



## TRANSPORTATION FOCUS GROUP

Meeting 2: Data Review and Policy Development



## Agenda

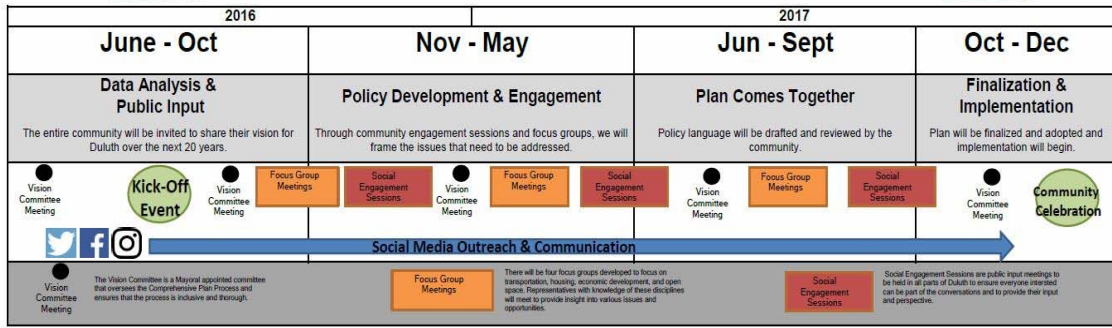
- ▶ Welcome & Introductions
- ▶ Brief Overview - Timeline & Process
- ▶ \*Activity\*
- ▶ Transportation Research
- ▶ Discussion
- ▶ Wrap-up & Next Steps



## Timeline & Process



### Comprehensive Plan 2035 Timeline



## Activity



## Research Questions

- ▶ Does the City's road and bicycle infrastructure meet user needs? Describe. How does Duluth compare to other communities of a similar size?
- ▶ Do existing transportation modes equally serve all residential neighborhoods? Does infrastructure availability follow population density?
- ▶ What percentage of the population is within a quarter mile of the transit system and do the most frequent run times or routes match this population?
- ▶ Is there sufficient area for growth of water borne industry and transportation logistics within current footprint of harbor/port area?
- ▶ Do we have trail connections for pedestrian and bike access to job centers, neighborhoods, and recreation areas?
- ▶ Where are there gaps or deficiencies in the pedestrian and bicycle networks?
- ▶ What new transportation opportunities and practices should we consider given our steep hills and varied topography?
- ▶ Do we fully utilize the capacity of the air and rail modes of transportation that serve the community?
- ▶ Does our existing transportation network adequately connect to neighboring communities and our region?
- ▶ How can we create a transportation network that maximizes financial investment and minimizes future maintenance costs?
- ▶ Do our current land use patterns support multimodal transportation?
- ▶ How will development of passenger rail impact the need for improved pedestrian systems?
- ▶ How can we reduce parking and traffic thru-put in Canal Park to best allow for new tourism development?
- ▶ What level of frequency should a model transit system consider for growing ridership?
- ▶ Are the streets within the City at or near traffic capacity? Where might LOS (Levels of Service) be compromised with additional density in development?

