Statewide - Highway Data Equipment Acquisition and Installation

FY2014 Request: $2,000,000
Reference No: 36196

AP/AL: Allocation
Category: Transportation
Location: Statewide

Project Type: Equipment / Commodities

Impact House District: Statewide (HD 1-40)
Estimated Project Dates: 07/01/2013 - 06/30/2020
Appropriation: Surface Transportation Program

Brief Summary and Statement of Need:
Design, construct or rehabilitate traffic data collection sites and develop software for the state's federally required Traffic Monitoring System for Highways (TMS/H). This project includes purchase of items such as: traffic data counters; cameras; computers; software for in office data retrieval; program evaluations; and, IT needs for data collection, communications, and software.

Funding:

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<tr>
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<th>FY2014</th>
<th>FY2015</th>
<th>FY2016</th>
<th>FY2017</th>
<th>FY2018</th>
<th>FY2019</th>
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<tbody>
<tr>
<td>Fed Rcnpts</td>
<td>$2,000,000</td>
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<td>$2,000,000</td>
<td>$12,000,000</td>
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Total: $2,000,000 $2,000,000 $2,000,000 $2,000,000 $2,000,000 $2,000,000 $12,000,000

State Match Required
One-Time Project
Phased - new
Phased - underway
Amendment
Mental Health Bill
9% = Minimum State Match % Required
On-Going

Operating & Maintenance Costs:

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<tr>
<th></th>
<th>Amount</th>
<th>Staff</th>
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<tr>
<td>Project Development:</td>
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<td>Ongoing Operating:</td>
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<td>One-Time Startup:</td>
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<td>Totals:</td>
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Prior Funding History / Additional Information:
Sec1 Ch17 SLA2012 P148 L31 SB160 $2,000,000
Sec1 Ch5 SLA2011 P116 L6 SB46 $1,500,000
Sec7 Ch43 SLA2010 P52 L4 SB230 $2,000,000
Sec1 Ch15 SLA2009 P35 L12 SB75 $1,200,000
Sec4 Ch30 SLA2007 P115 L29 SB53 $1,200,000

Project Description/Justification:
The Alaska Department of Transportation and Public Facilities' (DOT&PF) Division of Program Development is responsible for collecting, archiving and distributing accurate vehicle volume, classification and speed data (http://www.dot.alaska.gov/stwdplng/transdata/traffic.shtml). These data are used to meet Federal Highway Administration (FHWA) specifications in CFR23 to provide highway use data for: apportionment of federal-aid funds, bridge, pavement and road design; congestion management; FHWA annual reporting requirements (http://www.dot.alaska.gov/stwdplng/transdata/traffic_hmps_wim.shtml); and other issues as they relate to transportation and commerce. The purpose of this project is to replace or upgrade traffic recorder equipment for continuous and short term traffic counts. Also included are continuations of upgrading permanent volume sites to vehicle classification (VC) sites. The new systems will determine vehicle types (i.e., car, truck) and speed in addition to counting the number vehicles. There are over 100 continuous traffic counting sites. In the last three years, over 30 sites with a total
of more than 85 lanes were upgraded to collect VC data. Over 225 counters were purchased in the last three years for completing short term counts. In addition, 65 modems were replaced at permanent sites. Ten to fifteen sites will be upgraded or rehabilitated in the next two years depending on location and number of lanes. This project also includes the addition or replacement of temperature probes. A portion of the funds will be used to purchase or lease vendor specific software or develop software to retrieve and process data (i.e. quality control) to include the data in the state’s legacy Highway Analysis System Traffic Data System (HAS/TDS) mainframe. A portion of the funds will be used to determine and acquire a replacement for mainframe system which will meet current reporting requirements such as reporting data by lane in addition to direction.

The purpose of the Traffic Data System (TDS) program is to provide vehicle volume, vehicle classification, and speed data to the states TMS/H collected at various road locations. (Truck weight (Weigh-in-Motion (WIM)) data is included under the WIM equipment project.).

Specific information technology activities include system configuration, hardware/software maintenance, system/database administration, application development, research and development and project management.

The department intends to outsource the following segments of this project:
• Complete a review of best business practices (data retrieval, archiving (raw data), processing and storage with a web interface) and develop a business plan for the traffic data system database. In progress at this time.
• Documentation of legacy Highway Analysis System Traffic Data System mainframe system. Documentation of new requirements and associated business rules and develop new system requirements to purchase of replacement for HAS/TDS.