



MnDOT District 2 Freight Plan Advisory Committee: Meeting #2

Introductions

Andrew Andrusko

Project Manager, State Freight Planner with the Office of Freight and Commercial Vehicle Operations

Nancy Graham

Planning Director for District 2

James Curran

Assistant District Engineer District 2

Dan Haake

HDR Project Manager

Katie Caskey

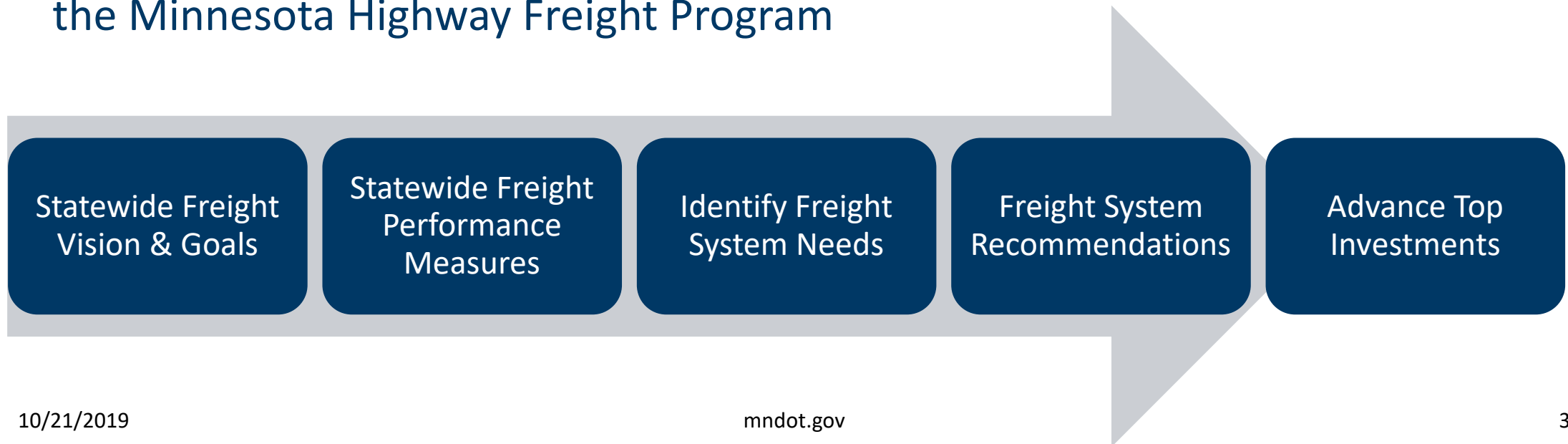
HDR Engagement Lead

Caroline Miller

HDR Freight System Profile Lead

MnDOT Freight Planning

- MnDOT has been working to implement the recently adopted statewide freight plan called the Minnesota State Freight System and Investment Plan
- One of the key recommendations was to work with each area of the state to create more detailed plans that would identify improvements to connect with the Minnesota Highway Freight Program





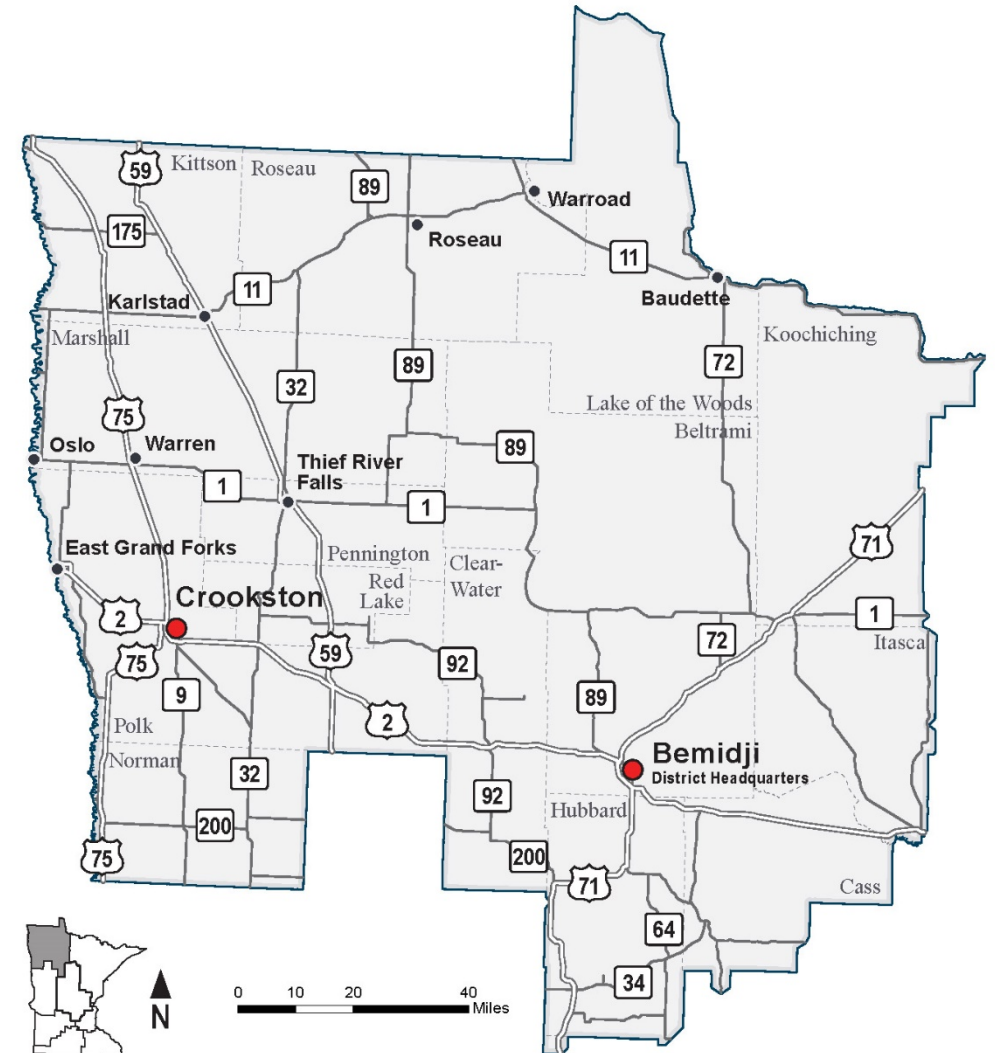
Purpose of this Effort

The District 2 Freight Plan will:

- I. Provide an up-to-date assessment of freight needs and issues specific to the District
- II. Produce a list of strategies to improve freight mobility in the Northern and Northwest Minnesota region
- III. Roll up long-term planning and programming in the next Statewide Freight System Plan

MnDOT District 2

- MnDOT is split up operationally into regional districts
- District 2 - Northwest Minnesota
- Duration: May 2019 – July 2020

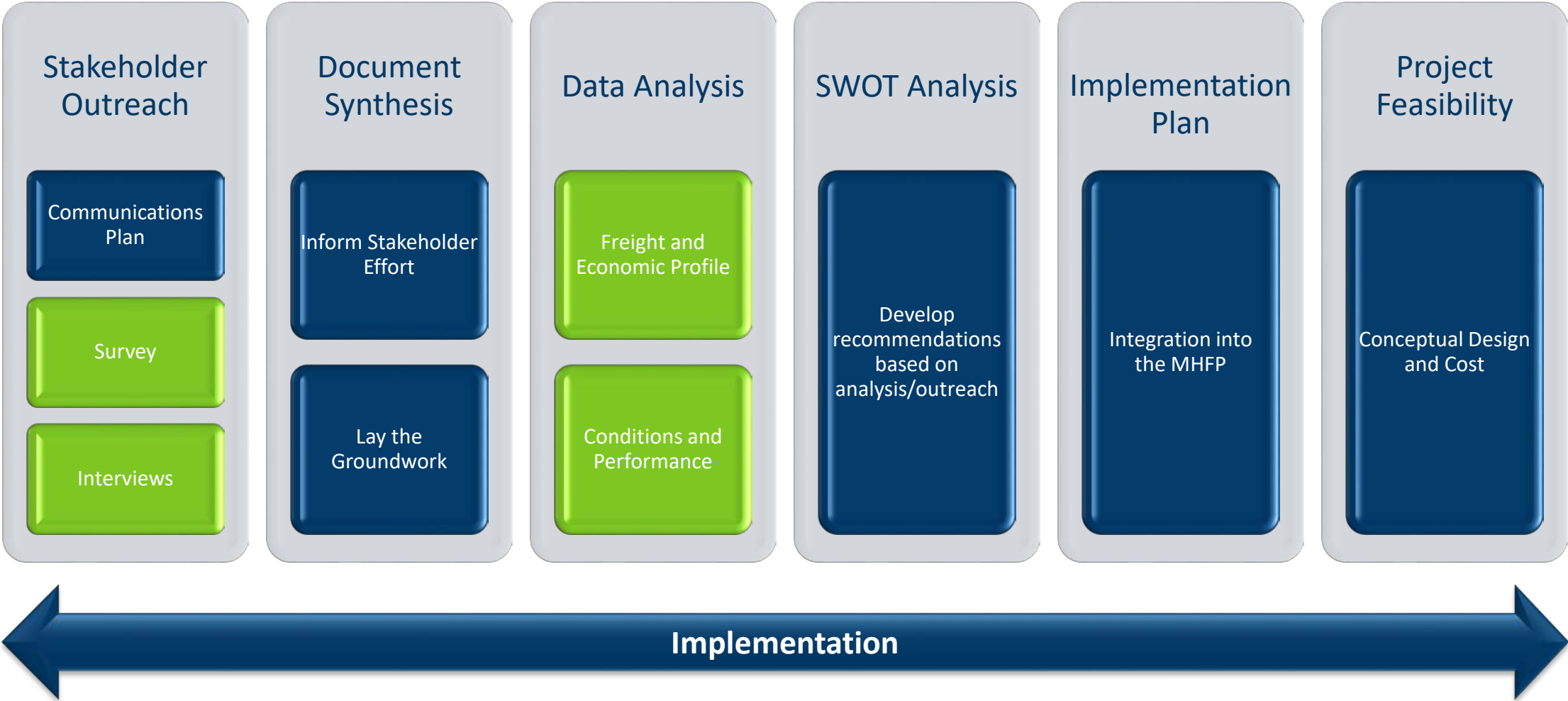


Project Overview

Today's Goals



Major Tasks



Advisory Committee Meetings



Lessons from Meeting #1

Needs	Lessons
TH 317 Widening	Identification of Missing Stakeholders
TH 57 Important for Freight	Seasonality of the District
Lack of Major N/S Roadways	Pipeline Concerns
No Freeways	Low Volume Roads Important to Freight/Seasonality
Lack of Rail Capacity for Grain	Safety Concerns, More than Going Fast
Increased Truck Size and Weight (and Harmonization)	Safety – Mix of Vehicle Types
Shoulders (Size and Multiple Uses)	Trucks Also Turn into Farm Fields (Safety)
Truck Parking	Commuting into TRF for Digi-Key
Winter Weather Signage	Trade with Canada

Outreach

- Shifted from listening sessions to more interviews
 - Due to geography
 - Mix of in-person and phone interviews
 - List of Potential Interviewees
- What and who are we missing?
- Additional interviews after the first group

Initial Interviewee List (Draft)

Shippers/Receivers

- R.D. Offutt Farms - Potato Farm (SW)
- Crystal Sugar (SW)
- Marvin Windows (NE)
- Thief River Falls Airport (NW)
- Bemidji Airport
- CHS North, SE, SW (All)
- Manufacturer home distributors and manufacturers in the region

Carriers

- Minnesota Northern
- CP (All)
- BNSF (All)
- Paradis Trucking (SW)
- CENEX (All)
- Eric Johnson Trucking (Unknown)
- Greg Hanson Trucking (NW)
- Nagurski Transportation (NE)
- Skeen Trucking (Unknown)
- Spee-Dee Delivery Service, Inc (SE)

Association/Government

- Minnesota Timber Producers Association or Minnesota Forest Industries
- US 2 Manufacturer's Association
- MPO

MnDOT District 2 – Freight Plan

STAKEHOLDER INPUT SURVEY

MnDOT is studying the freight trends, issues and needs of public and private sector freight operations.

We need your input to make...

Section 1

General Information

What segment of the freight...

