

Freight Mobility: Economic Impacts on the Upper Midwest

A Summary Report

December 2, 2005

Solving capacity and infrastructure constraints requires collaboration among the nation's entire transportation community. The 9th Annual Freight and Logistics Symposium brought together representatives from the shipper and carrier communities as well as policymakers and academic researchers to examine issues driving the freight network in Minnesota and the nation. CTS director Robert Johns and Council of Supply Chain Management Professionals Twin Cities Roundtable president Greg West opened the symposium by discussing the need for collaboration among the private sector, public sector, and academia. Topics included transportation system capacity, industrial competitiveness of Minnesota manufacturers, and supply-chain strategies to deal with constrained capacity. This report summarizes the three main sessions of the symposium.

Freight Mobility, Transportation System Capacity, and the Economic Challenges Ahead

Keynote Speaker: John Ficker, President, National Industrial Transportation League

Panel: How Logistics Costs Affect Corporate Decision Making

Moderator: Ron Dvorak, Sales/Marketing Representative, xpedx, an International Paper Company

Panelists: Cheryl Amborn, Traffic Manager, Cummins Power Generation; Paul Borgen, Corporate Logistics Manager, Polaris (Ron Dvorak presenting); Tom Bland, Customer Order Fulfillment Manager, 3M Company

Panel: Emerging Supply-Chain and Infrastructure Approaches to Capacity Challenges

Moderator: Richard Murphy Jr., President, Murphy Warehouse

Panelists: Karen Donohue, Associate Professor, Carlson School of Management, University of Minnesota; Mike Laden, Founding Principal, Trade Innovations, Inc.; Cecil Selness, Director, Office of Freight and Commercial Vehicle Operations, Minnesota Department of Transportation

Concluding Observations

John Ficker, President, National Industrial Transportation League

UNIVERSITY OF MINNESOTA



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Freight Mobility, Transportation System Capacity, and the Economic Challenges Ahead

Keynote Presentation

Keynote Speaker: John Ficker, President, National Industrial Transportation League



John Ficker

“Freight doesn’t vote. Potholes vote. Because of that, you have to become people who are engaged in recognizing the value of freight.”

—John Ficker, National Industrial Transportation League

In his keynote speech to the group of 125 freight and logistics professionals, policy-makers, and researchers at the symposium, NITL president John Ficker warned that a number of infrastructure and capacity issues are putting the nation’s transportation market in jeopardy.

“We cannot continue to operate our freight system and move the goods of this country unless we’re willing to put forth some effort,” he said, predicting the need for freight capacity to double in the years ahead.

“We need more interaction between the public sector, the private sector, and the academic sector,” Ficker said, urging collaboration among the three groups to bolster the nation’s freight transportation network and ensure the United States’ position as a global leader in transportation. To emphasize his point, he called on attendees to become “apostles of transportation and logistics.”

Ficker said the U.S. transportation market is at a critical crossroads following a 20-year buyer’s market with plenty of capacity and long carrier lists. Recent market forces, including industry consolidation and mushrooming demand for consumer goods, continue to strain capacity and infrastructure. “Capacity is tight across every mode of transportation,” he said, noting that trucking and intermodal capacities are particularly strained along domestic routes and import lanes.

Acute capacity constraints, such as those experienced by shippers a few years ago during the West Coast port strike, improved noticeably during 2005, Ficker observed, mostly due to transportation mode switches, improvements in the rail system, and diverting freight from, for example, Pacific Northwest ports to Gulf ports. Over the long term, however, he cautioned that the recent creativity and innovation shown by shippers in logistics strategies are not enough to match the tremendous growth in freight volumes.

Ficker said freight bottlenecks at jammed U.S. ports as well as intermodal and interior waterway congestion as a result of Hurricane Katrina are typical of system constraints. To further illustrate deteriorating infrastructure and the domino effect of the network, he cited the poorly maintained U.S. lock and dam system—vulnerable to shutdowns, natural disasters, and delays. “You take that kind of barge capacity out of the system,” he said, “and it sends off a chain reaction from one mode to another.”

