

Tabletop Discussion Responses

Wisconsin Freight Advisory Committee

October 26, 2023

Young Professionals Discussion

Question 1: What did you hear from the young professionals panel that surprised you the most? What had the greatest resonance?

Table 1:

- Artificial Intelligence (AI) had the biggest resonance. It's not new, but Menards warehouses have become automated. Automated vehicles instead of people. Everything evolves. Technicians oversee technology. Jobs will change, but not be eliminated.
- Students' emphasis on public involvement on economic development, multimodal logistics. It's a forward-thinking mindset.
- Electric Vehicles (EVs), rail EVs are interesting, electrify the rails. Range expectations maybe not realistic. Rail lines owned by private companies, maybe that's why we're falling behind Europe and Australia. Autonomous Vehicle (AV) trucking is doubtful and unrealistic.
- AV trucking is possible safety risk. Weight density may be a safety issue.
- Short-haul or yard tractors works for truck EV. 30 tractors moving to electric in Menards warehouse and railyards. Menards has AV vehicles in the warehouse, but not outside the warehouse, because the technology isn't there yet, but we will get there. AVs move pallets between docks. But they do crash every once in a while, which might have impacts for roadways, but aren't there more crashes with human drivers or operators. AVs lose their pathways time to time.
- Public perception will have to evolve to adopt widespread AVs on the roadway.
- Public confidence has to be higher in AV. Reskilling the workforce discussion – are we training our workforces to operate this new technology?

Table 2:

- Every panelist had an internship and valued internships; must be lots of outreach.
- Internships are required at Marquette. These small interactions are valuable to companies and agencies for career development.
- Panelists gave valuable insight, especially for their age. They showed a lot of professionalism too.
- Exciting to hear about the technology opportunities within transportation. Technology was embraced.
- Noted that WisDOT asked each panelist to include AI in their presentations.

Table 3:

- I wasn't surprised. AI, Sustainability, etc.
- 2050? That's going to be the Jetsons. Not sure about electric or self-driving by then.
- Electric by 2050?

- AV and electric aren't happening soon. PowerPoint didn't even work. I don't think that's the future. Driver assistance systems, not driverless.
- How much are we looking with data at the entire carbon footprint?
- Amazon is an issue. Example given of shipping model that had three separate deliveries; no "user" choice in processes.
- Consumption via impact of the new shipping Amazon model.
- ConAgra tried the same distribution center model, but died very sooner after.
- Mining for electric vehicle comparable? (*ed. – perhaps refers to the impact of mining for rare elements used in EV batteries*)
- Take the tax incentives.

Table 4:

- I was most surprised by the two younger guys talking about the combination of people and technology and trying to find a good balance between the two.
- Was surprised they were advocating the "go-slow approach" and expressing hesitancy regarding technology – not completely embracing it.
- Noted the analytics to help with efficiencies, and the predictions as well.
- It was good to hear the connection to urban planning. Working with cities is an important skill to have, be it with planners or city officials, etc.
- It was interesting to hear about the industry, the older truck drivers, and automation – what jobs will phase out in 20 years, transitions, autonomous vehicles, new jobs.
- Also interesting that keeping up technological advancements brings about new jobs as well.

Table 5:

- Freight movement efficiency versus worker's needs/life balance.
- Efficiencies through automating processes – "fewer clicks." Not looking for more information but looking for more actionable data.
- Technologies do not necessary take into consideration human issue; we can be over-reliant on technology (need to "right-size" its use).

Table 6:

- Concern – rely more on state and federal government to solve the problems – FAC members disagreed with students who believe government is the solution. The businesses need to solve the problem. Government is like AI – helps but not replaces businesses. Education system is teaching students that government is the answer.
- Resonance: being old school and trying to adapt to the new ideas. Encouraging and refreshing that the younger generation is uniformly integrating technology to change the way we do things. If you don't adapt to progress, you will get run over by it. If you don't have a seat at the table, you will be on the menu. Change has to happen.
- Technology needs to be embraced. AI is scary. Australia is using automation to operate rails – but is working because it's flat and unpopulated. Need to adapt AI to terrain.

Table 7:

- Great to hear that a human connection is still so important despite the advances in tech/AI. AI cannot cover all perceived scenarios – use tech as a tool / aid, not a crutch.

Table 8:

- Appreciated the wide perspective and how students covered different aspects of industry – automation, AI trains, biofuels.
- Surprised how students didn't talk about environment, more concerned about logistics.
- Surprised on human elements given age of students.

Table 9:

- One presenter mentioned White Pine Copper Mine. We knew the mine had shut down and they had talked about opening it up. I was surprised that in the research they found that. Being able to have rail access to the Upper Peninsula copper industry would be great. Being able to have exposure to a mine that was shut down, that surprised me.
- A lot of the push in my agency is with all the tech changes that are coming, 2030 is the goal. It's interesting to hear that 2050 is the goal now. It's probably more realistic to set 2050 as the goal.
- If the infrastructure isn't there, it might take longer to achieve those changes. Even with electric vehicles, we have very little infrastructure.
- One thing I'm still thinking about is the cross-country autonomous trains in Australia.
 - I could see that here, but the safety issues would be an obstacle.
 - Trains are already pretty much autonomous. The engineers are in there to make sure it doesn't run out of fuel, but that's about it.
- One thing they talked about was a future where humans and AI would be merging. All I could think of was gamers with their headsets on. It'll be a future of gamers.
- The trucking industry is going to that. A truck shows up at a facility, and a guy jumps into a simulator somewhere off-site and can drive a truck from across the country.
- I've heard about sometimes having a pack of trucks where some of the trucks don't have a driver in the cabs.

Question 2: What changes discussed by the young professionals pose the possibility of significant challenges to the freight transportation system?

Table 1:

- Age of truck drivers – anecdotally, uncle is a driver on route from Green Bay to California. Workforce is retiring.
- Expected workforce shortages need to be discussed more.
- Hard to hire drivers up in isolated areas like Door County.
- Workforce shortage will affect us very soon. AV question maybe in 50 years, but workforce shortage impacts us now.
- Geography and infrastructure both add time to pickups/deliveries. Congestion – not just from bottlenecks; also from passenger vehicles.

- If truck has to take circuitous route to us, it takes longer, then we don't receive shipments on time.
- Tourists, congestion, driver shortages impacting us greatly. Isolation of communities most impactful. Challenge for companies trying to procure freight service.
- Last mile is most expensive.
- Routes follow business.
- Infrastructure for alternative fuel systems. Hydrogen or alternative fuels.
- Compressed Natural Gas (CNG) infrastructure has not grown to expectations. Menards invested in 28 CNG trucks running daily. But infrastructure is not yet available for coast-to-coast shipments.
- Geopolitics is an issue. Depending on other countries for critical resources. Ever changing push to alternative fuels.

