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FY20 Transportation Planning Update

- International Falls Transportation Plan
- Trail pavement conditions
- Active transportation development
- Gitchi-Gami Trail Association
- North Shore Scenic Drive Council
- MnDOT trail counters program





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Northeast Minnesota Area Transportation Partnership

February 13, 2019



FY 2024 Local Funding Target



MPO \$2,960,000

- Duluth
- Hermantown
- St. Louis County

Cities/Counties \$4,440,000

- Cities > 5,000
- Counties

2024 Federal Aid Candidate Projects

Total ATP outside the MPO area = \$7,630,000 (Federal: \$4,440,000)

- Carlton CSAH 55, reconstruction: \$1,850,000 (Federal: \$1,480,000)
- Cook CSAH 12, resurfacing and turn lane reconstruction: \$2,980,000 (Federal: \$1,480,000)
- St. Louis County CSAH 115, resurfacing: \$2,800,000 (Federal: \$1,480,000)

Total MPO = \$5,280,000 (Federal: \$2,960,000)

- City of Hermantown MSAS 101 and 104, intersection improvements: \$3,430,000 (Federal: \$1,480,000)
- City of Duluth MSAS 147, resurfacing and ADA: \$1,850,000 (Federal: \$1,480,000)

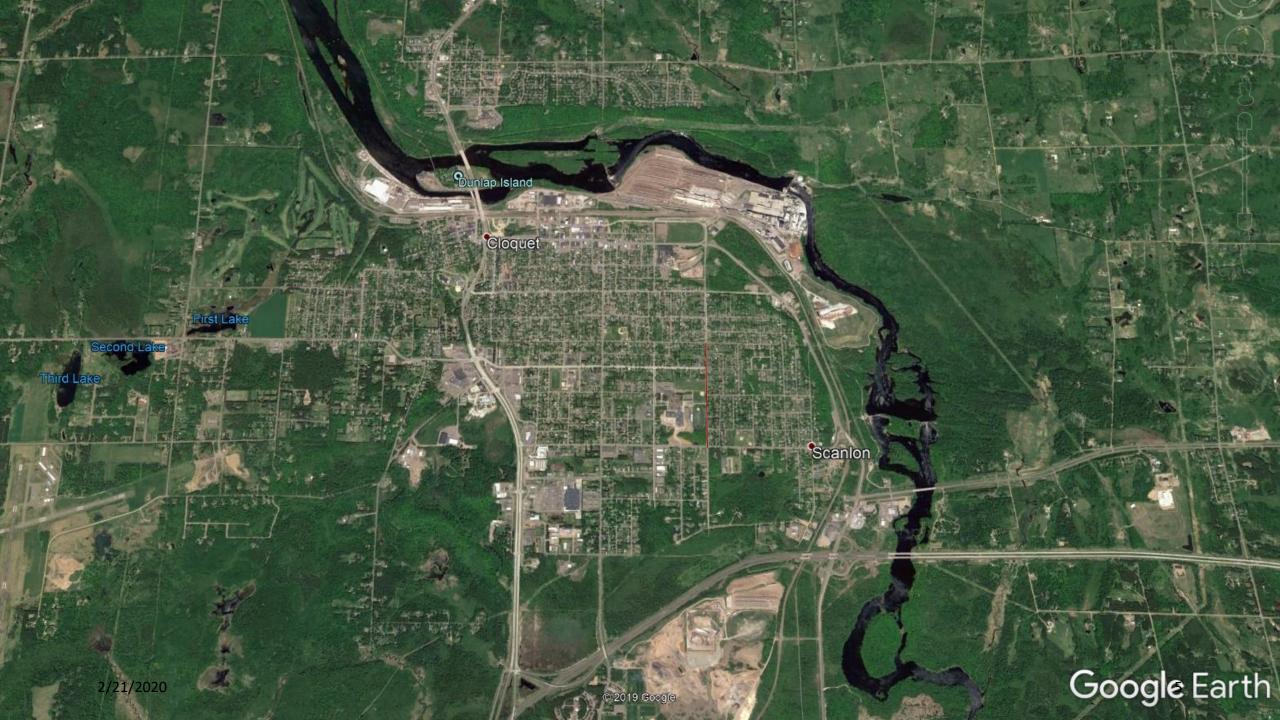
Carlton CSAH 55

CSAH 55 grading, bituminous surfacing, storm sewer repair, and multi-use trail in the cities of Cloquet and Scanlon from CSAH 16 (Washington Avenue) to Prospect Avenue, 0.5 miles.

