRN)
25	Grumman	(GRUM)
26	Coda	
30	Volkswagen	(VOLK)
31	Alfa Romeo	(ALFA)
32	Audi	(AUDI)
33	Austin/Austin Healey	(AUST)
34	BMW	(BMW)
35	<u>Datsun</u>	(DATS)
35	Nissan	(NISS)

FARS Make Code	Make	NCIC Code*
36	<u>Fiat</u>	(FIAT)
37	<u>Honda</u>	(HOND)
38	Isuzu	(ISU)
39	<u>Jaguar</u>	(JAGU)
40	Lancia	(LNCI)
41	Mazda	(MAZD)
42	Mercedes-Benz	(MERZ)
43	MG	(MG)
44	Peugeot	(PEUG)
45	Porsche	(PORS)
46	Renault	(RENA)
47	Saab	(SAA)
48	Subaru	(SUBA)
49	<u>Toyota</u>	(TOYT)
50	<u>Triumph</u>	(TRIU)
51	Volvo	(VOLV)
52	<u>Mitsubishi</u>	(MITS)
53	<u>Suzuki</u>	(SUZI)
54	Acura	(ACUR)
55	<u>Hyundai</u>	(HYUN)
56	Merkur	(MERK)
57	Yugo	(YUGO)
58	<u>Infiniti</u>	(INFI)
59	Lexus	(LEXS)
60	<u>Daihatsu</u>	(DAIH)
61	Sterling	(STLG)
62	Land Rover	(LNDR)
63	<u>Kia</u>	(KIA)
64	<u>Daewoo</u>	(DAEW)
65	Smart	(SMRT)

FARS Make Code	Make	NCIC Code*
67	Scion	(SCIO)
70	BSA	(BSA)
71	<u>Ducati</u>	(DUCA)
72	Harley-Davidson	(HD)
73	Kawasaki	(KAWK)
74	Moto-Guzzi	(MOGU)
75	Norton	(NORT)
76	Yamaha	(YAMA)
77	Victory	(VCTY)
80	Brockway	(BROC)
81	Diamond Reo or Reo	(DIAR)
82	Freightliner	(FRHT)
83	FWD	(FWD)
84	International Harvester	(INTL)
84	Navistar	(NAVI)
85	Kenworth	(KW)
86	Mack	(MACK)
87	Peterbilt	(PTRB)
88	Iveco/Magirus	(IVEC)
89	White/Autocar	(WHIT)
89	White/GMC	(WHGM)
90	Bluebird	(BLUI)
91	Eagle Coach	
92	Gillig	
93	<u>MCI</u>	(MCIN)
94	Thomas Built	(THMS)
29-001	Avanti	(AVTI)
29-001	Studebaker	(STU)
29-002	Checker	(CHEC)
29-003	Panoz	(PANZ)
29-004	Saleen	

FARS Make Code	Make	NCIC Code*
29-005	<u>Tesla</u>	
29-398	<u>Desoto</u>	(DESO)
29-398	Excalibur	(EXCL)
29-398	<u>Hudson</u>	(HUDS)
29-398	Packard	(PACK)
29-398	Stutz	(STUZ)
69-031	Aston Martin	(ASTO)
69-032	Bricklin	(BRIC)
69-033	Citroen	(CITR)
69-034	<u>DeLorean</u>	(DELO)
69-035	<u>Ferrari</u>	(FERR)
69-036	Hillman	(HILL)
69-037	<u>Jensen</u>	(JENS)
69-038	Lamborghini	(LAMO)
69-039	Lotus	(LOTU)
69-040	Maserati	(MASE)
69-041	Morris	(MORR)
69-042	Bentley	(BENT)
69-042	Rolls Royce	(ROL)
69-044	Simca	(SIM)
69-045	Sunbeam	(SUNB)
69-046	TVR	(TVR)
69-048	<u>Desta</u>	
69-049	Reliant (British)	(RELA)
69-052	<u>Bertone</u>	(BERO)
69-053	Lada	(LADA)
69-054	Mini-Cooper	(MNNI)
69-055	Morgan	(MORG)
69-056	Maybach	(MAYB)
69-057	<u>Spyker</u>	
69-058	Koenigsegg	

FARS Make Code	Make	NCIC Code*
69-061	<u>Mahindra</u>	
69-062	Caterham	
69-063	<u>McLaren</u>	
69-064	<u>Bugatti</u>	
69-398	<u>Fisker</u>	
69-398	Gazelle	(GZL)
69-398	Singer	(SIN)
98-301	<u>Think</u>	
98-302	Meyers Motors	
98-802	Auto-Union-DKW	(AUTU)
98-803	Divco	(DIVC)
98-804	Western Star	(WSTR)
98-805	<u>Oshkosh</u>	(OSHK)

FARS Make Code	Make	NCIC Code*
98-806	<u>Hino</u>	(HINO)
98-807	<u>Scania</u>	(SCAN)
98-808	<u>UD</u>	(UD)
98-809	Sterling	(STLG)
98-902	Neoplan	(NEOP)
98-903	Carpenter	
98-904	Collins Bus	
98-905	DINA	(DINA)
98-906	Mid Bus	
98-907	Orion	(ONTR)
98-908	Van Hool	

Appendix F: NCSA Make / Model / Body Type Tables

Passenger Vehicles

Motored Cycles

Trucks

Buses

Other Make

Unknown Make

Passenger Vehicles

NCSA MAKE: Acura (54) (ACUR)

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
031	Integra	GS, LS, RS, GS-R, Type R	1986-2001, 9999	03-05,07,09
032	Legend	L, LS, GS, Special Edition, GS-R	1986-95,9999	02,04,08,09
033	NSX (For 1991-2005 only. For 2016 on see model 043.)	NSX-T	1991-2005, 9999	02
034	Vigor		1992-94,9999	04
035	TL	3.2, 3.5, 3.7, SH-AWD (AT/MT)	1996-2014, 9999	04
036	RL/RLX	3.5, 3.7, Hybrid, Sport Hybrid, Technology Package, Advance Package	1996-2020, 9999	04
037	CL	2.2, 2.3, 3.0, 3.2, Type S	1997-2003, 9999	02
038	RSX	2.0, Type S	2002-06,9999	03
039	TSX	2.4, 3.5, Hybrid, Special Edition, V6	2004-14,9999	04, 06, 09
040	ZDX	3.7, SH-AWD	2010-13,9999	<u>05</u>
041	ILX	2.0, 2.4, Hybrid, Premium, A-Spec, Special Edition, AcuraWatch Plus, Technology Plus, Standard	2013-20,9999	04
043	NSX (2016 on. For 1991-2005 see model 033.)	Sport, GT3, Sport Hybrid	2016-20,9999	02
044	TLX	2.4, 3.6 V-6, Standard, GT Package, A-Spec, Advance Package, Technology Package	2015-20,9999	04
398	Other (automobile)		1986-2020, 9999	02-09
399	Unknown (automobile)		1986-2020, 9999	02-09

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
401	SLX		1996-2000, 9999	14
402	RDX	2.3, SH-AWD, Standard, Advance, AcuraWatch Plus, Technology	2007-20,9999	14
421	MDX	Standard, Sport Hybrid, Technology/ Advance/ Entertainment Package	2001-19,9999	<u>15</u>
499	Unknown (light truck)		1996-2020, 9999	<u>19</u>

UNKNOWN

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
999	Unknown (ACURA)		1986-2020, 9999	49

NCSA MAKE: Alfa Romeo (31) (ALFA)

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
031	Spider (Spyder)	Roadsters, Veloce, Quadrifoglio, Duetto, Graduate, 1600/1750/1900/ 2000 roadsters, Giulia, Giulietta, Giulietta Veloce, Tipo	1933-94,9999	01,02,09
032	Sports Sedan	4-door sedans (except 164); Milano, Giulietta, Super, Berlina, Alfetta, Giulia 1750/1900/2000/2600 sedans, Alpha 90	1933-89,9999	04
033	Sprint/Special	2-door coupes; Alfetta GT, Monteal, 1750/1900/2000/ 2600 GTV, Sprint GT, GT Veloce, Giulia, Giulietta, Super, GTA, GTV, GTZ, TZ2	1933-80,9999	02
034	GTV-6		1981-86,9999	02

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
035	164 (Alpha 164)	LS, Q, Quadrifoglio	1990-95,9999	04
036	4c	Launch Edition, Base	2014-19,9999	01,02,09
037	Giulia	Base, Ti, Quadrifoglio	2016-19,9999	02,04,09
398	Other (automobile)	Alfa, Montreal	1933-95, 2014-19,9999	01-04,08,09
399	Unknown (automobile)		1933-95, 2014-19,9999	01-04,08,09

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
401	Stelvio (For 2018 only. For model years 2019 on, see 31-422.)	Base, Ti, Quadrifoglio	2018	14
422	Stelvio (For 2019 on. For model year 2018, see 31-401.)	Base, Ti, Quadrifoglio	2019	<u>15</u>

UNKNOWN

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
999	Unknown (ALFA ROMEO)		2018-19, 9999	<u>49</u>

NCSA MAKE: AM General (03) (AMGN)

LIGHT TRUCKS

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
401	Dispatcher	Post Office (Jeep)	1965-94,9999	<u>14</u>
402	Hummer	H3 (Base, Luxury, Adventure, Limited Edition), x, Alpha	2006-11,9999	14
421	Hummer (SUV from 1993-2003; see 431 for 2004 on) (for Pickup, see model 481)	Slantback-HMSB, H1, H2	1992-2003, 9999	<u>15</u>
431	Hummer (2004 on; see model 421 for 1993-2003)	H1 (Base, Luxury, Adventure), H2 (Base, Luxury, Adventure), Limousine	2004-11,9999	16
441	MV-1	SE, DX, LX, Taxi	2013-15,9999	<u>20</u>
466	Dispatcher	DJ-Series-Post Office Van	1965-91,9999	<u>22</u>
481	Hummer (Pickup) (for SUV see model 421 for 1993-2003; see 431 for 2004 on)	H1, H2 (Base, Luxury, Adventure, Limited Edition), Alpha	1992-2011, 9999	34
482	Hummer	H3T (Adventure, Luxury, Alpha)	2009-11,9999	<u>34</u>
498	Other (light truck)		1940-2011, 2013-15,9999	14-16,19,20, 22, 33, 34, 39, 40, 41, 42, 45, 48
499	Unknown (light truck)		1940-2011, 2013-15,9999	14-16,19, 20, 22, 33, 34, 39, 40, 41, 42, 45, 48, 49

MEDIUM/HEAVY TRUCKS

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
884	Medium/Heavy Truck	Military off-road	1965-2011, 9999	60-64,71,72,78
898	Other (medium/heavy truck)		1965-94,9999	60-64,71,72,78

BUSES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
983	Bus: Rear engine, Flat front	Transit	1965-94,9999	<u>52</u>
988	Other (bus)		1965-94,9999	50-52,58,59
989	Unknown Bus Type		1965-94,9999	50-52,58,59

OTHER AND UNKNOWN VEHICLE

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
998	Other (vehicle)		1965-94,9999	92,93,97
999	Unknown (AM GENERAL)		1965-2011, 2013-15, 9999	<u>49, 79, 99</u>

NCSA MAKE: American Motors* (01) (AMER)

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
001	Rambler	Rogue, 220, 330, 440, 440-H, Scrambler Deluxe, Custom, Super, Classic, Brougham, SC	1954-69,9999	01,02,04,06, 08,09
002	Rebel	Mariner, Briarcliff, Westerner, The Machine, SST, 550, Grant, King	1967-70,9999	01,02,04,06, 08,09
002	Matador	Brougham, X, Oleg Cassini, Barcelona, Police, The Machine	1971-78,9999	02,04,06,08,09
002	Marlin	Black, Radar, Tahiti, Marlin II	1965-67,9999	02,08,09
003	Ambassador	800, 880, 990, SST, DPL, Brougham, DDL, Limited	1958-74,9999	02,04,06,08,09
004	Pacer	D/L, X, Limited	1975-80,9999	02,03,06,09
005	AMX	(2-seater only)	1968-70,9999	02,03,09
006	Javelin	SST, AMX (1971-1974)	1968-74,9999	02,03,09

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
007	Hornet	SST, Sportabout, AMX D/L, SC-360, Gucci Edition, Levi Trim Package, X	1970-77,9999	02-04,06,08,09
007	Concord	AMX Limited, D/L, Levi Trim, Sport, Base, Sundancer	1978-83,9999	01-04,06,08,09
008	Gremlin	Base, X, Levi Trim, GT, AMX	1970-78,9999	03,09
008	Spirit	GT, AMX, D/L, SST	1979-83,9999	02,03,09
009	Eagle	Sport, Series 30, Sundancer, Limited	1980-88,9999	01-04,06,08,09
010	Eagle SX-4	50 Series, Kammback, Sport	1981-84,9999	02,03,09
398	Other (automobile)		1940-88,9999	01-04,06,08,09
399	Unknown (automobile)		1940-88,9999	01-04,06,08,09

^{*} NOTE: Alliance, Encore, Premier (including L, DL, and Limited) are coded under Renault (46).

NCSA MAKE: Audi (32) (AUDI)

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
031	Super 90		1966-72,9999	02,04,06,08,09
032	100	S, CS, LS, GL, Quattro (1989-on)	1970-77; 1989- 94,9999	02,04,06,08,09
033	Fox		1973-79,9999	02,04,06,08,09
034	4000	Quattro, Coupe, Coupe GT, CS, S	1980-93,9999	02,04,08,09
035	5000	Quattro, CS, S, CS Turbo Quattro, T	1978-93,9999	04,06,09
036	80/90	Quattro, Coupe Quattro	1988-95,9999	04
037	200	Turbo Quattro	1989-92,9999	04,06,09
038	V-8 Quattro	100 series	1990-94,9999	04
039	Coupe Quattro	4000 series	1990-91,9999	02,03,09
040	S4 (1992-1994; 2000-2011 only. See model 055 for 2012 on)/S6 (1992-1994; 2000-2011 only. See model 056 for 2013 on.)	Quattro, Avant Quattro (Wagon), 3.0, 4.2 Saloon, Avant (2.7), RS4, Special Edition, V10, 5.6, 5.2	1992-95; 2000- 11,9999	01,04,06,09

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
041	Cabriolet (1994-1998)		1994-98,9999	<u>01</u>
042	A6	Avant Quattro Wagon (3.0L, 3.0T), Quattro (2.7T, 4.2), FrontTrak (2.8, 3.0L), RS6, 3.2, S Line, 3.0T (Premium, Premium Plus, Prestige), 2.0T (Premium, Premium Plus), Special Edition, 45 TFSI (Premium, Premium Plus, Prestige), 55 TFSI (Premium, Premium Plus, Prestige)	1995-2020, 9999	04, 06, 09
043	A4	Avant Wagon (1.8T, 2.0T, 2.8, 3.0, 3.2), Avant Quattro Wagon, FrontTrak (1.8, 2.8, 3.0), Quattro (1.8T, 2.0T, 3.0, 3.2), Special Edition, S Line, 2.0T (Premium, Premium Plus, Prestige)	1996-2019, 9999	01,04,06,09
044	A8	4.2 Quattro, L (3.0, 4.0, 55 TFSI, 60 TFSI), W12 (6.3), NWB, 3.0T, 4.0T, TDI, Sport	1997-2020, 9999	04
045	TT/TTS	FWD, Quattro AWD, 180, 225 Quattro Roadster, FrontTrak (180), 1.8L, 2.0 (Base, TFSI), 3.2L, S Line, RS (Premium, Premium Plus, Prestige), 2.0T (Premium Plus, Prestige), RS, 45 TFSI	2000-20,9999	01-03, 09
046	S8	4.2 Quattro, 5.2, 4.0 TFSI, Plus (4.0)	2001-03; 2007- 09; 2012-20, 9999	02,04, 08, 09
047	Allroad (2001-05 only. See 403 for 2013 on)	QuattroWagon, 2.7T, 4.2	2001-05, 9999	<u>06</u>
048	A3	2.0T/FSI, 3.2 S Line (Premium, Premium Plus), TDI, 1.8, Prestige, Sportback e-tron (Premium, Premium Plus, Prestige), 40 TFSI (Premium, Premium Plus), 45 TFSI (Premium, Premium Plus)	2006-20,9999	01, 03, 04, 05, 09

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
049	A5	2.0, 2.0T, 3.2, (Premium, Premium Plus, Prestige), Quattro	2008-19,9999	01,02,05,09
050	R8	4.2, 5.2, Spyder (V8, V10), GT (Spyder), (V8, V10, V10 Plus)	2008-20,9999	01,02,09
051	A7	Premium, Premium Plus, Prestige, (3.0 TFSI/TDI), 55 TFSI (Premium, Premium Plus Prestige)	2008-10, 2012- 20, 9999	04, 05, 09
052	S5	4.2, 3.0T (Premium Plus, Prestige), Quattro	2008-19,9999	01,02,05,09
054	RS5	4.2 Prestige, V8	2013-15, 2018- 19, 9999	01,02,05, 09
055	S4 (2012 on only. See model 040 for 1992-1994; 2000-2011)	3.0T Prestige, Premium Plus	2012-19,9999	04
056	S6 (2013 on. See model 040 for 1992-1994; 2000- 2011)	4.0TFSI Premium Plus, Prestige, 2.9 TFSI (Premium Plus, Prestige)	2013-18, 2020, 9999	04
057	S7	4.0, Premium Plus, Prestige, 2.9 TFSI (Premium Plus, Prestige)	2013-18, 2020, 9999	04, 05, 09
058	RS7	4.0 TFSI, Performance	2014-19,9999	<u>05</u>
059	S3	2.0 (Premium Plus, Prestige)	2015-20,9999	04, 05, 09
060	RS3		2017-19,9999	04
398	Other (automobile)		1970-2020, 9999	01-06,08,09
399	Unknown (automobile)		1970-2020, 9999	01-06,08,09

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
401	Q7 (For 2007-2018 only. For model years 2019 on, see 32-422.)	3.6/4.2, 3.0T, TDI (Premium, Premium Plus, Prestige) Hybrid, S Line,	2007-18,9999	14
402	Q5	2.0T, 3.2, 3.0T (Premium, Premium Plus, Prestige), Hybrid (2.0)	2008-20,9999	14
403	Allroad (2013 on. For 2001-2005 see model 047.)	2.0T (Premium, Premium Plus, Prestige)	2013-20,9999	14
404	SQ5	3.0 (Premium, Premium Plus, Prestige)	2014-20,9999	14
405	Q3	2.0 TFSI (Premium Plus, Prestige), 45 TFSI (Premium, Premium Plus, Prestige)	2015-20,9999	14
406	e-Tron	Premium Plus, Prestige	2019	14
421	Q8	Premium, Premium Plus, Prestige, 55 TFSI (Premium, Premium Plus, Prestige)	2019-20,9999	<u>15</u>
422	Q7 (For 2019 on. For model years 2007-2018, see 32-401.)	2.0T, 3.0T	2019	<u>15</u>
499	Unknown (light truck)		2007-20,9999	<u>14, 15, 19</u>

UNKNOWN

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
999	Unknown (AUDI)		1966-2020, 9999	<u>19, 99</u>

NCSA MAKE: Austin/Austin Healey (33) (AUST)

AUTOMOBILES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
031	Marina	GT	1973-75,9999	01-04,08,09
032	America		1968-72,9999	<u>02</u>
033	Healey Sprite	Mark II, MKIV/Princess (Special Order)	1958-70,9999	01,04,09
034	Healey 100/3000	M, S, Mark III	1953-67,9999	<u>01</u>
035	Mini/Mini Cooper/Mini Moke	850, S	1960-69,9999	01,02,06,09
398	Other (automobile)	A35, A40, Westminster, Cambridge, Somerset, Seven, Hereford, Sports, Sheerline, Atlantic, Countryman, Dorset, Devon	1947-75,9999	01-04,06,08,09
399	Unknown (automobile)		1947-75,9999	01-04,06,08,09

NCSA MAKE: BMW (34) (BMW)

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
031	1600/1800/2000/2002	Ti, Tii, Tilux, TR, CS, 1600- 2, SA, Turbo, A, 1500, 2600, 501, 502	1955-76,9999	01-04,08,09
032	Coupe (before 1975)	2800CS, 3.0CS, 3.0csi, 3.0csl, 3200, 503, 507, M1, 1802, 2000c/cs, 2002	1956-76,9999	01-03,09
033	Bavarian Sedan	2500, 2800, 2.8 Bavarian	1969-74,9999	<u>04</u>
034	3-series	3.0s/si, 318i/is/ti/iC, 320i, 323iS/iC/i/Ci,325e/es/i/iS/ii/C/Ci/Cic/xi/iT/xiT, Sport Wagon (iT/xiT), 328 d/i/iS/ti/iC/Ci/x/xi, xDrive, 330e/i/Ci/Cic/xi, 335i/is/xi/d, 340i, xDrive, ActiveHybrid, M3, Gran Tourismo (328i), 340i	1971-2020, 9999	01-06,08,09

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
035	5-series	524i,525i/xi,528i/iT/xi, xDrive, 530e/i/iT/xi,533i, 535d/i/xi, xDrive, 550i, xDrive 540/i/iA/iT, TD Sport Wagon,525i/iT, (wagon 1992-93), M5, 545i, 550i/ix, Gran Turismo (535i, 550i), ActiveHybrid 5	1975-2020, 9999	04-06,09
036	6-series	630, 633, 635, csi, M6, L6, 640i, 645Ci, 650i/ix, Neiman Marcus Edition, xDrive, Alpina B, B6, Gran Turismo (640i)	1976-89, 2004- 19, 9999	01,02,04,05, 08, 09
037	7-series	733i, 735i, L7, 740 e/d/i/L/iL/iA/Li Protection,750 i/iL/Li/Lxi/ix Protection,745i/Li, 760i/Li, Alpina B7, Individual, ActiveHybrid 7, xDrive, M760i	1978-2020, 9999	04
038	8-series	840Ci/cia/i, 850i/iS/Ci/Cia, xDrive, M8	1991-97, 2019- 20, 9999	01,02,09
039	Z3	2.3/2.8/2.5i/3.0i Roadster, MRoadster, MCoupe, 2.8/3.0i Coupe	1996-2003, 9999	01-03, 09
040	Z8		2000-03, 9999	<u>01</u>
041	V5		2007-08, 9999	<u>06</u>
042	Z4	2.5i, 2.8i, 3.0i/si, 3.5i/is, Z4M/s/sDrive, 28i, 30i, 35i/s	2003-16, 2018- 20, 9999	01,02,09
043	1-Series	128i, 135i/is, Electric	2008-14, 9999	01,02,09
044	X6 (For 2008-2015. For 2016 on, see model 404.)	35i, 50i, ActiveHybrid, M, xDrive	2008-15, 9999	<u>05</u>
045	i3	Base, Range Extender, s	2014-19, 9999	<u>03</u>
046	i8		2014-17, 2019, 9999	01, 02, 09
047	4-Series	428i, 435i, xDrive, M4, 430i, 440i	2014-20, 9999	01, 02, 04, 08, 09
048	2-Series	228i, 230i, M235i, M240i, XDrive, M2	2014-20, 9999	01, 02, 09
049	X4	28i, 35i, M40i, 30i	2015-20, 9999	<u>05</u>

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
398	Other (automobile)		1955-2020, 9999	01-06,08,09
399	Unknown (automobile)		1955-2020, 9999	01-06,08,09

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
401	X5 (For 2000-17 (for models manufactured as 2017 during the 2016 model year). For 2017 models manufactured during the 2017 model year on, see model 421)	3.0i/si, 4.0is, 4.4i, 4.6is, 4.8is, M, 35i/d, Premium, 50i, Sport Activity, Premium. sDrive	2000-17,9999	14
402	X3	25i, 28 d/i, 30i/xDrive, 35i, 4.8is, M40i, M Sports, xLine, Luxury Package	2004-20,9999	14
403	X1	28i/is, 35i, xDrive, xLine	2012-20, 9999	<u>14</u>
404	X6 (For 2016 on. For 2008- 2015, see model 044.)	35i, 40i, 50i, xDrive, sDrive, M, M50i	2016-20, 9999	14
405	X2	28i, xDrive, M35i	2018-20, 9999	14
421	X5 (For 2017 models manufactured during the 2017 model year on. For 2000-17 (for models manufactured as 2017 during the 2016 model year), see model 401)	35i/d, 40e/i, 50i, M, M50i	2017-20, 9999	<u>15</u>
422	X7	30i/40i xDrive, M50i	2019-20,9999	<u>15</u>
499	Unknown (light truck)		2000-20,9999	14, 15, 19

MOTORCYCLES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
703	125-349cc	G310	1948-66, 2017- 20, 9999	80, 84, 89
705	450-749cc		1950-2003; 2006-19,9999	80, 84, 89
706	750cc and over		1969-2020, 9999	80, 84, 89
707	Electric Motorcycle	C Evolution	2017-2019, 9999	84
709	Unknown cc		1948-2020, 9999	80, 84, 89

UNKNOWN

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
999	Unknown (BMW)		1948-2020, 9999	<u>49, 99</u>

NCSA MAKE: Buick (18) (BUIC)

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
001	Special/Skylark	GS (350, 400, 455), Deluxe GS California, Sport Wagon, Custom Roadmaster (1946- 59), Skylark Edition	1936-73, 9999	01,02,04,06, 08,09
002	LeSabre/Centurion/ Wildcat	Estate Wagon, Invicta, Custom, Limited, T-Type, Ltd, C.M.I, LE, Celebration Edition, Best Seller	1959-2005, 9999	01,02,04,06, 08,09
003	Electra/Electra 225/Park Avenue (1991-on)	Limited, Park Avenue, Ultra, Base, Prestige, SE	1959-2005, 9999	01,02,04,06, 08,09
004	Roadmaster	Estate Wagon, Limited	1991-96,9999	04,06,09
005	Riviera	S-Type, T-Type, Coupe Anniversary Edition, Silver Arrow	1963-93; 1995- 99,9999	01,02,09

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
007	Century	Luxus, T-Type, FWD (82- on), Custom, Regal (72-77), Limited, LE, SE, Base, Special	1954-2005, 9999	01,02,04,06, 08,09
008	Apollo/Skylark	Skylark (75), S/R	1973-76,9999	02-04,08,09
010	Regal (RWD only)	Turbo, Luxus, Grand National GNX, T-Type	1978-88,9999	02,04,06,08,09
012	Skyhawk	S-Type, Roadhawk, T-Type, GT	1975-80; 1982- 89,9999	02-04,06,08,09
015	Skylark (76-85)	S/R, S, Limited, Sport, T- Type	1975-85,9999	02-04,08,09
018	Somerset/Skylark	Skylark (86-on), Somerset, GS, Regal, Custom, Limited, T-Type	1985-98,9999	02,04,08,09
019	Regal (2011 on)	GS, CXL, Turbo, Premium I/ II, Base, Grand National, Sport Touring, Sportback/GS, TourX, Avenir	2011-20,9999	04, 05, 06, 09
020	Regal (FWD) (For 2011 on, see model 019)	Limited, Custom, Gold, Grand Sport GS, LS, Sport	1987-2004, 9999	02,04,08,09
021	Reatta		1988-91,9999	01,02,09
022	LaCrosse	CX, CXL (FWD/AWD), CXS, Super, Leather, Premium I/II, Touring, Preferred, Essence, Avenir	2005-19,9999	04
023	Lucerne	CX, CXL V6, CXL V8, CXS, Super, Special Edition	2006-11,9999	04
024	Enclave (2008-12 model years only. For 2013 on see model 421.)	CX, CXL (FWD/AWD)	2008-12,9999	<u>06</u>
025	Verano	Base, Convenience, Leather, Turbo, Premium, Sport, Touring	2012-18,9999	04
026	Cascada	1SV, Base, Premium, Sport Touring	2016-19, 9999	01
031	Opel Kadett		1965-72,9999	02,04,06,08,09
032	Opel Manta	1900, Luxus, Ralley, Sports Coupe	1966-75,9999	02,04,06,08,09
033	Opel GT		1969-75,9999	<u>02</u>

