Request for Information (RFI) for
Safety Data Integration Project
RFI #SDIP2013RFI

May 13, 2013

New York State Department of Transportation
50 Wolf Road
Albany, New York 12232
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NEW YORK STATE DEPARTMENT OF TRANSPORTATION

Safety Data Integration Project

Request for Information

(RFI #SDIP2013RFI)

1. PURPOSE

This is NOT a Request for Proposal (RFP).

The New York State Department of Transportation (NYSDOT), on behalf of a multi-agency project team, hereby issues this “Request for Information” to solicit feedback regarding feasibility of integrating crash data generated and used in New York State to potentially benefit all current users.

Information pertaining to ideas, high level concepts, design issues and practical knowledge from similar data integration initiatives is being sought. Additionally, suggestions on how to prioritize and implement the envisioned future state business requirements and goals over time are requested. It is anticipated that many of the future business requirements and goals will occur over time, with a phased approach to implementation. Release of this RFI presents an invitation to interested parties provide NYSDOT with information regarding current technologies and feasibility information regarding Crash Data Integration. Additionally, responses will be used to gauge the level of interest in the Safety Data Integration Project. Information obtained may be used to develop a needs requirement upon which future procurement might be based. If further discussion is required or should questions arise, please contact the NYSDOT contact person listed below.

The following key events and dates apply to the RFI:

<table>
<thead>
<tr>
<th>Key Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Release of RFI</td>
<td>May 13, 2013</td>
</tr>
<tr>
<td>Vendor Questions are due</td>
<td>June 19, 2013</td>
</tr>
<tr>
<td>Reply to Vendor Questions</td>
<td>June 28, 2013&gt;</td>
</tr>
<tr>
<td>Written RFI Response due</td>
<td>July 26, 2013&gt;</td>
</tr>
</tbody>
</table>

Please be advised that although a deadline for receipt of responses has been set, NYSDOT will consider extending the due date should interested parties require more time to respond. Please inform the contact person should such a need arise.
2. VISION

The vision for this project is to create one integrated, modern, cost efficient, accessible repository of crash related data for all New York State agencies and traffic safety partners to meet operating needs, improve safety and reduce fatal and severe crashes in the State.

The vision relies upon continual improvement to the NYS traffic safety tools, work environments, systems and processes. The stakeholders have established the following goals for achieving this vision:

- Improve efficiency and accuracy of data collection with uniform electronic reports
- Reduce costs and redundancy across agencies (redundant storage of traffic safety data, maintenance and support costs of aging infrastructure and technology)
- Improve data integrity by providing a single source for all traffic safety partners
- Improve alignment of policies across agencies
- Enable NYS agencies and traffic safety partners to further improve their internal business processes
- Enable partner agencies to maintain or enhance their revenue streams
- Enable partner agencies to meet their statutory mandates efficiently
- Enable partner agencies to efficiently adapt to necessary changes in reporting or efficiencies in the information technology arena
- Become a national leader and model for other States

Note - Nothing herein should constrain any vendor from offering information that goes beyond these parameters to incorporate improved data collection and processing capabilities in addition to the data integration requirements. While this RFI is not seeking competitive solutions (this is a RFI; this is not an RFP), information is being sought to help the Project Team determine the feasibility and affordability of solutions that provide end to end capabilities will also be considered. Please be careful, however, to keep such information at a high-enough level so as not to preclude a possible competitive RFP solicitation at a later date. Questions are welcome regarding the distinctions between what is a RFI versus what is an RFP.

3. BACKGROUND

New York State has established a Safety Data Integration project to gather and document how crash data is used by various stakeholders. This project is a cooperative effort between Federal Highway Administration (FHWA), Federal Motor Carrier Safety Administration (FMCSA), Governor’s Traffic Safety Committee (GTSC), Institute for Traffic Safety Management and Research (ITSMR), National Highway Traffic Safety Administration (NHTSA), New York City Department of Transportation (NYC DOT), New York State Department of Transportation (DOT), New York State Department of
Health (DOH), New York State Department of Motor Vehicles (DMV), the New York State Thruway Authority, New York City Police Department (NYPD), the New York State Division of State Police (DSP), New York State Sheriffs’ Association and the New York State Association of Chiefs of Police. All listed stakeholders currently use crash data and have assisted in the analysis effort of this project.

Through a series of work group meetings, the multi-agency team analyzed and documented how crash data is currently captured and used and documented future goals and needs. The results of this analysis are included in Attachment 1 – Concept of Operations Report.