But he added that a number of “one-percent” solutions, such as shifting shipments to Gulf ports and improvements at rail lines, will continue to contribute to smoother freight moves for 2005 and 2006. The bad news is the approved federal transportation bill—even at \$286.4 billion—will still limit improvements to and expansion of infrastructure, given cuts to intermodal projects and stretched dollars. “It’s not enough in the right spots,” Ficker said. “There’s loss of purchasing power with the Highway Fund being significantly impacted by inflation.”

Ficker’s solutions to fight an overburdened transportation network include infrastructure improvements, which will, in turn, contribute to increased capacity; a spotlight on security—no longer just to avoid pilferage but to protect against terrorism as well; and leveraging technology to address both security and productivity improvements.

Ficker also outlined additional factors complicating the already strained transportation picture: labor issues involving compensation and quality-of-life concerns, particularly the undesirability in our aging workforce for the job of driving a truck. Other contributing factors include concerns about energy and the environment.

U.S. policy has eased in favor of domestic sourcing of energy products and encouraged reducing the country’s dependence on foreign oil, Ficker pointed out. But, even though fuel-efficient vehicles and lowered

emissions—such as the EPA’s requirement for cleaner-burning truck engines in 2007—are certainly positive, he added, these advances won’t significantly help fund the nation’s infrastructure improvements. “Our system is really very, very fragile,” Ficker said. “If we’re not careful of that, we can really have a problem.”

Lack of funding lies at the heart of many of these problems. According to Ficker, the recently passed \$286.4 billion transportation bill isn’t enough for the nation’s transportation network to keep pace with mounting demand. Specifically, transportation bill allocations, which are spread among a number of freight and personal transportation projects over the next four years, fall short in supporting the nation’s freight transportation needs. “Monies for intermodal connectors ... were deleted from the highway bill at the eleventh hour,” he said, noting spending cuts to two critical intermodal projects: Southern California’s Alameda Corridor East and Chicago’s CREATE (Chicago Region Environmental and Transportation Efficiency) project.

To influence the next round of federal funding and ensure a larger allotment for freight transportation infrastructure, NITL has aligned with other private- and public-sector groups, including the American

Association of State Highway Transportation Officials (AASHTO), to create a national freight transportation policy. Ficker suggested the alliance, still in the early stages, is a critical step to advance the nation’s transportation network. “Freight doesn’t vote. Potholes vote,” Ficker said. “Because of that, you have to become people who are engaged in recognizing the value of freight.”

Ficker re-emphasized that the solution lies with collaboration and partnership. He challenged the public sector to reach out to the private sector, primarily shippers. “A carrier has no commerce to move unless a shipper hands it to them,” he said. Likewise, he suggested that shippers—especially manufacturers competing in today’s global marketplace—can go a long way to influence their carriers and the vast public sector.

Along these lines, one participant raised the notion that tightened government budgets mean both sectors must find new sources of revenue. In response, Ficker expanded on a concept he brought up earlier: projects to improve specific transportation corridors and truly addressing the value of freight in each project. “‘What’s the value for freight movement in that project?’ It’s questions like these,” he concluded, “that need to be asked so freight gets a stake at the table.”



How Logistics Costs Affect Corporate Decision Making

A Panel Discussion

Moderator: Ron Dvorak, Sales/Marketing Representative, xpedx, an International Paper Company

Panelists:

Cheryl Amborn, Traffic Manager, Cummins Power Generation
Paul Borgen, Corporate Logistics Manager, Polaris (Ron Dvorak presenting)
Tom Bland, Customer Order Fulfillment Manager, 3M



Cheryl Amborn

Discussion focused on the transportation infrastructure in the Midwest and weighed how manufacturers' logistics costs affect corporate decision making. Presenters outlined their company's logistics strategies and prevailing transportation concerns, including shifts in inventory trends, switching ports, and moving shipments off rail onto trucks to avoid delays, as well as border delays due to increased Homeland Security measures.

