Wisconsin Truck Size and Weight Study
Safety Issues Workshop

Main Conference Rooms (Columbia/Dane)
DOT Madison Regional Office
2101 Wright Street
Madison, WI 53704

November 3, 2008
1:00 p.m. – 3:30 p.m.

Attendees

Dennis Hughes, WisDOT
Laura Andreasson, WisDOT
Randy Thiel, Governor’s Highway Safety Advisory Council
Jim Baxter, National Motorists Assn.
Mark Oesterle, FMCSA
Craig Thompson, Transportation Development Assoc.
Tom Howells, Wisconsin Motor Carrier Assoc.
Tom Coogan, Department of Commerce

Todd Szymkowski, UW TOPS Lab
John Corbin, WisDOT
David Vieth, WisDOT
Capt. Charles Lorentz, WisDOT
Donald Ludlow, Cambridge Systematics
John Woodrooffe, University of Michigan
Ernie Stetenfeld, Stetenfeld Associates
Emily Silverson, TranSmart Technologies

Workshop Objectives

The Wisconsin Department of Transportation is conducting a study of Wisconsin truck size and weight (TSW) laws to determine whether there are potential changes to current TSW restrictions that could allow for economic development gains and greater employment within the State without negatively impacting roadway safety, roadway performance, and the costs to build and maintain infrastructure. This Workshop is part of the outreach effort for this study. It has the following objectives:

- Identify the safety concerns associated with trucks in Wisconsin
- Learn from safety stakeholders how any changes to TSW laws could impact the safety of Wisconsin’s roadways
- Identify potential recommendations for improvements to truck safety

Summary

1. Welcome
   - Introductions
     - Participants Briefly Described their Primary Issues/Concerns
   - Meeting Objectives

2. Study Introduction
   - Study History/Goals
   - Existing TSW Regulations and Potential for Change

3. Current Safety Challenges – Group Discussion
   - John Woodrooffe presented on how truck size and weight laws have a profound effect on safety.
   - There are three fundamental elements for transporting goods efficiently and safely: human, technology, and policy.

   What are the current large truck safety issues in Wisconsin?
   - Randy Thiel expressed concern for the shortage of drivers and providing ample training to new drivers, first driving straight trucks and then larger trucks. There is a lack of data to show if this is an actual problem.
• Mark Oesterle expressed concern with passenger vehicle operator error around large trucks. There’s also a need for early and continuing education of CDL drivers. Highway engineering has improved over the years; now, safety is one of the key factors in design, but there still are issues regarding safe designs. It was mentioned that divided roadways have a 60% better performance than non-divided highways.

• Jim Baxter expressed concern with the need for consistency on clearance intervals on signalized roadways with a high percentage of truck travel. Inconsistent clearance intervals can make it difficult for truck drivers and make the intersections unsafe for other vehicles.

• There is an increasing gap in size between passenger vehicles and large trucks when operating on the same system. This is becoming more of a problem with fluctuating fuel prices; passenger vehicles are getting smaller and trucks are getting bigger. Crashes are sometimes more severe because of the disparity in size.

• Annual levels of vehicle miles traveled (VMT) have increased significantly over recent decades. Lane miles of roadway have increased very little in that timeframe. Roughly the same infrastructure being shared by more vehicles traveling more miles is an essential cause of increased congestion and greater potential for traffic crashes.

• Tire pressure can be a key safety issue with large trucks. Higher tire pressure may cause increased pavement wear, and there seem to be more road debris and wheel loss on the highways.

Recommended action: The team should analyze at-fault large truck crashes caused by congestion in urban areas or due to more loads being moved in urban areas.

4. Break -- Refreshments

5. Potential Changes to TSW Regulations – Group Discussion

What (if any) changes to TSW regulations should the State consider?

If any changes to TSW laws are made, what would be the impacts on Wisconsin?

• Propose lower speeds (differential speed limits) for trucks operating on highways.

• If TSW were increased, then additional stopping distance is needed and braking and handling of larger trucks may become a problem. Also, the design of roadways and intersections (turning radii, placement of traffic control devices) would need to be redesigned.

• Winter weather may have an impact on the operating and handling of larger trucks if sizes and weights are increased.

• Evaluate and define the roles of the State, DOT and local governments in issuing permits for large-truck travel. Inconsistent permitting practices are frustrating for the motor carrier industry.

• Establish freight corridors (similar to Washington DOT).

• Establish private partnership programs with industries so that common highway corridors can be maintained using funds from private industry.

• If changes in TSW laws are made, must assess the status of CDL licensing and current CDL licensed drivers. May be a need to re-examine drivers for operation of larger trucks.

• With any changes in TSW laws, law enforcement capacity must be increased. Increasing the number of sworn inspectors may be necessary, and implementing civil enforcement audits – as in Minnesota – and holding shippers accountable for violations could help significantly.

• If TSW were increased, tanker trucks may need to be redesigned to take into account the “slosh factor” in unbaffled tanks.

• If TSW were increased, will the tractor (towing unit) design be analyzed to increase safe operation?
6. **Identification of Potential Truck Safety Countermeasures – Group Discussion**

There are many vehicle technologies that can be used to increase the safety of operating a large truck, such as lane-departure warning systems, roll-stability and electronic-stability systems, forward-collision warning systems with adaptive cruise control, and vehicle diagnostics and GPS location systems.

*What truck safety countermeasures (for example, requirements for truck drivers or vehicles, or safety and education programs) should the State consider adopting?*

- Mandate the exact placement of front-bumper mirrors on tractors to see blind spots.
- Ensure that law enforcement is allowed to obtain information from the electronic control module (ECM) when large truck crashes occur, for the sake of data collection.
- Use highway technologies, such as bridge sensors, to warn drivers or law enforcement, rather than relying on drivers to install equipment.
- Crack down on hours-of-service violators. Install more parking for large trucks.

7. **Next Steps and Additional Outreach Opportunities**

Recommendation to add Insurance Commissioner’s Office contact and representative of the Wisconsin Insurance Alliance to the list for Dec. 2 All Stakeholders Meeting.

Please visit [http://www.topslab.wisc.edu/workgroups/wtsws.html](http://www.topslab.wisc.edu/workgroups/wtsws.html) for additional news on the Wisconsin Truck Size and Weight Study including the schedule for additional outreach events.