

# WisDOT Freight Advisory Committee Meeting

Tabletop Discussion Responses

October 15, 2025

## Panel I: Safety, Security, and Resiliency

### Strengths

**When thinking about safety, security, and resiliency for the highway system in Wisconsin, what areas do you think the public sector is excelling?**

**What lessons could be learned from the private sector?**

Table 1:

- State Patrol has generally good relationships with private trucking companies
- Good signage – in particular for irregular operations
- SWEF technology – large improvements over the past decade
- Dynamic Message Sign usage – Amber Alerts; license plate IDs
- WisDOT has good stakeholder engagement for projects

Table 2:

- Wisconsin has some of the best road systems in the country
- Even something as simple as the signage is great here
- Maintenance
- Roads in winter, getting roads cleared of snow is good here too
- Updated facilities are nice, such as Wrightstown
- SWEF updates, including being able to get under the truck for inspection
- Ongoing funding commitments for infrastructure
- The way our law enforcement treats people much better than other states. More compassionate and understanding personnel.
- Private sector: use of technology

Table 3:

- Having TPIM systems to support truck parking
  - Awareness for drivers of parking availability
  - Additional parking needed
- Having a study for the trucking awareness
- State traffic operations center (STOC) for monitoring state roads
- Modernizing and reconstruction of the Highway system to improve safety

- Support for Intermodal
- Gathering / accessing more data / information for planning as well as publishing
- Region offices having emergency training sessions to lower response times for incidents (planning and drills)
- Intelligent technologies added to highway systems
- Lessons to be learned - Openness to new ideas, better options, leveraging technology, making a "good system" not a "perfect system," pragmatism – seek methods to solve issues

Table 4:

- WI traffic is not as bad as surrounding areas (like Chicago); things are moving and there are fewer bottle necks than other corridors
- Highway system generally supports goods movement
- WI has fewer weight restrictions especially for agriculture
  - But, higher weight limits aren't universally good for the trucking industry
    - There is a higher load cost for road maintenance
  - Though, shippers can ship more product with fewer trucks
  - It depends on how you ship, lumber has higher weight but with more axles
    - 98,000 gross with better brakes
    - Running 18,000 per axle to get to 98
  - WI has issues with weight limits on bridges
    - Do this to be less damaging to secondary roads and bridges
    - There are more issues with frost and weather conditions
  - County highway challenges
- Different states have different axle and weight limits, also causes issues at the Canadian border
- For international shipments you're traveling farther because we don't have direct intermodal
  - Driving further to make international connections
- Compliments to the OSOW permitting process in WI!

Table 5:

- Road conditions are quite good
- Physical conditions
- Good winter weather mitigation
- New entrant program, we will go out to facility and do new entrant audit, suggest improvements, outreach for education
- Automated ITS enforcement infrastructure helps allow the good trucks to bypass SWEF

Table 6:

- There is a focus on identifying conflicts and addressing them quickly—diamond interchange in Janesville, left turns on the Interstate. From a safety standpoint this administration is identifying safety concerns and then taking quick action to solve problems.
- There has been a spike in lawsuits for the private sector. Anything that can be identified as a conflict and can be resolved quickly is very helpful for the private sector
- Truck Parking – WisDOT is moving quickly on resolving this issue, listening to feedback and solving issues (ribbon cutting in Sparta). There still needs to be more work done on this issue, but the industry feels that Wisconsin is moving in the right direction - it doesn't want the state to become a statistic.
- Sometimes legislatures or other executives form too many committees and subcommittees that “talk too much.” They talk and don't solve any real problems. There has to be a decision made at some point instead of just talking in circles. The public sector can learn how to be better at this to be able to address problems and resolve issues more efficiently. If there's a mission and plan there also needs to be an exit strategy. “talking issues to death” is not helping to solve problems it's deferring to the next administration or legislation.
- Truck Parking: Perspective is still that if I park at this location, I'm going to be inspected and ticketed so want to make sure communication is clear about these truck parking locations—that they are a safe place for drivers to park and rest and not fear reprimands (referencing education of uses of SWEF).
- After crashes occur, we might be more strategic about how we prevent future crashes. Example was about running through a stop sign and there's a crash—after the fact orange flags are put on the stop sign but what does that really do? Can be clearer communication and follow-up action on how to prevent crashes in the future.

Table 7:

- Qualified DOT /staff that listens to industry needs
- Active and productive FAC
- Working with neighboring states, relationships – bridges, changes with COVID, multiple points of connection from staff to management
- Geographic location – proximity to Chicago
- Wide-reaching roadway system, many major corridors
  - Not as large of bottlenecks as other states
  - Shoulders on the roadway
- Camera visibility across the whole STH / USH system
  - 511 system that monitors road conditions such as weather information, crashes
- NEVI System – positive design with pull-through charging; earned extra points

Table 8:

- Expansion / support of SWEF improvements
- Inspection programs
- ARIP improves road accessibility and gets food to market or processing.
  - Direct routes instead of longer trips
- 511
- I-41 upgrade – safety improvements in high crash areas and locations with backups
  - Cross-over protection barriers