## Roads

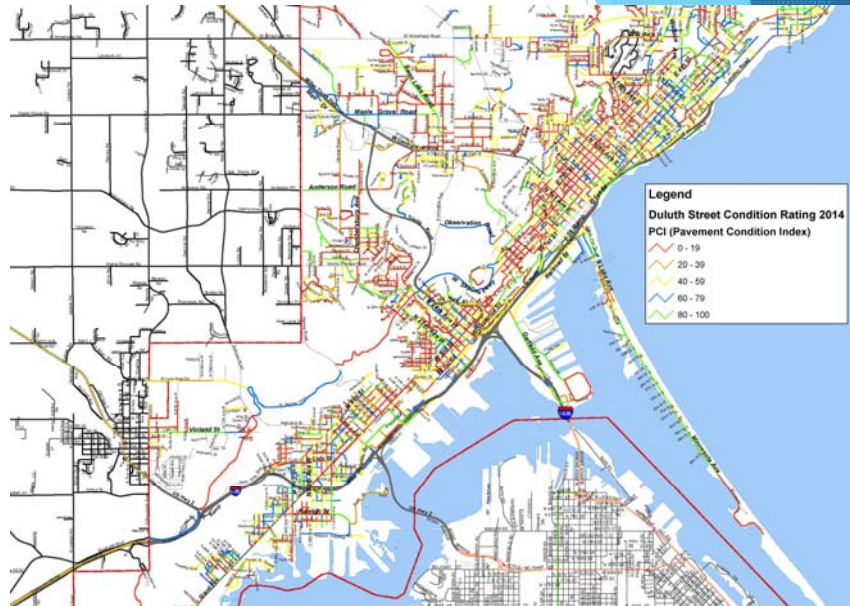
- ▶ Roads:
  - ▶ Congestion
    - ▶ Selected pinch-points with 2040 projection
    - ▶ Remainder of roads: free flowing or limited congestion
  - ▶ Congestion limits autos and buses, but not bicycles or pedestrians
  - ▶ *Policy suggestion:* May want to consider ways to ease congestion or increase alternative transportation





## Roads

- ▶ Roads:
  - ▶ Congestion
  - ▶ Condition
    - ▶ Road condition affects all users
    - ▶ Routine maintenance at a certain point can extend life span - not always best to fix the worst first
    - ▶ *Policy suggestion:* How do we prioritize roads to address?
