

Minnesota Statewide Freight System Plan

Minnesota's Multimodal Freight Network (MFN) Ad Hoc Working Group Meeting #4 March 26, 2015

We all have a stake in $A \oplus B$



















Agenda

- Welcome and Introductions
- Recap of Meeting #3
- Continue to Discuss the Multimodal Freight Network
 - Designation criteria
 - Application
- Recommendations



















Recap of Meeting #3



















Meeting #3 Summary

- Reviewed potential applications of the highway portion component of Minnesota's Multimodal Freight Network (MFN)
- Discussed non-highway facility components (rail, air, and water)
- Initial concurrent on non-highway facility node designations













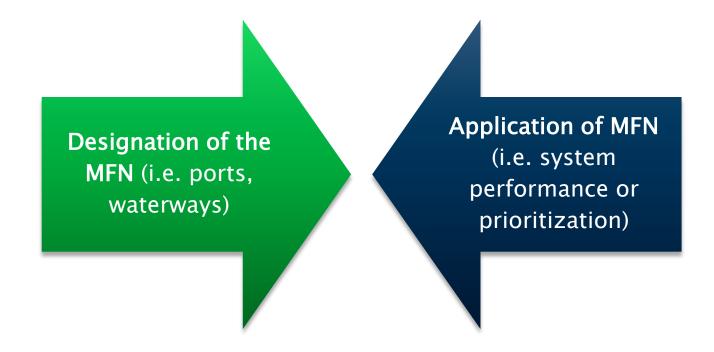






Multimodal Freight Network Designation and Application

We are working through an iterative process





















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

We will not determine the final application.

We <u>will</u> provide our recommendations to leadership for further consideration.



















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

- √General agreement on non-highway *facilities* and potential applications
- Initiate discussion on applications of facility designation
- Initiate discussion on corridors (rail and water corridors) and potential applications



















Non-Highway Network Components



















Non-Highway Network Components

 Confirm facilities designated – additional criteria reviewed

Rail Facilities

- Dilworth (BNSF)
- Glenwood Yard (CP)
- Midway Yard (BNSF)
- Northtown Yards (BNSF)
- Rice's Point Yard (BNSF/CP)
- Shoreham Yard (CP)
- Twin Ports Yard (CP)

Airports

- Minneapolis-St. Paul International
- Duluth International
- Rochester International
- Bemidji Regional
- Thief River Falls Regional

Water Ports

- Duluth/Superior
- Two Harbors
- Silver Bay
- St. Paul
- Savage
- Winona



















Airport Criteria

Airport Facilities Minneapolis-St Paul International/Wold-Chamberlain **Duluth International** Rochester International Bemidji Regional St. Cloud Regional Falls International-Einarson Field **Brainerd Lakes Regional** Range Regional Thief River Falls Regional

NHS - Primary Criteria				
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.			
16,280,835	732,663,072			
155,496	N/A			
109,870	N/A			
22,819	N/A			
15,842	N/A			
15,796	N/A			
15,654	N/A			
11,669	N/A			
2,079	N/A			
16,630,060				

MFN Criteria					
Consider for MFN Designation?	Criteria 1: Regional significance (Volumes, commodities, etc.)	Criteria 2: High level of projected growth or anticipated needs			
Yes	High				
Yes					
Yes					
No					
TBD	High - 1 million packages (Expedited service, i.e. FedEx) shipped annually				

Businesses within 5-Mile Radius	ales Volume vithin 5-Mile Radius
414	\$ 13,288,989,000
76	\$ 1,491,786,000
26	\$ 1,072,010,000
30	\$ 672,541,000
28	\$ 580,991,000
11	\$ 2,115,918,000
16	\$ 368,871,000
7	\$ 150,621,000
22	\$ 621,750,000
630	\$ 20,363,477,000



















Airport Criteria – Additional

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

Airport Facilities
Minneapolis-St Paul
International/Wold-Chamberlain
Duluth International
Rochester International
Bemidji Regional
St. Cloud Regional
Falls International-Einarson Field
Brainerd Lakes Regional
Range Regional
Thief River Falls Regional

