



# Minnesota Statewide Freight System Plan

Minnesota's Multimodal Freight Network (MFN)  
Ad Hoc Working Group Meeting #3  
February 26, 2015

We all have a stake in **A  B**



# Agenda

- ▶ Welcome and Introductions
- ▶ Recap of Meeting #2
- ▶ Continue to Discuss the Multimodal Freight Network
  - Designation criteria
  - Application
- ▶ Next Steps...one more meeting?



# Recap of Meeting #2



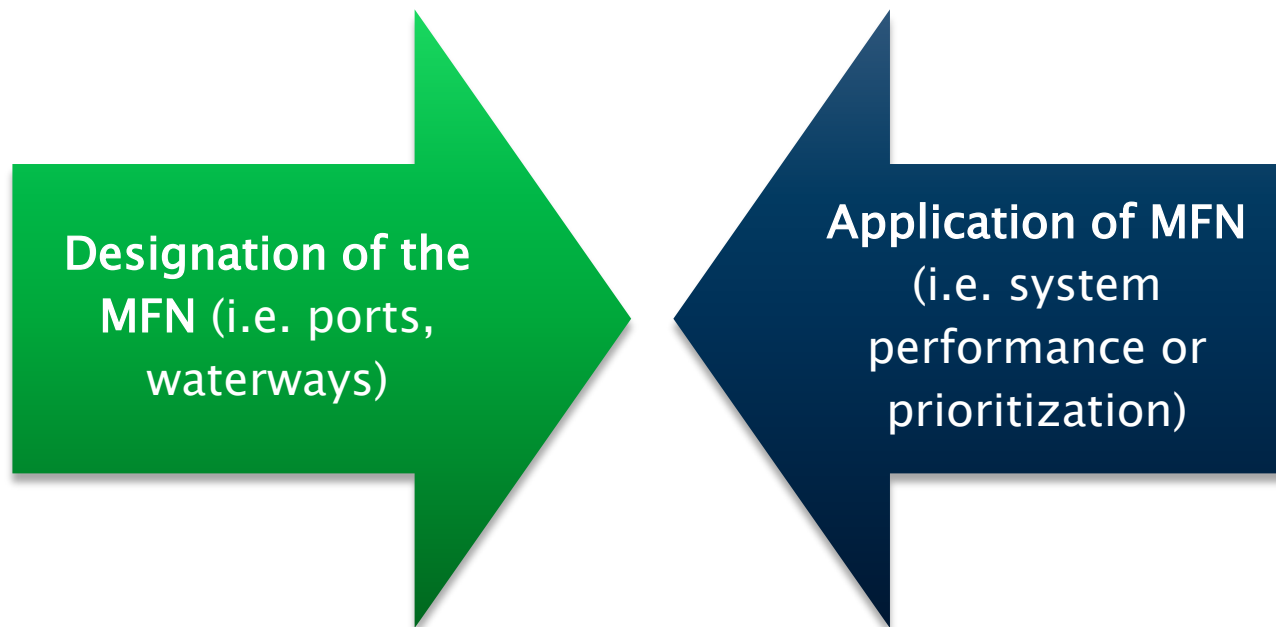
# Meeting #2 Summary

- ▶ Reviewed MN's various roadway networks in combination with industry location information
- ▶ Received group consensus on the highway component of Minnesota's Multimodal Freight Network (MFN)
  - Enhanced NHS, including NHS Intermodal Connectors
- ▶ FHWA Intermodal Connector criteria could be used as a starting point to designating freight facilities
  - Is using only this criteria adequate?
- ▶ Group interest in discussing how the network will be ***used***, to inform what components should be designated beyond the highway system



# Multimodal Freight Network *Designation and Application*

*We are working through an iterative process*



# Minnesota Multimodal Freight Network



# Where are we in this process?

## ► Highway Network

- ✓ General agreement on network – Enhanced NHS, including NHS Intermodal Connectors
- Discuss potential applications

## ► Non-Highway Network Components

- Continue discussion of **facilities** and potential applications
- Initiate discussion of **corridors** (rail and water corridors) and potential applications



# Application Considerations

- ▶ Several potential applications are viable for the MFN
- ▶ Some will be relatively easy to implement
- ▶ Others will require significant administrative coordination and funding
- ▶ Potential applications grouped into three Tiers

*We will not determine the final application.  
We will provide our thoughts to leadership for  
further consideration.*



# Highway Network



# Tier 1 Applications

- ▶ Track Freight System Activity
- ▶ Monitor Freight System Performance
- ▶ Marketing and Economic Development

*\*Refer to handout for more detailed information*



# Tier 2 Applications

- ▶ Prioritize System Needs
- ▶ Receive Prioritization During Project Selection and Funding
- ▶ Align with Freight-Specific Funding Source
- ▶ Bicycle and Pedestrian Considerations (Complete Streets)
- ▶ Provide Access to Intermodal Facilities

*\*Refer to handout for more detailed information*



# Tier 3 Applications

- ▶ Apply Different Design Standards
- ▶ Apply Higher Maintenance Standards

*\*Refer to handout for more detailed information*



# NHS & NHS Intermodal Connectors

<i>Should the MFN be used to ...</i>	<i>YES</i>	<i>NO</i>	<i>COMMENTS*</i>
To track freight system activity	X		Tier 1
To monitor freight system performance	X		Tier 1
To identify and prioritize system needs	X		Tier 2
To have different design or accessibility standards?	X		Tier 2
To have different (higher) maintenance standards?	X		Tier 3
To receive priority consideration during project funding?	X		Tier 3
To be aligned with dedicated freight funding source?	X		Tier 2
To be considered as part of Complete Streets planning?	X		Tier 2

