

Summary Report of the April 2016 Freight Advisory Committee Meeting

A Summary of Feedback Provided by the Freight Advisory Committee on April 14, 2016

The Wisconsin Department of Transportation (WisDOT) hosted a Freight Advisory Committee (FAC) meeting on April 14, 2016, at the Lussier Family Heritage Center in Madison, Wisconsin. FAC meetings provide an opportunity for members, which include freight transportation professionals in the private sector and government partners, to provide input and guidance on issues impacting freight transportation in Wisconsin.

Following a welcome by WisDOT Secretary Mark Gottlieb, attendees were presented a summary of the previous FAC meeting, held in September 2015. This summary included the results of that meeting's tabletop exercise, which asked in-depth questions on rail access, service, and competition in Wisconsin. The April 2016 FAC meeting, by comparison, included two tabletop discussion sessions. The first tabletop session focused on the mobility and safety concerns associated with Oversize/Overweight (OSOW) vehicles operating in Wisconsin. The second tabletop 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.

Further background on the FAC, including more detailed issue papers for each of the two discussion sessions and meeting minutes, can be found at <http://wisconsindot.gov/Pages/doing-bus/freight/fac.aspx>.

Tabletop Discussion Methodology

As part of the tabletop discussion sessions conducted during the meeting, FAC members were assembled into small groups for in-depth discussions on OSOW vehicles and supply chain and logistics practices. As with the tabletop sessions from the previous two FAC meetings, each table was assigned a facilitator and note taker.

The following narrative summarizes the discussions and comments provided by committee members.

OSOW Vehicles & the Local Infrastructure Tabletop Discussion

Wisconsin's transportation system has seen considerable growth in OSOW freight demand over the past few decades, and this trend is expected to continue. The size and frequency of OSOW vehicles and loads increases the stress on bridges and pavements and produces highway operational considerations specific to OSOW movements. These concerns extend from State and Federal highways to the many local roads and bridges with weight and size restrictions that are posted below legal limits. Wisconsin, along with many other states (including neighboring states), has made significant strides in developing a transportation system that accommodates OSOW loads. However, additional efforts will be required to improve the safe and efficient movement of these loads – both within the state and across state lines.

The FAC was asked to identify potential opportunities to enhance OSOW freight mobility and safety across the state, and to identify tangible steps WisDOT may take either solely or in partnership with stakeholders to address OSOW challenges and needs. Each group examined the following questions:

- What are the challenges and barriers that inhibit OSOW vehicle mobility and routing (including equipment, infrastructure, permitting, and operational challenges)?
- What is WisDOT's role with respect to removing the challenges and barriers that inhibit OSOW vehicle mobility and routing?
- What is the private sector's role with respect to removing the challenges and barriers that inhibit OSOW vehicle mobility and routing?
- How can non-roadway transportation modes (e.g., rail, waterway, etc.) enhance OSOW freight mobility in Wisconsin?

Themes We Heard

General themes emerged that emphasized better communication, harmonization of laws and permitting systems across municipal and state boundaries, the need to recognize the local impacts of OSOW, and identification of infrastructure improvements required to improve freight mobility. The observations of the FAC members organized into nine broad themes, and multiple specific areas of concern.

Permit Challenges

- There is a lack of uniformity on corridor capabilities, permit availability, and the permit issuing process between Wisconsin and surrounding states.
- This lack of uniformity also exists between Wisconsin and local municipalities.
- Local permits are difficult, sometimes impossible to get on weekends or evenings.
- WisDOT's automated permit system doesn't integrate with local road permit issuance.
- The number of permits needed is onerous (raised in connection to agriculture/fertilization/planting).
- Escort rules vary from state to state and can be confusing.
- WisDOT does not know how many trips are generated under annual/multi-trip permits.

Designing for Safety

- Newer road designs and features for safety (bump-outs, roundabouts, channeled turn lanes, monotubes) impede OSOW loads.
- Safety should not be overlooked.

Utility Coordination

- FAC members discussed support for the return of a "Hauler's Hotline" (a parallel to the "Digger's Hotline") as a way to ensure compliance with all the needed contacts for utility assistance during a high/wide load move. Under the present system, haulers are unsure of all the contacts needed to make large moves.
- The 12-day permit period is shorter than the time needed to coordinate movement with the many utilities along corridors, which can take up to seven weeks.

