Develop Educational Modules for NCSA Data and Data Query Tools

ACTIVE

Contract Opportunity

Notice ID

693JJ921R000021

Related Notice

Department/Ind. Agency

TRANSPORTATION, DEPARTMENT OF

Sub-tier

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

Office

693JJ9 NHTSA OFFICE OF ACQUISTION

General Information View Changes

- **Contract Opportunity Type:** Special Notice (Updated)
- All Dates/Times are: (UTC-05:00) EASTERN STANDARD TIME, NEW YORK, USA
- Updated Published Date: Feb 09, 2021 06:05 am EST
- Original Published Date: Jan 04, 2021 11:06 am EST
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- Inactive Policy: 15 days after response date
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- Original Inactive Date: Mar 05, 2021
- Initiative:
 - o None

Classification

- Original Set Aside:
- •
- Product Service Code:
- NAICS Code: 541511 Custom Computer Programming Services

• Place of Performance:

DescriptionView Changes

The U.S. Department of Transportation (DOT) National Highway Traffic Safety Administration (NHTSA) is assessing the need to improve the usability and accessibility of NHTSA crash data through the development of training materials and website design recommendations. NHTSA customers range from people with little knowledge of crash data to expert statisticians who use NHTSA's data for specific analysis. NHTSA is seeking input to creating a set of online learning modules and website user interface enhancements to meet the diverse needs of the public, the press, State and Federal highway safety officials, and industry and academic researchers and improve their understanding of NHTSA data. To complete the assessment, NHTSA will evaluate all aspects of the current system and complete an evaluation of industry capability using this Request for Information (RFI). Note: RFI responses will NOT be shared with other industry suppliers and will solely be used as part of the planning process.

Disclaimer: The following requested information is for planning purposes only and does not constitute a Request for Proposal (RFP), nor does it restrict the Government as to the ultimate acquisition approach. The government does not intend to award a contract on the basis of this RFI or to otherwise pay for the information solicited. Any contract that might be awarded based on information received or derived from this RFI will be the outcome of the competitive process.

Current NCSA Crash Data Presence on NHTSA.GOV

NHTSA has collected crash data since the early 1970s to support its mission to reduce motor vehicle crashes, injuries, and deaths on our Nation's highways. NHTSA's National Center for Statistics and Analysis (NCSA) provides a wide range of analytical and statistical support to NHTSA and the greater highway safety community. NCSA collects, processes, and maintains crash data in multiple databases, and uses this data for research and analysis for policy and rulemaking development as well as to create motor vehicle traffic safety informational products for the public. Part of NCSA's mission is to provide easy public access to its data for multiple users and uses. Users of NHTSA data range from other Federal and State agencies to universities, interest groups, industry, the news media, and the public. Data users may be researchers with years of experience conducting complex analyses with raw NHTSA data, individuals seeking existing data reports, or people with no previous experience with NHTSA crash data looking for quick answers on specific topics.

NCSA has been assessing the NHTSA website dedicated to crash data sets and crash data tools for future enhancements, including educational modules to help improve the public understanding of NHTSA crash data by meeting the needs of all the different levels of users. The NCSA Tools, Publications, and Data landing page, cdan.nhtsa.gov is the hub for accessing NHTSA crash data systems and products. One significant challenge is to educate users on how to get the information they need from the website. NCSA's Data Reporting and Information Division (DRID), responsible for answering the public's questions about NCSA data, repeatedly responds to common requests for data that users could obtain from the website. NCSA is also concerned that advocacy groups, the press, and researchers misuse NHTSA crash data because they do not understand the scope of the data or the nuances of a data element/attribute and make claims that the data cannot support. NHTSA Crash Datasets and Existing Crash Data Tools include NCSA's Fatality Analysis Reporting System (FARS), the Crash Report Sampling System (CRSS), the Crash Investigation Sampling System (CISS), and Special Crash Investigations (SCI), are used to provide the public with crash data resources through both direct queries as well as data products and services.

