



Freight Planning Update Minnesota Freight Advisory Committee

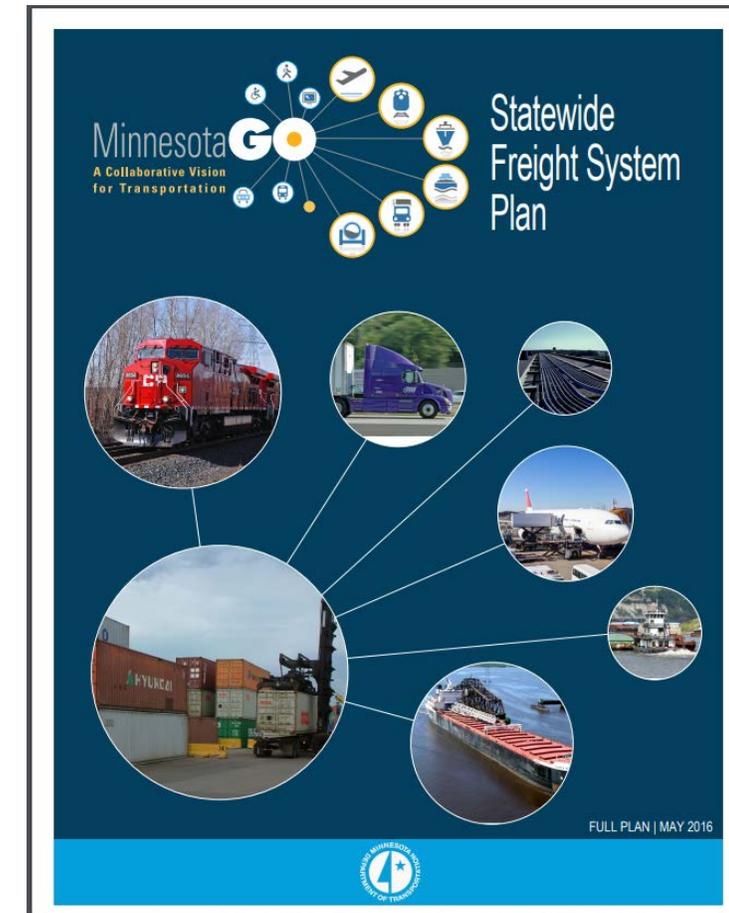
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State Freight Planner

Update on Freight Planning Efforts

- MFAC plays a vital role
- Last Plan completed in 2016 and updated in 2018
- Investments in the Minnesota Highway Freight Program rolling out now

\$100 million of freight improvements including:

- I. Twin Ports Interchange in Duluth
- II. Freight Mobility Improvements US10, TH13, US212
- III. Truck Parking in District 6 on I90



Freight Action Agenda

- Reviewing and updating
- Looking for some feedback and input from MFAC members
- District Freight Plans are direct result of Action Agenda

ID	STRATEGY CONCEPT	DESCRIPTION	ACTION(S)	LEAD AGENCY	PARTNER	TIMEFRAME
6	Integrate Freight into all Planning Projects	Consider freight in overall project planning across modes (highway, rail, water and air). Regularly engage the private sector and consider their perspectives during freight system planning.	P, S	MnDOT OFCVO	MnDOT planning offices, state, regional and local planning agencies	Short-term, ongoing
7	Pilot Programs	Short-term and low-cost pilot programs to test the viability of concepts at a small scale. infrastructure at the National level.	P, S, O	MnDOT OFCVO	FHWA, public and private sector freight stakeholders	Short-term, ongoing
5	Freight Data	Improved data collection (e.g., truck counts) and use of innovative sources to help the public sector do better freight planning.	P, S	MnDOT OFCVO	Offices within MnDOT collecting field data	Short-term, ongoing

Where are going with Planning?

1. Next State Freight Plan to be updated by the start of Calendar Year 2023
2. Soliciting future installments for the Minnesota Highway Freight Program as money comes in
3. Working on regional District Freight Plans in each of the MnDOT Districts to integrate freight into our construction planning

District 1 Freight Plan

District 1 Freight Plan

- Purpose of the regional/district freight plans:
 - ✓ To study regional freight trends in greater detail and to better integrate freight into policy and programming decisions at the District level
 - ✓ To feed the Minnesota Highway Freight Program
 - ✓ Will roll up into the next State Freight Plan