### **Weaknesses**

**Where do you think Wisconsin needs improvement in terms of addressing safety and security for the highway system?**

**Where or how can Wisconsin improve the resiliency of the highway system?**

Table 1:

- I-94 E/W had poor resiliency
- Always can improve truck parking – capacity and supporting amenities
- Left exit at Abrams scale – facility is closed 300 days, but when it is open the only sign is 1/10 of a mile away – drivers need to brake hard and rush to the left lane, leading to backups

Table 2:

- The legislation to adopt technology
- Truck parking / safety
- Lack of passing lanes on secondary roads (infrastructure)
- Funding for State Patrol Inspectors isn't sufficient
- The review process for safety. One example of this is a type of amber light that is good for safety in fog but there's an issue with the strobe. There needs to be a way to get an exemption in order to use these.
  - It's a federal issue, but at least with trucks that don't leave Wisconsin, that can be an option for them.

Table 3:

- Better data and better analysis of the data to improve support systems
- Using AI for more computation
- Providing realignment for roadways and intersections that can be hazards to farm equipment. Turn radii can be challenge.

- Better communication between local and state governments to improve data sharing and load situations / planning
- Tracking challenges for agricultural accidents
- Continued focus on safety and security of truck parking
- Funding for resiliency

Table 4:

- More safe and secure rest areas for drivers
- Be more aggressive with rail, keep loads off the road
  - Lost a lot of short line rail
  - Partnerships with rail needs to be improved
    - CN has new leadership, improving with WATCO
  - Truckers are driving further for international connections
- Forest health is dwindling because there isn't as much harvesting happening
- English Language, FMCSA relinquished enforcement to CVSA: carriers are fighting to get this regulation to be enforced
- Advocate for funding for enforcement
- Cameras are great to prevent some of the problems with reading English signs
- People are skipping out on driving past the SWEF, then are using the county roads
  - Have enough rules and not enough people to enforce
- Would like to see FMCSA do their core job which is safety
  - What will actually save someone's life, is a light being out going to matter?  
Really need to fix the breaks and the equipment that saves lives
  - The violations are stacked for violations that aren't related to safety
- Hearing about the safety at the rest areas was appalling
- Other drivers on the road are driving distracted and are speeding

Table 5:

- Inconsistency with weight limitations between states and even county/municipal
- Home Rule State
- State/County/City/Municipality have differing messages
- Opportunity for engagement for better understanding of requirements
- Education is there for industry, not much there for towns and locals
- Improve outreach education to county association and towns association
- Self-issued - get a permit like a slot machine, this permit isn't valid for what you are doing, doesn't match load dimensions as submitted on permit
- SWEFs are not staffed often enough
- Many OSOW citations get dismissed by the court, prosecutor has more serious charges to worry about, penalty does not change behavior
- Most are flushed, or fines are reduced by locals, District Attorney, or legislators
- Citations issued but data changes

- State Patrol looked for ramps with overflow at rest areas between certain hours around midnight — can we implement that data?
- Chameleon Carriers - Always changing names operating under the same drivers and equipment

Table 6:

- Public sector: need an action strategy from the Legislature
- Need better coordination between state and county governments over signage improvements

Table 7:

- Lack of intermodal connections, especially rail
  - Geographic location – proximity to Chicago
- Truck parking availability, location and security
- Expand charging beyond NEVI program with charging
  - Signage to stations
- Addressing lack of electrification in freight policy
  - Profit (commercial) vs public safety, mobility needs (DOT)
- Funding for electrification, other technologies transition along corridors, filling gaps
  - Ability to test in both rural and urban environments

Table 8:

- Local governments / private contractors don't consistently post signage for construction zones
- Non-domicile Commercial Drivers Licenses issued in some states
  - Businesses are turning away drivers who have English proficiency issues
- Freight thefts – need for improved means of identifying which drivers are authorized to make pickups
- Highway markings – need better paint / lane markings (especially for visibility in the rain / snow)
- Winter storm road clearance – highway road crews need to match work / delivery schedules
  - Some counties don't send out plows until 6 or 7 AM

## **Opportunities**

**What opportunities have you heard from the panel today that could help improve the safety, security, and resiliency for the highway system in Wisconsin?**

Table 1:

- Electrification for freight – how will it be provided?
- Alternative fuels
- Good amenities at EV truck charging locations
- Black and white lane markings
- Rail crossing signals
  - Signal lights (red/green stoplights, not just quad gates)
  - Would allow trucks to proceed if green rather than always stopping
  - Would reduce rear-end collisions

Table 2:

- Regulations are out-of-sync with technology, but a federal minimum can be established and Wisconsin can go beyond that.
- Wisconsin sets a good example, and other surrounding states would want to follow that, so a particular beneficial safety idea can spread.
- Coordination between states
- Secondary highways and passing lanes (need more)
  - Highways 26, 21
- Money for patrol, hiring more inspectors
- More training on truck-car interactions at roundabouts. The truck has the right-of-way - a lot of people don't know that. Education of the public. Could happen through PSA/message board.
- A \$10 seatbelt ticket does nothing. Other states have higher fines for that violation.