Federal request: \$1,480,000

Match: \$370,000

Total project cost: \$1,850,000



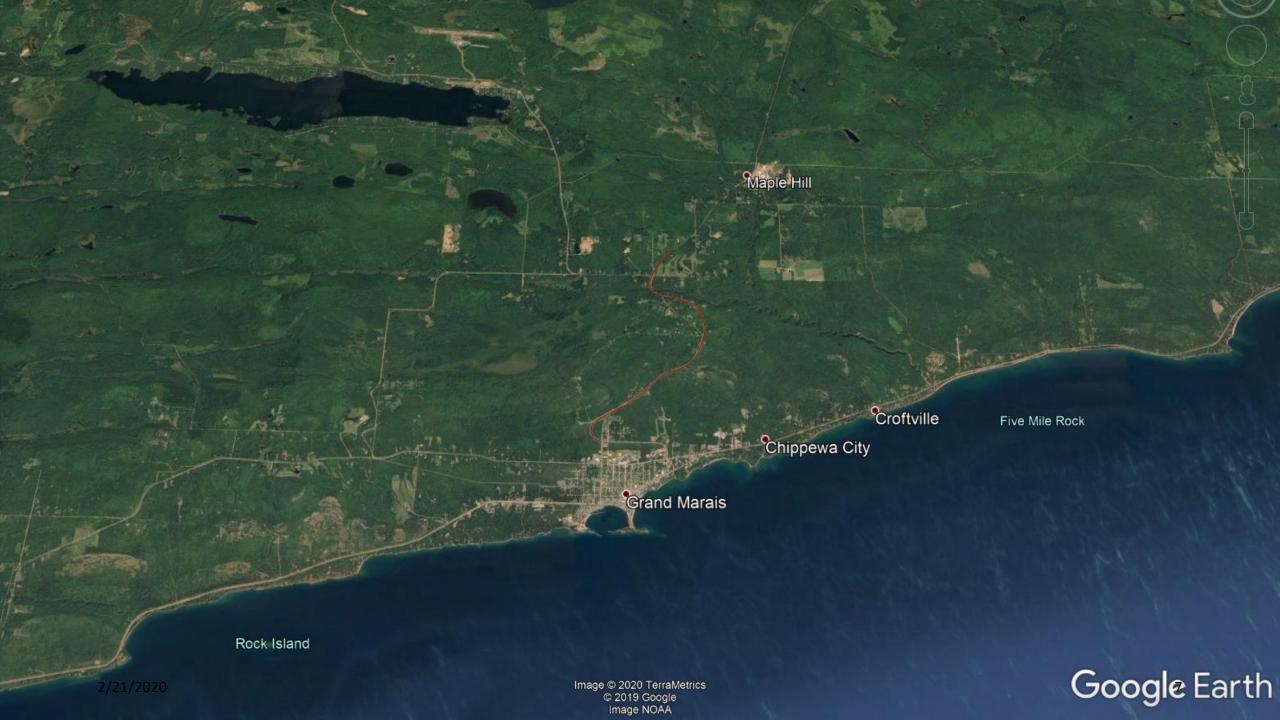
Cook CSAH 12

This project includes a mill and overlay of Gunflint Trail to improve its ride quality from 5th Ave. W. in Grand Marais to approximately one-half-mile north of Devil Track Rd. The existing gravel shoulder from 5th Ave. W. to County Rd. 53 will be paved to reduce long-term maintenance costs. Guardrail will be added at Little Devil Track River, and the Devil Track Rd. intersection will be reconstructed to add westbound left and eastbound right turn lanes to improve safety.

Federal request: \$1,480,000

Match: \$1,500,000

Total project cost: \$2,980,000



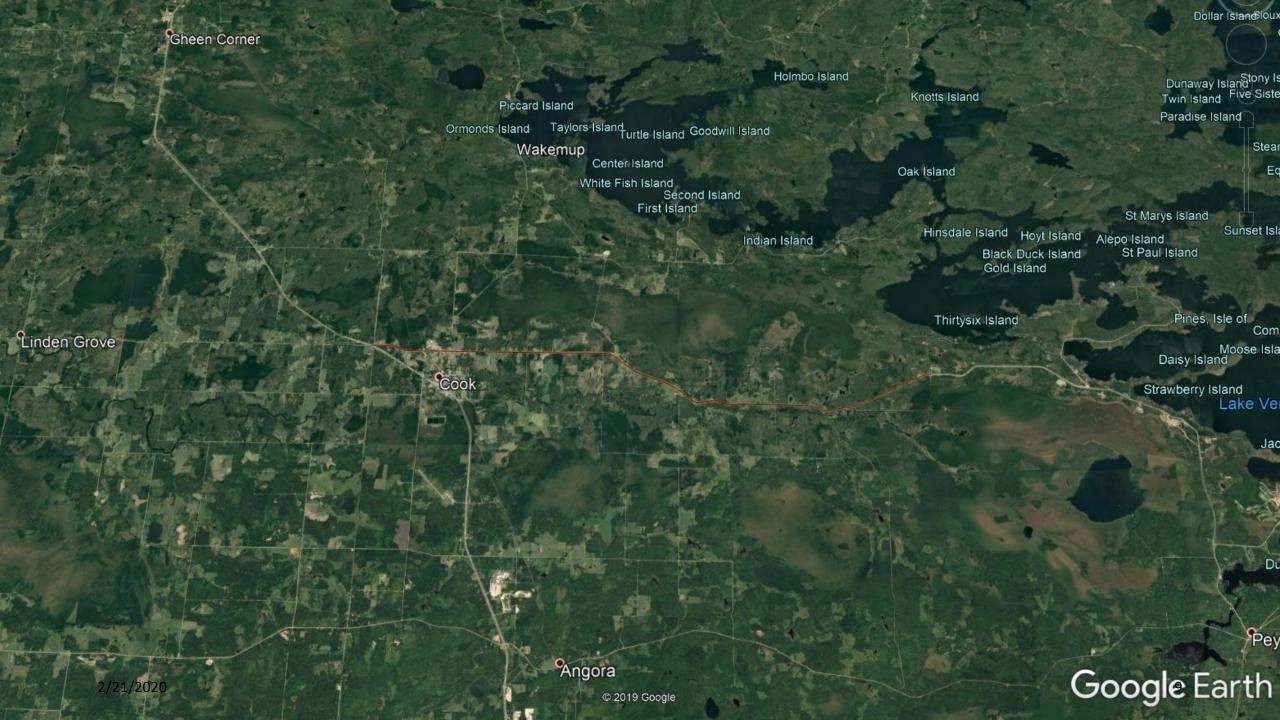
St. Louis County CSAH 115

The scope of the project would include a bituminous milling, full depth reclamation, and bituminous paving of an 11.6 mile segment of CSAH 115. The existing section has a 36' total width, with a 12' paved lane and 6' paved shoulder in each direction. The easterly portion of the roadway was reconstructed in 1998 and the westerly portion was reconstructed in 2002. Since then, the existing pavement has deteriorated to a condition with a PQI rating of 2.8 (in 2018), which was after a scrub seal rehabilitation project in 2017. St. Louis County's desired weighted average PQI for major collector roadways is 3.1, thus roadway segment will be ready for further rehabilitation in 2024. After the full depth reclamation and overlay project, a bituminous sealcoat will be included over the driving lanes. In addition, rumble strips will be included along the entire project segment as a continued safety measure.