Table 2:

- Sustainability was mentioned by panelists but it's a hurdle – the details are still fuzzy – including those in transportation systems. Collaboration will be critical to transportation development – meeting the needs and being sustainable. Emissions reduction is great, but how do you do it efficiently?
- Carbon offsets/taxes are great in theory, but in practice may not always reduce emissions significantly.
- Posed a question: Next day delivery; is it sustainable?
- Transition to AV will pose its own set of challenges, especially insurance. In crashes, who counts as the operator?
- Agreed – there aren't really insurance company guidelines for what happens in an AV car-human car collision situation.
- AV systems will continue to have limited use – only being fully operational where there is infrastructure to support communication.
- Other things AVs struggle with includes speed limits and moving with the flow of traffic.
- The structure to support data used to form decisions usually has some privacy restrictions, and the stripping of private data is necessary. It's also a challenge.
- Expanded comment on data from public standpoint – we often have access only to outdated data at WisDOT.
- Agreed that access to up-to-date data is an issue, and that some data points in transportation that used to be updated only twice a year might be updated much more often nowadays.
- How fast does data change? Markets have gone from six years to six months to six weeks.
- Issues of accessing/preserving the data – we have cloud storage, but how secure is that?
- The type of data collected is also crucial. Gave example of railroads compiling data by tonnage but not by value; emphasized importance of selecting a consistent and useful format across the industry.
- Stated that data cleaning is tough – you can be looking at 200+ lines on Excel.

Table 3:

- Do you know what happened to Convoy? Why they went bankrupt? They were like Uber, trying to cut. Stock market dropped and it went bankrupt.
- Economy; impact of shipping all over.
- What are the models for shipping? How does sustainability fit into freight?

- “Scaling?” Or economies of scale?
- I wonder how much inefficiency we have built into freight transportation. Appleton to Madison, shipped doorknobs. They are using different shippers, but the whole infrastructure trying to measure the different shipping pathways.
- No software can/will do it all.
- It’s all about how you use [it]. Automation is a great tool if applied in the right way.
- Legacy issues in a variety of software, the cumulative load for someone to establish it. It would be difficult to adjust.

Table 4:

- The changes from artificial intelligence, being open to learning about it and acceptance of it. May be tough to get people to believe in it.
- It may be tough to get older segment of population on board with it (with average age of truck drivers being late 40s).
- Not always wanting to deal with computers is another issue.
- Capital is needed to go from an established fleet of vehicles to an alternative-fuel (hydrogen) or electric vehicle fleet. There is the cost of transition to consider for small operators – 90% of truckers are small owner-operators.
- The viability of electric and hydrogen is a challenge and requires infrastructure surrounding it. Diesel engines are more efficient than even 10 years ago. Put forward a goal and see what the path is to achieve it, see if it’s practical. It’s a different process depending on if you’re running a fleet vs. being a small operator. There are many small owner-operators.
- The heavier weight of battery-operated trucks is an issue – it reduces the payload of goods that can be legally transported.
- The human element is important – the information being fed into the computer from a human needs to be truthful. The accuracy of information from AI, ChatGPT is a concern. More information is needed – but it needs to be GOOD information.

Table 5:

- Trying to maintain connectivity between data sharing – sharing information with the organization.
- Keeping up with the changes in data system technology – ensure there are enough people to maintain the data.
- What about costs? Costs of operations, change, delivery, infrastructure needed to maintain systems, etc. – recognition of transportation alternatives that are cost-effective.
- Political challenges with developing new policies – consistency and predictability from term to term – impacts to budgets and planning improvements.

Table 6:

- AI being integrated but will pose the greatest challenge and open transportation for chaos and failure of the system.
- Customer service needs to be front and center of all we do and personal relationships matter.
- People are the challenge – we have to interact with public and people can be unpredictable, how do we predict unpredictability.

- Transload – find ways to avoid Chicago. More on rail.
- Need to navigate the Mississippi and invest in getting the system functional.
- Need smarter integrated modes.

Table 7:

- Lack of potential employees across all modes.
- Age of the drivers for trucks; lack of number of people to get stuff done across all modes.
- Figuring out the automation of different vehicles, they're not perfect yet.
- This is a global business and a global issue, some solutions are local but sometimes it's based on forces outside of our control.

Table 8:

- Interface between humans and tech / automation.
- Whole emphasis on safety – efficiency doesn't necessarily equal safety or job satisfaction.
- Advocacy from the top to use and decipher data sets.
- Truckers: their livelihood – raised questions about supply chain issues during pandemic and made people think about how important freight is to peoples' lives. How can we value truckers more? Important since industry can't find employees.
- The safety element of moving freight during overnight hours.
- Trillion-dollar question: how we are going to automate vehicle travel when it interacts with humans?
- Need for advocacy from top of these orgs to get senior people to adopt information they are getting about new tech to help truckers.
- Ligation standpoint.

Table 9:

- AI
- Technology in general.
- Especially if it's mandated without a funding source.
- What gets me is farmers are more willing to adapt to new technology while the trucking industry keeps trying to avoid it.
- I know in my company we have people who are afraid of integrating AI.
- We have a university farm that uses AI in the milking system.
- Everyone uses AI. Anyone who's used Google Maps.
- Or GPS.

Question 3: Is your business or represented group ready for these changes? Why or why not?

Table 1:

- Changes are for the better, so why aren't people ready for it?
- They're coming, and Menards is getting ready. We hire new graduates who are ready to look at new alternatives. Older workers are changing and need to be flexible and ready to change. But we must hire the right people – people who have the answers if we don't have them.
- Are we prepared to take on all of these challenges? No, but the amount of change is daunting, so bringing in new people who are ready is an important part of change management.
- How many graduates are there and what are the trends?
 - I don't know.
- Are schools responding to the demand for supply chain workforce needs?
- Until COVID, most people didn't know what supply chain was.
- Running trucks at night, less congestion.
- At Menards, we run 12 to 12. Overlapping shifts move drivers around to keep trucks running as much as possible. We have 1,000 owner operators at Menards.
- Are you dependent on private contractors?
 - Yes.