Mega-Loads

- Mega-loads (those in excess of 250,000 pounds) generate a large amount of extra department work and system demands impacts.
- The department needs more communication with haulers, logistics planners, manufacturers, and shippers of large/mega loads to better identify their needs and the department's capabilities to ensure that OS/OW commerce can move without blocking roads due to incorrect expectations. In some cases, manufacturers are building products for end users without

consideration of the transportation systems available; they need to know they are building above the limits of safe transportation of their products.

- Look to land use as a longer-term solution. Locate the factories making the largest items along transportation corridors that are capable of handling those loads.

Bridges and Pavements

- Bridges can be an impediment – both as vertical clearance obstacles (especially near ports/transload locations) and as crossings posted with lower weight limits.
- Interstate Highways should be used for overweight loads, as the pavement and structures are designed to handle heavier loads.
- Weight limits on seasonally-posted roads limit freight movement during freeze/thaw cycle period.
- Weight and clearance standards vary from jurisdiction to jurisdiction, even when the corridor is part of routine OS/OW freight movement.

Connections to Other Modes

- Improve routes into and out of ports in general, since much of delivered OS/OW products come through ports. River ports need substantial land-side improvements.
- Consider a demonstration project for OS/OW movement using waterways, such as the Fox River lock system or the SS Badger. The upcoming CFIRE Port Study should offer guidance.
- Seek to use non-highway modes where possible to limit use of OS/OW on roads. Rail cars can legally handle up to 4X as much weight as trucks, but have issues with widths.

Local Roads / Impacts and Impediments

- Loads can't get to their final destination on posted roads. First-mile/ last mile challenges exist in both urban areas (low rail bridges; tight geometries) and in rural areas (posted roads/bridges).
- Local governments are seeking a funding stream dedicated to cover their local road infrastructure costs along OS/OW priority routes.
- Communication between state and local governments, and amongst local governments, is inconsistent and leads to poor planning for OS/OW movement.
- Sometimes, construction projects will cut off OS/OW access.
- Consistency with communities on jurisdictional issues regarding connecting highways should be given greater consideration, and WisDOT should play a stronger role on these issues. .

Communication and Partnerships

- There is a need for dedicated priority routes that remain unimpeded. An easy first step would be to share maps that direct movement to those routes; also consider one-step permitting that covers freight routes that use both state and local streets/roads.
- WisDOT should be a resource center and lead more partnerships that bring together shippers, local governments/MPOS/RPCs, law enforcement, utilities, manufacturers, and others using OS/OW to share information, identify critical obstacles, and seek solutions.
- Enforcement of some operations is minimal, allowing road damage from large loads without consequences for the driver or shipper.

Financial Impacts

- The financial impacts of time, distance in out-of-way routings need to be recognized.

WisDOT's Potential Responses

The WisDOT responses to the concerns regarding OS/OW operations and regulation include both informational responses and other considerations.

Communication and Information Sharing Opportunities

- WisDOT could work with manufacturers to inform them of the availability/practicality of using non-highway modes (even for short distances) to move the largest items.
- WisDOT manages several programs that may be used together to support freight needs, including improvements to the viability of non-highway OS/OW movement. These include the Harbor Assistance Program (HAP), Freight Rail Preservation Program (FRPP) grants, the Freight Rail Infrastructure Improvement Program (FRIIP) loan funds, and the Transportation Economic Assistance (TEA) program. Other opportunities also include evaluating available federal programs such as TIGER and Fast Lane Grants. WisDOT could use industry events to better inform shippers about these infrastructure assistance programs.
- As WisDOT replaces structures, it continues to identify the freight needs along corridors, and where appropriate, designs bridge heights and load limits accordingly.
- WisDOT will continue to partner with Port officials, local governments, and shippers to ensure proper identification of the critical state and local routes serving port facilities. The condition of these routes, and their impediments, could be further examined to understand the magnitude of need across the state.
- Congressional approval is required for any changes to or exemptions from the 80,000-pound GVW limits on Interstate Highways. WisDOT worked with its delegation to retain OS/OW options when USH 41 was redesignated as IH 41, and will continue to advocate for retaining existing OS/OW accessibility.
- WisDOT is aware that the SS Badger has been used to transport OS/OW loads across Lake Michigan, and will inform CFIRE of suggestions to use the vessel for these purposes on a more consistent basis.
- WisDOT also notes interest in on-barge/short-sea OS/OW shipping, and will also inform CFIRE of this suggestion. Any proposals could be an outgrowth of CFIRE's current study that examines both lake and riverway shipping options.
- WisDOT is willing to be the state-level clearing house / leader on technical information for OS/OW movement, helping to standardize roadway designs and permit issuance processes and improve coordination and communication with all agencies and stakeholders.
- WisDOT is developing maps that identify the corridors capable of accommodating loads of varying excess heights. We will begin to share these maps as they are produced.
- WisDOT has hosted several Governor's Freight Industry Summits over the last six years. These discussions provide a broad, ongoing forum for government and industry to discuss issues and opportunities.
- WisDOT has a long-standing Motor Carriers Advisory Committee that has discussed OS/OW issues on a regular basis.
- To offer broader awareness of WisDOT's freight programs and policies, WisDOT is developing a Freight Toolkit. This brief document will include facts about the state's freight network and the programs available to improve freight shipping.
- WisDOT recognizes that state MPOs and RPCs have made significant efforts in freight planning for their local systems and facilities.
- WisDOT holds routine outreach events to better understand how its plans, policies, and projects minimize shipping costs of manufacturers and carriers, including OS/OW transportation. As