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
034	Opel Isuzu	Deluxe, Sport	1976-79,9999	02,04,08,09
398	Other (automobile)		1965-2020, 9999	01-04,06,08,09
399	Unknown (automobile)		1950-2020, 9999	01-04,06,08,09

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
401	Rendezvous	CX, CXL, Ultra, Plus	2002-07,9999	14
402	Rainier	CXL, CXL Plus	2004-07,9999	14
404	Encore	Convenience, Leather, Premium, Base, Sport Touring, Preferred (I, II), Essence	2013-20, 9999	14
405	Envision	Preferred, Premium (I, II) Essence, Base	2016-20, 9999	14
421	Enclave (2013 on. See model 024 for 2008-12 model years.)	Convenience, Leather, Premium, Avenir, Essence, Preferred	2013-20, 9999	<u>15</u>
441	Terraza	CX, CXL	2005-07, 9999	<u>20</u>
498	Other (light truck)		2002-07, 2013- 20, 9999	<u>14, 15, 19, 20</u>
499	Unknown (light truck)		2002-07, 2013- 20, 9999	<u>14, 15, 19, 20</u>

UNKNOWN

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
999	Unknown (BUICK)		1946-2020, 9999	<u>49</u>

NCSA MAKE: Cadillac (19) (CADI)

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
003	Deville/Fleetwood (except Limousine)	Coupe de Ville, Sedan de Ville, Fleetwood Brougham, Fleetwood 60 Special, d'Elegance, Concours, DHS, DTS	1940-2005, 9999	01,02,04,08,09
004	Limousine	Fleetwood 75, Formal, Deville-based, DTS	1940-2019, 9999	12
005	Eldorado	Biarritz, El-doro, Touring Coupe, ESC, ETC	1967-2003, 9999	01,02,09
006	Commercial Series	Ambulance/Hearse, Professional	1940-2019, 9999	09, 10-12
009	Allante'		1987-93,9999	01,02,09
014	Seville	Elegante, STS, SLS	1976-2004, 9999	04
016	Cimarron	D'Oro	1982-88,9999	04
017	Catera	Sport	1997-2001, 9999	04
018	CTS/CTC	Luxury, Luxury Sport, V-Series, 2.0L, 2.8L, 3.0L, 3.6L, 6.2L Supercharged, Premium, Performance, Standard, Luxury (Base and Premium), V-Sport (Base and Premium Luxury)	2003-19,9999	02-04,06, 08, 09
019	XLR	Neiman Marcus Edition, V- Series, Standard, Platinum	2004-09,9999	01
020	SRX	V6, V8, Sports Package, 2.8L Turbo, 3.0L, Luxury, Performance, Premium, Standard	2004-16,9999	06
021	STS	V6, V8, V-Series, Luxury, Premium, Standard, Platinum, 3.6L	2005-11,9999	04
022	DTS	Luxury I, II, III, V8, 3.6L, Performance, Platinum	2006-11,9999	04

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
023	XTS	Standard, Luxury, Premium, Platinum, V-Sport, Limousine, Funeral Hearse, Twin Turbo	2013-19,9999	04, 09, 11, 12
024	ATS	2.0L/2.5L/3.6L (Standard, Luxury, Performance, Premium, Turbo) V-Series	2013-19,9999	02,04, 08, 09
025	ELR		2014-16,9999	<u>02</u>
026	CT6	2.0L (Turbo, Luxury) 3.0L (Twin Turbo, Platinum, Luxury), 3.6L (Premium Luxury, Platinum), Plug-In, V-Series	2016-19,9999	04
027	CT5	Luxury, Premium Luxury, Sport	2020	04
398	Other (automobile)		1965-2020, 9999	01,02,04,06, 08,09, 11, 12
399	Unknown (automobile)		1950-2020, 9999	01,02,04,06, 08,09, 11, 12

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
401	XT5	3.6L (Base, Luxury, Premium, Platinum)	2017-19, 9999	14
421	Escalade/ESV (from 2004 on; see 431 for 2003 only)	4WD, 2WD, 6.2L, Standard, Platinum, Limousine, Hybrid, Luxury, Premium	1999-2000; 2002-19,9999	<u>15</u>
422	XT4	Luxury, Premium Luxury, Sport	2019	<u>15</u>
423	XT6	Base, Luxury, Premium	2020	<u>15</u>
431	Escalade ESV (2003 only)	Luxury, Premium, Platinum	2003, 9999	<u>16</u>
480	Escalade EXT (from 2002 - 2006; for 2007 on see 481)	4WD, 2WD	2002-06,9999	34
481	Escalade EXT (from 2007 on; see 480 for 2002-2006)	4WD, 2WD, Luxury, Premium, Standard	2007-13, 9999	34
498	Other (light truck)		1999-2000; 2002-20, 9999	14, 15, 16, 19, 34

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
499	Unknown (light truck)		1999-2000; 2002-20,9999	<u>19, 39, 49</u>

UNKNOWN

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
999	Unknown (CADILLAC)		1940-2020, 9999	49

NCSA MAKE: Chevrolet (20) (CHEV)

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
001	Chevelle/Malibu (thru '83)	Classic, Councours, Laguna**, S-3, Greenbriar, Estate, 300, SS-396/454, Deluxe	1963-83,9999	01,02,04,06, 08,09
002	Impala/Caprice (For SS from 2014 on, use 20-021.)	Biscayne, Belair, Super Sport, Classic, Classic Brougham, Townsman, Brookwood, Kingswood, LS, LT, LTZ, Sport, SS, Luxury, Premier	1955-96; 2000- 20, 9999	01,02,04,06, 08,09
004	Corvette	Stingray, C5, Z06, Z06-R 50th Anniversary Edition, Commemorative Edition, Indy Pace Car, ZR1, Grand Sport, 427, 1LZ, 2LZ, 3LZ, ZL1	1953-82; 1984- 2019, 9999	01-03,09
006	Corvair	Monza, Corsa, 500, Yenko	1960-69,9999	01,02,04,06, 08,09
007	El Camino	Royal Knight, SS	1958-94,9999	<u>10</u>
008	Nova (-'79)	Chevy II, LN, LE, Concours, SS-350/396, Rally	1962-79,9999	01-04,06,08,09
009	Camaro	SS, RS, LT, Berlinetta, Iroc- Z, Z/28, LS, LT, ZL1, 2.0L, 3.6L, 6.2L	1967-2002, 2010-20,9999	01-03,09
010	Monte Carlo (thru '88)	LS, SS, Aerocoupe, Landau, Z34	1970-88,9999	02

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
011	Vega	GT, Cosworth	1971-77,9999	02-04,06,08,09
012	Monza	Spyder, 2 + 2, Towne Coupe	1974-80,9999	02-04,06,08,09
013	Chevette	S, Scooter, CS	1976-87,9999	03-05,07,09
015	Citation	X-11, Citation II	1980-85,9999	02-05,07,08,09
016	Cavalier	CS, RS, Z24, LS, Sport, Special Value Package	1982-2005, 9999	01-04,06,08,09
017	Celebrity	CS, Eurosport, VR	1982-90,9999	02,04,06,08,09
019	Beretta/Corsica	GT, GTZ, LT, LTZ, PX, QX, KX, LX, MX, Z26	1982-96,9999	02,04,05,08,09
020	Lumina	Z-34, Euro, LTZ, LS	1990-2001, 9999	02,04,06,08,09
021	SS (For 2014 on. For Impala/Caprice SS use model 20-002.)	LS, LT, LTZ	2014-17,9999	04
022	Cobalt	LS, LT, LTZ, SS (Base Supercharged), Sport, VL	2005-11,9999	02,04,08,09
023	HHR	LS, 1LT, 2LT, SS, Panel	2006-11,9999	<u>06</u>
024	Traverse (2009-2012 only. For 2013 on see model 423.)	LS, LT, LTZ	2009-12,9999	<u>06</u>
025	Cruze	LS, LT, LTZ, ECO, Turbo Diesel, Limited, Premier	2011-19,9999	02, 04, 05, 08, 09
026	Volt	Premier, LT	2011-19,9999	<u>05</u>
027	Caprice PPV		2011-17,9999	04
028	Sonic	Base, LS, LT, LTZ, RS, Premier	2012-20,9999	04,05,09
029	Spark	LS, LT, EV, ACTIV	2013-20,9999	<u>05</u>
031	Spectrum		1985-89,9999	02-05,08,09
032	Nova/Geo Prism/Prism	CL, NUMMI-built vehicles, LSi	1985-2002, 9999	02-05,07-09
033	Sprint/Geo Sprint	(Cultus - foreign)	1985-89,9999	03,05,07,09
034	Geo Metro/Metro	Lsi, Xfi	1989-2001, 9999	01,03-05,07,09
035	Geo Storm	Gsi	1985-93,9999	02,03,09
036	Monte Carlo (1995 on)	FWD, LS, Z34, LS, LT, LTZ, SS, Sport Edition	1995-2007, 9999	02

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
037	Malibu/Malibu Maxx	Base, L, LS, LT, LTZ, SS, Hybrid, ECO, Classic, Limited, Premier, RS	1997-2020, 9999	04-06,09
038	SSR	Signature Series, LS, LS5, 1SS, 2SS, 3SS	2003-06,9999	10
039	Aveo/Aveo 5	Base, LS, LT, Special Value	2004-11,9999	04,05,09
040	Bolt	Base, LT, Premier	2017-19, 9999	<u>05</u>
398	Other (automobile)	Fleetmaster, Fleetline, Styline Special, One-fifty, Bel-Air, Del Ray, Biscayne	1930-2020, 9999	01-09, 10-11
399	Unknown (automobile)		1930-2020, 9999	<u>01-09</u> , <u>10-11</u>

^{**}Nomad, Malibu, Laguna, and other similar terms may be used on all models as a reflection of trim type.

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
401	S-10 Blazer/TrailBlazer (2002 only; for 2003 on, see 403)	S-10 p/u based, LS, LT, ZR2 TrailBlazer, Xtreme, ZR2, LS, LT, LTZ, EXT	1982-2005, 9999	14
402	Geo Tracker/Tracker	Lsi, LT, ZR2	1989-2004, 9999	14
403	TrailBlazer (from 2003 on; for 2002, see 401)	LS, LT, LTZ, North Face Edition, EXT, SS (LS/LT)	2003-09,9999	14
404	Equinox	L, LS, LT, LTZ, Sport, Premier, Turbo (Base and Diesel)	2005-20,9999	14
405	Captiva	Sport, LS, LT, LTZ	2012-15,9999	14
406	Trax	LS, LT, LTZ, Premier	2015-20,9999	<u>14</u>
407	Blazer	L, 2.5L, 3.6L, RS, Premier	2019-20,9999	14
421	Fullsize Blazer/Tahoe	K-series, fullsized p/u based, LS, LT, LTD, LTZ, 4WD, Z71, Hybrid, Premier	1969-2020, 9999	<u>15</u>
422	Suburban (from 2004 on; see 431 for 1950-2003)	LS, LT, LTZ, Z71, Premier	2004-20,9999	<u>15</u>
423	Traverse (2013 on. For 2009-2012 see model 024.)	L, LS, LT (Cloth, Leather), LTZ, Premier, RS, Redline Edition	2013-20,9999	<u>15</u>

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
431	Suburban (from 1950- 2003; see 422 for 2004 on)	all models (C1500/2500, K1500/2500), LS, LT, Z71	1950-2003, 9999	<u>16</u>
441	Astro Van	Minivan, Cargo, Passenger, LT, LS, Conversion	1985-2005, 9999	<u>20</u>
442	Lumina APV	Minivan, MPV	1990-96,9999	<u>20</u>
443	Venture	Cargo, Passenger, Plus, LS, LT, Value, Value Plus, Extended, W. B. Edition, Entertainer	1997-2005, 9999	20
444	Uplander	Base, LS, LT, LT(AWD), LT Entertainer	2005-08,9999	<u>20</u>
445	City Express	LS, LT	2015-18,9999	<u>20</u>
461	G-series van	Beauville, Chevy Van, Sport Van, G10-G30, Express, G1500/2500/3500, LT, LS	1957-2019, 9999	21,22,28,29
466	P-series van		1965-99, 9999	22,28,29
470	Van derivative	Parcel Van, Hi-cube	1965-2019, 9999	22,28,29
471	S-10/T-10 Pickup	4 x 4, Fleetside, Extended, Crew, LS, S-10, Xtreme, ZR2, ZR5, electric pickup*	1982-2005, 9999	34, 39, 40, 42, 48
472	LUV	Imported pickup	1972-91,9999	34, 39, 40, 42, 48
473	Colorado	Z71, Z85, Sport, LS, LT, Work, Value, Shoreline, Midnight (LT, Z71), Trail Boss, ZR2	2004-12, 2015- 20, 9999	34
481	C, K, R, V-Series pickup/ Silverado	C10-C30, K10-K30, R10-R30, V10-V30, Silverado: 1500 (C-K, HD), 2500 (C-K, HD), 3500 (CK), ST, LS, LT, Z71, Fleetside, Sportside, CrewCab, SS, Hybrid, LTZ, WT, High Country, Rally ½, Midnight (HD, Base), Realtree, Custom Sport HD, Blackout, Special Ops, High Country, Custom Trail Boss	1940-2020, 9999	34,39, 40, 42
482	Avalanche	1500/2500 Premium, North Face Edition, Z71, Z66, LS, LT, LTZ, Black Diamond	2002-13,9999	34

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
498	Other (light truck)		1940-2020, 9999	14-16,19, 20-22, 28,29, 34, 39, 40, 42, 45,48
499	Unknown (light truck)		1932-2020, 9999	14-16,19, 20-22, 28,29, 34, 39, 40, 42, 45,48,49

MOTOR HOME

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
850	Motor Home	Truck-based, Van-based	1949-2019, 9999	<u>65,73</u>

MEDIUM/HEAVY TRUCKS

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
870	Medium/Heavy Van-Based Vehicle	Express 3500/4500	1957-2019, 9999	<u>55</u> , <u>61-64</u>
880	Medium/Heavy Pickup (pickup-style only - over 10,000 lbs.)		1953-2020, 9999	67
881	Medium/Heavy - CBE	C50/60/65; M60/65; H70/80/90; J70/80/90; Bison 90; Kodiak (C4500) all other CBE	1955-2020, 9999	60-64, 66, 71, 72, 78
882	Medium/Heavy - COE low entry	T60/65, all other COE low entry	1960-2020, 9999	60-64, 66, 71, 72, 78
883	Medium/Heavy - COE high entry	Titan 90, all other COE high entry	1971-80,9999	60-64, 66, 71, 72, 78
884	Medium/Heavy - Unknown engine location		1951-2020, 9999	60-64, 66, 71, 72, 78
890	Medium/Heavy - COE entry position unknown		1965-2020, 9999	60-64, 66, 71, 72, 78
898	Other (medium/heavy truck)		1949-2019, 9999	60-64, 66, 71, 72, 78

BUSES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
981	Bus**: Conventional (Engine out front)	S-60 series	1967-2019, 9999	50-52, 58, 59
988	Other (bus)		1965-2019, 9999	50-52, 58, 59
989	Unknown (bus)		1965-2019, 9999	50-52, 58, 59

^{**} Use code "989" (bus) if the frontal plane or the engine location is unknown.

OTHER AND UNKNOWN VEHICLE

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
998	Other (vehicle)		1934-2019, 9999	92, 93, 97
999	Unknown (CHEVROLET)		1933-2020, 9999	<u>49, 79, 99</u>

NCSA MAKE: Chrysler/Daimler Chrysler (06) (CHRY)

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
009	Cordoba	Crown, 300, LS	1975-83,9999	<u>02</u>
010	New Yorker (thru 78)/ Newport/5th Avenue/ Imperial (1979-83) (excludes all FWD)	Town and Country, Brougham, Custom, Royal, 300 (thru 1971) Frank Sinatra editions (FS), Royal Limo, Windsor Wagon/ Ambulance	1946-89,9999	01,02,04,06, 08,09, 11,12
014	New Yorker/E-Class/ Imperial (1990-93)/ Fifth Avenue	FWD vehicles, Turbo, Salon	1980-93,9999	02,04,08,09
015	Laser	Turbo, XE, XT	1984-86,9999	<u>03</u>
016	LeBaron	Premium, Salon (RWD), Landau, LX, Town and Country cars and wagon, Medallion, FWD except GTS or GTC Sport Coupe	1977-94,9999	01-09

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
017	LeBaron GTS/GTC	GT, GTS-Turbo, GTC- Sport Coupe	1982-95,9999	01-09
018	200	Limited (Base, Platinum), LX, Touring, S, Super S, C (Base, Platinum)	2011-17,9999	01,04,09
021	SRT Viper	Standard, GTS, TA, GT3-R, GTS-R	2013-14,9999	<u>02</u>
031	TC (Maserati Sport)	Turbo Convertible	1988-91,9999	01-03,09
035	Conquest	TSI, Turbo	1987-89,9999	<u>03</u>
041	Concorde	LX, Lxi, Limited	1993-2004, 9999	04
042	LHS	New Yorker (1994-on)	1994-97; 1999- 2001, 9999	04
043	Sebring	JX, Jxi, LX, Lxi, GTC, Tsi, Limited, Plus, Platinum, Touring, Signature Series	1995-2011, 9999	01,02,04,08,09
044	Cirrus	LX, Lxi	1995-2000, 9999	04
050	Executive	Sedan and Limo	1983-87,9999	04,09, 11,12
051	300M/300/300C/300S	Special, Platinum, Touring, Limited, SRT, Signature Series, SRT8, LX, SRT, Heritage, Great American, Walter P. Chrysler, Glacier, Executive Series, Luxury, Motown Edition, John Varvatos Edition	1999-2019, 9999	04
052	PT Cruiser	Base, Touring, Limited, GT, Turbo, Dream Cruiser, Platinum, Series 4, Signature Series, Street Cruiser, Pacific Coast Highway, LX, Sunset Blvd.	2001-10,9999	01,06,09
053	Prowler (for 2002) (1997,1999-01 see Plymouth)	Roadster, Black Tie Edition	2002	01
054	Pacifica (Passenger Cars)	Premium, Luxury, Touring, Signature Series, LX, Hybrid	2004-08,9999	<u>06</u>
055	Crossfire	Limited, SRT6, Standard	2004-08,9999	01,02,09

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
398	Other (automobile)		1946-2019, 9999	01-09, 11,12
399	Unknown (automobile)		1946-2019, 9999	01-09, 11,12

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
421	Aspen	Limited, Signature, Hybrid	2007-09,9999	<u>15</u>
441	Town and Country	Minivan, SX, L, LX, Lxi, Ltd., SWB, LWB, AWD, FWD, eL, eX, Touring, Platinum, Signature Series, Limited, 30th Anniversary, S	1990-2016, 9999	20
442	Voyager (2000-2003; 1984-2000 see Plymouth. For 2020 on see 06-444.)	Base, Popular, Value, LX, eC	2000-03,9999	<u>20</u>
443	Pacifica (Light Trucks)	L, LX, Touring (Base, L, L Plus, Plus) Limited, Hybrid (Touring, Touring L, Limited)	2017-19, 9999	20
444	Voyager (2020 on. For 2000-2003 see 06-442. For 1984-2000 see Plymouth.)	L, LX	2020	20
499	Unknown (light truck)		1990-2020, 9999	15, 20,29

UNKNOWN

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
999	Unknown (CHRYSLER)		1946-2020, 9999	49

NCSA MAKE: Coda (26)

AUTOMOBILES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
001	Coda		2012-13,9999	04,05,09
398	Other (automobile)		2012-13,9999	04,05,09
399	Unknown (automobile)		2012-13,9999	04,05,09

NCSA MAKE: Daewoo (64) (DAEW)

AUTOMOBILES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
031	Lanos	S, SE, SX, Sport	1999-2002, 9999	03,04,09
032	Nubira	SX, CDX, SE	1999-2002, 9999	04,06,09
033	Leganza	SE, SX, CDX	1999-2002, 9999	04
398	Other (automobile)		1999-2002, 9999	03, 04, 05, 06, 07,09
399	Unknown (automobile)		1999-2002, 9999	03-07,09

NCSA MAKE: Daihatsu (60) (DAIH)

AUTOMOBILES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
031	Charade		1988-94,9999	03,04,09

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
401	Rocky		1990-92,9999	<u>14</u>

UNKNOWN

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
999	Unknown (DAIHATSU)		1988-94,9999	03,04,09, 14

NCSA MAKE: Dodge (07) (DODG)

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
001	Dart (1960-76 only. For 2013 on; see model 029.)	170, 270, Custom, GT, Swinger, Demon, 340, 360, Special, Sport, Special Edition	1960-76,9999	01,02,04,06, 08,09
002	Coronet/Magnum/ Charger (thru 1978)	Brougham, Custom, Superbee, 500, Crestwood, Deluxe, XE, R/T, 440, SE, Police	1964-79,9999	01,02,04,06, 08,09
003	Polara/Monaco/ Royal Monaco	Custom, Special, Police, Taxi, Crestwood, Brougham	1964-78,9999	01,02,04,06, 08,09
004	Viper	RT/10, GTS, ACR, SRT-10, GT, SRT	1992-2010, 2015-17, 9999	01,02,09
005	Challenger (1970-74 only; see model 028 for 2008 on)	R/T, T/A, Rallye	1970-74,9999	01,02,09
006	Aspen	Custom, Special Edition, Police, R/T, Sport	1976-80,9999	02,04,06,08,09
007	Diplomat	Medallion, S, Salon, SE	1977-89,9999	02,04,06,08,09
008	Omni/Charger (1983-87; for 2006 on see vehicle model 024)	024, DeTomaso, Miser, Charger 2.2, GLH, Custom, Shelby, GLHS, America, Expo, SE	1978-90,9999	03,05,07,09
009	Mirada		1980-83,9999	<u>02</u>
010	St Regis	Police, Taxi	1979-81,9999	<u>04</u>
011	Aries (K)	Custom, SE, LE	1981-89,9999	02,04,06,08,09
012	400	LS	1982-83,9999	01,02,04,08,09
013	Rampage (car-based pickup)	2.2, GT, Sport	1982-84,9999	10
014	600	ES, Turbo, SE	1983-88,9999	01,02,04,08,09

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
015	Daytona	Turbo Z, C/S Competition, Shelby Z/CSX, Pacifica, IROC R/T	1984-93,9999	03
016	Lancer	Pacifica, Turbo, ES, Shelby	1985-89,9999	02-09
017	Shadow	ES, Turbo, America	1987-94,9999	01-03,05,07,09
018	Dynasty		1988-93,9999	02,04,08,09
019	Spirit	ES, Shelby, R/T	1989-95,9999	01,02,04,08,09
020	Neon	Competition, Highline, SE, ES, ACR R/T, SRT-4, SXT	1995-2005, 9999	02,04,08,09
021	Magnum	SE, SXT, R/T, SRT8	2005-08,9999	<u>06</u>
024	Charger (2006 on; see model 008 for 1983-87)	Daytona (Base, 392), SRT8, R/T, SE, SXT (RWD/AWD), Super Bee, 3.5L, Rallye, Plus, Max, Road and Track, Blacktop, 100th Anniversary, Red Line, Road & Track, Scat Pack, SRT 392, SRT, Hellcat, Blacktop, GT, Scat Pack	2006-19,9999	04
025	Caliber	SE, SXT, R/T, SRT4, Sport, Heat, Mainstreet, Rush, Uptown, Express	2007-12,9999	05
026	Avenger	SE, SXT, R/T, Heat, Express, Blacktop	2008-15,9999	04
027	Journey (For 2009-2018 only. For model years 2019 on, see 07-404.)	SE, SXT, R/T, Heat, Hero, Uptown, Express, Crew, Mainstreet, Lux, American Value Package, Blacktop, AVP, SXT Plus, Limited, Crossroad (Base, Plus), GT	2009-18,9999	<u>06</u>
028	Challenger (2008 on; for 1970-74 see model 005)	SRT (392, Hellcat), SE, R/T (Plus, Classic, Scat Pack, Road & Track), Shaker, Plus Shaker, Plum Crazy Edition, Classic, SXT, SXT Plus, Rallye Redline, Blacktop, Shaker, 100th Anniversary, T/A (Base, Plus, 392), 392 Hemi Scat Pack Shaker, SRT (392, HellCat), GT, Demon, Hellcat Redeye	2008-19,9999	02

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
029	Dart (2013 on. See model 001 for 1960-1976 model years.)	Limited, Rallye, SE, SXT, Special Edition, Mopar '13, Aero, GT, Blacktop	2013-16,9999	04
033	Challenger	all import	1978-83,9999	02
034	Colt (includes 2WD Vista)	GT, Custom, Carousel, Premier, Deluxe, E, DL, GTS, Turbo, RS	1974-94,9999	02-09
035	Conquest	Turbo	1984-89,9999	<u>03</u>
039	Stealth	RT, ES	1991-96,9999	02,03,09
040	Monaco		1990-92,9999	02,04,08,09
041	Intrepid	ES, R/T, S, SE, SXT	1993-2004, 9999	<u>04</u>
042	Avenger (see model 026 for 2008 on)	ES	1995-2000, 9999	<u>02</u>
043	Stratus	ES, SE, R/T, Plus, SXT	1995-2007, 9999	02,04,08,09
398	Other (automobile)		1946-2019, 9999	<u>01-09</u> , <u>10,12</u>
399	Unknown (automobile)		1946-2019, 9999	01-09, 10,12

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
401	RaiderSport	Sport	1986-94,9999	14
402	Durango (1998-2003 only; see model 422 for 2004 on)	Sport, R/T, SLT, SXT, Plus, Blacktop	1998-2003, 9999	14
403	Nitro	SLT, SXT, R/T, SE, Heat, Detonator, Shock	2007-11,9999	14
404	Journey (For 2019 on. For model years 2009-2018, see 07-027.)	SE, SXT, GT, Crossroads	2019	14
421	Ramcharger		1974-93,9999	<u>15</u>

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
422	Durango (2004 on; see 402 for 1998-2003 models)	ST, SLT, Limited, SXT (Base, Plus), Adventurer, Hybrid, Express, Crew, LUX, Citadel (Base, Anodized Platinum), R/T, Blacktop, Plus, Rallye, GT (Base, Plus)	2004-20,9999	<u>15</u>
441	Vista Van	4x4 (Only)	1984-91,9999	<u>20</u>
442	Caravan/Grand Caravan	Mini Ram Van, 112 & 19 WB, SE, ES, LE, Sport, EX, eC, eL, AWD, Sport, EPIC-elec* SXT, C/V, Special Edition, Cargo, Hero, American Value Package, R/T, Crew, Blacktop, AVP, 30th Anniversary, SE Plus, SXT Plus	1984-2019, 9999	<u>20</u>
443	Ram C/V	Tradesman	2013-17, 9999	<u>20</u>
444	Promaster City	Cargo, Passenger, Tradesman (Base, SLT), Wagon (Base, SLT)	2015-19, 9999	<u>20</u>
461	B-Series Van/Ram Van/ Ram Wagon	Sportsman, Royal, Maxiwagon, Ram, B1500- B3500, Tradesman, Ram Maxivan (1500, 2500, 3500), Ram Wagon (1500, 2500, 3500) Conversion, Cargo Van (1500: van, non-maxi van, maxi van; 2500: non-maxi, maxi van; 3500: non-maxi), Dodge Wagon (1500, 2500, 3500)	1963-2003, 9999	21,28, 40,41, 42, 48
462	Sprinter	Cargo, Passenger	2003-09,9999	21,28
463	Ram Promaster	Cargo, Chassis, Cutaway, 1500 (Low Roof, High Roof), 2500 (Low Roof, High Roof), 3500 (Low Roof, High Roof)	2014-19,9999	21,28
470	Van Derivative	Kary Van, Parcel Van	1971-2019, 9999	28,29
471	D50, Colt pickup, Ram 50/Ram 100		1979-93,9999	34, 39

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
472	Dakota	R/T, Limited Edition, Quad Cab, Club Cab, Plus, SLT, ST, SXT, Sport, Laramie, TRX, SE, Big Horn, Lone Star, TRX4	1987-2012, 9999	33, 34, 39, 40
481	D, W-Series pickup	Custom, Royal, Ram, Miser, D100-D350, W100-W350	1955-93,9999	34, 39, 40, 42
482	Ram Pickup	1500 (Limited, Longhorn, Rebel, Laramie, Sport, Big Horn, SLT, Express, ST, Black, Tradesman, EcoDiesel, Outdoorsman, Stinger Yellow, Night, Eco Diesel) 2500 (Limited, Laramie, Longhorn, Power Wagon, Big Horn, ST, SLT, Outdoorsman, Tradesman), 3500 (Limited, Laramie, Longhorn, Power Wagon, Big Horn, ST, SLT, Outdoorsman, Tradesman), Quad Cab, SLT, SLT+, ST, SRT-10, Laramie, Bumble Bee, Power Wagon, Daytona, TRX Off-Road, Sport, Black Ram, Red Wings Edition, Lone Star, Limited Tungsten, Hydro Blue, Harvest, Sublime Green, Kentucky Derby Edition, South Fork Edition, Ignition Orange Edition, Warlock Edition	1994-2020, 9999	34, 39, 40, 42
498	Other (light truck)		1979-2020, 9999	14,15,19, 20-22, 28,29, 33, 34, 39, 40, 41, 42, 45, 48
499	Unknown (light truck)		1949-2020, 9999	14,15,19, 20-22, 28,29, 33, 34, 39, 40, 41, 42, 45, 48,49

MOTOR HOME

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
850	Motor Home	Truck-based, Van-based	1952-2019, 9999	65,73

MEDIUM/HEAVY TRUCKS

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
870	Medium/Heavy Van- Based Vehicle	Sprinter, Promaster	1971-2009, 2014-19,9999	<u>55, 61-64</u>
880	Medium/Heavy Pickup (pickup-style only - over 10,000 lbs.)		1953-2019, 9999	<u>67</u>
881	Medium/Heavy - CBE		1966-2019, 9999	60-64,66, 71,72,78
882	Medium/Heavy - COE low entry		1967-77,9999	60-64,66, 71,72,78
883	Medium/Heavy - COE high entry		1967-77,9999	60-64,66, 71,72,78
884	Medium/Heavy - Unknown engine Location		1962-2019, 9999	60-64,66, 71,72,78
890	Medium/Heavy - COE entry position unknown		1965-77,9999	60-64,66, 71,72,78
898	Other (medium/heavy truck)		1930-2019, 9999	60-64,66, 71,72,78

BUSES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
981	Bus**: Conventional (Engine out front)	(not van based)	1966-77,9999	50-52, 58, 59
988	Other (bus)		1965-77,9999	50-52, 58, 59
989	Unknown (bus)		1965-77,9999	50-52, 58, 59

^{**}Use code "989" (bus) if the frontal plane or the engine location is unknown.