Table 3:

- Trucking technology for safety being placed into the trucks
- Public private partnerships for training
- Leveraging technology available and getting insight on what works best
- Highlight other data sources to find challenges before they start

Table 4:

- Get more aggressive with rail so freight doesn't need to be on the road so much
- Make safety regulations about safety, not other things – or less about other things

Table 5:

- Using technology for permitting so permitting is more effective. Trust and Verify.
- Should we be adding more parking than we need at rest areas? We as the state don't have to be the sole source,
- Truckers prefer state facilities in terms of safety

Table 6:

- Improve education / outreach to use SWEFs for parking (safe places)
- Better lighting
- Better signage
- More female drivers will feel safe to drive if we improve the system.
- Reaching out to younger drivers—set up programs to reach a younger audience. Allow students to get the perspective of the truck driver and learn how to safely share the road with truck drivers and why this is important. Ambassador program and get into schools and teach younger drivers on how to drive around trucks.
- Truck drivers are well trained and some of the safest drivers on the road—there is opportunity to showcase how safe trucks drivers are and how commercial drivers can learn to better share the road with trucks and freight. (Trooper in a Truck, ambassadors who go into schools, opportunities to connect with younger drivers).
  - Outreach based on correcting poor decisions / practices
  - Bring legislative representatives along

Table 7:

- Include multimodal measurements / data on top of trucking freight – metrics for safety on key freight corridors in WI
  - Will allow more focus on the corridors with more safety issues
  - Heat maps to display issues
- Join the MAASTO safety work zone initiative – Memo Of Understanding through technology and safety workgroup
  - 30% of truck crashes in work zones
  - Large decrease in efficiency in these areas
- Truck-only lanes
- NEVI Program
  - Diversity in locations awarded
  - Pull-through awarded additional points
  - Expand to heavy- and medium-duty commercial vehicles
  - Need to add signage along highways indicating if charging facilities are available at next exit
- Opportunity for pilot projects across subject matter within the private sector
  - Automated vehicle technology – preparing roads, rail

Table 8:

- Construction designs should improve safety and resiliency
- Construction designs should also reduce bottlenecks (I-94 east west in MKE county)
- Construction zone signage and pavement markings to prevent crashes
  - Add enforcement
- Scheduling of construction is getting better.
  - Most project are delegated to counties
  - More projects should use night construction during lowest volume traffic periods.
  - Longer construction seasons may be coming with climate change
- Resiliency – Build stronger initially or when rebuilding to avoid unscheduled reconstruction from damage
- Improved highway markings (older adults, vision impaired can't see lane markings).
  - Use better reflective materials.
- Improve 511 system and overall driver information systems
  - Work with companies to integrate and share data / get proactive with posting information, especially during construction.
  - Identify and direct drivers to preferred detour routes – give them enough advanced notice to follow these routes
  - Distribution of information via 511, directly informing trucking companies, driver apps, etc.

### **Threats**

**From a national or global perspective, what are some of the biggest challenges related to safety and security facing the trucking industry, and how might that impact the state highway system?**

**What national regulations or global trends may impact the public and private sectors response to the highway system's resiliency as it relates to the trucking industry?**

Table 1:

- Cybersecurity

Table 2:

- Electronic Logging Device (ELD) issues: can use technology to bypass regulations and monitoring
- English Language Proficiency (ELP) issue discussion very compelling.
  - It is on the books but is not enforced.
  - Drivers are out there with no training.

- Enforcement needs to be consistent and standardized.
- Our technology keeps getting better, but there are downsides.
- Cargo losses (by multiple means).
- A company needs to have a physical address. Have heard of a home in Los Angeles with 600 companies registered there – that is a glaring red flag.

Table 3:

- Driver availability
- Lack of qualified drivers and the challenges they introduce to the safety and the infrastructure
- Management of risks for insurance
- Threats of “nuclear lawsuits” – challenges

Table 4:

- Higher weight limits can cost extra for fuel, wear and tear on roads
- Enforcement issues are difficult to implement across different roadways
- Safety in rest areas

Table 5:

- Lack of time, no pre-planning, lack of knowledge to reach out for local road permitting for OSOW, regulations are so complex they don't understand it
- Everything starts with OSOW
- Limited number of bad players ruining it for others
- Infrastructure hits

Table 6:

- Put more of our heavy logging trucks on federal highways. Federal highway weight limits force trucks to take alternative routes on county highways.
- Truck driver shortage has driven industry to seek out drivers who aren't fluent in English. How do we attract students, younger people who might be a good fit to enter trucking industry?
- ELP—tip of the iceberg. Wisconsin needs to get in front of non-domicile problems.
- Infrastructure, weather, responsiveness etc. are topics that could fall under this category.

