MINUTES

Attending:

Rory Rhinesmith WisDOT
Dave Vieth WisDOT
Tom Coogan WI Dept of Commerce
Tony Driessen AAA - Wisconsin
Rick Stadelman WI Towns Association
Betty Nowak Port of Milwaukee
Tom Howells WI Motor Carriers Assoc.
John Petty WI Agri-Service Assoc.
Henry Schienebeck Great Lakes Timber Assoc.
Dan Fedderly WI County Hwy Assoc.
Peter Lynch UW-Madison TOPS Lab
Mike Oliva UW-Madison
Michelle Banister UW-Madison
Charles Lorentz WisDOT State Patrol
Beth Cannestra WisDOT
Scott Becker WisDOT

Mike Kernats WisDOT
Donald Ludlow Cambridge Systematics
Harry Cohen Consultant
Sam Van Hecke Cambridge Systematics
Jim Lucht Earth Tech
Kevin Hagen Earth Tech
John Corbin WisDOT
Greg Niva WisDOT
Todd Szymkowski UW-Madison TOPS Lab
Teresa Adams UW-Madison CFIRE
Jeff Lyon WI Farm Bureau
Representative WI Trans Builders Assoc.
Gunnar Bergersen Great Lakes Timber Assoc.

Some additional callers joined the teleconference.

Key Points

Project materials are available at http://www.topslab.wisc.edu/workgroups/wtsws.html.

Additional meetings of the Study Advisory Group will occur at Hill Farms on:

- **Wednesday, December 17 (12/17) from 9 a.m. - 11 a.m.**
  - Meeting backup date is Friday, December 19 (12/19) from 9 a.m. - 11 a.m.

Discussion Items

Welcome and Recap of Previous Meeting

This fourth meeting of the Wisconsin Truck Size and Weight Study Advisory Group was chaired by Rory Rhinesmith of WisDOT. He welcomed the group and thanked them all for contributing their valuable time.

The previous meeting was recapped. The three central questions of the study were reviewed:

- Should changes be made to Wisconsin’s TSW laws?
- What impacts would changes to TSW laws have on the State’s roads and bridges, regulatory and enforcement capabilities, administrative processes, and freight transportation modes?
- What specific requirements need to be met by any vehicles operating under modified size/weight standards?
Evaluation Methodology Update

The Study Team reviewed the four major steps of the methodology.

1. Calculate Cost Savings (per 1,000 Payload Ton-Miles Diverted to Configuration from Base Case Vehicles)
2. Estimate Change in Truck VMT by Configuration
3. Estimate Additional Costs/Benefits Created by Shift (i.e., Impact on Structures)
4. Weigh Costs vs. Benefits to See if Each Change is a Net Positive or a Net Negative

The five configurations analyzed were shown, along with the Straight Truck plus Pup Trailer configuration (6-axle, 98,000 pounds) which will be added.

Cost savings (in the case of allowing operations on the Interstate and in the case of allowing operations on only non-Interstate highways) were shown (see Slides #5-8).

Slide #8 has incorrect values for the Diverted Pay-Load Ton-Miles and will be fixed.

Bridge Analysis Preliminary Findings

Jim Lucht provided an overview of the bridge analysis conducted with different truck configurations using the bridge formula to calculate the loads. Preliminary analysis used the six most common bridge types (concrete T-beam, slab, truss, PS girders, steel girders, and floor system).

The study team would like to confirm with the trucking industry the likelihood of using these configurations presented. This question should be posed at the Dec. 2 All Stakeholders workshop.

Using calculations, when the five configurations were run across the 85 test structures, the result was less than the maximum vehicle weight than what the bridges are currently posted on HSI. The vehicle causes less damage/stress, except for the 6-axle 98,000-pound configuration. Peer Review participants from the American Transportation Research Institute brought this configuration forward as part of American Trucking Association packet of considerations (6-axle 97,000 pounds) for the next highway reauthorization. There is no specific industry recommending this configuration, however, some industries would use this truck configuration. Any corrections to configurations and spacings should be provided to the consultant team so they can be appropriately analyzed using the formula.

Slide #16 shows the Structural Deficient & Obsolete Bridges in Wisconsin and the surrounding states. However, this figure may not be appropriate for the final report since it may give the public the wrong perspective when using the terms “deficient” and “obsolete”. Slide #17 shows Structural Deficient Bridges on Wisconsin’s National Highway System. This figure/map may also not be appropriate for the final report due to the use of the term “deficient” and may send a mixed signal to public viewing this figure. The Advisory group agreed that the study team should continue to produce maps of structurally deficient bridges by using the new configurations. This topic will be discussed with the Secretary’s Office during the study briefing.