Federal request: \$1,480,000

Match: \$1,320,000

Total project cost: \$2,800,000



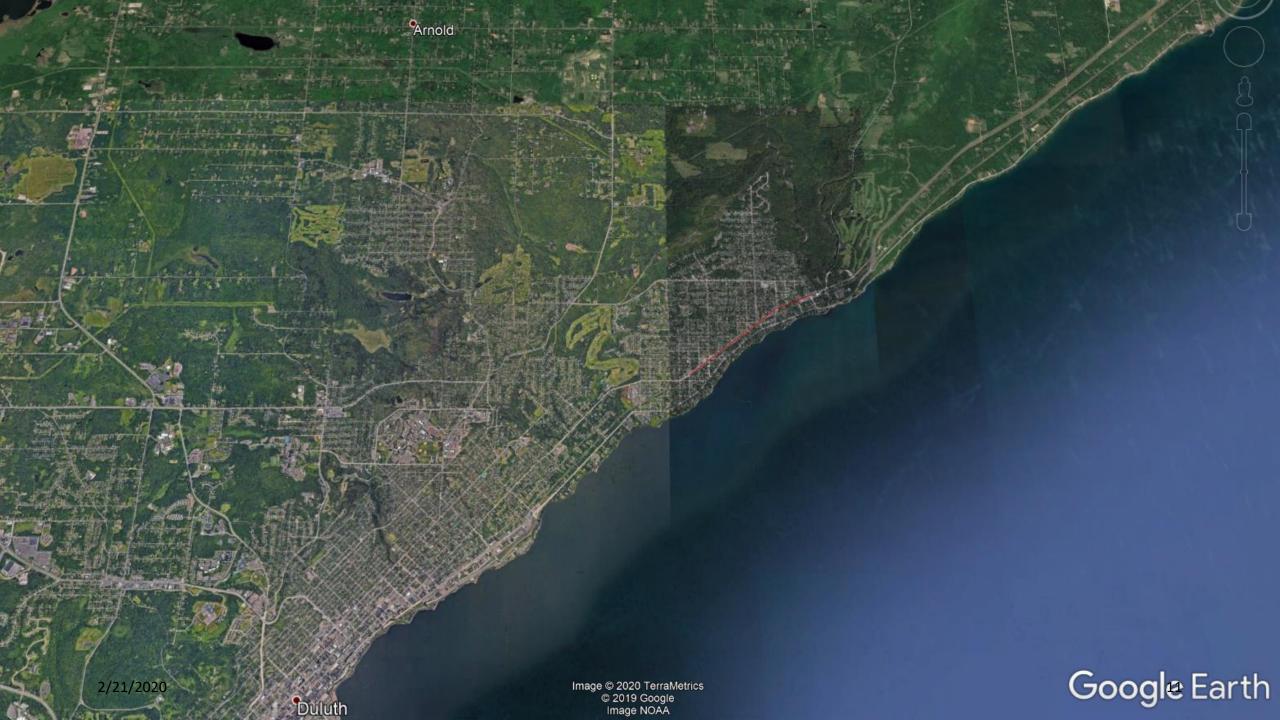
MPO-City of Duluth MSAS 147 (Superior Street)

The E Superior Street Reconditioning Project will consist of a mill and overlay of the bituminous surface between 45th Ave E and 60th Ave E. In addition, storm water system, curb and gutter, sidewalks, and traffic signal system repairs will be made as necessary, and as funding allows. ADA improvements are included in the project.

