

**Statewide: Weigh-in-Motion Equipment**

**FY2012 Request: \$2,000,000**

**Reference No: 40311**

**AP/AL:** Allocation

**Project Type:** Construction

**Category:** Transportation

**Location:** Statewide

**Contact:** Frank Richards

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

**Contact Phone:** (907)465-3900

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

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

| <b>Funding:</b> | FY2012             | FY2013             | FY2014             | FY2015             | FY2016             | FY2017             | Total               |
|-----------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|
| Fed Rcpts       | \$2,000,000        | \$1,700,000        | \$1,700,000        | \$1,700,000        | \$1,700,000        | \$1,700,000        | \$10,500,000        |
| <b>Total:</b>   | <b>\$2,000,000</b> | <b>\$1,700,000</b> | <b>\$1,700,000</b> | <b>\$1,700,000</b> | <b>\$1,700,000</b> | <b>\$1,700,000</b> | <b>\$10,500,000</b> |

|  |   |                                       |   |  |
|--|---|---------------------------------------|---|--|
| <input checked="" 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 |
| 9% = 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            |
| <u>One-Time Startup:</u> | 0             |              |
| <b>Totals:</b>           | <b>0</b>      | <b>0</b>     |

**Additional Information / Prior Funding History:**

\$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 in-roadway 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:

- 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 ([http://www.dot.alaska.gov/stwdplng/transdata/traffic\\_hpms\\_wim.shtml](http://www.dot.alaska.gov/stwdplng/transdata/traffic_hpms_wim.shtml)) used for apportionment of Federal-aid funds without increasing the number of staff by using better IT methods.

| <b>Table 1 WIM Sites and Locations</b>    |  |                  |                |
|---|--|------------------|----------------|
| <b>SITE NAME</b>                          | <b>DESCRIPTION</b>   | <b>Data From</b> | <b>Data To</b> |
| <b>Minnesota Drive</b>                    | Minnesota Drive between Strawberry Rd. & Dimond Blvd Exits.                  | 12/31/2002       | Current        |
| <b>Port Access</b>                        | Ocean Dock Road between RR Tracks & Bluff Rd.                                | 1/1/2003         | Current        |
| <b>New Seward Hwy @ 76th</b>              | New Seward Hwy between 76th Ave. & Dimond Blvd.                              | 7/28/2003        | Current        |
| <b>Tudor Road</b>                         | Tudor Road between Patterson St. & Kingston Rd.                              | 9/30/2003        | Current        |
| <b>Glenn Hwy @ Scalehouse</b>             | Glenn Hwy northbound lane, approx 0.5 miles south of NB Scalehouse entrance. | 9/7/2005         | Current        |
| <b>Steese Hwy @ Steese Tailings (Fox)</b> | Steese Hwy between Goldstream Rd. & Elliott Hwy.                             | 8/29/2005        | Current        |
| <b>Alaska Hwy @ Milepost 1310 (Tok)</b>   | Alaska Hwy at Milepost 1310 or 0.6 miles west of Tok River crossing.         | 9/7/2005         | Current        |
| <b>Sterling Hwy</b>                       | Sterling Hwy at Soldotna   | 9/2010           | Current        |
| <b>Glenn Hwy - Palmer</b>                 | Glenn Hwy north of Palmer  | 9/2010           | Current        |

Source: WIM Dataport 11/30/2010