stewards of the transportation system, WisDOT will continue to focus on maintaining and improving safety and reliability, using those efforts to address the concerns of industry for improved efficiency.

Potential WisDOT Action Opportunities

- WisDOT will continue to partner with national and regional associations (AAMVA, MAASTO, etc.) to collaborate on regional harmonization on differences in permit issuance procedures and permit allowances. Such efforts could include participation in a research study to analyze the barriers to and opportunities from harmonizing with neighboring states.
- Improvements in WisDOT's permit issuance processes will be explored for incorporation into the anticipated permit system upgrade. Additional efforts making include identifying the elements needed for an improved permit system and assessing the opportunities for implementation.
- WisDOT could encourage local governments to have additional hours available to issue permits during periods of peak demand, such as planting and harvest seasons.
- WisDOT remains committed to the safe and efficient multi-modal movement of people and freight. Where conflicts arise, WisDOT works to direct OS/OW traffic away from residential and commercial areas.
- WisDOT analyzed – at a regional level – many of the bottlenecks and impedances to OS/OW movement across the state. This analysis also identified the most critical locations in need of design changes to better address these types of movements. While this effort allowed the department to address critical impedances in the short term, a longer-term effort is required to ensure appropriate design standards are established for key corridors.
- WisDOT will explore identification of dedicated OS/OW freight corridors, and analyze design standards, such as those reviewed in national research literature, for opportunities to reduce future impediments on state highways (and local road connections?).
- In Milwaukee County, a working group of WisDOT, municipalities, and utilities is coordinating efforts to identify the corridors along which manufactured items larger than legal dimensions (oversize [OS] and over-height [OH]) had been moved in the past. The Region has worked with its partners to preserve these corridors through restricting or removing impediments. If successful, WisDOT will assess options to expand this model to all Region offices.
- WisDOT is also identifying a statewide oversize (20') route network, based on historic use patterns and routes with minimal overhead obstructions. Current policy has been to preserve the existing routes so no additional impediments are introduced, then to address existing impediments as funding is made available.
- If a "Hauler's Hotline" were created to improve operations and coordination efforts along designated OS/OW routes, WisDOT could provide partners such as the PSC and the Wisconsin Utilities Association with transportation data, to support collaboration.
- WisDOT allows extensions of permits to accommodate for utility coordination, but will work with shippers and specialized carriers to consider a review of the timelines for OS/OW permit issuance against the timelines of utility companies.
- WisDOT could review its permitting process to determine how far in advance of an OS/OW move permits could be issued, or if a preliminary permit system could be established.
- WisDOT could meet with the state's manufacturers of large items to better understand their shipping routes, and to explore the feasibility of re-engineering their products to better fit conventional highway designs, or to encourage them to locate future facilities near multi-modal corridors better able to accommodate their shipping needs.

- Consideration could be given to studying the infrastructure impacts and costs generated by mega-loads, with the potential long-term goal of establishing some certainty of where mega-loads could be accommodated.
- Should a system of mega-load corridors eventually be identified, WisDOT could work with MPOs, RPCs, local governments, and others to develop a shared information system to identify development sites adjacent to these corridors, and collaboratively direct firms manufacturing large items towards these sites. Over time, this practice could reduce the costs of maintaining multiple OS/OW corridors (including urban streets) to accommodate these shipments.
- WisDOT could review requests for improvements to highways with seasonal load limits, and offer benefit/cost analyses to support any decisions.
- WisDOT could work with the Wisconsin Towns Association, county highway commissioners, and others to establish a consistent set of standards for local roads that routinely carry OS/OW traffic.
- WisDOT, with other partners, could work with the Wisconsin Commercial Ports Association (WCPA) to study and prioritize short- and long-term needs at public ports along the Great Lakes and Mississippi. The CFIRE study could be instructive on potential new markets/port roles and the equipment needed to serve those roles.
- WisDOT could work with the state's railroad companies to gain a better understanding of the potential for modal diversion to rail for OS/OW loads, even for short distance deliveries.
- WisDOT could work with local partners to identify the most-frequently used local corridors for OS/OW movement, and identify major impediments. Should a freight program targeted to local roads be re-introduced, the local road OS/OW consideration would be one area of mutual interest and benefit. Information could be used to develop new programs or policies directed at improving local OS/OW movement.
- WisDOT could work with MPOs and RPCs to identify the first/last mile restrictions along routes between state highways and port/intermodal facilities
- WisDOT could share available commodity movement data for local road networks. This data may aid local governments in making investment decisions based on how and where freight movements occur.