Staying agile

Cheryl Amborn, global transportation manager at Cummins Power Generation, said the company has had to make a number of decisions about lanes, modes, and equipment to stay agile in managing its logistics. Cummins moves a variety of shipments, ranging in weight up to 45,000 pounds, with international freight—mostly imports—at about 80 containers each month. The company continues to grapple with service cutbacks given hours-of-service rules, as well as shortages of standard containers and specialized equipment.

Amborn said poor rail service has forced the company to move more of its freight via truck. "Rail congestion is a reality," she said. "Once shipments get to the port, we wait sometimes for the rail to get to us." She later added that because of inconsistent rail transit, sometimes varying as much as seven days, Cummins is more likely to use trucks. Longer clearance times due to increased Homeland Security also cause delays at North American borders.

To save costs and improve supply-chain efficiencies, Cummins increasingly consolidates inbound and outbound shipments. "We'll take all of our shipments going out

and consolidate them into one van truckload or whatever we can," Amborn said. On the inbound, the global manufacturer uses a third-party provider for optimization routing to consolidate pickup and delivery.

Further improvements in the system, according to Amborn, could come from easing congestion at rail yards nationwide and improving the supply of local containers.

Keeping up with competitors

Ron Dvorak, sales representative for xpedx, delivered a presentation created by Paul Borgen from Polaris, who had been scheduled to participate on the panel. Polaris, he said, has had to alter its logistics strategies in response to regional infrastructure limitations, especially in greater Minnesota, to remain globally competitive. Dvorak cited the manufacturer's fuel-cost

Cost pressures also have led Polaris to deliver less frequently and consolidate shipments, which has made the manufacturer less competitive to its foreign-based counterparts.

increases, driver shortages, and high turnover, along with increased costs stemming from regulatory issues like hours-of-service and Homeland Security. He also noted the Roseau-based company runs a considerable number of interstate shipments over the road and is constrained by a prohibition to run double-trailer trucks on Minnesota roads.

To stay competitive and reduce costs, Polaris no longer ships finished products in some instances and opts for slower transit times, Dvorak reported. Instead, for example, the company relies on subassembly of its



Ron Dvorak

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—Tom Bland, 3M

ATVs—leaving wheels or other items off the product for final assembly after shipping—to reduce product size and packaging. Cost pressures also have led Polaris to deliver less frequently and consolidate shipments, which has made the manufacturer less competitive to its foreign-based counterparts.

Dvorak encouraged the enhancement of the state’s transportation infrastructure through the improvement of roads, rail, and waterways. “We need to improve and expand rail opportunities,” he said, focusing attention on the need for more access to Class I railroads. “It’s becoming a real problem in rural areas and, in general, merchandise cargo.”

Solutions to access and capacity issues, Dvorak said, include the development of short-sea shipping, starting with the Port of Duluth to foreign waterways, as an alternative to rail-truck moves to East Coast ports. He also advocated allowing twin trailers on more roads in Minnesota, which is a change being considered by the Minnesota Freight Advisory Committee and the Minnesota Department of Transportation (Mn/DOT).

Increasing globalization

Tom Bland, customer order fulfillment manager for 3M’s medical division, explained that 3M includes logistics and factory costs as part of its calculations for total delivered costs. In addition, the manufacturer makes logistics decisions using information about customer service, fulfillment, and transportation costs. Bland noted shipping from the division’s single Iowa distribu-

tion center allows for reliable nationwide transit within seven days, and it encourages shipment consolidations.

Bland also addressed issues about sourcing decisions. For example, 3M adjusts its own inventories as well as customer inventories, considering distance to markets, availability

of capacity, and manufacturing costs. Bland said he suggests weekly shipments to 3M’s hospital and medical distributor customers to streamline its fulfillment and outbound processes, which creates a win-win for 3M and its customers. On the other hand, Bland said 3M customers, in many cases, are pressured to keep low inventories, which necessitates smaller, expedited shipments.

