Project Purpose

• Gather input from manufacturers and carriers on their priorities, challenges and needs regarding the transportation system

  Meet face-to-face, at their plants and offices, to learn what we don’t know

• Focus: Transportation infrastructure, operations, maintenance, communication, and policy that MnDOT can address in the next 1-4 years

• Operational, high-value/low-cost improvements that won’t require years of planning

• Improvements that will
  – Support more efficient transport of inputs and products;
  – Reduce product damage and waste; and
  – Ultimately, facilitate business retention and expansion
MnDOT’s District 8

- 12 Counties in SW Minnesota
- Major Cities
  - Willmar
  - Hutchinson
  - Marshall
- No Interstates
  - But surrounded by them
  - Access is important
- Key routes:
  - Highway 23, 212, 19
- Variety of Industries
  - Focus of this study is on manufacturing and their potentially unique transportation challenges
Competitiveness and Composition of Hutchinson Micropolitan Area
Linkages Across Traded Clusters, Location Quotients, 2010

Location Quotient = Hutchinson Industry Job Share / US Industry Job Share

Note: Clusters with overlapping borders have at least 20% overlap (by number of industries) in both directions.
Competitiveness and Composition of Marshall Micropolitan Area Linkages Across Traded Clusters, Location Quotients, 2010

Location Quotient = Marshall Industry Job Share / US Industry Job Share

Note: Clusters with overlapping borders have at least 20% overlap (by number of industries) in both directions.

Competitiveness and Composition of the Willmar Micropolitan Area
Linkages Across Traded Clusters, Location Quotients, 2010

Location Quotient = Willmar Industry Job Share / US Industry Job Share

Note: Clusters with overlapping borders have at least 20% overlap (by number of industries) in both directions.

Selecting Companies

**GOAL:** Identify a diverse group of manufacturing companies in D8, based on LQ, types of products, size, and representation of all 12 D8 counties

- 700 manufacturers in D8 initially identified and screened

- A second list was compiled using information received from EDOs and other resources

- Finally a number of carriers in the area were also interviewed

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1 Dun & Bradstreet Million-Dollar Database
Businesses Interviewed

- 75 interviews completed this spring and summer, with manufacturers and carriers
- At least 1 in each of the District’s 12 counties
- Received or shipped locally, nationally and internationally.

Legend

- Manufacturers, Carriers and Distributor located in District 8
- Carriers located outside District 8
Industry Clusters Interviewed (Excluding Carriers)

<table>
<thead>
<tr>
<th>Industry Cluster</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processed Food</td>
<td>9</td>
</tr>
<tr>
<td>Heavy Construction Svc</td>
<td>6</td>
</tr>
<tr>
<td>Business Services</td>
<td>5</td>
</tr>
<tr>
<td>Production Technology</td>
<td>4</td>
</tr>
<tr>
<td>Analytical Instruments</td>
<td>3</td>
</tr>
<tr>
<td>Metal Manufacturing</td>
<td>3</td>
</tr>
<tr>
<td>Chemical Products</td>
<td>3</td>
</tr>
<tr>
<td>Livestock Processing &amp; Services</td>
<td>3</td>
</tr>
<tr>
<td>Heavy Machinery</td>
<td>3</td>
</tr>
<tr>
<td>Agriculture</td>
<td>2</td>
</tr>
<tr>
<td>Prefabricated Enclosures</td>
<td>2</td>
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<tr>
<td>Product Mills</td>
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<td>Automotive</td>
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<tr>
<td>Construction Materials</td>
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<tr>
<td>Distribution Services</td>
<td>1</td>
</tr>
<tr>
<td>Forest Products</td>
<td>1</td>
</tr>
<tr>
<td>Manufactured Home Products</td>
<td>1</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>1</td>
</tr>
<tr>
<td>Mineral Products</td>
<td>1</td>
</tr>
<tr>
<td>Motor Drive</td>
<td>1</td>
</tr>
<tr>
<td>Publishing and Printing</td>
<td>1</td>
</tr>
<tr>
<td>Specialty Contractors</td>
<td>1</td>
</tr>
<tr>
<td>Veterinary Services</td>
<td>1</td>
</tr>
</tbody>
</table>

Local Real Estate, Construction, & Development
Findings: Infrastructure

• Highway 23 heavily used – but also large amount of rough areas and intersections that drivers perceive to be dangerous

• Roundabouts, old and new (e.g., Hwy 15)
  – Turning radii considered too tight
  – Especially for oversized loads

• 4-lane highways
  – Speed, safety, economic expansion
  – Often understood as “pie in the sky”
Why 4 lanes?

• Economic expansion
  – Connect Sioux Falls to Minneapolis
  – Along 212

• Safety
  – For wind protection
  – Eliminate accidents at unsafe intersections
  – To allow passing
  – Safer for trucks

• Decrease transit time
  – Address congestion
  – Especially through small towns

• Switching back and forth from two to four lanes (e.g., on 212) is frustrating
Findings: Infrastructure

• Wide shoulders and turning / passing lanes were requested often to improve safety
• Paved shoulders less important
• Highways through towns create issues
  – Speed reductions
  – Controlled intersections
  – Tight turns
  – Six interviewees requested full bypasses
Findings: Logistics

• 46 of 60 Manufacturers either exclusively contracted, or used 3\textsuperscript{rd} party carriers in combination with own fleet

• Common contractors:
  – UPS
  – Fed Ex
  – ATS
  – Conway
Findings: Operations and Maintenance

• Snow removal is a critical service
  – 35 companies only said good things
  – Road closures and late arriving employees do hurt

• Understand necessity of construction, but
  – 20 interviewees noted increased transit time and cost
Findings: Communications

• 511 is widely used, well-received, and can be improved
  – Integration with neighboring states
  – County construction information
  – Live feed from shippers and carriers to 511
  – Cameras showing real-time conditions

• More information about construction projects would be appreciated
  – Timing, detours
  – Coordination with city and county projects and communication efforts
  – Most would like e-mail contact
Findings: Policy

• Greatest concern was size, weight restrictions
  – Would like more information about restrictions and alternate routes
  – Less interest in paying for upgrades than simply being able to easily obtain information

• Several had issues with federal hours-of-service law changes
First District Association

- Litchfield
- Meeker County
- Processed Food Cluster
- 150 employees (plus more than 1000 on supplying farms)
- Coordinates 12 different haulers
- Milk and milk products (powder, cheese)
- Handles 7 million pounds of milk per day
- Milk needs to be at plant 3 hours from leaving farm
- Reliability of route is prime importance
Chandler Industries

- Montevideo
- Industrial Products and Services Cluster
- 130 employees over 3 shifts
- Owns one truck
- Uses Hwy 7 and 212
- Manufactures gauges for high-tech companies (Boeing, medical devices)
- Soft metal products need smooth roads
- Depends on open roads to meet air freight slots
Daktronics

- Redwood Falls
- Redwood County
- Publishing and Printing Cluster
- 180 employees
- 90% LTL
- All contract shipping

- Produces LED video message signs, scoreboard displays, and high-end video display boards – e.g., for Twins and Vikings stadiums)

- Bridge clearances
- Multi-state 511
Questions?

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