*\*Refer to handout for more detailed information*



# Non-Highway Network Components

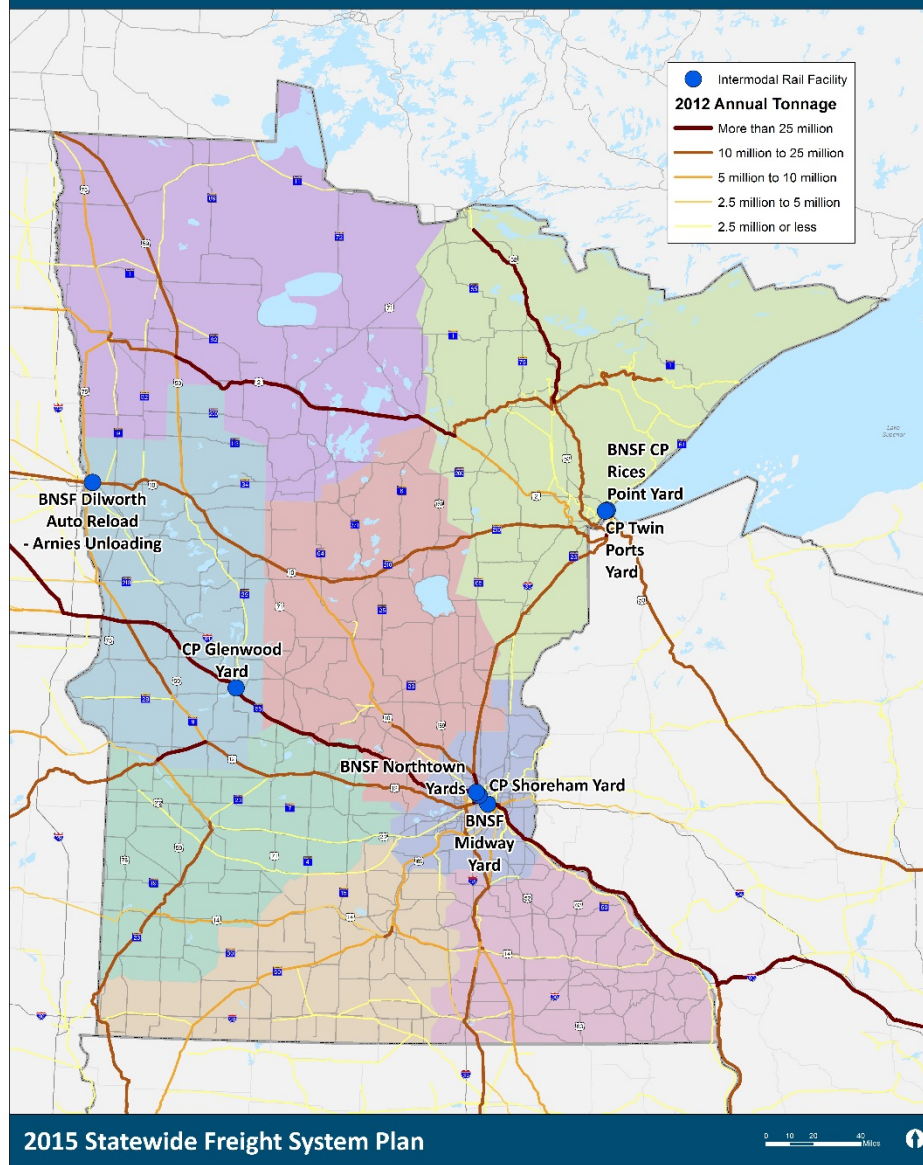


# Non-Highway Network Components

- ▶ Continue discussion of ***facility*** criteria
  - ▶ Rail facilities, airports, and water ports
- ▶ Discuss potential applications of designation
- ▶ Initiate discussion of ***corridor*** criteria
  - Rail and water corridors
- ▶ Discuss potential applications of designation



## Rail Facilities

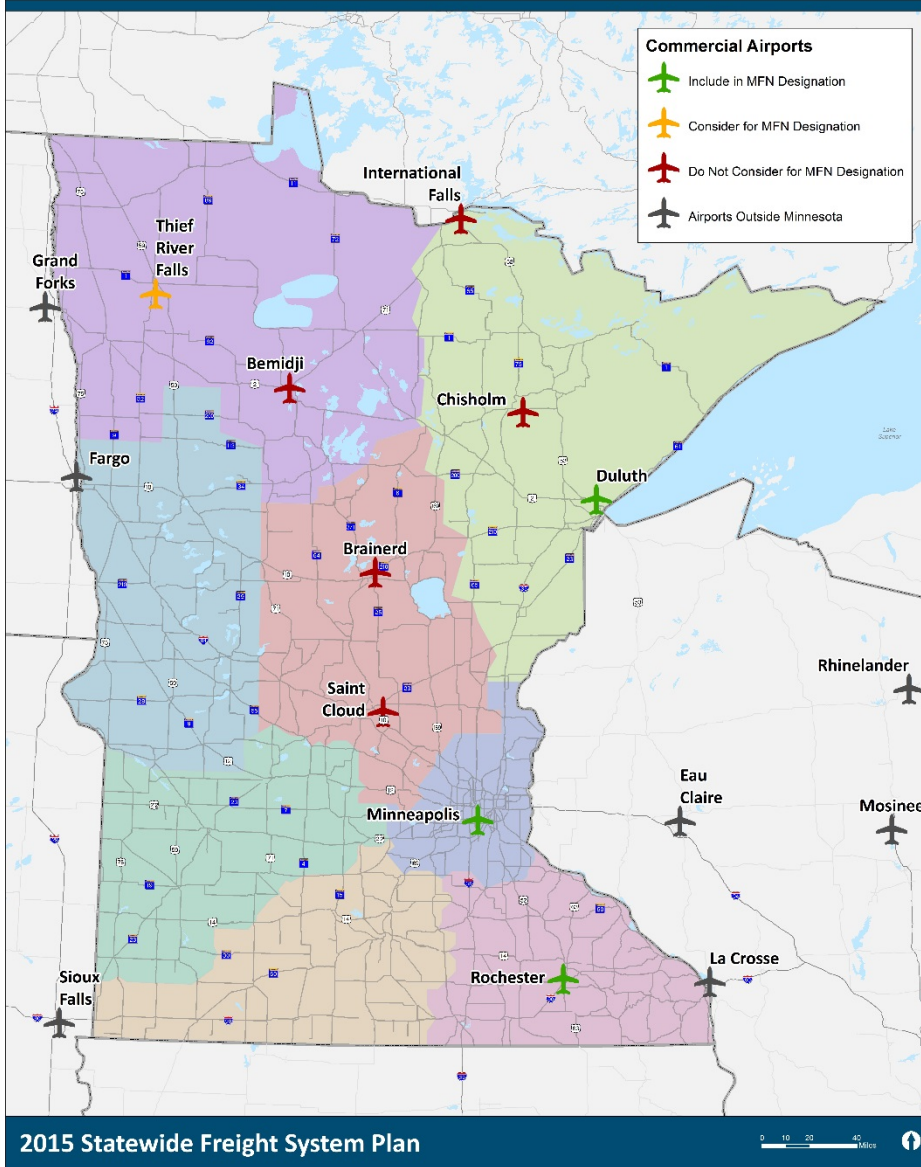


# Rail Facilities Criteria

Meets NHS Intermodal Connector Primary Criteria  
 Meets NHS Intermodal Connector Secondary Criteria  
 Meets MFN Criteria #1 or #2

Rail Facilities	NHS - Primary Criteria	Businesses within 5-Mile Radius	Sales Volume within 5-Mile Radius
	100 Trucks/Day or 50,000 TEUs/Year		
Dilworth (BNSF)	HCAADT on adjacent highways is 830 (US10)-1150(MN336)[1]	34	\$ 1,085,766,000
Glenwood Yard (CP)	HCAADT on adjacent roadway is 445 (MN28)	10	\$ 159,656,000
Midway Yard (BNSF)	HCAADT on access roads not available. Midway handles container traffic	601	\$ 31,623,028,000
Northtown Yards (BNSF)	According to FHWA's Interactive Map, University Ave is a MAP-21 intermodal connector	558	\$ 24,729,654,000
Rice's Point Yard (BNSF/CP)	According to FHWA's Interactive Map, Port Terminal Drive a MAP-21 intermodal connector	120	\$ 2,644,995,000
Shoreham Yard (CP)	According to FHWA's Interactive Map, University Ave is a MAP-21 intermodal connector	623	\$ 25,457,957,000
Twin Ports Yard (CP)	HCAADT on Oneota St not available. On I35, HCAADT is 1,950	122	\$ 2,723,470,000