Table 7:

- Issues with transportation budgeting – what does that mean for the roadways, primarily involving maintenance
  - Large amount of infrastructure to maintain

- Implements of Husbandry/ag equipment – OSOW movements not documented because they are unpermitted
- Weight going on top of roads, smaller bridges, culverts
  - Unpermitted oversized/overweight vehicles

Table 8:

- Heavier rains are leading to more hydroplaning – need to address with maintenance and design improvements
- Winter maintenance / clearance consistency across counties - some counties need to start earlier to coincide with commute times
- Align our plans to ensure critical access is preserved / enhanced around national defense industries, DOD facilities.
  - US DOT detours, routes to ensure supply chain reliability.
  - Local and county coordination.
- Ensure agricultural route access / preservation
- Local roads are not properly / accurately posted
  - Trucks get “trapped,” can’t turn around, and get huge fines as a result.
- Consistency across counties who maintain state highways
- Rough railroad crossings –
  - Railroad crossing maintenance zone includes track and 4 feet either side
  - Trucks and loads experience damage when not maintained
- Continued vigilance for Hazmat transportation and response.

## Panel II: Harmonization & Collaboration

### Strengths

**When thinking about collaboration, what is Wisconsin doing well when partnering with other agencies (e.g., state, local, etc.)?**

**When thinking about all modes of freight, how does the highway system partner with the various modes (i.e., operationally)?**

Table 1:

- I-794 reconstruction options – WisDOT is getting good input from local agencies and businesses
- WisDOT staff being good partners and providing expertise to the private sector

Table 2:

- The FAC has been in place for a while, 10 years, the commitment is a strength
- Collaboration between states, recognition of the fact that Interstate Highways cross borders: looking at trucks at a regional level (cross-state collaboration at the regional level)
- With our fleet, they work a lot with state patrol, DSP gives a lot of time, we send groups out to the SWEF at Sparta to educate people, the Trooper in the Truck program, relationship development.
- Comes down to education, outreach, and sharing perspectives with those doing the job

Table 3:

- Active participation in conferences, groups, and committees
- Having a similar emergency plans and partnership organizations
- Having long standing commitment to organizations of stakeholder groups (long term collaboration)
- Looking for problems before they become one (proactive efforts)
- Route planning for exporting and importing
- Including higher education, public and private institutions on research

Table 4:

- It can be incredible how sometimes seemingly small improvements can make a huge improvement
- Like a crane at the port to get the freight on the road or the rail
- Partnering with MNDOT on the Blatnik bridge project and port utilization
- Permitting process / ease of use. Wisconsin's process is being done in other states, which sounds good because WI is getting compliments. Complaints about Michigan.
- FAC is an example of the positive collaboration

Table 5:

- Going beyond our traditional ways and means of collaboration, driver safety, CDL licensure
- Federal government involvement top-down jurisdiction.

Table 6:

- Is there a model state that is doing things well? How can states better streamline so it's easier for the trucking industry to move their product from state to state or over borders.
- Coordination between state agencies
- WisDOT is inclusive of all industries, on road

- Overweight truck weight permits. Intermodal truck routes.
- Freight and harbors doing a truck study it's important to have all parties come to the table to discuss because getting product to a harbor or port is just the first step.

Table 7:

- Coordination on large issues – impacts to bigger industries
- Coordination and level of cooperation in Great Lakes region through MAASTO
  - Rural environments in certain regions mean separate projects doing similar things

Table 8:

- WisDOT upgraded its outdated permit system
  - Features full routing / mapping including construction zones
- Bringing people together at the site of problems to resolve conflicts (private companies, state officials, local jurisdictions)
- Give local citizens participation opportunities / a voice in design
  - They often have unique insight on local usage / needs

### Weaknesses

#### **What is currently hindering successful collaboration within Wisconsin?**

- **Public-to-public collaboration**
- **Public-to-private collaboration**
- **Private-to-private collaboration**

Table 1:

- Bridges restricting intermodal double-stacks in Milwaukee
- Lack of subject matter experts at the small-town level
  - Hazmat – how to handle at the local level

Table 2:

- Awareness of the partners and resources
- In state government, it's hard to move/mobilize: It takes time for policy, programs to go to implementation because of legislation requirements (could be an opportunity too)
- Differences between the states
  - Each state has their own regulations
  - Leverage: generally states don't want to be an island

- What determines how fast a project moves?
  - Funding, capacity, needs of the region, Federal requirements due to being a main artery, re-routing issues, real estate
- Differences between state and county levels regarding short-term maintenance.
  - Snow clearing example, difference in maintenance county to county.

Table 3:

- Communications between levels of government state, county, municipality
- Staffing availability for emergency or off hours needs
- Difference in / lack of knowledge between jurisdictions and challenges with how to determine who is in charge of things that are needed.
- Number of players / levels of government involved
- Reciprocity with different permits – local road standards are below those of the state

Table 4:

- To get “98K on 6” for timber in statute (type of OSOW permit), it took 3 legislative sessions for a bill draft
  - Then they went to WisDOT to build the legislation so that it made sense
- Coordination between WisDOT and industry is good
- Different government entities with different rules that don’t harmonize
- Why does it take so long to replace a bridge? Like St. Croix
  - Sometimes its state and federal regulations
  - Is a matter of project management skills?
- Example dredging the Mississippi River
  - There is a narrow window of when the weather is good and when it won’t affect the fish spawning
    - Sometimes you need a third party to help get the information or solve the issue
    - Because the state agency doesn’t have the bandwidth or the access to gather the information.

