NM Department of Transportation (NMDOT)

Traffic Monitor System

Initiation

Executive Sponsors: Tom Church, Cabinet Secretary
Tamara Haas P.E., Director Asset Management and Planning Division

Business Owners: Yolanda Duran, NMDOT Data Management Bureau
Business Project Manager: Sean Noonen, Traffic Monitoring
IT Project Manager: Joann Girard, Business Support

Project Initiation
July 27, 2016
Project Background

• Traffic monitoring is performed to collect data that describes the use and performance of the roadway system.

• Traffic data from the State is required to meet reporting requirements of the Federal Highway Administration (FHWA) under United States Code of Federal Regulations (CFR) title 23, 420.105(b), which requires the State to provide data that supports FHWA’s reporting responsibilities to Congress and to the public.

• Traffic data reported under this Federal regulation is submitted as part of the annual Highway Performance Monitoring System (HPMS) report from each State.
Project Goals & Funding

- **Project Goals**
  - A more user-friendly design for database data import, query and reporting
  - New updated system that replaces obsolete system
  - Real Time Data

- **Funding**
  - Funding Source FHWA AWP HSIP
  - Federal Fiscal Year 2016
  - Total Funding: $322,000
Business Problems

• Current system is relatively inaccessible to NMDOT’s staff
• Supporting requests for data exports, summary tabulation must go through NMDOT’s IT Division or outside vendor for support.
• Current system does not link to other department databases such as pavement or bridge
• Current System is no longer supported
  • Current system runs on Windows XP
  • Vendor is no longer in business
  • Unable to adjust current program source code to address new Federal traffic data requirements, requiring additional data and report processing outside of program.
    • Increases time to generate standard and ad-hoc reporting
    • Increases opportunity for errors and rework
Business Opportunity

• New Traffic Monitoring Database System meets FHWA Fixing America’s Surface Transportation Act (FAST Act) requirements

• Able to create data linkage with Asset data requirements such as Pavement, Bridge, Crash, Traffic Monitoring Data, Roadway Inventory Assets, Maintenance Management System, FMIS, and HSIP

• A more user-friendly design for database data import, query and reporting

• Streamlined business processes for ad-hoc and annual reporting
  • Will generate HPMS-relevant statistics and create submittals for FHWA Travel Monitoring Analysis System (TMAS).
  • Fully support current FHWA and HPMS traffic data requirements
Cost Savings

• Lower government service costs due to more efficient work flows and more accurate business processes, tracking, data entry, auditing, and reporting of information

• Utilization of a much more familiar, user-friendly software interface will greatly reduce staff training, time and costs

• Reduced staff time due to increased efficiency and productivity by utilizing a single, state-wide, well implemented linear reference system
Project Initiation Request

• Request for Approval of $100,000.00
• Amount covers software license to instantiate environments, initial discovery and IV&V costs
## Project Phases and Deliverables

<table>
<thead>
<tr>
<th>Major Project Deliverable and Performance Measure</th>
<th>Budget</th>
<th>Est. Due Date</th>
<th>Project Phase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent Validation &amp; Verification (IV&amp;V)</td>
<td>$36,000</td>
<td>August 2016</td>
<td>Initiation – Close</td>
</tr>
<tr>
<td>Discovery</td>
<td>$0</td>
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<td>Initiation</td>
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<tr>
<td>Software License</td>
<td>$100,000</td>
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<td>Initiation</td>
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<tr>
<td>Finalize Project Management Plan &amp; Requirements</td>
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<td>August 2016</td>
<td>Planning</td>
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<td>Legacy Data Migration From Old System</td>
<td>$50,000</td>
<td>December 2016</td>
<td>Implementation</td>
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<tr>
<td>System Configuration &amp; Customization</td>
<td>$48,000</td>
<td>January 2017</td>
<td>Implementation</td>
</tr>
<tr>
<td>Train NMDOT personnel on the use and operation of the new software</td>
<td>$28,000</td>
<td>January 2017</td>
<td>Implementation</td>
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<td>Annual Hosting and Support</td>
<td>$60,000</td>
<td>February 2017</td>
<td>Close</td>
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<tr>
<td><strong>Total:</strong></td>
<td><strong>$322,000</strong></td>
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Traffic Monitor System Initiation

Questions?