- Shipper
- Carrier
- Receiver

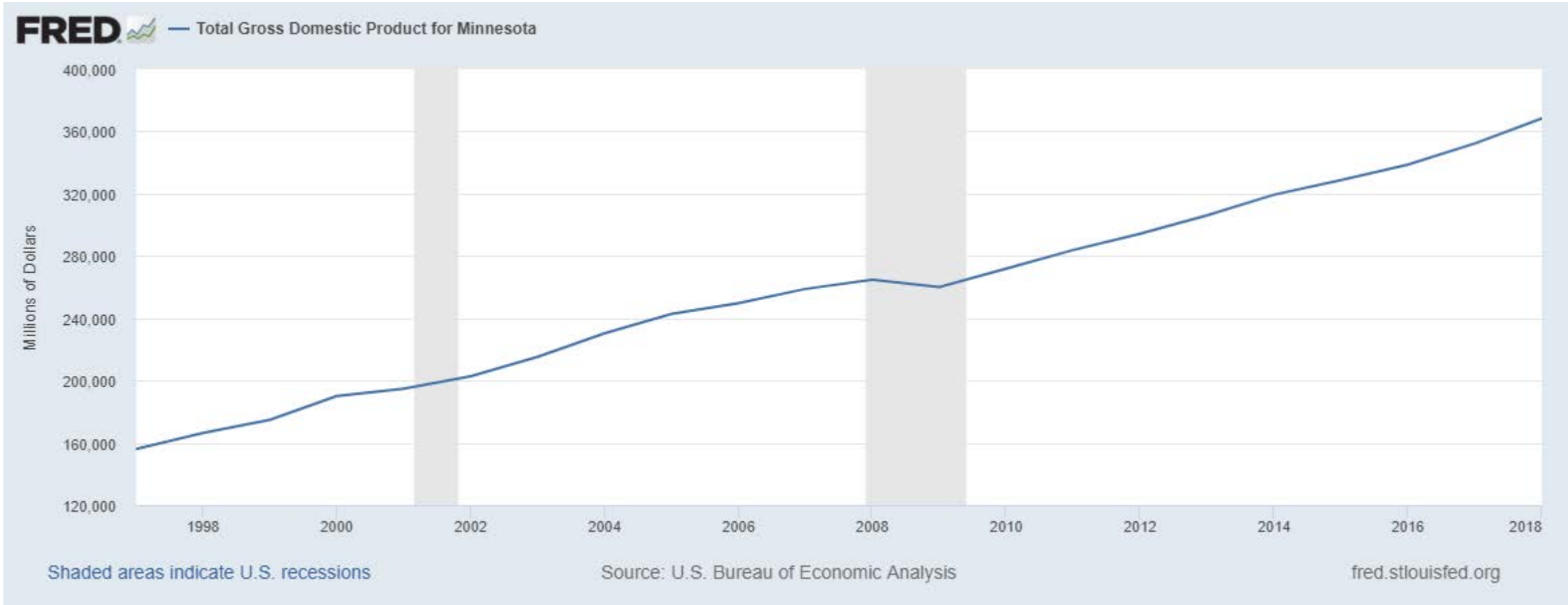
Map #1

If there is a specific area of concern, please identify it on the map below. (Zoom in/out or pan around the map below and drag the marker to a location)



