

**SUMMARY REPORT**  
**October 2016 Freight Advisory Committee**  
**- and -**  
**October 2016 Governor's Freight Industry Summit**

The Wisconsin Department of Transportation (WisDOT) hosted the fourth Freight Advisory Committee (FAC) meeting and the fifth Governor's Freight Industry Summit (GFIS) on October 12 and 13, 2016, respectively, in Rothschild, Wisconsin. Both events were held at the Stoney Creek Conference Center. Each meeting provided an opportunity for private sector freight transportation professionals, organizational leaders from business and trade groups, and government partners to provide input and collaborate on guidance for freight transportation policies and practices in Wisconsin.

Attendance at both events was comparable to previous meetings. Approximately 30 members of the FAC attended the October 12 meeting or sent a designee. Approximately 100 people attended the GFIS in total, with many attendees of the FAC meeting also attending and participating in the GFIS.

The following sections provide brief summaries of each day's events and reflect feedback provided by attendees over the course of the two days.

- Part I provides a brief summary of the morning sessions of both days and participants' feedback on the Draft State Freight Plan (SFP); the two mornings are summarized together because participants were asked the same set of questions both days.
- Part II provides a brief summary of the afternoon session of the October 12 FAC and participants' feedback on the Waterborne Freight topic.
- Part III provides a brief summary of the afternoon session of the October 13 GFIS and participants' feedback on the Transportation Technologies topic.

Further information on the FAC can be found at <http://wisconsindot.gov/Pages/doing-bus/freight/fac.aspx>.

Further information on the GFIS can be found at <http://wisconsindot.gov/Pages/doing-bus/freight/summit.aspx>; please note this webpage is under development as of May 2017.

**Part I: Summary of Both Morning Sessions & Draft State Freight Plan Feedback**

WisDOT Secretary Mark Gottlieb opened each day by welcoming the participants.

At the October 12 FAC meeting, Division of Transportation Investment Management Administrator Aileen Switzer followed Secretary Gottlieb with a summary of the April 2016 FAC meeting. The summary included a review of the April meeting's two tabletop discussion sessions. The first session focused on the mobility and safety concerns associated with Oversize/Overweight (OSOW) vehicles operating in Wisconsin. The second session examined supply chain and logistics issues impacting freight stakeholders in Wisconsin. This tabletop session included targeted discussion of supply chain and logistics practices, and focused on identifying the remaining obstacles and new challenges for improving the operational efficiency of the freight sector.

At the October 13 GFIS, Secretary Gottlieb was again followed by Aileen Switzer who provided a general update on the Freight Advisory Committee. Ms. Switzer was then followed by Federal Highway Administration (FHWA) Deputy Administrator David Kim, who gave a presentation on federal freight policies and programs.

### **Presentation on State Freight Plan and Tabletop Exercises**

Following Ms. Switzer and Mr. Kim's presentations on their respective days, Donna Brown-Martin delivered a presentation on the draft WisDOT State Freight Plan, which had been released the previous week. Her presentation introduced the Freight Factor scoring methodology to be used for identification of the most critical state highways, local roads, state-owned rail lines, port facilities, and airports. The presentation also showed how the state would monitor the two freight performance measures arising from the federal FAST Act reauthorization: percent of the Interstate system mileage providing for reliable truck travel time; and percent of the Interstate system mileage uncongested. Average speed, bottleneck frequency, and bottleneck duration will be part of these measurements. The presentation then briefly touched on some of the freight plan's key policies.

Following a break each day, the tables convened to discuss the content of the presentation and the plan, guided by facilitated questions. The responses from the FAC were compiled with those from the GFIS. The quantified analysis follows below.

### **Draft SFP Tabletop Exercise**

Similar to prior meetings, the tabletop discussion sessions consisted of attendees assembling into small groups for in-depth discussions. Between the two days, attendees were organized into a total of 23 tables.

Attendees were asked to respond to six questions on the draft SFP during the tabletop exercise. More than thirty different thematic areas were assessed, including modes, policies, emphasis areas, processes, and other freight-specific topics of concern. These included suggested policies for specific modes and intermodalism; specific governmental functions such as regulation, data analysis, and collaboration, and for specific operational concerns such as safety, first- and last-mile obstacles, and truck parking.<sup>1</sup>

In the following section, for the first five questions, the themes identified by the greatest number of tables are identified in the shaded boxes (rank ordered). A selection of comments pertaining to the emerging themes are presented after the sixth question. These comments include what the participants favored, what concerned the participants, and areas where additional emphasis was requested. For the sixth question, representative comments from FAC and GFIS participants are offered in proportion to the total number of positive, neutral, or negative comments received regarding the question "Overall, what is your opinion of the draft freight plan?"

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<sup>1</sup> See Appendix A for the complete list.

**Question 1: What topic areas were you hoping that the draft freight plan would cover?**

Rankings (themes of highest interest):

- Intermodal / Multimodal
- First / Last Mile
- Legal-Weight Trucking
- Class I Railroads
- Local Roads
- Regulation

**Question 2: What topic areas were you most impressed with in the draft freight plan?**

Rankings (themes of highest interest):

- Data Analysis
- Congestion / Bottlenecks
- Collaboration
- Multimodal Perspective
- Performance Measures

**Question 3: What topic areas were you least impressed with in the draft freight plan?**

Rankings (themes of highest interest):

- Collaboration
- Class I Railroads
- Data Analysis
- Intermodal / Multimodal
- Ports and Harbors
- Trucking
- Regional Approach
- Funding

**Question 4: What topic areas need more discussion in the draft freight plan?**

Rankings (themes of highest interest):

- Class I Railroads
- Intermodal / Multimodal
- Collaboration
- Connectivity
- Implementation
- Short Line Rail
- Trucking

**Question 5: What topic areas are missing in the draft freight plan?**

Rankings (themes of highest interest):

- Intermodal
- Ports
- Data Analysis
- Collaboration
- Class I Railroads
- Connectivity
- Funding

**Question 6: Overall, what is your opinion of the draft freight plan?**

- Liked the multimodal nature of the plan
- Good job recognizing DOT's role as a proponent of increased development of (the) freight system
- Good big picture look
- Significant effort- many hours have been put into this plan
- Baseline for Wisconsin- a good start!
- Comprehensive
- Innovative plan
- A good 1<sup>st</sup> step- turn into tangible/measurable items
- Educational and balanced
- Very robust and inclusive plan
- Needs a "champion"
- Covered 90 percent of the major issues
- Plan is too broad
- What will we do with the information?
- How will the plan be used to strategically invest funding?
- Needs to be a continuous living/breathing document for the agency to continue to use it

### **Selected Statements on Thematic Areas**

The following section identifies the top thematic areas to emerge from the combined FAC and GFIS tabletop exercises, along with selected comments and requests expressed to WisDOT by the attendees within each of those themes.