WisDOT will consider additional monitoring of unpermitted OS/OW freight movement on state highways, and if warranted, develop targeted enforcement strategies.

Supply Chain & Logistics in Wisconsin Tabletop Discussion

As part of the FAC discussion, WisDOT sought to build upon previous discussions on supply chains and logistics, which were examined during the 2014 Governor’s Freight Industry Summit. The questions revisited concerns including critical facility location, factors shaping supply chains, data and technology needed among other topics. FAC members were then asked to offer their views on what WisDOT’s role should be in that area. The results of these discussions will provide direction into the development of the State Freight Plan policies, and also allow the department to assess if any changes have emerged since 2014. The questions examined by the FAC through this tabletop exercise were:

- What are the most critical facilities, corridors, and choke points for supply chains (for all modes, both inside and outside of Wisconsin)?
- How should WisDOT prioritize and influence the development of policies to address those facilities/corridors/choke points, and how should other stakeholders partner with WisDOT on those efforts?
- What factors establish, shape, and change supply chains inside and outside of Wisconsin, and how have those factors changed over time?
- Which factors are most important for WisDOT to try and influence, and what form should that influence take?
- What types and sources of data are needed to evaluate supply chains, and how should WisDOT collect that data and/or partner to gather that data?
- What technologies, tools, and processes are essential to analyze supply chains? What are the most important items to measure? How should WisDOT prioritize these measures and evaluate changes in performance?
- What does the private sector expect from WisDOT in prioritizing policies and investments, and what are they willing to contribute to improve the most important facilities/corridors/choke points?

The following table reflects the themes emerging from the tabletop exercises, and department responses to the issues raised in those thematic areas.

Themes We Heard

The responses by the attendees from the Supply Chain and Logistics Panel marked a shift away from the “just-in-time” emphasis on speed historically prioritized by industry. Instead, FAC members stressed the importance of consistency and reliability, and also emphasized the need for better collaboration between the public and private sectors (especially on data collection, analysis and education). Technology was identified as a theme of growing importance to logistics, and WisDOT was encouraged to extend its freight planning outreach to organizations and locations beyond state lines.

The supply chain observations of the FAC members organized into six broad thematic areas, and multiple specific areas of concern.

System Performance

- Reliability, confidence in delivery times, and predictability are more important than speed. WisDOT should measure reliability and predictability for its corridors and seek to improve those with wide variabilities in travel time.

- Rail service remains a challenge in many parts of Wisconsin, as the state lacks sufficient market demand for consistent service. Connections between railroads are also a concern.
- State agencies should encourage economic development along rail lines to bring the state over the service threshold. The challenge is that Class I rail companies share limited data regarding their systems.
- State companies and WisDOT need to find greater efficiencies on Chicago freight interchange, for both rail-rail and rail-truck transfers. Chicago remains a chokepoint.
- Rail intermodal availability in Wisconsin remains a critical goal. Inbound containers are needed to have sufficient export capabilities. It can cost more to ship a container from Wisconsin to Chicago than to ship it from Chicago to China.
- The freight sector expects WisDOT to identify and address chokepoints and locations of growing congestion.
- The state faces seasonal challenges/limitations with water transportation and load limits on thawed roads.
- When frac sand came on quickly, the timber producers who relied on rail had to quickly shift to trucking.
- Need to talk more and strategize on how pipelines benefit Wisconsin.
- Local infrastructure needs to be maintained and viable, with connectivity to major arteries. Specific programs, policies, and procedures are needed to address first/last mile project implementation.
- Investments in transit open up capacity for freight. If people aren't moving, freight isn't moving.
- Industry expects – at a minimum – a safe and reliable transportation system, with good road condition that does not damage loads.
- State Freight Plan planning and funding strategies should specify policies for:
 - International benefits to WI
 - Interstate freight
 - In-state freight