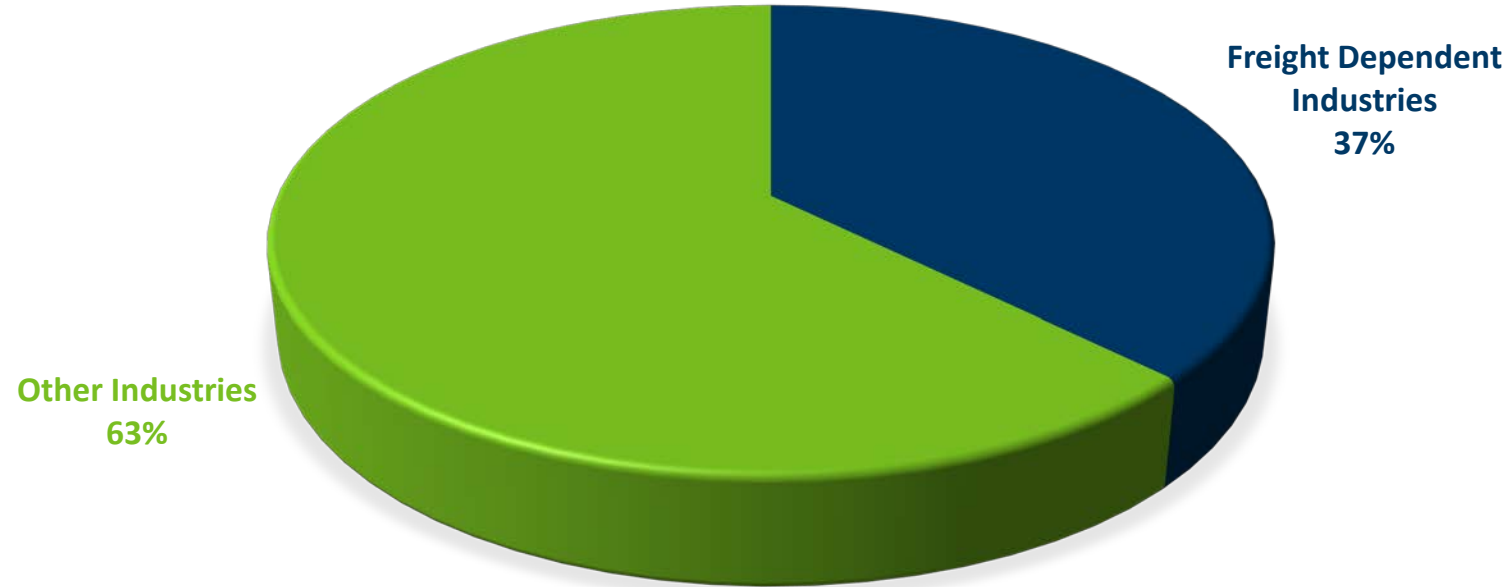
Freight System Profile: Economics

Overall Economic Growth

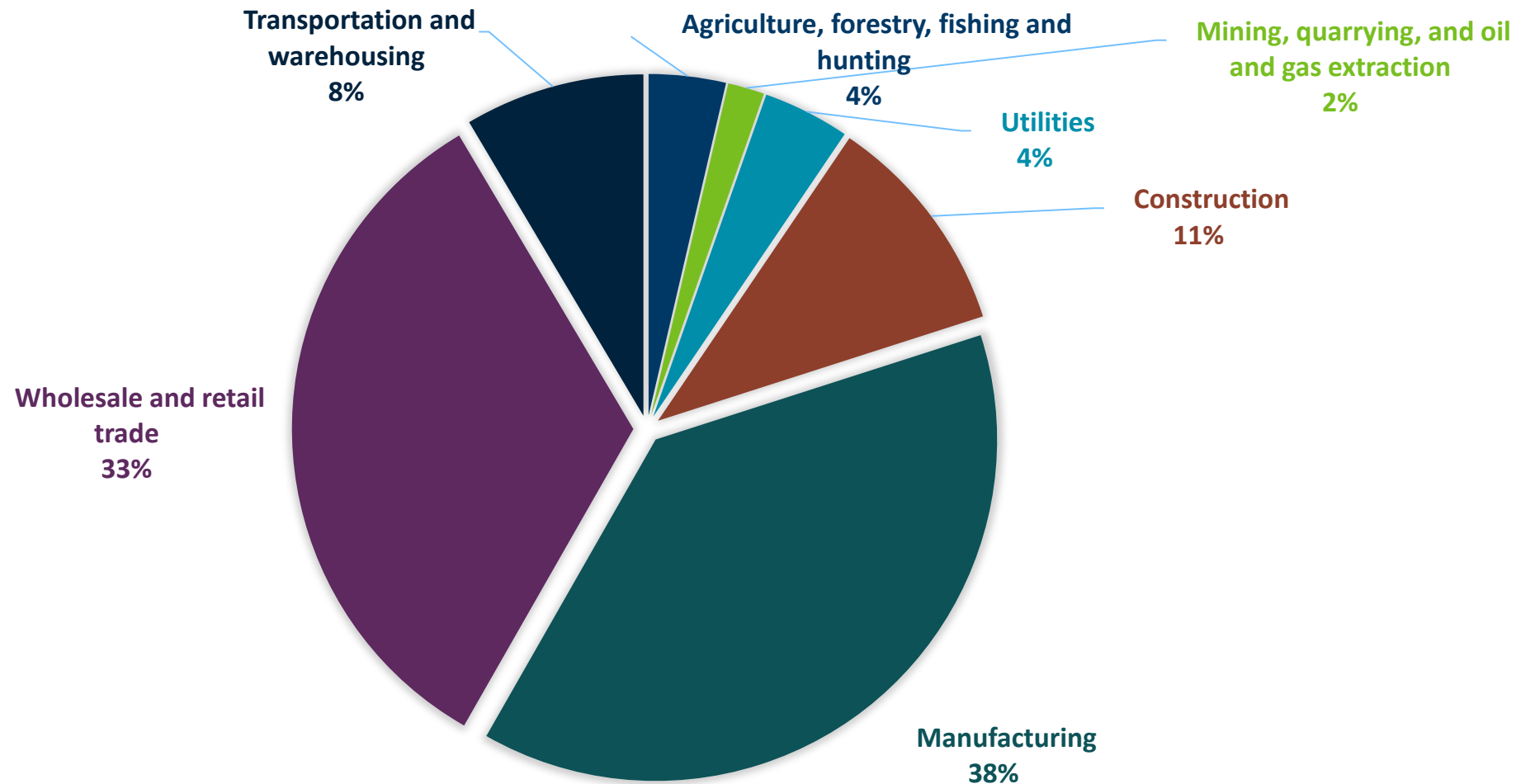


Minnesota Economy

2018 MINNESOTA GDP: \$386 B



Minnesota's Freight Dependent Industries

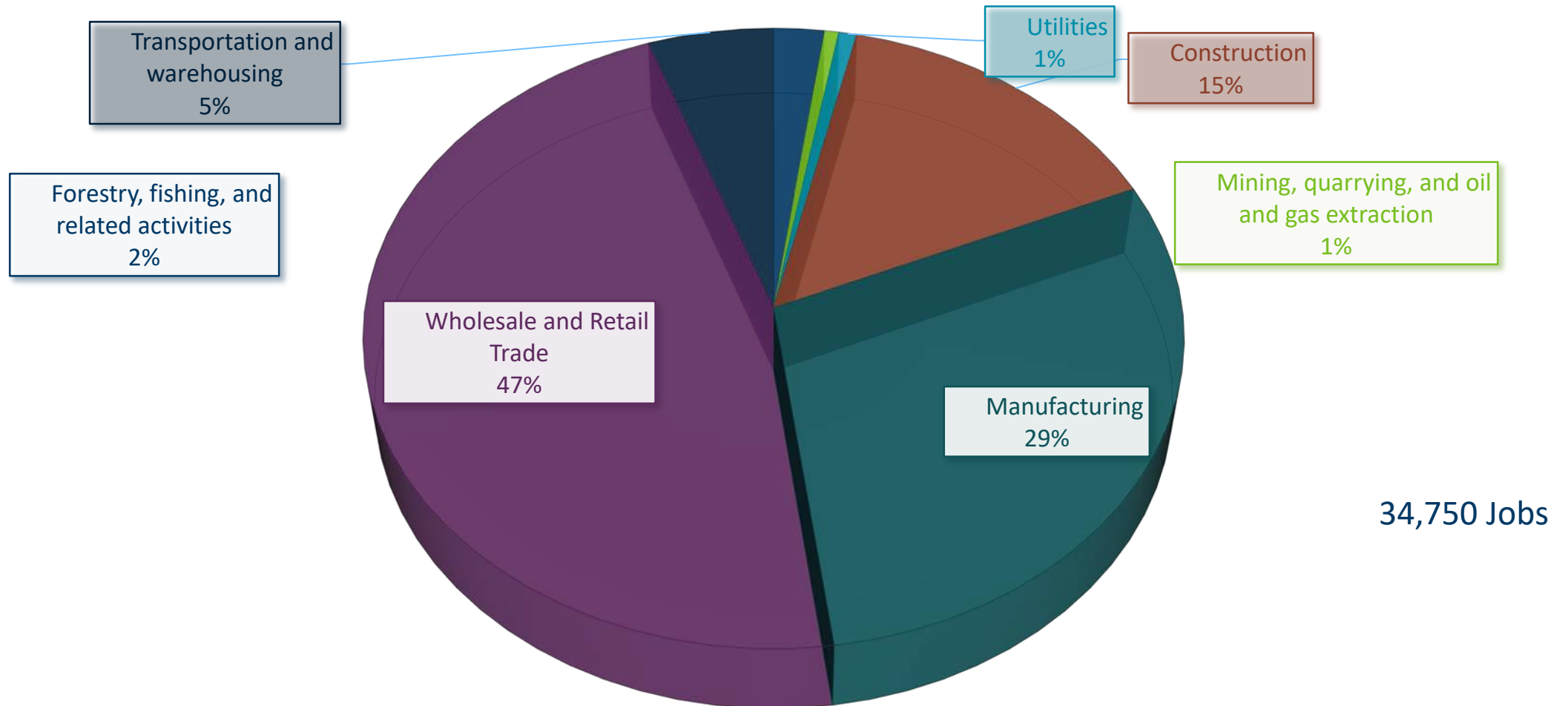


District 2 – Overall Employment

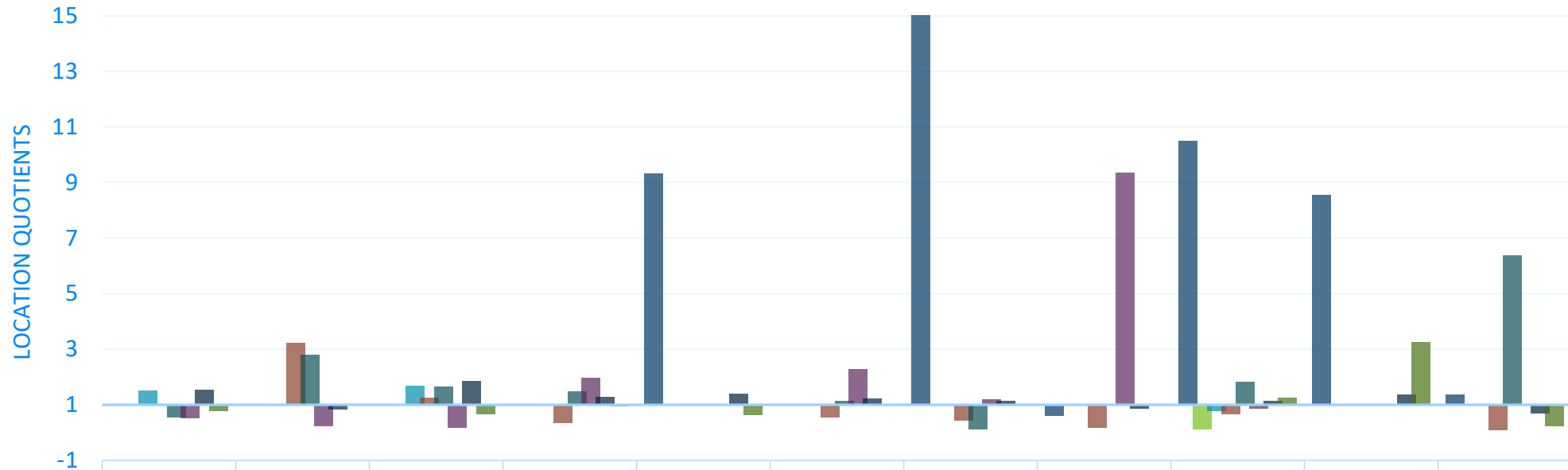


79,629 Jobs

District 2 - Freight Related Jobs

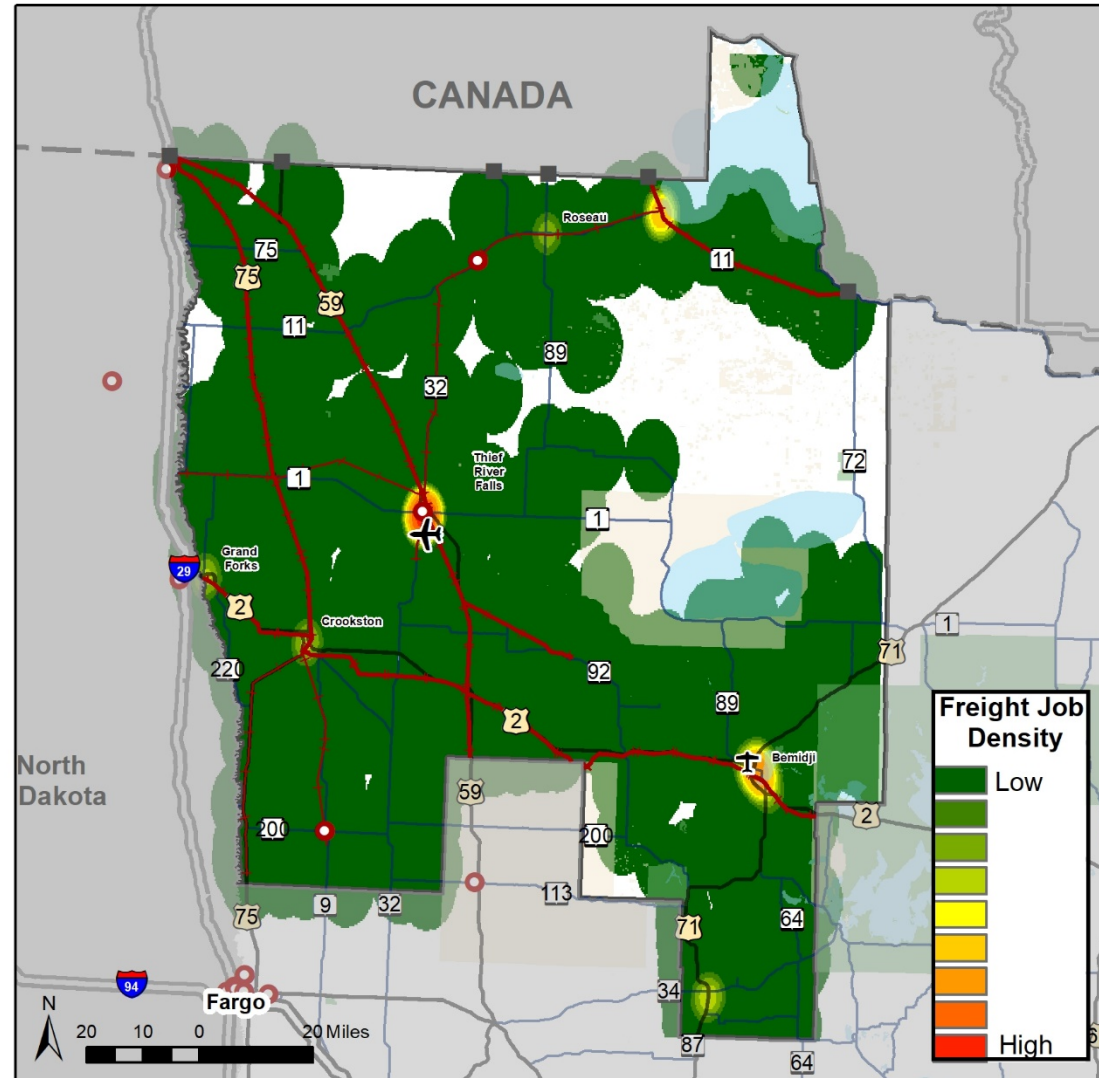


District 2 - Location Quotients

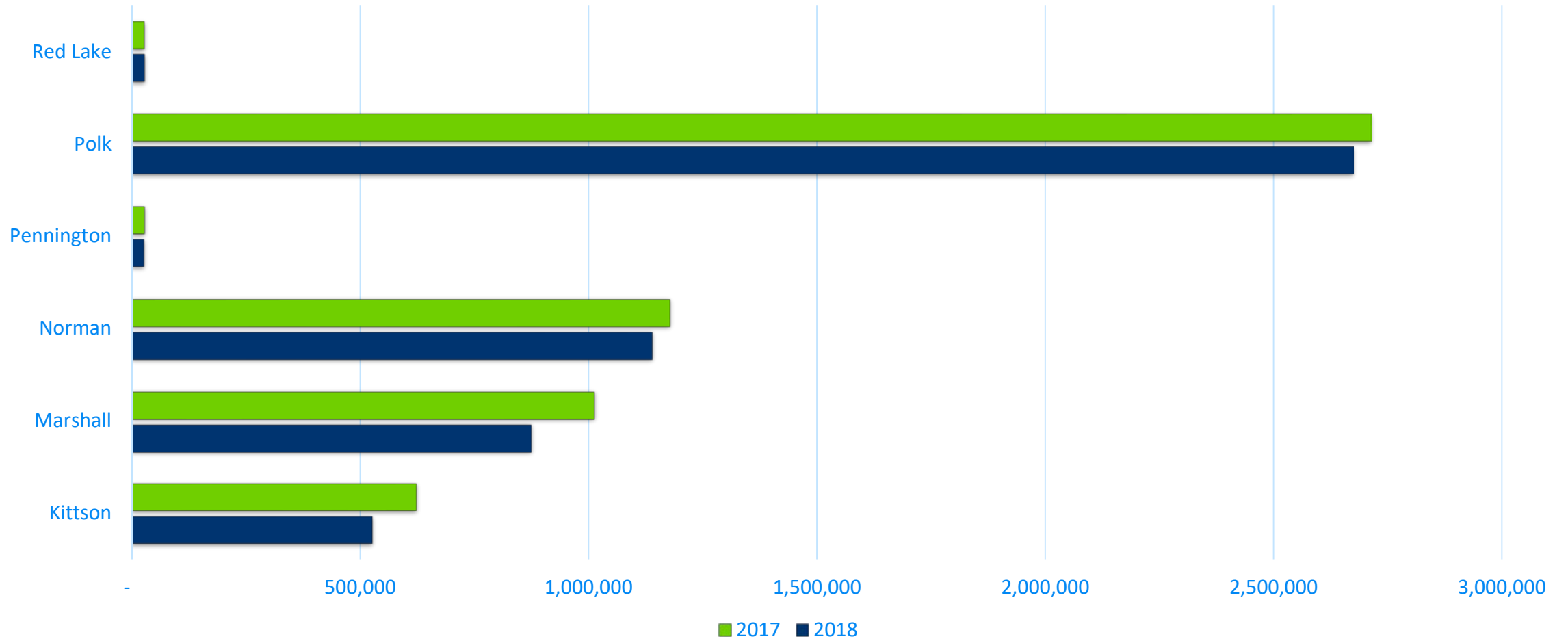


	Beltrami	Clearwater	Hubbard	Kittson	Lake of the Woods	Marshall	Norman	Pennington	Polk	Red Lake	Roseau
■ Agriculture, forestry, fishing and hunting					9.32		15.12	0.6	10.48	8.54	1.35
■ Mining, quarrying, and oil and gas extraction									0.12		
■ Utilities	1.49		1.67						0.78		
■ Construction	1.03	3.21	1.24	0.35		0.57	0.44	0.18	0.66		0.08
■ Manufacturing	0.57	2.78	1.64	1.48		1.12	0.14	0.97	1.82		6.37
■ Wholesale trade	0.52	0.25	0.17	1.97		2.27	1.18	9.35	0.86		
■ Retail trade	1.52	0.83	1.85	1.26	1.38	1.21	1.14	0.86	1.12	1.36	0.69
■ Transportation and warehousing	0.77		0.67	0.95	0.64				1.24	3.24	0.23

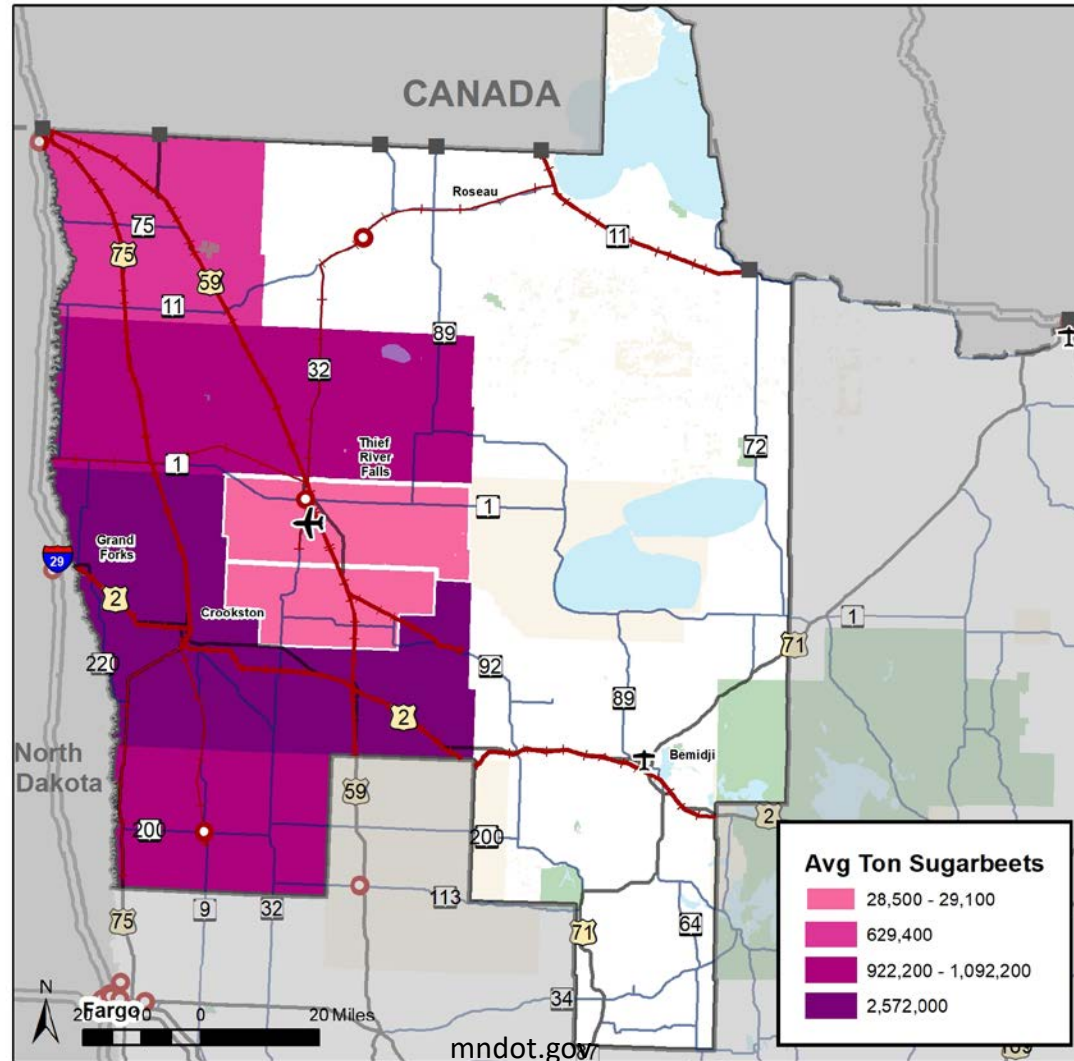
District 2 – Freight Related Jobs



Sugar beets (Tons Produced)