#### **Intermodal and Multimodal Freight**

Of all the thematic areas identified, intermodal freight movement was most frequently discussed by attendees. In a change from a previous FAC (April 23, 2015) and previous GFIS meetings (November 28, 2012; August 14, 2014), the attendees indicated an expectation that WisDOT take a more aggressive role in support of policies, facility development, and other provisions. Attendees raised several concerns and provided multiple recommendations for WisDOT strategies in support of intermodal operation assessment and intermodal facility development. Statements included:

- The plan lacks a strong intermodal analysis and strategy, and WisDOT lacks a leadership role in this area. WisDOT should be, at a minimum, a facilitator of the effort to develop intermodal options. In that role, WisDOT should take a stronger position and give clear direction through facilitating discussions between shippers, railroads, and potential site developers. Discussions on intermodal policy should include governance, facility costs, industry support, and degree of dedication to specific commodities or shippers.
- The current privately-owned in-state intermodal facilities are ineffective and/or too slow. The Arcadia terminal does not allow other shippers to use it, while the Chippewa Falls terminal is dominated by one shipper and is expensive.
- Discussion of intermodal freight containers needs improvement, including explanation of the different configurations for import/export (including sealed containers) and domestic intermodal.
- The plan also lacks detail about intermodal container movement. The plan needs to identify potential improvements to operational efficiencies. Too many containers and trucks are running empty. It should discuss the balance of imported containers to export containers. This is one of the great challenges to intermodal service. What can WisDOT do to improve the efficiency of container movement?
- Container drayage by truck to Chicago is also expensive, which hurts the state's economy. Due to more abundant intermodal facilities, neighboring states have competitive advantages with container movement costs. When drayage is used, more permitting options for overweight loads are needed. Wisconsin's five-axle configuration and spacing rules are too restrictive. Further, the ownership and condition of chasses also remains a concern.
- The state should analyze intermodal needs and potential volumes statewide. This assessment should identify intermodal sites in near-term strategies. Kansas used this approach and that model should be followed.
- There is a need to further document intermodal benefits, including what makes intermodal facilities attractive to current truckload shippers. The plan should look at case studies of where freight is optimized. One option would be to identify tri-modal or quad-modal ports case studies (rail, truck, maritime, possibly air). What facilities are doing the right things? WisDOT can look at the best practices and review what happened in other states.
- Multiple options for intermodal facility operation should be considered, including existing Class I rail companies and short lines. The private sector should still be integral to the planning, and lead the development of any facility. A state facilitation role for assisting intermodal facility development makes sense.

- Port development and expansion should be discussed at greater length. Integration of intermodal operations at ports with other plans (such as US DOT's Maritime Administration's (MARAD) Marine Highways, including the M35 Corridor) should be promoted.
- The plan includes no discussion on Aerotropolis in Milwaukee. This initiative connects manufacturing with air freight.
- Apart from intermodal facilities and their operations, more detail needs to be added on changes to transload business models.

### Data Analysis

Attendees generally expressed strong satisfaction with the department's level of data analysis used in the development of the plan and the identification of the areas of greatest needs. Some, however, were unclear on the methodology applied to develop the prioritization scales and the heat maps of bottleneck locations. Attendees also requested additional analysis of movement across state lines, of imports and exports, and on specific sectors that drive the state economy. Comments included:

- The plan showed a good level of detail, but could use more information regarding the data sources, and how they were selected. The discussion needs more clarification of the methodology for weighting the different modal systems.
- The scoring systems and freight factor analysis methodology help to prioritize and justify strategic investments and provide confidence in the process. Data integration and analysis is important for quantifying the importance of the system assets.
- There is a large amount of in-depth analysis, but also not enough detail on the prioritization process or projects. There is also uncertainty in how the freight factor scores were calculated. How was the weighting for comparisons between modes done?
- What are the driver industries for freight in Wisconsin? Where are they forecast to be located in the future? What is their economic trend – are they growing, declining, staying stable, or going through uncertainty? The plan should integrate driver industries into the prioritization process, especially those that export. Export markets are growing three times faster than domestic markets.
- Freight planning needs more accurate information on the external shipments into Wisconsin. The data used "stops" at the border and doesn't properly identify critical supply chain corridors.
- The plan needs better international data. What sources are used from an economic development standpoint?
- Agriculture has \$88 billion impact on the state's economy; the sector should be recognized as not just dairy. The University of Wisconsin has agricultural data and agricultural impact by county. Include an economic impact analysis of agriculture in the plan.
- Clarify why 2013 data used in the plan. Be careful when we discuss trends based on that data. Frac sand trends aren't the same as in 2013. Clarify that 2013 data doesn't reflect the reality today. The plan should update its data and revise its metrics for prioritization.
- Road ratings run contrary to public perception. The benchmarks are useful, but there will be different perspectives from 18-wheelers than from a passenger vehicle.
- How does the department maintain things? WisDOT needs to conduct a sustainability analysis.

### Collaboration

Attendees were also strongly supportive of WisDOT using greater collaboration in identifying and prioritizing freight needs. While the department has made improvements in its use of collaboration, attendees expressed that the department needs to be better with integrating economic development and public outreach, and with collaboration with MPOs, surrounding states, and major shippers and industries.