Table 2:

- Group already sees a vision for EV infrastructure, data guidelines, manufacturing standards and guidelines, and sensible regulations.
- There needs to be education that addresses the ¾ of the workforce that doesn't get college degrees. Only ¼ of Americans are getting those impressive 4-yr college degrees; how do we help the rest of the workforce learn to utilize things like AI? On top of that, when and how do we introduce these topics to younger people too?
- Feels that his company is ready for these changes, both from the youthfulness of their staff and what he's seen them do with data already, crunching spread sheets creating useful graphs. Physically, the company has been successful with transload facilities – through efficient spotting of vehicles, serving as container yards with a gate program, and using cell phone apps to identify container locations. Looking forward there are opportunities to put AVs in yards to make in-yard moves, perhaps some public moves too. The transload facilities also are expanding use of solar power and battery storage.
- And efficiency usually results in better sustainability too.

Table 3:

- How much pressure is there for electrification? And for automation?
- Getting the connectivity between all the modes and disparate parts is critical. "Spotty coverage" because different services offer different levels of information/automation, use different systems – last mile data is almost non-existent. Can we be transparent about where our freight is located? Or is that impossible?
- 85% of truck companies are one truck.
- Partners may have different business practices.

- Highly automated forwarders, gigantic freight places can dictate the market and service expectations, it becomes impossible to compete.
- Truck drivers might have multiple loads; how much information does the driver report while doing simultaneous loads?
- Reliable shippers used to be about faith that it would be there. “Peace of mind.” But that’s not emphasized.
- “...no one knows when a shipment might show up.”
- Regulations to stop “double-booking;” can’t enforce it, and the legislation is slow to emerge.

Table 4:

- Evolution takes time. Milestones could be helpful; smaller deadlines to keep on track.
- Meetings such as FAC are helpful.
- “Crawl, walk, then run” with new technology. Demos and background material would be good to have available for workers to learn about new technologies.
- Is the public sector ready? Tends to be slow. Takes a lot of actors to implement changes.
- Housing costs and other related costs with nearby warehouses, planning for those changes.

Table 5:

- Pace of change is outpacing available decision-making information. We are being forced into making decisions without awareness of impacts. This pace circumvents needed analysis.

Table 6:

- Not going to find drivers. They won’t pass drug tests. Lack of quality labor pool.
- AI close but not ready. Not ready but we need to be. Concern about human interactions with truck automation.
- Forced to change. Supply and demand will force the change.
- Worker replacement demographics changing we will be hurting for workers. Not just attracting drivers – just not enough people in the overall workforce.

Table 7:

- Probably not. We’re getting more and more tech savvy all of the time (tech to analyze logs, etc.). My dad started logging with horses, then they went to tractors, then to skidders, and now to new technology that is safer – much safer. Using the tech to be more efficient and safer.
- Now some tech can help sort food. There are people still needed to do things – to serve as a stopgap – but not as many people are needed to do the tasks. Sweet corn is the most labor intensive of all crops.
- Port infrastructure is old, outdated, and failing. We need to build up our infrastructure so that we can be ready for new technology. Across the Great Lakes system, we’re all a step behind. Port/Cruise infrastructure is separate.

Table 8:

- Government isn't ready and want to protect jobs. How to legislate technology.
- Look to farmers and high tech for example. Lots is automated. Yes, ag is already there, but it needs to be optimized and evolved more, which is going to be in fits and starts. Integration is a bumpy road.

Table 9:

- There are some things in our statutes that will have to change to keep up with this technology. We've made some updates, but there are others that will need updating – stuff that is decades old.
- It's coming whether we want it to or not.
- Who's going to pay for this? It's very expensive to do. Who is responsible for generating the money? Will the power grid be capable?
- Mom and pop companies can't afford AI.
- We've established an AI committee at our college to figure out how to get ahead of the game. How will we incorporate it into the technology and education sectors. We're still in the early stages.

Question 4: What policies and investments should WisDOT emphasize, given what you heard from the panelists?

Table 1:

- Reduce congestion in Wisconsin and across Midwestern states. Bottleneck congestion play a role in job satisfaction for a driver. Important to improve working conditions for drivers because it's important to retention. Driving on the way here from Eau Claire today, there are so many truckers parked on side of the Interstate. Not enough facilities for drivers. Also, harmonize policies.
- Tying together economic development and locating distribution centers closer to customers. Important for alleviating bottlenecks. Study to see the impacts – catchment areas are up to 500 miles. Could mean less investment necessary over time. Enticing companies to open distribution centers closer to customers and the potential impact to other nearby businesses and consumers. Delicate balance though between adding facilities and saving money.
- Will competitors respond by stacking distribution centers nearby in order to recapture their outbound drivers?
- Technology is changing constantly – maybe a WisDOT public-private partnership could lead to WisDOT adopting technology faster? Private sector takes the risk. Otherwise WisDOT will be five generations behind. Lots of money flowing in technology, but state government is staying behind. Rewards go to those who have the technology.
- Cargo diversification, inbound and outbound impacts. My nephew drives a grain truck but doesn't drop a trailer and pick up another one when he finishes a load, so cargo diversification is a big issue / problem. It's important that truckers don't sit idle for so long. There need to be loads going both ways.
- That is an important issue. There are huge investments from private sector right now to purchase trailers, especially refrigerated trailers.

Table 2:

- Leadership should be receptive to new ideas and be prepared for changes.
- Buy-in and work in collaboration with private sector – the private sector looks to government for guidance and information.
- Look at outcomes and what needs to be solved. For example, improved safety and reduced congestion.
- Be adaptable in how we meet those outcomes.

Table 3:

- “Get out of the way.”
- Permit issues as a result of different rules in different states makes it difficult. Speed limits/permitting are just some examples.

Table 4:

- Change the weight restrictions on the roads, make investments in the vehicles. Have grant opportunities for vehicles.
- Focus on a multimodal approach – rail, maritime, etc. Take a look at the Duluth trans-shipment facility, for example. With investments, maritime has potential. Examine continued feasibility and look at/promote other modes.
- Create policies for compliance of EV/AV’s.
- Consider the changing markets (e.g., less taconite, changing supply chain, trading partners, etc.).
- Implement specific truck lanes for automated vehicles.
- Consider the idea of charging highways with charging infrastructure embedded in the pavement.

Table 5:

- Invest in railroads.
- Improve active outreach to carriers and the freight transportation industry to get a better sense of issues they are facing and options to address those issues.
- Set-aside state funding to encourage private investments with applying for federal grants and funding (ability to leverage federal funding).
- Limitations in statutes regarding state funding that can be used for federal match.

Table 6:

- Need for more multimodal, transload, containers, PUBLIC – PRIVATE partnership. Infrastructure needs to be kept upgraded.
- Can’t be everything to everybody.
- Work with the innovators – find make things and people to make it happen – support through grants. Put support behind innovators.
- Private investment supported by public investment.
- Role of private is to adapt and overcome. Private is more aware than the government sector.

- WisDOT needs to support innovation. Innovators – gapped with those that won't. WisDOT open to new technology – and planning to make roads capable of serving rail needs?