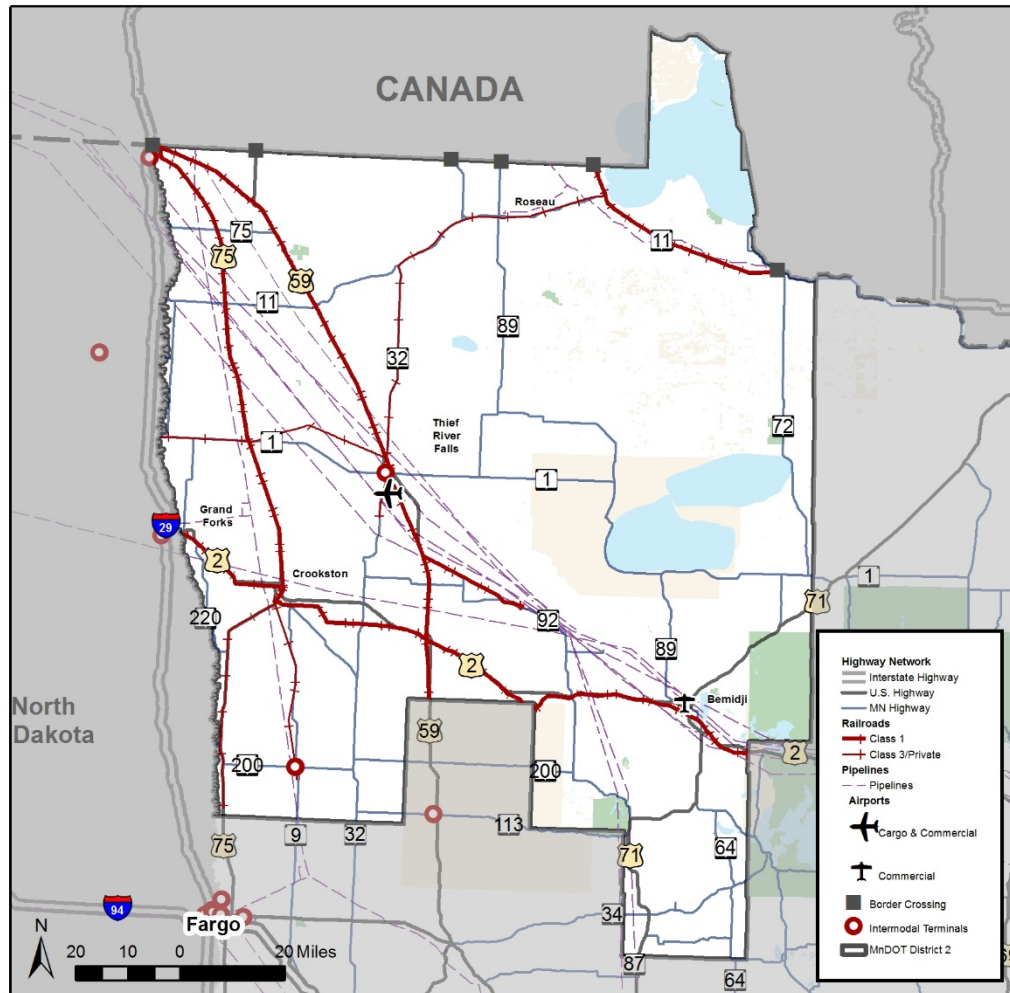


Sugar Beet Locations



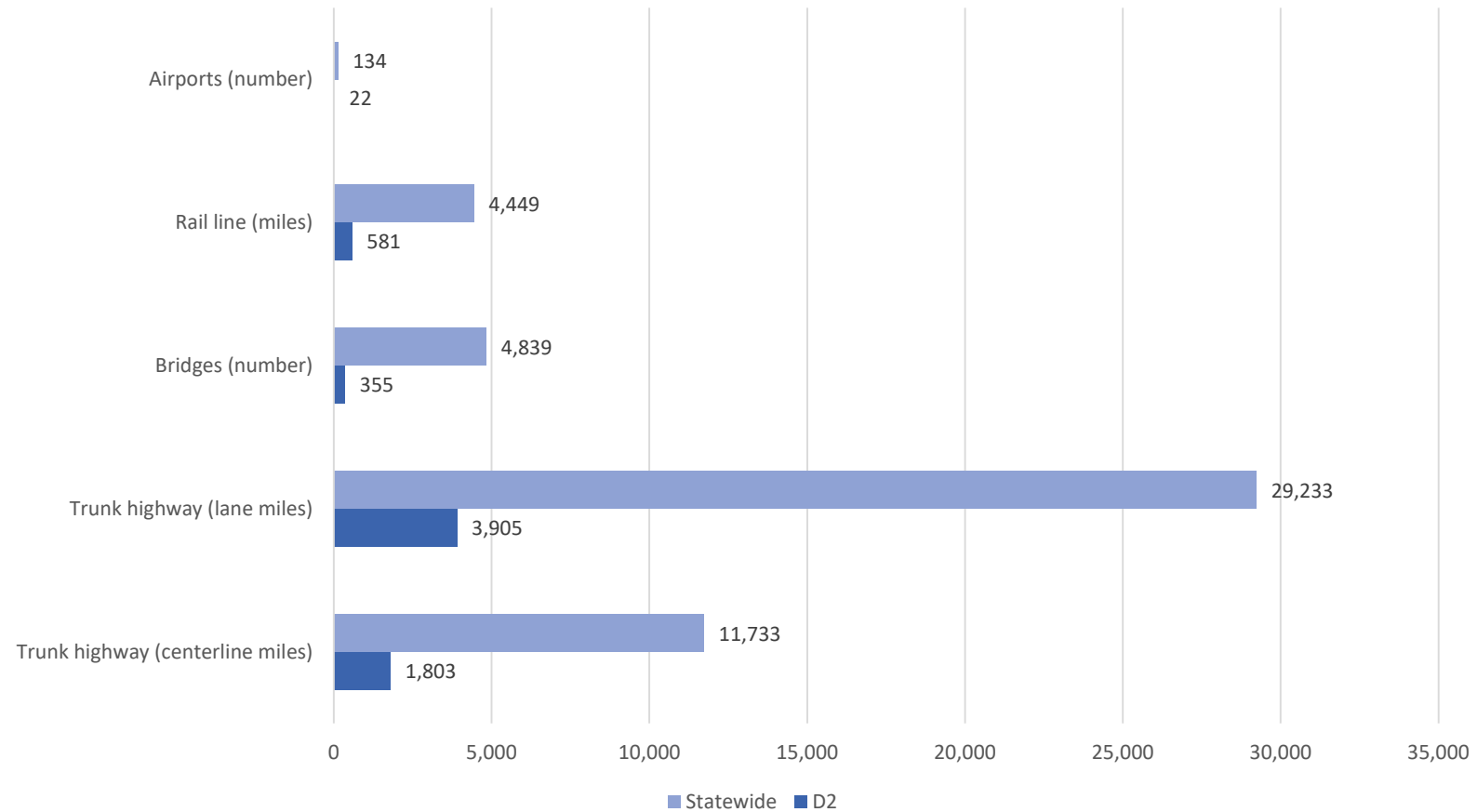
Freight System Profile: Overview

Freight System



- Highways
- Railroads
- Pipelines
- Airports
- International Border Crossings

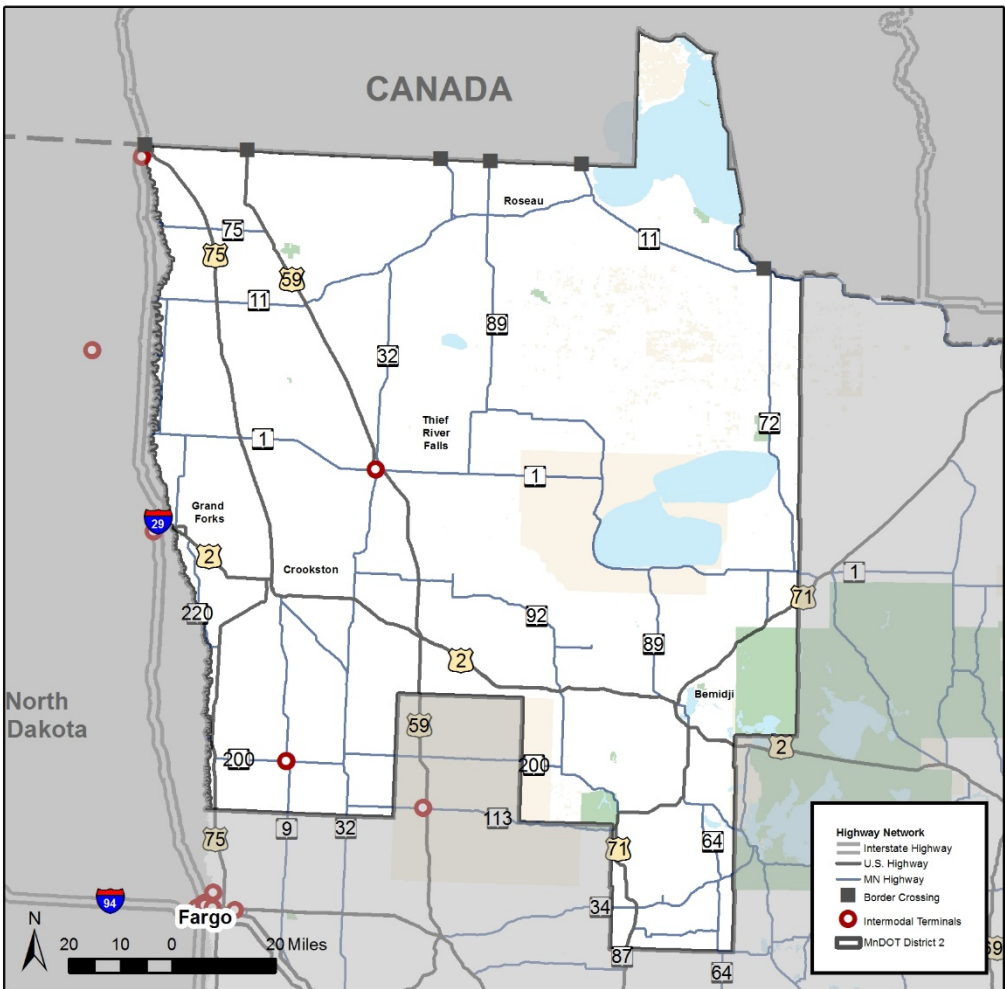
District 2 Freight System Assets



MnDOT District 2 Transportation Assets. Source: Minnesota Department of Transportation. 2019 District 2 Fact Sheet
<http://www.dot.state.mn.us/information/factsheets/d2-fact-sheet.pdf>