- The stakeholder involvement process is generally positive, including events such as the Governor's Freight Industry Summits. But WisDOT should be more proactive with reaching out to its stakeholders, considering state-to-state and global competition. There has to be an improved effort to get the information out to the freight community. There was no follow-up from the past meetings.
- Internal and external collaboration is evident in the plan. A large number of staff worked on it, and the cross-divisional effort is evident.
- The Southeast Wisconsin pilot efforts for OSOW and local road coordination on shipments to the Port of Milwaukee is a positive example of addressing real challenges to freight movement.
- Overall, the process needs improved outreach and communication during the comment period. Some options that were not used include a LinkedIn page or group, and a Facebook page to hit different demographics. WisDOT should have used E-Mail blasts and mailing lists with greater frequency. WisDOT needs to improve its use of private groups to get the word out. Marketing tools should also be used to get more people to support freight, and to bring in more businesses and other stakeholders.
- WisDOT should also publicize its freight plan meetings better, and should continue to try to get more people in the general public to be aware of the plan through regional outreach and to attend events based on its development.
- The relationship between the Wisconsin Economic Development Corporation and WisDOT needs to be fostered.
- The Transportation Utility Management System (TUMS): this is WisDOT's internal communications system for interacting with utilities. WisDOT needs to ensure its database has all the available contacts for the utility sector. WisDOT also needs to ensure outreach to utilities.
- A representative from the utility sector should be on the FAC to address OSOW carriers and their interactions with utilities. Their presence will help inform the department on initiatives such as streamlined permitting.
- Include more industry representatives on the Freight Advisory Committee, and fewer associations. Minnesota has more freight shippers on their FAC, including Target, Swift, Schneider, and more.
- The plan should get Amazon, FedEx, UPS engaged in long-range planning – both inside and outside of a FAC.
- The plan should offer more discussion of how WisDOT funds investments in various modes, given various private-public ownership models. The plan needs to promote regional, national, and global coordination, as well as coordination of funding between government and private sources. The aim should be to fill gaps where funding is needed. Discussion should cover how to blend private and public investments in a way that actually works. Does WisDOT contact or connect with the private sector when road projects are designed? WisDOT owns roads and invests in them, but doesn't invest as much in rail, ports, and other non-highway modes.

- The freight plan needs to integrate with existing local (city/village/town or MPO) freight plans and data, including the established Comprehensive Plans from municipalities and counties. The plan should explain how WisDOT could work with communities on warehousing and local road access to and from industrial sites. For example, the Janesville MPO created its own freight plan, and would like elements recognized. How were the maps of the local routes (for WisDOT) derived?
- Does the plan talk about freight planning and freight plan recommendations from the surrounding states (or any other states)? WisDOT should foster improved communication with neighboring states to seek alignment of policies and explore opportunities for planning and project facilitation. MPOs along or crossing borders should be one of targets of focused coordination.
- Federal involvement will be increasingly important as new rules for freight are established.
- The plan and the department both need to recognize there is a two-way street for communication, and existing lines between WisDOT and freight professionals should be kept open and enhanced.
- Adopt the manufacturer interview process as done in Minnesota to identify low-cost fixes with immediate potential benefits.

### Class I Railroads

As in previous meetings, attendees expressed interest in rail service from Class I railroads, but also expressed frustration with how the business models tend to view Wisconsin (with few exceptions) as an overhead state, rather than an origin and/or destination state. Some of the commentary also overlapped with the concerns over the lack of intermodal service options and opportunities. Comments included:

- Place a higher priority on rail; the plan didn't give it enough emphasis or content. The plan needs a more comprehensive assessment of freight rail. The plan should capture better information and input from Class I companies, and give more background on problems with the service from those companies.
- Railroad service is a concern and problems are not getting addressed. Look for ways to work with railroads, especially Class I companies, to get rail shipping access or improved reliability of service. We need to have Class Is listen to the needs of Wisconsin businesses and shippers.
- The plan needs to gather freight rail information from customer data and customer surveys instead of rail company information. Driver industries are not provided sufficient rail service. Follow the example set by the Northwoods Rail Transit Commission market study.
- DOT is more involved in freight rail service in southern Wisconsin than in other parts of the state. WisDOT should be more involved across other parts of the state, especially in the Northern part of the state, and with the Blue Line Group. The future of rail in Northern Wisconsin is uncertain.
- Wisconsin should take more of a leadership role in encouraging Class I railroads to develop intermodal service and facilities so the highways don't have so many truckers draying containers to and from Chicago. There are only a limited number of railroad companies. Do they want to support intermodal opportunities in Wisconsin?

- Shippers need more DOT rail involvement in other parts of the state. More specifically, WisDOT should revisit its process for the rail grant and loan programs. The emphasis always seems to be on state-owned lines<sup>2</sup>.
- How does the work of the Surface Transportation Board (STB) fit into the plan, given the rail issues it is currently examining? State government should not be afraid to flex its muscle and involve the STB with Class I Rail challenges. There needs to be a process for facilitating private sector issues.
- The plan should help inform federal regulation and private rail investments.
- Manifest cargo transload sites could be looked at; the state could help prioritize opportunities and encourage their development.
- Long trains are continuing to block at-grade crossings due to train length, jeopardizing access for emergency vehicles.
- Long trains don't often carry Wisconsin freight, and the congestion from these overhead trains makes it more difficult for Wisconsin shippers to get their freight on to Class I lines. This reduces the state's economic development potential.
- Verify the comment from the paper industry that Canadian National might be more responsive to customers now than in previous years.
- Has the new private rail line [Great Lakes Basin] been discussed in the plan?
- The plan needs to discuss local road access to and from rail lines.
- The discussion on Positive Train Control (PTC) says that the technology will be in place by 2015 (Page 139). However, Congress extended the deadline to 2018. Therefore, there is a need to update the text.
- Could high speed rail allow more capacity for freight movement?