Capacity issues, especially the company’s truckload requirements, continue to drive many supply-chain decisions at 3M. Congestion at the Port of Long Beach, for instance, has moved volumes to alternate ports like Seattle. “Capacity is tight all over the U.S. right now, and actually globally, except for the balance-of-trade coming back is pretty good,” Bland said. “We need to take that into consideration when we make decisions around source of supply.”

In addition to these issues, Bland’s division at 3M is also challenged by:

- fuel charges, which have eased recently
- globalization of its business with plants in Europe and Asia, causing inbound headaches associated with “breaking containers,” or deconsolidation
- disaster preparedness with the threat of avian flu while still recovering from Hurricane Katrina-related delays and container shortages
- maintenance of appropriate levels of inventories at its Iowa distribution center and with customers in light of system disruptions and cost pressures favoring load consolidations.



Tom Bland

“It does happen more often now, that we’re short of things or that we can’t get to a [destination] that we need to and we have to find a different way.”

—Cheryl Amborn, Cummins Power Generation

Putting it all together

Panelists agreed that competing globally today requires agility and informed decisions by manufacturers to better manage their supply chains. Discussion focused on Minnesota’s increasing interdependence on the rest of the world’s transportation network, world events, and the regulatory environment. Examples included switching ports and modes as necessary, examining alternatives like intercoastal shipping, and security certification under the Customs-Trade Partnership Against Terrorism (C-TPAT) program.

More than a dozen participants posed questions about a variety of issues, including security and border delays, lack of rail service, just-in-case inventories in light of capacity issues, and disaster preparedness. Panelists responded that Minnesota needs significant infrastructure improvements to address rural-outstate service issues, better rail access, and more standardized truck and road requirements.

A few participants probed further on 3M’s inventory and capacity issues. Bland pointed to lessons learned from Hurricane Katrina to prepare for a possible avian flu outbreak, which necessitates increased buffer stock.

“Right now,” he said, “the transportation network isn’t able to respond as quickly as we have in the past.”

Other questions involved transportation lane and mode decisions, especially in light of port congestion and equipment shortages. For Cummins, the consignee or their third-party logistics provider often designates port selection, Amborn said. In addition, 3M continuously changes ports to fit market conditions. “Recently, there are delays going up to Seattle on rail with containers and some going into Long Beach, although that seems to have eased a bit,” Bland said.

Next, moderator Dvorak probed the effect of infrastructure issues on the regional manufacturing base and on the relationship between the private and public sectors. In response, Amborn and Bland characterized their firms as representative of shippers getting the job done despite mounting infrastructure and capacity constraints.

“It does happen more often now, that we’re short of things or that we can’t get to a [destination] that we need to and we have to find a different way,” Amborn said. “Is there a disconnect? It’s on the horizon, and it’s going to be happening more—but at this time, it’s not major for us.”

Likewise, 3M is managing to keep its network intact despite capacity issues. “Infrastructure issues are significant but I wouldn’t say the wolf is at the door yet,” Bland said, noting that an ability to run twin trailers would aid his company.

Richard Murphy Jr., president of Murphy Warehouse and moderator of the next session, added that truck and rail service access issues are key for manufacturers. His company, for example, is working with a number of manufacturers across industry to bring products to the Twin Cities for distribution across North America because of limited rural service. “Our outstate customers are scrambling to find trucks,” Murphy said. “Their outstate locations, while inexpensive, aren’t necessarily prime locations anymore.”



Emerging Supply-Chain and Infrastructure Approaches to Capacity Challenges

A Panel Discussion

Moderator: Richard Murphy Jr., President, Murphy Warehouse

Panelists:

Karen Donohue, Associate Professor, Carlson School of Management, University of Minnesota

Michael Laden, Founding Principal, Trade Innovations, Inc.