OTHER AND UNKNOWN VEHICLE

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
998	Other (vehicle)		1965-2019, 9999	92,93,97
999	Unknown (DODGE)		1952-2020, 9999	<u>49, 79, 99</u>

NCSA MAKE: Eagle* (10) (EGIL)

AUTOMOBILES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
034	Summit (excludes wagon)	DL, LX, ES, ESi	1989-96,9999	02-04,08,09
037	Talon	FWD, Tsi, Tsi-FWD, Esi	1990-98,9999	02,03,09
040	Premier	LX, ES, ES Limited	1988-92,9999	02,04,08,09
041	Vision	Esi, Tsi	1993-97,9999	04
044	Medallion	DL, LX	1988-89,9999	04,06,09
045	Summit Wagon	FWD, AWD, DX, LX (Mitsubishi)	1992-96,9999	<u>06</u>
398	Other (automobile)		1988-98,9999	02-04,06,08,09
399	Unknown (automobile)		1988-98,9999	02-04,06,08,09

^{*}Note: Eagle model listed under <u>American Motors</u>.

NCSA MAKE: Fiat (36) (FIAT)

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
031	124 (Coupe/Sedan)	Sport	1967-75,9999	01,02,04,06, 08,09
032	124 Spider/Racer	Spider 2000/1500	1968-83,9999	01,02,09
033	Brava/131		1975-82,9999	02,04,06,08,09
034	850 (Coupe/Spider)		1967-73,9999	01,02,09
035	128		1972-79,9999	01,02,04,06, 08,09

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
036	X-1/9		1975-83,9999	01,02,09
037	Strada		1979-83,9999	03,05,07,09
038	500/500c	Abarth, Pop, Sport, Lounge, e, Cabrio, Turbo, Cattiva, Gucci, eSport, GQ Edition, 1957 Edition	2012-19,9999	02,03,09
039	124 Spider	Classica, Abarth, Lusso	2017-19, 9999	01
398	Other (automobile)	600, 1100	1967-83, 2011- 19,9999	01-09
399	Unknown (automobile)		1967-83, 2011- 19, 9999	01-09

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
401	500L	Pop, Easy, Trekking, Lounge, Urbana	2014-19,9999	14
402	500X	Pop, Easy, Trekking, Lounge, Trekking Plus	2016-19,9999	14
499	Unknown (light truck)		2014-19,9999	14, 19

MEDIUM/HEAVY TRUCKS

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
882	Medium/Heavy - COE low entry		1967-83,9999	60-64, 66, 71, 72, 78
883	Medium/Heavy - COE high entry		1967-83,9999	60-64, 66, 71, 72, 78
890	Medium/Heavy - COE entry position unknown		1967-83,9999	60-64, 66, 71, 72, 78
898	Other (medium/heavy truck)		1967-83,9999	60-64, 66, 71, 72, 78

OTHER AND UNKNOWN VEHICLE

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
998	Other (vehicle)		1967-83,9999	92,93,97
999	Unknown (FIAT)		1967-83; 2011- 19, 9999	99

NCSA MAKE: Ford (12) (FORD)

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
001	Falcon	FuturaSprint, GT, Futura	1960-70,9999	02,04,06,08,09
002	Fairlane	Torino (1968-70), 500, Brougham	1955-70,9999	01,02,04,06, 08,09
003	Mustang/Mustang II	Mach(I), Boss (302), Grande, Cobra (SVT), Ghia, SVO, GT (Premium, Base, Cal Spec. Pkg.), LX, Shelby (GT350, GT350R, GT500, GT500KR), Deluxe, Premium, Bullitt, V6 (Base, Premium, Pony), Fastback (V6, GT, Premium, Ecoboost)	1964-2020, 9999	01-03,09
004	Thunderbird (all sizes)	Landau, Heritage, Turbo coupe, Elan, Fila, Sport, LX, SC, Deluxe, Premium, Pacific Coast Edition, 50th Anniversary Edition	1955-98; 2002- 05,9999	01,02,04,08,09
005	LTD II	S, Squire, Brougham	1977-79,9999	02,04,06,08,09
006	LTD/Custom/Galaxy (all sizes)	XL, Landau, Ranch Wagon, Country Squire, S, 500, Brougham, XL, GT	1963-86,9999	01,02,04,06, 08,09
007	Ranchero	Falcon/Fairlane based Torino/LTD II based	1960-79,9999	10
008	Maverick	Grabber	1969-78,9999	02,04,08,09
009	Pinto	Pony, MPG, ESS	1971-80,9999	02,03,06,09
010	Torino/Gran Torino/Elite	GT, Cobra, Sport, Squire, Brougham	1971-76,9999	01,02,04,06, 08,09
011	Granada	ESS, Ghia	1975-82,9999	02,04,06,08,09

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
012	Fairmont	Futura, Sport Coupe	1978-83,9999	02,04,06,08,09
013	Escort/EXP/ZX2	L, GL, GLX, SS, GT, LX, LXE, SE, ZX2, Deluxe, Premium, Standard	1981-2003, 9999	02-09
015	Tempo	L, GL, GLX, Sport, 4X4	1984-94,9999	02,04,08,09
016	Crown Victoria (For 2011 on, code as vehicle model 398)	LX, LTD Crown Victoria, LX Sport	1981-2011, 9999	02,04,06,08,09
017	Taurus/Taurus X	MT-5, L, GL, LX, SHO, G, SE, SVG, SES, SEL, Limited, Eddie Bauer, Police Interceptor	1986-2019, 9999	04,06,09
018	Probe	GL, LX, GT	1988-97,9999	<u>03</u>
021	Five Hundred	SE, SEL, Limited	2005-07,9999	<u>04</u>
022	Freestyle	SE, SEL, Limited	2005-07,9999	<u>06</u>
023	Fusion	I4 S/SE/SEL, V6 SE/SEL, S, SE, Sport, Hybrid (S, SE, Platinum, Titanium), Titanium (Hybrid, Energi) Energi (SE, Platinum, Titanium), Platinum, Plug-In	2006-20,9999	04
024	Edge (For model years 2007-2018 only. For model years 2019 on, see 12-424.)	SE, SEL, SEL Plus, Limited, Sport, Titanium, ST	2007-18,9999	<u>06</u>
025	Flex	SE, SEL, Limited, Titanium	2009-19,9999	<u>06</u>
026	City		2000-02, 9999	02,04,08,09, 94
027	C-Max	Hybrid (SE, Titanium), Energi, SE, SEL	2013-18,9999	<u>05</u>
031	English Ford	Cortina, Anglia, Zephyr/ Zodiac Mark III	1946-70,9999	02,04,06,08,09
032	Fiesta	Sport, Ghia, S, SE, SES, SEL, Titanium, ST	1978-80, 2011- 19, 9999	03-05,09
033	Festiva	L, GL	1988-93,9999	03
034	Laser		1993-94,9999	02,03,09
035	Contour	Sport, LX, SE, SVT	1994-2001, 9999	04
036	Aspire		1994-97,9999	03,05,07,09

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
037	Focus	ZX3, LX, SE, ZTS, SVT, ZX4, ZX4 ST, ZX5, ZXW, S, SES, SEL, SE, Titanium, Electric, ST, RS	2000-18,9999	02-06,08,09
038	GT		2004-08, 2018- 19, 9999	01,02,09
398	Other (automobile)	Deluxe, Ford Six, Mainline, Crestline, Futura, Galaxie, Model A	1923-2020, 9999	01-09, 10,11, 94
399	Unknown (automobile)		1923-2020, 9999	01-09, 10,11, 94

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
401	Bronco (thru 1977)/ Bronco II/Explorer/ Explorer Sport (Explorer for 1990-2018 only. For model years 2019 on, see 12-425.)	Eddie Bauer, XL, XLT, Explorer (1990 on) XLS, Explorer Sport (Value, Choice Premium), NBX, Adrenalin, Ironman, Police Interceptor, Base, Limited, Platinum	1966-77; 1983- 2018, 9999	14
402	Escape	XLS (Value, Sport, V6 Choice/Premium), XLT (Choice, Premium, Sport), Hybrid (Base, Limited), No Boundaries, Limited, S, SE, SEL, Titanium	2001-20,9999	14
403	EcoSport	S, SE, SES (Black Appearance Package), Titanium	2018-20,9999	14
421	Bronco-full-size (1978-on)	Eddie Bauer, Custom, XL, XLT	1978-96,9999	<u>15</u>
422	Expedition	EL, XLS, XLT (4x4,4x2), Eddie Bauer (4x4,4x2), NBX, Sport, NBX, Limited, King Ranch, Funk Master Flex Edition, XL, Platinum, XLT MAX, Limited MAX, Platinum MAX, Special Edition	1996-2020, 9999	<u>15</u>

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
423	Excursion	XLT, Limited (LTD), Ultimate, Premium, XLS, Eddie Bauer	2000-05,9999	<u>16</u>
424	Edge (For 2019 on. For model years 2007-2018, see 12-024.)	E, SEL, ST, Titanium	2019-20, 9999	<u>15</u>
425	Explorer (For 2019 on. For model years 1990-2018 see 12-401.)	XLT, Limited, Sport, Platinum	2019-20, 9999	<u>15</u>
441	Aerostar	XLT, Cargo Van	1985-97, 9999	<u>20</u>
442	Windstar	GL, LX, XLT, Splash, Cargo Limited, SE, SEL	1995-2003, 9999	<u>20</u>
443	Freestar	Base, LX, SE, S, SEL, SES, Limited	2004-07, 9999	<u>20</u>
444	Transit Connect	XL, (Van, Wagon), XLT (Van, Wagon), Premium, EV, Titanium	2010-20, 9999	<u>20</u>
461	E-Series Van/Econoline	Clubwagon (XL, XLT), Chateau, (XL, XLT), Parcel Van, Econoline Wagon E- 150 (XL/ XLT/ Premium); E- 350 XL/XLT/ Extended), E- 250 (EXT)	1960-2019, 9999	21,22,28,29
462	Transit	Van, Wagon (XL, XLT)	2014-19, 9999	21, 28, 29
470	Van Derivative		1960-2019, 9999	28, 29
471	Ranger	Supercab, 4x4, STX, SL, SLT, Splash, XL (Standard/ Super Cab), XLT, Tremor (Standard/Super Cab/Off- Road/FX4), Edge (Regular/ Super Cab), EV* (electric), Level II, Sport, Lariat	1982-2012, 2019, 9999	34,39, 40, 42
472	Courier		1972-82, 9999	<u>34, 42</u>
473	Explorer Sport Trac	2WD/4WD, Value, Choice, Premium, XLS, XLT, Adrenalin, Limited	2001-11, 9999	34

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
481	F-Series pickup	F100, F150-F350, (XL, XLT, Crew Cab, Super Cab, Regular Cab, Lariat, Super Duty, Flareside, Styleside, SVT Lightning, Fireside, Harley-Davidson Edition, King Ranch, SuperCrew, STX, Heritage Edition, Sport Edition, FX4, FX2), F450 (10,000 GVWR and under) (see model 880 for F450 >10,000 GVWR), Amarillo Package, Platinum, Cabala's, STX, SVT Raptor, Limited	1940-2020, 9999	34,39, 40, 42
498	Other (light truck)		1972-2020, 9999	14-16, 19, 20,21,28, 29, 34,39, 40,41, 42, 45,48
499	Unknown (light truck)		1928-2020, 9999	14-16,19, 20-22, 28,29, 34,39, 40,41, 42, 45,48, 49

MOTOR HOME

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
850	Motor Home	Truck-based, F-550, Van- Based (E Series)	1956-2019, 9999	65,73

MEDIUM/HEAVY TRUCKS

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
870	Medium/Heavy Van- Based Vehicle	Econoline E350, E450, Transit	1956-2019, 9999	<u>55, 61-64</u>
880	Medium/Heavy Pickup (pickup-style only - over 10,000 lbs.)	Super Duty F250, 350, F450/550, Lariat, XL, XLT, King Ranch	1953-2020, 9999	<u>67</u>

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
881	Medium/Heavy - CBE	F-5 thru F-8, L-series, FT-series, Super Duty F-Series: 350/450/550/650/750/800 (does not include pickup style)	1953-2020, 9999	60-64, 66, 71, 72, 78
882	Medium/Heavy - COE low entry	C/CT series, LCF	1964-2009, 9999	60-64, 66, 71, 72, 78
883	Medium/Heavy - COE high entry	CL/CLT series, LCF	1967-1996, 9999	60-64, 66, 71, 72, 78
884	Medium/Heavy - Unknown engine location		1956-2019, 9999	60-64, 66, 71, 72, 78
890	Medium/Heavy - COE entry position unknown		1956-2019, 9999	60-64, 66, 71, 72, 78
898	Other (medium/heavy truck)		1965-2020, 9999	60-64, 66, 71, 72, 78

BUSES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
981	Bus**: Conventional (Engine out front)	B-series (not van based), F- Series	1964-2019, 9999	50, 52, 58, 59
988	Other (bus)		1940-2019, 9999	50, 52, 58, 59
989	Unknown (bus)		1940-2019, 9999	50, 52, 58, 59

^{**} Use code "989" (bus) if the frontal plane or the engine location is unknown.

OTHER AND UNKNOWN VEHICLE

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
998	Other (vehicle)		1940-2019, 9999	92,93,97
999	Unknown (FORD)		1923-2020, 9999	<u>49, 79, 99</u>

NCSA MAKE: GMC (23) (GMC)

AUTOMOBILES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
007	Caballero		1965-87,9999	10
008	Acadia (2007-2012 only. For 2013 on see model 423.)	SLE, SLT, Denali, SL	2007-12,9999	06
399	Unknown (automobile)		1965-2012, 9999	<u>06, 10</u>

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
401	Jimmy/Typhoon/Envoy	S-15 based, (100.5 WB), T15, SLE, SL, SLS, SLT, XL, XUV, Denali	1983-2009, 9999	14
402	Terrain	SL, SLE, SLT, Denali, Diesel (SLE, SLT), Black Edition	2010-19, 9999	14
421	Full-size Jimmy/Yukon	Fullsize pickup based, K5, K18, SL, SLE, SLT, SLS, Diamond Edition, Yukon Denali, Denali (Ultimate, Ultimate Black Edition), Hybrid, Premium Edition, Graphite Edition (Base, Performance)	1969-2019, 9999	<u>15</u>
422	Suburban/Yukon XL (2004 on; see 431 for 1950- 2003)	Yukon XL (Denali -1500-2500), SLE, SLT, Hybrid	2004-19,9999	<u>15</u>
423	Acadia (2013 on. For 2007-2012 see model 008.)	FWD/AWD, Denali, SL, SLE, SLT, All Terrain	2013-20,9999	<u>15</u>
431	Suburban/Yukon XL (1950-2003 only; see 422 for 2004 on)	all models, SLE, C16, C26, K16, K26, C1500-2500, K1500-2500, Yukon XL (Denali -1500-2500)	1950-2003, 9999	<u>16</u>
441	Safari (Minivan)	SLT, SLX, SLE, M15, L15, SL	1985-2005, 9999	<u>20</u>

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
461	G-series van/Savana	Rally Van, Bandura, G15-G35, Savana (G1500-3500) SLT, Extended, SLE, LS, LT, Uplifter, WT, Cargo	1965-2019, 9999	21,22,28,29
466	P-series van		1965-2019, 9999	22,28,29
470	Van derivative	Hicube, Magna Van, Value Van, Parcel Van	1965-2019, 9999	28,29
471	S15/T15/Sonoma	4 X 4, Syclone, SL, SLS, SLE, Extended/Crew Cab, ZR2, ZRX, ZR5	1982-2004, 9999	34,39, 40, 42
472	Canyon	Base, SLE, SL, SLT, Z71, Z85, Work Truck, Crew Cab, Extended Cab, Denali, All Terrain (Base, X)	2004-19, 9999	34
481	C, K, R, V-series pickup/ Sierra	Excluding Yukon, C15-C35, K15-K35, R15-R35, V15- V35, Sierra, C/K1500, 2500, 3500, Sportside, X81, SL, Special, SLE, Classic, Extended Cab, Denali, Limited 1500HD/ 2500HD/ 3500HD, C3, Hybrid, SLT, Work Truck, 5SA, AT4	1940-2020, 9999	34,39, 40, 42
498	Other (light truck)		1930-2020, 9999	14-16,19, 20- 22,28, 29, 34 40, 42, 45,48
499	Unknown (light truck)		1951-2020, 9999	14-16,19, 20-22, 28,29, 34,39, 40, 42, 45,48,49

MOTOR HOME

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
850	Motor Home		1950-2019, 9999	65,73

MEDIUM/HEAVY TRUCKS

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
870	Medium/Heavy Van- Based Vehicle	Savana 3500, 4500	1965-2019, 9999	<u>55, 61-64</u>
880	Medium/Heavy Pickup (pickup-style only - over 10,000 lbs.)		1953-2020, 9999	<u>67</u>
881	Medium/Heavy - CBE	W5000/6000/7000 series, Kodiak Brigadier/General models, Top Kick	1967-2020, 9999	60-64,66, 71,72,78
882	Medium/Heavy - COE low entry	W6000/W7000, all other COE, low entry, W/WT Series	1968-2019, 9999	60-64.66, 71,72,78
883	Medium/Heavy - COE high entry	Astro 95, all other COE, high entry, T Series	1969-2010, 9999	60-64,66, 71,72,78
884	Medium/Heavy - Unknown engine location		1948-2019, 9999	60-64,66, 71,72,78
890	Medium/Heavy - COE entry position unknown		1967-2019, 9999	60-64,66, 71,72,78
898	Other (medium/heavy truck)		1930-2020, 9999	60-64,66, 71,72,78

BUSES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
981	Bus**: Conventional (Engine out front)	B6000	1950-2019, 9999	50-52,58,59
988	Other (bus)		1965-2019, 9999	50,58,59
989	Unknown (bus)		1950-2019, 9999	50-52,58,59

^{**} Use code "989" (bus) if the frontal plane or the engine location is unknown.

OTHER AND UNKNOWN VEHICLE

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
998	Other (vehicle)		1965-2019, 9999	92,93,97
999	Unknown (GMC)		1940-2020, 9999	<u>49, 79, 99</u>

NCSA MAKE: Grumman/Grumman-Olson (25) (GRUM)

LIGHT TRUCKS

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
401	LLV	Postal vehicle	1987-2004, 9999	22
441	Step-in van	Multi-stop, step van	1987-2004, 9999	22
498	Other (light truck)		1987-2004, 9999	22
499	Unknown (light truck)		1987-2004, 9999	22

MEDIUM/HEAVY TRUCKS

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
881	Medium/Heavy - CBE		1987-2004, 9999	60-64,66, 71,72,78
882	Medium/Heavy - COE low entry		1987-2004, 9999	60-64,66, 71,72,78
883	Medium/Heavy - COE high entry		1987-2004, 9999	60-64,66, 71,72,78
884	Medium/Heavy - engine location unknown		1987-2004, 9999	60-64,66, 71,72,78
890	Medium/Heavy - entry position unknown		1987-2004, 9999	60-64,66, 71,72,78
898	Other (medium/heavy truck)		1987-2004, 9999	60-64,66, 71,72,78

BUSES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
983	Bus**: Flat front, rear engine	Transit	1950-2004, 9999	50-52,58,59
988	Other (bus)		1950-2004, 9999	50-52,58,59
989	Unknown (bus)		1950-2004, 9999	50-52,58,59

^{**} Use code "989" (bus) if the frontal plane or the engine location is unknown.

UNKNOWN

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
999	Unknown (GRUMMAN/GRUMMA N-OLSON)		1950-2004, 9999	79,99

NCSA MAKE: Honda (37) (HOND)

(<u>Acura: See "54")</u>

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
031	Civic/CRX, del Sol	1300, 1500, CVCC, DX, EX, VX, CX, FE, CRX, CRX Si, S, Si, HF, LX, 4WD Wagon, GX (NGV), HX, VTEC, VP, Si, Civic, Hybrid, Special Edition, EX-L, DX-VP, LX-S, Natural Gas, Sport, Sport Touring, EX-T, LX-P, Touring, Type R	1973-2020, 9999	02-09

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
032	Accord (Note: For Crosstour model years 2010 and 2011 only. For Crosstour model years 2012-2015, see vehicle model 37-405)	LX (V-6, ULEV), LXI, DX, CVCC, SE-I, LX-I, V-6, SJE, SME, SMH, SMK, EX (Wagon, ULEV, V-6), SE (ULEV), Special Edition, Hybrid (Base, EX-L, Touring), Value Package, LX-S, LX-P, EX-L, Crosstour (EX, EX-L, EX(V6), EX-L (V6)), Premium, Plug-In Hybrid, Sport, Hybrid (EX-L, Touring), Touring, Sport Special Edition, EX-T	1976-2020, 9999	02-09
033	Prelude	S, Si, VTEC, SNF, SH, SE	1979-2001, 9999	02
034	600	Coupe, Sedan	1968-72, 9999	<u>02</u>
035	S2000	Roadster, CR	2000-09, 9999	<u>01</u>
036	EV Plus*	*Electric vehicle (EV+)	1997-2000, 9999	03
037	Insight	*(Gasoline-Electric), MT/CVT, LX, EX, Touring	2000-06, 2010- 14, 2019, 9999	03, 04, 05, 09
038	FCX/Clarity	Hydrogen Vehicle, Clarity, Electric, Fuel Cell, Touring	2004-14, 2017- 19, 9999	03, 05, 09
039	Fit	Base, DX, LX, Sport, EV, EX, EX-L	2006-19, 9999	<u>05</u>
041	CR-Z	EX, Hybrid, Sport, LX, EX-L	2010-16, 9999	<u>03</u>
398	Other (automobile)		1968-2020, 9999	01-09
399	Unknown (automobile)		1968-2020, 9999	01-09

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
401	Passport	LX, EX, DX, EX-L	1994-2002, 9999	14
402	CR-V	LX, EX, Special Edition (SE), SC, EX-L, Touring, Hybrid	1997-2020, 9999	14
403	Element	DX, EX, EX-P, LX, SC, Dog Friendly	2003-11, 9999	14
404	HR-V	EX, EX-L, LX, Sport, Touring	2016-19, 9999	14
405	Crosstour (2012-2015 only. See vehicle model 37-032 for model years 2010 and 2011.)		2012-15, 9999	14
421	Pilot	EX, EX-L, LX, SE, Value Package, Touring, Elite, Black Edition	2003-20,9999	<u>15</u>
422	Passport (2019 on. For 1994-2002 see model 401.)	Sport, Elite, EX-L, Touring	2019	<u>15</u>
441	Odyssey	LX, EX, EX-L (Res, NAVI), Touring, Touring Elite, SE, Special Edition	1995-2020, 9999	<u>20</u>
471	Ridgeline	RT, RTL, RTL-T, RTL-E, RTS, RTX, Sport, Black Edition	2006-14, 2017- 19, 9999	34
499	Unknown (light truck)		1994-2020, 9999	14,15,19, 20, 34, 49

MOTORCYCLES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
701	0-50 cc		1978-2020, 9999	80, 81,83,84,88, 89
702	51-124 cc		1965-2020, 9999	80, 81,83,84,88, 89
703	125-349 cc		1965-2020, 9999	80, 83, 84, 88, 89
704	350-449 сс		1965-2020, 9999	80, 83, 84, 88, 89
705	450-749 cc		1970-2020, 9999	80, 83, 84, 88, 89
706	750 cc or greater		1970-2020, 9999	80,82, 83,84,87, 88, 89
709	Unknown cc		1965-2020, 9999	80, 81, 83, 84, 88, 89

ALL TERRAIN VEHICLES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
732	51-124cc		1972-2020, 9999	<u>90, 96</u>
733	125-349cc		1972-2020, 9999	<u>90, 96</u>
734	350cc or greater		1996-2020, 9999	<u>90, 96</u>
739	Unknown cc		1972-2020, 9999	<u>90, 96</u>