Data related to motor vehicle crashes that occur on New York’s roadways are captured or stored in different databases maintained by the Department of Motor Vehicles (DMV), the Department of Transportation (DOT), the Division of State Police (DSP), the NYC Accident Investigation Squad and the Department of Health (DOH).

The origin of motor vehicle crash information is the responsibility of both motorists and law enforcement agencies throughout the State. Upon collection of the crash data by various enforcement agencies, the information is sent to DMV in both electronic and paper format for processing and additional coding. DMV then matches motorist and police records and completes the data coding to create a “case”. The DMV provides a complete set of data from these “case” records to ITSMR on a monthly and annual basis for scrubbing and verification. Upon completion of the annual verification process, ITSMR creates and maintains the state’s official crash data file that is used to respond to data requests. Upon request, ITSMR also uses the official crash files to generate data sets for DMV’s external customers. These “case” records are used by DMV for actions against unsafe drivers. Once a case is created, it is available for sale. Cases are sold to both the public, attorneys and provided to judges and DA’s for court cases. The DMV provides a subset of data from the “case” records to the DOT for analysis and long term storage. Subsets of data are also provided to partner agencies from both DOT and DMV as needed to support local system data requirements.

Data from the crash databases are used by many entities. Key users, which are represented on the State’s Traffic Records Coordinating Council, are the Department of Transportation (DOT), Department of Motor Vehicles (DMV), Department of Health (DOH), Governor’s Traffic Safety Committee (GTSC), Division of State Police (DSP), New York City Department of Transportation (NYCDOT), Metropolitan Planning Organizations (MPOs), Institute for Traffic Safety Management and Research (ITSMR), Federal Highway Administration (FHWA), and the National Highway Traffic Safety Administration (NHTSA). Other parties with interest in the data and images are Attorneys and Insurance Companies. These are the primary users of the individual reports produced by the various systems. They rely on this information for resolution of criminal and civil cases related to crashes. They may also use the underlying statistical data in defense of parties involved in legal action. Additional stakeholders are described in Attachment 1 - Concept of Operations Report. All stakeholders have a strong interest in accuracy, timeliness, and accessibility of the data.
While many agencies have interests and inputs into the process, DOT and DMV are currently the primary sources of statewide crash data for New York. However, these two agencies have different missions and goals for how the information is used, as well as limited resources to develop and improve the systems. Over time, these and other factors have resulted in some significant issues as identified below:

- The inefficiency of data collection on paper reports impacts the accuracy and timeliness of the data
- There is redundant data stored in state and local safety systems across the state
- Data integrity problems persist, with each agency making edits that are not replicated back to the source
- Disparate technologies result in unsustainable maintenance and support costs
- Inconsistent codes and definitions create problems with data integration
- Duplicate data with varying retention policies is confusing for the public and end users
- Data is not easily accessible to all users

This safety data integration effort will create a reliable, consistent, and timely dataset for all crash data consumers, which will support the various analysis applications used by staff in the different entities and provide the ability to add additional functionality over time.

The integration of these various crash systems should improve the accuracy, completeness, and uniformity of the crash data, as well as making it more accessible to users.

By collectively utilizing NY State resources, it will be possible to become more effective in the State’s traffic safety programs, eliminating issues that have persisted for years and significantly reduce costs related to maintenance of multiple systems.
3.1 Partners and Key Stakeholders

This project is a multi-agency cooperative effort. Representatives from NY State’s major traffic safety organizations are participating. The participants are identified in Table 1 below along with the crash-related data systems they maintain.