MFN Criteria					
Consider for MFN Designation?	Criteria 1: Regional significance:	Criteria 2: High level of projected growth or anticipated needs			
	Freight/Mail (lbs., 2014)	Freight/Mail Growth (2013 - 2014)			
Yes	407,000,000	0%			
Yes	2,113,000	2%			
Yes	21,000,000	20%			
Yes	807,000	11%			
No	2,350	-98%			
No	-	N/A			
No	-	-100%			
No	-	-100%			
Yes	483,000	11%			

Source: Bureau of Transportation Statistics



















Water Port Criteria

Water Port Facilities
Duluth / Superior
Two Harbors
Silver Bay
Taconite Harbor
St. Paul
Savage
Winona
Red Wing
Total

MFN Criteria		
Consider for MFN Designation?	Criteria 1: Regional significance (Volumes, commodities, etc.)	Criteria 2: High level of projected growth or anticipated needs
Yes	High - Taconite and other products	Yes
Yes	High - Taconite	
Yes	High - Taconite	Two idled production lines reopening; regional iron ore projected to increase 20% to 24 million tons in 2014
No	Low - Taconite	
Yes	Non-grain ag. products. Largest river port	
Yes	Primarily grain and raw materials, i.e. frac sand	Increasing used as an intermodal connector (truck/rail/water)
Yes	Primarily grain and raw materials, i.e. frac sand	Increasing used as an intermodal connector (truck/rail/water)
No	Primarily grain	













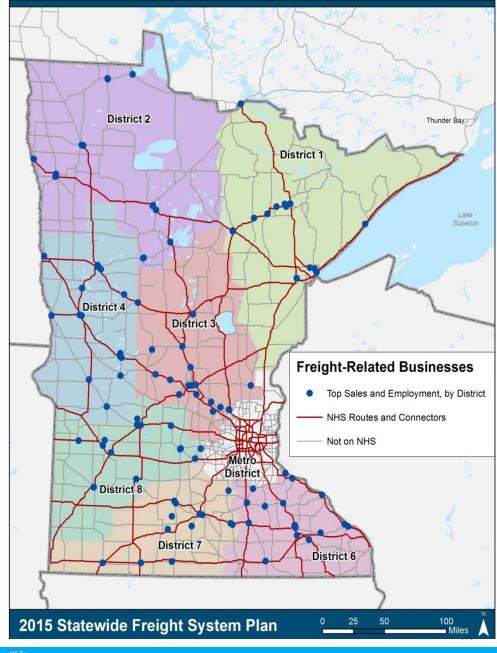






Non-Urban Evaluation

- Does the network provide access to Minnesota's largest industries?
- Top sales and employment by District





















Rail, Airport, and Water Port Facilities

The MFN be used to	YES	NO	COMMENTS
Track freight system activity	X		
Monitor freight system performance	X		
Identify and prioritize system needs	Х		
Provide different design or accessibility standards	Χ		Designated MFN facilities that meet NHS intermodal connector criteria, should be connected via an NHS intermodal connector
Provide different (higher) maintenance standards		X	
Receive priority consideration during project selection and funding	X		MFN facilities should be considered "freight projects" and state should evaluate funding commensurate with public benefits
Align with dedicated freight funding source	X		As dedicated funding sources are developed, MFN facilities should be eligible for freight funding
Consider Complete Streets principles		X	
Support existing businesses	X		
Provide access to intermodal facilities		X	These are the intermodal facilities



















Non-Highway Corridor Designation

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



















Intermodal Rail Facilities and Annual Rail Tonnage (2012) Intermodal Rail Facility 2012 Annual Tonnage 5 million to 10 million 2.5 million to 5 million 2.5 million or less BNSF CP Rices **Point Yard** BNSF Dilworth Auto Reload CP Twin Arnies Unloading CP Glenwood BNSF Northtown Yards CP Shoreham Yard BNSF Yard 2015 Statewide Freight System Plan

Rail Corridors

▶ 2012 tonnage by corridor



















Intermodal Rail Facilities and Annual Rail Tonnage (2040) Intermodal Rail Facility 2040 Annual Tonnage 5 million to 10 million 2.5 million to 5 million 2.5 million or less BNSF CP Rices BNSF Dilworth **Point Yard** Auto Reload - Arnies Unloading CP Glenwood **BNSF Northtown** CP Shoreham Yard 2015 Statewide Freight System Plan