Table 5:

- Need more communication and connections with locals
- Better understanding of what roads can handle the local
- Sacrificing safety for efficiency

Table 6:

- Hear a lot of anecdotal feedback “this state is great, this state has got it all right” why can’t it be an easier, more streamlined process between states. It’s a patchwork permitting system and industries are not seeing permit collaboration across state lines
- Electronic permits? Does anyone know more information about electronic permits and what the status is on making that happen. Folks are excited to see that come to fruition. Iowa and Michigan are working on a similar process.
  - Cost of electronic permits might be expensive and hard to implement across state lines.
- WisDOT/FAC is doing a good job being inclusive of all types of industries that ship freight- road, rail, water, air. Road gets all the attention but it’s important to recognize that freight gets moved across all types of modes.
  - Need to do a better job of including air in freight discussion.
- Public-to-public collaboration
  - Gap working with multiple states? Different agencies and entities are operating at an interdepartmental level—not something that’s seen from a public view. Collaboration is positive, but sometimes it’s hard to understand what the end goal working across the states. Is there something that is preventing states from having more reciprocal permitting and understanding that freight moves across states/borders constantly. Is there a way to streamline so it’s less work on the producers and we can take care of all the logistics and red tape beforehand so it’s easier to move across the country?
- In the Ag industry a lot of members travel across state lines and not a whole lot of consistency which is frustrating.
- Truck drivers can operate within a state at 18 years old but can’t move across state lines unless they’re 21. Doesn’t make a lot of logistical sense. Depending on where you’re at in any given state you can drive five hours across Iowa but can’t drive three minutes across Iowa/Wisconsin border. Age restrictions should be addressed.
- Public-to-private collaboration
  - Transparency. If something is happening at the state level it’s not well known in the private industry. Would be helpful to advertise and educate across sectors so folks have up-to-date information and know what’s going on at any given time.
  - MOU’s are important across states to streamline processes and better coordinate movement.
- Private-to-private collaboration
- Private sharing of container data

Table 7:

- Difficulties with communication and connections at the local level, especially with rural communities
- Coordination on small issues – impacts on smaller industries
- Disconnected rail lines / lack of connectivity leads to lack of economic viability

- Federal funding not used to its potential, with respect to DBE goals
  - Need to refocus / expand to include small businesses, similar to municipalities

Table 8:

- The OCR says it needs more details on the Blatnik Bridge reconstruction to better understand impacts on railroad operations and access – information from the project team needs to be shared with his office
  - Lack of staff is a barrier that slows things down
- Communication and education in small communities is lacking.
  - Efforts need to be made to improve knowledge of rules, requirements, and processes.
  - Lack of local newspapers / other news sources is a barrier.
- Lack of permit uniformity between state and local systems
- Electronic permit issuance to those not familiar with routes leads to safety issues and infrastructure damage (bridges)
  - Situational awareness of height restrictions is critical

### **Opportunities**

**What opportunities for collaboration/harmonization have you heard from the panel today that would set Wisconsin up for a more collaborative freight environment?**

**What innovative techniques or technologies could support collaboration or harmonization of the highway system?**

Table 1:

- Training videos (or other technologies) to address lack of expertise at local government level in small towns – especially for Hazmat
  - PHMSA has begun to allow electronic shipping paperwork (E.S.P.)
  - All local governments you travel through must agree to use of E.S.P.
  - Also should include how first responders should respond to an incident

Table 2:

- Collaboration between states – working together on issues
  - Duluth-Superior Harbor Technical Advisory Committee as a model for collaboration, that doesn't happen everywhere
- Organizations, states working together on issues – land use planning

Table 3:

- State to state regional cooperation
- Legislative differences – develop state-level priorities
- Working with companies with how they are collecting information (data sharing) and how Artificial Intelligence can help apply that data
- Updating the analysis for future uses – use technology to see the “bigger picture.”
- Permitting across states and collaboration

Table 4:

- Harmonize permitting and regulations among the states
  - Would be easier to go to axle weight instead of gross weight
  - Permits should be by axle weight and shouldn't matter what their load is
    - Weather does factor into some industries more than others, especially with timber or agriculture
- Intradepartmental harmonization such as with DNR
  - Got a grant for the timber industry to build a new facility
  - The State of Mississippi has a good example of building permitting for new facilities
    - They were able to get a facility up and running in 8 months, where in WI and a few other states they said it would take 10 years
- Have the ability to keep collaborating and building relationships with groups that may be tertiary, to expand the network and keep people informed
  - Especially private groups
  - Towns, recreation groups
  - Maybe MPOs can be a helpful to bring people together?
- Be proactive about future major projects, or projects that affect routes
  - Get information to industries and businesses that have routes impacted
  - How do you get the word out to reach nontraditional partners?