OTHER AND UNKNOWN VEHICLE

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
998	Other (vehicle)		1968-2020, 9999	95, 97
999	Unknown (HONDA)		1965-2020, 9999	<u>49, 99</u>

NCSA MAKE: Hyundai (55) (HYUN)

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
031	Pony	Pony Excel (Foreign)	1979-88,9999	02,03,09
032	Excel	GL, GLS, GS	1984-94,9999	03-05,07,09
033	Sonata	GL, GLS, LX, SE, Limited, Hybrid (SE, Limited), 2.0T (Sport, Limited), Sport, Eco, Plug-in, SEL	1989-2020, 9999	04
034	Scoupe	LS, Turbo	1991-95,9999	<u>02</u>
035	Elantra	GLS, GL, GT, Limited, SE, Touring (GLS, SE), GS, Sport, Value Edition, ECO, SEL	1992-2020, 9999	02, 04-06,08,09
036	Accent	L, GL, GS, Gsi, GT, GLS, SE, Blue, Sport, Limited, Value Edition, SEL	1995-2020, 9999	03-05,07,09
037	Tiburon	FX, GT, GS, SE, Limited	1997-2008, 9999	02,03,09
038	XG300(2001)/ XG350 (2002 on)	L	2001-05,9999	04
039	Azera (For 2018 on, code as vehicle model 398)	SE, Limited, GLS	2006-17,9999	04
040	Equus	Signature, Ultimate	2011-16,9999	<u>04</u>
041	Genesis (For 2009-2016 only. For model years 2017 on, see 55-043, 55-044, and 55-046)	3.8, 4.6, 2.0T, R-Spec, Grand Touring, Premium, Track, 5.0 R-Spec, Ultimate	2009-16,9999	02,04,08,09
042	Veloster	Base, Turbo, Re-Mix, R-Spec, RE-FLEX Edition, Rally Edition, N, Premium, Turbo (Base, R-Spec, Ultimate), Ultimate, 2.0 (Base, Premium)	2012-17, 2020, 9999	03, 09
043	Genesis (G80)	Standard, Premium, Sport, Ultimate (RWD/AWD)	2017-20, 9999	04
044	Genesis (G90)	Premium, Ultimate (RWD/AWD)	2017-19, 9999	04
045	Ioniq	Electric (Base, Limited), Hybrid (Blue, SEL, Limited), Plug-In Hybrid (Base, Limited)	2017-19, 9999	05

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
046	Genesis (G70)	Standard, Premium	2019	04
398	Other (automobile)	Azera (2018 on)	1984-2020, 9999	02-09
399	Unknown (automobile)		1984-2020, 9999	02-09

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
401	Santa Fe	GL, GLS, LX, Limited (Base, Ultimate), SE (Base, Ultimate), Sport (Base, 2.0T Ultimate), 2.0T, SEL, SEL Plus	2001-20, 9999	14
402	Tucson	GL, GLS, LX, Limited, SE, Fuel Cell, ECO, Sport, SEL, Value, Ultimate	2005-20, 9999	14
403	Veracruz (2007 only)	GLS, Limited, SE	2007	<u>14</u>
404	Kona	EV, Iron Man Special Edition, SE, SEL, SEL Plus, Limited, Ultimate, Electric	2018-20, 9999	14
405	Nexo	Fuel Cell	2019	14
406	Venue	SE, SEL, Denim	2020	14
421	Veracruz (2008 on; see 403 for 2007 only)	GLS, Limited, SE	2008-12, 9999	<u>15</u>
422	Palisade	SE, SEL, Limited	2020	<u>15</u>
441	Entourage	GLS, Limited, SE	2007-09, 9999	<u>20</u>
498	Other (light truck)		2001-20, 9999	14,15,19, 20
499	Unknown (light truck)		2001-20, 9999	14,15,19, 20

UNKNOWN

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
999	Unknown (HYUNDAI)		1979-2020, 9999	<u>49, 99</u>

NCSA MAKE: Imperial (08) (CHRY)

AUTOMOBILES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
010	Imperial	LeBaron, Mark Cross, Crown Imperial	1954-75,9999	01,02,04,08,09
398	Other (automobile)		1965-75,9999	01-09
399	Unknown (automobile)		1965-75,9999	01-09

NCSA MAKE: Infiniti (58) (INFI)

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
031	M30		1990-92,9999	01,02,09
032	Q45	Standard Touring, Q45t, Luxury, Sport, Premium	1990-2006, 9999	04
033	G20	G20t, Touring, Standard, Luxury	1991-96; 1999- 2002, 9999	04
034	J30		1993-97,9999	<u>04</u>
035	130	Standard, Touring, Luxury	1996-2001, 9999	04
036	I35	Touring, Luxury	2002-04,9999	<u>04</u>
037	G25/G35/G37	x, 6MT, Journey, Sport, Special Edition, IPL	2003-13,9999	01,02,04,08,09
038	M35/M37/M45/M56	Sport, x, Hybrid	2003-13,9999	<u>04</u>
039	FX35/FX37/FX45/FX50		2003-13,9999	<u>06</u>
040	EX35	Journey	2008-13,9999	<u>06</u>
041	Q50	Base (3.7 Premium/AWD/ Hybrid) S (3.7 Premium/ AWD/Hybrid), Eau Rogue, 2.0t (AWD, Premium, Sport, Pure, Luxe), 3.0t (Premium, Sport, Luxe, AWD, Pure), Red Sport 400, Hybrid (Base, Premium, Luxe), Signature Edition, Red Sport	2014-20,9999	04

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
042	Q60	Journey, AWD, 6MT, IPL (Base and 6MT), S, Neiman Marcus, 2.0t (Base, AWD, Premium, Pure, Luxe), 3.0t (Premium, AWD, Luxe, Sport, Pure), Sport (Base, AWD), Red Sport 400 (Base, AWD)	2014-20,9999	01, 02, 09
043	Q70	Hybrid, 3.7 (Base, Luxe, AWD), 5.6 (Base, Luxe, AWD) L 3.7 (Base, Luxe, AWD), 5.6 (Base, Luxe, AWD)	2014-19,9999	04
044	QX50	Base, AWD, Journey, Pure, Luxe, Essential, Sensory, Autograph	2014-20,9999	<u>06</u>
045	Q40		2015-16,9999	<u>04</u>
047	QX30	Luxury, Premium, Sport, Pure, Essential	2017-19,9999	05
398	Other (automobile)		1990-2020, 9999	01,02,04,06, 08,09
399	Unknown (automobile)		1990-2020, 9999	01,02,04,06, 08,09

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
401	QX4	Luxury	1997-2003, 9999	14
402	JX35	Luxury, AWD	2013	14
403	QX60	3.5, AWD, Hybrid, Limited, Pure, Luxe	2014-20,9999	14
404	QX70	3.7, 5.0, AWD	2014-17,9999	<u>14</u>
421	QX56		2004-13,9999	<u>15</u>
422	QX80	Base, AWD, 4WD, Limited, Luxe	2014-19,9999	<u>15</u>
499	Unknown (light truck)		1997-2020, 9999	14,15,19

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
999	Unknown (INFINITI)		1990-2020, 9999	<u>49, 99</u>

NCSA MAKE: Isuzu (38) (ISU)

AUTOMOBILES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
031	I-Mark	S, RS, Turbo, DOHC	1981-90,9999	02-04,08,09
032	Impulse	Turbo, RS	1983-92,9999	02,03,09
033	Stylus		1991-94,9999	04
398	Other (automobile)		1981-94,9999	02-04,08,09
399	Unknown (automobile)		1981-94,9999	02-04,08,09

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
401	Trooper/Trooper II	Deluxe, LS, S, LTD	1984-2002, 9999	14
402	Rodeo/ Rodeo Sport	S, LS, LSE	1991-2004, 9999	14
403	Amigo		1989-94; 1998- 2000, 9999	14
404	VehiCROSS	VXO	1999-2001, 9999	14
405	Axiom	XS	2002-04,9999	14
421	Ascender	LS, S, Limited, Luxury	2003-08,9999	<u>15</u>
441	Oasis	S, LS	1996-99,9999	<u>20</u>
471	P'up (pickup)	4 X 4	1976-95,9999	34,39
472	Hombre	S, XS, XS Space Cab	1996-2000, 9999	34,39, 40, 42
473	i-280/i-290	S, LS, Luxury	2006-2008, 9999	<u>34</u>

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
474	i-350/i-370	LS, Limited, S	2006-2008, 9999	34
498	Other (light truck)		1981-2008, 9999	14,15, 20, 34,39, 40, 42, 48
499	Unknown (light truck)		1981-2008, 9999	14,15,19, 20, 34,39, 40, 42, 48,49

MEDIUM/HEAVY TRUCKS

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
881	Medium/Heavy - CBE		1981-2004, 9999	60-64,66, 71,72,78
882	Medium/Heavy - COE low entry	NOR, NPR, NQR, N Series	1981-2020, 9999	60-64,66, 71,72,78
883	Medium/Heavy - COE, high entry	FRR, FRRI, FSR, FTR, FVR, F Series	1981-2020, 9999	60-64,66, 71,72,78
884	Medium/Heavy - Unknown engine location		1981-2020, 9999	60-64,66, 71,72,78
890	Medium/Heavy - COE entry position unknown		1981-2020, 9999	60-64,66, 71,72,78
898	Other (medium/heavy truck)		1981-2020, 9999	60-64,66, 71,72,78, 97

BUSES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
981	Bus**: Conventional (Engine out front)		1981-2019, 9999	50-52,58,59
982	Bus: Front engine, Flat front		1981-2019, 9999	50-52,58,59
983	Bus: Rear engine Flat front		1981-2019, 9999	50-52,58,59
988	Other (bus)		1981-2019, 9999	50-52,58,59
989	Unknown (bus)		1981-2019, 9999	50-52,58,59

^{**}Use code "989" (bus) if the frontal plane or the engine location is unknown.

UNKNOWN

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
999	Unknown (ISUZU)		1981-2020, 9999	<u>49, 79, 99</u>

NCSA MAKE: Jaguar (39) (JAGU)

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
031	XJ-S, XK8 Coupe	S, SC, GT, H.E.	1976-2008, 9999	01,02,09
032	XJ/ XJL/ XJ6/ 12/ XJR/ XJ8/ XJ8L Sedan/ Coupe	Mk II, Mk X, XJ,3.85, 3.8, 340/420 Sedan; XJ8 (LWB, L, Vanden Plas, Sport); XJ6(L), C, L, Vanden Plas, III, GT, Super 8, Limited, Portfolio, Supersport, Supercharged, Ultimate, Standard Wheelbase, Long Wheelbase, R-Sport, 50th Anniversary Special Edition	1949-2019, 9999	02,04,08,09
033	XK-E	V12, Roadster, 120,140, 150, 2+2	1946-74,9999	01-03,09

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
034	S-Type	3.0, 4.0, 4.2, Base, Sport, L, R, VDP Edition	2000-08,9999	04
035	XKR/XK	Victory Edition, Portfolio, 175 Limited Edition, Black Pack, XKR-S, Touring, GT, Final Fifty	2000-15, 9999	01-03,09
036	X-Type	2.5, 3.0, Sport, VDP Edition	2002-08, 9999	04,06,09
037	XF/XF-R	4.2 Luxury, S, Premium Luxury, Supercharged, 3.0, 2.0T, Portfolio, Sport, Prestige, R-Sport, S, Sportbrake (First Edition, S, Prestige)	2008-20, 9999	04,06,09
038	F-Type	S, V8, Project 7, Premium, SVR, Type R, British Design Edition, R-Dynamic, 400 Sport, Checkered Flag	2014-20, 9999	01, 03, 09
039	XE	Premium, Prestige, R-Sport, R-Dynamic, S	2016-20, 9999	04
398	Other (automobile)		1949-2020, 9999	01-04,06,08,09
399	Unknown (automobile)		1949-2020, 9999	01-04,06,08,09

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
401	F-Pace	20d/35t (Premium, Prestige, First Edition, Sport, R-Sport, S), SVR, Portfolio	2017-20, 9999	14
402	E-Pace	Base, S, SE, R-Dynamic (S, SE, HSE), First Edition, Checkered Flag Edition	2018-20, 9999	14
403	I-Pace	Base, First Edition, e-Trophy, S, SE, HSE	2019	14
499	Unknown (light truck)		2017-20, 9999	14

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
999	Unknown (JAGUAR)		1946-2020, 9999	<u>49, 99</u>

NCSA MAKE: Jeep* (Includes Willys**/Kaiser-Jeep) (02) (AMER)

AUTOMOBILES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
001	Compass	Base, Sport, Limited, Latitude, Altitude, High Altitude, SE, 75th Anniversary Edition, Upland	2007-20, 9999	<u>06</u>

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
401	CJ-2/CJ-3/CJ-4	Military	1940-66,9999	<u>14</u>
402	CJ-5/CJ-6/CJ-7/CJ-8	Scrambler, Renegade, Golden Eagle, Laredo, Wrangler,	1967-93,9999	14
403	YJ series/Wrangler	SE, Sport (Base, S), Sahara, X, Rubicon (Base, Hard Rock), Unlimited (Altitude, Dragon, Freedom, Polar, Rubicon X. Willys Wheeler, Sport, S, Sahara), Islander, Call of Duty: Black Ops Edition, Moab, Altitude, Freedom, Rio Grande, 60th/65th Anniversary Edition, Apex, Columbia, Golden Eagle, Rocky Mountain, Willys, Willys Wheeler (Base, W), Black Bear, 75th Anniversary Edition, Winter, Rubicon Recon, Black and Tan Edition, Sahara Altitude Edition	1986-95; 1997- 2020, 9999	14

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
404	Cherokee (1984-on) (For Grand Cherokee for 2014 on use 02-422.)	Limited, Laredo, Pioneer, Sport, Grand Cherokee, TSi, Briarwood, Country, RHD, SE, Classic, Overland, Special Edition, SRT8, Summit, Laredo X, Overland Summit, Altitude, Trail Hawk, Sport, Latitude (Base, Plus), Limited, 75th Anniversary, Sport Altitude, High Altitude, Upland	1984-2020, 9999	14
405	Liberty	Sport, Limited Edition, Renegade, Columbia Edition, Rocky Mountain Edition, CRD, Special Edition, Latitude, Jet	2002-13,9999	14
406	Commander	Base, Limited, Overland, Sport, Rocky Mountain	2006-10,9999	<u>14</u>
407	Patriot	Sport (Base, SE), Limited, Latitude, X, Altitude, High Altitude, Freedom Edition, 75th Anniversary Edition	2007-17,9999	14
408	Renegade	Trail Hawk, Latitude, Sport, Altitude, Limited, Desert Hawk, 75th Anniversary Edition, Upland, High Altitude	2015-19,9999	14
421	Cherokee (thru 1983)	Wide Track, Chief, Commando, Jeepster	1969-83,9999	<u>15</u>
422	Grand Cherokee (For 2014 on. Use model 404 for model years prior to 2013.)	Laredo (Base/E), Limited, Overland, Summit, SRT (Laredo [Base, E] 75th Anniversary Edition [Base, E], Altitude, Limited, Overland, Summit), Trailhawk, 75th Anniversary Edition (Base, Limited), Altitude, Latitude (Base, Plus), Upland, Limited X, High Altitude, Trailhawk Elite	2014-20,9999	<u>15</u>
431	Grand Wagoneer	Custom, Brougham Limited, Wagoneer	1971-91; 1993,9999	<u>15</u>
481	Pickup	J-10, J-20, Honcho	1940-93,9999	<u>34,39, 40, 42</u>
482	Comanche	Chief	1986-92,9999	<u>34,39, 40, 42</u>

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
483	Gladiator	Sport, Sport S, Overland, Rubicon	2020	34, 39
498	Other (light truck)		1940-2020, 9999	14,15,19, 34,39, 40,41, 42, 45,48,49
499	Unknown (light truck)		1940-2020, 9999	14,15,19, 34,39, 40,41, 42, 45,48,49

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
999	Unknown (JEEP)		1940-2020, 9999	49

^{*}Note that Jeep DJ-series are coded under MAKE 03, MODEL 466

NCSA MAKE: KIA (63) (KIA)

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
031	Sephia	RS, LS, GS	1994-01,9999	04
032	Rio/Rio5	Cinco (Wagon), LX, SX, EX, S	2001-20,9999	04-06,09
033	Spectra/Spectra5	GS, GSX, GX, LS, LX, EX, SX	2000-09,9999	04,05,09
034	Optima	LX, SE, V6, EX (Base, Premium), SX, SX Turbo, Hybrid, Limited, SXL, Plug In, S	2001-20,9999	04
035	Amanti		2004-10,9999	04
036	Rondo	EX, LX	2007-10,9999	<u>06</u>
037	Soul	Base, sport, +, !, White Tiger, EV, Tarmac, 1 Million, X-Line, GT-Line (Base, Turbo)	2009-20,9999	<u>06</u>

^{**}Willys Jeep can be coded 401 or 999.

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
038	Forte	2.0 (EX, LX, SX) 2.4 (SX), Koup (EX, LX, SX) 5 (EX, LX, SX), S, FX, EX, LXS	2010-20,9999	02,04,05,08,09
039	Cadenza	Premium, Limited, Technology	2012-19, 9999	04
040	K900	V6 (Premium, Luxury), V8 (Luxury)	2014-19,9999	04
041	Stinger	2.0, Premium, GT, GT1, GT2	2018-19, 9999	<u>05</u>
398	Other (automobile)		1994-2020, 9999	02,04-06,08,09
399	Unknown (automobile)		1994-2020, 9999	02,04-06,08, 09

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
401	Sportage	EX, LX, 4WD, Limited, S, SX, Base, Turbo	1995-2003, 2005-20, 9999	14
402	Sorento	EX, EX-V6, L, LX, LX-V6, SX, SX-V6, Limited, Limited-V6, SXL, S V6	2003-20, 9999	14
403	Niro	FE, EX, LX, Touring (Base, Launch Edition, Graphite Edition), Plug-In, S	2017-19, 9999	14
421	Borrego	EX, LX, LTD	2008-10,9999	<u>15</u>
422	Telluride	EX, LX, S, SX	2020	<u>15</u>
441	Sedona	EX, L, LX, L, SX, Limited, SXL	2002-12, 2014-20, 9999	<u>20</u>
498	Other (light truck)		1995-2020 9999	<u>14,15,19</u> , <u>20</u>
499	Unknown (light truck)		1995-2020, 9999	14,15,19, 20

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
999	Unknown (KIA)		1994-2020, 9999	<u>49</u>

NCSA MAKE: Lancia (40) (LNCI)

AUTOMOBILES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
031	Beta Sedan - HPE	Zagato	1976-82,9999	02,04,06,08,09
032	Zagato		1976-82,9999	01,02,09
033	Scorpion	(Mote Carlo- Europe Only)	1977	<u>02</u>
398	Other (automobile)	Stratos, Fulvia, Flavia, Appia, Aurelia, Aprilia	1946-82,9999	01-09
399	Unknown (automobile)		1946-82,9999	01,02,04,06, 08,09

^{*}NOTE: Lancia did not import in 1980. 1982 - last year imported

NCSA MAKE: Land Rover (62) (LNDR)

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
401	Discovery (For 2017 on, see model 425)	SD, SE, SE7, LE, LSE, Series II, Kalahari Edition, S, HSE, G-4 Edition	1994-2004, 9999	14
402	Defender	90	1993-95; 1997, 9999	14
403	Freelander (2004 on; see 422 for 2002-03.)	HSE, SE, S, SE3, G4 Edition	2004-05,9999	14
404	Range Rover Evoque	Pure (Premium, Plus), Prestige, Dynamic, SE (Base, Premium), HSE (Base, Dynamic), Autobiography, Landmark Edition, S, First Edition, Convertible	2012-20,9999	14

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
405	Discovery Sport	HSE (Base, Luxury), SE, Landmark Edition	2015-20,9999	14
421	Range Rover	County, County SE, Great Divide, Hunter, LSE, County LWB, 4.0SE, 4.6HSE, S, SE, HSE, Westminster, Limited Edition, Supercharged, Sport (HST, SE, SVR, HSE [Base, Dynamic]), Supercharged, Autobiography), Supercharged, HSE-LUX, Autobiography (Base, Black), Standard Wheelbase (Base, HSE, Supercharged, Autobiography, SV Autobiography DYNAMIC), Long Wheelbase (Supercharged, Autobiography, SV Autobiography, SV Autobiography, SV Autobiography), PHEV, SV Coupe	1987-2020, 9999	15
422	Freelander (2002-03 only; see 403 for 2004 on)	HSE, SE, S, SE3	2002-03,9999	<u>15</u>
423	LR3/LR4	HSE, SE, LUX, Plus, V8, Limited Edition, HSE Silver Edition, Landmark Edition	2005-16,9999	<u>15</u>
424	LR2	i6, TD4, HSE, LUX, Plus	2007-16,9999	<u>15</u>
425	Discovery (For model years 1994-2004, see model 401)	SE, HSE, HSE Luxury, First Edition, Sport (HSE, HSE Luxury, SE)	2017-20, 9999	<u>15</u>
426	Velar	Base, B-Dynamic, First Edition, R-Dynamic (SE, HSE), S	2018-20, 9999	<u>15</u>
427	Defender	110, 90 First Edition, 110 First Edition	2020	<u>15</u>
498	Other (light truck)	Land Rover (1948-1990), Range Rover (before 1987)	1948-1990, 9999	14,15,19
499	Unknown (light truck)		1948-2020, 9999	14,15,19

NCSA MAKE: Lexus (59) (LEXS)

AUTOMOBILES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
031	ES-250/300/300h/330/ 350	Black Diamond Edition, Premium Plus, Ultra Luxury, Hybrid, F-Sport	1990-2020, 9999	04
032	LS-400 /430 /460 /460L/ 600h/ 600hL	LS-F Sport, Hybrid, Nightfall Edition, LS 500, LS 500h	1990-2020, 9999	04
033	SC-400/300	2-Door Coupe	1992-2000, 9999	02
034	GS-300/350/400/430/ 450h/460	Hybrid, F Sport, Turbo, F	1993-2020, 9999	04
035	IS-250/300/350/500/200t	SportCross, Sport, F, C, F Sport, Turbo	2001-20,9999	01,04,05,09
036	SC-430	Special Edition, Pebble Beach	2002-10,9999	<u>01</u>
037	HS 250h	Premium	2010-12,9999	<u>04</u>
038	CT 200h	F Sport	2011-17,9999	<u>05</u>
039	LFA	Standard, Special	2012-17,9999	01,02,09
040	RC	300, 350, 350h, F Sport, Turbo, F	2015-20,9999	01,02,09
042	LC Series	500, 500h	2018-20, 9999	<u>02</u>
043	UX	200, Hybrid, F-Sport, 250h, Luxury	2019-20, 9999	<u>05</u>
398	Other (automobile)		1990-2020, 9999	01,02,04,05,08,09
399	Unknown (automobile)		1990-2020, 9999	01,02,04,05, 08,09

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
401	RX300/350	2WD, 4WD	1999-03,9999	14
402	GX470	Sport, Premium	2003-09,9999	14
403	RX330/350/400h/450h	Hybrid, Thundercloud, Mark Levinson Package, F Sport, L (Base, Hybrid)	2004-20,9999	14

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
404	GX460	Sport, Premium, Luxury	2010-20, 9999	14
405	NX	200t, 300, 300h, F Sport, Hybrid, Turbo	2015-20,9999	14
421	LX450/470/570		1996-2020, 9999	<u>15</u>
499	Unknown (light truck)		1996-2020, 9999	14,15,19

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
999	Unknown (LEXUS)		1990-2020, 9999	<u>49</u>

NCSA MAKE: Lincoln (13) (LINC)

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
001	Continental (thru '81)/ Town Car	Continental, (thru '81), Signature/Designer Series, Town Car ('81 on, body 04 only), Cartier, Executive, L, Premium, Ballistic Protection Edition, Ultimate, Designer Series, Limited	1940-2011, 9999	01,02,04,08,09, 11,12
002	Mark	I, II, III, IV, V, VI, VII, VIII LSC, Signature/Designer Series	1956-98,9999	01,02,04,08,09
005	Continental ('82 on)	Signature/Designer Series, Luxury	1982-2002, 9999	02,04,08,09, 12
011	Versailles		1977-80,9999	04
012	LS	Convenience, Premium, Sport, Luxury, Ultimate	2000-06,9999	04

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
013	Zephyr/MKZ	FWD, AWD, Hybrid (Premier 400A, Select 500A, Reserve 600A), 2.0L, 3.7L, EcoBoost, Premiere (100A), Select (200A), Reserve (300A, I, II), Black Label (Vineyard, Chalet, Thoroughbred), 3.0L	2006-19,9999	04
014	MKX	FWD, AWD, Black Label (Modern Heritage, Indulgence, Thoroughbred, The Muse), Premiere, Select, Reserve	2007-18,9999	<u>06</u>
015	MKS	EcoBoost, 3.7L FWD/AWD	2008-16,9999	<u>04</u>
016	MKT	EcoBoost, TownCar, 3.5L, 3.7L, Premiere, Reserve	2010-19,9999	06,09, 11,12
017	Continental	Black Label Edition (Rhapsody, Chalet, Thoroughbred), Select, Premiere, Reserve, 80th Anniversary Coach Door Edition	2017-20, 9999	04
398	Other (automobile)	Cosmopolitan, Capri, Premiere	1940-2020, 9999	01-09, 10-12
399	Unknown (automobile)		1940-2020, 9999	01-09, 10-12

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
401	Aviator	Premium, Luxury, Ultimate, Kitty Hawk Edition	2003-06,9999	14
402	MKC	FWD, AWD, Black Label (Modern Heritage, Center Stage, Indulgence), Premiere, Select, Reserve	2015-19,9999	14
403	Corsair	Standard, Reserve	2020	<u>14</u>

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
421	Navigator	2WD, 4WD, Premium, Luxury, Ultimate, L, 5.4L, Premiere, Select (Base, L), Reserve (Base, L), Black Label (Base, L)	1997-2020, 9999	<u>15</u>
422	Nautilus	Black Label Edition, Reserve, Select	2019-20,9999	<u>15</u>
423	Aviator	Reserve, Black Label Edition	2020	<u>15</u>
481	Blackwood		2002	<u>34</u>
482	Mark LT	2WD, 4WD	2006-08,9999	<u>34</u>
498	Other (light truck)		1997-2020, 9999	14,15,19, 34
499	Unknown (light truck)		1997-2020, 9999	14,15,19, 49

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
999	Unknown (LINCOLN)		1990-2020, 9999	49

NCSA MAKE: Mazda (41) (MAZD)

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
031	RX2		1970-74,9999	02,04,06,08,09
032	RX3		1970-78,9999	02,04,06,08,09
033	RX4		1974-78,9999	02,04,06,08,09
034	RX7	S, GS, GSL, SE	1979-96,9999	01-03,09
035	323/GLC/Protégé/ Protégé 5	DX, Protégé (1990-on), DX, LX, ES, Mazdaspeed	1977-2003, 9999	03-07,09
036	Cosmo		1976-78,9999	<u>02</u>
037	626	GT, GS, GSL, SE, DX, LX, ES	1979-2002, 9999	02,04,05,08,09
038	808		1972-77,9999	02,04,06,08,09