District 1 Freight Plan

Challenging Terrain



Heavy Snowfall, Long Winters

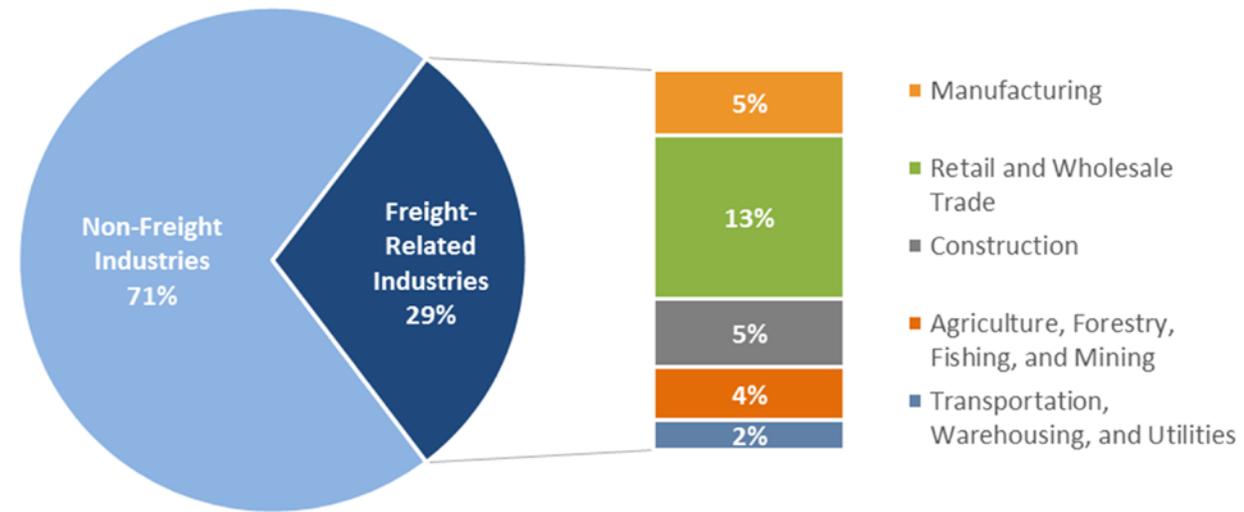
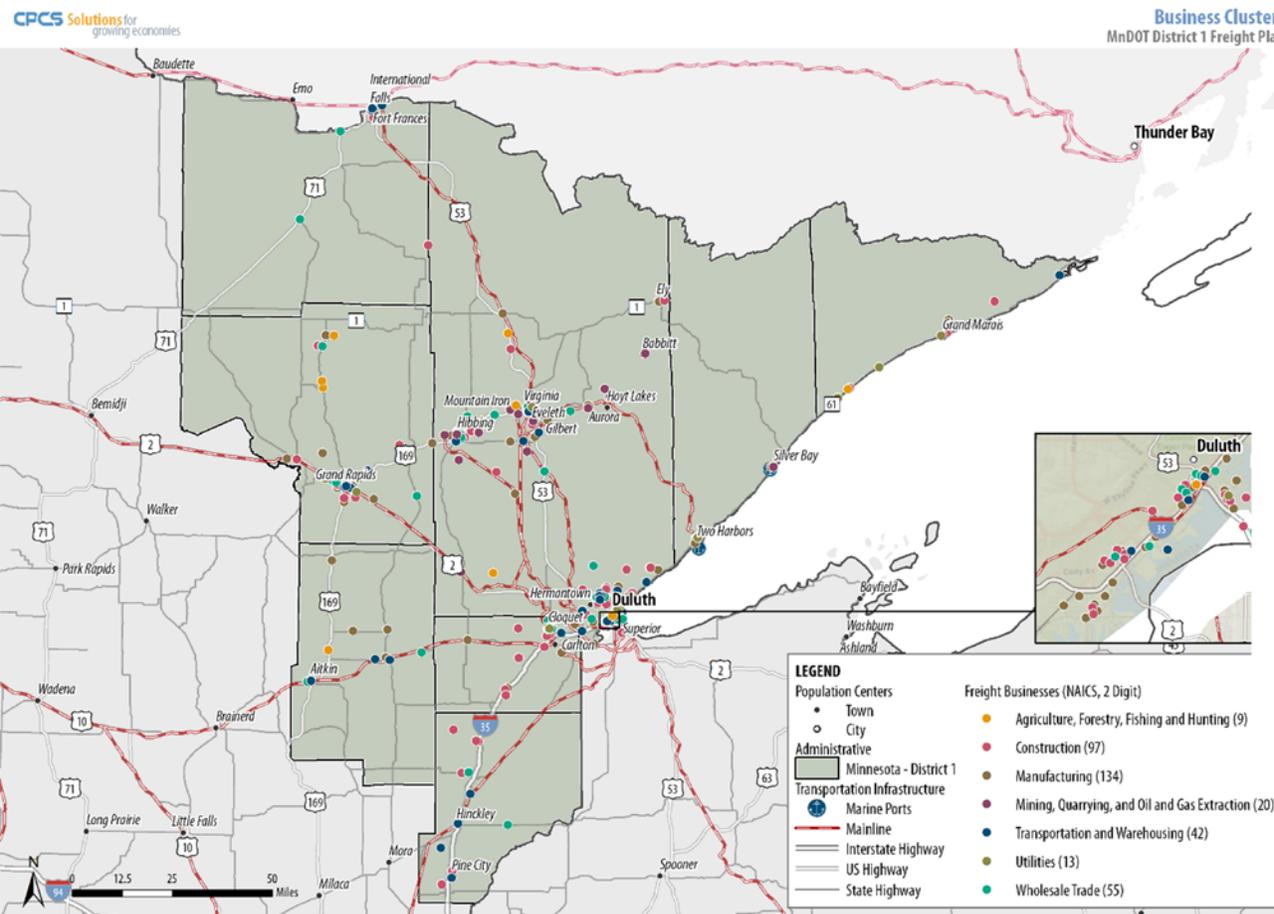


Unique Natural Resources



Freight and Northeast Minnesota's Economy

Industries that rely on freight transportation to support their operations employ about 56,800 people, or 29% of District 1's workforce.



District 1 Multimodal Freight System: Facts

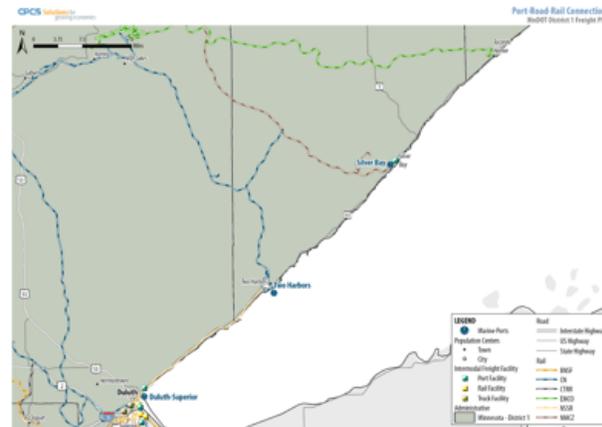
Railroads



Rail is important for a variety of freight, including taconite and intermodal containers.