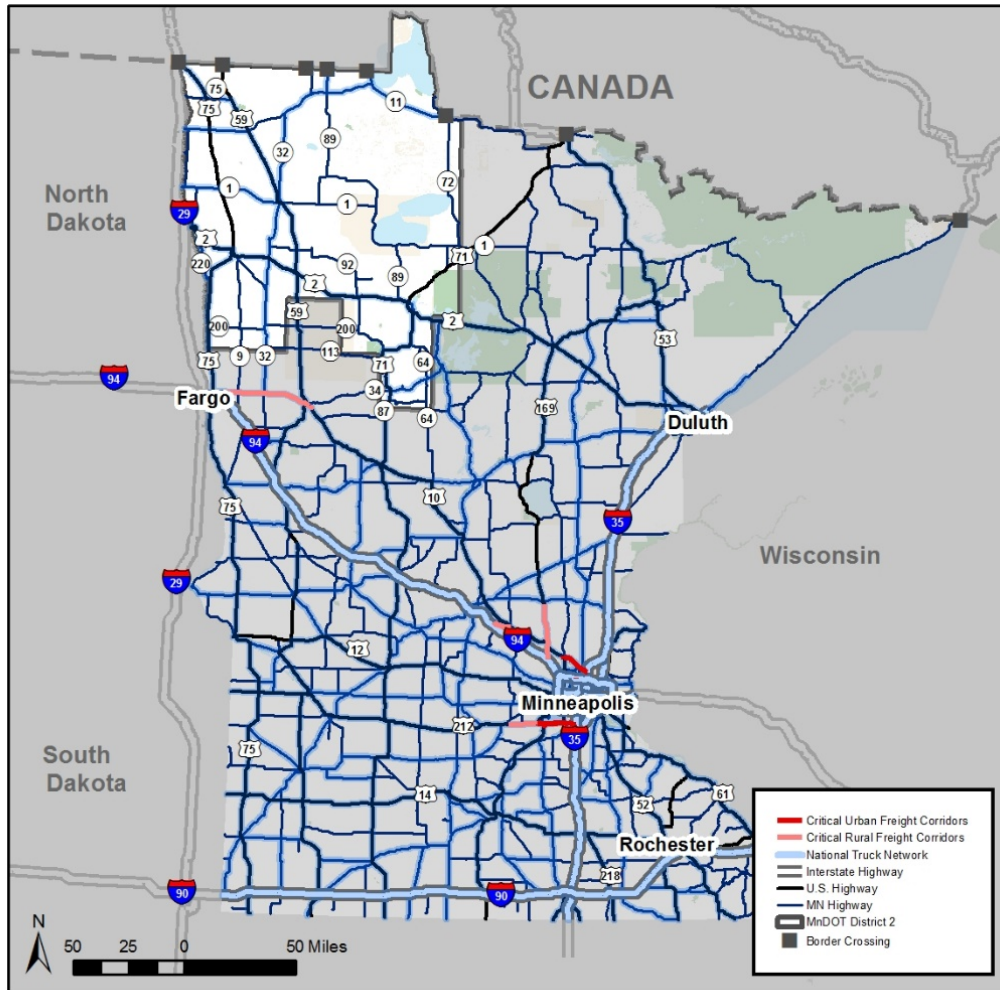
Highway System

Highway System



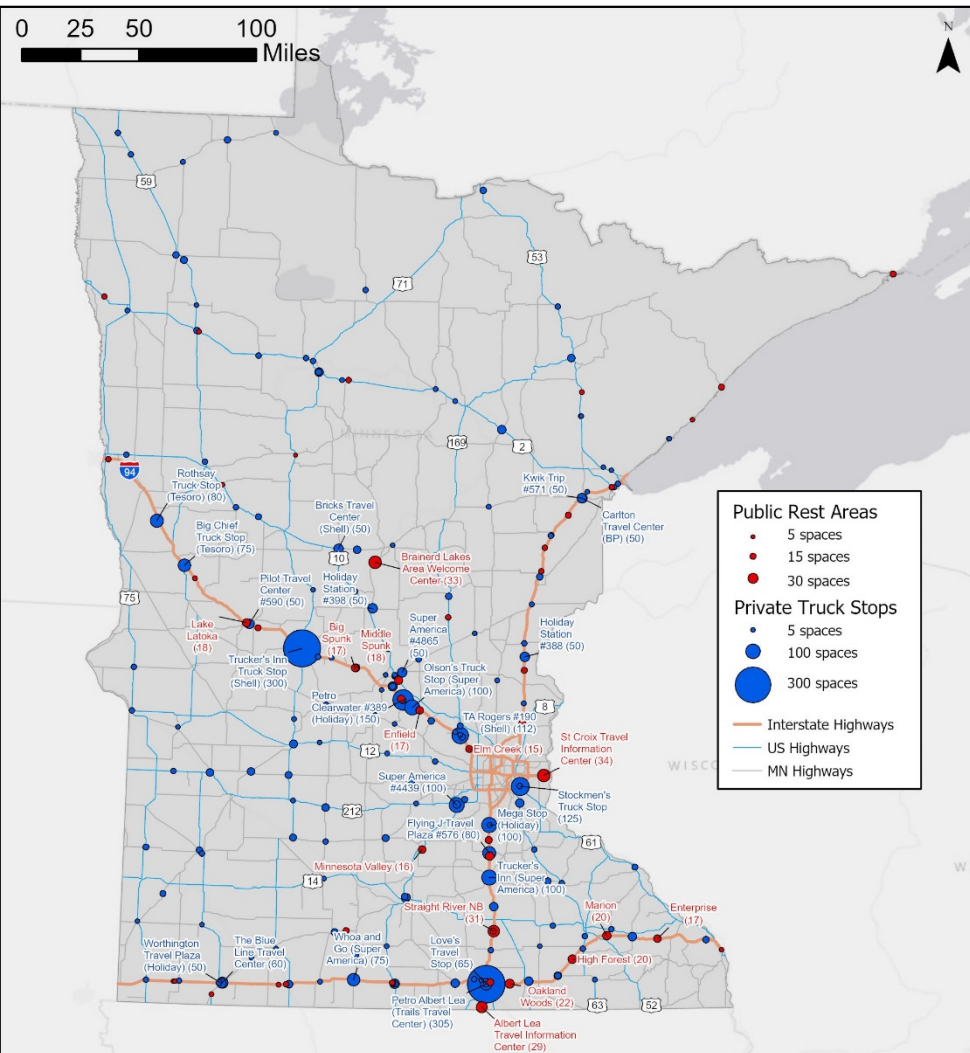
- No Interstates in District 2

National Truck Network

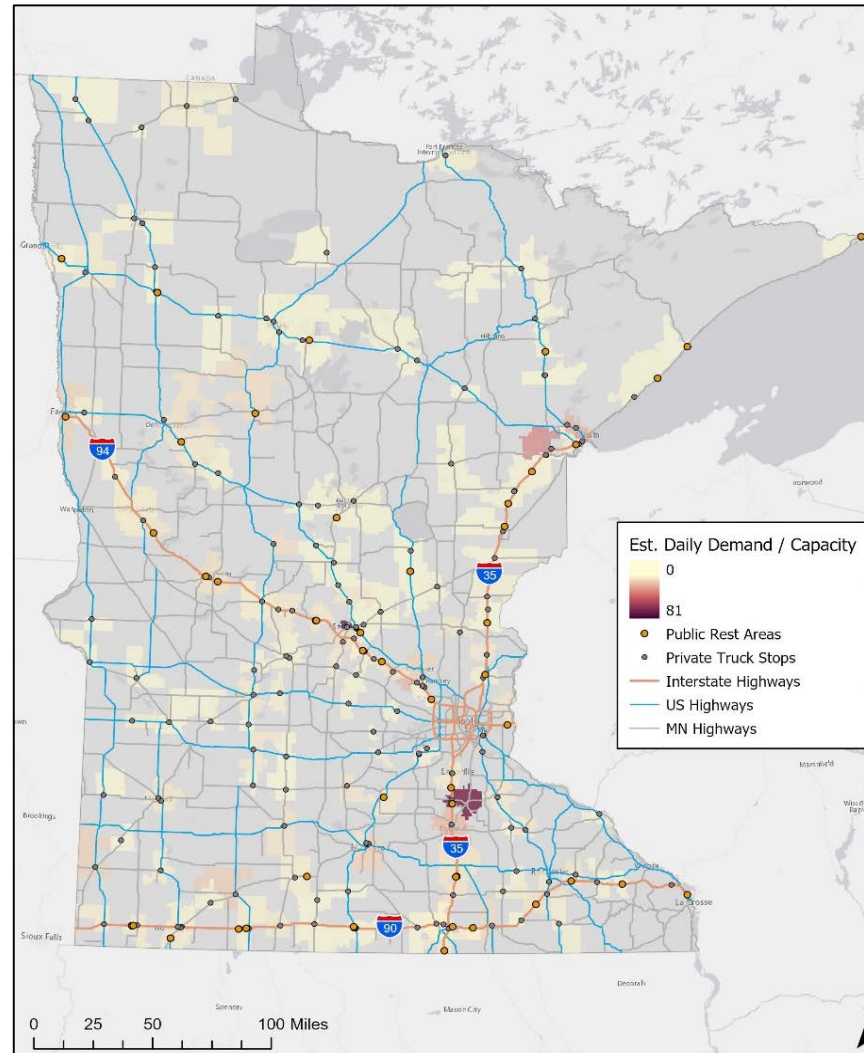


- Includes a few routes on National Truck Network
- Adjacent to I-29 and Pembina, ND port of entry

Statewide Truck Parking



10/21/2019



mndot.gov

3 public rest areas

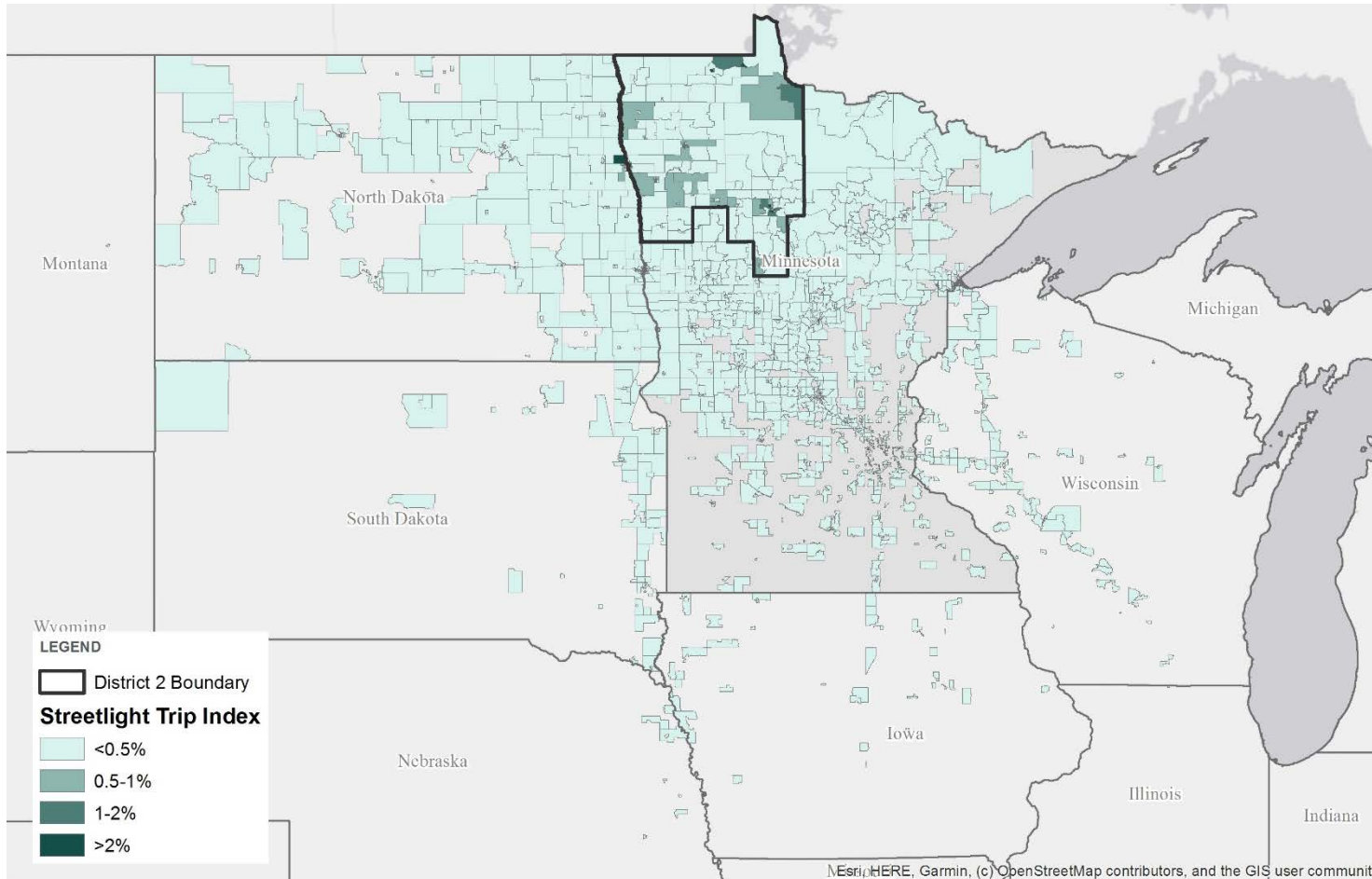
- Park Rapids
- Erskine
- Fisher

Source: Minnesota Truck Parking Study analysis of 2015 Jason's Law Survey, 2017 Trucker's Friend National Truck Stop Directory, NATSO Park My Truck app, TA-Petro TruckSmart app, Pilot-Flying J myPilot app and Trucker Path app data.

Streetlight Methodology

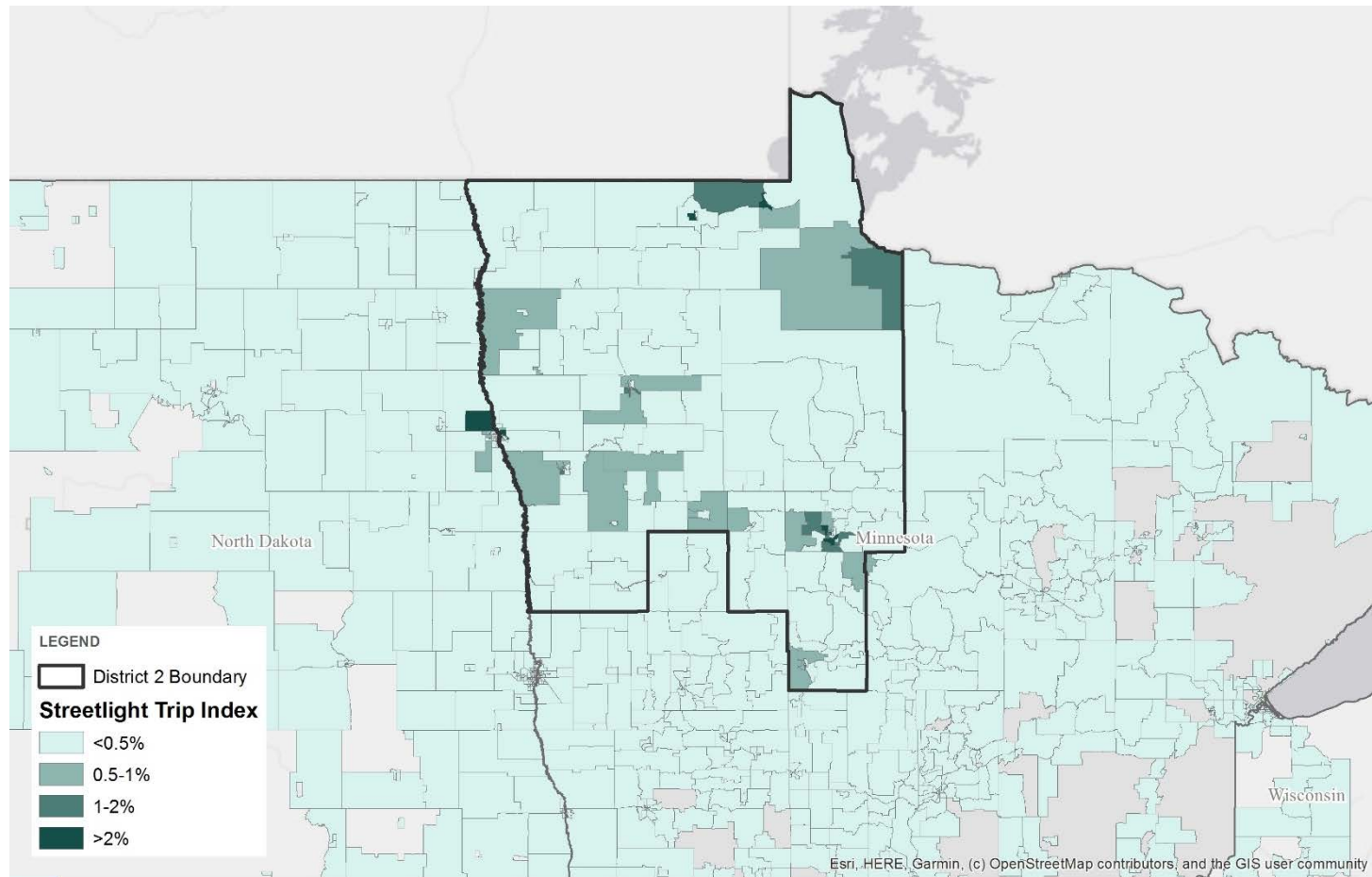
- StreetLight Insight data
- Uses Truck and Cell phone GPS data
- Output is “StreetLight Trip Index,” represents relative volume of trip activity
- Data output by Census Block Group
- Since Block Groups are relatively small geographic areas, the resulting trip volume percentages are low per Block Group
- MnDOT’s dataset not include data from Canada