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
039	Mizer		1976	02,04,06,08,09
040	R-100		1950-72,9999	02
041	616/618		1968-72,9999	02,04,08,09
042	1800		1968-72,9999	04,06,09
043	929		1988-95,9999	04
044	MX-6	Turbo, LS, M-Edition	1988-97,9999	<u>02</u>
045	Miata/MX-5	Miata (LS), SE, SV, Mazdaspeed, Sport, Touring, Grand Touring, Club, Special, Special Edition, PRHT, RF (Club, Grand Touring), 30th Anniversary	1990-97; 1999- 2019, 9999	01
046	MX-3	GS	1992-95,9999	<u>02</u>
047	Millenia	L, S, P, Millennium Edition	1995-02,9999	04
048	MP3	Limited Edition	2001	04
049	RX-8	Sport AT, Shinka, Touring, Grand Touring, R3, Plus	2003-14,9999	04
050	Mazda6	Grand Touring, Sport, Mazdaspeed6, Grand Sport, SV, Plus, Touring, Skyactiv-D, Touring, Grand Touring Reserve, Signature	2003-20,9999	04-06,09
051	Mazda3	i (Sport, Touring, Grand Touring, SV), s (Touring, Grand Touring), SP23, Value, Mazdaspeed3, Touring 2.5, Select, Preferred, Premium	2004-20, 9999	04-06,09
052	Mazda5	Sport, Touring, Grand Touring	2006-10, 2012- 15, 9999	<u>06</u>
053	CX-7	i, s, Sport, Touring, Grand Touring, SV	2007-12, 9999	<u>05</u>
054	CX-9 (2007-12 only. For 2013 on see model 421.)	Sport, Touring, Grand Touring	2007-12, 9999	<u>06</u>
055	Mazda2	Sport, Touring	2011-15, 9999	<u>05</u>
056	CX-3	Sport, Touring, Grand Touring	2016-19, 9999	<u>05</u>
398	Other (automobile)	1200, 616	1950-2020, 9999	02,03,09

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
399	Unknown (automobile)		1950-2020, 9999	01-09

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
401	Navajo		1991-94,9999	14
402	Tribute	DX, DX-V6, LX-V6, ES-V6, ES, LX, i, s, Hybrid, Sport, Grand Touring, Touring	2001-12,9999	14
403	CX-5	Sport, Touring, Grand Touring, Diesel, Reserve, Signature, Skyactiv-D	2013-19,9999	14
421	CX-9 (2013 on. See model 054 for 2007-12 model years.)	Sport, Touring, Grand Touring, Signature	2013-19,9999	<u>15</u>
441	MPV	LX, ES, DX, All Sport, LX-SV	1989-98; 2000- 06, 9999	<u>20</u>
471	Pickup/ B-Series Pickup	B2000, B2200, B2300, SE-5, LX, SE (2WD, 4WD), SX, DS, Cab Plus, B2500/B2600/ B3000/B4000, Dual Sport Cab	1972-2009, 9999	34,39, 40, 42, 48
498	Other (light truck)		1965-2019, 9999	14,15,19, 20, 34,39, 40, 42, 48
499	Unknown (light truck)		1965-2019, 9999	14,15,19, 20, 34,39,40, 42, 48,49

UNKNOWN

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
999	Unknown (MAZDA)		1950-2019, 9999	49

NCSA MAKE: Mercedes Benz (42) (MERZ)

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
031	200/220/230/240/ 250/260/280/300/ 320/420	Sedan and 5-passenger "C" only; SE, CD, D, SD, TD, TE, CE, E; DOES NOT include 280 SE (1975 on) or 300 SD-see code 037; C-Class up to 1993, E-Class up to 1997	1950-97,9999	01,02,04,06, 08,09, 12
032	230/280 SL	2-seater only	1964-71,9999	01,02,09
033	300/350/380/450/500/ 560 SL	2-seater only; 300/500 SL (1990 on)	1972-94,9999	01,02,09
034	350/380/420/450/560 SLC		1973-94,9999	<u>02</u>
035	280/300 SEL		1967-72,9999	02,04,08,09
036	300/380/420/450/500/ 560/SEL & 500/560, 600 SEC & 300/350 SDL		1973-94,9999	02,04,06,08,09
037	300/380/450 SE	280 S, 280 SE (1975 on), 300 SD Sedan/350 SD	1968-94,9999	01,02,04,08,09
038	600, 6.9 Sedan	Pullman	1978-87,9999	<u>04, 12</u>
039	190	D, E, 2.3, 2.5	1984-93,9999	04,06,09
040	300	CE Cabriolet	1993-94,9999	<u>01</u>
041	400/500E		1992-94,9999	01,02,04,06,08,09
042	C Class (94 on)	C220/C230 (Kompressor)/ C240/250/280/300/320/350/ 400 (W)/C32/ 36/43/55/63/63S AMG, Sport, Luxury, 450 (AMG), 350e Plug-In Hybrid	1994-2020, 9999	01,02,04,06,08,09
043	S Class (95 on)	S320/350/400(V)/420/430/ 450/500/550/560 (V/e/ Maybach)/600(V), 55/ 63/65 (AMG), Hybrid, 4-M, S600 (Maybach)	1995-2020, 9999	01,02,04,08,09
044	SL Class (95 on)	SL320/400/450/500/550(R)/ 600(R), Silver Arrow Edition, SL55/63/65 AMG	1995-2020, 9999	01,02,09

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
045	SLK	SLK230/250/280/300/320/ 350 (Sport), Kompressor, SLK 32/55 (AMG), Special Edition	1998-2016, 9999	01
046	CL Class	CL500/550/600, CL55/63/ 65 AMG	1998-2014, 9999	<u>02</u>
047	CLK	CLK 320/350/430/500/550, Cabriolet, CLK 55/63/65 AMG	1998-2009, 9999	01,02,09
048	E Class ('97 on)	250/300/TD, 320/350 (4-M, A, C, S, W)/400/420/430/450/ 500/550 (4-M, A, C, W), 43/53/55/63/63S AMG, 320CDI, Hybrid	1996-2020, 9999	01,02,04,06,08,09
049	SLR	McLaren, 722 Edition	2005-10,9999	01,02,09
050	R Class	R320/350/500, R63 AMG	2006-12,9999	<u>06</u>
051	CLS Class	CLS400/450/500/550, CLS 53/55/63/ 63S AMG	2006-20,9999	04
052	SLS Class	AMG (C/GT) Final Edition	2011-15,9999	01,02,09
053	B Class	250e	2014-17,9999	<u>05</u>
054	CLA Class	250, 45 (AMG)	2014-20,9999	04
055	GLA Class	250, 45 (AMG)	2015-20,9999	<u>05</u>
056	AMG GT S	450, GT C, GT R	2016-20,9999	01, 02, 04, 09
057	SLC Series	300, 43 (AMG)	2017-19,9999	01
058	A-Class	220, 35	2019-20,9999	04
398	Other (automobile)		1946-2020, 9999	01-09, 10-12
399	Unknown (automobile)		1946-2020, 9999	01-09, 10-12

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
401	M/ML Class	ML250/320/350/400/430/ 450/500/550, 55/63 AMG Special Edition, Hybrid, 4-M	1998-2015, 9999	14
402	G Class	G500/550, G55/63/65 (AMG)	2002-19,9999	14
403	GLK Class	220/250/280/320/350	2010-15,9999	14
404	GLE Class (For 2016-2018 only. For model years 2019 on, see 42-423.)	300d, 350/550e, 43/63/63S (AMG), Coupe (450, AMG - 43/63S)	2016-2018, 9999	14
405	GLC Class	300, 43/63/63S (AMG), Coupe (300, AMG 43), 350e	2016-2020, 9999	<u>14</u>
406	GLB Class	250	2020	14
421	GL Class	GL320/350/450/550, GL63 (AMG)	2007-16,9999	<u>15</u>
422	GLS Class	450, 550, 63 (AMG)	2017-20, 9999	<u>15</u>
423	GLE Class (For 2019 on. For model years 2016-2018, see 42-404.)	400, 43/63/63S AMG	2019-20, 9999	<u>15</u>
461	Sprinter	(for 2004-2010 see "Freightliner" and "Dodge")	2002-03, 2010- 19, 9999	21,22,28,29
462	Metris	Cargo, Passenger	2016-19, 9999	<u>20</u>
470	Van derivative	Kurbstar	1982-2019, 9999	28,29
498	Other (light truck)		1946-2020, 9999	14-16,19, 21,22, 40,41, 42, 45,48
499	Unknown (light truck)		1946-2020, 9999	14-16,19, 21,22, 28,29, 40,41, 42, 45,48,49

MOTOR HOME

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
850	Motor Home	Sprinter based	2002-03, 2010- 19, 9999	65,73

MEDIUM/HEAVY TRUCKS

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
870	Medium/Heavy Van- Based Vehicle	Sprinter	2002-03, 2010- 19, 9999	<u>55</u> , <u>61-64</u>
881	Medium/Heavy - CBE		1965-91,9999	60-64,78
882	Medium/Heavy - COE low entry		1965-91,9999	60-64,78
883	Medium/Heavy - COE high entry		1965-91,9999	60-64,78
884	Medium/Heavy - Unknown engine location		1965-91,9999	60-64,78
890	Medium/Heavy - COE entry position unknown		1965-91,9999	60-64,78
898	Other (medium/heavy truck)		1965-91,9999	60-64,78

BUSES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
981	Bus**: Conventional (Engine out front)		1965-91,9999	50-52,58,59
988	Other (bus)		1965-91,9999	50-52,58,59
989	Unknown (bus)		1965-91,9999	92-93,97

^{**}Use code "989" (bus) if the frontal plane or the engine location is unknown.

OTHER AND UNKNOWN VEHICLE

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
998	Other (vehicle)		1965-2020, 9999	<u>49, 79, 99</u>
999	Unknown (MERCEDES BENZ)		1950-2020, 9999	<u>49, 79, 99</u>

NCSA MAKE: Mercury (14) (MERC)

(<u>Merkur: See "56"</u>)

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
002	Cyclone	GT, CJ, Spoiler	1964-70,9999	01,02,09
003	Capri-domestic (for 1967 see 008)	RS, Turbo, GS, Black Magic, 5.0	1979-86; 1989- 94, 9999	01,03,09
004	Cougar (For 1967-1997. See 038 for 1999-2002) /XR7 (1967-1997)	Villager, Brougham, RS, LS, GS, Eliminator, XR-7	1967-97,9999	01,02,04,06,08,09
006	Marquis/Monterey (car version; for van version 2004 on see code 444) /Grand Marquis	Marauder (prior to 2003, 2003 on see code 039), Montclair, X-100, Parklane, S-55, Custom, Brougham Grand Marquis (GS, LS), Medalist, Turnpike, Colony Park, GS, LS, LSE, Limited Edition, Palm Beach Edition	1952-2011, 9999	01,02,04,06,08,09
008	Comet	Caliente, Capri (1967), GT, Voyager, 202, 404, Villager Wagon	1960-79,9999	01,02,04,06,08,09
009	Bobcat	Runabout, Villager Wagon	1975-80,9999	03,06,09
010	Montego (prior to 1976; for 2005 on see code 020)	GT, MX, Villager, Brougham, Comet (1968-1970)	1968-76,9999	01,02,04,06,08,09
011	Monarch	Ghia	1975-80,9999	02,04,08,09
012	Zephyr	GS, Z-7	1978-83,9999	02,04,06,08,09
013	Lynx/LN7	L, LS, GS, RS, XR-3	1981-87,9999	03,05-07,09
015	Topaz	L, LS, GS, 4x4, XR5, LTS, Sport	1984-94,9999	02,04,08,09
017	Sable	LS, GS (Premium), GS Plus, Platinum Edition, Premier, Base	1986-2005, 2008-09,9999	04,06,09
020	Montego (2005 on)	Luxury, Premier	2005-07,9999	04
021	Milan	I-4, V6 (Base/Premier), Hybrid	2006-11,9999	04
031	Capri-foreign	Capri II, 2+2	1970-77,9999	03
033	Pantera-foreign	deTomaso	1972-74,9999	<u>01-09</u> , <u>10</u>
036	Tracer	L, GL, LTS, GS, LS	1988-99,9999	03-06,09

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
037	Mystique	GS, LS	1995-2000, 9999	04
038	Cougar (1999-2002)	V-6, I-4, S, Sport, CR, XR	1999-2002, 9999	02,03,09
039	Marauder	M75, 300A	2003-04,9999	04
398	Other (automobile)		1962-2011, 9999	01-09, 10
399	Unknown (automobile)		1952-2011, 9999	<u>01-09</u> , <u>10</u>

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
401	Mountaineer	Convenience, Luxury, Premier (4.0/4.6L)	1996-2010, 9999	14
402	Mariner	Convenience, Luxury, Premier, Hybrid	2005-11,9999	14
443	Villager	LS, GS, Nautica, Estate, Sport, Sport Plus, Popular	1993-2002, 9999	<u>20</u>
444	Monterey (van version; for car version prior to 2004 see code 006)	Convenience, Luxury, Premier	2004-07,9999	20
498	Other (light truck)		1993-2011, 9999	<u>14, 20</u>
499	Unknown (light truck)		1993-2011, 9999	49

UNKNOWN

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
999	Unknown (MERCURY)		1950-2011, 9999	<u>49</u>

NCSA MAKE: Merkur (56) (MERK)

AUTOMOBILES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
031	XR4Ti	Turbo	1985-89,9999	03
032	Scorpio	Turbo	1988-90,9999	<u>05</u>
398	Other (automobile)		1985-90,9999	03-05,07,09
399	Unknown (automobile)		1985-90,9999	03-05,07,09

NCSA MAKE: MG (43) (MG)

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
031	Midget	GAN I/II/III/4/5, MK I, MK II, MKIII	1962-80,9999	01
032	MGB	MK I/II/IV, 600 Limited, V-8	1955-80,9999	01,02,09
033	MGB	GT, MK III	1967-74,9999	02,03,09
034	MGA	1500, 1600, YT, TC, TD/II, MK I/II, A	1945-62,9999	01,02,09
035	TA/TC/TD/TF	Y-Type, 430, TDC	1945-62,9999	01,02,09
036	MGC	GT	1968-69,9999	01,02,09
037	Magnette/Sports Sedans	ZB, ZA/YA/YB, MK III, MK IV, 1100, 1300	1945-66,9999	02,04,08,09
398	Other (automobile)		1945-80,9999	01-04,08,09
399	Unknown (automobile)		1945-80,9999	01-04,08,09

NCSA MAKE: Mitsubishi (52) (MITS)

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
031	Starion	2+2, LE, Turbo, ESI	1982-89,9999	<u>03</u>
032	Tredia	L, LS, Turbo	1982-88,9999	04
033	Cordia	L, Turbo	1982-88,9999	03
034	Galant	ECS, Sigma (through '88), ES, LS, DE, GTS-V6, I-4, Special Edition, Ralliart, Sport Edition, SE, FE	1985-2012, 9999	04
035	Mirage (For 1985-2002. For 2014 on use model 048.)	L, Turbo, GS, LS, DS, DE, ES	1985-2002, 9999	02-04, 08, 09
036	Precis		1987-94,9999	03,05,07,09
037	Eclipse	GS, DOHL, Turbo, GS-T, GSX, Spyder, RS, GT, GTS, Remix Edition, SE, Sport, Special Edition	1990-2012, 9999	01-03, 09
038	Sigma	(Prior '89 see 034)	1989-90,9999	04
039	3000 GT	SL, VR-4, Spyder	1991-99,9999	01-03, 09
040	Diamante	LS, ES, LE, VR-X	1992-2004, 9999	04, 06, 09
041	iMiEV (For 2018 on, code as vehicle model 398)	ES, SE	2012-17,9999	<u>05</u>
045	Expo Wagon	LRV, Sport	1992-95,9999	<u>06</u>
046	Lancer/Lancer Sportback/Lancer Evolution	ES (2.0, 2.4), LS, O-Z, Rally, Evolution VII/VIII/IX/X, Sport, Ralliart LS, MR Edition, DE, GSR, GTS, Touring, SE, GT, SEL, FE	2002-17,9999	04-06, 09
047	Outlander (For 2003-2018 only. For model years 2019 on, see 52-404.)	ES, LS, SE, XLS, Limited, GT, Sport, SE-S, GT-S, SEL, GT 3.0 S-AWC, Plug-In Hybrid, PHEV	2003-18,9999	<u>05</u> , <u>06</u> , <u>09</u>
048	Mirage (2014 on. For 1985-2002 use 52-035.)	DE, ES, LE, RF, SE, GT, G4 (ES, RF, SE)	2014-19,9999	04, 05, 09
398	Other (automobile)	500, 1000, Debonair, Galant (1969), iMEV (2018 on)	1960-2019, 9999	01-09

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
399	Unknown (automobile)		1960-2019, 9999	01-09

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
401	Montero/Montero Sport	Sport, LS, SR, XLS, ES, LTD, 20th Anniversary Edition, SE	1983-2006, 9999	14
402	Endeavor	LS, SE, XLS, Limited	2004-12,9999	14
403	Eclipse Cross	ES, LE, SE, SEL	2018-20,9999	14
404	Outlander (For 2019 on. For model years 2003- 2018, see 52-047.)	ES, LE, SE, SEL, GT, Sport (ES, LE, SP, SE, GT), PHEV	2019-20,9999	14
441	Mini-Van	LS	1987-90,9999	<u>20</u>
471	Pickup	Mighty Max, SPX, 4x4	1983-96,9999	<u>34,39, 40, 42, 48</u>
472	Raider	LS, Durocross, XLS	2006-10,9999	<u>34</u>
498	Other (light truck)		1983-2020, 9999	14, 20, 34,39, 40, 42, 48
499	Unknown (light truck)		1983-2020, 9999	14, 20, 34,39, 40, 42, 48,49

MEDIUM/HEAVY TRUCKS

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
882	Medium/Heavy - COE low entry	FUSO FE/FG/FH/FK/FM	1983-2020, 9999	60-64,66,71,72,78
898	Other (medium/heavy truck)		1983-2020, 9999	60-64,66,71,72,78

BUSES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
981	Bus**: Conventional (Engine out front)		1981-2004, 9999	50-52,58,59
982	Bus: Front engine, Flat Front		1981-2004, 9999	50-52,58,59
983	Bus: Rear engine, Flat front		1981-2004, 9999	50-52,58,59
988	Other (bus)		1981-2004, 9999	50-52,58,59
989	Unknown (bus)		1981-2004, 9999	50-52,58,59

^{**}Use code "989" (bus) if the frontal plane or the engine location is unknown

UNKNOWN

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
999	Unknown (MITSUBISHI)		1983-2020, 9999	49, 79, 99

NCSA MAKE: Nissan/Datsun (35) (NISS) - (DATS)

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
031	F-10		1977-78,9999	03,05-07,09
032	200SX/240SX	SE, SE-R, LE	1977-98,9999	01-03,09
033	210/1200/B210	110 series, Honeybee	1971-82,9999	02-04,06,08,09
034	Z-car, ZX	240/260/280Z & ZX, 300 ZX, 2+2, Turbo	1970-96,9999	01-03,09
035	310	SPL	1979-82,9999	02,03,05,07,09
036	510	PL, WPL	1968-73; 1978-81,9999	02-09
037	610	PL, HL	1973-76,9999	02-04,06,08,09
038	710	PL	1974-77,9999	02-04,06,08,09

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
039	810/Maxima	SE (Titanium Special), GXE, GLE, 2.5 (S/SR/SL/SV), 3.5SE/SL/SEL /S/SV/SR, Platinum Edition, Midnight Edition, Platinum Reserve	1977-2020, 9999	04,06,09
040	Roadster	SPL311, SRL311, 1500, 1600, 2000, convertible, Fairlady	1950-70,9999	01
041	311/411	1000, Bluebird, PL311/ PL312/PL410/PL411/RL411	1959-67,9999	04,06,09
042	Stanza	XE	1982-93,9999	03-07,09
043	Sentra	E, XE, GXE, S, SE, SE-R (Spec V), GLE, CA, 2.5LE, 1.8, 1.8S, 2.0/S/SL/SR, Special Edition, Platinum Edition, Spec-V, FE, SV, FE+S, Nismo, SR Turbo	1982-2019, 9999	02,04,06,08,09
044	Pulsar	NX, EXA (1986 on)	1983-90,9999	02,03,05,07,09
045	Micra		1987-94,9999	01-05,07-09
046	NX 1600/2000	T-bar coupe	1991-94,9999	02,03,09
047	Altima	XE, GXE, SE, GLE, 2.5 S/SL/SR/SV, 3.5 S/SE/SL/SR/ SV, SE-R, Hybrid, SR (Base, Midnight), Platinum, Special Edition, Edition One, VC- Turbo	1993-2020, 9999	02,04,08,09
048	350Z/370Z	Enthusiast, Performance, Touring, Track, Base, 35th Anniversary, Grand Touring, Nismo, 40th Anniversary, Sport, Sport Tech, Nismo Tech, Touring Sport, Heritage Edition (Magnetic Black, Pearl White, Deep Blue Pearl, and Chicane Yellow), 50th Anniversary Edition	2003-20,9999	01,02,03,09
049	Murano (For 2003-2018 only. For model years 2019 on, see 35-422.)	SE, SL, S, LE, SV, CrossCabriolet, Platinum, S Plus	2003-18,9999	01,06,09

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
050	Versa	1.8S/SL, 1.6 S/SV/SL, Plus, Note (S, S Plus, SV, SR, SL), S Plus, SR, SV Special Edition	2007-20,9999	04,05,09
051	Rogue (For 2008-2018 only. For model years 2019 on, see 35-404.)	S, SL, SV, Krom/Special Edition, Select (S), Sport	2008-18,9999	<u>06</u>
052	Cube	1.8 S/SL, Krom Edition, Indigo Edition	2009-14,9999	<u>06</u>
053	GT-R	Base, Premium, Black Edition, Track Edition, Nismo, 45th Anniversary, Pure, 50th Anniversary	2009-20,9999	02
055	Leaf	S, SL, SV, Plus	2011-19,9999	<u>05</u>
056	Kicks	S, SV, SR	2018-19,9999	<u>05</u>
398	Other (automobile)	110 sedan, K110	1955-2020, 9999	01-09, 10
399	Unknown (automobile)		1955-2020, 9999	01-09, 10

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
401	Pathfinder	MPV, 4X4, XE, LE, SE, S, Off-Road, FE+, SV, Silver Edition, Hybrid, SL (Tech, Premium), Platinum, SL, Rock Creek Edition	1986-2020, 9999	14
402	Xterra	XE (I-4), SE, (S/C), SE-R, Spec V, X, S, Off-Road, Pro-4X	2000-15,9999	14
403	Juke	S, SL, SV, Nismo, Nismo RS	2011-18,9999	14
404	Rogue (For 2019 on. For model years 2008-2018, see 35-051.)	S, SV, SL, Hybrid, Sport (S, SV, SL)	2019-20,9999	14
421	Pathfinder Armada	LE, SE, SE Off-Road, Titanium, Platinum (Base/Reserve), SV, SL	2004-20,9999	<u>15</u>

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
422	Murano (For 2019 on. For model years 2003- 2018, see 35-056.)	S, SV, SL, Platinum	2019-20,9999	<u>15</u>
441	Van	XE, GXE	1987-91,9999	<u>20</u>
442	Axxess		1989-90,9999	<u>20</u>
443	Quest	XE, GXE, SE, GLE, 3.5 S/SE/SL, Special Edition, SV, LE, Platinum	1993-2002; 2004-09, 2011-17, 9999	<u>20</u>
444	Altra EV*	(electric vehicle*)	1998-2005, 9999	<u>20</u>
446	NV200/eNV200	S, SV, Taxi, Compact Cargo, Passenger (S, SL, SV), HD Cargo	2013-20,9999	<u>20</u>
461	NV	1500 (S, SV), 2500 HD (S, SV), 3500 (S, SV, SL), Passenger (S, SV, SL)	2011-20,9999	21,22,28,29
471	Nissan/Datsun Pickup (1955-1997)	120,620 series, King Cab, Hardbody, XE, SE	1955-97,9999	34,39, 40, 42
472	Frontier (1998 on)	XE, SE, S/C (Regular Cab, King Cab, Desert Runner, Crew Cab), Open-Sky, SVE, Nismo, Pro-4X, LE, SV, SL, S, Diesel Runner, Midnight Edition	1998-2019, 9999	34,39, 40, 42
473	Titan (from 2004-06; see 481 for 2007 on)	E, LE, SE, XE	2004-06,9999	34
481	Titan (from 2007 on; see 473 for 2004-06)	LE, SE, XE, PRO-4X, S, SV, SL, XD (S, SV, SL, Platinum Reserve), Platinum, Platinum Reserve, Midnight Edition	2007-19,9999	34
498	Other (light truck)	Patrol (1960)	1955-2020, 9999	14,15, 19, 20,21,22, 34,39
499	Unknown (light truck)		1955-2020, 9999	14,15,19, 20,29, 34,39, 40, 42, 48,49

MEDIUM/HEAVY TRUCKS

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
870	Medium/Heavy Van-Based Vehicle	NV	2011-20,9999	<u>55</u> , <u>61-64</u>
883	Medium/Heavy - COE high entry		1986-2019, 9999	60-64,66, 71,72,78
898	Other (medium/heavy truck)		1986-2019, 9999	60-64,66, 71,72,78

UNKNOWN

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
999	Unknown (NISSAN/DATSUN)		1950-2020, 9999	<u>49, 79, 99</u>

NCSA MAKE: Oldsmobile (21) (OLDS)

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
001	Cutlass (RWD-only)	Supreme, S, LS, Salon, Brougham Vista Cruiser, F85 (thru 1972), Rallye 350, Hurst Olds, 442, Calais (thru 1985), Classic (88)	1960-88,9999	01,02,04,06, 08,09
002	Delta 88/LSS	Royale, Custom, Delta, Jetstar 88, Delmont 88, Starfire (Thru 1966), Custom Cruiser, Jetfire, Eighty-Eight (LS, 50th Anniv. Edition)	1949-99,9999	01-04,06,08,09
003	Ninety-Eight/Regency	Luxury, Futuramic, Brougham	1949-99,9999	01,02,04,08,09
005	Toronado	XS, XSR, Trofeo, Brougham Custom	1966-92,9999	02
006	Commercial Series	Ambulance/Hearse	1940-2003, 9999	<u>09</u> , <u>10-12</u>
012	Starfire	SX, GT, ST	1975-80,9999	01-03,09
015	Omega	X-body type, Brougham	1973-85,9999	02-04,08,09

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
016	Firenza	S, LS, SX, Cruiser, GT	1982-88,9999	03-06,07,09
017	Ciera	Cutlass Ciera (Base, S, SL, International), Cutlass Cruiser (Base, S, SL)	1982-96,9999	01,02,04,06, 08,09
018	Calais	GT, ES, 500	1985-91,9999	02,04,08,09
020	Cutlass (FWD)	Supreme (Excludes Ciera), GLS, GL	1988-99,9999	01,02,04,08,09
021	Achieva/Alero	SC, SL, GX, GL (1,2,4), GLS	1992-2004, 9999	02,04,08,09
022	Aurora	3.5L, 4.0L, Collector's Series	1995-99; 2001-03,9999	04
023	Intrigue	GL, GX, GLS	1997-2002, 9999	02,04,08,09
398	Other (automobile)	66/68/70/90, Dynamic 70	1930-2004, 9999	01-09, 10-12
399	Unknown (automobile)		1930-2004, 9999	01-09, 10-12

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
401	Bravada	2WD, 4WD, Collector's Series	1991-94; 1996-2004, 9999	14
441	Silhouette	GL, GLS, Series I, Series II, GS Premier Edition, Collector's Series	1990-2004, 9999	<u>20</u>
499	Unknown (light truck)		1932-2004, 9999	14, 20, 49