Table 7:

- Expand the state rail network.
- Look at CN map where rail route goes across Wisconsin but barely stops for service. So expand rail competition (infrastructure already exists, we just need to use it).
- Rate of return drives industry. (*ed. – details unclear.*)
- Rail does best with long haul and not interested in shorter trips but could be helpful.
- Focus on both, acknowledge the Class 1s but continue to advocate for/work with regional/smaller branch lines so it's not all through traffic, it's regional service as well for rail.
- There's a lot that WisDOT is already doing – we've previously heard about harmonizing truck weights and improved efficiencies on how long a truck driver has to take at a Safety and Weight Enforcement Facility (SWEF).
- Could identify routes that have bridges that need upgrades for heavier/more efficient but lower weight per axle trucks.
- A lot of money is being funneled to the local roads and bridges so there are opportunities federally (and state).

Table 8:

- Keep pushing intermodal.
- Investment in various infrastructure to handle/keep up with demands (signage, etc.). Make it easier to get the money (grants can be challenging to apply for).
- Fund various modes of transportation. Ensure relevant data is being analyzed to form future needs.
- Wise use of funding – keeping both human and technology elements in mind. Ensure ease of funding.
- Put positive spin of transportation industry for public (trains: loud, huge, dirty); glorify industry for funding and recruitment.
- Money's out there for the first time during my career. We need to get the money out the door asap by spending on everything necessary, to accommodate tech and people.
- Ensure relevant data is being analyzed to inform future needs.

Table 9:

- Increase state and federal funding for all.
- Who's gonna pay for all of it?
- Tech policies – whether it's AI or autonomous vehicles – having standard policies or system requirements will be critical.
- The state helping with any type of policy so there is a standard.
- Are there any type of laws out there on AI vehicles?
- They're working on it. One example is a statute that says "driver," but who's the driver of an autonomous vehicle.
- Which insurance company covers what?

- That's what they're working on now. But they need more of the vehicles out there in order to get the data before they can set policy.
- Talking to our legal department, we're starting the process of updating the legalese in policies. Hearing 2050 as a target, it's interesting that we have more time than I realized.
- One thing they mentioned was the truck-only lane.
- Omaha-Council Bluffs has a truck-only lane where you can just drive straight through.
- Those are the trained drivers going out there.
- Then again, it's the infrastructure money, who's gonna pay for it?
- It reminds me of the Flex Lane. It's great!
 - I used it today, it was great.
- I live in Milwaukee and work in Platteville. There are people who abuse that lane.
- It's reduced travel times drastically.
- There are opportunities to invest in ports and intermodal sites. It helps industry and takes vehicles off the road.

Question 5: How do you expect the private sector to respond, based on the observations from the panelists?

Table 1:

- The "drop trailer" practice – it helps reduce greenhouse gases (reduced idling time); keeps drivers moving. The market is seeing increased numbers of dry van (trailer) and refrigerated trailer purchases.
- Maybe incentivize this practice?
- That concept will alleviate the parking problems.
- But credible data needed.
- Firms need to share their data.
- That kind of information is considered proprietary. Collaboration is a challenge; there's give and take.
- We have less infrastructure than Illinois, but can Wisconsin get better data on our own freight trucking?
- Save money, will make changes if costs are reduced and profits increase. If cost effective.
- Electrification will happen if infrastructure exists / gets improved.
- Can there be opportunities for private sector to partner with government?
- AI could improve Transportation Management Systems (TMS); shocking that there are so many types. Each company develops its own TMS. Maybe that's where AI has potential. Consolidate management systems. Does it account for truck movement or just freight movement?
- I just developed our own TMS. We didn't want to use other tech. It shows where drivers are and when and where things are loaded.
- It is very difficult to get everyone on the same page because individual firm needs are so unique and different throughout the industry. That's why there are so many TMSs out there.
- Many bigger companies like Menards develop their own TMS. Why spend a million dollars just to rely on another company to make their tech function right? That's what is needed to modify off-the-shelf software.
- These systems enable competitive advantages, so that's why so many are touchy about their own management systems.

Table 2:

- Promote and seep public-private partnerships. The private sector needs to buy in as a group. Trust/faith needed; private sector needs to have trust in public sector.
- Internships and job jumping are more common nowadays, which may bring challenges for business long-term projects. More like 3-5 years rather than 30 years. It's a change from the older mindset of spending a career at a single business – or even in a single career.
- One way to keep staff at a company longer is to challenge them continually, with new and/or different tasks. Younger employees will not stay at a business without the opportunity for growth.
- Agreed that at C.H. Robinson, the people who worked there a long time were still there because of the availability of new challenges and ability to learn about new facets of the business and experience new roles within the organization.
- Summarized parts of convo and emphasized the meshing business mindsets between generations. Businesses may need to adapt to the changing career development mindset of individuals by changing their systems to match.

Table 3:

- Sustainability – is it possible to be cost/benefit positive?
- Schneider – electrification if it doesn't pay we aren't doing it.
- CNG did not deliver. Kwik Trip spent a lot to set up facilities. Mechanical issues with trucks. Costs are still excessive.
- "Slowly"
- "Predictably"
- "Cloudy"
- Driver shortage – how to market trucking to young drivers? Be realistic. Emphasize safety. These changes don't eliminate jobs, just changes how work is done.

Table 4:

- Rail and water would need to get more competitive, put in investments.
- The private sector needs education before responding.
- Awareness is important too for both businesses and the public. Seeing a self-driving truck can be a surprise. What kind of driver tests will there be? Expand these for older drivers.
- Cost analyses are needed (markets, technology, business investments).
- Private industries would respond to BIL grant/funding opportunities for the private sector.
- Ensure policies around technology are mutually beneficial to all involved parties.

Table 5:

- The private sector would like to see more young professionals involved in transportation issues and to hire them.
- There also need to be more instructors for freight, logistics, and supply chains.

Table 6:

- Policy should not be over prescriptive, and the private sector should be able to be innovative and don't have the policy hinder innovation.
- Autonomous combined with driver.
- Work with railroad not against – about AI train. Build local roads to be able to serve the needs of the railroads. Rail forgot their customers. Build efficiencies in rail. Need to work well together.

Table 7:

- Age old situation, push and pull of what the private sector can/can't do because it's business and competition. AI, how much modeling could be done with AI? Not good bad or otherwise, but it's inevitable. Based on what we heard from panel, the opportunity to be involved while students are in school. Provide real life opportunity to connect students to jobs/sectors while they're still in school.
- Change is hard, but opportunities to improve efficiency need to be addressed.
- One of the challenges that the ports have, we have plenty to ship out of Wisconsin, but the import part is a challenge and almost as or more important to discuss. In theory the technology should help us bridge that, but will it really?
- Also important to encourage students to take advantage of opportunities.