Datasets:

- 1. **FARS:** The Fatality Analysis Reporting System, in operation since 1975, is a nationwide census providing NHTSA, Congress, and the American public yearly data regarding fatal injuries suffered in motor vehicle traffic crashes. To be included in FARS, a crash must involve a motor vehicle traveling on a trafficway customarily open to the public and result in the death of a person (occupant of a vehicle or a non-occupant) within 30 days of the crash. NHTSA has a cooperative agreement with an agency in each State government to collect, code, and submit information in a standard format on fatal crashes.
- 2. CRSS/GES: The Crash Reporting Sampling System is a sample of police-reported crashes involving all types of motor vehicle occupants, pedestrians, and cyclists, ranging from property-damage-only crashes to those that result in fatalities. CRSS is a replacement of the National Automotive Sampling System General Estimates System (NASS/GES). NHTSA designed CRSS to replace GES (GES data remains available) to select a more efficient and flexible sample using updated traffic and demographic information and optimizing the sample to meet the data users' needs. 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. CRSS obtains its data from a nationally representative probability sample selected from the estimated 5 to 6 million police-reported crashes that occur annually. These crashes include those that result in a fatality or injury and those involving property damage. By focusing attention on police-reported crashes, CRSS concentrates on those crashes of greatest concern to the highway safety community and the public.
- 3. CISS/CDS: The Crash Investigation Sampling System collects detailed crash data to help scientists and engineers analyze motor vehicle crashes and injuries. CISS collects data on a representative sample of crashes involving at least one passenger vehicle cars, light trucks, sport utility vehicles, and vans towed from the scene. After a crash has been sampled, trained Crash Technicians obtain data from crash sites by documenting scene evidence such as skid marks, fluid spills, and struck objects. They locate the vehicles involved, document the crash damage, and identify interior components that were contacted by the occupants. On-site inspections are followed-up with confidential interviews of the crash victims and a review of medical records for injuries sustained in the crash. CISS uses emerging technologies and methods to acquire quality data. Crash Technicians are interested only in information that will help them understand the nature and outcome of the crashes. Personal information such as names, addresses, license and registration numbers, and even specific crash locations are not included in public CISS files. The CISS builds on the National Automotive Sampling System Crashworthiness Data System (NASS)

CDS) – 2004-2015 CDS files remain available.

4. SCI: Special Crash Investigations has provided NHTSA with the most in-depth and detailed level of crash investigation data collected by the agency. The data collected ranges from basic data contained in routine police and insurance crash reports to comprehensive data from special reports by professional crash investigation teams. Hundreds of data elements relevant to the vehicle, occupants, injury mechanisms, roadway, and safety systems are collected for each of the over 100 crashes designated for study annually. SCI cases are intended to be an anecdotal data set useful for examining special crash circumstances or outcomes from an engineering perspective. The benefit of the program is its ability to locate unique real-world crashes anywhere in the country and perform in-depth clinical investigations in a timely manner that can be used by the automotive safety community to improve the performance of its advanced safety systems. Case selection is based on the current and evolving needs of the agency.

Data Tools & Products

- 1. NCSA Tools, Publications, and Data hub: https://cdan.nhtsa.gov/, a prototype hub for accessing NCSA data systems and products.
- 2. Fatality and Injury Reporting System Tool (FIRST), https://cdan.nhtsa.gov/Query/: FIRST is the newest NCSA data product, intended to enable users to query FARS and CRSS data to obtain possible answers to their traffic safety questions through an easy-to-use interface. FIRST includes the capability to do multi-year trends, query FARS and GES/CRSS over the last 15 years, and generate outputs in the form of tables, charts, and GIS maps.
- 3. Traffic Safety Facts Annual Report Tables, https://cdan.nhtsa.gov/tsftables/tsfar.htm: These annual report tables present descriptive statistics about traffic crashes of all severities, from those that result in property damage to those that result in the loss of human life. Information from FARS, CRSS, and GES are combined to create a single source for motor vehicle traffic crash statistics, provided in the categories of national statistics, trends, crashes, vehicles, people, States, fatality rates, and lives saved.
- 4. FARS Encyclopedia, https://www-fars.nhtsa.dot.gov/Main/index.aspx: Also referred to as the FARS Data Tables, the FARS Encyclopedia includes all the information in the Traffic Safety Facts Annual Report Tables plus additional information and a finer level of detail. The FARS Encyclopedia also consists of a GIS mapping capability.
- 5. State Traffic Safety Information (STSI), https://cdan.nhtsa.gov/STSI.htm: This portal incorporates data from the US Census Bureau and the Federal Highway Administration. STSI, provides state-by-state traffic safety profiles, including crash data, lives saved/savable, legislation, economic costs, grant funding, alcohol-related crash data, performance measures,