Federal request: \$1,480,000

Match: \$370,000

Total project cost: \$1,850,000



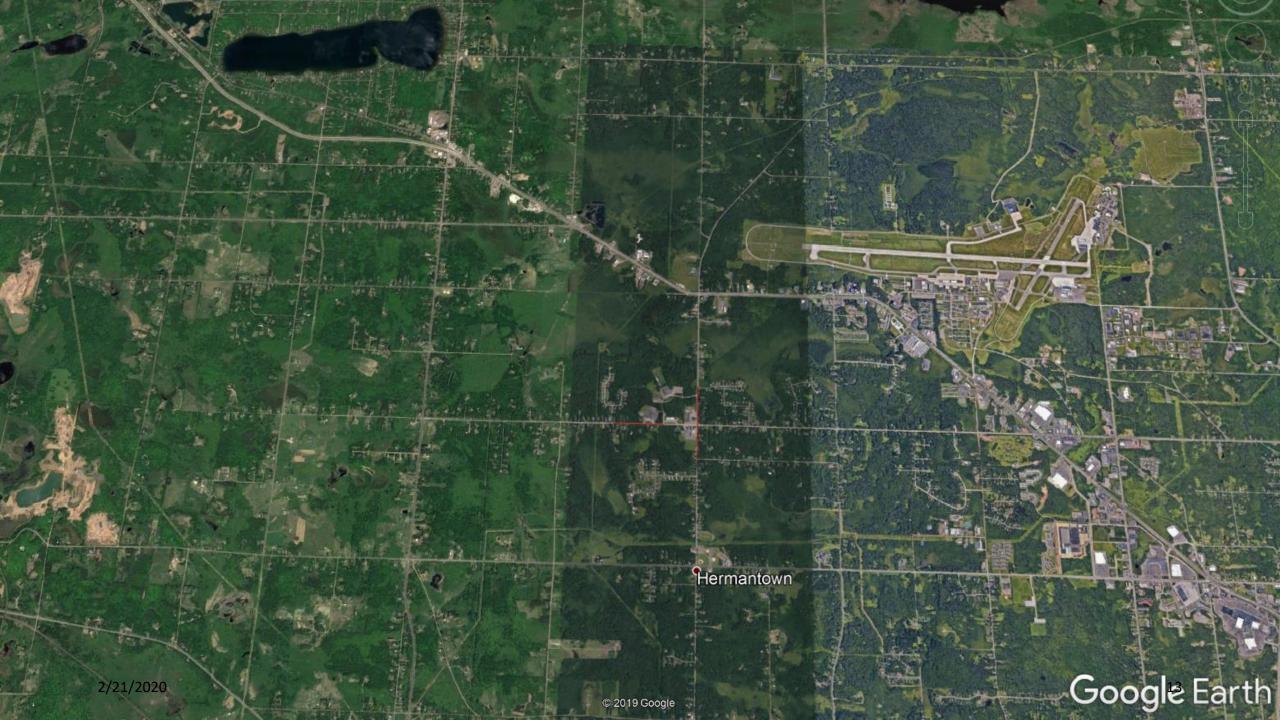
MPO-City of Hermantown MSAS 101 and 104

Intersection Improvements following Traffic Evaluation, Roadway & Surfacing Improvements, Ugstad and Arrowhead Road intersection

Federal request: \$1,480,000

Match: \$1,950,000

Total project cost: \$3,430,000



Washington Avenue(CSAH 16) SAP 009-616-004



CARLTON COUNTY TRANSPORTATION DEPARTMENT FEBRUARY 12, 2020

Washington Avenue

- ▶1954 Grade, Curb & Gutter & Gravel
- ▶1967 Paved
- ▶1981, 1997, 2003 Bituminous Mill & Overlay

Existing Conditions

- ► Cross-Section: 2 12' traveled lanes with 10' paved shoulders, curb & gutter
- Safety Concerns: Pedestrians Middle School built in 2018
- ►Increased Traffic: Middle School & New Kwik Trip
- ► ADT = 5900 vehicles/day

Proposed

- ► Cross-Section: 2 11' traveled lanes with a continuous center turn lane
- Right turn lanes at Southbound 14th, 18th & 22nd Streets
- ▶10' separated Multi-Use trail

Project

- ▶ Bituminous Mill & Overlay, Concrete Shared-Use Path, Storm Sewer, Sanitary Sewer & Water Main.
- Coordination with the City of Cloquet, City of Scanlon, and the Cloquet School District.
- Funding: \$3,232,841
 - City of Cloquet = \$142,721
 - ► City of Scanlon = \$215,425
 - Municipal CSAH = \$1,088,490
 - ► Regular CSAH = \$1,786,205
- ▶ Contractor: Northland Constructors

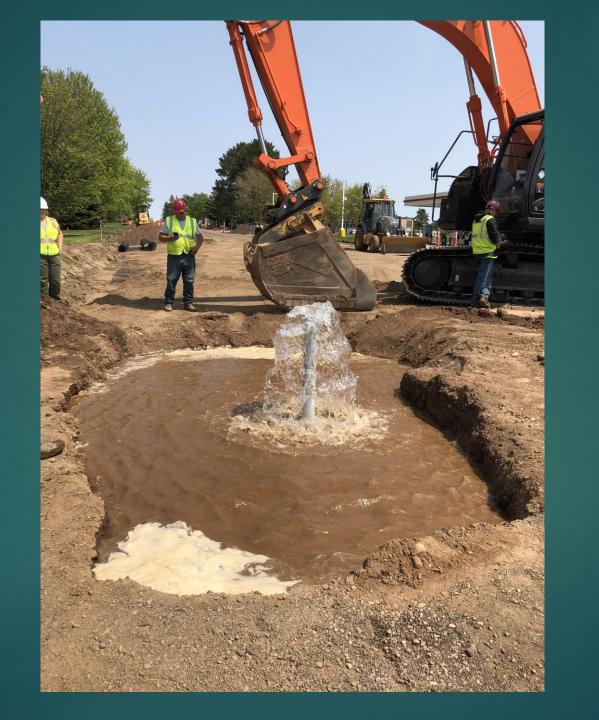
Construction

- ► Contract Construction Period: May 20 September 20, 2019
 - ▶Work between 14th & 22nd Street: June 3
 - August 30, 2019
- ► Actual Construction Period: May 23 October 17, 2019
 - ► Work between 14th & 22nd Street: June 3
 - August 30, 2019









Cohasset -Grand Rapids Corridor Study

Trunk Highway 2, Itasca County

Background



West Edge of Grand Rapids to Cohasset



Was 4 lanes with no center turn lanes



Switched to 2 lanes west bound and one east bound with a center turn lane for one year



Switched to 2 lanes east bound with a center left turn lane



Complaints were occuring

August Traffic Study

Last 2 weeks in August 2019

Alliant Engineering



Turning movements



Traffic counts



Gap analysis



Safety review

Input



Meeting with surrounding landowners/businesses/residents



Meeting with local governments, active living advocates



Meeting with technical staff



Upcoming additional public input opportunity

Local Stakeholders



Concerns about traffic congestion westbound



Unable to safely enter traffic for extended periods of time



Concerned About Excessive speeds



Turning movement confusion/lack of opportunity



Pedestrian crossing safety concerns



Desire for bicycle facility between Cohasset and Grand Rapids

Local Governments and Active Living



Pedestrian concerns



Advocates for bicycle connections



Potential for major new destination



Potential for new school/senior living facilities



Other ideas for trails

Technical Staff



STATE, COUNTY, AND CITY ENGINEERS



CONSULTANT



PLANNERS



CHAMBER OF COMMERCE

Draft Report Details



Intersections operate at overall LOS A



All side-street movements operated at LOS D or better



Each segment of the US 2 is LOS B or better



Gaps: Wait during PM peak hour is between 30 sec. & 1min.