Table 8:

- Business as usual.
- Don't want to pay or wait more. If they don't respond, they'll be left behind.
- Customers will be early adopters; industry will need to get on board to stay relevant.
- Incentivize to change way business is being conducted and look towards the future. Anything that gives their product more visibility the industry will happily do.
- First/last mile challenges: most of the efforts and innovation will happen at these places / for these operations.

Table 9:

- Understanding the funding process and what requirements are involved.
- One person talked about reskilling. Some of the jobs that have a chance to be phased out. The new tech would provide a new opportunity for those workers.
- People are aging out of the shipping industry. If you can have one person controlling multiple trucks, that's important. Doing more with less.
- With the driver shortage, getting younger drivers in is incredibly important.
- Waukesha County Technical College must have a truck driver program because I saw one on the road the other day that said "student driver" on it.
- Supply Chain Management software is what companies use to optimize trucking/shipping. We've incorporated that software into the training we do.
- At the last FAC meeting, one guy mentioned that his youngest driver was 55. That blew my mind.
- Drivers want to be home every night. And they want to be paid for all hours worked. They don't want to work 11 hours and only get paid for 8.

- I feel like there was a Covid effect. People were home more regularly and don't want to be on the road as much anymore. Work/life balance is critical.
- A lot of companies have shortened routes, have circular routes and closer distribution routes.
- Private sector investments need to continue for ports, intermodal, and freight rail. Reduce congestion and you get safer roads.

Additional commentary provided by FAC members during Tabletop question period

Table 3 – Addendum on Automation

- The people investing in AV are the ones promoting it. AVs are still thirty years in the future. Automated braking/automated lane assist. There's no way to fully take the human out of the situation.
- It doesn't eliminate jobs. It just changed the jobs.
- Regionality, drivers want to be home at the end of the day.
- Railroads: you couldn't find four people to staff it nowadays.
- Aging problem. In 2008, people were forced into trucking.
- Immigration might also improve it.
- Drivers see it as a stepping-stone to their "Real Job."
- 450,000 CDLs issued every year. It's the constant churn.
- \$12-13 increase (50% raise) in the past 13 years.

Intermodal Discussion

Question 1: What did you hear from the intermodal panel that surprised you the most? What had the greatest resonance?

Table 1:

- The power of the ocean carriers to dictate the supply chain process. Railroads aren't nearly as important; they're basically sub-contractors. Intermodal means truck, train, and ocean liner. Ocean carriers play an oversized role.
- Ocean liners said during pandemic that no containers should reach inland.
- Would Menards shipping mix change if Milwaukee took containers?
 - No. Freight forwarders don't understand that Chippewa Falls exists.
- Would Milwaukee having container shipping help at Menards at all?
 - No. That would have no influence on Menards.
 - But Milwaukee makes a lot of sense, even if Menards won't be impacted.
- Where's Amazon on this? They got stuck with Walmart using Long Beach. If I was Amazon, I'd rather have my containers go through Canada, at Vancouver or Prince Rupert, then going to Milwaukee on CP. Is a short-line railroad coming to Milwaukee?
- Is stacking an issue? Bridge heights impact stacking.
- Companies did overbuy in the pandemic. Our inventories are higher than they've ever been.
- Do you start with the freight forwarders and have discussions with them one on one? World Trade Association will do international events. Promoting intermodal and getting feedback from players. But that wasn't the right organization to promote that. (*ed. – notes are unclear.*)
- The story is no different than it was 5 years ago. The importers run the show.
- Kenosha pharmaceutical operation with Covid vaccine made a 2% difference in value of exporting goods for the state. But vaccines are air freight time sensitive. So maybe not a good example.

Table 2:

- Importance of Chippewa Falls was striking. Central location for Menards.
- Not a ton new for me; drayage concerns are definitely important.
- Drayage ties into hours-of-service issues. For example, without the Milwaukee terminal, fewer round trips by truck are possible nowadays from most of eastern Wisconsin.
- Pay structure for drivers – only paid for drive time, not when they're waiting at shippers or receivers.
- That was made even worse by long wait times for drivers to even get into terminals during the pandemic. Some would shut down access entirely when they got overloaded.
- General agreement on this issue.
- Noted that we still face similar issues to intermodal as we did in 2018-19. Questioned group on the preference of ocean carriers to transload their containers at coasts rather than allowing inland moves. Are there options for inland exporters who need ocean containers? Not much was discussed.
 - Ocean carriers want more transloading for trade balance.

Table 3:

- That we are still in a desert with regard to facilities.
- As far as terminals?
 - Yes
- Ocean carriers and railroads drive the movement of containers from overseas to Chicago, with drayage back to Wisconsin. Eastern Wisconsin is entirely missed by intermodal terminal stops. The big-ticket item is getting the container back to China. Milwaukee's former terminal no longer has the cranes and other equipment it would need as part of some key infrastructure for a terminal.
- Having so much trouble in Los Angeles that bringing containers to the East Coast was cheaper.

Table 4:

- Surprised to hear that rail has problems with congestion as well. What can be done to remediate? i.e., grain elevators right by tracks.
- We need another "Arcadia."
- Surprised about the comment on the high shipping rates. (drayage)
- Chicago is such a major hub everything goes through there. A lot of stuff will just sit. That's idle time for freight which is terrible for the economy and the supply chain.
- Regarding Menard's flooring materials: the preference to put that on rail instead of truck was interesting.

Table 5:

- BNSF repositioning empty containers from Chicago to Omaha for DeLong's operation.
- An intermodal terminal developer needs to find an anchor business in the area of desired development.
- Ocean shippers decide where containers are to be sent and terminated.
- Freight data needs to be labeled as domestic or international cargo regardless of container size to reflect transloading at ports.
- Study of catchment areas of Illinois rail terminal yards. (MAASTO study or UW Superior?)

Table 6:

- Intermodal – surprising that a facility is not locating in Milwaukee but understand the container owners are not willing without the volume. Discussed problems for the Midwest like limited direct relationships with ocean trade partners, seasonal waterways.
- Intermodal Port in Green Bay? – Panamax vessels can't make it through the Seaway.
- Demand for intermodal: but there is no supply.
- Build it and they will come: risky endeavor but need to go for it.
- Imports drive the markets – exports will follow – because containers are available.

Table 7:

(No notes – see below)

Table 8:

- Didn't realize had to have shipping line at the table. Based on their commitment they can get rail line to commit.
- Inability to control our own destiny. What if we produced our own containers?
- The utilization to ship things over the Great Lakes. It's significantly under-utilized (50% capacity currently).

