Using FMCSA’s CVISN Grants to Deploy ITS for Truck Parking

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Outline

- US Department of Transportation (DOT) Background
- Costs
- Using Expanded CVISN to Deploy SmartPark
- Contact Information
Introduction to FMCSA

- FMCSA’s mission is... *to reduce the number of crashes, injuries, and fatalities involving large trucks and buses*
- FMCSA is 1 of 10 Operating Administrations within the U.S. Department of Transportation (DOT)
- FMCSA is 1 of 3 DOT agencies focused on improving highway safety
- FMCSA and FHWA are the 2 DOT agencies involved with truck parking
FMCSA and FHWA: Roles in Truck Parking

- **FMCSA’s role**
  - Conduct research on providing real-time information on parking using Intelligent Transportation Systems (ITS), namely SmartPark Phases I and 2
  - Administer Commercial Vehicle Information Systems & Networks (CVISN) grants to States deploying ITS for truck parking

- **FHWA’s role**
  - Administer capital grants to States for truck parking
  - Execute a truck parking capacity survey (Jason’s Law)
  - Provide technical assistance & education to advance freight technology & operations (including truck parking)
Scope

FMCSA’s SmartPark Research Initiative
- Responds to National Transportation Safety Board’s (NTSB) Recommendation H-00-19 to provide a guide for truckers for parking availability
- Is a research and technology demonstration effort in conjunction with the State of Tennessee
- Is not intended to compete with
  - Other ITS truck parking projects funded under SAFETEA-LU § 1305
  - Private sector efforts

FMCSA’s CVISN Grants
- States may apply for an Expanded CVISN Grant to deploy any reasonable ITS technology for truck parking
  - States are not restricted to deploying the same technology as in FMCSA’s SmartPark
Costs
# Capital Costs to Deploy ITS for Truck Parking

<table>
<thead>
<tr>
<th>Component</th>
<th># Units</th>
<th>Unit Cost</th>
<th>Subtotal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detector/Sensor</td>
<td>2</td>
<td>$50,000</td>
<td>$100,000</td>
</tr>
<tr>
<td>CCTV Cameras</td>
<td>5</td>
<td>$10,000</td>
<td>$50,000</td>
</tr>
<tr>
<td>Communications</td>
<td>2500</td>
<td>$20</td>
<td>$50,000</td>
</tr>
<tr>
<td>(fiber optics for Wide Area Network)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dynamic Message Signs</td>
<td>2</td>
<td>$50,000</td>
<td>$100,000</td>
</tr>
<tr>
<td>Integration</td>
<td>1</td>
<td>$30,000</td>
<td>$30,000</td>
</tr>
<tr>
<td>Network Equipment</td>
<td>10</td>
<td>$2,000</td>
<td>$20,000</td>
</tr>
<tr>
<td>Signage</td>
<td>8</td>
<td>$2,000</td>
<td>$16,000</td>
</tr>
<tr>
<td>Utilities</td>
<td>1</td>
<td>$25,000</td>
<td>$25,000</td>
</tr>
<tr>
<td>Integration</td>
<td>1</td>
<td>$30,000</td>
<td>$30,000</td>
</tr>
<tr>
<td><strong>Grand Total:</strong></td>
<td></td>
<td></td>
<td><strong>$391,000</strong></td>
</tr>
</tbody>
</table>
## Operations & Maintenance Costs of ITS for Truck Parking

<table>
<thead>
<tr>
<th>Component</th>
<th>Monthly Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communications (fiber optics for Wide Area Network)</td>
<td>$1,000</td>
</tr>
<tr>
<td>Operational Support (calibration)</td>
<td>$1,500</td>
</tr>
<tr>
<td>Preventative Maintenance</td>
<td>$2,000</td>
</tr>
<tr>
<td>Software Maintenance/Licensing</td>
<td>$1,000</td>
</tr>
<tr>
<td><strong>Grand Total:</strong></td>
<td><strong>$5,500</strong></td>
</tr>
</tbody>
</table>
Grants to Deploy ITS for Truck Parking

- FHWA grants to States for truck parking
  - SAFETEA-LU §1305 Truck Parking Grant Program (expired but formerly awarded grants still in place)
  - Highway Safety Improvement Program (HSIP)
  - National Highway Performance Program (NHPP)
  - Surface Transportation Program (STP)

- FMCSA grants to States for truck parking
  - Expanded Commercial Vehicle Information Systems and Networks (also known as Expanded CVISN) grants
Federal Grant Match Requirements

- FHWA HSIP, NHPP, & STP Grants to States
  - 80% Federal match
  - 20% State match

- FMCSA CVISN Grants to States
  - 50% Federal match
  - 50% State match
Using Expanded CVISN to Deploy SmartPark
CVISN Deployment Program Overview

The CVISN Grant Program is FMCSA’s ITS grant program designed to:

- Improve safety and productivity of motor carriers, commercial vehicles and their drivers
- Improve efficiency and effectiveness of commercial vehicle safety programs through targeted enforcement
- Improve commercial vehicle data sharing within states and between states and FMCSA
- Reduce Federal/State and industry regulatory and administrative costs
Core CVISN

- A State must be certified as Core CVISN compliant before receiving an Expanded CVISN Grant, which can be used to deploy ITS for truck parking

- A Core CVISN compliant State has three primary capabilities
  - To exchange safety information on commercial vehicles and carriers with other States
  - To administer credentials (e.g., oversize/overweight, HazMat, International Registration Plan, International Agreement)
  - To perform electronic screening of commercial vehicles
After being certified as Core CVISN Compliant, a State may apply for an Expanded CVISN Grant to deploy ITS for truck parking.

At FMCSA’s discretion, a State may apply for an Expanded CVISN Grant to deploy other ITS / Commercial Vehicle Operations (ITS/CVO) projects:

- e.g., trucker 511 systems
Types of Expanded CVISN Grants

1. Expanded CVISN Program Plan (PP) / Top Level Design (TLD) grants
   a) Planning for deployment of ITS for truck parking for a single or a few rest stops or for a corridor or network of rest stops

2. Expanded CVISN Deployment grants
   a) Capital costs of deploying ITS for truck parking

3. Expanded CVISN Maintenance grants
   a) Operations & maintenance costs of deploying ITS for truck parking
Funding & Eligibility

- The **maximum** amount a State may receive for an Expanded CVISN Grant in any fiscal year: $1 million
- Eligible awardees for CVISN funding are State agencies (including District of Columbia & U.S. territories) designated as the lead agency in the State’s CVISN Program Plan / Top-Level Design
- Individuals and businesses are not eligible
- FY 2016 Notice of Funding Availability in December
CVISN Deployment Status

Deploying Expanded CVISN Functionality (33 States)

Deploying Core CVISN Functionality (17 States plus DC)

September 2014
Contact Information

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