### Trucking

Comments on legal-weight trucking echoed previous concerns over regulations (including legal weights, hours of service, and enforcement). Attendees looked for the state to continue to address critical concerns such as safe truck parking areas. Comments included:

- Trucking is the largest freight mode, but the plan did not give it enough emphasis. More truck-specific policies, recommendations, and actions should be added. Trucking is going through a lot of changes, really quickly. The plan needs to be nimble enough to adapt to those changes.
- Promote consistent weights and sizes in all states, including weights for handling containers. The current 80,000-pound limits hurt Wisconsin industries. Other states have much higher weights without permits. Stakeholders suggest adding axles to allow better weight distribution and therefore additional weight (90,000+ pounds on six axles). Another option could be to allow the use of longer double-bottom trailers. Turnpikes allow 48' and 53' doubles; what is their feasibility in Wisconsin?
- Communication methods to trucking membership on legal operations need to be improved. Officers are not adequately trained to inform the trucking community, and communication among State Patrol is poor. Sometimes trucking companies don't know a new law occurs until they are pulled over.
- Local road weight restrictions are an impediment to freight movement. The plan should discuss the impacts of trucking across counties and county roads to get shipments to rail providers.

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<sup>2</sup> All rail lines, regardless of ownership, are eligible for freight railroad assistance under Wis. State 85.08.

- Safe truck parking remains a long-standing concern. The plan needs to give more discussion to rest areas for trucks. Drivers need rest locations near major metropolitan areas for required breaks and pick-up and delivery. Safe rest areas could help attract women drivers to the workforce.
- Some suggested that instead of WisDOT building truck parking on its own facilities, that incentives should be offered for private businesses to develop more truck parking.
- Trucks cost \$100/hour when sitting in traffic. Taxes are a lesser burden than the overall costs of delay. When drivers time out on their hours-of-service due to delays, loads are stranded until replacement drivers are brought in. These rolling warehouses then create problems for the businesses expecting the shipments at a certain time window.
- Driver shortages are anticipated due to the final adoption of ELD (electronic log books). What are legal time limits of transportation workers (truck drivers, railroad workers)?
- The plan should explain how WisDOT intends to accomplish the goal of reducing truck accidents by 5% from the rolling average of previous years. It will be difficult for the heavy-duty trucks to get safer through training or technology. How does the plan intend to accomplish the same goals for light duty crashes? What else is WisDOT going to try?
- The geometrics of infrastructure remain a concern for truckers. The plan should address “driver functionality” through friendlier geometric standards for roundabouts. Do we design roundabouts for double bottoms?
- Comments also supported further deployment of alternative fuels for commercial vehicles, such as compressed natural gas (CNG). Wisconsin’s use of the emissions settlement from Volkswagen was also discussed.
- Tolling is not a feasible option for truck carriers, who are operating with slim margins and move 70 percent of freight.

### Connectivity

The FAC and GFIS attendees also identified concerns over connectivity – both between modal systems and between jurisdictions - in their discussions. Many of these overlapped with statements regarding collaboration and regional approaches. Some of the statements offered included:

- Identify choke points in rural areas, especially where infrastructure is involved. Develop priority consideration for infrastructure at a rural level, such as culverts and bridges. These are important first/last mile issues, and can serve to further identify strategic routes at a rural system level.
- The plan needs to look at freight outside of the Wisconsin border to discuss basic information on what is moving and how that affects connections to Wisconsin. Specifically, the plan should discuss impacts and opportunities from the major metropolitan areas at and across the state borders. Do we consider Chicago and the Twin Cities enough in the plan? Both areas are powerful economic drivers to the state economy, even though they are outside of the state.
- Apply ‘lessons learned’ to freight planning between Wisconsin and the surrounding states. Don’t just look within Wisconsin; include other states without limiting yourself by the boundary.
- Connectivity at the Port of Milwaukee needs more improvement.
- Identify priority corridors on the local system.
- Promote multiple exchange opportunities and improved service for shippers using short line rail operations service.
- Develop a strategy for system resiliency and responses to flooding and other natural disasters.

- How can WisDOT improve the next generation 511 to better inform the freight community rapidly and accurately, and to offer route alternatives?
- Does the plan address needs in Northern Wisconsin, not just the Southeast, Southwest, and Major Highways?

### Ports and Harbors

The attendee discussion on maritime concerns and policies emphasized the need for WisDOT to integrate its efforts with those of the Wisconsin Commercial Ports Association and with those of the US DOT's Maritime Administration and the Conference of Great Lakes and St. Lawrence Governors and Premiers. Attendees also expressed concern over some inaccuracies in the mapping and data tables. Comments included:

- How strong are the freight connections to the state's harbors and ports? Does the strength of these connections influence the level of investment in ports through the state's harbor and port programs?
- The recommendations of the *Wisconsin Commercial Ports Development Initiative - Final Project Report* for improvements to port infrastructure and first/last mile connections should be adopted. These recommendations include improving access from rail to vessels at the state's 7 largest ports (especially Superior, Green Bay, and Milwaukee).
- Other states do better at use of their ports on the Mississippi River. The plan should reference the port facilities in adjacent states (Winona, Red Wing, etc.) and recommend development of more ports on the Wisconsin side of the river. The poor condition of the locks should also be noted.
- The plan's ports and harbors metrics need to be revised. Cassville is not considered a commercial port; further, its coal plant is now shut down. Other relevant maritime maps are inconsistent and have errors, or are just missing. The plan needs to include a map showing Wisconsin's connection to the Atlantic via the St. Lawrence Seaway.
- The freight plan needs to recognize and support the Conference of Great Lakes and St. Lawrence Governors and Premiers plan and strategy, and give more weight to the Great Lakes / St. Lawrence system overall.
- The plan could make a stronger connection between the underutilization of ports and what can be done to improve/maximize their potential.
- The plan should identify the importance of ship building in Wisconsin and its economic impacts in its narrative. Wisconsin has the three largest Great Lakes shipyards.

### First and Last Mile

Attendees requested WisDOT continue to examine ways of improving the first and last mile local road connections to transportation facilities. These also overlap with concerns over local roads identified by the attendees. Comments included:

- Last mile truck access is a concern in rural areas, especially when trying to haul from fields to processors to markets.
- Single-lane roundabouts into industrial parks don't make sense.
- When local connecting roads into industrial parks are weight-limited, they defeat the objective of the industrial park.
- Include OSOW provisions in discussion of first and last mile issues and policies.

- Sufficient urban connections between road and rail facilities should be ensured. Factors to address include jurisdictional control/authority, funding authority, and route planning for both OSOW and normal loads.