Table 9:

- The amount they're moving is astronomical – maybe not for me, but for my students. I really liked the customs broker's statements. Her job must be tough. I used to deal with x-ray tube shipping overseas. It was bad then; I can only imagine how awful it was during the pandemic.
- How does enforcement keep track of all the products shipped?
- The variety of intermodal modes and how much touches our highways. How do you enforce that from a motor carrier standpoint? With all the different weights and axles?
 - With all the different configurations, it does get confusing. And trying to keep track of all the different companies. Part of our job is, every company that comes along, we do an educational audit to make sure they know what they're doing. There are so many new companies coming on board, we can't keep up. There are more than 200 a month.
- I was surprised by the cost difference there is between shipping from Wisconsin and Chicago.
- The guy from Menards who said "the money we're saving, we're gonna pass it on to the consumer" – I don't know if that's true.

Question 2: What factors do you think are needed to improve intermodal freight opportunities in Wisconsin? Which of these factors are the same for overseas intermodal and domestic intermodal, and which are different?

Table 1:

(No direct notes – see Q3)

Table 2:

- First, the boxes are different for overseas vs. domestic. The players are also different: Martin, Schneider, J.B. Hunt, Swift – those are the domestic players vs. Cosco, Hapag-Lloyd, and other international steamship lines / liner services.
- Payloads – international containers can carry larger volumes by weight. There's an older study from the Soybean Transportation Coalition that discusses this.
- Noted that surprisingly, from a road standpoint, 92,000-pound loads are better with 6-axle than 80,000-pound loads on 5 axles.
- The factors from the previous report are still valid: intermodal needs an anchor business to provide sufficient and sustained volumes of freight; those volumes need to be guaranteed to railroads and liner services, and inbound freight drives the market and pays for most of the freight costs of box movement.

- The combined challenge and opportunity for domestic intermodal is truck driver availability – shifting loads to intermodal allows companies to keep good drivers on local operations – and make more money.
- Did the North Central Wisconsin study look at domestic and/or international?
 - Hard to separate the two out completely, but they looked at lanes of transportation.
- Foreign Trade Zone (FTZ) benefits – only at Duluth.
- FTZ can create subzones in WI. Subzones might provide some benefits.
- Also heard lack of federal customs staff can be a challenge.
- Agreed with customs/border staffing challenges. Duluth-Superior paid in advance for both a building and staffing for US Customs.

Table 3:

- Okay, I heard all the reasons – all the different places to put intermodal – but the one thing I didn’t hear was if it was profitable. If it was profitable, they would be doing it.
- It used to be a \$300 difference to have containers delivered to Milwaukee versus Chicago. Now it’s \$1,000.
- Trucking rate to Southern Illinois can be over \$1,000.
- Average speed/velocity: if that’s going down then the railroads don’t have capacity.
- At what point do you have a state or federal entity say, “we’ll just subsidize this.” If it is costing tons of money for businesses, at what point do you provide incentives or subsidies for intermodal? Are there situations where mandates need to be tried?
- Steamship lines have the most say in making intermodal happen. We need the space and drayage to unload them.
- But sometimes they won’t let others use their facilities. It’s the back-end stuff you don’t see. I don’t think it’d be rocket science to open the yard.
- “Build it and they will come,” I don’t think that’s the way to go, but at the same time, the ocean carriers need to get involved.
- Milwaukee or Chicago? If I am looking at international, they are going to Chicago. It’s like whether or not to take an international flight out of Milwaukee, I’d go to Chicago.
- It’s about taking control of my freight. Calling the shots at the bargaining table. It’s about leveraging. But the guy in China is going to use the cheapest carrier. Whereas we need to have the preferred business guiding “this is what we want.” If you are a volume importer, negotiate and bring in your own freight.
- Does Walmart think “can we get more control?”
- And you need collective action to get your volumes. It’s a little bit of rail, but it’s the ocean carriers. It’s a combined thing – have you offered enough money for them to do it.
- This guy at the farm bureau was complaining that they were pulling [other rail cars] instead of his grain hoppers. I told him: “here’s the solution: pay more.”
 - Right, it’s a business. Is there enough money.
- The container owners want consistency. Railroads want a hundred loads a week – consistency in a volatile market.

Table 4:

- Double stacking on the rails keeps coming up as an issue. Complaints about maintenance of infrastructure.
- For containers, need to bring things and drop off, then send the container back immediately for re-use.
- One thing to consider is that Wisconsin is more of a rural state except for Milwaukee, Kenosha-Racine, Madison, and Green Bay. Or areas that are near the Twin Cities.
- Importance of trade balance. Empty containers being sent back is an issue.
- Size of ships is an issue (coming into the Great Lakes)

Table 5:

- Develop/redevelop intra-state (within Wisconsin) container moves or container pools within Wisconsin. This allows for use of containers within region and is not reliant on Chicago.
- Upgrade infrastructure targeting bridge weight restrictions and vertical clearance issues.

Table 6:

- Connection to maritime is key. Ocean carriers don't want their containers inland. Containers need to move, move, move!
- Infrastructure needs to keep pace with growing markets.
- Panamax – construction of Seaway to accommodate larger ships for direct ocean connection.
- Can Wisconsin compete with Chicago infrastructure and demand? Unlikely, focus on the lines that are most efficient.

Table 7:

(No notes – see below)

Table 8:

- Getting commitments from importers to sufficient volumes that can capture contracts.
- Related: Shippers have to put themselves in position “we will commit to shipping so much by rail.”
- We need the infrastructure, such as for double stacking of containers.
- Freight programs and per-container incentives that go to legitimate businesses. Incorporating more innovation and data into the process, as well as load sharing.
- Domestic shipping relies on international shipping.
- Is intermodal cost-effective for domestic without international?

Table 9:

- Manufacturing jobs need to be brought back to Milwaukee. Milwaukee used to be a hub – a city of manufacturing. All that's gone and went south because of the cost of business. Allis Chalmers used to have a rail system right into the business. You had AO Smith, Allis Chalmers, and now they're all gone.

- What was up with the double-stacking issue?
 - It was infrastructure; street overpasses in Milwaukee are too low for double-stacking rail underneath. I'm from Wauwatosa and there's a bridge that's only about 12 feet high. The truckers know not to go there, but people in U-Hauls don't know any better. Trucks get stuck there all the time. It's at Swan Boulevard, and we call it the Swan Slicer.
 - So, it's an infrastructure update that's needed, probably by both the state and city.
- Are the policies for workers limits the same for domestic and international intermodal?