Safety

- 4 lanes no left turn lane = crash rate 1.3
- 2 lanes westbound, 1 eastbound with center left turn lane = .51
- 2 lanes eastbound, 1 west bound with center left turn lane = .38

Notes

- The current configuration may work better because the AM peak, with school and business start times, may cause more congestion than the pm peak, even during summer.
- Long trailer movements onto the Highway are challenging to address.
- Next steps will be to address bicycle connectivity, ped safety, and some potential Highway 2 improvements.



Twin Ports Interchange Reconstruction Project for NE MN ATP



Duane Hill, P.E. | District Engineer – District One February 12, 2020





Project Purpose and Goals



Revised Project Scope

Deferring Component 2

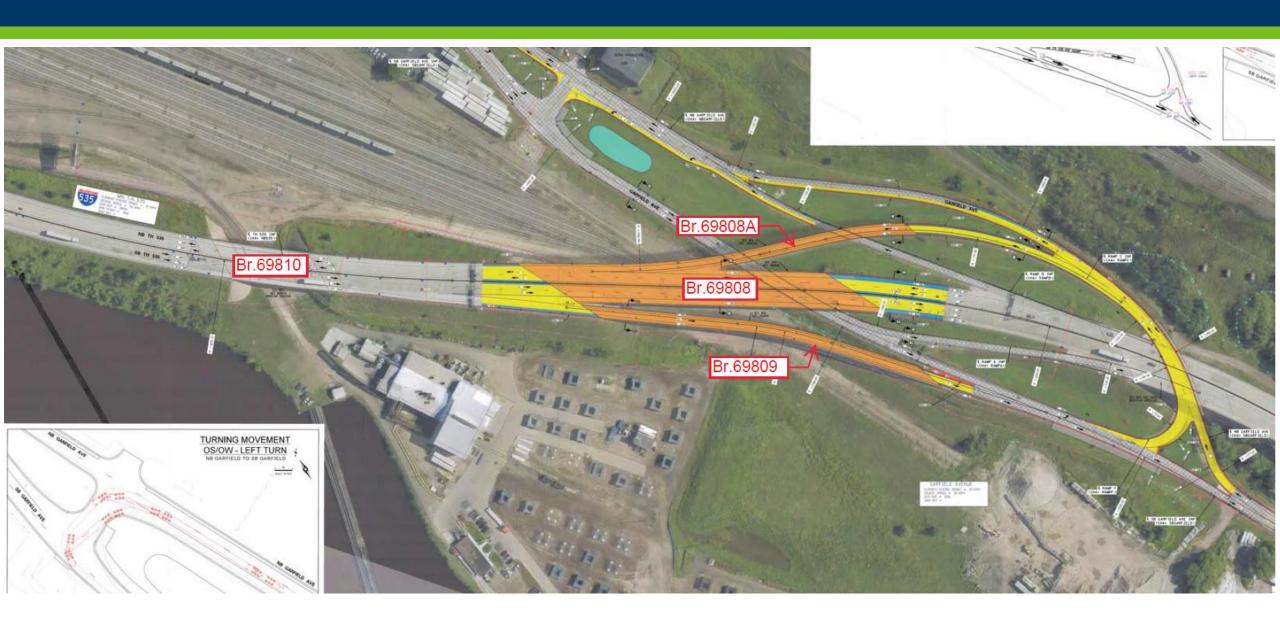
Proceeding with Component 1

Deferring Component 3

Interchange Layout



I-535/Garfield Avenue



Project Purpose/Goals

Enhance safety by eliminating blind merges and left exits

- Moving left exits to the right
- Relocating merges

Replace aging infrastructure

- Reconstructing weight restricted and non-redundant bridges
- Reduces maintenance and closures
- Eliminates some bridge structure

Improve freight mobility

- Allow oversize/overweight freight on the Interstate
- First and last mile to port!





Project Cost

Project Cost

- Budget is currently \$350 M including operating budget for staff.
- TPCE of all work in scope is \$430M-\$500M.
- Reduced Scope TPCE is \$340M-\$390M.





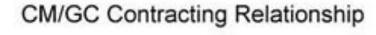
Project Delivery

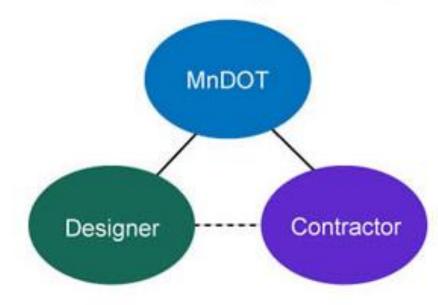
Contracting Methods & Collaboration

- Design-Bid-Build (Traditional Low Bid)
 - No up front collaboration

- Design-Build
 - Collaboration between contractor and designer

- CMGC (Construction Manager General Contractor)
 - Collaboration between owner, contractor and designer BEFORE CONSTRUCTION
 - Contractor: Ames/Kraemer Joint Venture





CMGC Test Programs













WP1 and WP2 Pricing Milestones



- They are staggered
- Work is packaged to benefit the project as a whole, but induces some amount of risk
- Cost certainty for the whole job is needed before work package 1 is executed





Project Challenges

What are some of the Cost Drivers?