    - ▶ *Infrastructure funding is key*



## Roads

- ▶ Roads:
  - ▶ Congestion
  - ▶ Condition
  - ▶ Safety
    - ▶ Safety affects all users
    - ▶ Severity of crashes, plus accident frequency (if greater than typical for type of road)
    - ▶ Intersections = conflicts
    - ▶ Duluth is relatively safe and low speeds contribute to fewer severe accidents
    - ▶ Intersections to be addressed noted in Long Range Transportation Plan and Transportation Systems Management Plan
    - ▶ MnDOT policy: Towards Zero Deaths

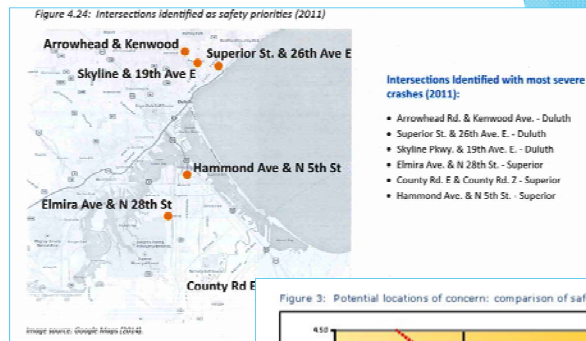
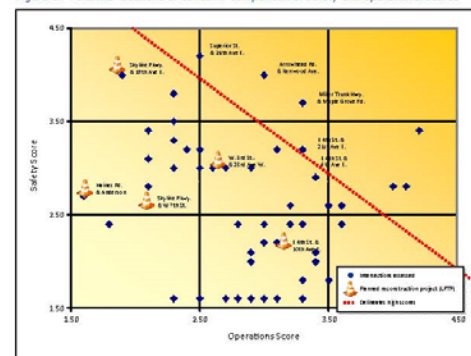
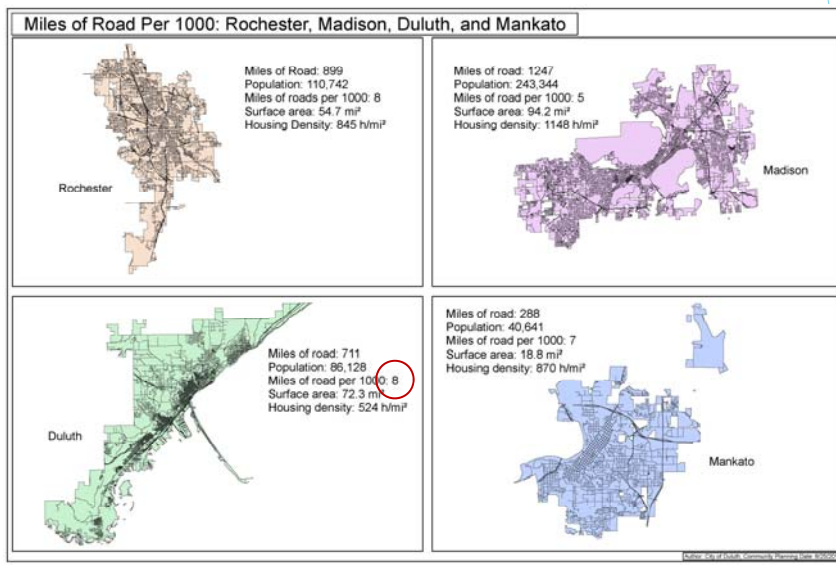


