Statewide - Weigh-in-Motion Equipment

FY2013 Request: Reference No:

\$1,000,000 40311

AP/AL: Allocation **Project Type:** Construction

Category: Transportation

Location: Statewide House District: Statewide (HD 1-40)

Impact House District: Statewide (HD 1-40) Contact: Pat Kemp

Estimated Project Dates: 07/01/2012 - 06/30/2019 **Contact Phone:** (907)465-3900

Appropriation: Surface Transportation Program

Brief Summary and Statement of Need:

The project includes purchase and installation of Weigh-in-Motion (WIM) systems. This project includes WIM data retrieval, archiving and processing software and web access and database development. Currently there are nine operational WIM sites (see WIM Table 1 on the next page), all located on the National Highway System. The WIM sites provide near real time secondary weight enforcement data and vehicle volume/classification, speed and truck weights data for planning.

| Funding: | FY2013 | FY2014 | FY2015 | FY2016 | FY2017 | FY2018 | Total |
|-----------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Fed Rcpts | \$1,000,000 | \$1,000,000 | \$1,000,000 | \$1,000,000 | \$1,000,000 | \$1,000,000 | \$6,000,000 |
| Total: | \$1,000,000 | \$1,000,000 | \$1,000,000 | \$1,000,000 | \$1,000,000 | \$1,000,000 | \$6,000,000 |

| ✓ State Match Required ☐ One-Time Project | ☐ Phased - new | □ Phased - underway ✓ On-Goir | ng |
|---|----------------|-------------------------------|----|
| 9% = Minimum State Match % Required | ☐ Amendment | Mental Health Bill | |

Operating & Maintenance Costs:

| | Amount | Staff |
|----------------------|--------|-------|
| Project Development: | 0 | 0 |
| Ongoing Operating: | 0 | 0 |
| One-Time Startup: | 0 | |
| Totals: | 0 | 0 |

Additional Information / Prior Funding History:

\$2,000,000 - Ch 5 FSSLA 2011 Sec 1 Pg 116 Ln 30; \$3,500,000 - Ch 43 SLA 2010 Sec 7 pg 53 ln 4; \$750,000 - Ch 15 SLA 2009 Sec 1 pg 36 ln 9; \$750,000 - Ch 29 SLA 2008 Sec 13 pg 172 ln 8; \$1,000,000 - Ch 30 SLA 2007 Sec 4 pg 116 ln 27; \$850,000 - Ch 82 SLA 2006 Sec 1 pg 101 ln 29; 1,100,000 - Ch 3 FSSLA 2005 Sec 1 pg 84 ln 23.

Project Description/Justification:

This project is necessary to complete the goals outlined in the State's Truck Weight Monitoring Plan (pdf copies are available on request) for installation of Weigh-in-Motion (WIM) systems. Over the next two years two WIM system sites will be rehabilitated. Also, a portion of the funds will be used to address software and communication issues to allow viewing the WIM data via the web in near real time.

Weigh-in-Motion (WIM) equipment systems are designed to collect truck weight data using inroadway detection and may include other Intelligent Transportation System (ITS) equipment such as cameras and automatic vehicle identification. The purpose of the WIM program is to meet per vehicle truck weight data reporting requirement of the states Traffic Monitoring System for Highways (TMS/H) program. THS/H provides vehicle volume, vehicle classification, speed, and truck weight (WIM) data collected at various road locations. The WIM data is processed and stored in Traffic Weight Data Warehouse from which the various extracts are generated and used to meet:

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- Federal Highway Administration (FHWA) specifications in CFR23 to provide highway use data (Highway Performance Monitoring System (HPMS));
- Apportionment of Federal-aid funds; bridge, pavement and road design;
- Secondary weight enforcement and trucking regulations;
- Safety and congestion management; and
- Other issues as they relate to transportation and commerce.

Specific Information Technology (IT) activities include system configuration, hardware/software maintenance, system/database administration, application development, web services, research and development and project management. The state intends to outsource some of these activities.

The goal of this project is to provide near real time secondary truck data to the Division of Measurement Standards and Commercial Vehicle Enforcement (MSCVE), and information for annual Highway Performance Monitoring System reports used for apportionment of Federal-aid funds without increasing the number of staff by using better IT methods.

| | Alaska WIM Sites and Location | | | | |
|-------------------------|---|-----------------------------------|------------|---------|--|
| Site Name | Site Description | Functional | Data | Data To | |
| | | Classification | From | | |
| Sterling Hwy | Sterling Hwy at Soldotna | Rural Interstate | 2011-01-01 | Current | |
| New Seward Hwy | New Seward Hwy between 76th Ave & Dimond Blvd | Urban Interstate | 2003-07-28 | Current | |
| Tudor Rd | Tudor Rd between Patterson St & Kingston Rd | Urban Other Principal Arterial | 2003-09-30 | Current | |
| Minnesota Dr | Minnesota Dr between Strawberry Rd & Dimond Blvd exits | Urban Other Principal Arterial | 2002-12-31 | Current | |
| Port of Anchorage | Ocean Dock Rd between RR tracks & Bluff Rd | Urban Other Principal Arterial | 2003-01-01 | Current | |
| Glenn Hwy Scalehouse | Glenn Hwy NB, 0.5 miles south of NB Scalehouse entrance | Urban Interstate | 2005-09-07 | Current | |
| Glenn Hwy - Palmer | Glenn Hwy North of Palmer | Rural Interstate | 2011-01-01 | Current | |
| Steese Hwy (FOX) | Steese Hwy between Goldstream Rd & Elliott Hwy | Rural Other Principal Arterial | 2005-08-29 | Current | |
| Alaska Hwy (TOK) | Alaska Hwy at Milepost 1310 | Rural Interstate | 2005-09-07 | Current | |

This project contributes to the Department's Mission by reducing injuries, fatalities and property damage and by improving the mobility of people and goods.