## **Comment from Bryan Costello**

Posted by the National Highway Traffic Safety Administration on Feb 6, 2023

•Section 1.3 Format: "Identifier" should be "Group" and "Number" should be "Identifier".

•Chapter-2: This is a great addition!

•S1.State-Crash-Identifier: This is a unique identifier and may not be a number.

•S2.Agency and S3.Reported-By could be combined.

•S4.State-Reportable: It is not clear in what scenarios this would be "No", so the relevance of this data element is very questionable.

•C2.Crash-Time: The 24-hour clock is not specific to the military - it is widely used.

•C9.Atmospheric-Conditions: This could easily be split into two groups (Wind & Precipitation) that each would be quicker to understand and more complete than the choice menagerie presented by combining the two. There is no need to shoehorn visual conditions into this element.

oWind: None, Mild, Sever, Tornado, Hurricane, Other, Unknown

oPrecipitation: None, Drizzle, Rain, (Sleet, Hail, or Graupel), Snow, Freezing Rain, Other, Unknown

•C10.Light-Condition: This should define Dusk.

•C12.Intersection-Type: This is a degraded version of MMUCCv5 and less preferable.

•C13.School-Bus-Related: While this is nice to have, it is certainly not part of a minimal set. This is very dependent upon the law-enforcement officer to get this correct, which may not occur. School-bus crashes are much less lightly to be involved in harmful crashes and when they are the occupants of the other vehicle tend to be most harmed. This should have a validation rule that align True for either a rider is embarking, a rider is disembarking, or a passenger is present; and another rule for the opposite.

•C15.Secondary-Crash: While this is nice to have, it is certainly not part of a minimal set. These are rare and difficult for law-enforcement officers to accurately capture. This is something that could be better determined by analyzing congestion from a known crash as several companies have demonstrated.

•V5.Responsible-Entity and V6.Responsible-Entity-Type could be combined.

•V8.Vehicle-Registration and V9.Vehicle-Pate could be combined.

•V10.Vehicle-Make and V11.Vehicle-Production-Year could be combined.

•V29.Roadway-Grade

oHillcrest: this could simple be "Crest" as an already recognized wave feature.

oSag: this could simply to "Trough" as an already recognized wave feature.

•V30.Roadway-Surface-Condition: It would be better to group "Gravel" with "Sand" and include "Rocks" with the two.

•V38.Most-Harful-Event: This should have a validation rule that specifies it should be present in V37.Event-Sequence.

•Travel-Direction appears to have been removed. It is a vital element that helps to both ensure the proper location, but also the proper Collision Manner. It is easy to capture and more useful than many of the elements remaining. Consistency rules between this and Collision Manner are eliminated if this is missing.

•D4.Driver-Licence-Identifier: This is a unique identifier and may not be a number.

•P1.Person-Identifier: This is a unique identifier, "number" is a misnomer.

•P3.Person-Age: It is more preferable to have the person's age than to have data that must be converted into useful information.