## Airports



# Airport Criteria

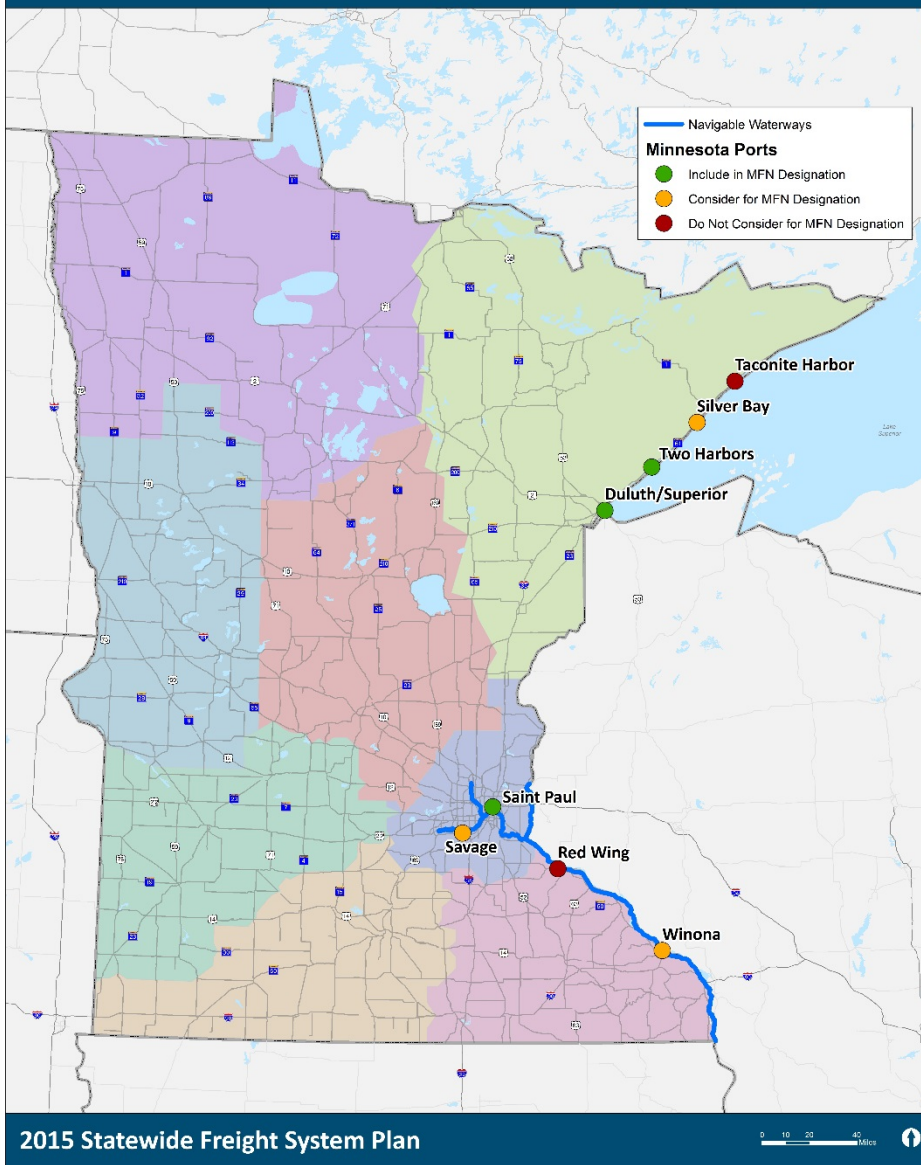
Meets NHS Intermodal Connector Primary Criteria  
 Meets NHS Intermodal Connector Secondary Criteria  
 Meets MFN Criteria #1 or #2

Airport Facilities	NHS - Primary Criteria		MFN Criteria			Businesses within 5-Mile Radius		Sales Volume within 5-Mile Radius	
	Passengers—more than 250,000 annual enplanements.	Cargo—100 trucks per day (each direction) or 100,000 tons per year arriving or departing by highway mode.	Consider for MFN Designation?	Criteria 1: Regional significance (Volumes, commodities, etc.)	Criteria 2: High level of projected growth or anticipated needs				
	Minneapolis-St Paul International/Wold-Chamberlain	16,280,835	732,663,072	Yes	High	414	\$	13,288,989,000	
	Duluth International	155,496	N/A	Yes		76	\$	1,491,786,000	
	Rochester International	109,870	N/A	Yes		26	\$	1,072,010,000	
	Bemidji Regional	22,819	N/A	No		30	\$	672,541,000	
	St. Cloud Regional	15,842	N/A	No		28	\$	580,991,000	
	Falls International-Einarson Field	15,796	N/A	No		11	\$	2,115,918,000	
	Brainerd Lakes Regional	15,654	N/A	No		16	\$	368,871,000	
	Range Regional	11,669	N/A	No		7	\$	150,621,000	
Thief River Falls Regional	2,079	N/A	TBD	High - 1 million packages (Expedited service, i.e. FedEx) shipped annually		22	\$	621,750,000	
	16,630,060					630	\$	20,363,477,000	





# Water Ports



# Water Port Criteria

Meets NHS Intermodal Connector Primary Criteria  
 Meets NHS Intermodal Connector Secondary Criteria  
 Meets MFN Criteria #1 or #2

Water Port Facilities	NHS - Primary Criteria	MFN Criteria			Businesses within 5-Mile Radius	Sales Volume within 5-Mile Radius
	>50,000 TEUs or > 500,000 tons per year by highway* or 100 trucks per day (each direction)	Consider for MFN Designation?	Criteria 1: Regional significance (Volumes, commodities, etc.)	Criteria 2: High level of projected growth or anticipated needs		
Duluth Superior /	36,000,000	Yes	High - Taconite and other products	Yes	106	\$ 2,348,773,000
Two Harbors	16,500,000	TBD	High - Taconite	Yes	9	\$ 207,000,000
Silver Bay	6,000,000	TBD	High - Taconite	Two idled production lines reopening; regional iron ore projected to increase 20% to 24 million tons in 2014	2	\$ 3,706,000
Taconite Harbor	657,700	No	Low - Taconite		1	\$ 40,760,000
St. Paul	5,500,000	TBD	High; large shipper of non-grain agricultural products. Largest state river port		291	\$ 16,263,662,000
Savage	2,000,000	No	Primarily grain		249	\$ 7,480,670,000
Winona	1,700,000	No	Primarily grain		58	\$ 1,647,128,000
Red Wing	<1,000,000	No	Primarily grain		32	\$ 463,060,000
Total	68,357,700				748	\$ 28,454,759,000

\*note: designation cannot be determined from primary criteria only, as tons reported here are total tons, including both rail and highway



