



Investigator



"Ultimately, the resolution of truck parking problems in Wisconsin comes down to good communication and how to effectively facilitate it."

> -Teresa Adams University of Wisconsin-Madison adams@ engr.wisc.edu

Low-Cost Strategies to Increase Truck Parking in Wisconsin

Truck parking has been an issue of great concern in and around Wisconsin metropolitan areas such as Milwaukee and Madison. Problems with parking capacity, safety and convenience to truckers are just some of the issues impacting truckers' ability to move freight.

What's the Problem?

Truckers are responsible for moving 83 percent of all manufactured goods in Wisconsin, and 77 percent of Wisconsin's communities are served exclusively by trucks. Wisconsin's economy depends on trucks for freight movement.

As the trucking industry has continued to grow, the increasing volume of commercial traffic on interstate highways has met with a shortage of available parking spaces at many rest areas and truck stops. The Hours-of-Service regulations dictated by the FHWA in 2005 specify a maximum of 11 hours of driving per day. Under increasing pressure to cover the greatest possible distance each shift, fatigued truckers unable to find parking are forced to choose between continuing to drive or parking illegally on ramps and shoulders to avoid private rest stop disturbances in the form of solicitations from drug dealers and prostitutes. When parking is available, it is often poorly designed, resulting in truck damage when maneuvering in or out of parking spots.

As the nation's freight tonnage is projected to increase nearly 70 percent between 1998 and 2020, it is imperative to address these issues, not only to support the ability of Wisconsin's truckers to conduct the business of moving freight but to prevent negative impacts on public safety on Wisconsin's freeways.

Research Objectives

This project sought to understand and analyze trends in truck parking, especially as they relate to:

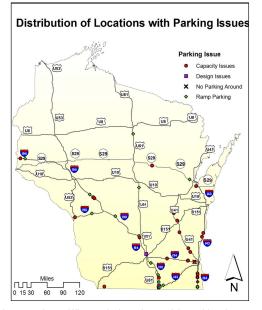
- Specific truck parking issues associated with stops for meals, bathroom breaks and such.
- Operational issues causing the need for parking.
- Locations where truck parking problems exist along specific U.S. and state trunk highway corridors in Wisconsin.
- Available low-cost solutions for these areas.

Methodology

Researchers identified problems along with suggested solutions by using Web-based surveys directed at four separate groups of stakeholders: truckers/carriers, public freight planners, metropolitan planning organization representatives and highway patrol officers. Researchers then used e-mail, telephone and in-person contacts to solicit responses to the survey.

Due to the difficulty in gathering information in this fashion from truckers, researchers attended four trucking conventions and surveyed participants directly. When possible, the research team's booth was equipped with a laptop and Internet access to allow participants to fill out the Web-based survey. Where this was not possible, participants were asked to fill out general and location-specific printed surveys that were then later entered into the Web-based survey system.

Researchers also drew from information previously gathered by the Mississippi Valley Freight Coalition study "Low-Cost Strategies for Short Term Parking on Interstate Highways of the MVFC." This study provided valuable information about additional interstate corridors in Wisconsin.



This map shows Wisconsin locations with parking issues, including capacity issues, design issues, no nearby parking and ramp parking.

Results

Major findings from this study, which were consistent with the MVFC truck parking study, included:

- The most common parking problems were related to insufficient parking capacity during peak demand hours, resulting in overflow parking on ramps.
- Parking problems primarily occurred in the early evening or late at night.
- Consistent among one series of studies was that many truckers park on ramps and shoulders to avoid private rest stop disturbances in the form of solicitations from drug dealers and prostitutes.
- Truckers who experienced problems finding available parking tended to be from outside the area and knew little about Wisconsin's available parking or the means to obtain this information.
- According to truckers, design issues in public parking areas tended to cause problems: Poor designs make entry and exit movements difficult, and some trucks take up more than one spot due to poor lane markings, thus driving capacity further down.

Implementation and Benefits

Researchers created a geographical distribution of locations with parking issues ranked from low to high priority for need of resolution. For longer-range technology solutions, researchers propose several ideas such as mobile phone applications and in-vehicle displays to inform drivers of available parking. Immediate solutions include restriping existing facilities to make more effective use of existing space, and the expansion and promotion of weigh-in stations as available parking locations. Madison, identified as one of the bottlenecks, now has expanded parking availability and bathrooms with 24-hour access at the Madison Safety and Weight Enforcement Facility. Additionally, more truck parking is being built at new rest areas in Columbia County.

This brief summarizes Project 0092-08-28, CFIRE 01-04, "Low Cost Strategies to Increase Truck Parking in Wisconsin," produced for the Wisconsin Department of Transportation Research Program, 4802 Sheboygan Ave., Madison, WI 53707.

Daniel Yeh, WisDOT Research and Communication Services

Project Manager



"This study has been a solid step toward clearly identifying the specifics of Wisconsin's truck parking issues so that workable solutions can be implemented."

-Peter Lynch WisDOT Bureau of Highways peter.lynch@ dot.wi.gov

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Brief prepared by CTC & Associates LLC ctcandassociates.com

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