Understanding Industry Operations

- WisDOT needs better awareness of logistics and supply chain metrics/operations, and the private sector stakeholders need to share the analytical tools they use to make supply chain decisions with WisDOT, including data collection and analysis.
- WisDOT should hold a primer on logistics and supply chain management for new freight staff, so they can understand the tools and thresholds used in the industry. WisDOT could explore using the I-95 Corridor Coalition's Freight Academy model for training its staff in understanding the practice of logistics and supply chain management. UW-Superior could help develop the curriculum.
- WisDOT policies should align with and help facilitate the "8(+)" R's of Logistics:
 - Use the right means
 - To deliver the right products and services
 - In the right quantities
 - And in the right condition
 - From the right source
 - To the right customer
 - In the right configuration
 - At the right time
 - In the right place
 - And at the right price
- Logistics efficiencies are built around full loads, trip chains, and customer relationships.

- Porter’s Cluster Theory (clustering of inter-linked businesses) also applies to logistics clusters.
- Customer demand is also essential to build a logistics/supply chain base. Supply chains are strongest in high-demand areas.
- WisDOT should consider developing relevant FAC subcommittees to examine domestic intermodal, drayage, and other sector challenges.
- Consumer expectations are also driving changes in delivery schedules (Amazon Prime) – including more weekend deliveries.
- Changes in retail distribution models are disrupting the retail sector – from the old warehouse and retail store pairing to the emerging fulfillment center and parcel/package delivery process.
- The quantity and cost of required labor shapes supply chains – from trucker hours-of-service to warehousing staff costs – remains a challenge. Businesses balance those costs against the proximity of customers. WisDOT has very little influence in this area.
- Bridge crossings between Wisconsin and Iowa and Wisconsin and Minnesota are of concern. Construction projects should be staged to minimize disruption.
- WisDOT needs to recognize that logistics firms need resiliency and redundancy – and fast, accurate information on alternate route availability – to accommodate near-instant changes by private sector in routes / shippers / modes when incidents occur.
- Differentiate between domestic intermodal containers and import/export intermodal containers. There is nowhere in Wisconsin where domestic containers can be loaded, and nowhere in eastern Wisconsin where export containers can be loaded. That’s why so many containers go back and forth from Wisconsin to the Chicago area.
- Trucking is challenged by mismatched load demand, with trucks going out full and coming back empty.
- Once the larger Panama Canal is opened, we are likely to see changes to rail routings, including overhead traffic through Chicago.
- Work with the Department of Revenue on depreciation rates for trucks.

Compiling and Analyzing Information

- Economic benefits should shape/focus transportation system improvements – use industry-preferred tools such as IMPLAN or EMSI¹.
- Companies need to be more open with their data and business plans; WisDOT needs to conduct business and manufacturing surveys and small group meetings to identify stakeholder needs.
- Origin-destination data and overall truck ADT volumes are important data pieces that will provide WisDOT with a better understanding of manufacturing and priority freight corridors; most data should already be available as generic data travel patterns derived from proprietary data. Third-party data collection can shield confidential information. This will help identify the bottlenecks and generate forecasts.
- WisDOT needs to be aware of the volume and route movements of intermodal containers for planning purposes.
- In addition to reliable data, WisDOT also needs viable forecasting models.
- Better accuracy in forecasting will be welcome, but recognize it won’t answer all the questions. Data needs should be defined to better refine the degree of granularity.

¹ EMSI and IMPLAN are privately-owned and operated economic modeling systems that gather public and proprietary data, then apply their models to calculate future economic outputs by sector and location.

- WisDOT needs to look more regionally at freight transportation and encourage development and data sharing (e.g., work with Chicago and Twin Cities organizations to get stakeholders together; partner with other states through the Great Northern Coalition).
- WisDOT should produce a multimodal transportation map that can identify who owns what facilities, and how to contact that company. This would help existing and potential shippers identify the available modes.
- WisDOT should also improve its mapping capability to be able to know and show origins and destinations.
- The maps should have an OS/OW layer.
- Demographics will shape supply chain changes, with millennials gaining economic power while the overall population ages and places different demands on transportation.
- Changes in revenue sources will need to be considered with the expected decline in use of fossil fuels.
- WEDC should partner with WisDOT on business surveys (using Ohio and Minnesota as models), and on directing development to sites with sufficient transportation capacity.
- There are large pools of freight data available, but none are coordinated to common performance measures. WisDOT should adopt performance measures that include a freight fluidity model, traffic speeds, and reliability.
- WisDOT should look for “game changers” in planning for freight. The fracking (hydraulic fracturing) revolution has added large supplies of natural gas to domestic reserves, catalyzing production of plastics.
- Product engineering can allow for flexible delivery – either through conventional shipping or manufacturing via 3-D printers.

