



INDOT to Help Truckers Find Parking Spaces

(Posted May 26, 2016) For many truck drivers, the worst part of their job is not knowing specific information, such as whether there are enough parking spaces at the next interstate rest area or weigh station. Without such information, some truckers will park alongside nearby highways or ramps.



The signs, which will be designed to look like this prototype, will alert truckers to the number of spaces available at multiple parking areas coming up on the interstate.

A new Truck Parking Information and Management System (TPIMS) aims to fix that problem. The TPIMS project will track the number of available parking spaces available at upcoming rest areas and weigh stations and inform truckers of parking availability via interstate signs.

The TPIMS features automated sensors that monitor select truck parking sites to track where open spaces exist in real time. The sensors will be calibrated according to how many spaces exist in each lot, and then they will count the number of trucks that enter to park and exit. The number of open spaces will be automatically calculated and displayed on Dynamic Message

Signs (DMS) along the interstate, overseen by INDOT's Traffic Management Center (TMC).

INDOT and seven other state departments of transportation are partnering in the TPIMS project through a \$25 million TIGER grant from the Federal Highway Administration (FHWA).

"We received around \$4.15 million as our portion in the project, and a state 12.7 percent match of about \$600,000 makes the total project fund \$4.75 million," said INDOT Freight Policy Analyst Donna Luley. "We have identified the 17 sites, and construction starts summer 2017. Some will be completed by late summer 2017, with all sites finished by August 2018."

Construction includes the installation of sensor equipment and DMS:

- The sensor equipment features magnetometers, which are in-ground, wireless pucks at the entrances and exits of the parking lot. The system would be recalibrated once a day, and the information would be automatically updated to the system every 15 minutes to appear on DMS.

- DMS would be installed approximately 15 miles before the truck parking area and would include not only the amount of parking spaces for the closest parking area, but also for the one or two parking areas after that.

“Since this is an eight-state effort of Midwest states, signs near state borders would include parking spaces available at the closest parking area in that neighboring state,” said Luley.

The 17 confirmed Indiana sites include two weigh stations and 15 rest areas on I-65 and I-70. To view a list of the sites, click [here](#).

“These amount to nearly 1,100 parking spaces,” said Luley. “This is vitally important for truckers.”

In a survey of 4,000 truck drivers conducted by an Illinois consulting firm, 95 percent said they spend more than 15 minutes to find parking for mandatory resting periods. Nearly 40 percent search for longer than an hour. Additionally, there is danger for truckers who are forced to park in locations other than rest areas or weigh stations. In 2009, a trucker was killed in South Carolina while resting at an abandoned gas station. That incident propelled Jason’s Law, a national law passed by Congress in 2012 that prioritizes funding to address the shortage of parking for commercial vehicles on national highways and requires the U.S. Department of Transportation to conduct a survey of the availability of parking facilities within each state to make sure there are enough.

Preliminary design engineering, which consists of 30 percent of the design of the Intelligent Transportation Systems (ITS) infrastructure, will be completed for the TPIMS project by this fall. A request for proposals will take place for the remaining 70 percent of the design; once the final design is approved by INDOT (with oversight by FHWA), construction will follow.

Other elements of the project will eventually include:

- Cameras that oversee the parking areas to aid the TMC and law enforcement
- Added layers to include truck parking times on the TrafficWise mobile app and the [TrafficWise webpage](#)

“The technology deployed at rest stop facilities and on roadside signs will integrate with our current ITS network and software platform and will include a common Application Programming Interface to exchange parking availability information between all parties, both public and private,” said Luley. “In future expansions of the project — which would include all of INDOT’s welcome centers, rest areas and weigh stations — private truck stops could be invited to join the system by their investments into the sign additions and construction expansion.”

Freight Manager Kristin Brier said Luley, as well as the TMC’s Ed Cox and Jim Sturdevant, have been instrumental in the TPIMS project.

“This eight-state project is exciting and especially valuable here because out of the 1.5 billion tons of freight that travels in Indiana, more than 60 percent of that is freight that passes through Indiana from one state to another,” said Brier. “There is a huge need to improve the truck parking situation in our state.”