UNKNOWN

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
999	Unknown (OLDSMOBILE)		1932-2004, 9999	49

NCSA MAKE: Peugeot (44) (PEUG)

AUTOMOBILES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
031	304		1971-72,9999	04-06,09
032	403	Station Wagon	1955-67,9999	01,04,06,09
033	404	Station Wagon	1961-70,9999	01,04,06,09
034	504/505	STI, STX, Turbo, S, STI, STX, GL, GLS Liberte, Station Wagon, DSL, DL, GLX	1970-91,9999	04-06,09
035	604	SL, D	1977-84,9999	04
036	405	Mi-16, DL, S	1989-91,9999	04,06,09
398	Other (automobile)	202, 203	1945-91,9999	01-09
399	Unknown (automobile)		1945-91,9999	01-09

MOTORCYCLES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
701	0-50 cc		1965-83,9999	81
702	51-124cc		1965-83,9999	81
709	Unknown cc		1965-83,9999	<u>81</u>

UNKNOWN

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
999	Unknown (PEUGEOT)		1960-91,9999	<u>99</u>

NCSA MAKE: Plymouth (09) (PLYM)

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
001	Valiant/Scamp/Duster (thru 1976)	100, 200, Brougham, Signet, Custom, Special, 340, 360, Twister	1960-76,9999	01,02,04,06, 08,09
002	Satellite/Belvedere	Belvedere I/II, GTX, Roadrunner (through 1974), Brougham, Sebring, Sebring Plus, Superbird	1951-74,9999	01,02,04,06, 08,09, 10-12
003	Fury (Fury Gran thru '78)	I, II, III, Roadrunner (1975), Suburban, Salon, VIP, Sport	1957-78,9999	01,02,04,06, 08,09
004	Gran Fury ('80 on)	Sedan, Coupe, Salon	1980-89,9999	02,04,06,08,09
005	Barracuda	Formula, S, 340, Gran Coupe, AAR, Cuda	1964-74,9999	01,02,09
006	Volare'	Custom, Premier, Roadrunner (1976 on), Police	1976-80,9999	02,04,06,08,09
007	Caravelle	Turbo, SE	1985-88,9999	04
008	Horizon/Turismo	TC-3, Turismo 2.2, Miser, America, Custom, SE, Duster (1985 on), Expo	1978-90,9999	03,05,07,09
011	Reliant (K)	SE, LE, Reliant America, Limited	1981-89,9999	02,04,06,08,09
013	Scamp- (car-based p/u)	GT, 2.2	1982-84,9999	<u>10</u>
017	Sundance	RS, Turbo, Sundance Duster, America	1987-94,9999	03,05,07,09
019	Acclaim	LX, LE	1989-95,9999	04
020	Neon (2002 and on, see Dodge)	Sport, Competition, Highline	1995-2001, 9999	02,04,08,09
031	Cricket		1971-72,9999	04,06,09
032	Arrow	GS, GT, Fire Arrow	1976-80,9999	03
033	Sapporo	all imported	1978-83,9999	02,03,09
034	Champ/Colt import (includes 2WD Vista)	Turbo, Custom, GL, SE, DL, E Station wagon (1984 on)	1979-94,9999	02-09
035	Conquest	TSI	1984-87,9999	03
037	Laser	RS, Turbo	1989-94,9999	02,03,09

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
038	Breeze		1996-2000, 9999	04
039	Prowler (1997, 1999- 2001 only. <u>For 2002 on,</u> <u>see Chrysler</u>)	Roadster, Black Tie Edition	1997; 1999- 2001, 9999	<u>01</u>
398	Other (automobile)	Regant, Fleet, Savoy, Concord, Cambridge	1930-95,9999	01-09, 10-12
399	Unknown (automobile)		1965-2001, 9999	01-09, 10-12

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
421	Trailduster		1974-93,9999	<u>15</u>
441	Vista Van	4X4 (only)	1987-94,9999	<u>20</u>
442	Voyager (minivan) (2000 and on, see Chrysler)	SE, LX, Grand Voyager, SE Expresso, EPIC-electric*	1984-2001, 9999	<u>20</u>
461	Van-fullsize (B-series)	Voyager (thru 1983), Sport, Premier	1965-95,9999	<u>21</u>
471	Arrow pickup (foreign)		1975-91,9999	34,39
498	Other (light truck)		1965-2001, 9999	15, 20,21,28,29, 34,39, 42, 45,48
499	Unknown (light truck)		1974-2001, 9999	15, 20,21,29, 34,39, 48,49

OTHER AND UNKNOWN VEHICLE

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
998	Other (vehicle)		1965-2001, 9999	92,93,97
999	Unknown (PLYMOUTH)		1957-2001, 9999	<u>49</u>

NCSA MAKE: Pontiac (22) (PONT)

001 Lemans (See model 031 for 1988 on)/Tempest (thru 1970) Safari, T-37, Luxury, Grand Sport, GTO (thru 1973), GT-37, Sprint, Judge, Grand AM (73-75), Grand Lemans 1961-81,9999 002 Bonneville/Catalina/Parisienne Brougham, Grand Safari, Safari, Grandville, 2+2, Executive, Starchief, SE, SSE, SSEi, G, SLE, GXP 1954-2005, 9999 005 Fiero 2M4, 2M6, GT, SE 1984-89,9999 008 Ventura/GTO II, SJ, Sprint, GTO (74-77), Custom, Base, LS2 1971-77; 2004-06,9999	01,02,04,06, 08,09 01,02,04,06, 08,09 02 02-04,08,09 01-03,09
Parisienne Safari, Grandville, 2+2, Executive, Starchief, SE, SSE, SSEi, G, SLE, GXP 9999 005 Fiero 2M4, 2M6, GT, SE 1984-89,9999 008 Ventura/GTO II, SJ, Sprint, GTO (74-77), 1971-77;	08,09 02 02-04,08,09
008 Ventura/GTO II, SJ, Sprint, GTO (74-77), 1971-77;	02-04,08,09
	01-03,09
Firebird/Trans AM Esprit, Formula, GTA, Redbird, Yellowbird, Skybird, SE, Bandit, TransAm 1967-2002, 9999	
010 Grand Prix (RWD) J, LJ, SJ, Brougham, 2+2, GT, STE, SE 1962-87,9999	01,02,09
011 Astre Safari, SJ, Custom 1975-77,9999	02,03,06,09
012 Sunbird (thru 1980;1985 Safari, Sport, Formula 1976-80,9999 on see model 016)	01-09
013 T-1000/1000 2T 1981-87,9999	03,05,07,09
015 Phoenix LJ, SJ 1977-84,9999	02-05,07-09
016 Sunbird (1985-1994 only) LE, SE, GT, 2000 1982-2005, /J-2000/Sunfire (1995 on) Convertible, 2J, S, SE, GT, 1SA, 1SB, 1SC, 1SV	01-09
017 6000 STE, SE, LE 1982-91,9999	02,04,06,08,09
018 Grand AM SE, LE, GT, GT1, SE1, SE2, 1973-2005, SC/T Package 9999	02,04,08,09
019 G5 Base, GT 2007-10,9999	02
O20 Grand Prix (FWD) LE, SE, STE, GT, McLaren Turbo, GTP, Limited Edition, 40th Anniversary Edition, GXP	01,02,04,08,09
022 G6 Base, GT, GTP, Value 2005-10,9999 Leader, GXP	01,02,04,08,09
023 Solstice GXP 2006-10,9999	01,02, 09

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
024	G8	GT, GXP	2008-10,9999	04
025	G3		2009-10,9999	04,05,09
031	Lemans (1988 on)	LE, SE, Tempest Canadian	1988-93,9999	01-09
032	Vibe	GT, AWD, HB	2003-10,9999	<u>06</u>
398	Other (automobile)	Torpedo, Streamliner, Chieftain Star Chief, Super Chief	1946-2010, 9999	01-09, 10
399	Unknown (automobile)		1926-2010, 9999	01-09, 10

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
401	Aztek	GT, SE, 1SA, 1SB, 1SC, Rally Edition	2001-05,9999	14
403	Torrent	GXP	2006-09,9999	14
441	Trans Sport/ Montana/SV6	SE, Montana, Extended, Versatrak, 1SV, 1SA, 1SX, 1SY, 1SE, Chrome Sport,	1990-2009, 9999	20
499	Unknown (light truck)		1990-2009, 9999	<u>14, 20, 49</u>

UNKNOWN

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
999	Unknown (PONTIAC)		1951-2010, 9999	<u>49</u>

NCSA MAKE: Porsche (45) (PORS)

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
031	911/996	L, S, E, T, SC, Carrera (2, 4, Cabriolet, S, Targa, T), GT, Slopenose, 4S, Targa, Speedster, Turbo (Base, S, S Exclusive, Cabriolet), B series, S-Coupe, Cabriolet (S), GT2, GT3 (RS), GT, GTS, 4 GTS (Carrera/Targa)	1965-2020, 9999	01,02,09
032	912	1600, E, T	1966-69; 1976,9999	01,02,09
033	914	1.7, 1.8, 2.0, S, 914/4/6	1970-76,9999	<u>01</u>
034	924	Turbo, S	1977-88,9999	01-03,09
035	928	S, S4, GT, GTS	1978-95,9999	02,03,09
036	930	Turbo	1979	<u>02</u>
037	944	Turbo, S, S2	1983-91,9999	01-03,09
038	959	Not Imported to US	1989-94,9999	01-03,09
039	968		1992-95,9999	01,02,09
040	986/Boxster	Boxster, Boxster Cabriolet, S Roadster, S Anniversary, Limited Edition, Spyder, Black Edition, GTS	1997-2016, 9999	01
041	Cayman	S, Hybrid, Black Edition, R, GTS, GT4	2006-16,9999	<u>02</u>
042	Panamera	S, 4, 4S, Turbo, Turbo S, Hybrid, GTS, S, Platinum Edition, Executive, Edition, Exclusive, Sport Turismo (Base/4S/E-Hybrid/S E- Hybrid/Turbo), 10 years edition	2010-20,9999	05, 06, 09
043	918	Spyder, Weissach Pkg	2013-17,9999	01,02,09
044	718	Cayman (Base, S, GTS, T), Boxster (Base, S, GTS, T), GT4, Spyder	2017-20,9999	01,02,09
045	Taycan	4S, Turbo, Turbo S	2020	04

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
398	Other (automobile)	Spyder, Speedster (prior to '65), 356 (A, B, C) Grund, America, Super, 1500	1948-2020, 9999	01-03,04,05,09
399	Unknown (automobile)		1948-2020, 9999	01-03,04,05,09

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
401	Macan	S, S Diesel, Turbo, GTS	2014-20,9999	14
421	Cayenne	Turbo, S, Titanium, GTS (PD Edition), Transsyberia, Hybrid, Diesel, E-Hybrid	2003-20,9999	15
499	Unknown (light truck)		2003-20,9999	14, 15,19

UNKNOWN

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
999	Unknown (PORSCHE)		1965-2020, 9999	99

NCSA MAKE: Renault (46) (RENA)

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
031	LeCar	R-5, R5TL, GTL, TL, DLX	1976-83,9999	02-05,07-09
032	Dauphine/10/R-8 Caravelle	all models, R-1190, R8 -1100	1955-71,9999	01,02,04,08,09
033	12	R-12L, R-12TL/GTL	1972-77,9999	04,06,09
034	15	R-15TL	1973-76,9999	02,03,09
035	16	R-16, R-1152	1969-72,9999	<u>06</u>
036	17	R17, Gordini Coupe, R17TL	1972-80,9999	01,02,09
037	18i/Sportwagon	R18i, Deluxe, DLX	1981-86,9999	04,06,09

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
038	Fuego	TL, TS, GTL, GTS, Turbo	1982-85,9999	02,03,09
039	Alliance/Encore GTA, Convertible	L, DL, Limited, X-37	1983-87,9999	01-05,07-09
041	Alpine	GT, GTA Coupe, Not imported to US	1971-90,9999	02,03,09
044	Medallion **	DL, LX	1987	04,06,09
045	Premier**		1987	<u>04</u>
398	Other (automobile)	Juvaquatre, 4CV, Fregate, Domaine	1946-90,9999	01-09, 10,11
399	Unknown (automobile)		1946-90,9999	01-09, 10,11

^{**} Note: Medallion and Premier listed under **Eagle** after 1987.

NCSA MAKE: Saab (47) (SAA)

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
031	99/99E/900	S, GL, GLE, L, LE, 2CM, 4CM Turbo, Cabriolet, 2EM, 4EM, CM, SE	1969-98,9999	01-05,07-09
032	Sonnett	II, III, 97	1967-74,9999	<u>02</u>
033	95/96	V-4, M, S, M-S, Special	1959-73,9999	02,06,09
034	9000	S, Turbo, CS, CD, CDE, E, AERO, CSE	1985-98,9999	04,05,09
035	9-3/9-3x	SE (Hot), Viggen, Linear Arc, Vector, Aero, 2.0T, SportCombi, Combi, Estate	1999-2012, 9999	01,03-07,09
036	9-5	SE, Aero, 2.3T, Set, Arc, Linear, Aero, SportCombi, 2.5T, Turbo X, Vector	1999-2012, 9999	02,04,06,08,09
037	9-2x	Linear, Aero	2005-06,9999	<u>05</u>
038	9-4x		2009-12,9999	<u>06</u>
398	Other (automobile)	Monte Carlo 850, GT850, GT750, 92/93	1950-2012, 9999	01-09
399	Unknown (automobile)		1950-2012, 9999	01-09

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
401	9-7x	Arc, Linear, 4.2i, 5.3i, Altitude Edition, Aero	2005-11,9999	14

UNKNOWN

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
999	Unknown (SAAB)		1950-2012, 9999	49

NCSA MAKE: Saturn (24) (STRN)

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
001	SL	SL, SL1, SL2	1991-2002, 9999	04
002	SC	SC1, SC2	1991-2002, 9999	02, 09, 17
003	SW	SW1, SW2	1993-2001, 9999	<u>06</u>
004	EV1/EGV1*	Electric Vehicle (Gen II)	1997-2003, 9999	02
005	LS	LS, LS1, LS2, L100/L200/ L300, L300-1/2/3	2000-05,9999	04
006	LW	LW1, LW2, LW200/ LW300-1/2/3	2000-04,9999	<u>06</u>
007	Ion	Quad-coupe, I3, Red Line	2003-07,9999	04, 09, 17
008	Sky	Red Line	2007-10,9999	<u>01</u>
009	Aura	XE, XR, Hybrid	2007-10,9999	04
010	Outlook	XE, XR	2007-10,9999	<u>06</u>
011	Astra	XE, XR, Sport	2008-10,9999	03,05,09
398	Other (automobile)		1991-2010, 9999	02-06,08,09, 17
399	Unknown (automobile)		1991-2010, 9999	02-06,08,09, 17

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
401	Vue	Red Line, 4, V6, Green Line, XE, XR-4, XR-V6	2002-10,9999	14
441	Relay	2, 3	2005-07,9999	<u>20</u>
499	Unknown (light truck)		2002-10,9999	<u>14, 20</u>

UNKNOWN

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
999	Unknown (SATURN)		1991-2010, 9999	<u>49</u>

NCSA MAKE: Scion (67) (SCIO)

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
031	xB (2012 on. <u>See Toyota</u> for 2004-2011)	1.0, 2.0 Series, Limited Edition, 10th Anniversary	2012-15,9999	06
032	tC (2012 on. <u>See Toyota for</u> 2005-2011)	1.0 Series, Limited Edition, 8.0 Series, 10th Anniversary	2012-16,9999	03
033	xD (2012 on. <u>See Toyota</u> for 2007-2011)	Limited Edition, 10th Anniversary	2012-14,9999	<u>05</u>
034	iQ (2012 on. <u>See Toyota for</u> 2010-2011)	10th Anniversary	2012-14,9999	03
035	FR-S	10th Anniversary	2013-16,9999	02
036	iA		2016	04
037	iM		2016	<u>05</u>
398	Other (automobile)		2012-16,9999	02-06,08,09
399	Unknown (automobile)		2012-16,9999	02-06,08,09

NCSA MAKE: Smart (65) (SMRT)

AUTOMOBILES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
031	Fortwo	Pure, Prime, Passion, Proxy, Electric, Brabus, EQ	2008-19,9999	01,02,03,09
398	Other (automobile)		2008-19,9999	01,02,03,09
399	Unknown (automobile)		2008-19,9999	01,02,03,09

NCSA MAKE: Sterling (61) (STLG)

AUTOMOBILES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
031	827	Li, SL, S, SLI	1987-91,9999	04,05,09
398	Other (automobile)	825, S, SL, Oxford Edition	1987-91,9999	04,05,09
399	Unknown (automobile)		1987-91,9999	04,05,09

NCSA MAKE: Subaru (48) (SUBA)

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
031	Loyale (1990 on)/DL/ FE/G/GF/GL/GLF/ STD	4-wheel drive, S, 1300, 1400, 1600, 1800, A15L, A44L, Touring Wagon, Turbo	1972-94,9999	02-09
032	Star	FF -1 Star, 1100	1971	02,04,06,08,09
033	360		1958-70,9999	<u>02</u>
034	Legacy/Outback (prior to 2003 only; see 045 for 2003 on)	L, LS, LSI, 4WD, Outback (Limited, Ltd, Sport, VDC, L.L. Bean Edition), GT, Brighton, Sport Utility Sedan (Ltd.), 30th Anniv. Outback, H-6, 35th Anniv., 2.5, 2.5i (Base, Premium, Sport, Limited) GT, spec. B, 3.0R, Limited, Premium, Sport, 3.6R (Base, Limited), XT (Limited, Touring)	1990-2020, 9999	04-06,09

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
035	XT/XT6	4WD Turbo, convertible, DL, GL	1985-91,9999	01,02,09
036	Justy	DL, GL, 4WD	1987-94,9999	03,05,07,09
037	SVX	LS, LSL, XR, Lsi	1992-97,9999	<u>02</u>
038	Impreza	L, LS, Brighton, Outback Sport, RS, L-Sport, LX, 2.5i/RS/S/TS/ GT, WRX, WRX Sport/STI/SS/ TR, Limited Edition, Premium, SE, STI, STI-S, 2.0i (Premium, Limited, Sport, Sport Limited)	1993-2020, 9999	02,04-06,08,09
039	RX		1986-89,9999	03,04,09
043	Brat	DL, GL	1978-87,9999	<u>10</u>
044	Baja	Sport, Turbo	2003-07,9999	<u>10</u>
045	Outback (2003 on; see 034 for prior to 2003)	H6-VDC, 35th Anniversary Edition, 2.5, 2.5i (Premium, Limited), 2.5XT, 3.0R, Special Edition, VDC Limited, Sport, L.L. Bean Edition, 3.0R. Premium, 3.6R (Limited)	2003-20,9999	04-06,09
046	BRZ	Premium, Limited, tS	2013-20,9999	<u>03</u>
047	WRX (2015 on; see 038 for prior to 2015)	Premium, Limited, STi (Base, Limited, Type RA, S209)	2015-20,9999	04
398	Other (automobile)		1968-2020, 9999	<u>01-09</u> , <u>10</u>
399	Unknown (automobile)		1968-2020, 9999	<u>01-09, 10</u>

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
401	Forester	L, S, 2.5i, 2.0XT, 2.5X, 2.5XS, 2.5XT, L.L. Bean Edition, Limited (Plus), Sport, Premium, Touring	1997-2020, 9999	14
402	B9 Tribeca	Base, Limited, Special Edition, Premium, Touring, 3.6R	2006-14, 9999	14

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
403	XV Crosstrek	2.0i Premium/Limited, Hybrid (Premium, Touring)	2013-19, 9999	14
421	Ascent	Base, Premium, Limited, Touring	2019-20, 9999	<u>15</u>
499	Unknown (light truck)		1997-2020, 9999	<u>14, 15, 19</u>

UNKNOWN

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
999	Unknown (SUBARU)		1958-2020, 9999	<u>49</u>

NCSA MAKE: Suzuki (53) (SUZI)

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
031	Swift/SA310	Gti, GTX, GLX, GA, GT, GL	1989-2001, 2010,9999	03-05,07,09
032	Esteem	GL, GLX, GLX+	1995-2002, 9999	04,06,09
033	Aerio	S, G, LX, SX (Wagon), Luxury	2002-07,9999	04,06,09
034	Forenza	S, LX, EX, Premium, Convenience, Popular	2004-08,9999	04,06,09
035	Verona	S, LX, EX, Luxury	2004-06,9999	04
036	Reno	S, LX, EX, Premium, Convenience	2005-08,9999	<u>05</u>
040	SX4/SX4 Crossover	Base, Sport, Convenience, Touring, L, S, SD, SE, GTS, LE, SportBack, JX, Premium, Tech Value Package	2007-13,9999	04,05,09
041	Kizashi	GTS, S, SE, SLS, Sport	2010-13,9999	04
398	Other (automobile)	800 Fronte, Alto	1981-2013, 9999	03-07,09
399	Unknown (automobile)		1981-2013, 9999	03-07,09

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
401	Samurai	Standard, Deluxe, JL	1986-96,9999	14
402	Sidekick/Vitara/ Vitara V6	JS, JX, JLX, JLS, Sport, Grand Vitara (1999-2002 only; see model 404 for 2003 on) (JS, JLX, JLS, Ltd.), XL- 7 (2002 only; see model 405 for 2003 on), LX	1989-2004, 9999	14
403	X-90		1996-98,9999	14
404	Grand Vitara (2003 on; see model 402 for models prior to 2003)	JS, JLX, JLS, Limited, GX, LX, XV6, Premium, Xsport, Luxury, Special Edition, Ultra Adventure Edition	2003-13,9999	14
405	XL-7 (2003 on; see 402 for 2002 model year)	Standard, Touring, Limited, GX, LX, Premium, Luxury	2003-09,9999	14
481	Equator	Comfort, Premium, Sport, RMZ-4	2009-13,9999	34
498	Other (light truck)	Jimmy	1981-2013, 9999	<u>14, 34</u>
499	Unknown (light truck)		1981-2013, 9999	14, 34

MOTORCYCLES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
701	0-50cc		1970-2013, 2019- 20, 9999	80, 81, 83, 84, 88, 89
702	51-124cc		1970-2020, 9999	80, 81, 83, 84, 88, 89
703	125-349cc		1969-2020, 9999	80,83,84,88,89
704	350-449cc		1970-93; 2000- 20, 9999	80,83,84,88,89
705	450-749cc		1969-2020, 9999	80,83,84,88,89
706	750cc-over		1970-2020, 9999	80,83,84,88,89
709	Unknown cc		1969-2020, 9999	80-84,87-89

ALL TERRAIN VEHICLES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
731	0-50cc		1969-87; 2002- 04, 2009-20, 9999	<u>90, 96</u>
732	51-124cc		1969-2004, 2009- 20, 9999	<u>90, 96</u>
733	125-349cc		1969-2019, 9999	<u>90, 96</u>
734	350cc or greater		1969-93; 1998- 2020, 9999	<u>90, 96</u>
739	Unknown cc		1969-2020, 9999	<u>90, 96</u>

UNKNOWN

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
999	Unknown (SUZUKI)		1969-2020, 9999	<u>49, 99</u>

NCSA MAKE: Toyota (49) (TOYT)

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
031	Corona	Mark II, Custom, 1900, 2000, Deluxe	1966-83,9999	02,04,06,08,09
032	Corolla	1100, 1200, 1600, SR-5, LE, DX, CE, Deluxe, Custom, FX, FX16, Sport, GTS, VE, S, XRS, XLE, CE, L, Special Edition, LE Eco, 50th Anniversary, XSE, iM, SE CVT	1969-2020, 9999	02-09
033	Celica	1900, 2000, GT, ST, GTS, VE, GT-S	1971-2006, 9999	01-03,09
034	Supra	Celica Supra, Soarer, Turbo	1979-98,9999	03
035	Cressida		1978-92,9999	04-06,09
036	Crown	2300, 2600, Toyopets	1958-71,9999	02,04,06,08,09
037	Carina	2000	1972-73,9999	02

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
038	Tercel	Corolla Tercel, 4WD, EZ, DX, LE, DLX, CE	1980-99,9999	02-09
039	Starlet		1981-84,9999	<u>03</u>
040	Camry	LE, Deluxe, XLE, DLX, SE, All-Trac, CE, SE, Limited Edition, L, Hybrid (CVT/LE/XLE/SE), XSE, Special Edition, TRD, Nightshade Edition	1983-2020, 9999	02,04-06,08,09
041	MR-2/MR Spyder	Super Charged	1984-95; 2000- 07,9999	01,02,09
042	Paseo	Turbo, T-bar	1992-97,9999	01,02,09
043	Avalon	XL, XLS, Limited, Touring, XLE, Hybrid, Premium, Sport, Plus, TRD	1995-2020, 9999	04
044	Solara	Camry Solara (SE, SLE, Sport)	1999-2009, 9999	01,02,09
045	ЕСНО		2000-05,9999	02,04,08,09
046	Prius *	*Electric hybrid, Touring, II, III, IV, V (2/3/4/5), (CVT), 3 rd Generation (2/3/4/5), Plug-In (Base/Advanced), c (1/2/3/4,L,LE), Persona Series, Two, Two Eco, Three, Three Touring, Four, Four Touring, Prime (Plus, Premium, Advanced)	2001-20,9999	03-06,07,09
047	Matrix	Base, XR, XRS, STD, S, SD, L	2003-13,9999	<u>06</u>
048	Scion xA	RS 1.0	2004-06,9999	<u>05</u>
049	Scion xB (2004-2011 only. See 67-031 for 2012 on.)	1.0, 2.0 Series	2004-11,9999	<u>06</u>
050	Scion tC (2005-2011 only. See 67-032 for 2012 on.)	1.0 Series	2005-11,9999	03
051	Yaris	Liftback, S, CE, HB, LB, LE, RS, SE, L, iA, XLE	2007-20,9999	03-05, 09

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
052	Scion xD (2007-2011 only. See 67-033 for 2012 on.)		2007-11,9999	05
053	Venza	LE, XLE, Limited	2009-15,9999	<u>05</u>
054	Scion iQ (2010-2011 only. See 67-034 for 2012 on.)		2010-11,9999	04
055	Mirai		2016-19, 9999	<u>04</u>
056	86	Base, GT, TRD, Special Edition, Hakone Edition	2017-20, 9999	03
057	GR Supra	3.0, 3.0 Premium, Launch Edition	2020	<u>03</u>
398	Other (automobile)	2000 GT Coupe (1960s), Sports 800, Viper, Tiara	1960-2020, 9999	<u>01-09</u> , <u>10</u>
399	Unknown (automobile)		1960-2020, 9999	<u>01-09</u> , <u>10</u>

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
401	4-Runner	SR5 (Base, Limited, Premium), Limited (Base, Nightshade Edition), Sport, Trail, TRD Pro, TRD Off- Road (Base, Premium)	1984-2020, 9999	14
402	RAV4*	L, LE, EVs-electric*, Sport, Limited, Hybrid (Limited, SE, XLE, LE), XLE (Base, Premium), Platinum, Adventure, SE	1996-2020, 9999	14
403	Highlander	Limited, Hybrid (LE, XLE, Limited), Sport, SE, Plus, LE, LE Plus, XLE, Platinum	2001-19, 9999	14
404	FJ Cruiser	Baja 1000, FJ, SE, TRD, AT, MT	2007-14, 9999	14
405	C-HR	LE, Limited, XLE, XLE Premium	2018-20, 9999	14
421	Land Cruiser	4WD, Heritage Edition	1964-2020, 9999	<u>15</u>