Partnerships and Collaboration

- WisDOT should collaborate with MAASTO/AASHTO and other regional groups, along with local governments.
- Support is growing for more public-private partnerships in freight, but both sides need to better understand the risks and rewards.
- WisDOT should bring stakeholders together that might not otherwise get together – try to promote regionalization of freight (reduce one-way empty trucks).
- In general, WisDOT needs to be more proactive in understanding and working with the freight sector, and with informing the legislative decision-makers.
- WisDOT should get the legislature involved with policy development and engagement through data and other information.
- WisDOT needs to coordinate its plans with major shippers.
- WisDOT should incentivize use of preferred locations or modes.
- The federally-designated National Primary Freight Network does not completely identify Wisconsin’s most important freight corridors.
- Fee increases are anticipated and expected – users should pay to get the system they need to operate.
- Community and social benefits, jobs, and quality of life is related to transportation decisions. There are regional and statewide impacts; transportation is especially critical in cities with less than 15,000 population.
- Wisconsin should allow establishment of Regional Transportation Authorities to allow a regional view of transportation, and to help relieve congestion.

Technology and Security

- Technology opens doors for accurate and instant data collection; also for automated vehicle operations. Basic communication services (such as cellular phone service) are needed to support freight efficiency. However, cell/GPS/WiFi availability in the state is not always present.
- Technology is also helping optimize shipping through efficient load-building and chained distribution.
- Vehicle-to-vehicle (V2V) technology will be used to improve efficiency.
- Autonomous vehicles are coming. WisDOT should aim to be a leader in pursuit of identifying technology and innovation that's happening by bringing groups together.
- Security looms as ongoing concern, especially as more "access points" via technology get introduced.
- Electronic Logging Device (ELD) use is becoming commonplace, but paper logs remain in use for smaller operators. (Note: FMSCA requires on-board electronic data logging by December 18, 2017.)
- Remote temperature detection and control ability – Internet of Things – we don't know everything that's coming. However, those remote systems offer others an access point to computer networks. Vulnerability is a critical concern.

Infrastructure Gaps and Needs

- Rail intermodal availability in Wisconsin remains a critical goal. The loss of ramps in many parts of the state (including Milwaukee, Neenah, and Green Bay) has hurt the state's competitiveness. Ramps at Arcadia and Chippewa Falls need to be protected. Locations should be (re)established near Portage and near the Upper Peninsula.
- Invest in multimodal projects.
- An international air cargo terminal is needed at Mitchell International.
- A viable Port of Milwaukee is needed.
- Truck parking at rest areas is an important concern.
- There is a lack of rail sidings for shippers.
- Seasonal limitations (frozen road limits, frozen lakes and rivers) hamper supply chains.
- WisDOT should identify permanent corridors so people can plan long-term and have more flexibility for changing future needs.
- WisDOT must address the needs of local roads and their first/last mile importance. That includes the importance of roads near freight facilities, and of roads in agricultural areas that help move commodities for export.

WisDOT's Potential Responses

The WisDOT responses to these logistics and supply chain concerns include both informational responses and other considerations.

Communication and Information Sharing Opportunities

- Under rulemaking originating from passage of both the Moving Ahead for Progress in the 21st Century Act (MAP-21, 23 CFR Part 490) and the Fixing America's Surface Transportation Act (FAST Act, Pub. L. No. 114-94), states are required to establish performance measures for freight movement on Interstate Highways. Two measures are currently identified: 1) Truck Travel Time Reliability, measured by the percent of the Interstate System mileage providing for reliable truck travel times; and 2) the percent of the Interstate System with uncongested miles. States will be required to establish targets for both of these measures, and show significant progress towards

meeting these targets within two years of the targets being established (FAST Act ss. 1116; 23 U.S.C. 167 [j]).