Table 5:

- Educate local networks
- Short line railroad industry
- Regulated by federal government is there overarching federal policy that could mandate better compliance and consistency between states
- Local units of government ordinances
- If the State is the primary authority all throughout the state, then the locals would have to follow suit
- Provide education on how drivers use roundabouts, the public needs to be better informed how to use roundabouts
- Participation in autonomous vehicle testing

Table 6:

- Reciprocal permitting
- Electronic permits like Iowa and Michigan
- Dedicated OSOW truck routes to intermodal terminals
- More transparency
- Multi-state agreements move to an MOU
- Online electronic visibility of container availability
- Universal Bills of Lading to standardize readability
- New deep-water ports are coming

Table 7:

- Programs for roads and highways (ARIP, etc.) should be flexed / expanded to multimodal connections (such as rails and harbors), especially in northern WI
  - How to break the cycle of siloed modes
- Containerization on the Great Lakes
  - Include as eligible for funding
  - Need standardization
  - Working on restrictions for double stacks
  - How is it helping the state, not just the Chicago to MN connection
  - Customs requirements and infrastructure needed to carry those out
  - Affordability, example in IN
- Collaboration across modes, industries on WisDOT budget options
  - Leveraging Tribal relationships
  - Coordination with economic development
  - Involving all levels of stakeholders from bigger and smaller players / businesses
  - DBE involvement
    - Create consistency of terms between WisDOT, municipalities
- Public-private partnerships need more technical capacity, training – use federal programs and funding available through the Build America Bureau

Table 8:

- Over-height detection systems at bridges
  - Prevent hits / damaged infrastructure and vehicles
- In-cab translators of signs and language for non-English speakers
  - Establish educational programs and training in “English for Truck Drivers”
  - Dynamic communications from central location to address language barrier
  - Training and verification of language skills
  - Translation devices in trucks
  - More advanced training for permitting etc.
- Shippers – checking the CDLs of truckers before loading
  - Verify that correct truck is being loaded to prevent fraud

- Other fraud detection methods / broker communication
- Cybersecurity improvements

### **Threats**

**From a national or global perspective, what are some of the biggest challenges facing the highway system as it relates to collaboration/harmonization?**

Table 1:

- Retraction of funds that would have otherwise improved harmonization
  - Applies to the E.S.P. for Hazmat under the Pipeline and Hazardous Materials Safety Administration (PHMSA)
- Will reshoring increase domestic freight movement such that it stresses highway infrastructure?

Table 2:

- With changes in administrations, federal funding issues? Change of priorities and policies?
  - Stories of funding being taken away in CA, NY
  - EV program could be in trouble
- Administration change at state level could have an effect too

Table 3:

- Legislative differences with "not our problem"
- Different priorities between each other
- Not sharing data or a non-compete challenge
- Lack of trust / efforts needed to build trust
- Open records terms
- Negative feedback loops for sharing data (I share data then based on the data you assign greater fees)
- Time needed for implementation before problems are resolved
- Keeping up to the needs of current and future requirements

Table 4:  
(No entries)

Table 5:

- Roundabouts in unexpected locations (rural, low volume, freight routes) on state and local networks
- Certain states are not legislatively allowing travel for loads on federal highways despite being allowed to travel on that same highway in another state
- So difficult for carriers to compete, but it comes back to the standards, what are we holding ourselves to, what makes a quality driver
- Boils down to “we want it now economy”
- Driver behavior and psychology, new embedded vehicle technology vs none
- Drivers are becoming too reliant on tech, too complacent
- Compare truck driver to pilot, large trucks have detrimental impacts when involved with a crash
- Driver shortages are not getting any better

Table 6:

- Wisconsin loses dollars and business because of certain restrictions (Intermodal) freight must go out of state in order to get on the railroad- this is a huge hinderance and threat. It's a huge expense. Wisconsin is the most expensive state to ship, and group feels like that shouldn't be the case. (WisDOT doesn't have control of intermodal locations in other place like in Chicago—relies on state partners). Need to bring the right people/partners to the table to have the right discussions.
- Congestion on top of cost is a threat.
- Container availability. Traffic impacts drive time/wasted time and is a huge cost if driver gets to their destination and no containers are available and then the driver has to come back the next day. More delays are costing exporters.
- Cyber security threats. Shipping, cargo losses, third party vendors causing confusion and loss of dollars. Security point of view as well. Universal Bills of Lading - improve readability, scanning QR/barcodes.

Table 7:

- Federal changes, budget issues
  - Lack of certainty
  - People not participating due to changes/uncertainty/lack of funds
  - Policy changes, statute restrictions – how new technology is included
- Geopolitical, economic changes, impacts to freight routes, etc. – international and domestic flows
  - Supply chain changes
  - Potential to be an opportunity if it leans domestic
- The relationship between new technologies and legislation
- Environmental impacts, resiliency to changing climate

Table 8:

- Driver behavior
- Out-of-state drivers without English proficiency or knowledge of signage.
  - Non-domicile CDLs issued to drivers without thorough confirmation of training, English proficiency
- Double- and triple-brokering of loads
  - Passes responsibility off initial broker
  - They sometimes collect and don't pay transportation provider
  - Process more vulnerable to load thefts
  - Fraudulent and duplicate brokers
- Cybersecurity
  - Fake Bills of Lading
  - Fake load tracking
  - Fraudulent phone numbers for voice confirmations
  - Tracking new criminal tactics and scams
- Mark Abrahamson's handouts
- Layers of security

### Panel III: Operations, Mobility, & Efficiency

#### Strengths

When thinking about physical infrastructure, such as highways or bridges, are there particular areas within the state that stand out as more efficient or amenable to trucking operations (i.e., truck parking)?