1,049	Miles of track
18.9%	of MN's total track miles
161	Actively-Protected Public Crossings
279	Passively-Protected Public Crossings
4	Class I Railroad Operators

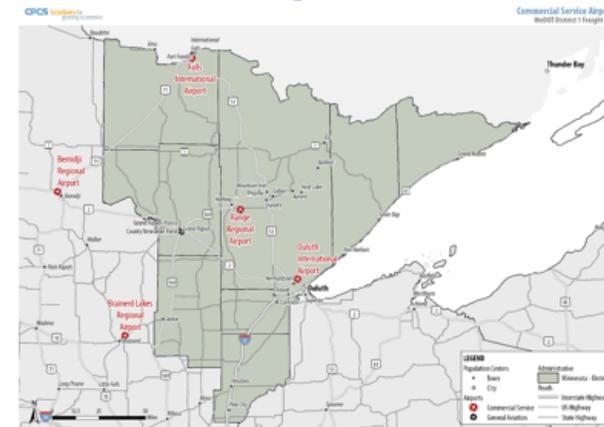
Great Lakes Ports



Shipping is important for high-volume, low-value goods like taconite and grain.

3	Commercial Ports
49	Million tons of cargo handled in 2016
900	Vessel calls in Duluth, 2017
2,814	Direct port-related employment at Port of Duluth-Superior

Airports



Air cargo is important for fast movement of high-value, low-weight freight.

3	Commercial Airports
1	Primary Cargo Airport (Duluth International)
5,300	Direct and indirect jobs associated with DLH
2	Primary cargo providers (UPS and FedEx)

Strengths

- Diverse industrial base, including manufacturing and mining
- Multimodal freight assets – a system designed to transport bulk goods
- Low to no congestion issues
- Well-maintained roads
- Room to grow without conflict with other land uses

Weaknesses

- Freight bottlenecks (vertical clearances under bridges)
- Lack of system redundancy (SOO Locks, CN Bridge in International Falls, MN-61)
- Bridges, river crossings can be bottlenecks
- Border crossings can be bottlenecks
- Lack of competitive rail service outside of Duluth
- Land use and freight conflicts (routing through neighborhoods)
- Lack of reliable freight funding
- Lack of truck weight rule harmonization between states/province

Opportunities

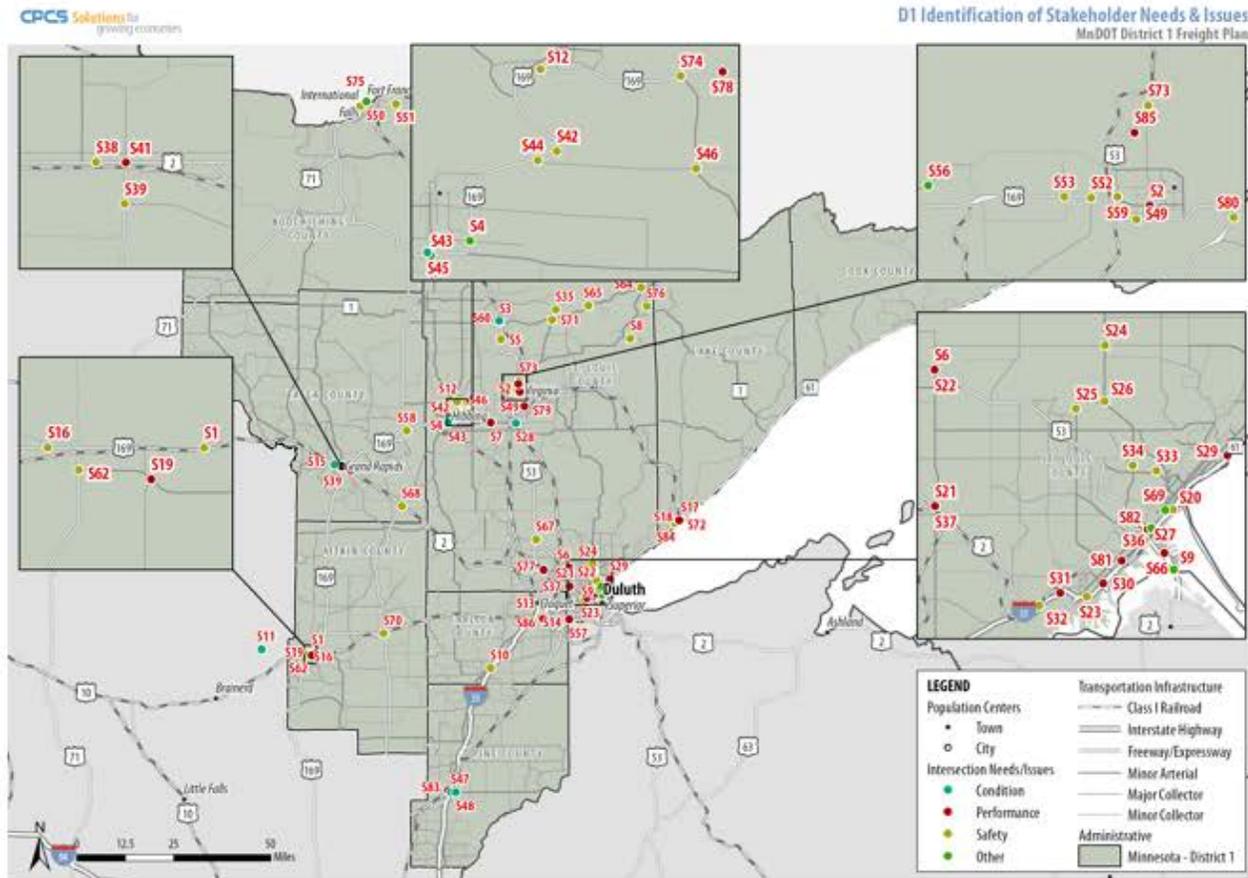
- Advance low-cost spot infrastructure improvements (bypasses and widened lanes)
- Improve 1st/last 3-miles of connections between main routes and freight facilities
- Opportunity to ID freight projects that can help improve other aspects of the system (e.g., safety) and leverage non-freight funds (e.g., safety) to make improvements
- Continued development of intermodal and transfer facilities
- MnDOT to be proactive in working with other stakeholders
- Utilize Competitive Rail Service Study and funding
- Leverage private funding
- Incident management (low clearance bridge that fell, rock slide)
- Autonomous or connected vehicles related to truck driver shortage