# Rail, Airport, and Water Port Facilities

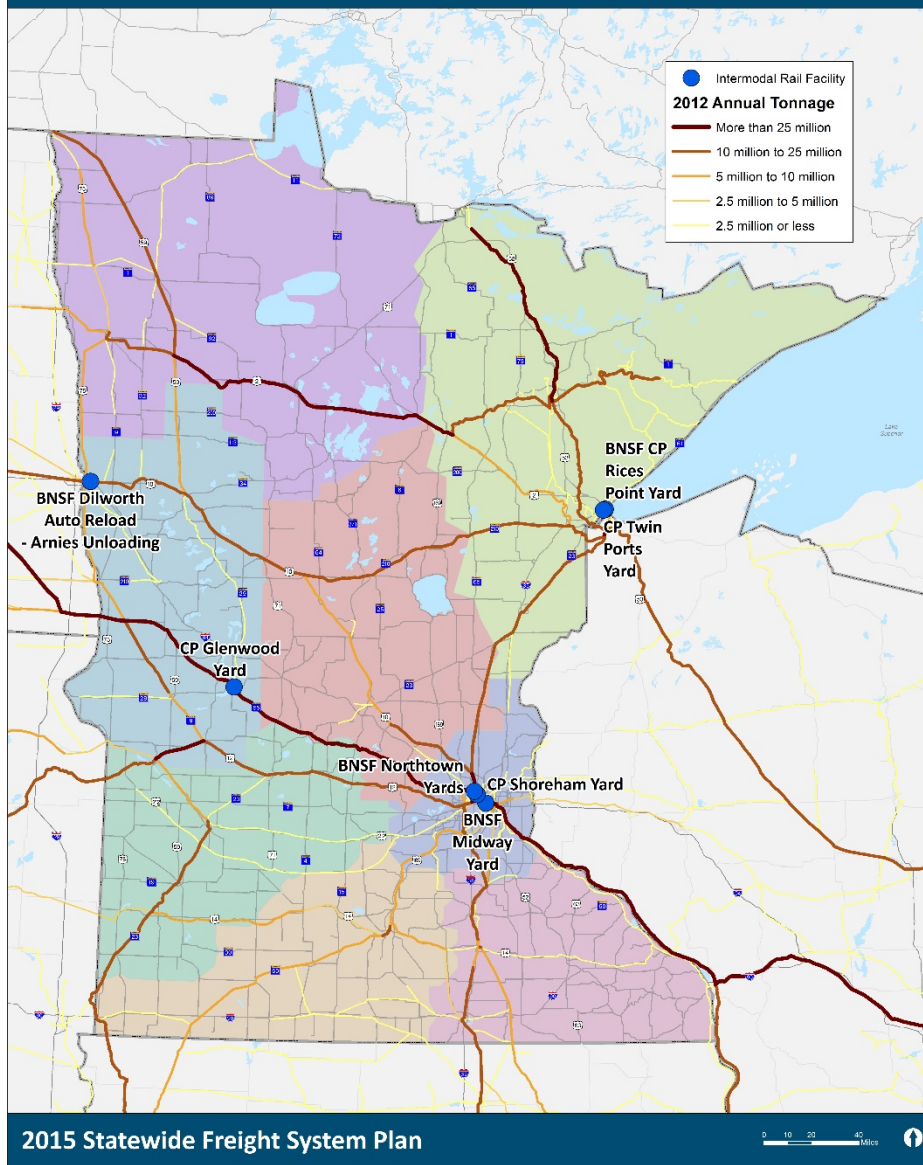
<i>Should the MFN be used to ...</i>	<i>YES</i>	<i>NO</i>	<i>COMMENTS</i>
To track freight system activity	X		
To monitor freight system performance	X		
To identify and prioritize system needs	X		
To have different design or accessibility standards?	X		<i>Designated MFN facilities that meet NHS intermodal connector criteria, should be connected via an NHS intermodal connector</i>
To have different (higher) maintenance standards?		X	
To receive priority consideration during project funding?	X		<i>MFN facilities should be considered “freight projects” and state should evaluate funding commensurate with public benefits</i>
To be aligned with dedicated freight funding source?	X		<i>As dedicated funding sources are developed, MFN facilities should be eligible for freight funding</i>
To be considered as part of Complete Streets planning?		X	



# Non-Highway Corridor Designation

- ▶ Rail Corridors
- ▶ Waterway Corridors
- ▶ Considerations
  - Tonnage
  - Designations by others
  - Other criteria?