- WisDOT has an established and robust set of performance measures organized under its Mobility, Accountability, Preservation, Safety, and Service (MAPSS) improvement program. To ensure full compliance with the FAST Act, WisDOT will be working with the Federal Highway Administration and other partners to identify the appropriate measures and targets.
- WisDOT continues to provide FRIIP loans to rail-served businesses, assisting them with projects to expand capacity and/or increase efficiency. WisDOT could take additional steps in promoting these programs to the business community.
- WisDOT is aware of Chicago's CREATE efforts, and (where appropriate) could provide insight on the bottlenecks of greatest concern to Wisconsin-based businesses and shippers.
- WisDOT's Freight Advisory Committee (FAC) examined intermodal freight at the April 2015 meeting. The membership requested WisDOT take the role as coordinator, facilitator and data analyst, and recognize that the private sector take the lead in facility development. WisDOT remains ready to help document and coordinate efforts to demonstrate sufficient freight demand for an intermodal facility, and to consider assistance for any proposal for such a facility in the state.
- WisDOT, in partnership with the FAC and others, is gaining a better understanding of chokepoints critical to the freight sector, especially on the State Trunk Highway system. WisDOT will continue to work with its partners to develop potential solutions.
- The US DOT's Strategic Highway Research Program (SHRP 2) documented the need to improve freight demand modeling, due in part to weaknesses in using passenger trip models for freight movement. US DOT established a process directed at Freight Demand and Data Improvement (project C20). Four states, including Wisconsin, developed and tested pilot models based on supply chains; other states participated through testing innovations in local freight data. This model is undergoing final testing and calibration in late 2016.
- WisDOT has already held collaborative discussions with counterparts in Minnesota and Iowa.
- The State Freight Plan will discuss emerging issues and trends that are likely to impact freight movement, demand, and supply chains. These include connected and automated vehicles, technologies such as unmanned aerial systems (drones), and the neo-Panamax shipping capacities.
- WisDOT actively participates in MAASTO and AASHTO committees and other outreach efforts. WisDOT also has formal working arrangements with the state's MPOs and RPCs. WisDOT's region offices routinely work with municipalities on project identification and development.
- WisDOT's efforts through the Freight Advisory Committee and the Governor's Freight Industry Summit provide opportunities for government and business leaders to discuss issues and opportunities of mutual interest.
- WisDOT has an established process for communicating with the State Legislature, and routinely provides them with relevant information on transportation plans and projects.
- WisDOT's efforts through the Freight Advisory Committee, the Governor's Freight Industry Summit, and the Freight Plan public involvement process are some examples of WisDOT's efforts to discuss freight topics, and inform major shippers of the department's long-range freight plans.
- WisDOT has provided feedback to the US DOT and FHWA expressing that the Interim National Multimodal Freight Network, as federally identified, does not comprehensively identify the most important transportation corridors and facilities in Wisconsin.

- WisDOT will host a panel discussion and conduct a tabletop exercise on emerging technology in transportation at the fall 2016 Governor’s Freight Industry Summit.
- WisDOT remains vigilant of cyber threats, and incorporates multiple security structures to ensure data security and continuity of IT operations.
- WisDOT’s State Traffic Operations Center (STOC) in Milwaukee is staffed 24/7, and is equipped to serve as an emergency operations center when situations arise.
- WisDOT’s cooperative efforts on OS/OW routes in Milwaukee County are one example of WisDOT’s commitment to ensuring the viability of the Port of Milwaukee.
- WisDOT is collaborating on two separate efforts to improve information on the availability of truck parking in Wisconsin, and is also making its Safety and Weight Enforcement Facilities (SWEFs) open for truck parking.
- WisDOT programs such as Transportation Economic Assistance (TEA) and FRIIP (Freight Rail Infrastructure Improvement Program) are available to help support or finance the construction of rail sidings, where need is documented.
- WisDOT’s State Freight Plan will examine potential policies that support freight-dependent corridors.

Potential WisDOT Action Opportunities

- WisDOT continues to partner with WEDC, WEDA, and regional economic development groups, and could enhance these activities to potentially emphasize locations where rail service is available, and to identify locations where rail service is in demand but unavailable.
- WisDOT could provide the current freight volume data needed to help support investment-driven decisions, while the regional and private sector partners could help WisDOT by providing data on the potential carload demand from manufacturers and shippers.
- WisDOT will also continue to monitor additional rail activities that impact Wisconsin, to better understand rail industry changes and their potential impacts to and benefits for Wisconsin.
- WisDOT is interested in partnering with the CSCMP, UW-Superior, and/or other parties to develop in-house staff training on supply chain management and logistics. Such training would allow staff and management to gain a greater understanding of the criteria used to develop and alter supply chains, including basic concepts such as the “8 ‘R’s” and Porter’s Cluster Theory.
- WisDOT will consider researching and studying the impacts of changing retail shopping patterns, or other consumer-behaviors, on supply chains.
- WisDOT will continue to review regional and local road and bridge reconstruction schedules to ensure that, where possible, at least one alternative route is available for trucks. Due to lack of redundancy, reconstruction of Mississippi River bridges may not allow convenient detours for freight traffic. In those circumstances, WisDOT will work with the freight shippers to provide accurate information about bridge closure schedules, available routes, and other items. WisDOT will strive to provide this information with enough time for businesses to make alternate transportation arrangements.
- WisDOT remains ready to help document sufficient freight demand for either domestic or import/export intermodal facilities, and to consider assistance for any proposal for such facilities in the state.
- WisDOT is monitoring the supply chain changes that neo-Panamax vessels will create, including possible increased use of the Mississippi River for container shipping of imports and exports. WisDOT could work with partner states in MAASTO and with university researchers (including C-FIRE and UW-Superior) to develop appropriate public sector strategies to these changes.