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
422	Sequoia	SR5, Limited, Platinum, TRD Sport	2001-20, 9999	<u>15</u>
441	Minivan (1984-90)/ Previa (1991 on)	LE, Cargo, DX, XLE	1984-97, 9999	<u>20</u>
442	Sienna	CE, LE, XLE, Symphony, Limited, SE, L	1998-2020, 9999	<u>20</u>
471	Pickup	SR5, Xtracab, Sport, LN44, Chinook, Wonder Wagon	1974-95, 9999	<u>34,39, 40, 42</u>
472	Tacoma	SR5, Xtracab, Limited, PreRunner, Side Step, Double Cab, S-Runner, 2.7L, 4.0L, X-Runner, T/X, T/X Pro, Access Cab, TRD (Sport, Pro, Off-Road), SR	1995-2020, 9999	34,39, 40, 42
481	T-100	DX, SR5, Limited, Xtracab	1993-98,9999	<u>34,39</u> , <u>40</u> , <u>42</u>
482	Tundra	SR5 (Access Cab), LTD (Access Cab), Double Cab, Darrell Waltrip Special Edition, CrewMax, 4.0L, 4.6L, 5.7L, Limited, SR, 1794 Edition, Platinum, TRD Pro	1999-2020, 9999	34,39, 40, 42
498	Other (light truck)		1970-2020, 9999	14,15,19, 20,29, 34,39
499	Unknown (light truck)		1973-2020, 9999	14,15,19, 20, 34,39, 40, 42, 48,49

UNKNOWN

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
999	Unknown (TOYOTA)		1966-2020, 9999	49

NCSA MAKE: Triumph (50) (TRIU)

AUTOMOBILES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
031	Spitfire	I, II, III, IV, 1500	1962-81,9999	01,02,09
032	GT-6	MK3	1967-73,9999	01,02,09
033	TR4	TR2, TR3, TR4A	1958-68,9999	01,02,09
034	TR6		1969-76,9999	01,02,09
035	TR7/TR8		1975-81,9999	01,02,09
036	Herald	Vitesse	1960-74,9999	01,02,06,09
037	Stag		1971-73,9999	01,02,09
398	Other (automobile)	1800, 2000, Mayflower, Renown, 1200	1946-81,9999	01,02,04,08,09
399	Unknown (automobile)		1946-81,9999	01,02,04,08,09

MOTORCYCLES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
701	0-50cc		1965-83,9999	80
702	51-124cc		1965-83,9999	80
703	125-349cc		1950-74,9999	<u>80</u>
704	350-449cc		1950-71,9999	<u>80</u>
705	450-749cc		1950-2019, 9999	<u>80</u>
706	750cc or greater		1950-2020, 9999	80
709	Unknown cc		1950-2020, 9999	80
799	Unknown (motorcycle)		1950-2020, 9999	80

UNKNOWN

	Codes	NCSA Models	Includes	Model Years	NCSA Body Types
Ì	999	Unknown (TRIUMPH)		1950-2020, 9999	<u>99</u>

NCSA MAKE: Volkswagen (30) (VOLK)

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
031	Karmann Ghia		1954-75,9999	01,02,09
032	Beetle 1300/1500	Flat windshield, 94.5 WB	1948-77,9999	01,02,09
033	Super Beetle	Curved windshield 95.3 WB	1971-80,9999	01,02,09
034	411/412	Squareback/Fastback	1971-74,9999	03,04,09
035	Squareback/Fastback	Type 3, 1600	1965-74,9999	<u>02</u>
036	Rabbit	L, GTI, Sport, LS, Custom, DL, Deluxe, S	1975-84, 2006- 09,9999	01,03,05-07,09
037	Dasher		1974-81,9999	03,05-07,09
038	Scirocco	16V	1975-88,9999	<u>02</u>
040	Jetta/Jetta SportsWagen	III, GL (TDI, 1.9L, 2.0L), GLI (2.0T, VR6), GLS (1.8T,1.8L/1.9L/2.0L/2.8L/TDI/VR6), GT, Carat, TDI, GLX (VR6/2.8L), Turbo Diesel, 2.5L Wolfsburg Edition, S/SE/SEL, Value Edition, 2.0T, 3.6, Autobahn, Hybrid (SE, SEL, SEL Premium), Premium, Edition 30, 1.4T, Sport, Turbo Charged, 35th Anniversary Edition	1981-2019, 9999	02,04,06,08,09
041	Quantum	Synco	1982-88,9999	02,04,06,08,09
042	Golf/Cabriolet/Cabrio/ GTI/ GLI	Golf II, GTI (GLS, GLX 1.8T/2.0T/2.8L), GT, GL(1.8T/ VR6/2.0L/1.9L/ TDI), Golf III, GLS (1.8T/1.8L/1.9L/2.0/TDI), Wolfsburg, Cabrio (GL, GLS, GLX), 20th Anniversary, R32, MkV, Convenience, R, 2.5L, Driver's Edition, SE, SEL, Autobahn, Launch Edition, SportWagen (S, SE, SEL), eGolf (SE, SEL Premium), Alltrack (S,SE, SEL), Alltrack	1985-2019, 9999	01,03,05-09
043	Rabbit Pickup	car-based pickup	1980-83,9999	<u>10</u>
044	Fox	GL	1987-94,9999	02,04,06,08,09

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
045	Corrado		1989-94,9999	<u>02</u>
046	Passat (CC - 2008 thru 2011; see 052 for 2012 on)	GL, GLS (1.8T, Synchro, V6), TDI, GLX (1.8T, 2.0T, W8, Synchro, V6), 4MOTION, 3.6 GL, Value Edition, CC, Highline, Komfort, 2.5 (S/SE), Wolfsburg Edition, Sport, Premium, Clean Diesel, SEL, R-Line, 35th Anniversary Edition, Autobahn	1990-2020, 9999	04,06,09
047	New Beetle	GL GLS TDI, 1.8T/1.8L/ 1.9L/2.0L/2.5/2.5L Syncro/ V6, GLX (1.8T), Turbo, Turbo S, Fender Edition, Sun and Sound, R-Line, GSR, Clean Diesel, Classic, SE, SEL, Dune, #PinkBeetle, Coast, Final Edition (SE, SEL)	1998-2010, 2012-19, 9999	01,03,09
048	Phaeton	3.2L, 4.2L, V6, V8, W12	2002-11,9999	04
051	Eos	2.0T, 3.2L, Executive, Komfort, Luxury, Turbo, VR6, Sport, Final Edition	2006-16,9999	01
052	CC (For 2012 on. See model 046 for 2008- 2011.)	Luxury, Sport, Sport Plus, VR6, R-Line, 2.0T, 4MOTION, Executive, V6	2012-17,9999	04
053	Arteon	R-Line, SE, SEL	2019	<u>05</u>
398	Other (automobile)		1965-2020, 9999	01-09, 10
399	Unknown (automobile)		1956-2020, 9999	<u>01-09</u> , <u>10</u>

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
401	The Thing (181)		1973-75,9999	14
402	Tiguan	S, SE, SEL, R-Line, 4MOTION, 2.0T, Wolfsburg, Sport, Premium, Limited (Base, 4MOTION)	2008-20,9999	14

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
403	Atlas	S, V6 (S, 4MOTION, Launch Edition, SE, SEL)	2018-19,9999	14
421	Touareg/Touareg 2	V6, V8, V10, VR6 FSI, Lux, Executive, Hybrid, Sport, R- Line, X Special Edition, TDI, Wolfsburg	2003-17,9999	<u>15</u>
441	Vanagon/Camper	Bus, Kombi, Van	1955-91,9999	<u>20</u>
442	Eurovan	GLS, MV, Camper, Weekender Package	1992-04,9999	<u>20</u>
443	Routan	S, SE, SEL Premium/RSE	2009-14,9999	<u>20</u>
498	Other (light truck)		1967-2020, 9999	14,15,19, 20
499	Unknown (light truck)		1965-2020, 9999	14,15,19, 20, 49

OTHER AND UNKNOWN VEHICLE

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
998	Other (vehicle)		1965-2020, 9999	92,93,97
999	Unknown (VOLKSWAGEN)		1956-2020, 9999	49

NCSA MAKE: Volvo (51) (VOLV)

AUTOMOBILES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
031	122	S	1958-68,9999	02,04,06,08,09
032	140/142/144/145 *	S, E, GL, GLS, Deluxe	1968-74,9999	02,04,06,08,09
033	164	S, E 1970-75,9999		04
034	240 series*/DL/GL/GLT	242, 244, 245, DL, GL, GLT, Deluxe	1975-93,9999	02,04,06,08,09
035	260 series/GLE	264,265,262, c, Volvo Coupe, Volvo Diesel	1976-82,9999	02,04,06,08,09, 12
036	1800	E, S, ES, P1800	1960-73,9999	02,06,09
037	PV544	PV444	1947-65,9999	04,06,09
038	760/780	GLE, Turbo, Bertone Coupe	1983-92,9999	<u>02,04,06,08,09</u> , <u>12</u>
039	740	GLE, GT, Turbo, GL, SE	1983-92,9999	04,06,09
040	940	GLE, Turbo, SE	1991-95,9999	04,06,09, 12
041	960		1992-97,9999	04,06,09, 12
042	850	GLT, Turbo, T-5, GTAS, GTMS Cross Country	1993-97,9999	04,06,09
043	70 Series (For XC70 for 2014 on, use model code 402)	C70 (LT, HT, T5), S70 (GLT, T5, AWD) V70 (R, SC Cross Country, GLT, T5, M, 2.4T, 2.4, 2.5T, T6, R, 3.2) LPT, HPT, XC70	1998-2013, 9999	01,02,04,06,08, 09
044	90 Series	S90, V90	1998	04,06,09
045	80 Series	S80 (2.9, T6, Executive, Premier) 2.5, 2.5T, 3.2, V8	1999-2017, 9999	04
046	40 Series	S40, V40, LSE, 2.5i, T5, 2.4i, R-Design	2000-11,9999	04,06,09
047	60 Series	S60 (2.4T, 2.4, 2.5 AWD, T5, Polestar), 2.4M, 2.5T, R, T5, T6, R-Design, Drive-E, Cross Country, Dynamic, Inscription, Polestar, Momentum	2001-20,9999	04
048	V50	2.4i, T5, R-Design	2005-11,9999	<u>06</u>
049	C30	1.0, 2.0, T5, R-Design	2008-13,9999	<u>03</u>

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
050	XC60 (For 2008-2018 only. For model years 2019 on, see 51-404.)	3.2, T5 (Dynamic, Inscription), T6 (Dynamic Inscription, R-Design), R- Design, Drive-E, Momentum, Plug-In Hybrid	2008-18,9999	<u>06</u>
051	V60	T5, T6, R-Design, Drive-E, Cross Country, Polestar, Dynamic, Momentum, Inscription	2014-20,9999	<u>06</u>
052	V90	Cross Country (Volvo Ocean Race, Inscription, R-Design)	2017-20, 9999	<u>06</u>
053	S90	T5 (Momentum, Inscription), T6 (Momentum, Inscription), R-Design	2017-20, 9999	04
398	Other (automobile)		1958-2020, 9999	01-09, 10-12
399	Unknown (automobile)		1958-2020, 9999	01-09, 10-12

LIGHT TRUCKS

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
401	XC90	2.5T(AWD), T6(AWD), V8, 3.2, R-Design, SVR7, First Edition, T5, Plug-In, Excellence, T8, Momentum, Inscription, Excellence	2003-20, 9999	14
402	XC70 (For 2014 on. For prior to 2013, use model code 043)	3.2, T6, Drive-E	2014-17,9999	14
403	XC40	Momentum, R-Design, Plug- In Hybrid, Inscription	2018-20, 9999	14
404	XC60 (For 2019 on. For model years 2008- 2018, see 51-050.)	Momentum, R-Design, Inscription, Polestar	2019-20, 9999	14
499	Unknown (light truck)		2003-20, 9999	14

MEDIUM/HEAVY TRUCKS

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
881	Medium/Heavy - CBE		1981-93; 1996- 2020, 9999	60-64,66,78
882	Medium/Heavy - COE low entry		1981-93; 1996- 2004, 9999	60-64,66,78
883	Medium/Heavy - COE high entry		1981-93; 1996- 2004, 9999	60-64,66,78
884	Medium/Heavy - Unknown engine location		1981-93; 1996- 2019, 9999	60-64,66, 71,72,78
890	Medium/Heavy - COE entry position unknown		1981-93; 1996- 2020, 9999	60-64,66,78
898	Other (medium/heavy truck)		1981-93; 1996- 2020, 9999	60-64,66, 71,72,78

BUSES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
981	Bus**: Conventional (Engine out front)		1981-2005, 9999	50-52,58,59
983	Bus: Rear engine, Flat front		2014-20,9999	50-52,58,59
988	Other (bus)		1965-2020, 9999	50-52,58,59
989	Unknown (bus)		1965-2020, 9999	50-52,58,59

^{**}Use "981" (bus) if the frontal plane or the engine location is unknown.

OTHER AND UNKNOWN

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
998	Other (Vehicle)		1958-2020, 9999	92,93,97
999	Unknown (VOLVO)		1958-2020, 9999	<u>49, 79, 99</u>

NCSA MAKE: Yugo (57) (YUGO)

AUTOMOBILES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
031	GV/GVL/GVX	All models, Cabriolet	1986-92,9999	01-03,09

NCSA MAKE: Other Domestic Manufacturers (29)

AUTOMOBILES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
001	Studebaker/Avanti	Lark, Gran Turismo, Hawk, Cruiser, all associated subseries, light pickup, Studebaker XUV/XUT, Lister	1940-91; 2001-07,9999	01,02,04,06, 08,09, 16, 34,39
002	Checker	Marathon, Superba, Taxi, Aerobus	1965-82,9999	04,06,09, 12
003	Panoz	Esperante (Magnussen Edition, Spyder (Base, GT), Convertible, GTS), GT, GTS, GTLM, JRD, Abruzzi, Roadster, GTR1, 25th Anniversary, Spyder (GT), Avezzano	2000-19,9999	01,02,09
004	Saleen	S7, S281, 435S, S302 (White Label, Yellow Label, Black Label), 570, 620, FOURSIXTEEN	2001-15,9999	01,02,04,08,09
005	Tesla	Roadster (Base, Sport) Model S (Base, Signature, Performance), Model X, Super Charger, Model 3, Model Y	2008-20,9999	01,04,05,09, 14
398	Other (automobile)	Desoto, Excalibur, Stutz, FiberFab, Hudson, Packard, Consulier, Gatsby, Auburn, Phaeton, Citicar, Clenet	1930-91,9999	01-09, 10-13
399	Unknown (automobile)		1940-2020, 9999	<u>01-09</u> , <u>10-13</u> , <u>14,16,19</u> , <u>39</u>

NCSA MAKE: Other Import (69)

AUTOMOBILES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
031	Aston Martin	Lagonda, Vantage, Volante, Saloon, DB Mark III, DB4, DB4GT, DB5, DB6, DB7 (Heritage/Vantage/Volante), V12 (Vanquish S/Zagato/ Vantage, Vantage S), V8 (Vantage/ Vantage S), DB9 (Carbon Edition, GT), Rapide (S), Cygnet, Carbon Black, One-77, Virage (Coupe/ Volante), DBS (Coupe/ Volante), CC100, Vantage GT, Rapide E, Vulcan, GT12, DB11	1950-2020, 9999	01-09
032	Bricklin		1965-91,9999	<u>02</u>
033	Citroen		1965-91,9999	02-09
034	DeLorean		1981-83,9999	02
035	Ferrari	F355 (Berlinetta, GTS, Spider, F1), F430, F456 (GTA, M, GT, MGTA), F550 (Maranello, Barchetta Pininfarina), 360/430 (Spider, Modena, Challenge) Maranello, Berlinetta, MGT (Vintage), Enzo, Challenge Stradale, 575M, 612 Scaglietti, Superamerica, 599 GTB/GTO, California (T), 418 Italia, FF, SA Aperta, 458 (Spider/ Italia/ Challenge/ Speciale (A)), F12 Berlinetta, FF, LaFerrari, 488 GTB/Spider/Pista, GTC4Lusso, F12TDF, F60 America, F8 Tributo	1965-2020, 9999	01-05,07-09
036	Hillman		1965-91,9999	01-09
037	Jensen	Healy-Interceptor, 541R	1965-91,9999	01-05,07-09

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
038	Lamborghini	Countach, 5000S, Jalpa, Diablo, Miura, Murciélago (LP640), Galladoro, LP 550-2/560-4/570- 4/670-4/700-4, CP, Aventador (J, SV, LP750-4, Roadster), Sesto Elemento, Spyder, Superlegga, Aventador, Gallardo, Veneo, Huracan (Base, Spyder, EVO), 350GT, Urus	1965-2020, 9999	01, 02, 04, 08, 09, 14
039	Lotus	Europe, Espirit (V8, GT-3, V8-GT) Elise, Exige, Evora (Range/GTE/400), California, Club Racer, Sport, 2-Eleven, Black, Bespoke, 3-Elevent (430)	1967-2020, 9999	01,02,03, 04, 08,09
040	Maserati	Biturbo, Ghibli, 3200 GT, Quattroporte, Spyder GT, Sports GT, Executive GT, 90th Anniversary, MC12, GranSport, GranTurismo, GranCabrio, Stradale, Kubang, Sport, MC, S, GTS, S Q4, MC Centennial Edition, Levante, Alfier, Trofeo		01-05,07-09, 14
041	Morris	Minor	1965-91,9999	<u>01-09</u> , <u>10</u>
042	Rolls Royce/Bentley	Rolls Royce: Cloud/ Shadow series, Silver Spur, Silver Dawn, Silver Spirit, Silver Seraph, Corniche, Park Ward), Phantom (Drophead), Ghost; Bently: (Arnaze, Azure, Continental (GT, Speed Black Edition), Mulliner), Brooklands, Goodwood, EWB, 4, Mulsanne, Flying Spur, Super Sports, Wraith, Dawn, Cullinan, Black Badge, Bentayga		01, 02, 03, 04, 08, 09, 15
044	Simca		1965-91,9999	01-09
045	Sunbeam	1965-91,9999		01,02,04,08,09
046	TVR	1965-91,9999		01,02,09
048	Desta	1985-99,9999		14,15,19
049	Reliant	1960-91,9999		01-09
052	Bertone	X/19	1989-91,9999	01,02,09
053	Lada		1965-91,9999	01-09

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
054	Mini-Cooper	Mark I, II, III, S, SE, Sport, MC40, Traveller, John Cooper Works, Clubman, Countryman, Paceman, Coupe, All 4, Roadster, Convertible, Plug-In, Signature, Classic, Iconic, Oxford Edition, International Orange Edition, Ice Blue Edition, Ying Yang Edition, Straight Edition, 60 Years Special Edition, Rebel Green Edition, John Cooper Works Knights Edition	1961-74; 2002-20, 9999	01, 03, 05, 06, 09, 14
055	Morgan (2003 on; Prior to 2003 see 398)	Aero 8, Plus 8, V6, Classic Range, AeroMax, 4/4 Sport, Super Sports Junior, Plus 4, 4- Seater, Aero, Eva GT, 3-Seater, 4/4, Plus 8, SP1, AR Plus 4, Roadster 37		01,02,09
056	Maybach	57, 57S, 62, 62S, Laudualet, Zeppelin, Guard	2003-14,9999	04
057	Spyker	C8, Base, T, Laviolette, Aileron, Spyder, Double 12R, Double 12S, C12 Zagato, L2014 M85, D, B6 Venator		01,02,09,17
058	Koenigsegg	CC8S, CCR, CCX, CCXR, CCGT, Trevita, Agera, CC8S, Agera R/S, Special Edition, Regera, One:1, Jesko	2007-20, 9999	01
061	Mahindra	Scorpio (Lx, Sle, Vls, Vlx)	2010-19, 9999	<u>14, 34, 96</u>
062	Caterham	Classic, Roadsport, Academy, Superlight (R300/R400/R500), CSR, Seven (270/280/310/360/ 420/480/620S/R), SP 300R, Aeroseven, Superflight Twenty, 60th Anniversary Edition	2011-20, 9999	01
063	McLaren	MP4-12C, P15, 675LT, 540C, 12C GT Spirit, 650S, P1, BP23, 570S, 600LT, 720S		01
064	Bugatti	Veyron 164 (Grand Sport, Super Sport), Vitesse, Chiron, Divo		01,02,09
398	Other (automobile)	Morgan (Prior to 2003; 2003 on see 055), Singer, Gazelle, Fisker, Karma	1928-2020, 9999	01-09, 10-13, 17
399	Unknown (automobile)		1928-2020, 9999	01-09, 10, 19, 39

Motored Cycles

Note: Refer to <u>Passenger Vehicle section</u> for motored cycles produced by automobile manufacturers (<u>BMW</u>, <u>Honda</u>, <u>Peugeot</u>, <u>Suzuki</u>, <u>Triumph</u>)

NCSA MAKE: BSA (70) (BSA)

MOTORCYCLES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
701	0-50cc		1950-72,9999	80,81,83,84, 88,89
702	51-124cc		1950-72,9999	80,81,83,84, 88,89
703	125-349cc		1950-72,9999	80,83,84,88,89
704	350-449cc		1950-72,9999	80,83,84,88,89
705	450-749cc		1950-72,9999	80,83,84,88,89
706	750cc or greater		1950-72,9999	80,83,84,88,89
709	Unknown cc		1950-72,9999	80,83,84,88,89

NCSA MAKE: Ducati (71) (DUCA)

MOTORCYCLES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
701	0-50cc		1958-65,9999	80,81,84,88,89
702	51-124cc		1958-65,9999	80,81,84,88,89
703	125-349сс		1958-65,9999	80,88,89
704	350-449сс		1958-65, 2014-20, 9999	80,88,89
705	450-749cc		1958-93; 1997- 2020; 9999	80,88,89
706	750cc or greater		1958-2020, 9999	80,88,89
709	Unknown cc		1958-2020, 9999	80-83, 84, 87, 88, 89

NCSA MAKE: Harley-Davidson (72) (HD)

MOTORCYCLES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
701	0-50cc		1965-66,9999	80,81,88,89
702	51-124cc		1948-78,9999	80,81,88,89
703	125-349cc		1948-88,9999	80,84,88,89
704	350-449cc		1969-74,9999	80,88,89
705	450-749cc		1971-78, 2014-19, 9999	80,88,89
706	750cc or greater		1932-2020; 9999	80,82,87,88,89
707	Electric Motorcycle	Livewire	2020	<u>80</u>
709	Unknown cc		1932-2020, 9999	80-82,84,87, 88,89

NCSA MAKE: Kawasaki (73) (KAWK)

MOTORCYCLES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
701	0-50cc		1965-82, 9999	80,81,83,84, 88,89
702	51-124cc		1965-2020, 9999	80,81,83,84, 88,89
703	125-349cc		1965-2020, 9999	80,83,84,88,89
704	350-449cc		1975-98; 2003-04; 2006-20, 9999	80,83,84,88,89
705	450-749cc		1972-2020, 9999	80,83,84,88,89
706	750cc or greater		1972-2020, 9999	80,83,84,88,89
709	Unknown cc		1965-2020, 9999	80,83,84,87, 88,89

ALL TERRAIN VEHICLES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
731	0-50cc		2003-20, 9999	<u>90, 96</u>
732	51-124cc		1970-88; 2003-20, 9999	<u>90, 96</u>
733	125-349cc		1970-2020, 9999	<u>90, 96</u>

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
734	350cc or greater		1970-2020, 9999	<u>90, 96</u>
739	Unknown cc		1970-2020, 9999	<u>90, 96</u>
998	Other (Vehicle)		1965-2020, 9999	<u>91, 96</u>

NCSA MAKE: Moto-Guzzi (74) (MOGU)

MOTORCYCLES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
704	350-449cc		1965-76, 9999	80,88,89
705	450-749cc		1965-87; 2004-20, 9999	80,88,89
706	750cc or greater		1965-2020, 9999	80,88,89
709	Unknown cc		1965-2020, 9999	80,88,89

NCSA MAKE: Norton (75) (NORT)

MOTORCYCLES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
704	350-449сс		1950-76, 9999	80,83,88,89
705	450-749cc		1950-76, 9999	80,83,88,89
706	750cc or greater		1950-76, 9999	80,83,88,89
709	Unknown cc		1950-76, 9999	80,83,88,89

NCSA MAKE: Victory (77) (VCTY)

MOTORCYCLES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
706	750cc or greater		1998-2017, 9999	80,88,89
707	Electric Motorcycle		2017	80,88,89
709	Unknown cc		1998-2017, 9999	80,88,89
998	Other (Vehicle)		1998-2017, 9999	<u>89</u>

F-116

NCSA MAKE: Yamaha (76) (YAMA)

MOTORCYCLES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
701	0-50cc		1979-2020, 9999	80,81,83,84, 88,89
702	51-124cc		1972-2020, 9999	80,81,83,84, 88,89
703	125-349cc		1969-2020, 9999	80,83,84,88,89
704	350-449cc		1972-2020, 9999	80,83,84,88,89
705	450-749cc		1971-2020, 9999	80,83,84,88,89
706	750cc or greater		1974-2020, 9999	80, 83, 84, 85, 88, 89
709	Unknown cc		1969-2020, 9999	80, 81, 83, 84, 85, 87, 88, 89

ALL TERRAIN VEHICLES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
731	0-50cc		1965-91, 2005- 20, 9999	<u>90, 96</u>
732	51-124cc		1965-2020, 9999	<u>90</u> , <u>96</u>
733	125-349cc		1965-2019, 9999	<u>90</u> , <u>96</u>
734	350cc or greater		1993-2020, 9999	<u>90</u> , <u>96</u>
739	Unknown cc		1965-2020, 9999	<u>90, 96</u>
998	Other (Vehicle)	Snowmobiles, Golf Carts	1965-2020, 9999	<u>91, 95, 96</u>

Trucks

NCSA MAKE: Brockway (80) (BROC)

MEDIUM/HEAVY TRUCKS

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
881	Medium/Heavy - CBE		1965-77,9999	60-64, 66, 71, 72, 78
882	Medium/Heavy - COE low entry		1965-77,9999	60-64, 66, 71, 72, 78
883	Medium/Heavy - COE high entry		1965-77,9999	60-64, 66, 71, 72, 78
884	Medium/Heavy - Unknown engine location		1965-77,9999	60-64, 66, 71, 72, 78
890	Medium/Heavy - COE entry position unknown		1965-77,9999	60-64, 66, 71, 72, 78
898	Other (medium/heavy truck)		1965-77,9999	60-64, 66, 71, 72, 78

BUSES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
981	Bus**: Conventional (Engine out front)		1965-77,9999	50-52,58,59
982	Bus: Front engine, Flat front		1965-77,9999	50-52,58,59
983	Bus: Rear engine, Flat front		1965-77,9999	50-52,58,59
988	Other (bus)		1965-77,9999	50-52,58,59
989	Unknown (bus)		1965-77,9999	50-52,58,59

^{**}Use code "989" (bus) if the frontal plane or the engine location is unknown.