- Local Street and Utility Work
- Coffee and Miller Creek culvert replacement
- Contaminated soil and water

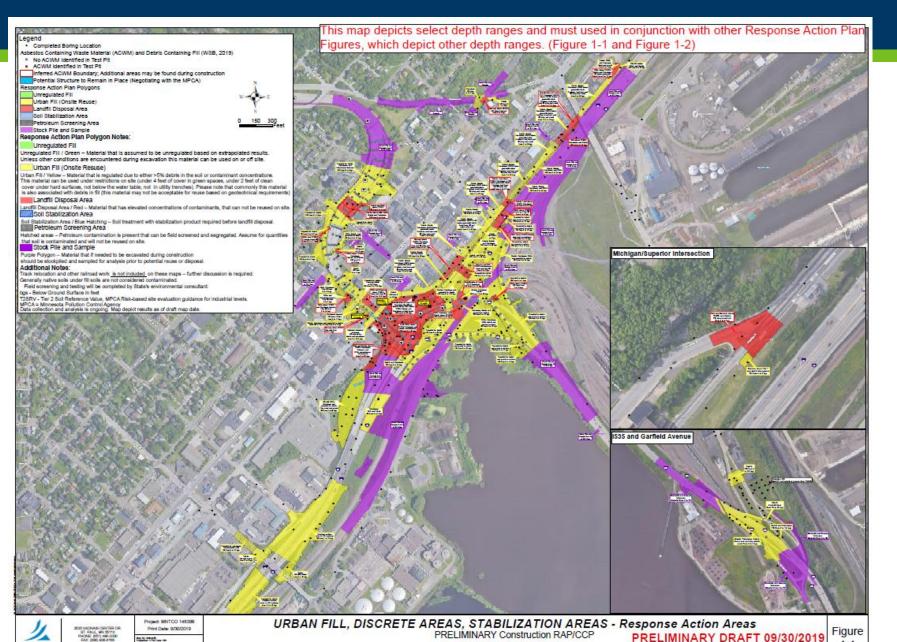
Lower Michigan Street Utilities



Miller and Coffee Creek Realignment

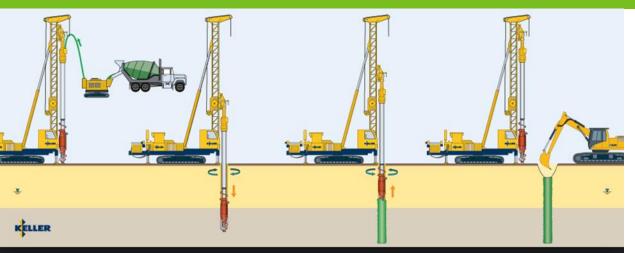


Contamination



- Red to landfill
- Yellow can be re-used if there is an engineering purpose and there is no debris in it.
- Magenta not able to drill, or not drilled yet.
 Stockpile and test during construction.

Foundations/Ground Improvements



Load Transfer

embankment

Poor

• Column or Pile Supported Embankment



Foundations/Ground Improvements –Test Section



Other - Temporary Fiber and Freeway Cameras - City of Duluth Utility Relocations - Piedmont Ave & N 24th Ave W Temporary Signal - WLSSD Sanitary Sewer Crossing I-35 at 26th Michigan St & Superior St Intersection Temporary Rechannelization 1 1st St & Piedmont Ave Storm Sewer Relocation and Temporary Paving to Support Option 3 W Railroad St & Garfield Avenue Temporary Signal Removal Bridge 69905 Bridge 69902 Footings and Girders I-35, I-535 Bridge Removals Track Relocation Miller/Coffee Creek Temporary Pavement for Staging Option 3 I-35 Profile Correction Temporary Ramp Widening 27th Ave W Bridge Replacement & Crossovers on I-35 (South of 27th, North of 27th, North of Garfield) I-535/Garfield **Bridge Demolition**

Work Package 1 Details

- Spring 2020 Spring 2021
 - 27th Ave W. Bridge replacement
 - Lowering the profile (hump) of 135 for improved sight distance
 - Bridge removals/construction
 - Lower Michigan Street Storm
 Sewer relocation and bypass
 - W. 1st Street & Piedmont Ave
 - Temporary widening of Garfield Interchange off ramp
 - Garfield bridge removal

rner Removal of SB I-35 Bridges 69881, 69881N Removal of TH 53 Bridges 69802B Removal of Work Package 1 Temporary Pavement and Traffic Mitigation Measures Ground Improvements and Retaining Walls ITS Components Signing and Striping Lighting Dynamic Message Bridge 69910 Stormwater Pond Bridge 69904 Realign 22nd Ave W & Reconstruct Local Roads Under TH 53 Reconstruct I-535 Lift Station Bridge 69902 Traffic Signal Stormwater Pond Reconstruct Stormwater Reconstruct Garfield Ave & I-535 Interchange Bridge 69808A

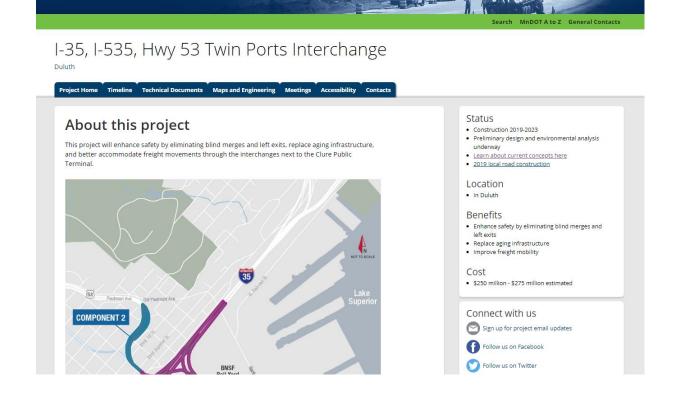
Work Package 2 Details

- Spring 2021 Fall 2023
 - Majority of staged bridge removals and construction
 - Storm water pond construction
 - Ground improvements and retaining walls
 - Restore areas surrounding US53 bridges
 - Lighting and ITS Components

Questions?

DEPARTMENT OF TRANSPORTATION

- Check out the project website for more information. Google "Twin Ports Interchange"
- Contacts:
 - Patrick Huston, D1 Major Projects Engineer
 - Roberta Dwyer, TPI Project Manager







Duluth-Superior Long-Range Transportation Plan



NE MN ATP Meeting February 12, 2020

What is the MIC?