- WisDOT has used IMPLAN for economic analysis, and will explore using it (and other recognized economic tools/packages) to help prioritize projects with freight benefits.
- WisDOT will examine best practices for the use of private sector data by the public sector. The goal would be to provide accurate, comprehensive, current, and quantitative means of assessing freight demands on the state transportation network.
- WisDOT will explore partnerships with organizations, universities, and others to conduct business and manufacturing surveys that identify the transportation concerns of stakeholders. These efforts could be similar to the business surveys conducted by the Minnesota DOT.
- WisDOT will work with public and private data sources to improve its tracking of origins, destinations, and contents of containerized shipments to and from Wisconsin.
- WisDOT will continue to take efforts to strengthen relationships through regular interaction, and to reach out to government agencies and regional entities (Illinois DOT, Alliance for Regional Development, Indiana and Michigan DOTs, etc.) for expanded collaboration and data sharing. The Great Northern Coalition, in which WisDOT participates, offers an example of such a regional partnership.
- WisDOT is developing its State Freight Plan to prioritize investment strategies and policies that address freight mobility.
- WisDOT is also tracking development of the US DOT's National Multimodal Freight Network, and will use this data, along with stakeholder outreach and involvement, to shape our state's Multimodal Freight Network.
- WisDOT has provided feedback to the US DOT and FHWA expressing that the Interim National Multimodal Freight Network, as federally identified, does not comprehensively identify the most important transportation corridors and facilities in Wisconsin.
- WisDOT will work with the local FHWA office to ensure changes and revisions are made to align the federal network with Wisconsin's Multimodal network, to the greatest extent possible.
- As mentioned earlier, WisDOT is producing draft statewide maps of routes favorable to OS/OH movement, and may expand those efforts to identify preferred OW routes.
- WisDOT has limited involvement in public-private partnerships (3Ps). WisDOT is collaborating with other states, universities, and private technology vendors on the deployment of truck parking information systems at state-owned rest areas. Once these systems are deployed and refined, opportunities may be considered to collaborate on similar information systems for private truck stops.
- WisDOT could work within the FAC to examine innovative efforts, such as Iowa's proposal to support regional transload locations, to see if the benefits for Wisconsin shippers are sufficient to warrant considering similar opportunities.
- WisDOT will contact the PSC to assess the requirements and limitations towards providing adequate cell phone coverage and Wi-Fi at all truck rest areas.
- WisDOT will continue to support local first responders to ensure they have resilient and redundant technology and communication systems in place.

Next Steps

The next FAC meeting is scheduled for October 12, 2016, at the Stoney Creek Inn and Conference Center, in the Wausau area. The anticipated discussion topics will be:

- The Wisconsin State Freight Plan
- Wisconsin's Commercial Ports

A potential site visit is also being considered that will allow FAC members to have first-hand examination of rail equipment and rail freight operations for the paper industry in northern Wisconsin.

WisDOT will also hold the 2016 Governor's Freight Industry Summit the following day, October 13, also at Stoney Creek. In addition to further discussion of the Freight Plan, that event will explore current and emerging use of technology in transportation, including connected and automated vehicles, weigh-in-motion equipment, and positive train control.

Over the next several months, WisDOT will develop and review a White Paper summary on the topic of Wisconsin's Commercial Ports. This White Paper will be shared with FAC members, along with an electronic link to the draft Wisconsin State Freight Plan and meeting agenda, in advance of the October meeting. These materials will be sent via e-mail and will also be found on the WisDOT FAC webpage: <http://wisconsin.gov/Pages/doingbus/freight/fac.aspx>. FAC members and others with knowledge specific to these topics may be contacted to help in the development of the White Paper, and/or to serve on discussion panels at the next meeting.