Threats

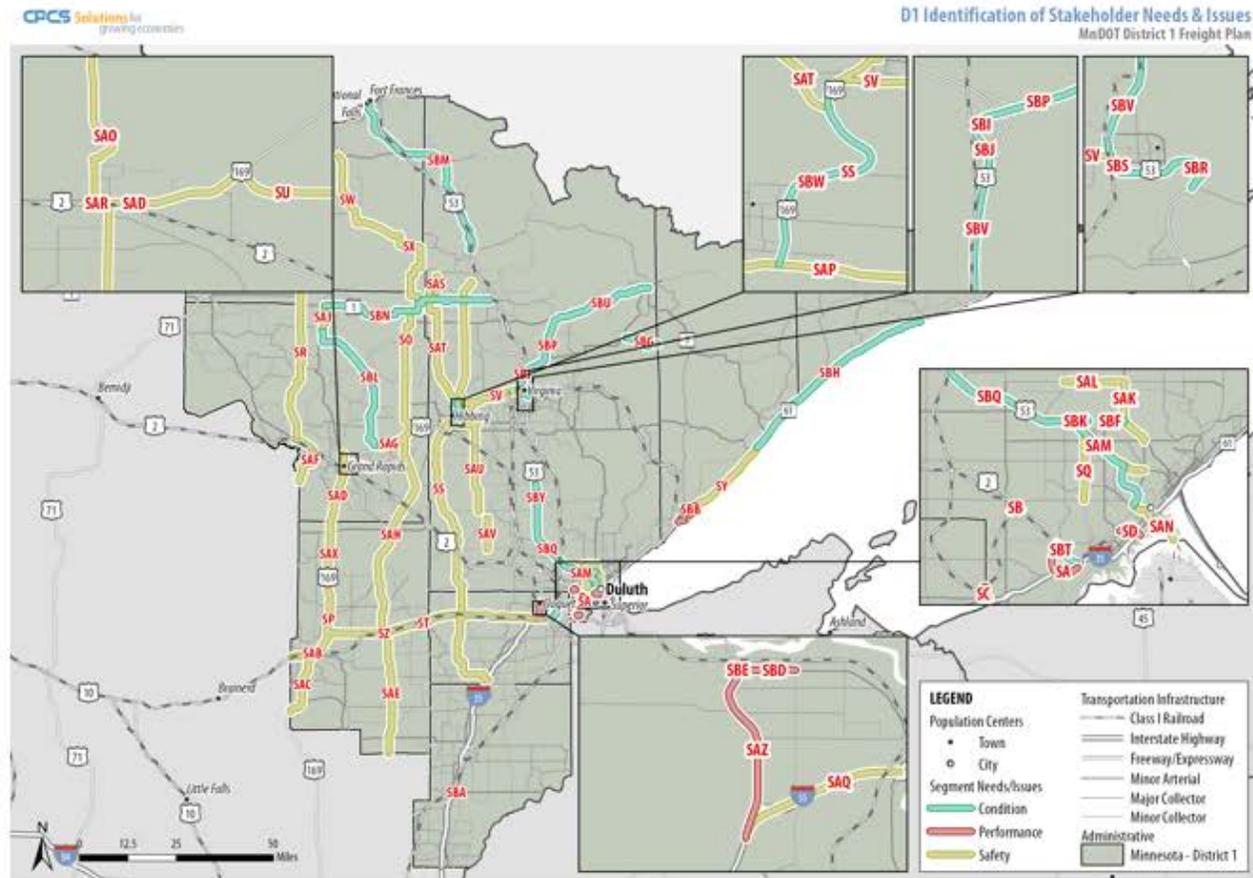
- Truck driver shortage, life expectancy, requirement to be 21 to cross state lines (demographic “cliff” for industry)
- Hazmat movements through communities (London Road, Two Harbors)
- To some extent, at mercy of our neighbor states (WI, ON) to maintain their routes that are critical to the District
- Soo Lock closure
- Market forces, commodity prices, tariffs
- Boom/bust cycle of resource extraction, or long ramp-up time. Build something now to support Essar/Polymet in 5-10 years?
- Conflict with growing tourism traffic – Bentleyville as an example
- E-Commerce – more traffic for same tonnage
- TPI interchange is going to be a temporary problem, but will be an issue for next 2-3 years
- Public and private sectors move at different paces