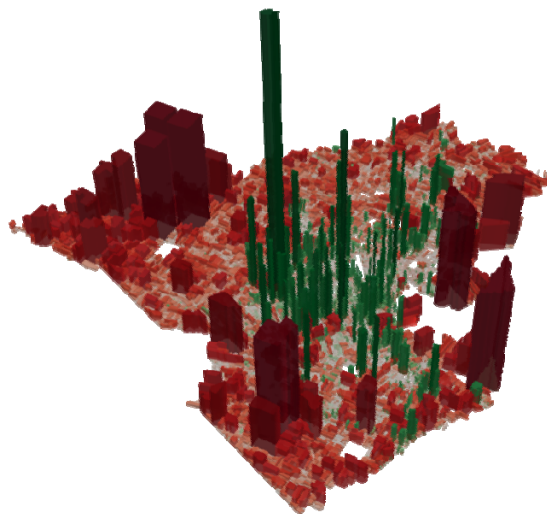
Figure 3: Potential locations of concern: comparison of safety and operational scores



## Roads

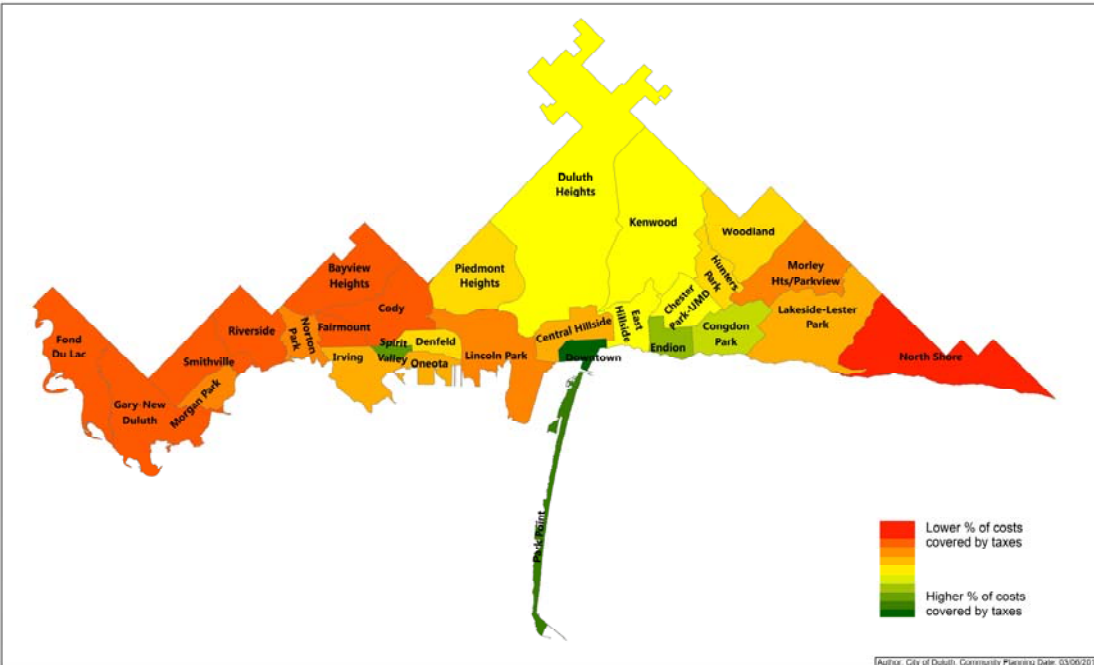


## The Example of Lafayette

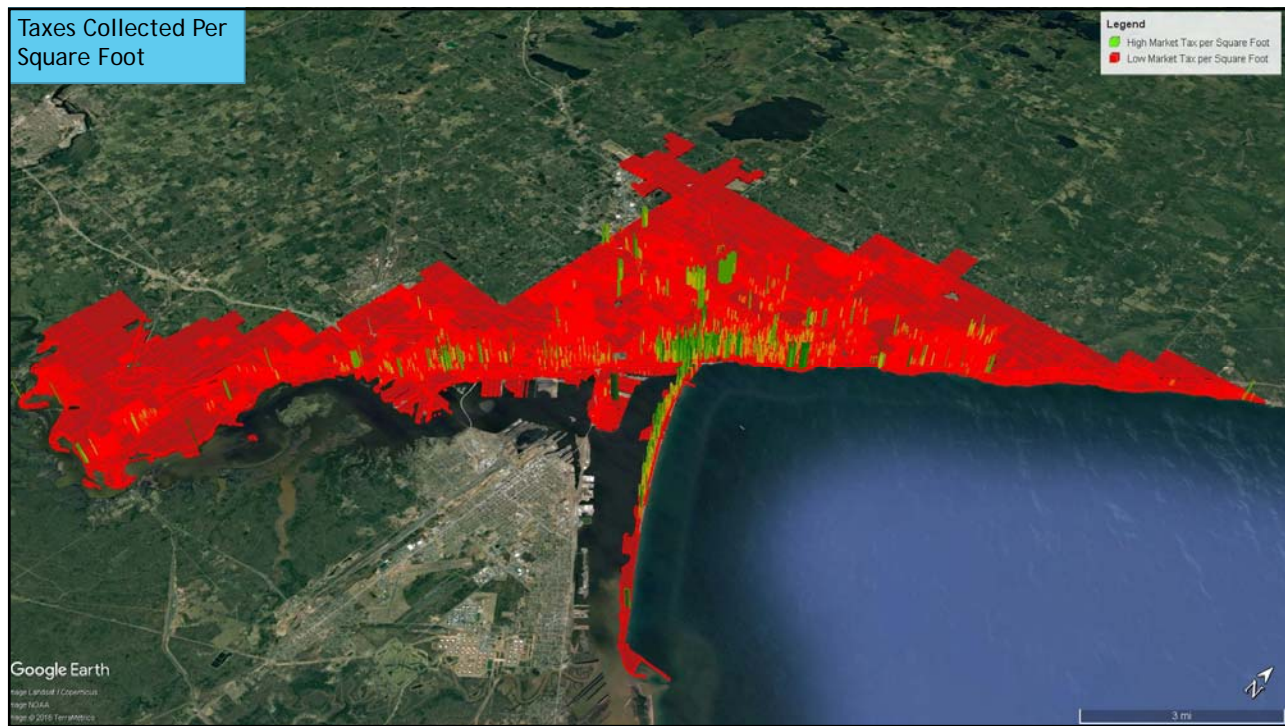


\$23.43

Relative Infrastructure Costs Covered By Taxes







## The hill ...



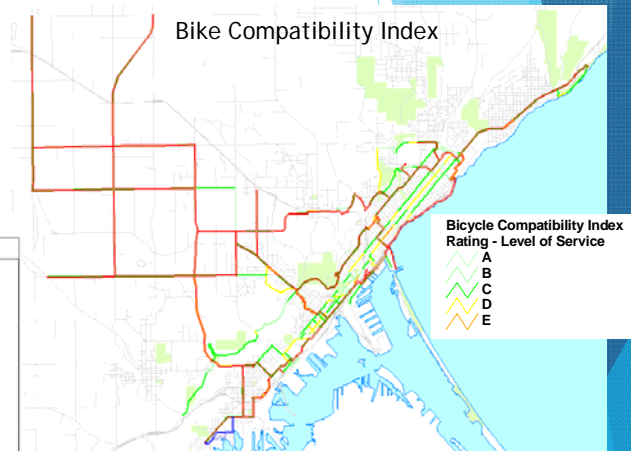
## Bike Transportation

- ▶ Need for connected network
  - ▶ *Policy suggestion:* complete the network
- ▶ Safety and comfort of people on bikes
  - ▶ Bike Compatibility Index
    - ▶ Developed FHWA; analysis done in 2002
    - ▶ New model developed since - "level of stress"

Commuting Bike Infrastructure in Duluth



Bike Compatibility Index

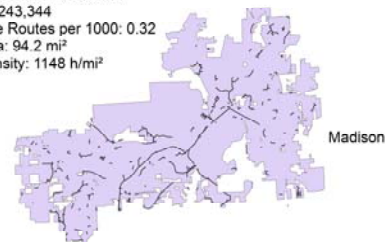