### Local Roads

Comments on local roads issues are also captured in trucking and intermodal, along with these policy comments:

- Support of local freight corridors through funding of local road programs is essential.
- Mapping of Tier 1 and Tier 2 connections to the system can help in the prioritization of the most important local facilities.
- Coordination with local and private transportation plans is needed to confirm the function and importance of specific local freight corridors.

### Congestion and Bottlenecks

Discussion of congestion and bottlenecks included review of the heat maps generated by measuring system performance on the Interstate Highways. In addition to overlapping comments from the data analysis section, specific feedback included:

- Glad to see emphasis on congestion, and methods to address congestion.
- Bottleneck mapping and the heat maps showing average speeds and locations of congestion are an important set of tools.
- The attempt to measure reliability and consistent travel times is very important for supply chains. Shipments need to be on time, not early or late.
- How does the department gather speed data? How accurate is it? How effective is the analysis? What is the level of accuracy?

### Regulation

The concerns on regulation include some raised under trucking, along with these statements:

- The freight plan should discuss and identify current and potential partnerships across state lines. Regional integration and coordination with nearby states is essential in ensuring consistent regulation and permitting of OSOW loads travelling to and from Wisconsin.
- Michigan's permitting of 164,000-lb loads for forest products is a challenge to cross-border permit consistency and to the economics of forest products movement.
- Why can't the Interstate Highways be used more for overweight shipments? Some corridors have exemptions (I-39) that others do not. There are also load types such as refuse and recycling that have exemptions not granted to other shippers.

### Short Line Rail

The attendee comments that requested greater Short Line Rail discussion included several that crossed with Class I service, especially in northern Wisconsin. One specific comment mentioned:

- The plan should discuss the state's relationship with all short line railroads, and discuss current short line service issues.

### Implementation

Attendees questioned how the plan would be implemented, including the factors used to prioritize projects and policies. Statements and questions included:

- How does the plan get into specific identification and prioritization of freight projects?
- What strategies can we put in place to be more proactive about predicting what is coming in the future?
- Does the report discuss how WisDOT would handle unexpected changes to shipping? When frac sand emerged as a dominant commodity, it became the focus of shippers - at the expense of other commodities.
- The plan needs to identify near-term strategies, and to identify costs to non-freight modes.
- The plan should integrate driver industries into the prioritization process.
- How will plan's goals be achieved? There needs to be teamwork within WisDOT. Execution is key: don't talk; do. Communication with external and internal partners will be very important.

### Funding

FAC and GFIS attendees offered many suggestions for funding considerations and project prioritization. Comments included:

- The plan is a good start, but it needs to discuss who will be deciding the funding levels and priorities, and how these will be funded. How will the plan be used to strategically invest the funding that does exist?
- As private industry shifts modes based on economics (and different products), how does WisDOT factor in future investments to guide freight to the most effective mode – as a benefit to operations and to society in general?
- Why was there no section discussing dedicated funding sources? Funding mechanisms and revenue streams need greater discussion, covering the past, present, and future trends. Wheel taxes are being discussed and implemented in multiple communities across the state.
- Key funding sources need specific near-term targets. For example, apply the benefit/cost testing as used for FRPP grants or FRIIP loans to identify low-cost, easy fixes.
- Keep funding in place to improve efficiencies. The plan should allow redirection of funding to fix the greatest needs of the system.
- The plan's discussion of the roles of different agencies makes it hard to identify resources and/or implementation strategies relative to the dollars needed.
- WisDOT needs to provide funding investments for rural infrastructure.

### Shaping the Final Plan

The combined input of attendees to the FAC and GFIS meetings provided a majority of the public comment on the Draft State Freight Plan. For example, during the public comment period for the draft plan, WisDOT collected over 280 comments from interested individuals and groups. Of those 280 comments, over 150 were submitted by stakeholders during the FAC and GFIS meetings. WisDOT also received more than 130 comments via email and from attendees of the public involvement meetings. All comments were compiled and analyzed to develop a complete picture of stakeholder interests and concerns. Comments promoting significant additions, deletions, or revisions were reviewed and carefully considered.

Based on the analysis of comments received during the draft plan stage, WisDOT developed several changes to the draft plan to address key issues identified. Specifically, WisDOT developed nine policies for inclusion in the State Freight Plan, in response to the feedback received. The policies have been incorporated into the freight plan chapters where appropriate:

1. WisDOT will continue to coordinate with state, regional and international partners, as well as explore the development of a maritime strategy for Wisconsin, to support maritime transportation as part of a safe, efficient and seamless freight transportation system.
2. WisDOT will work with stakeholders to facilitate a discussion to develop an intermodal strategy for Wisconsin.
3. WisDOT will review project development process and design standards to incorporate the needs of freight system users.
4. WisDOT will provide tools/materials that communicate and educate industry and the general public on pertinent freight topics and issues.
5. WisDOT will leverage the data, tools and methods developed through the freight plan to inform project prioritization and investment decision, as well as provide them for DOT partners.
6. WisDOT will continue to work with other states to identify harmonization opportunities.
7. WisDOT will investigate ways to simplify, streamline and provide more permitting options.
8. WisDOT will continue its efforts to promote safe rail crossings throughout the state.
9. WisDOT will monitor national best practices and other initiatives related to reducing freight's impact on the environment.

## **Appendix A: Subject Areas Identified in Tabletop Comments**

The following list of subjects was used to prioritize the thematic areas for each of the questions asked through the tabletop exercise:

- Intermodal/Multimodal Facilities<sup>3</sup>
- Ports/Harbors
- Airports
- Rail – Class I
- Rail – Short Line
- Trucking
- OS/OW
- Pipelines
- Interstate Highways<sup>4</sup>
- Local Roads
- First/Last Mile
- Congestion/Bottlenecks
- Safety
- Legal Weights
- Drivers/Labor
- Regulation
- Truck Parking
- Economic Development
- Supply Chains
- Collaboration
- Connectivity
- Regional Approach
- Agriculture/IOH
- Forest Products
- Data Analysis
- Performance Measures
- Funding
- Environmental
- Tool Kit
- Implementation
- Plan Summary
- Other (Specify)

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<sup>3</sup> This area also captured multimodal policy discussions.

<sup>4</sup> Also included Corridors 2030 Highways.