Table 1:

- I-41 / US 45 improvements
- I-43 north of Milwaukee
- I-41 in the Fox Valley

Table 2:

- New type of interchange with separated turn lanes and dedicated on-ramps: these are much safer, access lanes are good.
- New Diverting Diamond Interchanges seem to work, no issues with those.
- The strengths I see are more about the road restrictions the state has than particular areas/corridors that work well.

Table 3:

- TPIMS
- Interstate system – I-94 from Milwaukee south to Illinois; I-90 from Madison south to Illinois
- Clear sightlines for US 151 – Verona and beyond
- Madison/Milwaukee and South is easy for the mobility
- Long-range planning

Table 4:

- Bigger cities are where there are major highway crossings (two or more major routes)
  - Chippewa Falls / Eau Claire
  - Wausau
- Where the economic activity is – economic impacts
- Money is being spent in Milwaukee and Madison
- Trucking is flexible and can ramp up quickly (as compared with rail)

Table 5:

- Use our OSOW route data to find our strains and stresses

Table 6:

- There are a lot of good highways in Wisconsin.
- A positive about truck parking is signage and mileage. The signs that provide how many spaces available and mileage to stop can help with truck drivers decision making. Stoppage can affect supply chain.
- Culvert replacement program (including small bridges)
- Human trafficking awareness.

Table 7:

- Overall, Wisconsin's infrastructure is comparatively strong to other states
  - Issues still present but commute times are relatively shorter
  - Travel time is predictable
- Established planning process with stakeholders to get input

Table 8:

- TPIMS allows drivers to plan ahead on parking availability
- WisDOT is responding to truck parking shortage and overall trucker needs
- Increased lighting

- Staging areas dedicated for OS/OW loads

### Weaknesses

**Are there any bottlenecks/constraints that impact the operations, mobility, and efficiency for the trucking sector in Wisconsin (e.g., types of bridges, specific highway corridors, first/last mile improvements, etc.)?**

Table 1:

(No entries)

Table 2:

- Consecutive roundabouts: Fond du Lac has a string of several of these in a row - it's a harrowing drive.
- Corridors:
  - I-894: why is there a slow timeline on projects?
  - STH 29
- Longevity

Table 3:

- I-39/90/94 by the dells
- Beltline / US 151 to Verona - Bottlenecks
- Hwy 12/151, **21 (emphasized multiple times)**, 73, 164
- East / West movement on central / north Wisconsin
- Weight posted bridges/roads create a challenge for trucking industries

Table 4:

- Rail connections need private rails to open up business opportunities
- Drivers have to drive further because there is no intermodal access
  - Bottlenecks – Milwaukee area; Madison Beltline; WisDOT is addressing...
- Infrastructure resiliency (during storm damage)

Table 5:

- Siloed approach with data collection, can we share more data private sector and public, coordinating with organizations.
- Our permitting system does not connect state to state, if we have compatibility state to state with vendors that would share key elements/inputs that must be passed on
- Permit fees are so cheap in Wisconsin that OSOW loads are using routes more common

- Fees are not rational, higher fees could help prevent

Table 6:

- Bottlenecks (73, 64, 21).
- Lack of intermodal
- Truck parking needs improvement
- SWEF parking/scale misunderstandings. Opportunities for education to truck drivers about what's offered and what stopping at a SWEF entails.
- Not a whole lot of funding (other than ARIP program) that provides funding for that first and last mile.
- Would be helpful for industry to have more funding for ag products/moving ag freight on six axles. Michigan does truck weights per axle—you can carry more weight with more axles on approved routes. (they allow up to 11 axle and each axle can have a certain weight) which allows them to carry more weight and reduces carbon emissions and trucks on the road also reduces need for drivers and increases efficiency.
- Opportunity for state of Wisconsin to create a permit system for weight permits. Fed/state weight differences are frustrating (80k vs. 90k lbs.)
- County road capacities – even with ARIP there are many posted road restrictions

Table 7:

- General public doesn't have insight / knowledge about planning process and how transportation decisions are made
  - Need a way to communicate roles, who is responsible for what
- Lack of multimodal connections
- Winter weather
- Frozen / seasonal roads

Table 8:

- Road signage / posted limits on local roads
  - Signs missing / damaged / faded
- Park and Rides aren't usable by trucks at night.
- Hwy 21 needs more capacity (Oshkosh-Tomah)
- Hwy 10 Fox Valley – eastbound into Calumet County to Manitowoc
  - Goes to two lanes - bottleneck
- Hwy 23
- I-94 nighttime parking
- 1-41 NB rest area at Theresa – more parking capacity needed
- Rail bridge capacity
  - Shippers have to do less-than-full loads
  - Requires more rail cars, or using longer routes