Cecil Selness, Director, Office of Freight and Commercial Vehicle Operations, Minnesota Department of Transportation

This second panel broadened discussion toward supply-chain management and infrastructure, focusing especially on capacity challenges. Three panelists presented their unique perspectives on the topic.

Savvier supply-chain management

Karen Donohue, associate professor at the University of Minnesota’s Carlson School of Management, summarized the previous panel discussion about inventory versus transportation costs. She noted how symposium participants described market forces, which tip the scale toward putting more inventory into pipelines because truckload consolidations are forcing deliveries less frequently. Conversely, she said nationwide data shows transportation costs remained relatively flat through 2003 (the latest full year available) as firms succumbed to longer transport times and opted for more frequent deliveries to reduce inventory costs. “Total logistics costs are going down, but total transportation has flattened,” she said, pointing out that supply-chain innovations are keeping logistics costs

at bay (*see Logistics Costs graph*).

Supply-chain innovations are abundant and evolving, Donohue continued, as shippers leverage information to reduce the number of storage locations and inventory investment. To this end, she cited five “flow strategies”: direct ship, cross-docking, merge-in-transit, sales-agent model, and leveraged shipments. She focused on the last three strategies, which she characterized as highly innovative. A merge-in-transit strategy is often used for high value goods, where components from suppliers are brought together at a hub, consolidated, and then shipped to customers. The sales-agent model employs regional warehousing, not direct shipping, to deliver heavy, bulky items to customers. Finally, leveraged shipments reduce logistics costs by consolidating across time, vendors, or buyers.

Donohue illustrated the potential for logistics to be used as a competitive difference, which in turn, saves money for everyone in the supply chain. Just as designing products for manufacturing is now common, consider-

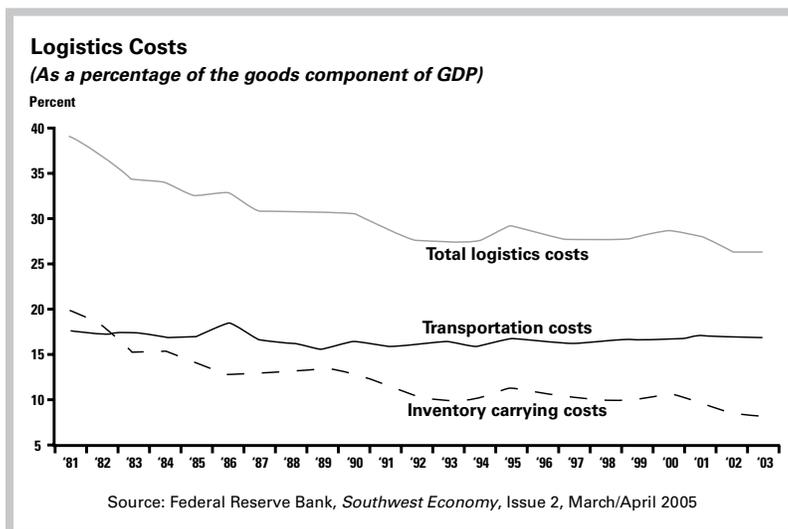
able potential exists for manufacturers to design for logistics. “Manufacturers can ask questions like making the product smaller, lighter, or less fragile,” she said. For example, Rubbermaid has designed for Wal-Mart logistics by modifying the plastic storage bins it makes to optimize transportation and labor at the retailer. Similarly, IKEA creates products while



Richard Murphy Jr.



Karen Donohue



mindful of their effects on transportation and packaging in its world-class supply chain.

The strategy of designing for logistics requires tight coordination among links in the supply chain, Donohue emphasized.

So does leveraging assets like hubs and trucks to bring economies of scale and using information to replace inventory and storage facilities.