## **Part II: Summary of October 12 FAC Afternoon Session and Waterborne Freight Feedback**

On October 12, following a lunch break FAC attendees reconvened to a panel presentation on Waterborne Freight issues and opportunities for Wisconsin. Presenters and their focus areas included:

- Dean Haen, FAC member and President of the Wisconsin Commercial Ports Association. Mr. Haen provided the attendees with an overview of the locations, commodities, and volumes of freight moving through Wisconsin's commercial ports. He also discussed the economic impact of the ports: 8,700 jobs and \$622 million in personal income.
- Mark Binsfeld, JF Brennan Company. Mr. Binsfeld discussed his company's marine construction, environmental remediation, and harbor management operations. The JF Brennan Company operates throughout most of the Upper Mississippi River, the Illinois River, and on occasional projects elsewhere. Mr. Binsfeld's presentation discussed the commodities and volumes at the Ports of La Crosse and Prairie du Chien, examined the aging and deteriorated lock and dam facilities on the Upper Mississippi, and identified the potential challenges that could result from failures. He further identified potential federal funding sources and emerging federal legislation.
- Kirsten Mickelson, Upper Mississippi River Basin Association. Ms. Mickelson discussed her organization's efforts on environmental and commercial development along the upper Mississippi River. She identified opportunities for potential containerized import and export, including agricultural exports and the US DOT's Maritime Administration's Marine Highways M-35 and M-55 designations.
- Mike Piskur, Conference of Great Lakes and St. Lawrence Seaway Governors and Premiers. Mr. Piskur discussed the efforts of this bi-national organization and the \$5 trillion economy in the region. He highlighted opportunities with greater trade, longer seasons with icebreaking, and other economic development opportunities. He also explained the threat an unanticipated closure of the 49-year-old Poe Lock at Sault Ste. Marie would have to the entire North American economy.
- Dr. Ernie Perry, FAC member and researcher for University of Wisconsin's National Center for Freight and Infrastructure Research and Education (CFIRE). Dr. Perry discussed the findings of a study CFIRE conducted for the Wisconsin Commercial Ports Association. It examined opportunities to divert freight from truck to vessel, and found some opportunities along both the Mississippi River and Lake Michigan shorelines.

Attendees then convened for tabletop exercises to discuss Maritime Freight issues in Wisconsin, and the state's potential role. Many bulk commodities, including cement, road salt, grains, steel, large mechanical equipment, and petroleum distillates are part of the range of goods handled at Wisconsin ports. In summary, the state role was identified as continuing the Harbor Assistance Program, informing Congress on the need to supplement the Poe Lock, working with other governmental agencies to coordinate consistent efforts and reduce regulatory redundancy, and ensuring land-side connections remain robust or are enhanced.

### **Waterborne Freight Tabletop Exercise**

The Waterborne Freight tabletop exercise asked FAC members to identify the role that maritime freight transportation plays, across the globe and within Wisconsin. Attendees were asked to identify what items were moving by water, what factors direct the movement of freight towards or away from a waterborne option, the role of state and federal governments towards maritime transportation, and the roles that the private sector expects to play in the development and improvement of the marine sector.

#### **Question 1: What factors drive the use of waterways as a means to move freight?**

Attendees were asked to divide their responses between “in general” and “in Wisconsin.” Generally, commodity type, commodity prices, competing mode costs, size of load, time the delivery is needed, and overall availability of maritime options were identified as the primary forces driving maritime freight. In Wisconsin, weather was a critical factor, with marine transportation halted in much of the winter months. Water level variability, infrastructure condition, proximity to ports, storage availability, load destination, transportation costs, port infrastructure, reliability, and awareness were also listed as factors for Wisconsin’s ports.

#### **Question 2: What business sectors are most reliant on waterborne freight, and what are the origins and destinations of the goods being shipped?**

In general, bulk commodities and large items were identified as the primary users of waterborne transportation. Commodities includes coal, grain, iron ore, steel, salt, limestone, fertilizer, and concrete; wind energy equipment and other large manufactured items were identified as other major items moving through state ports. Most of the supply chains were commodity-specific. Grains would head to Lake Superior for export to Europe, while grains along the Mississippi River would be exported to Asia via Gulf Coast ports. Coal arriving by rail in Superior is loaded into vessels for transport to southeastern Michigan’s utilities, or to the Great Lakes steel mills that also receive taconite. Salt and petroleum products are exchanged throughout Great Lakes ports; cement and limestone also have large volumes moving through the Great Lakes. Fertilizer comes northbound on the Mississippi River for agricultural markets. Ship building was also raised as an important operation for three of Wisconsin’s Great Lakes ports (Superior, Marinette, and Sturgeon Bay).

#### **Question 3: Identify the private sector waterborne freight competitors and options.**

Rail is the most direct competitor domestically; there are no other direct competitors for global import/export trade. Pipelines also compete for bulk petroleum product movement. Rail would be challenged to absorb much of the maritime bulk volumes due to lack of equipment and the configuration of receiving facilities (particularly for taconite/iron ore; the receiving docks face the water and have little or no rail access).

#### **Question 4: Determine if there is a role for government with respect to waterborne freight, and if so, what that role should be.**

At the federal level, attendees emphasized the need for infrastructure investments to maintain and improve facilities on both the Upper Mississippi River and the Great Lakes / St. Lawrence Seaway system. Most locks on the Mississippi River are over 70 years old; only one lock at Sault Ste. Marie (the Poe Lock) can accommodate the 1000’ ore carriers used to transport taconite. Redundancy was identified as a critical need.

In Wisconsin, continuation and enhancement of the Harbor Assistance Program (HAP) was endorsed, with participants noting the importance of first- and last-mile connectivity at ports, particularly for rail and oversize loads. Funding and regulatory easing were also identified by attendees as important

changes, especially the Jones Act and pilotage rules/fees at Great Lakes harbors. Dredging and port wall maintenance were listed as key activities tied to the HAP. Funding concerns, including overall lack of visibility of the maritime role in the state's economy, were raised as concerns by attendees. The important role of local governments in management, including land use planning, was also discussed.