Metropolitan Interstate Council

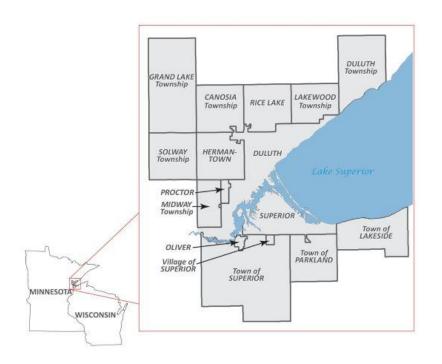
Metropolitan Planning Organization (MPO) for the

Duluth-Superior area

Federally designated

641 square mile area

Obviously, the MIC and ATP have much different geography



MPO Priorities ...

Are set in their approved LRTPs

Are implemented through:

- Annual Workplans
- Transportation Improvement Program (TIP)



Introducing

Sustainable Choices 2045

Approved By MIC Board October, 2019



Extensive Public Input & Involvement

78 public engagements (committee and board meetings, consultations, stakeholder meetings, open houses, public events)

262 comments from stakeholder meetings and consultations

Nearly 1600 responses to the dot surveys

542 participants in MetroQuest phase 1

275 participants in MetroQuest phase 2

299 open comments from MQ phase 1 page 3

909 markers and 623 comments on the MQ phase 1 interactive map

108 comments received & responded to on Draft LRTP



Bottom Line

There are many needs & wants, but limited resources.

We must make wise, sustainable choices.



Sustainable?

Financially

Socially

Environmentally

Planning Perspectives Basis of the 5 LRTP Goals

Moving People & Goods

Supporting Economic Vitality

Creating Livable & Equitable Communities

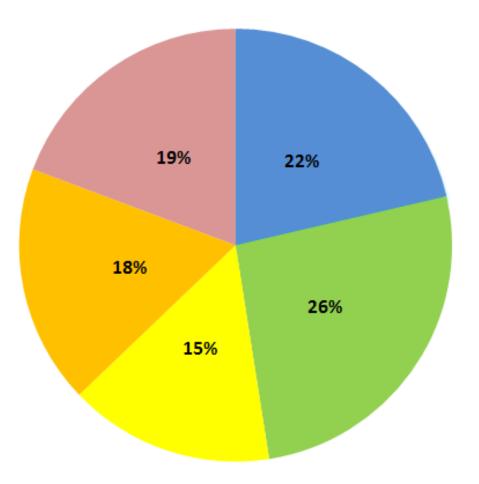
Protecting the Environment & Promoting Public Health

Improving Safety



Balance Is Desired

What Transportation Issues Matter Most?



Results of Dot Surveys at 5 public events in 2018 (n = 843) and 2018 MetroQuest Phase 2 survey results (n = 748)

- Supporting Great Places & Neighborhoods
- Health of People & the Environment
- Building the Economy
- Moving Fast & Efficiently
- Reducing Injuries & Crashes

Reminded that we have many needs but limited resources, people were given three dots and asked to place them under the planning perspectives they believed our transportation resources should be directed towards.

Duluth-Superior Metropolitan Interstate Council (MIC) January, 2019

Moving Forward

Keys of Sustainable Choices 2045

- Achieve integrated balance beyond just safety and efficient movement of vehicles
- Greater emphasis on sustainability ultimate goal of a fully sustainable transportation system
- Ongoing implementation strategy including evaluation of progress towards meeting the plan's goals & objectives

Comments? Questions?

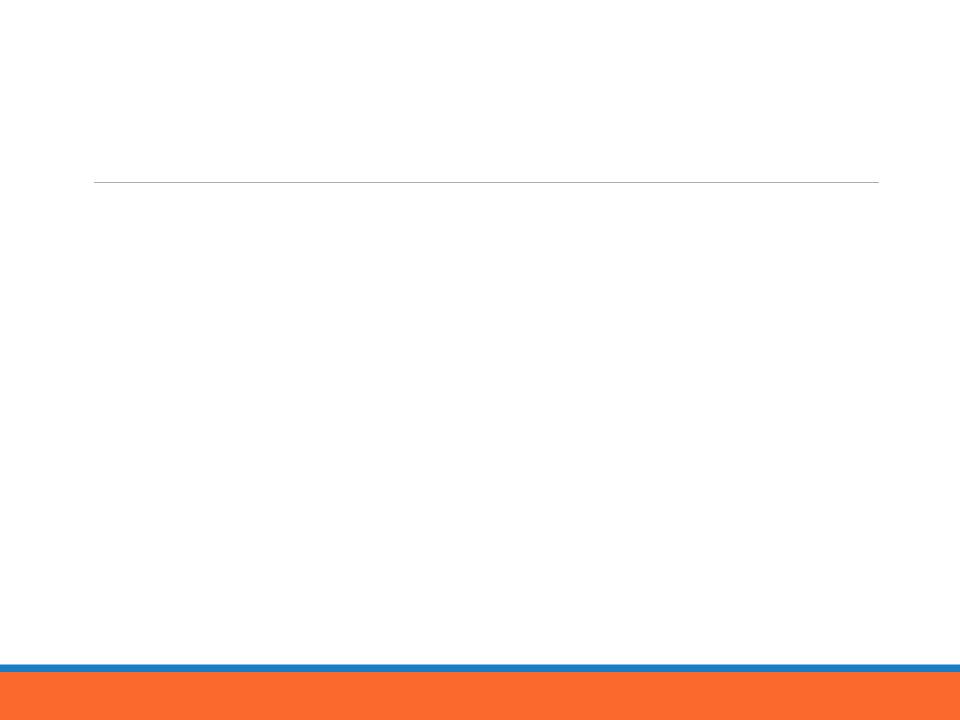




Mike Wenholz

mwenholz@ardc.org

dsmic.org/planning/long-range



Plan Goals

Goal 1

Promote public health and energy conservation, and protect and enhance the environment through responsible Duluth-Superior area transportation system policies and design

