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

UNIVERSITY OF MINNESOTA

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

Project budget and timeline

- $105,000 contract with University of Minnesota
  - Intentionally relied on MnDOT staff to supplement University research staff
  - Locally-based economic development professionals volunteered their time
- Took place during the better part of 2013
- Expanded budget and timeline to accommodate manufacturers' very positive response to interview invitation, and to interview carriers

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

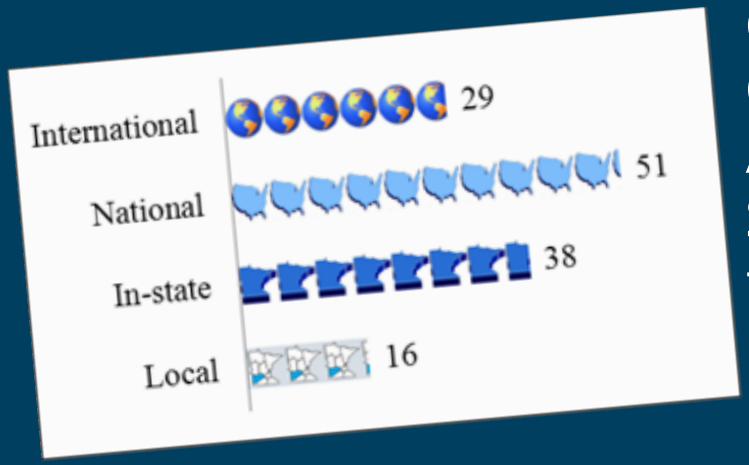
Used industry cluster analysis to identify manufacturers who have regional competitive advantages and bring resources into the area

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

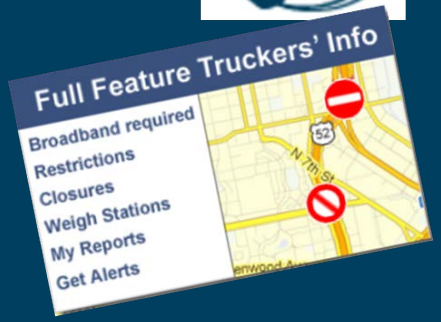
- Smooth pavement essential for transport of fragile, high-tech products and fragile livestock
- Some inputs and products are very time-sensitive – alternate route planning is essential to reduce waste
- **Wide** (not necessarily paved) shoulders valued for safety
- Roundabouts can pose problems for OS/OW loads

Safety and roadway technology

- Signage is important
  - Pre-stop warning lights
  - Bridge clearance
- Additional rumble strips requested

Major findings and themes

- S&I removal is generally working well, can be tweaked to accommodate higher-priority routes and time-sensitive freight
- 511mn.org widely used and communication for weather/road conditions and construction is highly valued
- Greater coordination among jurisdictions would ease detours upon detours



Early successes

- Provided assistance to several manufacturers to expedite permitting and plan alternative routes
- 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
- Detour delays overheat swine
- FDA quarantine zones vs. routes

Tebben Enterprises

Clara City

- Limited driveway widths on state road
- Closure of alternate exit by county
- Request to design & build wide driveway

Friendship Homes

Montevideo

- Competitive need for 14 Ft. wide units (ND)
- Uncertainty around Oversize permitting
- Hesitation to pressure MnDOT
- Plant expansion at stake

First District Assoc.

Litchfield

- Milk and food products
- Multiple daily truckloads, all weather
- MnDOT expertise to supplement routing
- 511mn.org

Other Stories

- **Hutchinson heavy equipment:** "Roundabouts have blocked 3 of city's 4 sides."
- **Daktronics commercial electronic billboards:** "Need smooth pavement and height clearances for undamaged deliveries."
- **Noah's Ark Processing:** "Smooth, fast routes to Twin Cities to customers and air freight."
- **ATS:** "Shoulders and clearances for OS/OW."

Project team

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