Commuting Bike Infrastructure Per 1000: Rochester, Madison, Duluth, and Mankato



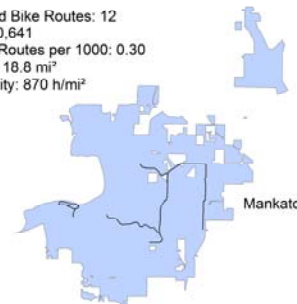
Miles of Paved Bike Routes: 94  
Population: 110,742  
Miles of Bike Routes per 1000: 0.84  
Surface area: 54.7 mi<sup>2</sup>  
Housing Density: 845 h/mi<sup>2</sup>

Miles of Paved Bike Routes: 77  
Population: 243,344  
Miles of Bike Routes per 1000: 0.32  
Surface area: 94.2 mi<sup>2</sup>  
Housing density: 1148 h/mi<sup>2</sup>



Miles of Paved Bike Routes: 24.3  
Population: 86,128  
Miles of Bike Routes per 1000: 0.28  
Surface area: 72.3 mi<sup>2</sup>  
Housing density: 524 h/mi<sup>2</sup>

Miles of Paved Bike Routes: 12  
Population: 40,641  
Miles of Bike Routes per 1000: 0.30  
Surface area: 18.8 mi<sup>2</sup>  
Housing density: 870 h/mi<sup>2</sup>