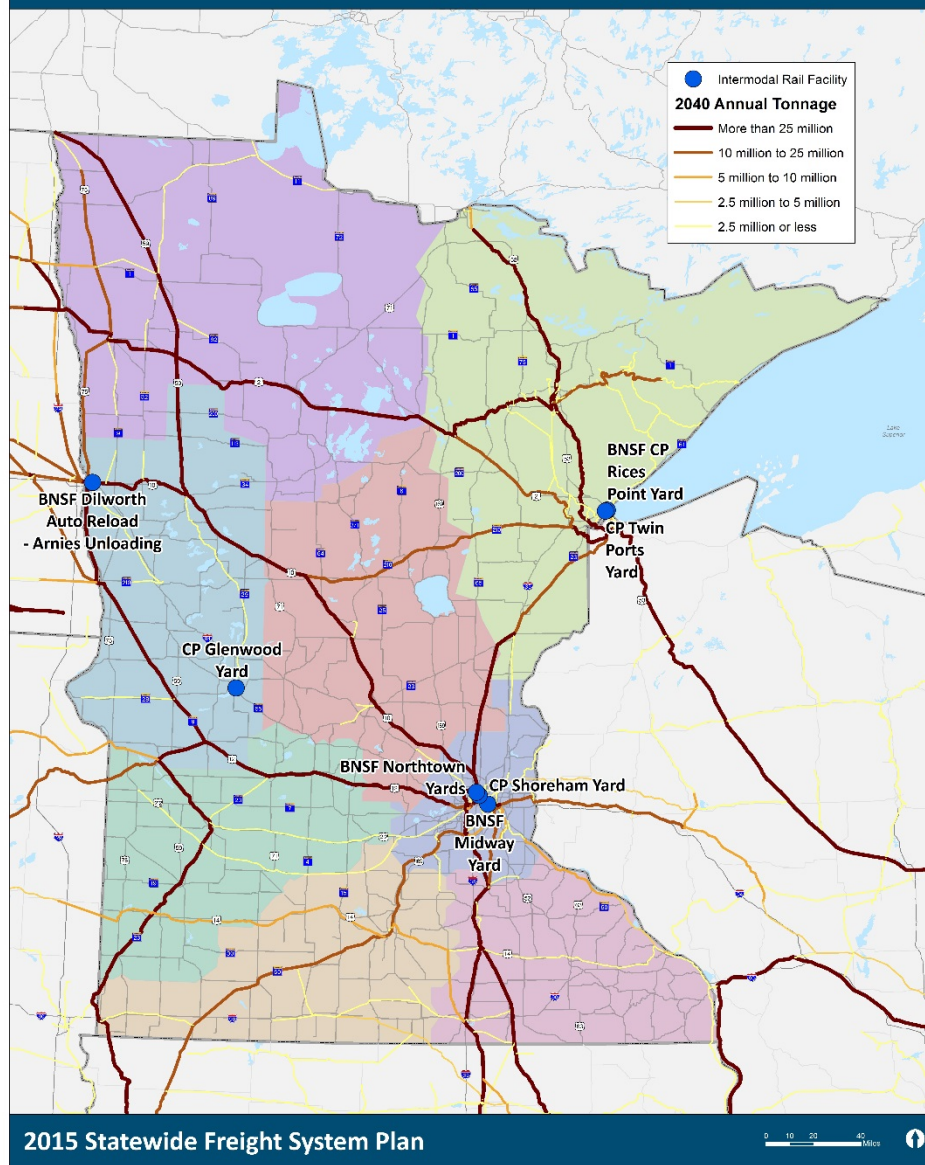




## Rail Corridors

- 2012 tonnage by corridor





## Rail Corridors

- 2040 tonnage by corridor

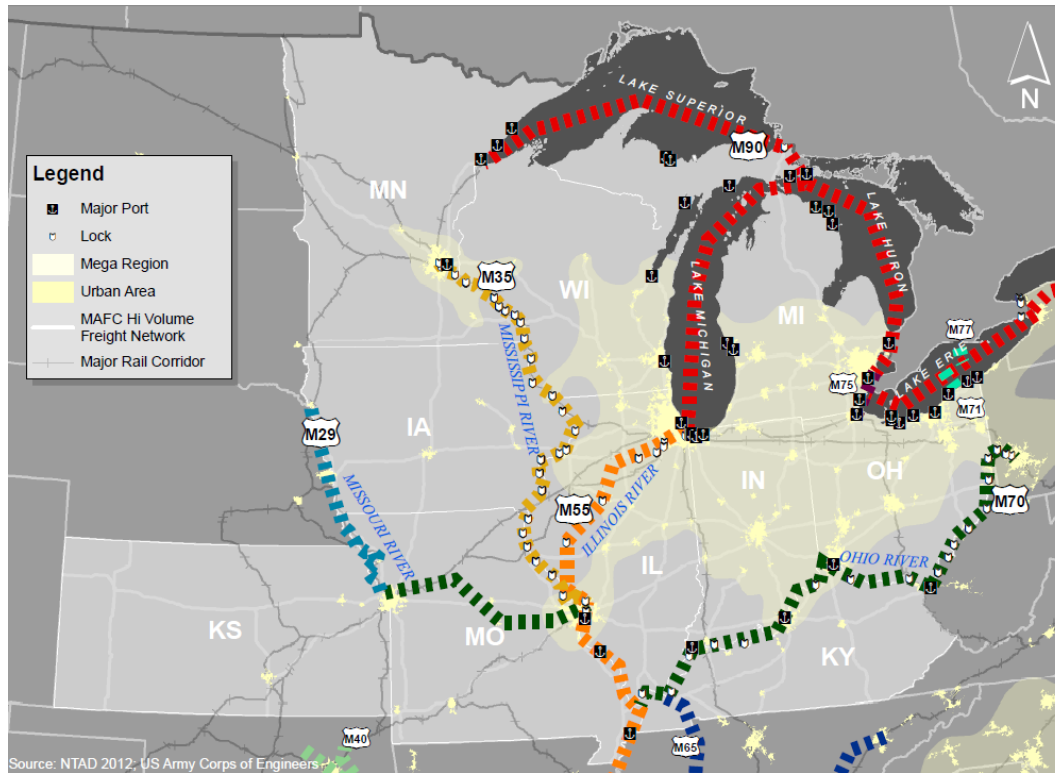


# Rail Corridors

<i>Should the MFN be used to ...</i>	<i>YES</i>	<i>NO</i>	<i>COMMENTS</i>
To track freight system activity	X		
To monitor freight system performance	X		<i>Focused on locating system bottlenecks</i>
To identify and prioritize system needs	X		<i>Could be useful for prioritizing large-scale projects that would involve multiple railroads</i>
To have different design or accessibility standards?		X	<i>Unlikely to impact or alter design standards</i>
To have different (higher) maintenance standards?		X	<i>Unlikely to create a meaningful impact on maintenance, given that the majority of infrastructure is privately owned and maintained</i>
To receive priority consideration during project funding?		X	<i>A small portion of rail projects are eligible for public funding assistance, and do not enter the transportation improvement processes</i>
To be aligned with dedicated freight funding source?	X		<i>Could assist Class I and short line railroads seeking state and federal funding, such as the state's revolving grant program or USDOT TIGER</i>
To be considered as part of Complete Streets planning?		X	



# Waterways



Source: Mid-America Freight Council, 2014

- ▶ Great Lakes
  - (M-90 Marine Corridor)
- ▶ Mississippi River
  - (M-35 Marine Corridor)



# Waterways

<i>Should the MFN be used to ...</i>	<i>YES</i>	<i>NO</i>	<i>COMMENTS</i>
To track freight system activity	X		
To monitor freight system performance	X		
To identify and prioritize system needs	X		
To have different design or accessibility standards?		X	<i>Unlikely to impact or alter design standards</i>
To have different (higher) maintenance standards?		X	<i>Unlikely to create a meaningful impact on maintenance; infrastructure is maintained by the U.S. Army Corps of Engineers</i>
To receive priority consideration during project funding?		X	
To be aligned with dedicated freight funding source?		X	
To be considered as part of Complete Streets planning?		X	



# Summary of Possible Uses

<i>Should the MFN be used to ...</i>	<i>Highway</i>	<i>Rail Lines</i>	<i>Waterways</i>	<i>Freight Facilities</i>
To track freight system activity	X	X	X	X
To monitor freight system performance	X	X	X	X
To identify and prioritize system needs	X	X	X	X
To have different design or accessibility standards?	X			X
To have different (higher) maintenance standards?	X			
To receive priority consideration during project funding?	X			X
To be aligned with dedicated freight funding source?	X	X		X
To be considered as part of Complete Streets planning?	X			



# Next Steps



# Next Steps

- ▶ Meeting #4 will summarize findings and provide a slate of strategic freight network components
- ▶ General consensus on multimodal freight network designation and potential applications
- ▶ Next meeting – End of March TBD



