Manufacturers’ Perspectives on Minnesota’s Transportation System: A Pilot Study in Southwest and West–Central Minnesota

MnDOT District 8, Freight Office & Customer Relations

Humphrey School of Public Affairs
University of Minnesota Extension
Project purposes and scope

- Learn what we didn’t know about manufacturers’ transportation challenges and priorities
- Build relationships with regional manufacturers and carriers and economic development organizations, to support economic vitality in southwest/west-central Minnesota
- Identify actionable, low-cost/high-benefit improvements that can be made in 1–4 years
MnDOT District 8: Southwest / West–Central Minnesota

- Twelve counties
- No interstates in the District itself
- Ten percent of the land area
- Lots of snow!
- Just 7 cities with pop > 5,000
Identified key manufacturers

Used industry cluster analysis to identify manufacturers who have regional competitive advantages and bring resources into the area.

Examples:
- High-tech and precision manufacturing
- Heavy (OS/OW) manufacturing
- Food processing
Bringing resources to the region

Manufacturers in District 8 ship all over the country, all over the world

- Canada, Korea, Japan, Thailand, China, India, South Africa, Saudi Arabia, Ireland, Italy, Germany, Switzerland, Spain, Mexico and the Caribbean

Of 75 manufacturers and carriers interviewed, over half employ between 20–99 staff, and almost 20 firms have 100+ employees
Structured interview teams

- Usually two–three–person teams
- State and Local Policy Program/Humphrey School provided base staffing
- University of Minnesota Extension Center staff
- Local economic development staff (Chambers of Commerce, EDAs, RDCs, etc.)
- MnDOT District Engineer, planners, and Central Office staff

Cross-discipline teams conducted hour-long, face-to-face interviews on-site with manufacturers and carriers
Involved local stakeholders

- Met with and provided training to staff of region’s economic development organizations
- Engaged MnDOT District 8 and Central Office staff to review mid-project findings, initiate planning
- Met with region’s City and County Engineers to review early findings and gather feedback
Qualitative interviews

Open-ended questions:

➢ Tell us about your business
  • What do you make, where do your inputs come from?
  • Who and where are your customers?
  • What are the challenges in shipping your products?

➢ Tell us about your transportation needs
  • Infrastructure
  • Maintenance and operations
  • Communication
  • Policy
Major findings and themes
Infrastructure

- Smooth pavement essential for transport of fragile, high-tech products and fragile livestock

- Wide (not necessarily paved) shoulders are valued for safety

- Roundabouts can pose problems for OS/OW loads
Smaller features highly valued

- Signage is important
  - Pre-stop warning lights
  - Bridge clearance

- Rumble strips enhance safety
Operations and communication

- S&I removal is generally working well, can be tweaked to accommodate higher-priority routes and time-sensitive freight
- 511mn.org widely used; suggestions for improvements are being analyzed
- Communication/e-mail updates regarding weather/road conditions and construction projects are highly valued
Construction planning has direct impacts

- Some inputs and products very time-sensitive. Alternate route planning is essential to reduce waste

- Additional time spent on detours or reduced lanes can have significant costs; some preference for shorter/greater pain than multi-year projects

- Greater coordination among jurisdictions would ease detours upon detours
Early successes

- Provided assistance to several manufacturers to expedite permitting and plan alternative routes
- Changed process to allow more lead time for manufacturers to plan alternative route
- Invited participants to sign up for District email updates on weather road conditions and construction detours and routes
- Analyzing and incorporating detailed feedback into District and MnDOT planning
- In planning stages for implementing this model in other Minnesota regions
Pipestone Veterinary Supply
Pipestone

- Rough roads injure livestock
- Construction detour delays, overheats swine
- FDA quarantine zones limit alternative routes
Friendship Homes
Montevideo

- Competitive need for 14-foot wide units
- Plant expansion at stake
- Uncertainty around Oversize permitting
First District Association
Litchfield

- Milk and food products
- Multiple daily truckloads, all weather
- MnDOT consultation to provide alternative routes
Project team

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- Dave Christianson, Freight and Commercial Vehicle Operations
- Jarrett Hubbard, MnDOT District 8
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- Mary Safgren, MnDOT District 8
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