Input and Data Analysis on Needs

Issues Identified from Stakeholder Input



Intersections

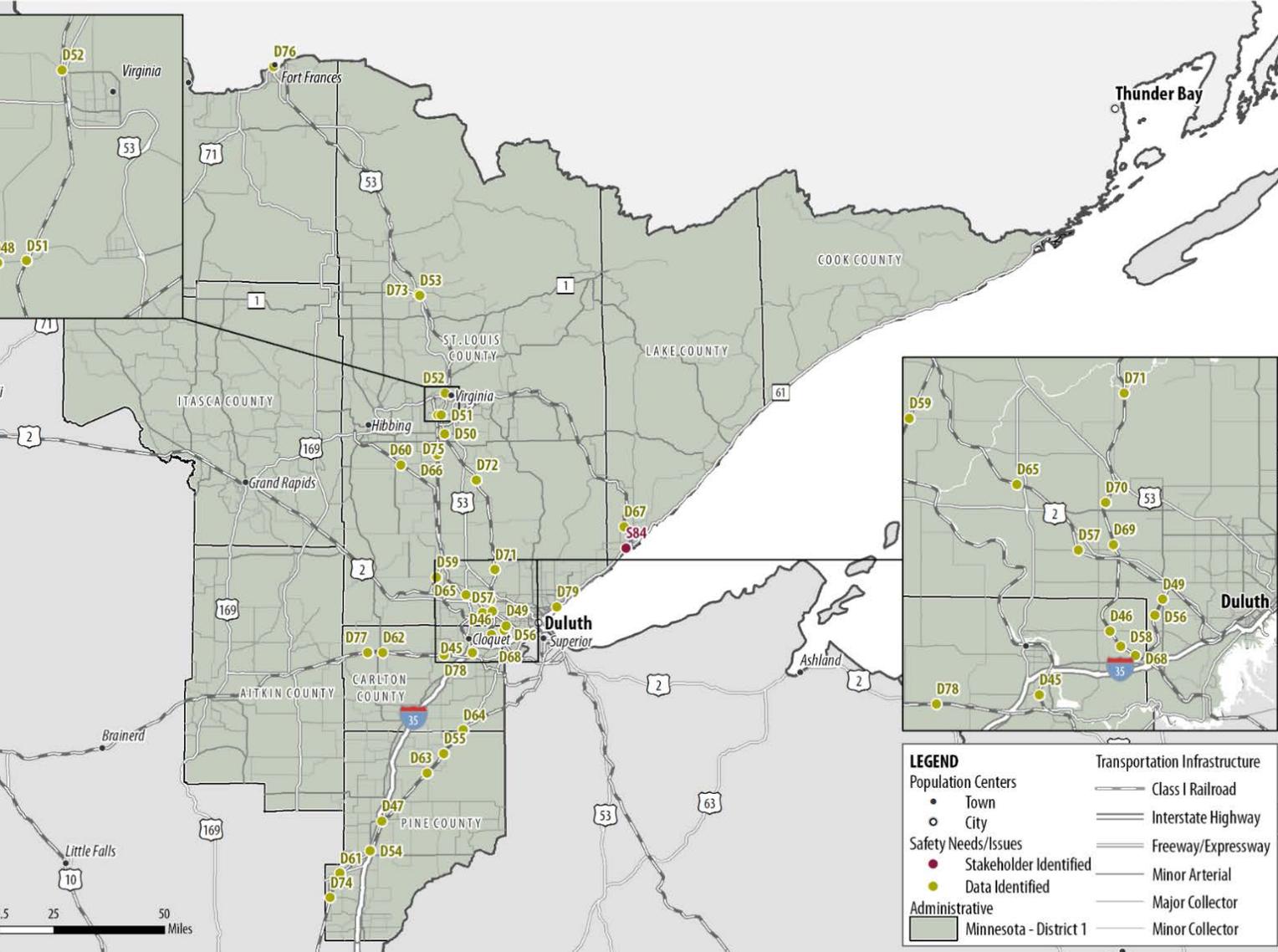


Segments

Railroad Needs and Issues

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D1 Rail Crossing Safety Issues
MnDOT District 1 Freight Plan



Reliable and competitive rail service is a major rail-related issue outside of the Duluth area

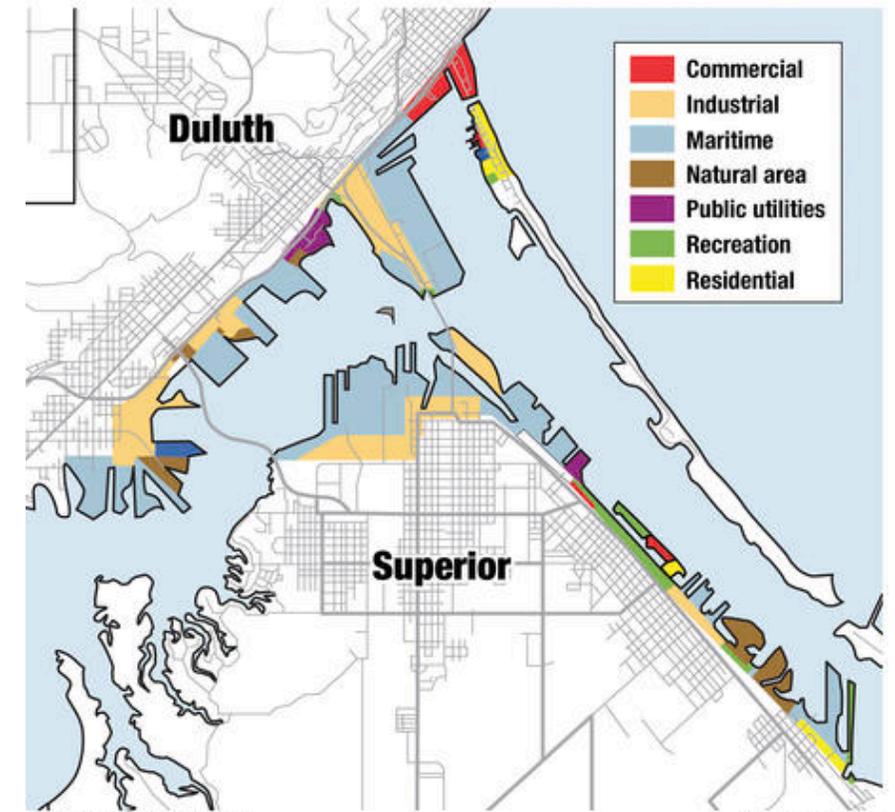
- Incorporated feedback and input from a related effort called the Northeast Minnesota Freight Rail Opportunity Study (NEMFROS)
- Grade Crossings and service costs