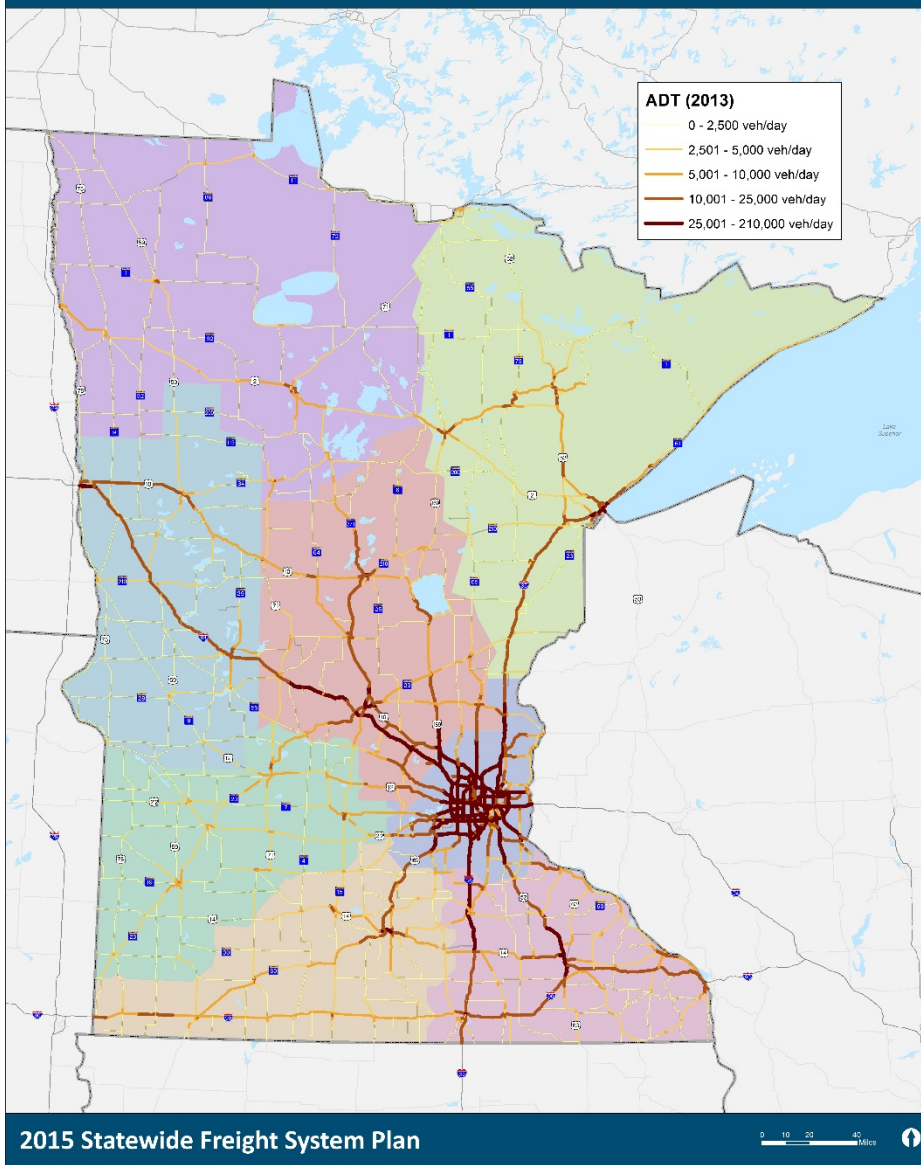
# THANK YOU

## Questions?



# EXTRA SLIDES

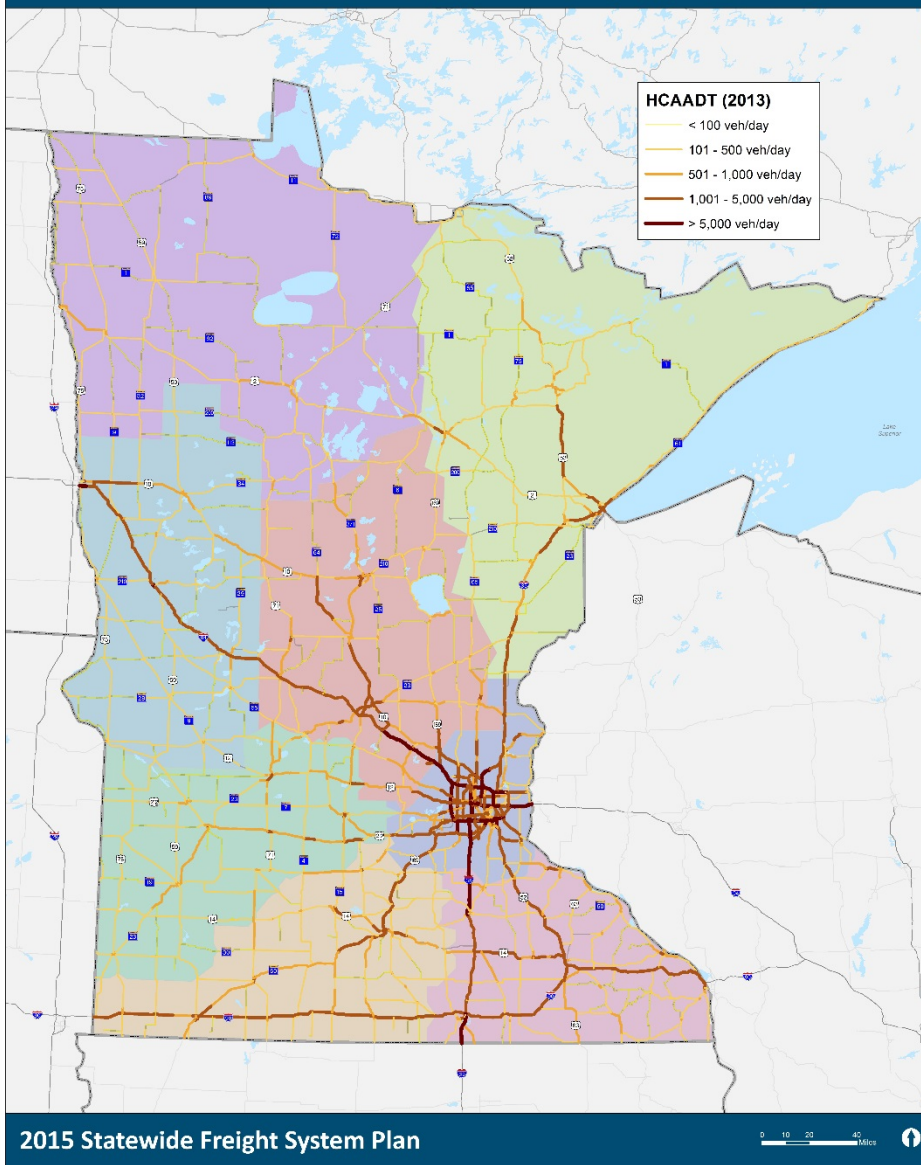




# Average Daily Traffic Volumes

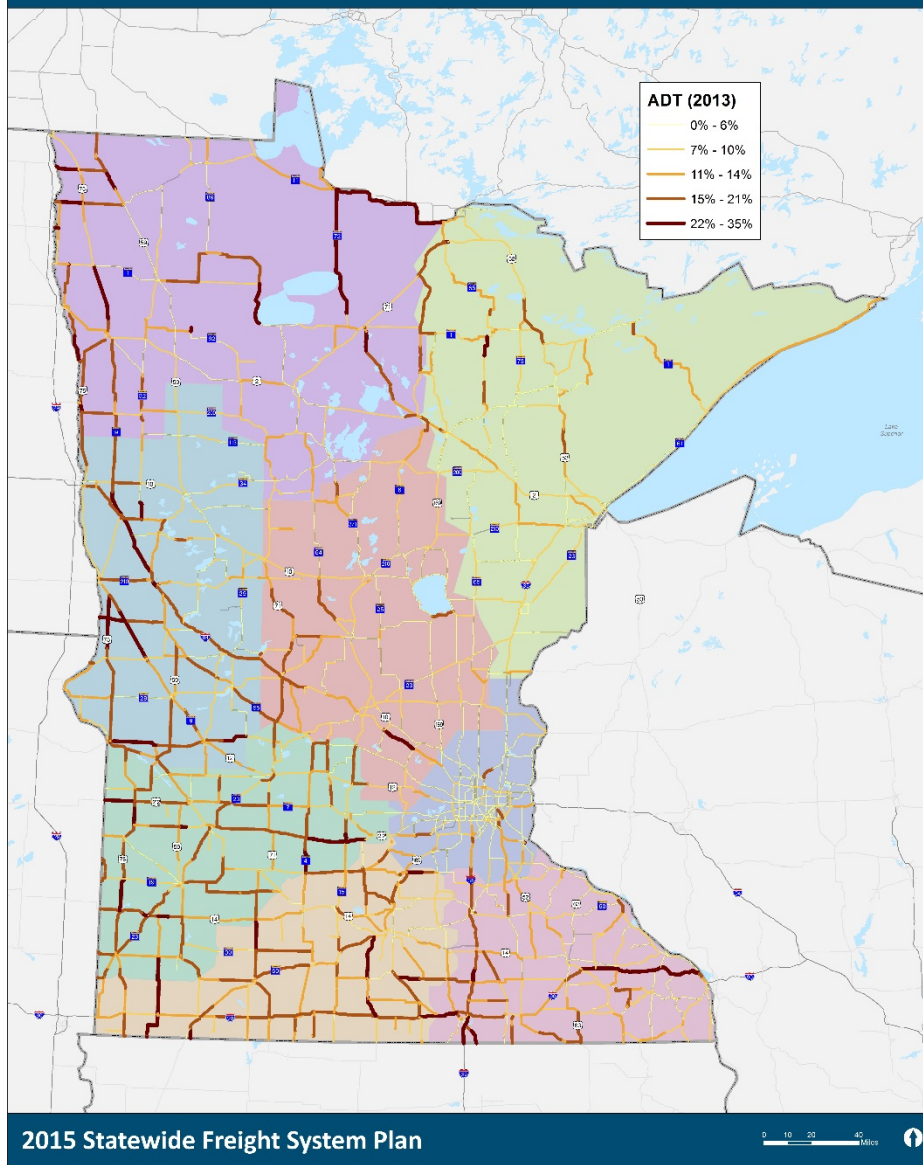
▶ ...





