



Technology and Data Working Group Meeting

November 16, 2017

A recording of this meeting is available upon request.

Welcome and Introduction

FHWA stated that the purpose of the working group is to develop implementation strategies for various technology and data initiatives that are identified through these meetings. These strategies should include actions needed and next steps. The group should take ownership of the solutions and actions necessary to implement the initiatives.

Previously-Identified Working Group Priorities

FHWA provided background on the working groups, including that they derived from opportunity areas that were identified in the 2015-2016 [National Coalition on Truck Parking Activity Report](#). The working groups are focused on parking capacity technology and data; innovative funding options; and State, local, and regional government coordination. This webinar was focused on technology and data. Several innovative ideas for increasing the supply of truck parking by utilizing technology and data were identified:

- Disseminate real-time parking utilization information to maximize use of existing sites.

Some examples of current efforts to use technology to improve truck parking include: California developing an iPark system on the I-5 corridor; Maryland and Virginia's investments in truck parking information systems on the I-95 corridor; and, Florida installing equipment to monitor the State rest areas for truck parking availability.

- Expand use of Variable Message Signs to provide parking locations and utilization.

Example: I-94 projects in Michigan and Minnesota.

- Utilize funding programs for new technology.

Regional truck parking information system being developed in eight Midwestern States, being funded by a Transportation Investment Generating Economic Recovery (TIGER) grant. The Federal Motor Carrier Safety Administration (FMCSA) also has the Smart Park system and is researching truck parking information systems and identifying ways to advance their implementation in the field. FHWA had a grant program under SAFETEA-LU for truck parking, which included truck parking information systems.

- Balance with low-tech signage and new parking capacity.

Make sure the technologies “talk” to each other. Also maintain basic signage; not everything has to be high-tech. Some States are developing basic maps, which can be effective tools.

- Tie parking apps/technology to existing platforms.

The National Association of Truck Stop Operators (NATSO) developed an app called Park My Truck that provides parking utilization at truck stops. Consider using the Waze model to crowdsource information on parking. This could expand to include private and public rest areas.

- Tie parking technology to parking reservations.

Truck parking can be integrated into the trip planning and reservation setup.

- Others?

Technologies related to vehicle-to-infrastructure communication, connecting weather information to truck parking apps, and other new emerging technologies.

New Suggestions for Technologies

FHWA asked the group for any additional ideas they have about ways to make use of technology and data to improve truck parking. The discussion was as follows:

The Dock411 app identifies the shippers and receivers that allow truck parking, and those that don't.

We're working with the Arizona DOT to determine whether the perceived lack of truck parking is really due to a lack of inventory, or a failure to get the information about parking availability out to drivers. We're also looking at the difference in parking availability between rural and urban areas. We're using an app called Trucker Path as the source of information. This effort grew out of the Arizona State Freight Plan. The Arizona Trucking Association is very concerned about the upcoming electronic logging device (ELD) mandate and how that will change the location and demand for truck parking.

It's important to include in these apps whether there are electrified spots available.

Drivers on the call confirmed that they would want to know if a spot is free or reservable and whether a weigh station allows overnight parking.

Something to note is that there has been mixed reception to paying for reservable spots.

Last year, the American Trucking Associations (ATA), the American Transportation Research Institute (ATRI), and the National Association of Truck Stop Owners (NATSO) launched the Park My Truck app. Some truck stops have their own apps, and that information is synced with the Park My Truck app.

Two truck drivers use Trucker Path. That's the most widely used for drivers. Truck Park USA is used in the UK, and some drivers have been testing it in the U.S. That app allows users to add spots to the app, but does not allow a driver to make a note for other users that a spot is full. The apps need to include the Mom and Pop truck parking areas, which are not traditionally included. Drivers noted that after 8pm, truckers almost always need to park at Mom and Pop truck parking areas since the big rest areas will be full.

One truck driver uses Park my Truck, Petro app, Flying Jay, Road Breakers, Dock411, OMP, and OOIDA. I probably use 9 or 10 apps. Sometimes if I can't find a spot through those apps, I call my friends to see if they know of a spot. Part of the reason for using so many apps is that there are gaps in each of them. They address only rural or urban issues. Most of the apps that I use are driver-run. The information depends on what the drivers input.

We are trying to look at truck parking availability near ports.

At the Salt Lake City National Coalition on Truck Parking meeting, we saw a contour map that showed freight leaving the California ports and where they would end up in Utah given the usual detention rates. That was probably one of the most helpful maps of area port areas.

ATA produced that using our truck GPS data.

Maybe we could gather data about when people pull over on the side of the road or ramps because they can't find truck parking.

We'd also like to gather information on the reason for the stop and how long the stop was. We're thinking about starting an effort to gather this.

The conversation needs to center around data standards and APIs rather than building apps ourselves. A role USDOT could play is promoting common standards and platforms for the apps, so they don't compete against each other. There are already certain NCIP standards regarding ITS and I don't think any of them capture what's needed for truck parking facilities. I see this group feeding the information about truck parking demand to the group that will develop, publish, and disseminate those standards.

Priorities identified based on voting results:

1. Disseminate real-time parking utilization information to maximize use of existing sites.
2. Tie parking apps/technology to existing platforms.
3. Collect data about occurrence of parking on the side of the roads, on ramps.
4. Provide contour maps to predict truck parking needs.

Ideas for implementation

1. [Disseminate real-time parking utilization information to maximize use of existing sites](#)
 - The group suggested developing recommended best practices or standards for disseminating information, since it would be challenging to dramatically influence the app market place.
 - Incorporate data from private truck stops on the variable message signs.
 - Maybe modify Type-A insert signs to include truck parking information. This would require coordination with the Manual on Uniform Traffic Control Devices (MUTCD).
 - A lot of the time the data for truck parking at public parking areas is gathered and maintained by the States, and input into their 511 systems. The process for the private parking areas is unclear.

2. Tie parking apps/technology to existing platforms

- One of the standards should be for the information on the apps to be in real-time, so they need to be updated maybe every fifteen minutes. Dock411, Trucker Path, Truck Shippers and Receivers, and Truck Park USA use driver input, which is less up-to-date.

3. Collect data about occurrence of parking on the side of the roads, on ramps

- This initiative can be used to understand the locations where there is a need for additional parking. Truck GPS probe data along with highway patrols and State troopers would probably be good resources for this information.

4. Provide contour maps to predict truck parking needs

- This falls under the umbrella of providing data to the States and MPOs, which might be better suited to the Parking Capacity working group's focus.

Next Steps

- One participant will share any data he has related to goal area 1: Disseminate real-time parking utilization information to maximize use of existing sites.
- One participant will share the data she has from the Jason's Law survey on ports, and the problems drivers have around ports. She also offered the assistance of drivers to any States that are represented on the call.
- FHWA will reach out the Utah DOT (Tom Kearney) about their model.
- FHWA will ask ATA for the information on best practices and standards.
- FHWA will see if he can pull information from the FMCSA study on deployment of smart carrier systems.
- Once the working group gathers this information, the group could develop a report and share it nationally.
- Information on common needs and best practices related to smart truck parking systems could be shared through a webinar. The moderator will coordinate with the Volpe Center staff who run the T3 webinars to gather information about webinars they've already given related to this topic, and she will share that information with the group.
- The next meeting will be the week of January 29, 2018. Read-ahead materials will be provided.