Question 3: In follow-up to the previous question, do you see these factors being sufficient in Wisconsin over the next five to ten years? Why or why not?

Table 1:

- Help eastern WI by finding a way. Stevens Point is too close to Chippewa Falls – how far is the dray? Probably cheaper than going to Chicago to Milwaukee.
- Are more studies helpful? Or is the story clear enough?
 - The story is clear enough of what needs to happen. We know what needs to happen. But maybe not enough companies know what that “here's what needs to happen” story is. Intermodal is 6% of freight – hard to make decisions based on that number.
- Private sector is squeezing every penny out, unlike the public sector. What needs to be done is clear but not clear enough.
- Every small manufacturer is at the mercy of all sorts of things. Outrageous drayage fees having an impact.
 - Like Custer Farms.
 - Menards looks at every city. Save every penny.
- Assume we could get everyone to support this, where would you put it? Somewhere other than Milwaukee?
- Where would the boxes go? Not just the terminal, but the boxes too. The complexity of this problem surpasses the difficulty of building an Interstate. So many players and factors with competing or different interests.
- Amazon has to be the one to start. Amazon has to go through Chicago and through those chokepoints. That would scare me if I was Amazon.
- Fox Cities have advantages – growing populations, proximity to Great Lakes, proximity to farmland.

Table 2:

- Where will future trade lanes exist? In 1982 China wasn't a trade partner yet. Similarly, what will emerging markets be moving forward, and how to do we position ourselves to prepare? Africa? South America? That changes trade lanes, etc.
- Good example was Menards shipping from Brazil now.
- Agreed that shipping across Midwest is often more expensive than shipping out to Europe/South America. Drayage costs are greater than the remaining costs of container returns.
- Some railroads are offering no-charges to ship empty containers East; increasingly more shipments are coming to the Midwest from the East Coast.
- Issue is that East Coast shipments usually stop at Chicago, and don't make it to Wisconsin.
- Wisconsin is also not on major east-west Union Pacific corridor.

- Physical barriers like double stack capacity are significant. But fixing those costs money – whether raising bridges or lowering the roadbed. The state may be more likely to get federal money (BIL, CRISI) for bridges than railroads.
- Expressed interest in CRISI grants.
- Intermodal service in Wisconsin will require commitments from importers, and all the right people at the table together, communicating at the same time. That includes liner services and railroads. Otherwise, no one will make commitments without knowing rates.
- Menards uses Incoterms to its advantage – getting shippers to pay for transportation costs by keeping ownership until delivery.
- To help intermodal turnaround, try to get Distribution Centers (DCs) around it. When looking at potential locations, look for a potential “Ecosystem” area near the terminal location (with available land and existing highways) that can be turned into a hub of DCs (Cluster Theory).
- Agreement around table on this theory.

Table 3:

- Everything is volatile.
- Will conditions be sufficient? No. I don’t know.
- Trucking can add capacity quickly, but for rail by the time they add capacity the economy changes.
- From a freight forwarders perspective, no one outside our sector had a sense of what a supply chain actually was before Covid. No one else was tracking everything and what was going on. But Secretary Buttigieg got maritime, rail, and trucking all talking. We have to share statistics.
- It’s about getting all the transportation companies and cargo owners to talk to one another.
- We are now tracking supply chains nationally, post-Covid.
- It seems like too many people at the DOT don’t even talk about it. (*ed. – unclear if this is a reference to U.S. DOT or WisDOT.*)

Table 4:

- Much depends on what is being moved. What mode and route are being used?
- Changing oversize/overweight (OSOW) formulas are important. The 80,000-pound exemptions should match those in other states.
- Standards were set in the 1960’s. The upgrades are for more weight. Weight distribution is important. Battery weight adds to the issue. (Possibility of an EV weight exemption?)
- Someone saw info about a school bus causing more damage to roads than freight trucks because of poor weight distribution.
- The leadup of the roadbed to bridges was different decades ago and that affects condition of bridge infrastructure.
- Consider the fees charged by municipalities when going into towns.
- How infrastructure is built is important. For Primary Corridors, money needs to be raised.
- Changing markets and political factors need to be considered.

Table 5:

(Not addressed)

Table 6:

- Shortline haulers – but the more railroads you get involved the more expensive it will be.
- At the end of the day – how much are you willing to invest in an unsure market?
- A sorting facility outside Chicago needs to be a priority.

Table 7:

(No notes – see below)

Table 8:

- If they put money behind addressing double stacking... Need commitments from shippers and carriers before (public funding of) infrastructure investments will gain traction (politically).
- We need to do something different, instead of doing studies.
- Wisconsin is missing something – unidentified – to make the changes that are desired (by shippers).
- Q: Is there some way to integrate air (*ed. – unclear context.*) to bring attention to rail?

Table 9:

- Possibly. What support is there, though?
- At GE, we transported globally. We had a lot of independent companies that did our shipping. I'm sure that affects a lot of the shipping. We had to change our shippers every year.
- Are ships that go overseas a different size than domestic?
- It would make sense that the ocean ships are much bigger and deeper.
- During Covid, the bottleneck was in Long Beach. That's an overseas shipping issue, not domestic.
- When I was with GE, we had a plant in Mexico. Our plant there was next to a lot of other American companies. It was like a little neighborhood of American companies. They all go there because of the cost of labor.
- It sounds similar to the current issue with U.S. automakers.
- That's currently an issue with microchips. Because we've sent so much manufacturing overseas, we couldn't even try to do it domestically because we don't have the infrastructure anymore.

Question 4: What policies and investments should WisDOT emphasize, given what you heard from the panelists?

Table 1:

(Part of response to Q3; see above)

Table 2:

- Try to come up with core group of importers, not a large group, but a group that can sit down and brainstorm well. Freight forwarders, too. Maybe a steamship line in there too after the importers meet up. State could facilitate with such a meeting. Domestic and international there; a couple exporters too. (*ed. – order of who to meet and when to meet unclear.*)

- Asked about potential of Johnson Controls and Rockwell forming the core of such a meeting group.
- Talking about who could help make introductions.
- Sandi Siegel of M.E. Dey knows the rates and availability.
- Check ability to bring some groups (Johnson Controls and Rockwell?) to the table.
- Use the core group to identify the critical domestic and international trade lanes and balances.
- NEMA has this data broken down by state, percent of GDP their members produce.
- Canada and Mexico are crucial in that balance of trade.
- Question raised: Were / are there limits on the number of carloads Canadian Pacific can deliver to Port Milwaukee?
- Summary of this part: Request for a new intermodal subcommittee focusing on key importers and exporters.