- Disincentive to use rail – divert freight to trucks

### **Opportunities**

**What innovations have you heard from the panels today that could support operations, mobility, and efficiency for the trucking industry?**

Table 1:

- Keep improving SWEFs

Table 2:

- Lots of activity in truck parking is good for us
- TPIMS is excellent

Table 3:

- More truck parking and flexible legislation for truck parking
- Identify other available parking opportunities in locations that WisDOT already owns
- Leverage technology for information and to help identify efficiencies

Table 4:

- What cross-divisional communication is there at WisDOT?
- Rail / intermodal is a solution for some of the infrastructure problems
  - Do the rail people have access to these funds at WisDOT?
  - Are they talking across the table if they spend it here
  - Rail might need to be politically driven
    - Is it as simple as government raising bridges to incentivize the railroads to use those tracks again?
- Can WisDOT share data with rail, like how many trucks will it take off the road?
- Rail and ports need to be more efficient too
- Drivers are having to drive longer hours because there isn't access to intermodal
  - Drivers want to go home at the end of the day and be able to take PTO
    - They don't want to get stuck with a load overnight because they had to wait at a bottleneck in the process
- How can you get all the players to see the benefits and make it work
  - Difference between rail and trucking is that trucking can ramp up fast, but rail is more cautious because of their fixed rail
- More harmonization between public and private entities
- Asset management

Table 5:

- VMT vehicle miles traveled funding, bills
- Improvement to the fuel tax

Table 6:

- OSOW exemptions – like those for dairy (98K on six axles)
  - Expand those to other ag commodities
  - Michigan's per-axle maximum weight option is a good model
- Opportunity to grow Northside Beltline.
- County road capacity. When roads are posted and producers have to drive 20 miles around just to get back to their facility that's a big issue- comes down to funding
- Advanced Driver Assistance Systems – improved safety

Table 7:

- Rail technology: AI + EV, reduces labor and fuel costs – highest cost components
  - Testing system that can send single cars to / from sidings using a small motor instead of using a whole train
  - Allowing modal shift for the last mile, short haul, low density rail lines
- Tolling
- Truck automation, platooning to improve efficiency
- Look at system regionally (nationally) to benefit industry needs at all scales
  - Differences between northern and southern areas of the state
  - Support smaller local industry hubs

Table 8:

- Shippers and receivers don't communicate with truckers about needs / availability of parking spaces at their facilities
  - For AM deliveries – truckers need overnight parking nearby
  - Is parking available at business?
  - Opportunities for improvement
- Establish a rail program that echoes the ARIP program
  - Improve rail systems for Wisconsin's Ag and timber sectors
  - This program should be funding over and above existing FRIIP / FRPP / TEA programs
- Plan ahead for self-driving trucks
- Reconsider 90,000 pounds on 6-axle configuration
  - Better axle loads

## **Threats**

**From a national or global perspective, what are some of the biggest challenges related to operations, mobility, and efficiency of the trucking industry?**

Table 1:

(No entries)

Table 2:

- EV infrastructure & policy
- A program that runs only for a year isn't going to help, needs to be at least 3-5 yr plan that's locked in
- EV Charging issues
  - Waiting time to charge battery
    - Heard interesting idea of a newly charged battery ready to be installed and depleted one removed from truck while the trucker waits, was surprisingly quick
  - Tires are worn through quicker with heavy battery weight

Table 3:

- Lack qualified drivers
- Lack of Intermodal Terminals
- Available Truck Parking / Capacity expansion projects
- Funding for highway expansion

Table 4:

- Aging population
- Loss of immigrants / workforce
- Tariffs and reduced trade
- Bottlenecks are mostly in the Milwaukee area and WisDOT as addressed many of them. Still studying the Beltline, studies in Waukesha County.
  - More infrastructure issues that were not even thought of, like climate related issues.
    - Flooding that was never perceived
  - Asset management
    - The infrastructure in the US was mostly built at the same time and everything is coming due for fix at the same time.
  - MnDOT did a study on I-90 bridges and realized they couldn't replace all the bridges at once or even some of them.
    - It's a massive problem coming due

Table 5:

- Is the expansion of private sector distribution centers going to create problems at interchanges?
- Tired or not, some of these owner operators will drive beyond their means to reach destinations.

Table 6:

- Tariffs.
- Being under 21 and not being able to drive across state lines. Hinders companies with hiring younger folks and creates inefficiencies.
- Cargo theft. The driver is asleep in the sleeper berth and then someone comes into the truck and can steal goods.
- Speed differentials—can be dangerous to both drivers and truckers.

Table 7:

- Technology requirements that may not be beneficial/efficient for different applications, not applicable to their needs
  - Standardization could be beneficial but could potentially be harmful to small businesses
- Roundabouts for OSOW trucking and long truck routes

Table 8:

- Technology and human interaction
  - Distractions and safety issues
- Tariffs
  - Whip-saw effect on the economy
  - Inability to plan ahead – reactive rather than proactive import / export trade
- Supply chain disruptions and uncertainty
  - Loss of traditional customer base