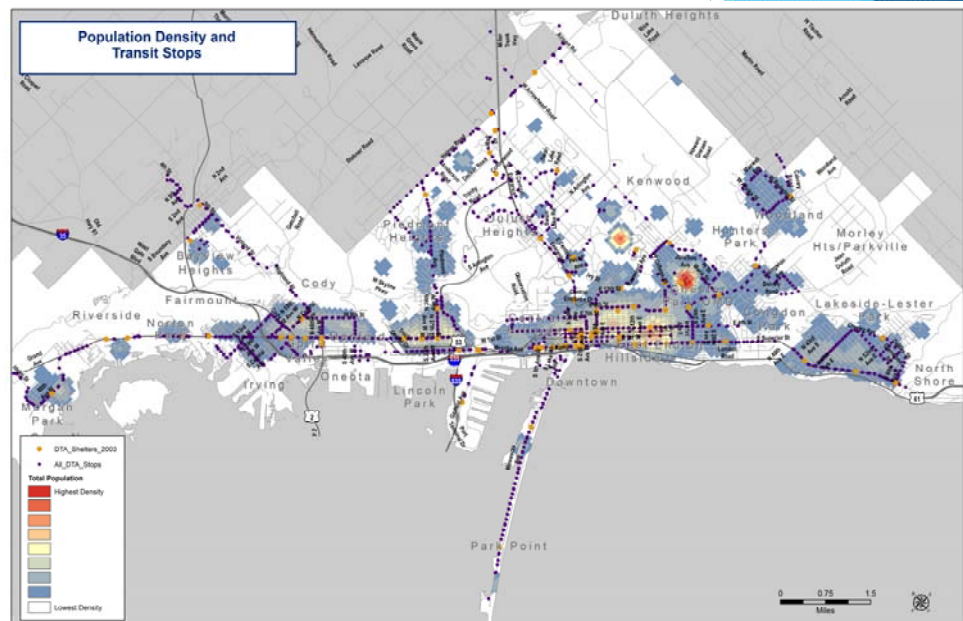


Author: City of Duluth, Community Planning Dept. 03/08/2017

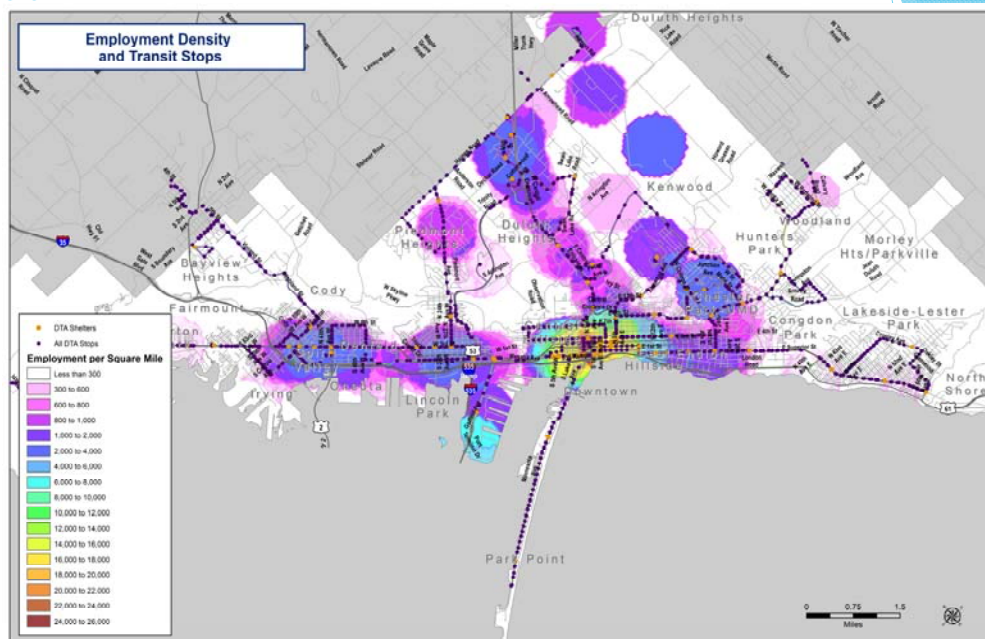


## Transit

- ▶ Correlates with population density
- ▶ Frequency?
- ▶ Destinations?



## Transit







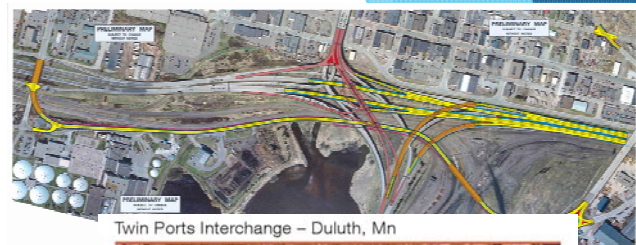
## Duluth-Superior Port Area

- ▶ The Port of Duluth-Superior consists of 19 square miles of land and water with 17 miles of dredged shipping channels.
- ▶ A priority of the Duluth-Superior Port Plan is to ensure the protection of industrial land from encroaching non-compatible uses.
- ▶ Duluth Port Authority Logistics
  - Beyond port area - Waseca Industrial area, US Steel site
  - Distribution of products
  - Road and rail - connectivity to local processing
  - Increase in truck traffic
  - Access to highway
  - Container cargo - multimodal transport
  - Value added services - 4 railroads, Truck accessible