Freight Trip Volume Originating in D2 - Region



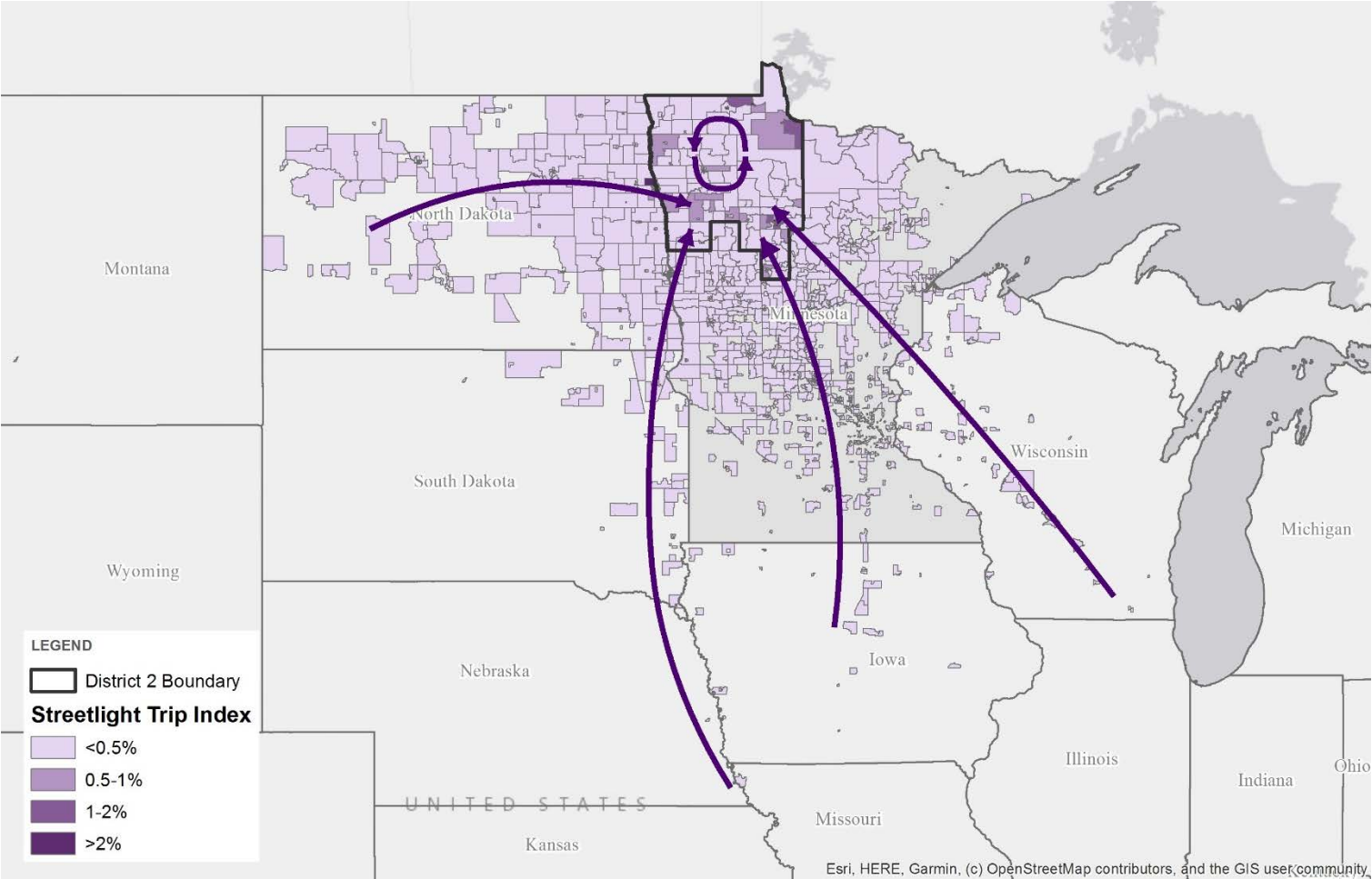
Streetlight Insight Data – Block Group Level

Freight Trip Volume Originating in D2



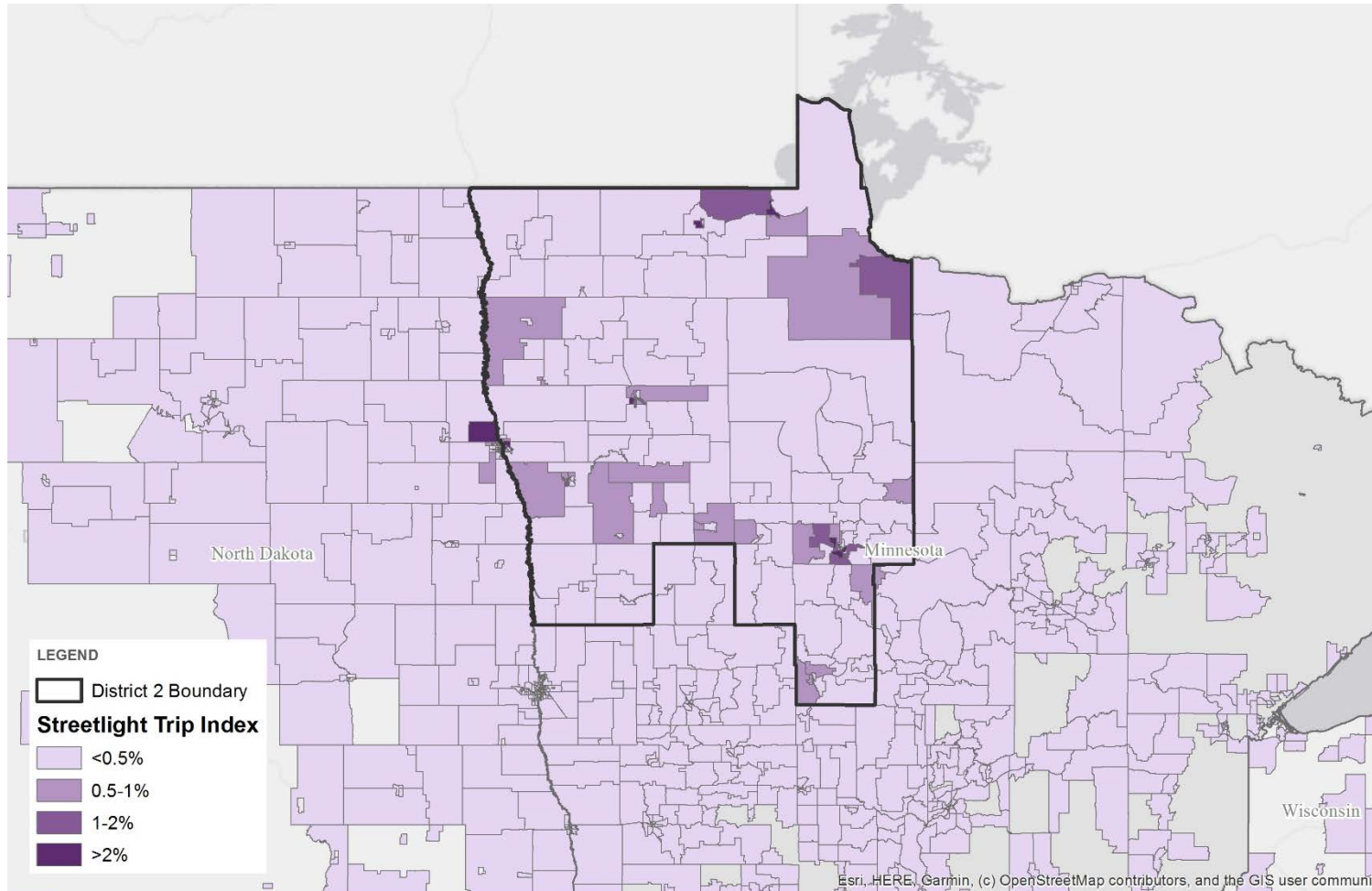
Streetlight Insight Data – Block Group Level