Attendees requested the state take a stronger role in advocating for the maritime sector. The actions identified included increased coordination with federal agencies (US DOT's Maritime Administration, Corps of Engineers, etc.), regional organizations (Upper Mississippi River Basin Association, Wisconsin Commercial Ports Association, Council of Great Lakes and St. Lawrence Governors and Premiers), and other state agencies (Natural Resources, Coastal Management) to identify shared priorities and develop strategies for federal planning and infrastructure funding. Attendees noted several studies and planning efforts underway that should be acknowledged and incorporated into the State Freight Plan and maritime freight policy.

*Question 5: Identify the expectations/roles from the private sector in making improvements to waterway assets and waterborne freight competition/options.*

FAC members from the private sector noted they expected to see continued investment in vessels, including replacing or converting coal-burning vessels to diesel operations. Private dock owners also pledged to make improvements to maintain operations. Concerns over regulations (including ballast water) were identified as a potential limitation to these reinvestments. FAC members expressed their desire that the FAC be empowered to guide policy changes in an ongoing, formalized role. Efforts they envision include advocating for the use of maritime transportation, educating the larger community about the role of maritime freight operations, and offering input to legislative changes.

Following the tabletop discussion, attendees prepared to attend a site visit to the Domtar Paper Mill and Co-Generation plant.

**Visit to Domtar Mill and Co-Generation Facility**

To better understand the movement of forest products across northern Wisconsin by rail and truck, WisDOT staff arranged a visit of the Domtar Paper Mill and Co-Generation plant in Rothschild. Craig Timm, Director of Government relations at Domtar, helped arrange the FAC visit to the mill. The Domtar Paper Mill is one of two mills owned by Domtar in central Wisconsin, the other being in Nekoosa. While both mills are adjacent to operating rail lines, only the Nekoosa mill receives any of its logs by rail. Logs delivered by truck are moved around the Rothschild mill on its own rail lines, however. More than 180 truck movements per day are part of the traffic flow into and out of Rothschild.

The Rothschild Mill opened in 1909 and is now operating on its 4<sup>th</sup> machine (built in 1969). The facility produces a high-quality uncoated paper, used for greeting cards and other similar applications. Much of the wood used for this paper is maple. The Mill employs more than 400 people, with an estimated regional economic impact of almost \$300 million. Annual paper production capacity is 138,000 tons, with annual pulp production capacity of 66,000 tons.

Adjacent to the mill, WE Energies owns and operates a 50 megawatt co-generation facility, completed in 2013, that produces steam for the paper mill as well as electricity available to customers through the region. The highly-automated process uses wood and other biomass as fuel, with much of the biomass removed from land that has had the timber harvested from it.

### **Conclusion of FAC**

The FAC meeting ended with a return to the Stoney Creek Conference Center at 5:00 PM for a networking opportunity.

### **Participant Evaluations**

A total of 14 participant evaluations were collected at the FAC meeting; three more were subsequently received via e-mail. In summary, attendees found their experiences positive, including ratings for overall experience, the level of information provided, and agenda topics. With one exception, all attendees who submitted surveys felt the five-hour session (with a 45-minute lunch in the middle) was the right amount of time to spend.

For the discussion on the Freight Plan, evaluation scores were mostly positive; the comments associated with lower scores directed their concerns at the lack of time to review the complete plan, and the need for more time to answer the questions from the tabletop presentations. For the Waterborne Freight panel and tabletop discussions, scores were also positive; concerns noted a lack of maritime expertise at the tables, and lack of time for questions and discussions. Attendees also found the Domtar visit positive, with one commenter calling the tour “very interesting.”

The ratings for the topic areas of future interest found two topics at nearly equal ratings: Funding and Intermodal. These topics will likely be of continuing interest to the members of the FAC. The next-highest theme was Freight Planning, followed by Rail. Of lower interest to attendees were Energy and Economy & Partners. At the lowest position was Implements of Husbandry.

Finally, attendees expressed general satisfaction with the location and accommodations both rating highly. One attendee commented that it was good to get out of Madison.

The next FAC meeting is scheduled for May 2017 and will be held in the Madison area.

### **Part III: Summary of October 13 GFIS Afternoon Session and Transportation Technologies Feedback**

On October 13, following a lunch break GFIS attendees reconvened to a panel presentation on Emerging Technology issues and opportunities for Wisconsin. Presenters and their focus areas included:

- *Dewayne Johnson, P.E., WisDOT Division of Transportation System Development, Deputy Administrator.* Mr. Johnson provided an overview of the long history of technology use in transportation system planning and project development. He provided an example of how new GPS equipment helped save \$10,000 in additional construction costs, and how drones can be used for bridge inspections. Johnson referenced WisDOT's participation in several national committees on connected and automated vehicles. He also briefly discussed the Truck Parking Information Management Systems being installed along I-90, and the PrePass 360 technology for legal and safe over-the-road drivers to bypass Safety and Weight Enforcement Facilities (SWEFs).
- *Lieutenant Mike Klingenberg, WisDOT Division of State Patrol, Motor Carrier Enforcement.* Lt. Klingenberg offered a comprehensive overview of historic, current, and emerging technology for truck weight and safety enforcement. The earliest applications included Weigh-In-Motion systems that used floppy discs and static scale measurements. Today's automated systems are installed as part of the equipment at the new SWEFs, and include private accreditation companies PrePass and Drivewyze. Current state-of-the-practice equipment also includes Performance-Based Brake Testing, Virtual Weigh-In-Motion, and infrared cameras to detect brake function through heat. Through commercial vehicle inquiry and inspection reporting systems, inspectors can determine the safety records of companies, drivers, and even specific pieces of equipment.
- *Professor Adeel Lari, University of Minnesota, Director of Innovative Financing, State and Local Policy Program.* Professor Lari emphasized that automated vehicles (AVs) will be coming- the adoption of the technology is a matter of when, not if. He identified the companies – both auto manufacturers and technology companies such as Uber and Google – who are making the biggest strides in development and testing of the technology. Lari noted the anticipated safety benefits – a likely significant reduction in fatal crashes as AVs eliminate the potential for human error – are the key consideration in making the transition to AVs. He briefly reviewed the existing laws and determined that the technology may be legal, depending on how the definition of “driver” is established. He further discussed how federal and state roles might be defined and delineated. Professor Lari also reviewed the 2016 federal guidance on AVs, as well as the six stages (rated 0 to 5) of driver assistance and fully autonomous operations, as established by the Society of Automotive Engineers.