The Bridge Analysis Preliminary Results were shared and the following assumptions were made:

- Costs assume that all structures will be replaced in 10 years and 5% annual inflation
• Approximately 3,600 structures on State routes
• Approximately 6,800 structures on Local routes
• Structures on Local routes were assumed to be older and in worse condition. More analysis required to verify.

The economic analysis needs to show additional costs of impacts above and beyond currently programmed bridge replacement costs at the current configurations rather than the total need for bridge replacement that is programmed and due to new configurations. The team is trying to find the best way to present/analyze this information. DTIM may be able to provide the investment level of structures on an annual basis. Scot Becker will provide contact information so that the study team can find out if the State is investing the established amount in bridge replacement costs.

These figures below also include the currently programmed bridge replacement costs including with current configurations:

<table>
<thead>
<tr>
<th>Configuration</th>
<th>State Route Bridge Replacement Costs</th>
<th>Local Route Bridge Replacement Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-axle 90k Semi</td>
<td>&gt; 8.2</td>
<td>&gt; 31.8</td>
</tr>
<tr>
<td>6-axle 98k Semi</td>
<td>&gt; 15.7</td>
<td>&gt; 50.3</td>
</tr>
<tr>
<td>7-axle 97k Semi</td>
<td>&gt; 13.2</td>
<td>&gt; 44.8</td>
</tr>
<tr>
<td>7-axle 80k SU</td>
<td>&gt; 12.7</td>
<td>&gt; 41.9</td>
</tr>
<tr>
<td>8-axle 108k Twin</td>
<td>&gt; 8.2</td>
<td>&gt; 29.8</td>
</tr>
</tbody>
</table>

(All Values in $ Millions per Year)

The study team also presented the Cost-Benefit Analysis Preliminary Results in Annual Benefits which shows transport savings, pavements, bridge replacement costs, safety and congestion of each of the configurations and then provides a total net benefit of each of the configurations

**Related Bridge Studies – Professor Mike Oliva & Michelle Banister**

Professor Mike Oliva and Michelle Banister provided an overview of a current UW study that analyzes the impact of the transport of forest products on a number of state bridges in Wisconsin. The analysis measured truck loads and axle spacings, and measured 6-axle and 5-axle configurations loading typically at 98,000 pounds. The many weights and axle spacing combinations were tested on different span lengths of 40’ up to 120’. At the 85’ span range, the 98,000-pound truck starts to have an effect on a single span bridge. The UW study team is working with the state and counties to try and identify specific routing corridors that should be analyzed. Bureau of Structures will be meeting with UW and these findings may be incorporated into the final report if necessary.

**Commercial Vehicle Fees, Fines, and Revenue – Greg Niva**

(See Handouts: Transportation Fund Revenues, OS/OW Fees, Gross Weight Vehicle Fee Chart)

Greg Niva provided an overview of transportation fund revenue collected by DMV, the vehicle registration fee chart, and the Oversize/Overweight Fees collected. Commercial vehicle registration fees are set by statute with no regular schedule for updating. There was a 30% increase in commercial vehicle registration fees on January 1, 2008. He noted that the increases in registration fees have impacted carriers with smaller fleets more than those with larger fleets. All revenues go to the general transportation fund, only a small amount of revenue goes to the specific areas (i.e., credit card fee reimbursements, etc.). It is unsure where the
heavy truck permit fee revenue goes and Greg will research this question. DOT does not receive the revenue from fines collected, because the fines are distributed to many agencies and areas of government (i.e., counties, schools, court fees, other misc. fees, etc.). OS/OW fee structure has not been changed since 1991 and $5.3 million in OSOW permit revenue is collected annually.

Final Study Advisory Group Meeting Preparation
Draft deliverables will be provided to the SAG for review/comment. The final meeting will be on Wednesday, December 17 (9:00 a.m. – 12:00 p.m.) in Hill Farms Room 419. (Back-up date is Dec. 19 from 9-11).

The All Stakeholders Workshop on December 2 is at the East Side Club (3735 Monona Drive, Madison, WI 53714) from 9:00 a.m. – 12:00 p.m. The preliminary agenda includes an Introduction from Secretary’s Office, Study Overview / Introduction, Break-out Sessions re: TSW Law Impacts, Discussion of Responses, and Discussion of Potential Next Steps.

The meeting was adjourned at 2:30.