Freight Trip Volume Ending in D2 - Region



Streetlight Insight Data – Block Group Level

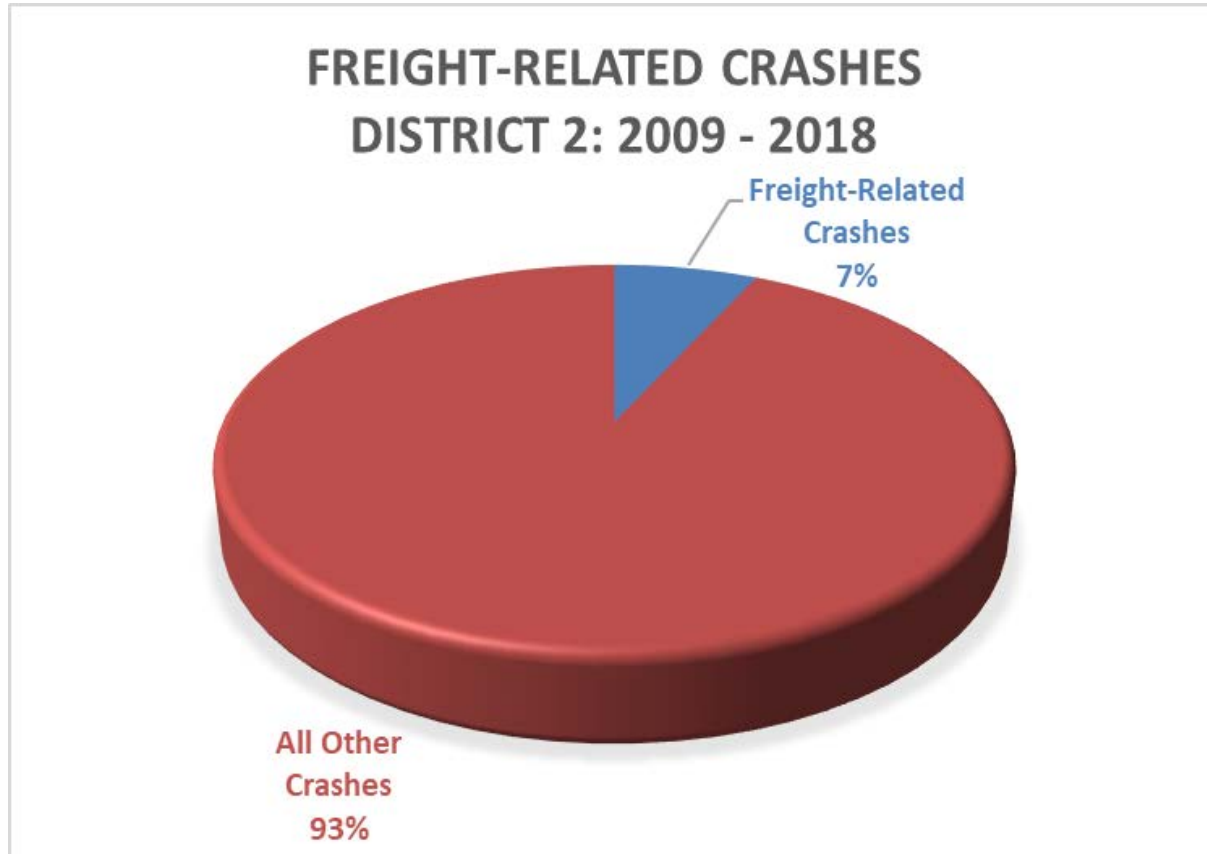
Freight Trip Volume Ending in D2



Streetlight Insight Data – Block Group Level

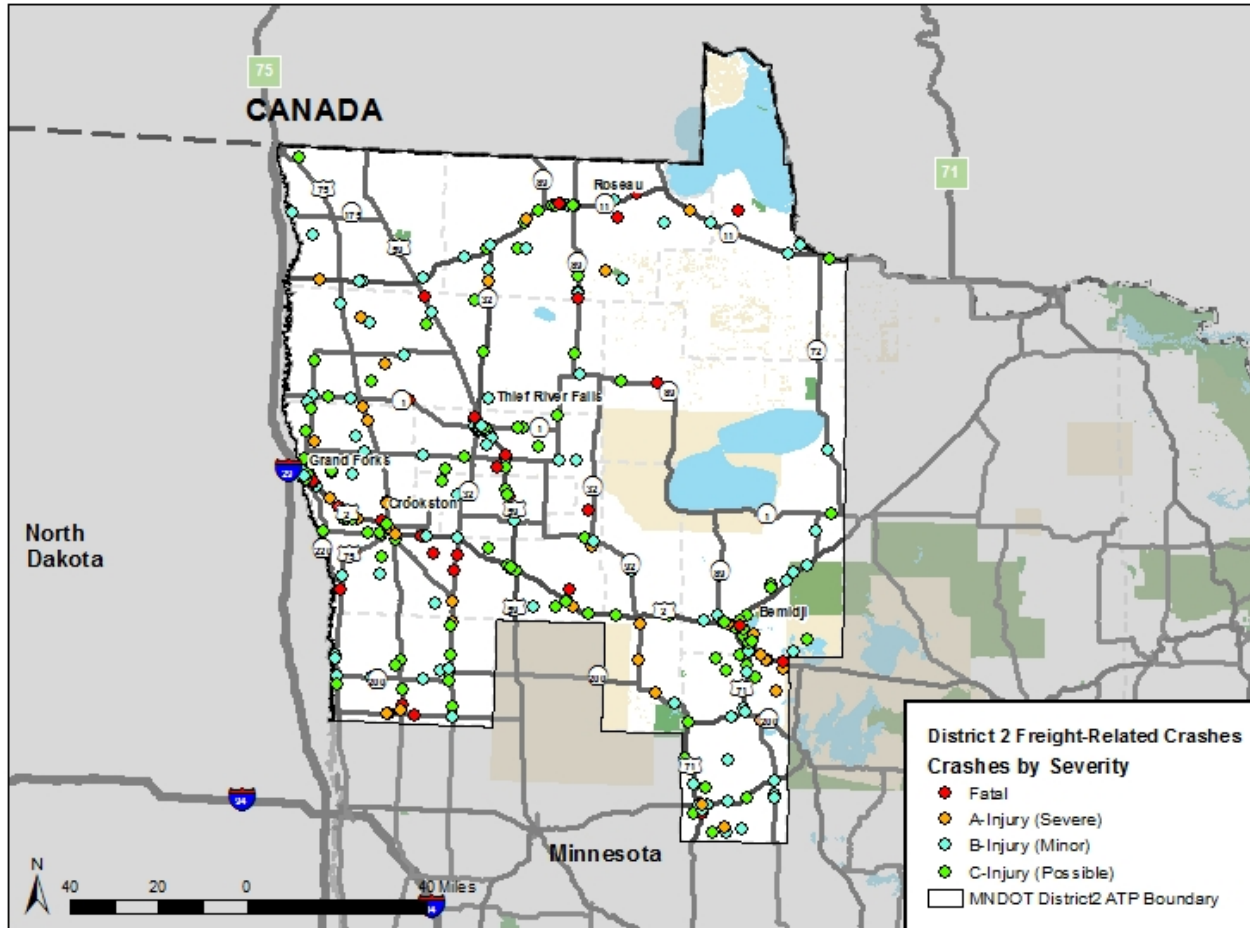
Highway Crash Analysis

Freight Related Crashes



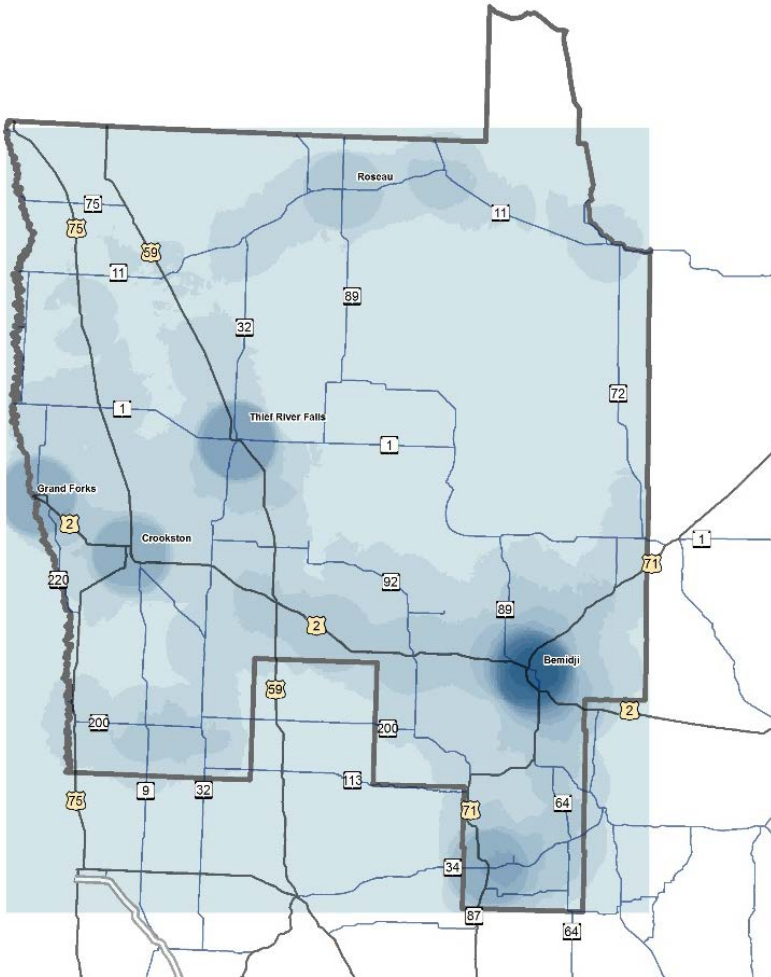
Crashes (2009-2018)	Count
Freight Related	872
All other	11,573
Total	12,445

Crash by Severity Type



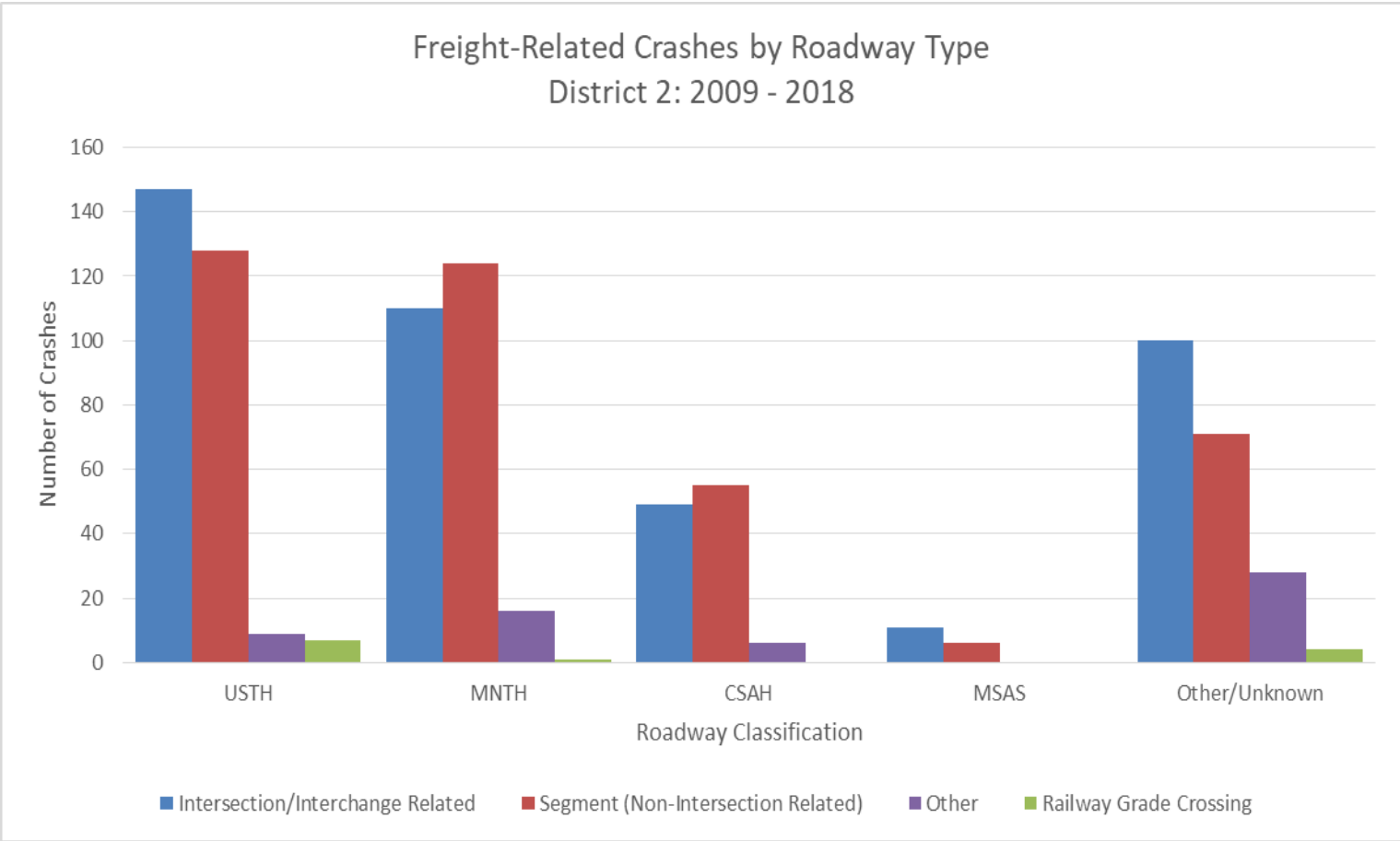
2009-2018 Data (does not include property damage only crashes)

Freight Crash Concentration



2009-2018 Data (does not include property damage only crashes)

Crash by Route Type

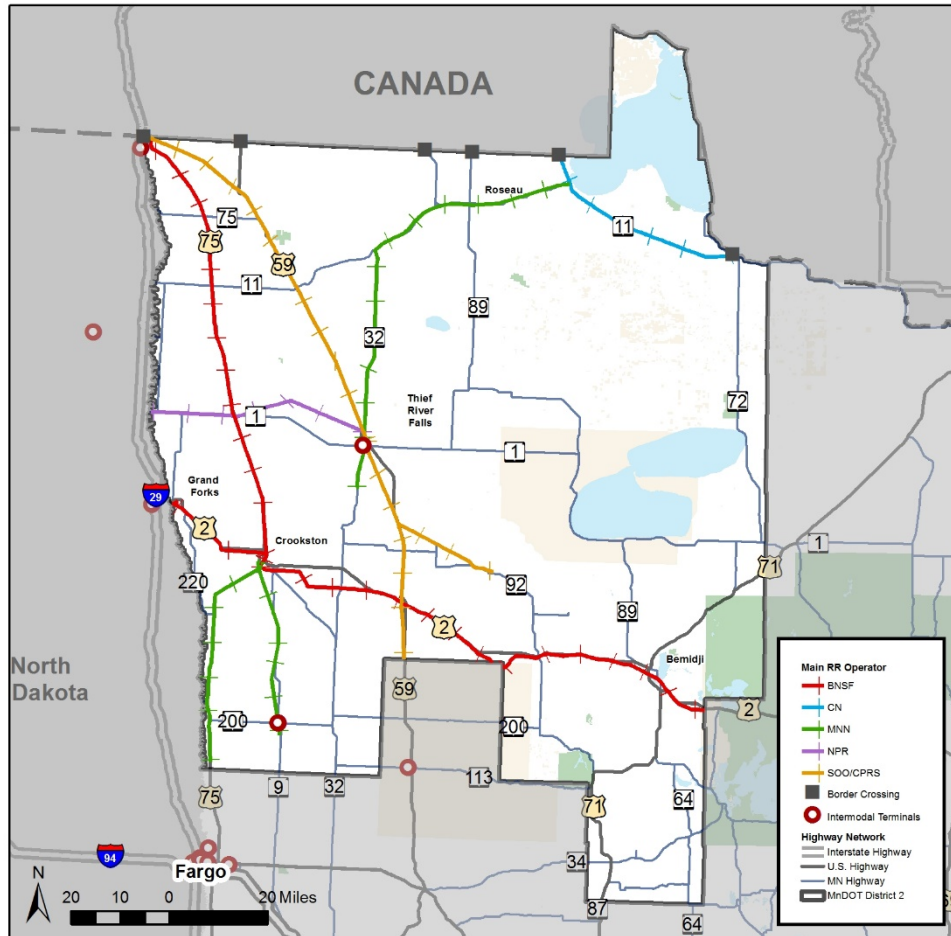


Crash Characteristics

- Roadway surface condition not a factor (e.g. snow, mud, wet)
- Lighting conditions not a factor (e.g. daylight, night time)
- 75% of truck drivers involved in freight crashes were between the ages of 30 and 64, while the remaining 13% consisted of drivers 65 years and older.
- 27 of the 872 (3%) District 2 freight-related crashes involved more than 1 heavy truck.
- 23 of the 872 (3%) District 2 freight-related crashes occurred in work zones.