<table>
<thead>
<tr>
<th>Participating Traffic Safety Organization</th>
<th>Crash-Related Data System Owner</th>
<th>Crash-Related Data System User</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal Highway Administration (FHWA)</td>
<td>SAFETYNET, MCMIS</td>
<td>SIMS, FARS</td>
</tr>
<tr>
<td>Federal Motor Carrier Safety Administration (FMCSA)</td>
<td>SAFETYNET, MCMIS</td>
<td>SIMS, FARS</td>
</tr>
<tr>
<td>Governor’s Traffic Safety Committee (GTSC)</td>
<td>Final Crash Database</td>
<td>SAFETYNET, AIS, FARS</td>
</tr>
<tr>
<td>Institute for Traffic Safety Management and Research (ITSMR)</td>
<td>NYCDOT Fatality Database NYCDOT Crash Database NYCDOT Traffic Safety Data Viewer</td>
<td>SIMS, ALIS, AIS</td>
</tr>
<tr>
<td>National Highway Traffic Safety Administration (NHTSA)</td>
<td>Fatal Accident Reporting System (FARS)</td>
<td>FARS, AIS</td>
</tr>
<tr>
<td>New York City Department of Transportation (NYC DOT)</td>
<td>NYCDOT Fatality Database NYCDOT Crash Database NYCDOT Traffic Safety Data Viewer</td>
<td>SIMS, ALIS, AIS</td>
</tr>
<tr>
<td>New York City Police Department (NYPD)</td>
<td>Safety Information Management System (SIMS) SAFETYNET Accident Location Information System (ALIS)</td>
<td>SIMS, SAFETYNET, ALIS</td>
</tr>
<tr>
<td>New York State Association of Chiefs of Police</td>
<td>TraCS</td>
<td></td>
</tr>
<tr>
<td>New York State Department of Transportation (DOT)</td>
<td>Crash Outcome Data Evaluation System (CODES)</td>
<td>CODES</td>
</tr>
<tr>
<td>New York State Department of Motor Vehicles (DMV)</td>
<td>Accident Information System (AIS)</td>
<td>AIS, ALIS, FARS</td>
</tr>
<tr>
<td>New York State Division of State Police (DSP)</td>
<td>Traffic and Criminal Software (TraCS)</td>
<td>TraCS</td>
</tr>
<tr>
<td>New York State Sheriffs’ Association</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New York State Thruway Authority</td>
<td>ARMS</td>
<td>ARMS, ALIS</td>
</tr>
</tbody>
</table>

1: New York City agencies, while listed, may not be as active stakeholders as the others listed in this project.

3.2 Business Opportunity

There is an opportunity to create a reliable, consistent, and timely dataset for all crash data consumers, which will support the various analysis applications used by staff in the different entities and provide the ability to add additional functionality such as revenue generation over time.
The integration of these various crash systems should improve the accuracy, completeness, and uniformity of the crash data, as well as making it more accessible to users.

By collectively utilizing NY State resources it will be possible to become more effective in State traffic safety programs, eliminating issues that have persisted for years and significantly reduce costs related to maintenance of multiple systems.

NYSDOT, on behalf of the multi-agency project team, is seeking information from interested vendors regarding the feasibility of integrating crash data generation and use within New York State, to the betterment of all involved stakeholders.

NYSDOT is also seeking general information about current products and services readily available regarding possible ways and means to integrate crash data generation and use.

3.3 Expected Capabilities and Characteristics
Consistent with the project vision, the following have been identified as key functionalities. Additional details are included in Attachment 1 – Concept of Operations Report.

3.3.1 System Integration/Data Management
- Single crash case record including data from all applicable sources (motorist, police, DMV, DOT, DOH, Hospital, EMS, Coroner, payors)
- Accurate identification of all crash locations (State and local highways, rural roads, entire street network)
- Ability to integrate road, traffic and crash data via LRS (NYS Enterprise Linear Referencing System)
- Ability to integrate with or include a geographic information system (GIS)
- Enable real-time updates of the information sources

3.3.2 Data Analysis and Summarization
- Calculation of Crash Metrics such as crash frequencies and rates
- Ability to analyze data and display analysis results via GIS mapping
- Statistical Analysis and Summaries
- Ability to identify crash contributing violations
- Ability to assist the user in appropriate selection of predefined countermeasures
- Ability to estimate cost-effectiveness of safety countermeasure
- Ability to analyze benefit-cost ratio, net-present value
- Priority Ranking based on locations with worst crash metric and/or best economic metric

3.3.3 Data Queries and Reporting
- Ability to aggregate and drill down data
- Structured Query Language Capabilities including pre-built “Toolboxes” and manual “Command-Line” option
- Graphical User-Interface
- Cross-Tabulation capability
4. RFI RESPONSE INSTRUCTIONS

4.1 Administrative Guidance for Respondents

4.1.1 Registering Interest
Interested Entities are encouraged to submit a written expression of interest via email to the Issuing Officer prior to the deadline for submission of questions. Submitted questions and the answers to those questions will be publicly posted and emailed to vendors.

4.1.2 Respondent Questions
All inquiries concerning this RFI should be submitted via e-mail. Questions and answers to all questions will be compiled, publicly posted and shared with all vendors that have either submitted questions or registered their interest in the RFI.