and geographic maps of crash data.

- CrashStats, https://crashstats.nhtsa.dot.gov/#/: CrashStats is NHTSA's portal for NCSA publications. Users can search for and download documents by topic or document type, from 1975 until the present.
- 7. **CISS Case Viewer**, https://crashviewer.nhtsa.dot.gov/CISS/SearchIndex: The Crash Investigation Sampling System Crash Viewer enables users to search for crashes either by Case ID or Case Number.
- 8. **SCI Case Viewer**, https://crashviewer.nhtsa.dot.gov/SCI/SearchIndex: The Special Crash Investigations Crash Viewer enables users to search for crashes either by Case Number or ID or DOT HS Number. Alternatively, users may also search by SCI case type and year.
- 9. **Data Visualization**, https://cdan.dot.gov/DataVisualization/DataVisualization.htm These are data visualization prototypes, using FARS crash data, generated using Tableau.

Data Sets & Tools Matrix

Tool [Associated NHTSA Data Sets]

FIRST [FARS, CRSS, GES]

TSF Annual Report Tables [FARS, CRSS, GES]

FARS Encyclopedia [FARS]

STSI [FARS (with data from Census and FHWA)]

CrashStats [FARS, CRSS, CISS, SCI]

CISS Case Viewer [CISS, CDS]

SCI Case Viewer [SCI]

Data Visualization [FARS]

Future Presentation of NHTSA Crash Data

NHTSA is interested in creative, intuitive, and user-friendly approaches to presenting and educating the public on its crash data. NHTSA is seeking information on available solutions from organizations who have developed educational modules to help the public understand complex data. This information will assist NHTSA plan for a procurement by understanding the available options and scope of work required to implement new methods to improve the public understanding of crash data.

Other Information

Respondents shall ensure that any response to this RFI includes a reply to the questions that follow. Respondents shall reference the question number with each corresponding response as follows:

- 1. Indicate the organization name, address, point of contact, telephone number, e-mail address, and size of your organization (i.e. large business, small business) using as the basis for your response.
- 2. Identify your organization's experience with presenting data online for use by both researchers (expert users) and the public, to include user interface design and data visualization.
- 3. Identify your organization's experience designing online instructional or educational material, such as user guides, video tutorials, how-to instructions, FAQs, etc.
- 4. Identify your organizations experience working with traffic safety data, or more broadly, public health data, or if neither applies, data drawn from multiple sources that can be analyzed to better understand a nationwide or statewide issue.
- 5. Provide a limited discussion of your company's ideas related to potential improvements to existing NHTSA crash data resources.
- 6. Provide an overview of a strategy for designing user instructional modules or user help content.
- 7. NHTSA is not seeking cost or price information at this time but is seeking a general discussion on anticipated costs and expenses.

Submission Information

Respondents shall respond to this RFI by e-mail only to NHTSAOAM@dot.gov. Respondents shall limit their response to a maximum of twenty (20) pages. Respondents shall ensure that all response contents are in Word, Excel, Visio, JPG, or PNG format. Where Visio and Excel are inserted, Respondents shall also provide the original Excel or Visio content. Where JPG or PNG objects are inserted, Respondents shall ensure clarity of the object when inserted, and also provide the original JPG or PNG object. Respondents are advised that PDF is not an acceptable format.

Amendment 00001 corrected transposed letters in the submission email address.

Attachments/Links

Download All Attachments/Links

No attachments or links have been added to this opportunity.

Contact Information

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