MOTOR HOME

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
850	Motor Home	Truck based	1965-77,9999	65,73

OTHER AND UNKNOWN VEHICLE

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
998	Other (vehicle)		1965-77,9999	92,93,97
999	Unknown (BROCKWAY)		1965-77,9999	<u>99</u>

NCSA MAKE: Diamond Reo or Reo (81) (DIAR)

MEDIUM/HEAVY TRUCKS

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
881	Medium/Heavy - CBE	DC101, C116, M35 (A1, A2, A3)	1950-88, 1993- 99, 9999	60-64, 66, 71, 72, 78
882	Medium/Heavy - COE low entry		1954-75, 9999	60-64, 66, 71, 72, 78
883	Medium/Heavy - COE high entry	C054-C088	1954-75, 9999	60-64, 66, 71, 72, 78
884	Medium/Heavy - Unknown engine location		1954-75,9999	60-64, 66, 71, 72, 78
890	Medium/Heavy - COE entry position unknown		1950-88, 1993- 99, 9999	60-64, 66, 71, 72, 78
898	Other (medium/heavy truck)		1950-88, 1993- 99, 9999	60-64, 66, 71, 72, 78

BUSES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
981	Bus**: Conventional (Engine out front)		1954-75, 9999	50-52,58,59
982	Bus: Front engine, Flat front		1954-75, 9999	50-52,58,59
983	Bus: Rear engine, Flat front		1954-75, 9999	50-52,58,59
988	Other (bus)		1954-75, 9999	50-52,58,59
989	Unknown (bus)		1954-75, 9999	50-52,58,59

^{**}Use code "989" (bus) if the frontal plane or the engine location is unknown.

MOTOR HOME

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
850	Motor Home		1954-75, 9999	65,73

OTHER AND UNKNOWN VEHICLE

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
998	Other (vehicle)		1950-88, 1993- 99, 9999	92,93,97
999	Unknown (DIAMOND REO or REO)		1950-88, 1993- 99, 9999	99

NCSA MAKE: Freightliner (82) (FRHT)

LIGHT TRUCKS

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
461	Sprinter/Advantage	2500 (HC/SHC), 3500 (HC/SHC)	2002-19, 9999	21,22,28,29
462	MT 35 Chassis		1985-2013, 9999	<u>22, 40, 42</u>
498	Other (light truck)		1985-2019, 9999	20-22,28,29, 48
499	Unknown (light truck)		1985-2019, 9999	<u>20-22,28,29, 48, 49</u>

MEDIUM/HEAVY TRUCKS

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
870	Medium Heavy Van-Based Vehicle	Sprinter	2002-19, 9999	<u>55, 61-64</u>
881	Medium/Heavy - CBE		1965-2020, 9999	60-64, 66, 71, 72, 78
882	Medium/Heavy - COE low entry		1968-2013, 9999	60-64, 66, 71, 72, 78
883	Medium/Heavy - COE high entry		1965-2013, 9999	60-64, 66, 71, 72, 78
884	Medium/Heavy - Unknown engine location		1963-2013, 2020, 9999	60-64, 66, 71, 72, 78
890	Medium/Heavy - COE entry position unknown		1965-2013, 9999	60-64, 66, 71, 72, 78
898	Other (medium/heavy truck)		1965-2020, 9999	60-64, 66, 71, 72, 78

BUSES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
981	Bus**: Conventional (Engine out front)		1965-2019, 9999	50-52,58,59
982	Bus: Front engine, Flat front		1965-2019, 9999	50-52,58,59
983	Bus: Rear engine, Flat front		1965-2019, 9999	50-52,58,59
988	Other (bus)		1965-2019, 9999	50-52,58,59
989	Unknown (bus)		1965-2019, 9999	50-52,58,59

^{**}Use code "989" (bus) if the frontal plane or the engine location is unknown.

MOTOR HOME

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
850	Motor Home		1965-2019, 9999	65,73

OTHER AND UNKNOWN VEHICLE

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
998	Other (vehicle)		1963-2020, 9999	92,93,97
999	Unknown (FREIGHTLINER)		1963-2020, 9999	<u>99</u>

NCSA MAKE: FWD (83) (FWD)

MEDIUM/HEAVY TRUCKS

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
881	Medium/Heavy - CBE		1965-2001, 9999	60-64, 66, 71, 72, 78
882	Medium/Heavy - COE low entry		1965-2001, 9999	60-64, 66, 71, 72, 78
883	Medium/Heavy - COE high entry		1965-2001, 9999	60-64, 66, 71, 72, 78
884	Medium/Heavy - Unknown engine location		1965-2001, 9999	60-64, 66, 71, 72, 78
890	Medium/Heavy - COE entry position unknown		1965-2001, 9999	60-64, 66, 71, 72, 78
898	Other (medium/heavy truck)		1965-2001, 9999	60-64, 66, 71, 72, 78

BUSES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
981	Bus**: Conventional (Engine out front)		1965-2001, 9999	50-52,58,59
982	Bus: Front engine, Flat front		1965-2001, 9999	50-52,58,59
983	Bus: Rear engine, Flat front		1965-2001, 9999	50-52,58,59
988	Other (bus)		1965-2001, 9999	50-52,58,59
989	Unknown (bus)		1965-2001, 9999	50-52,58,59

^{**}Use code "989" (bus) if the frontal plane or the engine location is unknown.

MOTOR HOME

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
850	Motor Home		1965-2001, 9999	65,73

OTHER AND UNKNOWN VEHICLE

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
998	Other (vehicle)		1965-2001, 9999	92,93,97
999	Unknown (FWD)		1965-2001, 9999	<u>99</u>

NCSA MAKE: International Harvester/Navistar (84) (INTL) - (NAVI)

LIGHT TRUCKS

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
421	Scout	Scout II, Utility pickup, SS-2, Roadster, 800 series, Traveler, Terra Traveltop,	1962-80,9999	<u>15</u>
431	Travelall	1010-1210, 100-200	1963-75,9999	<u>16</u>
466	Multistop Van	Metro RM, MS1510, 120-160, MS1210	1960-84,9999	22,28,29
481	Pickup	R-100-500, 900A- 1500C/D, 1010-1510	1951-76,9999	33, 34
498	Other (light truck)		1960-84,9999	15,16,19, 22,28,29
499	Unknown (light truck)		1951-84,9999	15,16,19, 22,28,29

MEDIUM/HEAVY TRUCK

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
881	Medium/Heavy - CBE	Loadstar/Fleetstar, Paystar, CBE Transtar, 4200, S-series Mixer, 8100, 8500, 9100, 9200, 9300, 9400, 9900, CXT, RXT, MXT, Lonestar	1963-2020, 9999	60-64, 66, 71, 72, 78
882	Medium/Heavy - COE low entry	CO, VCO, DCO, 190- 1950, Cargostar, LFM, 5370 (Garbage), CF500/600	1973-2018, 9999	60-64, 66, 71, 72, 78
883	Medium/Heavy - COE high entry	DCO, DCOT, UCO, VCOT, 405-series, COE Transtar, Unistar, Conco 707B, 9600	1961-2018, 9999	60-64, 66, 71, 72, 78
884	Medium/Heavy - Unknown engine location		1948-2020, 9999	60-64, 66, 71, 72, 78
890	Medium/Heavy - COE entry position unknown		1964-2019, 9999	60-64, 66, 71, 72, 78
898	Other (medium/heavy truck)	Fire truck - R140-R306, CO 8190	1955-2019, 9999	60-64, 66, 71, 72, 78

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
981	Bus**: Conventional (Engine out front)	R153-1853 Loadstar, 1603-1853	1953-2020, 9999	50-52,58,59
982	Bus: Front engine, Flat front	173FC, 183FC	1972-2020, 9999	50-52,58,59
983	Bus**: Rear engine, Flat front	183RE, 193RE-transit	1965-2019, 9999	50-52,58,59
988	Other (bus)		1953-2019, 9999	50-52,58,59
989	Unknown (bus)		1953-2020, 9999	50-52,58,59

^{**}Use code "989" (bus) if the frontal plane or the engine location is unknown.

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
850	Motor Home	Truck based	1965-2019, 9999	<u>65,73</u>

OTHER AND UNKNOWN VEHICLE

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
998	Other (vehicle)		1954-2020, 9999	92,93,97
999	Unknown (INTL. HARVESTER/ NAVISTAR)		1951-2020, 9999	79, 99

NCSA MAKE: Kenworth (85) (KW)

MEDIUM/HEAVY TRUCKS

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
881	Medium/Heavy - CBE	520, 540, T400, T600, T800, C500-550, W900, T300	1947-2020, 9999	60-64, 66, 71, 72, 78
882	Medium/Heavy - COE low entry	L700	1972-2018, 9999	60-64, 66, 71, 72, 78
883	Medium/Heavy - COE high entry	K100, K100E, K270, K300, K350	1965-2018, 9999	60-64, 66, 71, 72, 78
884	Medium/Heavy - Unknown engine location		1954-2020, 9999	60-64, 66, 71, 72, 78
890	Medium/Heavy - COE entry position unknown		1964-2019, 9999	60-64, 66, 71, 72, 78
898	Other (medium/heavy truck)		1965-2020, 9999	60-64, 66, 71, 72, 78

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
981	Bus**: Conventional (Engine out front)		1965-2004, 9999	50-52,58,59
982	Bus: Front engine, Flat front		1965-2004, 9999	50-52,58,59
983	Bus: Rear engine, Flat front		1965-2004, 9999	50-52,58,59

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
988	Other (bus)		1965-2004, 9999	50-52,58,59
989	Unknown (bus)		1965-2004, 9999	50-52,58,59

^{**}Use code "989" (bus) if the frontal plane or the engine location is unknown.

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
850	Motor Home		1965-2019, 9999	65,73

OTHER AND UNKNOWN VEHICLE

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
998	Other (vehicle)		1965-2020, 9999	92,93,97
999	Unknown (KENWORTH)		1965-2020, 9999	<u>99</u>

NCSA MAKE: Mack (86) (MACK)

MEDIUM/HEAVY TRUCKS

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
881	Medium/Heavy - CBE		1968-2020, 9999	60-64, 66, 71, 72, 78
882	Medium/Heavy - COE low entry		1965-2019, 9999	60-64, 66, 71, 72, 78
883	Medium/Heavy - COE high entry		1977-2019, 9999	60-64, 66, 71, 72, 78
884	Medium/Heavy - Unknown engine location		1956-2020, 9999	60-64, 66, 71, 72, 78
890	Medium/Heavy - COE entry position unknown		1972-2019, 9999	60-64, 66, 71, 72, 78
898	Other (medium/heavy truck)		1971-2020, 9999	60-64, 66, 71, 72, 78

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
981	Bus**: Conventional (Engine out front)		1965-2004, 9999	50-52,58,59
982	Bus: Front engine, Flat front		1976-2004, 9999	50-52,58,59
983	Bus: Rear engine, Flat front		1965-2004, 9999	50-52,58,59

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
988	Other (bus)		1965-2004, 9999	50-52,58,59
989	Unknown (bus)		1965-2004, 9999	50-52,58,59

^{**}Use code "989" (bus) if the frontal plane or the engine location is unknown.

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
850	Motor Home		1965-2019, 9999	65,73

OTHER AND UNKNOWN VEHICLE

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
998	Other (vehicle)		1965-2020, 9999	92,93,97
999	Unknown (MACK)		1965-2020, 9999	99

NCSA MAKE: Iveco/Magirus* (88) (IVEC)

MEDIUM/HEAVY TRUCKS

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
881	Medium/Heavy - CBE	LCF	1980-91,9999	60-64, 66, 71, 72, 78
882	Medium/Heavy - COE low entry	FL, FS	1980-91,9999	60-64, 66, 71, 72, 78
883	Medium/Heavy - COE high entry		1980-91,9999	60-64, 66, 71, 72, 78
884	Medium/Heavy - Unknown engine location		1980-91,9999	60-64, 66, 71, 72, 78
890	Medium/Heavy - COE entry position unknown		1980-91,9999	60-64, 66, 71, 72, 78
898	Other (medium/heavy truck)		1980-91,9999	60-64, 66, 71, 72, 78

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
981	Bus**: Conventional (Engine out front)		1980-91, 9999	50-52,58,59
982	Bus: Front engine, Flat front		1980-91, 9999	50-52,58,59
983	Bus: Rear engine, Flat front		1980-91, 9999	50-52,58,59
988	Other (bus)		1980-91, 9999	50-52,58,59

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
989	Unknown (bus)		1980-91, 9999	50-52,58,59

^{**}Use code "989" (bus) if the frontal plane or the engine location is unknown.

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
850	Motor Home		1980-91,9999	65,73

OTHER AND UNKNOWN VEHICLE

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
998	Other (vehicle)		1980-91,9999	92,93,97
999	Unknown (IVECO/MAGIRUS)		1980-91,9999	<u>99</u>

^{*} Magirus stopped production in 1985; Iveco stopped production in 1991.

NCSA MAKE: Peterbilt (87) (PTRB)

MEDIUM/HEAVY TRUCKS

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
881	Medium/Heavy - CBE	357-379, 387, 385	1974-2020, 9999	60-64, 66, 71, 72, 78
882	Medium/Heavy - COE low entry	270	1965-2019, 9999	60-64, 66, 71, 72, 78
883	Medium/Heavy - COE high entry	362, 320	1965-2019, 9999	60-64, 66, 71, 72, 78
884	Medium/Heavy - Unknown engine location		1961-2020, 9999	60-64, 66, 71, 72, 78
890	Medium/Heavy - COE entry position unknown		1964-2019, 9999	60-64, 66, 71, 72, 78
898	Other (medium/heavy truck)		1965-2020, 9999	60-64, 66, 71, 72, 78

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
981	Bus**: Conventional (Engine out front)		1965-2004, 9999	50-52,58,59
982	Bus: Front engine, Flat front		1965-2004, 9999	50-52,58,59
983	Bus: Rear engine, Flat front		1965-2004, 9999	50-52,58,59

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
988	Other (bus)		1965-2004, 9999	50-52,58,59
989	Unknown (bus)		1965-2004, 9999	50-52,58,59

^{**}Use code "989" (bus) if the frontal plane or the engine location is unknown.

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
850	Motor Home		1965-2019, 9999	<u>65,73</u>

OTHER AND UNKNOWN VEHICLE

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
998	Other (vehicle)		1965-2020, 9999	92,93,97
999	Unknown (PETERBILT)		1965-2020, 9999	<u>99</u>

NCSA MAKE: White/Autocar-White/GMC (89) (WHIT) - (WHGM)

MEDIUM/HEAVY TRUCKS

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
881	Medium/Heavy - CBE		1965-2019, 9999	60-64, 66, 71, 72, 78
882	Medium/Heavy - COE low entry		1968-2019, 9999	60-64, 66, 71, 72, 78
883	Medium/Heavy - COE high entry		1965-2019, 9999	60-64, 66, 71, 72, 78
884	Medium/Heavy - Unknown engine location		1963-2019, 9999	60-64, 66, 71, 72, 78
890	Medium/Heavy - COE entry position unknown		1965-2019, 9999	60-64, 66, 71, 72, 78
898	Other (medium/heavy truck)		1965-2019, 9999	60-64, 66, 71, 72, 78

BUSES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
981	Bus**: Conventional (Engine out front)		1965-2019, 9999	50-52,58,59
982	Bus: Front engine, Flat front		1965-2019, 9999	50-52,58,59
983	Bus: Rear engine, Flat front		1965-2019, 9999	50-52,58,59
988	Other (bus)		1965-2019, 9999	50-52,58,59
989	Unknown (bus)		1965-2019, 9999	50-52,58,59

^{**}Use code "989" (bus) if the frontal plane or the engine location is unknown.

MOTOR HOME

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
850	Motor Home		1965-2019, 9999	<u>65,73</u>

OTHER AND UNKNOWN VEHICLE

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
998	Other (vehicle)		1963-2019, 9999	92,93,97
999	Unknown (WHITE/AUTOCAR-WHITE/GMC)		1963-2019, 9999	99

Buses

NOTES:

- Refer to the <u>PASSENGER VEHICLE</u> section for buses manufactured by <u>Chevy</u>, <u>Dodge</u>, <u>Ford</u>, <u>GMC</u>, <u>Grumman</u>, <u>Isuzu</u>, <u>Mercedes</u>, <u>Mitsubishi</u>, and <u>Volvo</u>.
- Refer to the <u>TRUCK</u> section for buses manufactured by <u>Brockway</u>, <u>Diamond Reo</u>, <u>Freightliner</u>, FWD, International Harvester, <u>Kenworth</u>, <u>Mack</u>, <u>Peterbilt</u>, and <u>White/Autocar-White/GMC</u>.
- Refer to the <u>OTHER MAKE</u> section for buses manufactured by <u>Neoplan, Carpenter Industries,</u> <u>DINA, Mid Bus, Orion, and Van Hool.</u>
- <u>Hino and Scania buses</u> are located under <u>OTHER MAKE (Medium/Heavy Trucks)</u> since those manufacturers also make trucks.

NCSA MAKE: Bluebird (90) (BLUI)

LIGHT TRUCKS

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
461	Van Based	van-based school bus, shuttle bus	1927-2019, 9999	<u>21</u>

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
981	Bus**: Conventional (Engine out front)		1927-2021, 9999	50-52,58,59
982	Bus: Front engine, Flat front		1927-2020, 9999	50-52,58,59
983	Bus: Rear engine, Flat front		1927-2020, 9999	50-52,58,59
988	Other (bus)		1927-2020, 9999	50-52,58,59
989	Unknown (bus)		1927-2020, 9999	50-52,58,59

^{**}Use code "989" (bus) if the frontal plane or the engine location is unknown.

UNKNOWN

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
999	Unknown (BLUEBIRD)		1927-2021, 9999	<u>99</u>

NCSA MAKE: Eagle Coach (91)

BUSES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
981	Bus**: Conventional (Engine out front)		1948-2001, 9999	50-52,58,59
982	Bus: Front engine, Flat front		1948-2001, 9999	50-52,58,59
983	Bus: Rear engine, Flat front		1948-2001, 9999	50-52,58,59
988	Other (bus)		1948-2001, 9999	50-52,58,59
989	Unknown (bus)		1948-2001, 9999	50-52,58,59

^{**}Use code "989" (bus) if the frontal plane or the engine location is unknown.

NCSA MAKE: Gillig (92)

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
981	Bus**: Conventional (Engine out front)		1932-2019, 9999	50-52,58,59
982	Bus: Front engine, Flat front		1932-2019, 9999	50-52,58,59
983	Bus: Rear engine, Flat front		1932-2019, 9999	50-52,58,59
988	Other (bus)		1932-2019, 9999	50-52,58,59
989	Unknown (bus)		1932-2019, 9999	50-52,58,59

^{**}Use code "989" (bus) if the frontal plane or the engine location is unknown.

NCSA MAKE: MCI (93) (MCIN)

BUSES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
981	Bus**: Conventional (Engine out front)		1963-2019, 9999	50-52,58,59
982	Bus: Front engine, Flat front		1963-2019, 9999	50-52,58,59
983	Bus: Rear engine, Flat front		1963-2019, 9999	50-52,58,59
988	Other (bus)		1963-2019, 9999	50-52,58,59
989	Unknown (bus)		1963-2019, 9999	50-52,58,59

^{**}Use code "989" (bus) if the frontal plane or the engine location is unknown.

NCSA MAKE: Thomas Built (94) (THMS)

LIGHT TRUCKS

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
461	Van Based	van-based school bus, shuttle bus	1936-2019, 9999	<u>21</u>

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
981	Bus**: Conventional (Engine out front)		1936-2020, 9999	50-52,58,59
982	Bus: Front engine, Flat front		1936-2019, 9999	50-52,58,59
983	Bus: Rear engine, Flat front		1936-2019, 9999	50-52,58,59
988	Other (bus)		1936-2019, 9999	50-52,58,59
989	Unknown (bus)		1936-2019, 9999	50-52,58,59

^{**}Use code "989" (bus) if the frontal plane or the engine location is unknown.

UNKNOWN

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
999	Unknown (THOMAS BUILT)		1936-2019, 9999	99

Other Make

NCSA MAKE: Other Make * (98)

AUTOMOBILES

(Unknown if DOMESTIC or FOREIGN) **

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
301	Think	City	2009-15, 9999	03
302	Meyers Motor	NmG	2008-15, 9999	02
398	Other (automobile)	Solectra (electric: Force)	1945-2019, 9999	<u>01-09</u> , <u>10-13</u>

^{**}Do not use Other Make (98) if Other Domestic (29) or Other Import (69) is applicable.

LIGHT TRUCKS

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
498	Other (light truck)	Solectra (electric: Citivan Flash)	1960-2019, 9999	14-16,19, 20-22, 28,29, 33,34, 39, 40,41, 42, 45,48

LSV/NEV

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
598	Other (LSV/NEV)	Tomberlin, Ford, Fly Bo	2000-20, 9999	94

MOTORCYCLES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
701	0-50cc	ATK, Beta, Buell, Cagiva, Cobra Trike, Jawa, Husqvarna, KTM, Aprilia, Maely, Riva, Strociek, BMC, MV Agusta, Bimota, Husaberg, Indian Scout, Indian, Laverda, Big Dog, Polaris, Titan, Twin Eagle, Viza, Vespa, Viper	1965-2020, 9999	80,81,84-89
702	51-124cc		1965-2020, 9999	80-89
703	125-349cc		1965-2020, 9999	80-89

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
704	350-449cc		1965-2020, 9999	80-89
705	450-749cc		1965-2020, 9999	80-89
706	750cc or greater		1965-2020, 9999	80-89
707	Electric Motorcycle	Zero	2016-20, 9999	80-89
709	Unknown cc		1945-2020, 9999	80-89

ALL TERRAIN VEHICLES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
731	0-50cc		1965-2020, 9999	<u>90, 96</u>
732	51-124cc		1965-2020, 9999	<u>90, 96</u>
733	125-349cc		1965-2020, 9999	<u>90, 96</u>
734	350cc or greater		1965-2020, 9999	<u>90, 96</u>
739	Unknown cc		1965-2020, 9999	<u>90, 96</u>

MEDIUM/HEAVY TRUCKS

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
802	Auto-Union-DKW		1965-88, 9999	60-64, 66, 71, 72, 78
803	Divco		1963-88, 9999	60-64, 66, 71, 72, 78
804	Western Star		1965-2020, 9999	60-64, 66, 71, 72, 78
805	Oshkosh	(includes trucks & buses)	1965-2019, 9999	50,52-59, 60-64, 66, 71, 72, 78
806	Hino	(includes trucks & buses)	1985-2020, 9999	50-52,58,59, 60-64, 66, 71, 72, 78
807	Scania	(includes trucks & buses)	1986-2004, 9999	<u>50-52,58,59, 60-64,</u> <u>66, 71, 72, 78</u>
808	UD		1986-2013, 9999	60-64, 66, 71, 72, 78
809	Sterling		1998-2010, 9999	60-64, 66, 67, 71, 72, 78
881	Medium/Heavy - CBE	DINA	1965-2019, 9999	60-64, 66, 71, 72, 78
882	Medium/Heavy - COE low entry	DINA	1965-2019, 9999	60-64, 66, 71, 72, 78

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
883	Medium/Heavy - COE high entry		1965-2019, 9999	60-64, 66, 71, 72, 78
884	Medium/Heavy - Unknown engine location		1965-2019, 9999	60-64, 66, 71, 72, 78
870	Medium/Heavy Van- Based Vehicle		1965-2019, 9999	55, 61-64
890	Medium/Heavy - COE entry position unknown		1965-2019, 9999	60-64, 66, 71, 72, 78
898	Other (medium/heavy truck)	e.g., Marmon, Ward LaFrance	1945-2019, 9999	60-64, 66, 71, 72, 78

BUSES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
902	Neoplan		1950-2019, 9999	50-52,58,59
903	Carpenter		1923-2000, 9999	21, 50-52,58,59
904	Collins Bus		1967-2012, 9999	<u>21</u>
905	DINA		1989-2004, 9999	50-52,58,59
906	Mid Bus		1963-2008, 9999	<u>21</u>
907	Orion		1978-2013, 9999	50-52,58,59
908	Van Hool		1947-2019, 9999	50-52,58,59
981	Bus***: Conventional (Engine out front)		1965-2019, 9999	50-52,58,59
982	Bus: Front engine, Flat front		1976-2019, 9999	50-52,58,59
983	Bus: Rear engine, Flat front		1965-2019, 9999	50-52,58,59
988	Other (bus)		1945-2019, 9999	50-52,58,59

MOTOR HOME

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
850	Motor Home		1965-2019, 9999	65,73

OTHER AND UNKNOWN VEHICLES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
998	Other (vehicle)		1940-2020, 9999	91-93,95-97
999	Unknown (OTHER MAKE)		1940-2020, 9999	<u>49, 79, 99</u>

^{*}Occurs when make is not explicitly listed here.

^{**}Do not use Other Make (98) if Other Domestic (29) or Other Import (69) is applicable.
***Use code "989" (bus) if the frontal plane or the engine location is unknown.

Unknown Make

NCSA MAKE: Unknown Make (99)

AUTOMOBILES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
399	Unknown (automobile)		1945-2019, 9999	<u>01-09</u> , <u>10-13</u>

LIGHT TRUCKS

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
499	Unknown (light truck)		1945-2019, 9999	14-16,19, 20-22, 28,29, 33,34,39, 42, 45,48

LSV/NEV

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
599	Unknown (LSV/NEV)		2000-19, 9999	94

MOTORCYCLES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
701	0-50cc		1965-2019, 9999	80-89
702	51-124cc		1965-2019, 9999	80-89
703	125-349cc		1965-2019, 9999	80-89
704	350-449cc		1965-2019, 9999	80-89
705	450-749cc		1965-2019, 9999	80-89
706	750cc or greater		1965-2019, 9999	80-89
707	Electric Motorcycle		2017-19, 9999	80-89
709	Unknown cc		1945-2019, 9999	80-89

ALL TERRAIN VEHICLES

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
731	0-50cc		1965-2019, 9999	<u>90</u> , <u>96</u>
732	51-124cc		1965-2019, 9999	<u>90</u> , <u>96</u>
733	125-349cc		1965-2019, 9999	<u>90</u> , <u>96</u>
734	350cc or greater		1965-2019, 9999	<u>90</u> , <u>96</u>
739	Unknown cc		1965-2019, 9999	<u>90, 96</u>

MEDIUM/HEAVY TRUCKS

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
870	Medium Heavy Van-Based Vehicle		1965-2019, 9999	55, 61-64
881	Medium/Heavy - CBE		1965-2019, 9999	60-64,66,71,72,78
882	Medium/Heavy - COE low entry		1965-2019, 9999	60-64,66,71,72,78
883	Medium/Heavy - COE high entry		1965-2019, 9999	60-64,66,71,72,78
884	Medium/Heavy - Unknown engine location		1965-2019, 9999	60-64,66,71,72,78
890	Medium/Heavy - COE entry position unknown		1965-2019, 9999	60-64,66,71,72,78
898	Other (medium/heavy truck)		1965-2019, 9999	60-64,66,71,72,78

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
981	Bus**: Conventional (Engine out front)		1965-2019, 9999	50-52,58,59
982	Bus: Front engine. Flat front		1976-2019, 9999	50-52,58,59
983	Bus: Rear engine, Flat front		1965-2019, 9999	50-52,58,59
988	Other (bus)		1945-2019, 9999	50-52,58,59
989	Unknown (bus)		1945-2019, 9999	50-52,58,59

^{**}Use code "989" (bus) if the frontal plane or the engine location is unknown.

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
850	Motor Home		1965-2019, 9999	<u>65, 73</u>

OTHER AND UNKNOWN VEHICLE

Codes	NCSA Models	Includes	Model Years	NCSA Body Types
998	Other (vehicle)		1945-2019, 9999	91-93, 95-97
999	Unknown (as to automobile, motored cycle, light truck, or truck)		1945-2019, 9999	49, 79, 99

Appendix G: References

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