4.1.3 Incurring Costs
NYSDOT is not liable for any costs incurred by respondents in the preparation and production of a response to this RFI.

4.1.4 Response Requirements
The NYSDOT prefers that responses be returned in electronic format but will accept paper submissions. The NYSDOT can accept a variety of electronic formats including MS-Word, MS-Excel, MS-PowerPoint, Portable Document Format (.pdf) files or other industry standard file types.

The response should include a cover letter on company letterhead, characterizing your interest, background and reply to the response request information specified in Section 3.2 NYSDOT prefers to limit the main response body to a dozen pages or less. NYSDOT will accept up to two dozen total pages (to grant additional flexibility).

4.1.5 Interviews
The NYSDOT may, at its discretion, invite interested entities to visit its Main Offices, 50 Wolf Road, Albany, New York, for further facilitated discussions.

Note: This IS NOT a Request for Proposals.

4.2 Issuing Office
US Mail:
Mr. William A. Howe, Director
New York State Department of Transportation
Contracts Management Bureau
50 Wolf Road 6th Floor
Albany, NY 12232
Attention: Mr. Al Hasenkopf SDIS2013RFI
Respondents who mail their “Expression of Interest” are requested to provide an electronic copy in MS Word or PDF Format. These formats are also required for E-mail submissions.

4.3 RFI Deadline

NYSDOT requests delivery of any RFI responses, **no later than COB, July 26 2013** (via e-mail to: alfred.hasenkopf@dot.ny.gov) to further progress its safety data integration project.

4.4 RFI Response Clarifications

The Department may seek additional information (clarifying or otherwise) following the receipt and consideration of RFI Responses. This may be through phone discussions, meetings or correspondence, and may be with an individual respondent, a subset of respondents, or all respondents.

NOTE: All responses to this RFI become the property of NYSDOT. NYSDOT will protect confidential and proprietary information from disclosure to the extent permitted by the Freedom of Information Law (“FOIL”), Article 6 of the Public Officers Law. If a respondent believes information included in their response is confidential and proprietary, they should identify those page(s) of their proposal which contain such information as “confidential and proprietary”. Additionally, respondents need to explain the reason(s) why this information should be considered exempt from public disclosure under FOIL.

4.5 ATTACHMENT 1 – CONCEPT OF OPERATIONS REPORT

Posted to NYSDOT’s website as a separate file named: ‘Concept of Operations Report_Final’
4.6 Response Request

Please complete the following “Company Profile” table:

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Location of Division serving New York State</th>
<th>Headquarters Location</th>
<th>URL of Company Web Site</th>
<th>Contact Name</th>
<th>Contact Title</th>
<th>Contact Email Address</th>
<th>Contact Phone Number</th>
<th>Number of Years of experience in this service offering</th>
<th>Business Size – Annual Revenue</th>
<th>Primary Type of Service(s) Provided</th>
</tr>
</thead>
</table>

Please provide information regarding the following questions:

1. Have you delivered traffic safety/crash analysis services to any public sector jurisdictions? If so, please identify those entities and describe the services provided.
   **Response:** << Insert your response here >>

2. What would you recommend as a phased approach to transitioning from the current state to the future state? How could the State leverage existing data sources and systems in your approach?
   **Response:** << Insert your response here >>

3. Given the currently available technology what architectures are available to support the project’s vision in a cost effective (best value) manner?
   **Response:** << Insert your response here >>
4. From your past experiences, what concerns, issues or roadblocks could cause NYS to fall short of its intended goals? How have you overcome these types of issues and/or roadblocks in the past?
   Response: << Insert your response here >>

5. Do you offer readily available commercial off-the-shelf software (COTS) solution(s) that could be procured via a future procurement request to help NYSDOT’s vision for this project? If so, provide a high level description of your COTS?
   Response: << Insert your response here >>

6. If COTS solutions are not available or feasible, at a conceptual level, would development of a custom solution be feasible and/or affordable? NYS envisions a staged approach with frequent discrete deliverables. What would you recommend as the major deliverables? Provide ballpark/very high level cost estimates for the deliverables.
   Response: << Insert your response here >>

7. What would limit your interest in participating in this project?
   Response: << Insert your response here >>

8. Do you have any other comments or suggestions that you feel would assist in the success of this project?
   Response: << Insert your response here >>

This is NOT a Request for Proposal (RFP).

Please e-mail all questions regarding this RFI to: alfred.hasenkopf@dot.ny.gov

Thank you.