(3 Objectives)

Goal 2

Ensure the Duluth-Superior area transportation system supports the development and maintenance of a safe, healthy, and connected community that provides opportunities and choices for people of all ages, incomes, and abilities

(6 Objectives)

Goal 3

Ensure the safety and security of the Duluth-Superior area transportation system for all users and modes, including being prepared to handle emergencies and disasters

(6 Objectives)

Goal 4

Ensure the DuluthSuperior area
transportation
system is an
integrated
multimodal
network that
supports people
and goods getting
to where they
need to go in an
efficient manner

Goal 5

Develop and maintain the Duluth-Superior area transportation system to support economic productivity and competitiveness, including tourism

(7 Objectives)

(6 Objectives)



Setting the Stage

KEY CURRENT CONDITIONS



Our Many Transportation Assets



Infrastructure Costs Continue to Rise

"... highway construction costs rose 66% between 2003 and 2016." *

* = Long, Elliott. 2017. Soaring Construction Costs Threaten Infrastructure Push. Progressive Policy Institute, Washington DC. 13 pp

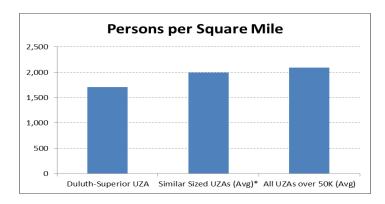


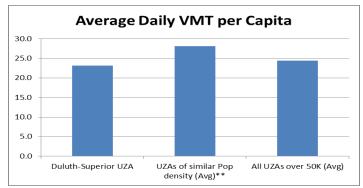
Compared to Similarly-Sized Cities We ...

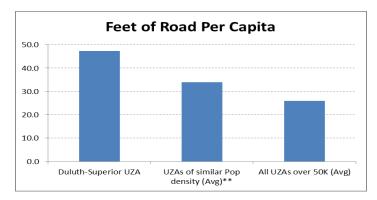
have fewer people,

drive less,

but have much more road.







We Have Limited Traffic Congestion

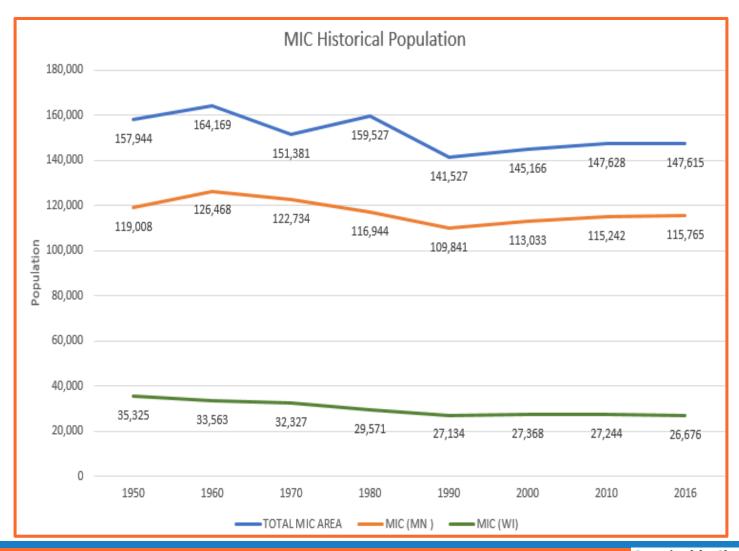
Majority of roads operate well below capacity

Congestion on a few corridors & intersections

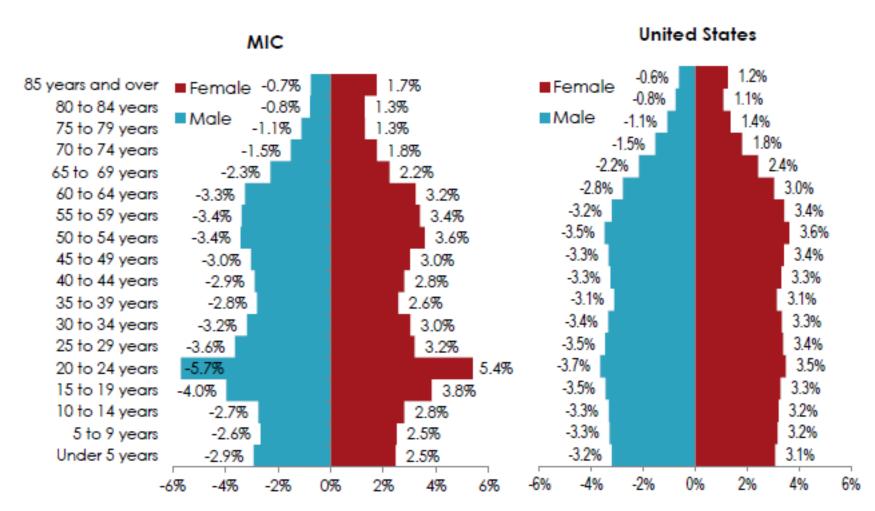
Some congestion during peak hours & events



Population Not Growing



Aging Population



Source: ACS (2015).

Poverty is a Real Issue & Concern

18% of the total MIC area population is below poverty

Summary – The Issues

Decreasing Tax Base

Sustainable Funding Problem

Likely Shift in Transportation Needs & Options

What does a sustainable transportation system look like?

Considers & Works for Everyone
Is Affordable
Has a Reliable Funding Source
Right Size – Not Overbuilt
Creates Wealth
Supports Economic Vitality
Safe
No Environmental Problems
Supports Livable Neighborhoods