Rail Corridors

2040 tonnage by corridor



















Rail Corridors

The MFN be used to	YES	NO	COMMENTS
Track freight system activity	Х		
Monitor freight system performance	X		Focused on locating system bottlenecks
Identify and prioritize system needs	Х		Could be useful for prioritizing large-scale projects that would involve multiple railroads
Provide different design or accessibility standards		X	Unlikely to impact or alter design standards
Provide different (higher) maintenance standards		X	Unlikely to create a meaningful impact on maintenance, given that the majority of infrastructure is privately owned and maintained
Receive priority consideration during project selection and funding		X	A small portion of rail projects are eligible for public funding assistance, and do not enter the transportation improvement processes
Align with dedicated freight funding source	Х		Could assist Class I and short line railroads seeking state and federal funding, such as the state's revolving grant program or USDOT TIGER
Consider Complete Streets principles		X	
Support existing businesses	Х		
Provide access to intermodal facilities	Х		











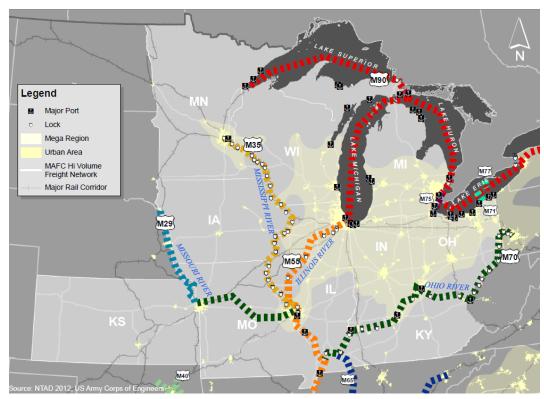








Waterways



Source: Mid-America Freight Council, 2014

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



















Waterways

The MFN be used to	YES	NO	COMMENTS
Track freight system activity	Х		
Monitor freight system performance	X		
Identify and prioritize system needs	X		
Provide different design or accessibility standards		Х	Unlikely to impact or alter design standards
Provide different (higher) maintenance standards		X	Unlikely to create a meaningful impact on maintenance; infrastructure is maintained by the U.S. Army Corps of Engineers
Receive priority consideration during project selection and funding		X	
Align with dedicated freight funding source	X		
Consider Complete Streets principles		X	
Support existing businesses	X		
Provide access to intermodal facilities	X		



















Summary of Possible Uses

The MFN be used to	Highway (Tiered)	Rail Lines	Waterways	Freight Facilities
Track freight system activity	1	X	X	Х
Monitor freight system performance	1	Χ	Χ	Χ
Identify and prioritize system needs	2	Χ	X	Χ
Provide different design or accessibility standards	3			Χ
Provide different (higher) maintenance standards	3*			
Receive priority consideration during project selection and funding	1			Χ
Align with dedicated freight funding source	2	Χ	Χ	Χ
Consider Complete Streets principles	2			
Support existing businesses	2	Χ	X	Χ
Provide access to intermodal facilities	1	X	X	



















Next Steps



















Next Steps

- General consensus on multimodal freight network designation and potential applications
- Forward recommendations to the Technical Team and Advisory Committee for consideration



















THANK YOU

Questions?



















EXTRA SLIDES



















Average Daily Traffic Volumes ADT (2013) 0 - 2,500 veh/day 2,501 - 5,000 veh/day 5,001 - 10,000 veh/day 10,001 - 25,000 veh/day 25,001 - 210,000 veh/day 2015 Statewide Freight System Plan

Average Daily Traffic Volumes

...



















Heavy Commercial Average Daily Traffic Volumes HCAADT (2013) 101 - 500 veh/day 501 - 1,000 veh/day 1,001 - 5,000 veh/day > 5,000 veh/day 2015 Statewide Freight System Plan

Average Daily Heavy Commercial Traffic Volumes

...



















Percent Heavy Commercial Vehicles ADT (2013) 2015 Statewide Freight System Plan

Heavy Commercial Traffic Percent of All Traffic

...