## Average Daily Heavy Commercial Traffic Volumes



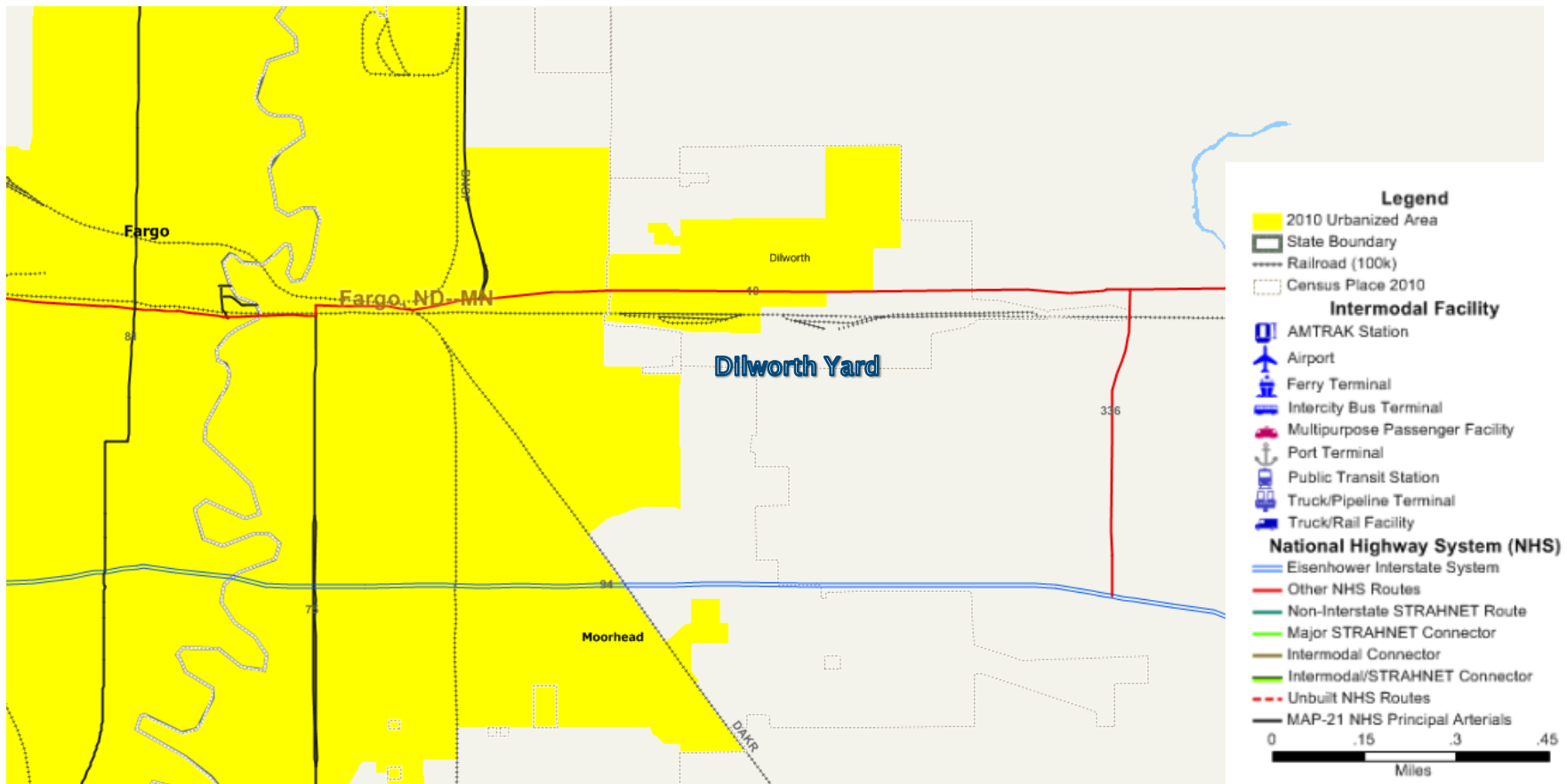


## Heavy Commercial Traffic Percent of All Traffic

► ...



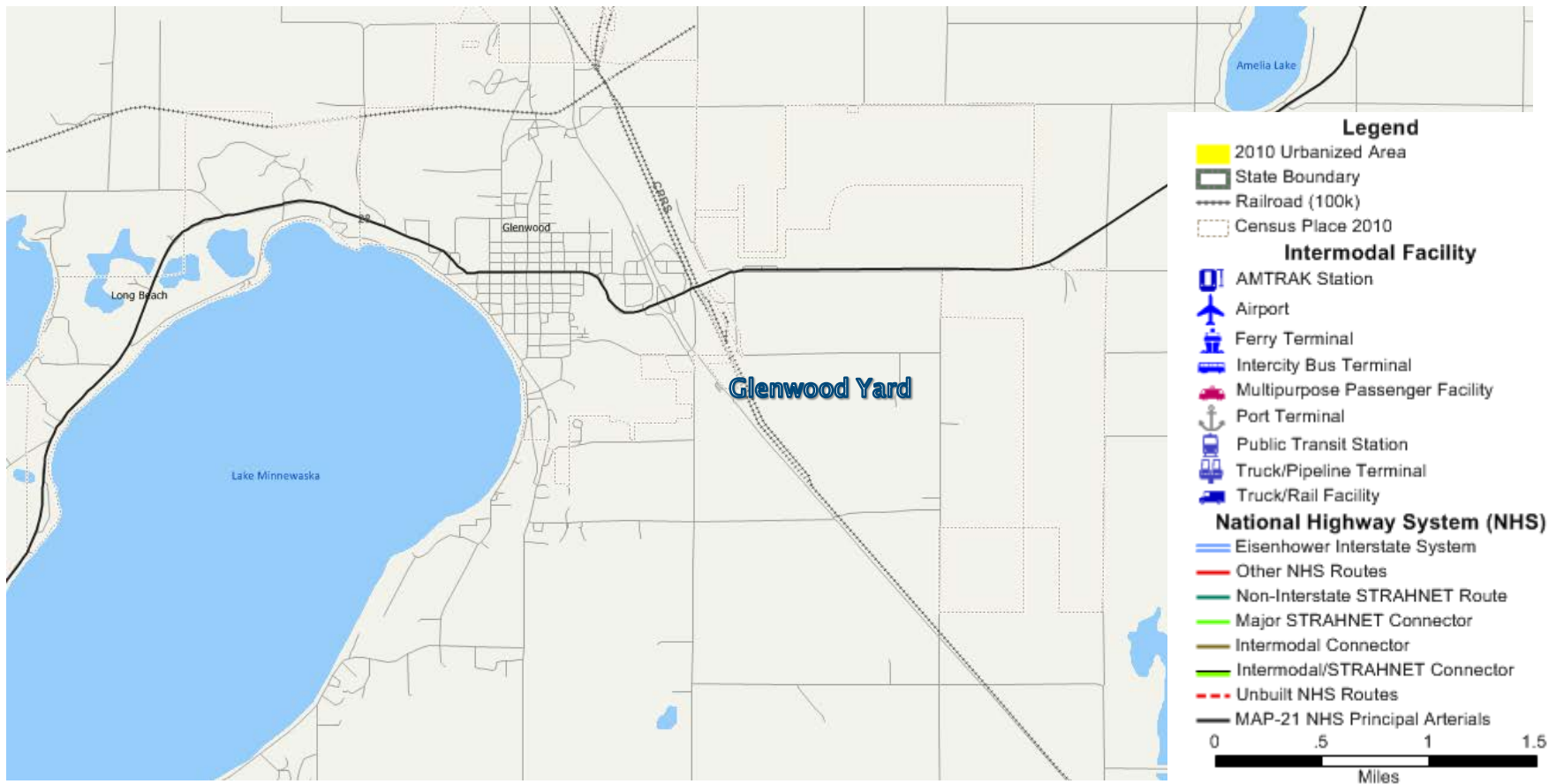
# Dilworth (BNSF)