Rail System

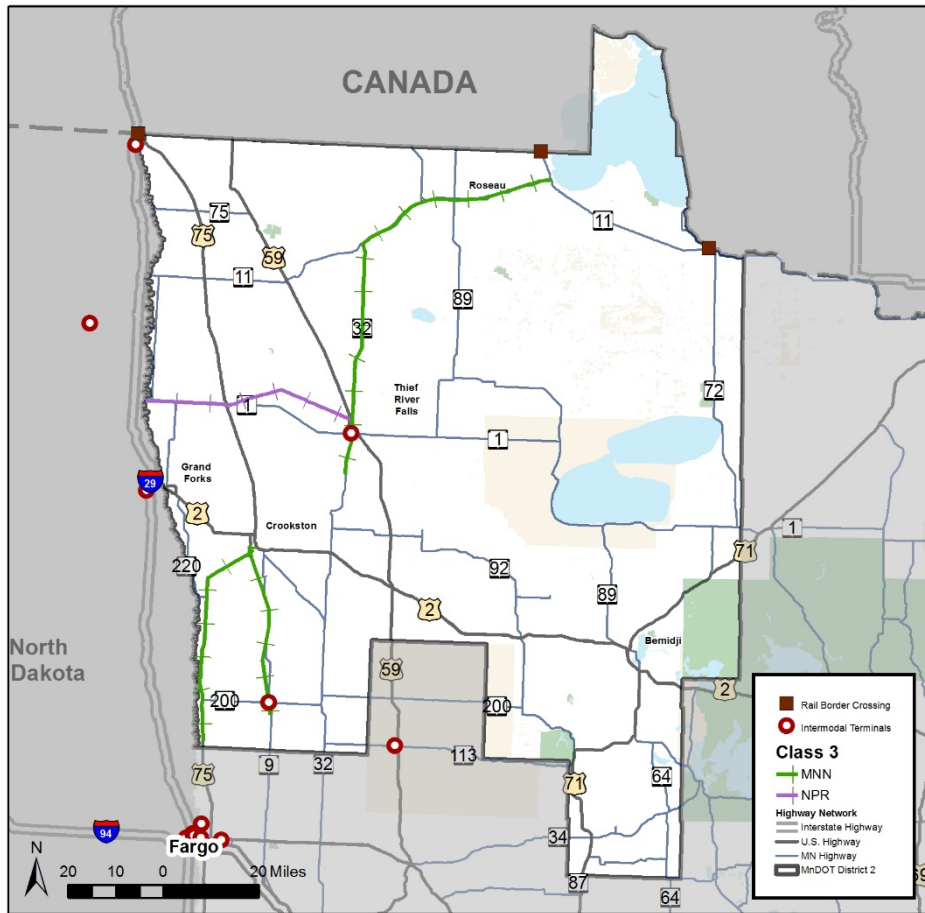
Rail System



- Class I Operators

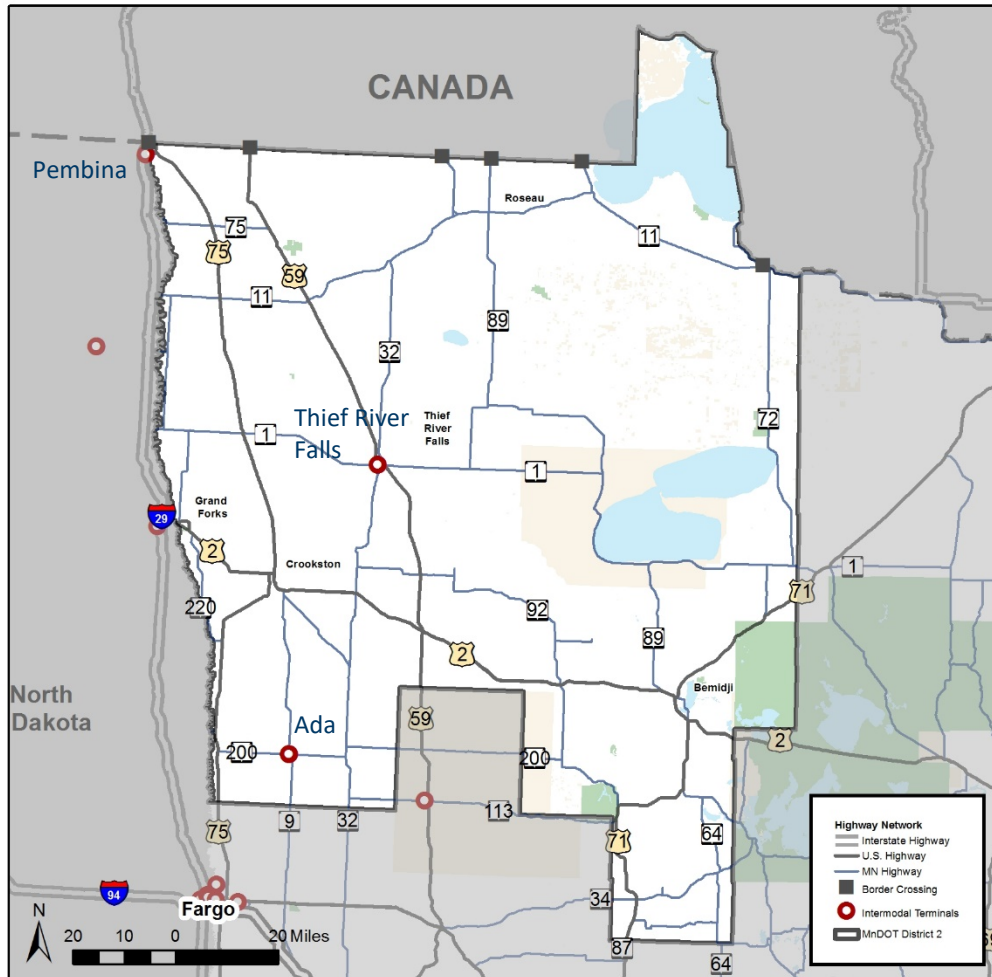
- Burlington Northern Santa Fe (red)
- Canadian National (blue)
- Canadian Pacific (yellow)

Class 3 Rail Operators



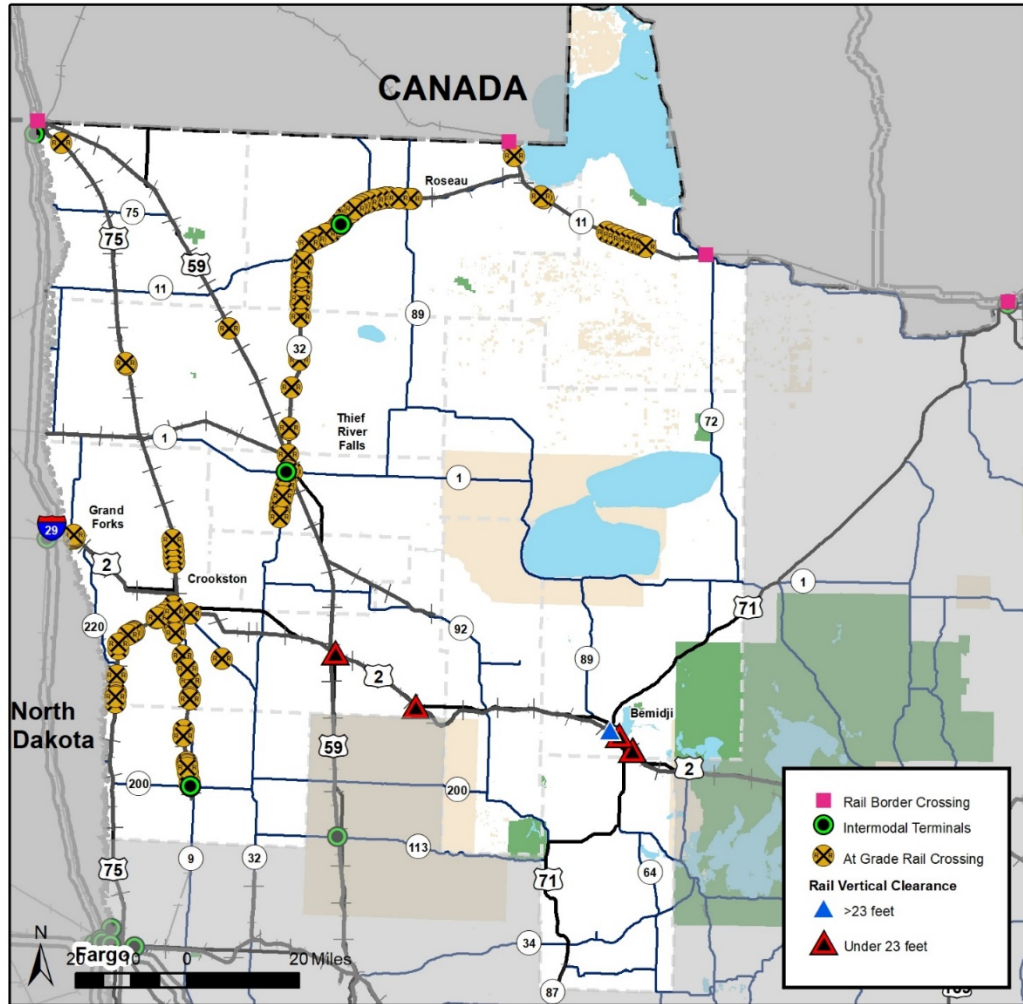
- Class 3 Operators:
 - Minnesota Northern Railroad (green)
 - Northern Plains Railroad (purple)

Intermodal Terminals



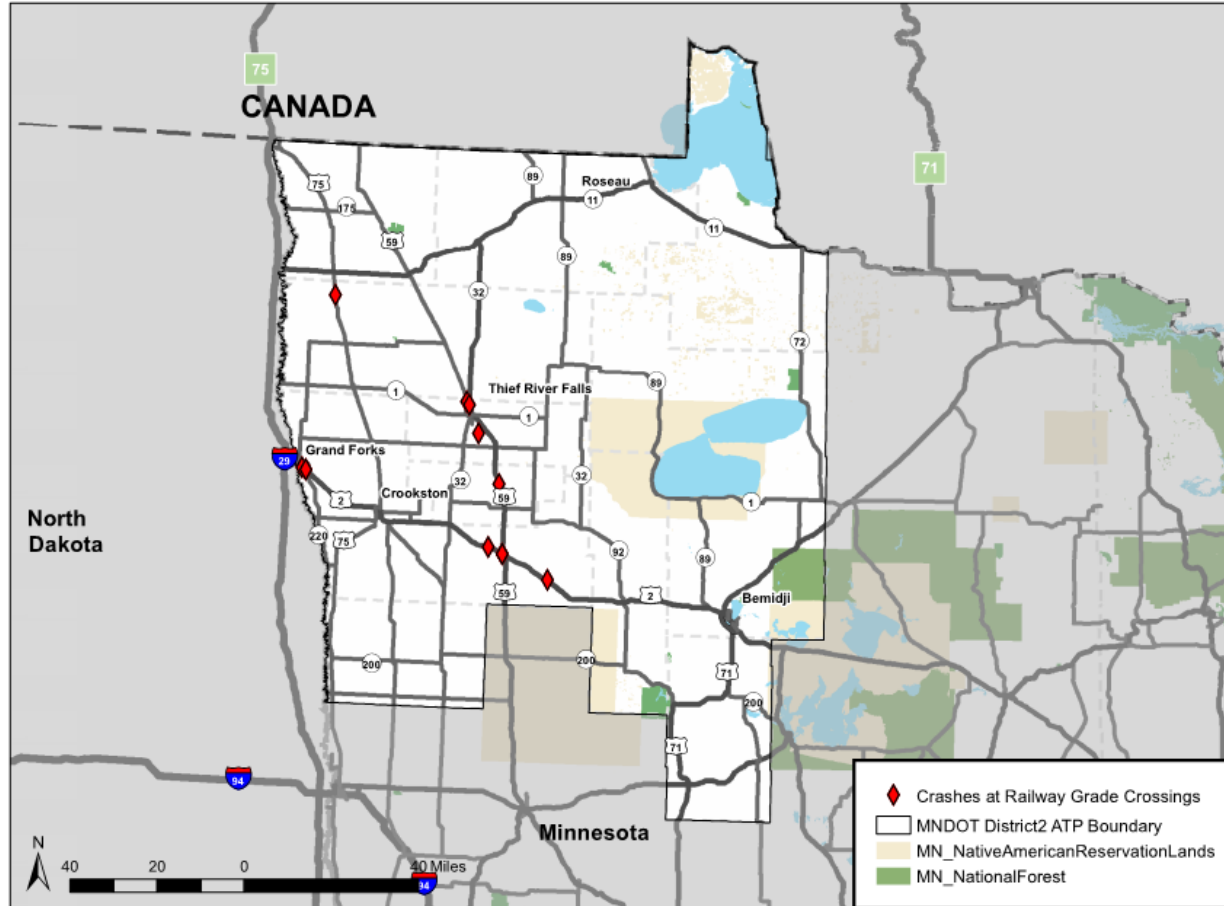
- Ada, MN
 - Triple Crown Nutrition
 - West Central Ag
- Thief River Falls, MN
 - CP Railway
- Intermodals near D2
 - Pembina, ND
 - Fargo, ND

At-Grade Rail Crossings



- 136 at-grade rail crossings
- BNSF line has rail vertical clearance issues (along US 2)

Rail Crashes



- 12 reported freight-related crashes at railway grade crossings
 - 2009 – 2018

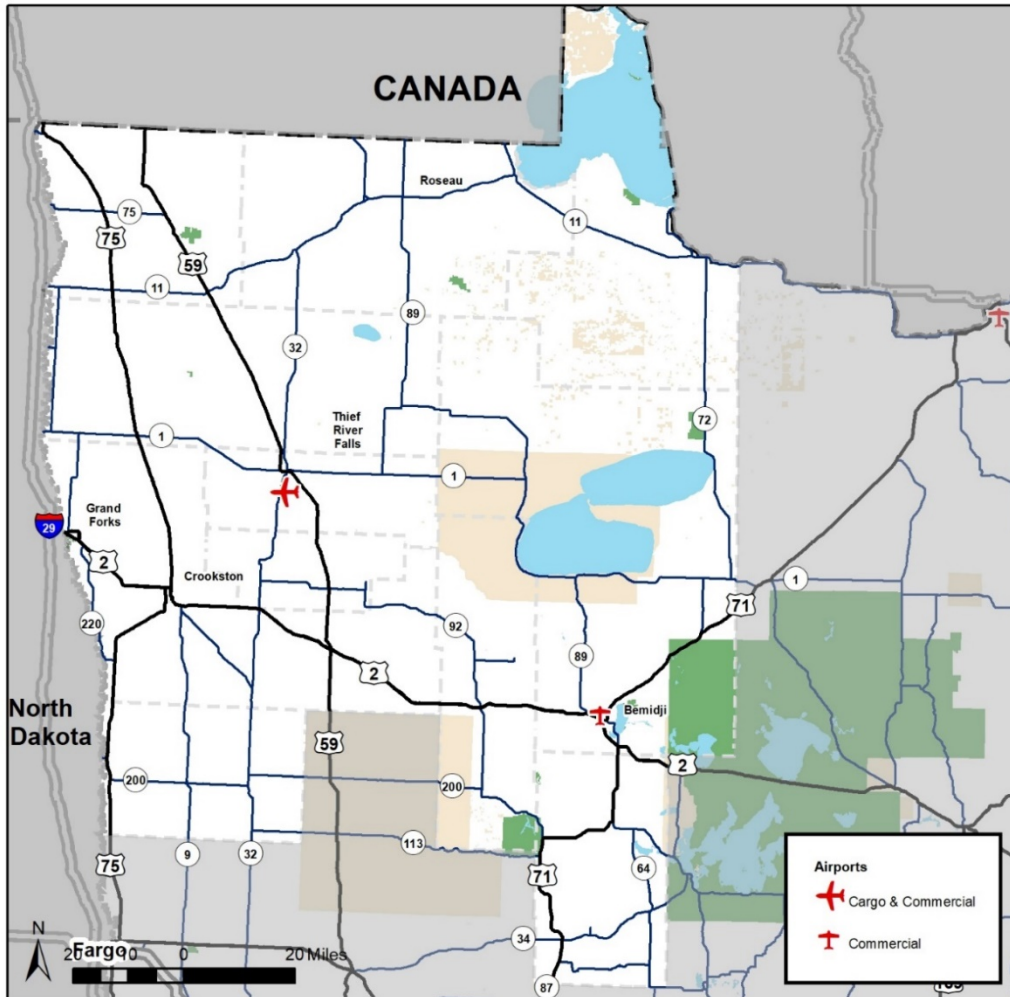
Other Freight Modes

Pipelines



- Crude oil – 583 miles
- Hydrocarbon Gas Liquid (HGL) – 150 miles
- Natural Gas – 378 miles
- Petroleum product – 148 miles

Airports/Aviation



- Thief River Falls
 - Digi-Key
 - Growth: 49.52 %
 - 2017-2018 Landed Weight
- Bemidji
 - Belly Freight
 - Encore Air Cargo
 - FedEx Feeder

Next Steps

- Short term:
 - Stakeholder Outreach
 - SWOT/Initial Recommendations
- Long term:
 - 1) Develop major findings
 - 2) Create final document

Questions

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