Waterway Needs and Issues

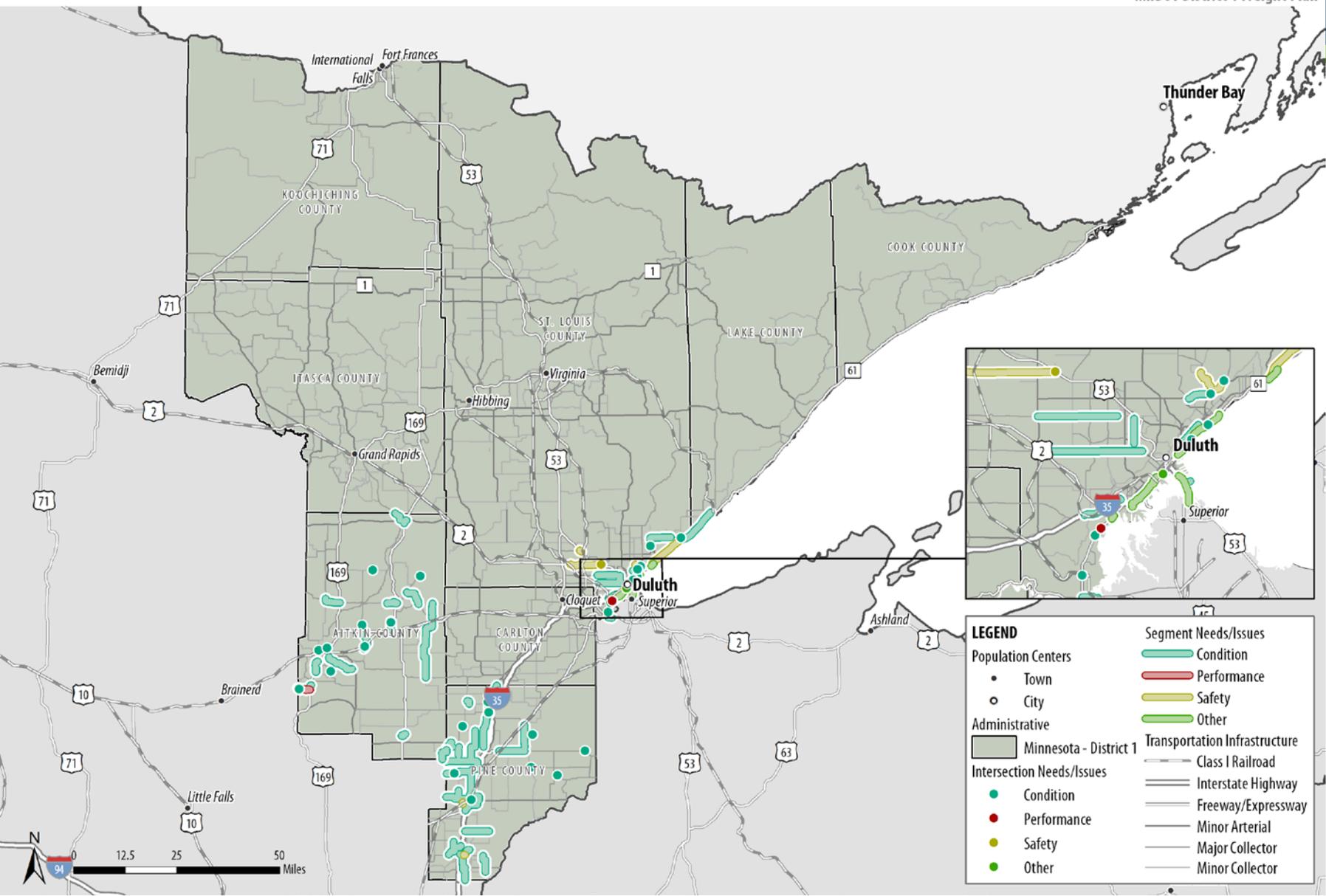
Port issues are more limited in scope, and focused on Duluth.

