

Statewide - Highway Data Equipment Acquisition and Installation

FY2012 Request: \$1,500,000
Reference No: 36196

AP/AL: Allocation

Project Type: Equipment / Commodities

Category: Transportation

Location: Statewide

House District: Statewide (HD 1-40)

Impact House District: Statewide (HD 1-40)

Contact: Frank Richards

Estimated Project Dates: 07/01/2011 - 06/30/2018

Contact Phone: (904)665-3900

Appropriation: Surface Transportation Program

Brief Summary and Statement of Need:

Purchase of equipment, software and installation of traffic detection devices (inductance loops and piezoelectric sensors) and to implement requirements of the State Traffic Monitoring System for Highway. This project contributes to the Department's Mission by reducing injuries, fatalities and property damage and by improving the mobility of people and goods.

Funding:	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	Total
Fed Rcpts	\$1,500,000						\$1,500,000
Total:	\$1,500,000	\$0	\$0	\$0	\$0	\$0	\$1,500,000

<input type="checkbox"/> State Match Required	<input type="checkbox"/> One-Time Project	<input type="checkbox"/> Phased - new	<input type="checkbox"/> Phased - underway	<input checked="" type="checkbox"/> On-Going
0% = Minimum State Match % Required		<input type="checkbox"/> Amendment	<input type="checkbox"/> Mental Health Bill	

Operating & Maintenance Costs:

	<u>Amount</u>	<u>Staff</u>
Project Development:	0	0
Ongoing Operating:	0	0
One-Time Startup:	0	
Totals:	0	0

Additional Information / Prior Funding History:

\$2,000,000 - Ch 43 SLA 2010 Sec 7 pg 52 ln 4; \$1,200,000 - Ch 15 SLA 2009 Sec 1 pg 35 ln 12; \$1,200,000 - Ch 30 SLA 2007 Sec 4 pg 115 ln 29; \$900,000 - Ch 82 SLA 2006 Sec 1 pg 100 ln 28; \$900,000 - Ch 3 FSSLA 2005 Sec 1 pg 83 ln 20; \$900,000 - Ch 159 SLA 2004 Sec 1 pg 46 ln 28; \$900,000 - Ch 82 SLA 2003 Sec 1 pg 52 ln 19.

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_hpms_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

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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.