Donohue concluded by summarizing a recent trade survey, which asked shippers to assess how they account for risk in their supply chains. “Roughly 40 percent of companies are feeling that they’re doing a reasonable job of accounting for risk,” she said, “but 60 percent are just getting started. I think there’s a lot of work to do.”

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—Karen Donohue, Carlson School of Management, University of Minnesota



Michael Laden

Improving Security

Michael Laden, founding principal of Trade Innovations, Inc., said Target Corporation has leveraged technology since September 11, 2001, to build a robust Customs–Trade Partnership Against Terrorism (C-TPAT) program. C-TPAT, established in 2002, is a joint initiative between the U.S. Department of Homeland Security and business aimed at increasing the protection of cargo into and out of the United States while improving the flow of trade. “It’s critical we keep our focus on security, but trade compliance is just as important,” Laden said. “The U.S. Customs and Border Protection (CPB) won’t give up advances made in the area of trade compliance pre-9-11.”

According to Laden, Target took a proactive approach immediately following the September 11 attacks to help form national policy on freight security. Target is the nation’s second largest importer of container cargo, bringing in about 200,000 40-foot containers annually. C-TPAT, which requires

parties to establish policies enhancing their security practices and those of their business partners, is becoming a requirement to do business for many companies. To become a member, participants must carry out a stringent review of their supply-chain security processes involving freight security procedures, personnel screening, and training, as well as of their inventory-control measures in all of their locations used to process freight. More than 10,000 organizations worldwide participate in the growing C-TPAT program.

Since September 11, security has certainly taken on heightened importance to shippers and carriers, but it also adds costs. Most of these costs are borne by private sector, Laden said, with the onus on the nation’s 400,000 importers to conform to C-TPAT requirements. He suggested the public and private sectors have a long way to go to educate all stakeholders in supply chains on protecting their cargo. “It’s a monumental task,” Laden said. “Many are still in the learning curve stages of understanding how complex some supply chains can be.”

Laden detailed the evolution of Target’s C-TPAT measures for freight, personnel, and IT security. For Laden, Target demonstrates how an enterprise can use many of the process-and-technology outgrowths of security certification to boost supply-chain efficiencies. The corporation uses advanced container security devices with high-tech alarms to indicate when a seal is compromised, and it gives U.S. Customs advance data on its shipments. “We launched the Advanced Trade Data Initiative, which passes purchase orders to CPB as they were being created (months

“Cargo at rest is cargo at risk, so we looked for ways to speed up that supply chain at Target.”

—Michael Laden, Trade Innovations, Inc.

“TSW proposals will promote industrial competitiveness for Minnesota shippers by increasing the efficiency of trucking and by helping to standardize the weight limits allowed on Minnesota-controlled roads.”

—Cecil Selness, Mn/DOT

in advance), so they could do a security vetting and screening of those overseas vendors. I think that’s going to be a trend coming up right along with the 24-hour advanced manifest rule that went into play quite awhile back,” Laden said.

Laden’s presentation of the Target Corporation case study illustrates how security procedures and processes can enhance the supply chain. At Target, the programs resulted in an optimization of its supply chain, which added velocity, particularly faster customs clearance. “We actually came up with ideas where we’re going to save money,” Laden said. “In Target’s model, we took 1.5 days out of the supply chain and took out some duty (taxes) along the way.”

“Cargo at rest is cargo at risk, so we looked for ways to speed up that supply chain at Target,” Laden added. He stressed that responsibility rests with all stakeholders in the transportation continuum to devise innovative ways to “harden and secure” their supply chains.

Heavier trucks proposed

Cecil Selness, director of the Minnesota Department of Transportation (Mn/DOT) Office of Freight and Commercial Vehicle Operations, addressed access, capacity, and safety issues on Minnesota roads. He outlined a pending state legislative proposal to allow heavier trucks on Minnesota roads, changing current truck-size-and-weight (TSW) allowances. Overall, the TSW plan is aimed at helping Minnesota shippers to stay competitive.