Table 3:

- Continued infrastructure development.
- Invest in roads and access to the ports.
- We'd been removing railroads, but I think we are moving away from that. Continue rail banking so that it can go back to freight service in the future.
- Railroads, they're going to stick to where the volumes are.
- Everything is eventually going on a truck. If you add those costs together, and then compare putting it on rail instead of truck – looking at Madison to various points, shipping to Kansas City was the same as going 14 miles. The bulk of the cost was getting the rail car and handling it, after that it was pennies once they got it on rail.
- My operation is one mile from the train location, but I buy lumber by the truckload because they got to get it to me. It's hard for both of us to make money.
- The mergers, the railroads will send you a bill. (*ed. – unclear context.*)

Table 4:

- Studies for understanding bottlenecks, intermodal, markets.
- Try to understand what makes us non-competitive.
- Get to the source first, look at public/private partnerships, then see what needs to be done to change.
- Why is Wisconsin drayage so expensive? Who controls that?
- Some bottlenecks have been addressed really well (Marquette Interchange).
- Address the megalopolis of the Milwaukee-Waukesha area. Significant amount of traffic goes through the Zoo interchange.
- How to address other congestion issues?

Table 5:

- Provide public property that can be utilized for container storage.
- Creation of an "intermodal czar" (public/private); maybe work jointly with WEDC. Ensure that model allows private data to be collected and protected.
- Creation of a private interest group to lead efforts to secure public grants; Washington state as a model.

- Coordinate grant applications and prioritize projects for submission to reduce in-state competition to capitalize on / prioritize matching funds.
- Develop a state funding source to match private funds; Illinois has such a program that provides dollar for dollar match to private industry, up to \$2M, for federal local grants – to match projects to secure more federal funds.
- Develop a grant program for local communities to develop rail infrastructure, not dependent solely on job creation. Cited example – support developments such as those done in Milton.

Table 6:

- What can infrastructure/policies do for the customer whereas rail only looks at it for investment.
- Keep studies going – so facts can be well known and shared with business sectors.
- Monitor for innovation – public sector needs to understand how to support and accelerate innovation in the private sector.

Table 7:

Intermodal Potential Solutions: Convene a Meeting

- First – Discuss / identify who should facilitate? WisDOT? DATCP? WEDC?
- Identify a meeting location.
 - Perhaps WEDC can host – could be hosted on the eastern side of Wisconsin.
 - Kohler could host? Would require \$\$.
- Invite (compel?) steamship operators to attend – they control containers. Their participation will be a big challenge.
- Identify importers who have the financial ability to get service. We need to identify the importers who have the financial wherewithal to work with the steamship operators who control the containers.
 - Kohler, Fleet Farm/Farm and Fleet, Fiskars, Menards, John Deere, Kohl's.
 - Plastics industry in Fox Valley.
 - The large paying customers would give CN a motivation to come.
 - It is approximately 3x more expensive to import than to export.
- Reach out to forwarders (such as M.E. Day and other forwarders).
 - M.E. Day would know who the importers are and would be a good resource to identify them.
- There's also data that shows who spends the most for importing into Wisconsin, maybe that would identify who should come.
 - "We want to help you save money." Retail partners, plastics, paper, – all bring in boxes.
 - Goal is to have an intermodal terminal in Eastern Wisconsin (Oshkosh? Green Bay? Milwaukee?)
 - Introduce more competition to Class 1 rail in WI (Oshkosh Yard – owned by state of Wisconsin (*ed. note: statement is incorrect. The Oshkosh Transload Facility is owned by the City of Oshkosh*), down to Milwaukee that would be competition to CN).
 - Need to figure out DOT bridges that are too low.
- It would be great if this topic could go somewhere but there are concerns that this topic won't go anywhere. There have been multiple (3) studies that show we do need intermodal – how do we move forward with it and not just keep talking about it?

Table 8:

- Provide a delivery incentive to encourage owners to send containers to Wisconsin.
- Take findings of study to next level – appoint a dedicated champion/group to bring intermodal into state (one singular, dedicated resource).
- Tidy up the weight allowances for domestic and international weight limits. Also, investments to update/modernize state ports.

Table 9:

- Invest in the future. Budget funding for Artificial Intelligence (AI). Figure out which laws/policies need to be figured out for the impending influx in AI.
- There is discussion in Division of State Patrol (DSP) about autonomous vehicles. How do you tell a driver-less truck to come into a weigh station?
- Is WisDOT thinking about driver-less trucks?
 - I know they're testing them. Someone's in the cab, but the truck is doing it all on its own.
- One of our initiatives is to keep freight moving. DSP is putting a lot of investment into technology to help weigh trucks on the road or via sensors on the truck, rather than making them come in to weigh stations. That allows us to focus on the trucks that need our attention.
- They were talking about trucks sitting idle, and it helps support our initiatives to weigh trucks more efficiently.

Question 5: How do you expect the private sector to respond, based on the observations from the panelists?

Table 1:

(Part of response to Q3; see above)

Table 2:

- Private sector should contribute to the dialog.
- Will look into shipper's coalition and what they're doing with freight.
- Reach out to the private sector and see how they respond. Time and money savings are worth change, but not all groups are always ready for change.
- Time/cost savings vs. momentum/fear of change.

Table 3:

- At the end of the day, it's all about money.
- If you can manage your own transload facility, your business saves time and money through efficiencies.
- Reduce drayage, it's not profitable for return otherwise.
- Use front haul terms – all the importers are paying to get their products to Menards.

Table 4:

- Fund and update studies, use for decision-making (would continually need to be done because of changing conditions).
- Market study to encourage reopening a facility (rail).
- Any instance where Rails to Trails was reversed? Recall one instance of a plant potentially being built in Walworth County 20 years ago but then plans were abandoned. That area is now a bike trail.
- Surprised at how well Menards does in certain parts of the state.
- Need to help sell the market, jobs for investments.

Table 5:

(No Response)

Table 6:

- Will continue to respond to market. That means Chicago will be the solution.

Table 7:

(No responses)

Table 8:

- I think shippers would take advantage of intermodal. They could save \$1,700 each in getting containers brought up from Chicago.
- They will take advantage if it makes economic sense. Also, workforce availability: are there enough folks in the areas where you put these facilities?
- Shippers will need to start thinking about making a commitment. Also, make these commitments long-range.

Table 9:

- The private sector will be looking to try anything that saves money and helps address the truck driver shortage. Seems like everyone is exploring ways to use all the resources they have more efficiently. However, some may need to be convinced of the value of intermodal.
- It's all about getting the costs down. At GE, we'd hire a new transport company each year. X-ray tubes cost a lot to ship, and we're always looking to save a few bucks.
- If you build it, they will come – is that true?
- You've got to look at the cost.