## **Transportation Technology Tabletop Exercise**

Following the panel presentation, attendees were asked several questions, as listed below.

*Question 1: “What areas of transportation technology are you most familiar/comfortable with? In which areas do you have less awareness? What additional information do you feel that you need to better understand the changing technologies for freight operations?”*

Attendees expressed a general understanding of most of the current technologies, especially those that were utilized within their modal area. These included the weigh-in-motion, PrePass, and other SWEF-based technologies for motor carriers. GPS, satellite tracking systems, driver assistance systems (lane departure warnings, emergency braking), electronic truck logs (ELDs), and truck parking information systems also were identified by truckers and truck shippers, while Positive Train Control and Automatic Equipment Identification readers were mentioned from the rail sector.

Many attendees raised questions on the technologies and deployment of connected and automated vehicles, including truck platooning. Specific questions were raised about the safety, availability, adoption rates, and legal standing of automated vehicle technologies. Some discussed how non-CV/AVs (bicycles, motorcycles, and older vehicles) would co-exist; others wondered about the public and private infrastructure needed to support deployment, and how the insurance sector would respond to the technology changes.

*Question 2: “What technologies have the greatest potential benefit for freight movement? Which have the greatest risks? Are they the same technologies? What should WisDOT do to enhance the benefits and minimize the risks?”*

Technologies viewed most favorably included improvements in GPS and vehicle/load tracking, load matching software, driver performance monitoring, and other tools for real-time predictive analytics to be applied. Safety benefits and reduced driver shortages were identified as likely outcomes. Defect detection equipment (for trucks, railroad tracks, and railroad equipment) was also mentioned favorably.

While some attendees expressed hope for increased efficiency and performance through CV/AV use in freight, others raised concerns of those systems’ likelihood to suffer hardware or software failures, or otherwise be hacked. The maintenance of CV/AV equipment was one concern raised, as was concern that the technology was being put in place before the systems are fully tested, debugged, and provided with sufficient back-end technical support. Proposed speed governors for commercial vehicles were also identified as a potential safety hazard, as they would create speed differentials between commercial and passenger vehicles. One attendee noted that the additional monitoring equipment and information platforms in truck cabs, installed for safety and efficiency, actually serves as a distraction that reduces both those goals.

*Question 3: “What NON-technological changes should be of concern to WisDOT? What are their implications for freight movement and economic development? Can technology help address those concerns, and if so, how? What policies should be considered in reflection of those changes?”*

The wide-ranging discussion points raised by attendees included concerns over geopolitical terrorism, aging driver demographics and driver fitness, millennial mobility, energy costs, regulatory changes, more distribution warehouses for on-line retail, and road design and capacity changes. Suggested WisDOT roles include improving the availability of truck parking and parking information (including partnerships

with private sector facilities), and reducing roadway barriers for trucking (such as monotubes, curb extensions, and tight-radii roundabouts).

Question 4: “What are the most important roles for government as transportation technology rapidly advances? Where should it be involved? Where should it not be involved? How should the value of technology be measured?”

Safety and overall technological awareness were emphasized as critical concerns for government by the attendees. The attendees expected that government will establish clear policies and legal frameworks for the safe implementation of CV/AV technology, having first familiarized itself with the technology and its vulnerabilities. Expectations are that governments will also work closely with the private sector developers of the technologies, research institutions, and with each other on standards and regulations.

Question 5: “What are industry expectations regarding the implementation of connected and autonomous technologies? How soon do transportation companies expect to apply connected vehicle platforms, or other technologies? How soon does industry expect automation, at least in part? To what degree is the private sector investing in the equipment, training, and security required for these technologies?”

The attendees saw that there would be a split between those that want to adopt the technology today, and those that are taking a more cautious approach to implementation. One of the splits is likely to be between large trucking companies (including UPS and FedEx) and small carriers/independent owners, as smaller companies often use cascaded equipment and lack the capital to invest in new technologies. Data requirements that support algorithms and predictive analytics will be a key factor in determining the pace of implementation. Current trucking and railroad regulations require operators; railroads are comfortable with keeping a human presence in the cab. The legal groundwork will need to be established before CV/AV deployment is widespread.

Question 6: “What capacity for human interaction/over-ride should be allowed for transportation technologies? Should one human be allowed to over-ride, or should over-ride permission be required by multiple humans? Are there circumstances under which over-ride should never be permitted?”

While attendees generally agreed that some mechanism for an override should be allowed, those circumstances should be very limited and closely monitored. Positive Train Control and real-time camera recording are two circumstances where overrides should not be permitted. Some attendees felt that more than one human should be required to override any technology. Insurance coverage, safety risks, and liability will determine when and how any override could or should be allowed.

### **Conclusion of GFIS**

Following the conclusion on the tabletop discussion, WisDOT Deputy Secretary Paul Hammer offered a preview of WisDOT’s freight-related efforts expected in 2017. He then joined with Craig Thompson, from the Transportation Development Association, to thank the attendees for their participation in the GFIS.

### **Participant Evaluations**

A total of 23 participant evaluations were collected at the GFIS meeting. In rating the summit's overall effectiveness "in giving the freight industry a method for positively interacting with Wisconsin Agencies", 14 participants rated the Summit "Excellent", 8 rated the Summit "Good", and 1 rated the Summit "Fair".

Comments were generally positive for the Freight Plan session, ranging from compliments the quality of the presentation, to the thoroughness of the Plan, to appreciating the opportunity to discuss the Plan in a tabletop setting. The few negative remarks regarding were almost wholly driven by participants not having had a chance to read the Plan (or a summary of it) prior to the GFIS.

Comments were generally positive for the Technology session as well. Many participants noted the presentations were an excellent education on how technology has evolved over time, and how quickly transportation technologies are moving today. Technologies associated with WisDOT's SWEFs were pointed out by several attendees as very interesting. The few other remarks regarding the session were suggestions that the briefings could have been more detailed.

The next GFIS date and location are to be determined.