- OSOW access
- Rebuild TPI
- Dredging
- Preserve land

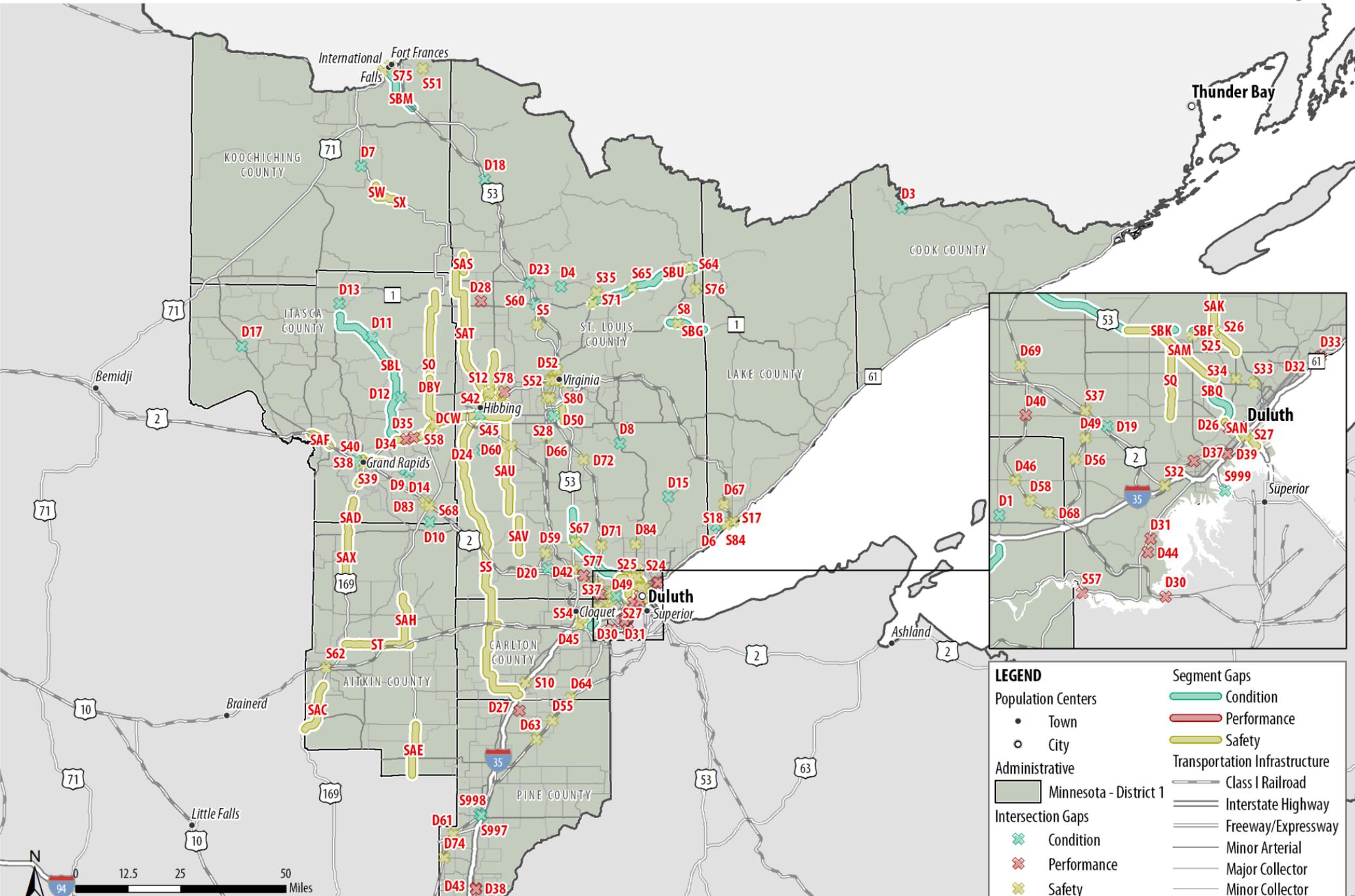
Future land use



Local Projects



GAPS



LEGEND

• Town	○ City	Minnesota - District 1	Condition	Performance	Safety
Condition	Performance	Safety	Class I Railroad	Interstate Highway	Freeway/Expressway
Minor Arterial	Major Collector	Minor Collector	Condition	Performance	Safety

- Categorized Issues into the 3 Main MHFP Program Categories and ranked them:
 1. Freight Safety
 2. Freight Mobility
 3. Freight Condition