In support of Mn/DOT’s TSW propos-

als, Selness said demand precipitates the need for heavier trucks. Selness cited the Minnesota State Freight Plan, a recently completed study forecasting a 60 percent increase in the amount of freight moving within Minnesota

between 2001 and 2020—the vast majority riding on trucks. “The question that came up earlier was, ‘Do we put more trucks on the road, or do we put more in the trucks?’” he said. “The answer is, We need to be looking at doing both. We expect that truck volumes will continue to increase over time.”

According to Selness, TSW proposals will promote industrial competitiveness for Minnesota shippers by increasing the efficiency of trucking and by helping to standardize the weight limits allowed on Minnesota-controlled roads. Though Minnesota doesn’t set weight limits on the Interstate Highway System—the federal government does that—it can bring the rest of the Minnesota-controlled roads up to a consistent 10-ton weight limit. State law regulates trunk highways as well as county,



Cecil Selness



(From left) Panelists Cecil Selness, Michael Laden, Karen Donohue, and Richard Murphy Jr.

municipal, and township roads.

“We want to promote uniformity in the state,” Selness explained. “Most trips start on a local road and use the county, state, and federal systems. There are variations in the allowed weights allowed on each of those systems. Also there are variations during the spring seasonal load restrictions. To the extent consistency can be achieved across these systems, it will benefit Minnesota’s economy. Also increased weight limits allowed on Minnesota roads will allow interstate shippers to enjoy the higher weight limits of our neighboring states.”

Selness outlined several truck configurations that Mn/DOT will propose for consideration during the 2006 legislative session to allow increased vehicle weights and truck sizes (*see Mn/DOT proposals below*). The proposal will include appropriate additional driver requirements, permits, and other requirements on the vehicles to assure their safety, Selness explained. Those require-

ments are still in development with the help of experts in the field. In addition, Mn/DOT has proposed uniformity across spring load restrictions, including an increase to 7 tons, up from the current default of 5 tons, on all county roads during the busy construction and hauling season.

“Heavier payloads mean fewer trucks are needed to haul the shippers’ shipments. That can reduce transport costs. And if you put on additional axles and fewer truck trips, you can actually reduce pavement wear,” Selness said. “Heavier vehicles will result in some additional bridge postings. Over time, these higher weight limits will require the rebuilding of deficient bridges to the new higher standards and, therefore, will result in additional costs.”

Selness expects that if the proposed truck-size-and-weight changes are passed, they would result in several benefits to the industries that rely on trucking. Improvements, such as more understandable signage and

Mn/DOT proposals for increased vehicle weights and truck sizes

- *80,000-pound gross-vehicle-weight (GVW) straight trucks* would be able to use all roads, including the Interstate and 10-ton network. In order to allow the full 80,000-pound limit, these trucks would be allowed up to 45 feet long, up from the current restriction of 40 feet.
- *90,000-pound GVW, six-axle trucks, 53-foot trailer.* By putting an extra axle under a standard truck, an extra 10,000 pounds could be loaded without doing extra damage to the road. This weight is not allowed on the Interstate system but it could be used on the 10,000 miles of state highways that are rated for 10-ton axle weights. The additional axle spreads weight out and reduces the stress on the pavement. With the extra axle and the addition of brakes on that axle, this configuration actually adds a better braking capacity per pound of weight.
- *97,000-pound GVW, seven-axle trucks, 53-foot trailer.* By adding another axle, the weight limit on a standard size truck could rise to 97,000 pounds. This could also be used on the 10-ton Minnesota network.
- *108,000-pound GVW, eight-axle, twin trailers (28.5 feet each),* is the same size as twin trailers used by express carriers on a preapproved system of about 5,000 miles of Interstate and other Minnesota roads. This proposed configuration would add three extra axles to handle the higher weights within the same size limits. It would also require an improved connection between the two trailers. It could be used on the Twin Trailer Network, except for the Interstate system. This configuration was approved by the 2005 legislature for the transport of lumber products from Grand Rapids to Duluth.

spring load-restriction standardization, will increase productivity and local access. If the laws are clear and consistent, they will be easier to follow and easier to enforce, he said.