Source: FHWA HEPGIS



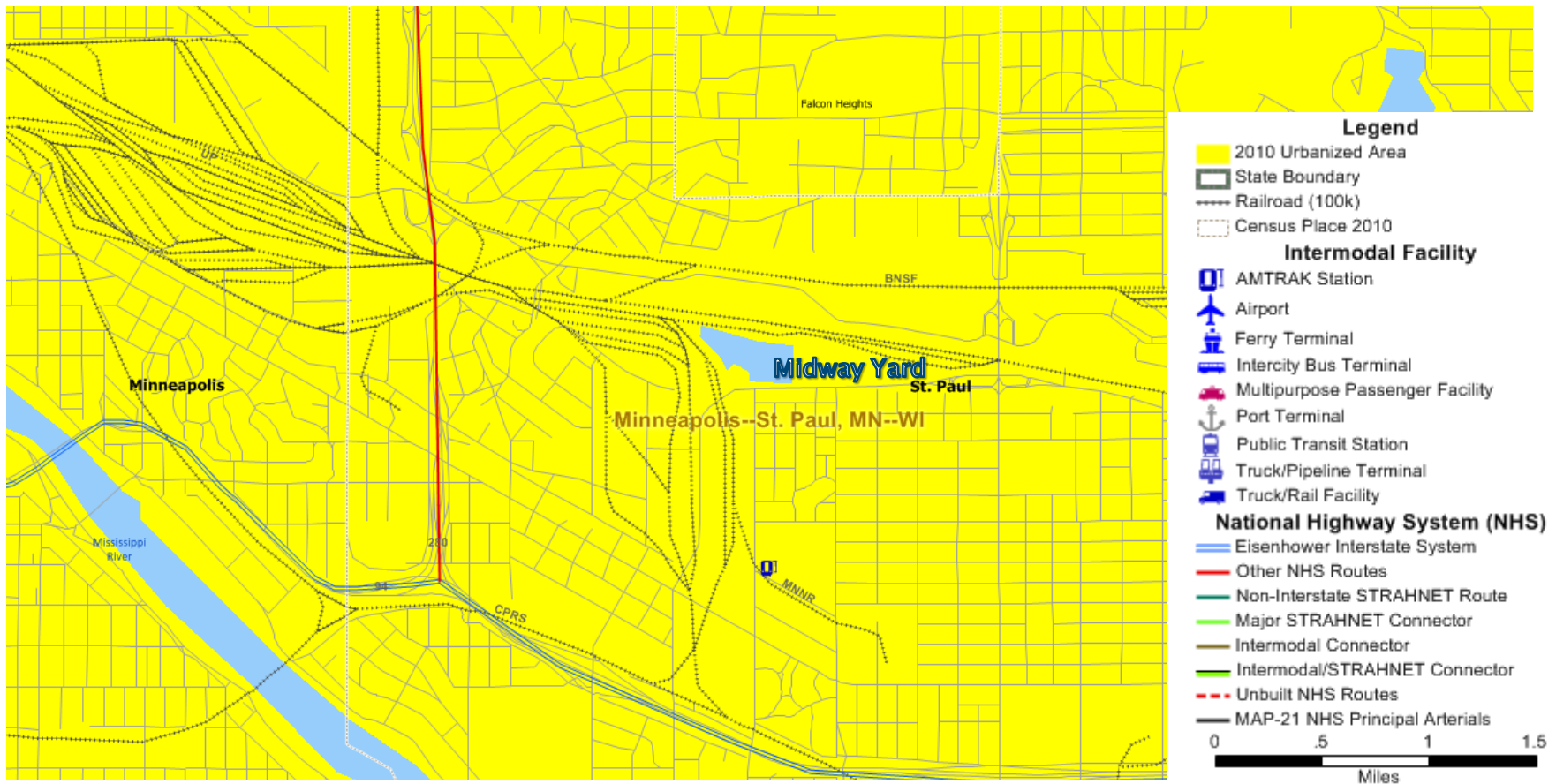
# Glenwood Yard (CP)



Source: FHWA HEPGIS



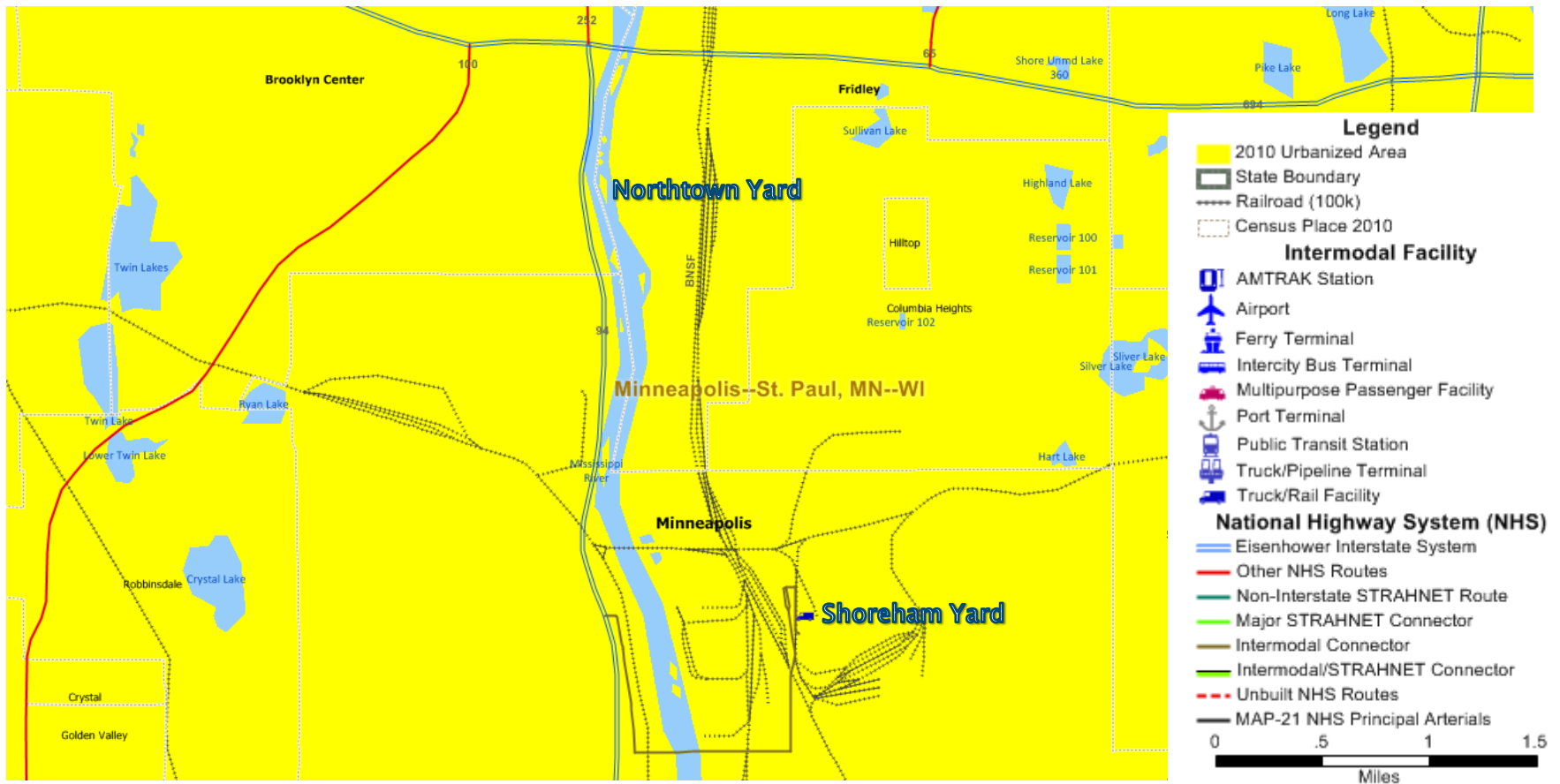
# Midway Yard (BNSF)



Source: FHWA HEPGIS



# Northtown Yard (BNSF) and Shoreham Yard (CP)



Source: FHWA HEPGIS



# Rice's Point Yard (BNSF/CP)



Source: FHWA HEPGIS