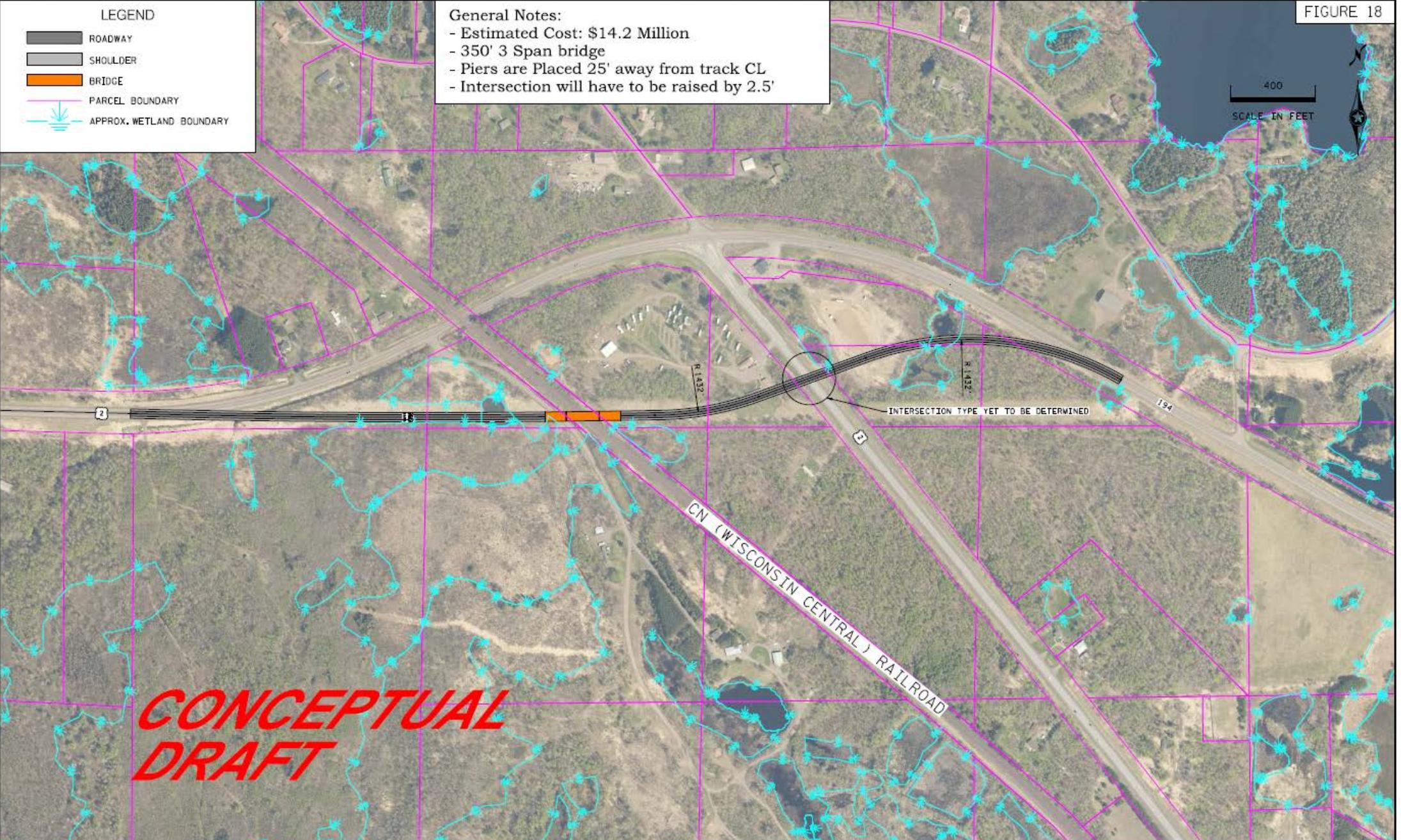
LEGEND

-  ROADWAY
-  SHOULDER
-  BRIDGE
-  PARCEL BOUNDARY
-  APPROX. WETLAND BOUNDARY

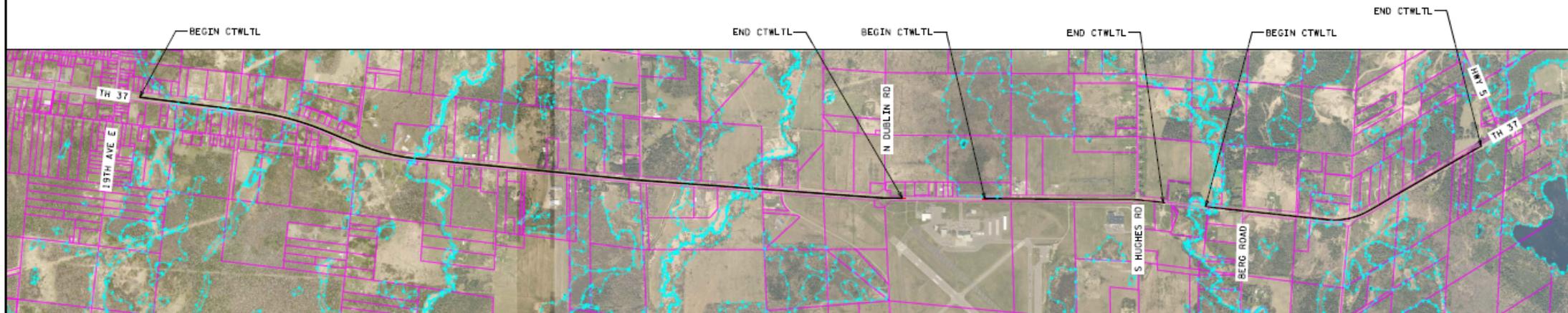
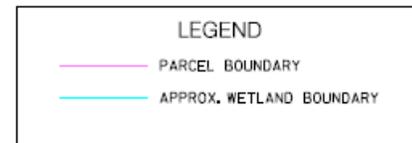
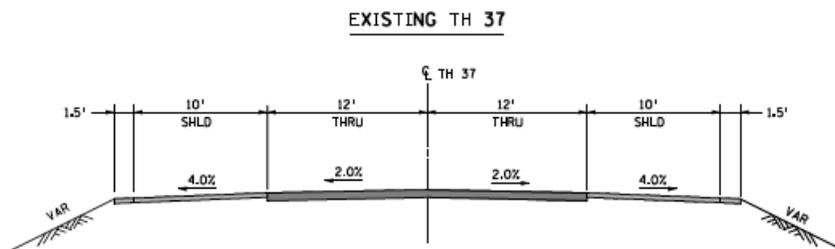
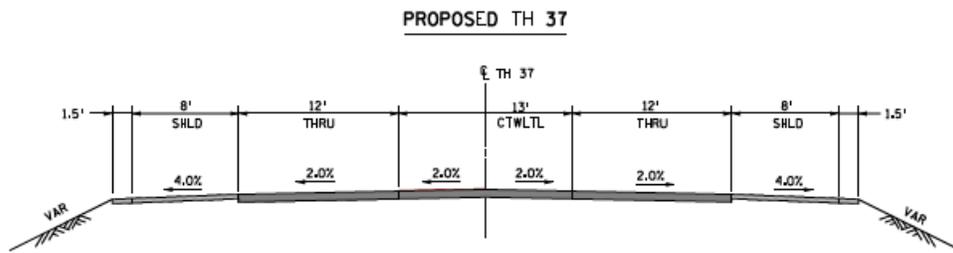
General Notes:

- Estimated Cost: \$14.2 Million
- 350' 3 Span bridge
- Piers are Placed 25' away from track CL
- Intersection will have to be raised by 2.5'

400
SCALE IN FEET



**CONCEPTUAL
DRAFT**



General Notes:

- Estimated Cost: \$4.9 Million
- Add a continuous two-way left turn lane throughout the corridor.

CONCEPTUAL DRAFT

District 1 Freight Plan – Set of Priorities

- Better understanding of risks
- Need for statewide consistency
- Set out the architecture – for all the other district freight plans



<http://www.dot.state.mn.us/ofrw/freight/districtfreightplan/d1.html>

- If you would like to be involved in District Freight Plans please contact me

Opportunities range from being on an Advisory Committee to helping organize outreach

- Continue to come back to the MFAC to provide updates on our progress

Questions



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