In reaction to the TSW proposals, participants raised issues about both truck and vehicle driver safety. The consensus was that more training and awareness would be needed for both groups of drivers. Selness added that truck safety in Minnesota has improved steadily, citing that truck accident rates have consistently fallen. He reported that the challenge is to improve driver skills since the causal factor in about 85 percent of truck-vehicle accidents is passenger vehicle driver error.

Other questions during the panel discussion addressed security issues and costs associated with security. Participants and panelists also debated issues concerning rail demand and rail infrastructure improvements. “UP (Union Pacific) and BN (Burlington Northern) in our community here, who deal west of the Mississippi, don’t have money to put into boxcars and, therefore, put constraint on boxcars,” Richard Murphy Jr. said. “Not everything can go in intermodal containers.” As an alternative to

trucks, however, outstate shippers are interested in pursuing shorter boxcar transits of 200 to 300 miles, instead of the typical 500- to 1,000-mile runs, he added.

Later in the discussion, Selness suggested the large railroad companies are losing interest in this region, instead turning their attention to hauling products between Chicago and the West Coast. But, he said, Minnesota’s regional and short-line railroads are interested in—and stand to gain by—finding ways to generate trainloads of Minnesota products that can move by rail. “It’s a tough-but-important business to respond to the significant changes coming in the logistics of moving those products. The regional carriers and short-line railroads have to be nimble,” Selness added.

In response to a participant query about his desire to develop a “road railer” service in a local hub-and-spoke system, Selness again suggested collaboration. “If there is a market for this service, and if it can be operated profitably, then it should be pursued. What doesn’t work is for the state to decide on a policy basis. It must be a partnership from the private and public sector.”

Concluding Observations

John Ficker, President, National Industrial Transportation League
Robert Johns, Director, Center for Transportation Studies

“The creativity of shippers alone isn’t enough to weather the transportation storm ahead, especially given infrastructure and capacity woes.”

—John Ficker, NITL

Keynote speaker John Ficker offered some concluding observations for symposium attendees. First, he lauded them for their enthusiasm and encouraged their further involvement in the public-private-academic partnership already begun to advance the entire U.S. transportation network. But he again cautioned that the creativity of shippers alone isn’t enough to weather the transportation storm ahead, especially given infrastructure and capacity woes.

Next, Ficker highlighted a key underlying theme of the conference: top-down national policies to complement trickle-up collaboration among all sectors and modes. He referenced the Minnesota Department of Transportation’s (Mn/DOT) truck size and weight (TSW) proposals for road uniformity as a good step in the right direction. “Freight isn’t state only. It’s regional at minimum—it’s national and international. These applications need to be broadened,” he said, underscoring the interdependent nature of the nation’s transportation network.

In response to the TSW presentation by Cecil Selness of Mn/DOT calling for larger

trucks, Ficker urged the state to consider more driver training, including for vehicle drivers. He also responded to a number of participant comments on rail discussed throughout the symposium, calling the mode problematic at best. “The problem with short-haul intermodal,” he said, “is that railroads can’t make enough money unless the volumes are substantial enough.”

Ficker also noted that lack of rail infrastructure, such as sidings to deliver shipments to destination, discourages realistic development of the mode. On the other hand, he noted rail and intermodal can work with private-sector collaboration. For example, he described a successful venture for transferring Seattle port containers to Portland via rail. “It can work without city, county, state, or federal money in it,” he said.

CTS director Robert Johns closed the symposium by reiterating the Center’s mission to serve as a catalyst for transportation innovation through research, education, and outreach. “We think we’ve stimulated discussions today,” he concluded, “and we hope you take away some great ideas.”



Robert Johns and John Ficker

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