## Twin Ports Interchange

- ▶ Local connection from the Garfield Avenue/Railroad Street intersection to the end of Courtland Street.
- ▶ Connection will allow Over Sized and Over Weight loads to have direct access between the Clure and I-35 south of the interchange,
- ▶ Eliminating the need for OSOW loads to travel through the Lincoln Park Business District on Superior Street.
- ▶ Provide better freight access for the businesses located along the harbor north of Garfield Avenue.
- ▶ Connection provides a secondary access route for freight deliveries to the Western Lake Superior Sanitary District (WLSSD) sewage treatment plant and will allow reconstruction of the 27th Avenue West interchange.
- ▶ It will also serve as a multi-use corridor for bicycle and pedestrian access to one of the only undeveloped segments along the harbor near the confluence of the St. Louis River and Miller Creek.



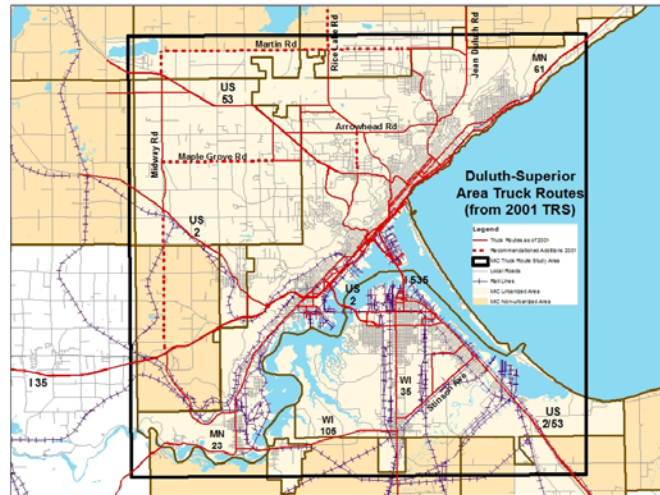
Twin Ports Interchange – Duluth, Mn





## Truck Route/Freight Study

- ▶ Federal - Fast Lane grant for Interchange
- ▶ Minnesota DOT Freight Plan
- ▶ Duluth Seaway Port goods movement
- ▶ MIC updating Truck Route network



## Northern Lights Express

- ▶ Offer fast service between Minneapolis and Duluth
- ▶ Provide a safe and reliable travel alternative to serve business and tourism.
- ▶ Previous cost estimates approached \$ 1 billion dollars
- ▶ Estimated total cost to implement NLX is between \$500 to \$600 million.
- ▶ **Next Steps**
  - Project and operating cost estimates will be updated
  - Completion of preliminary engineering
  - Tier II Environmental Assessment
  - Financial Plan and Implementation Plan
  - NLX Service could begin as early as 2020
- ▶ Wayfinding
- ▶ Local transportation connections (bus, uber)



## Discussion Questions

- ▶ Prioritizing road improvements
  - ▶ Roads that are also transit lines?
  - ▶ Roads that carry a higher volume of traffic?
  - ▶ Address roads that need maintenance now to extend lifespan?
- ▶ What policies would reduce overall/long-term transportation and infrastructure costs?
  - ▶ Narrower roads? Different road standards?
  - ▶ Promote transit, bicycling, walking
  - ▶ Change land use patterns
- ▶ What transportation improvements will best serve the city of Duluth?
- ▶ What policies should we consider when thinking about transportation related to the governing principles?
- ▶ What strategies would increase revenue?
  - ▶ Incremental investments to increase property values in certain neighborhoods