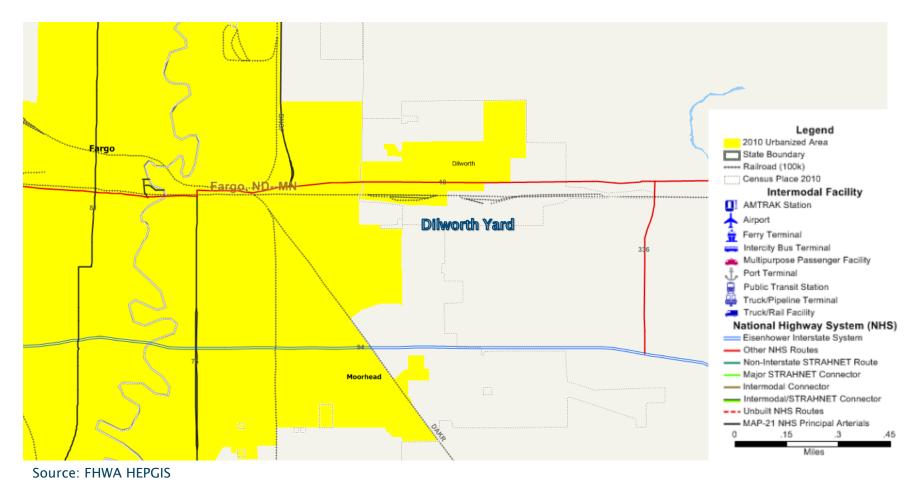








Dilworth (BNSF)















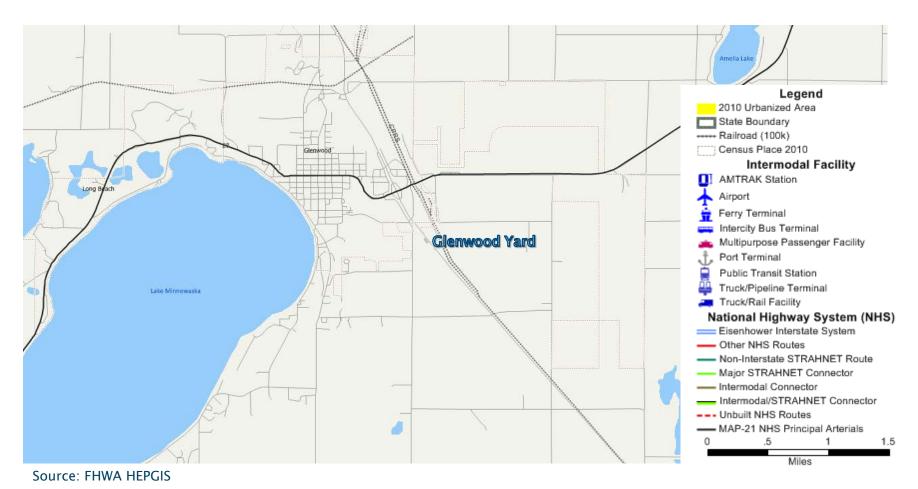








Glenwood Yard (CP)













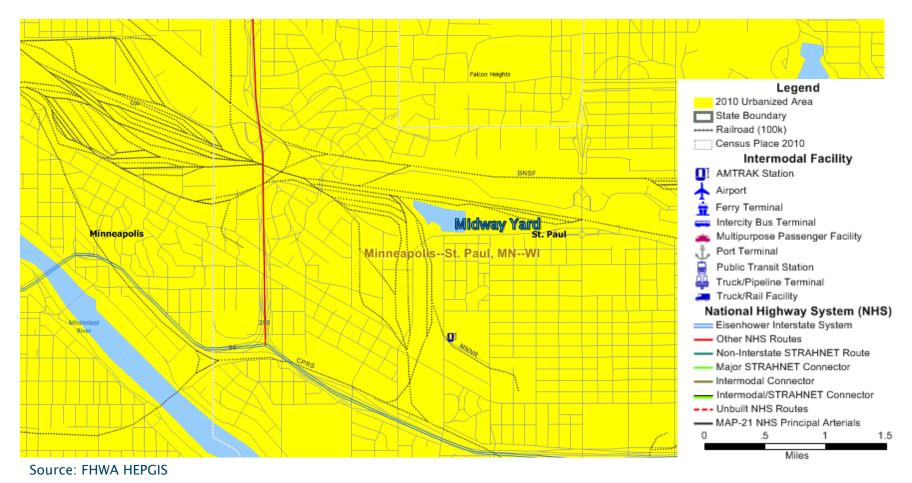








Midway Yard (BNSF)













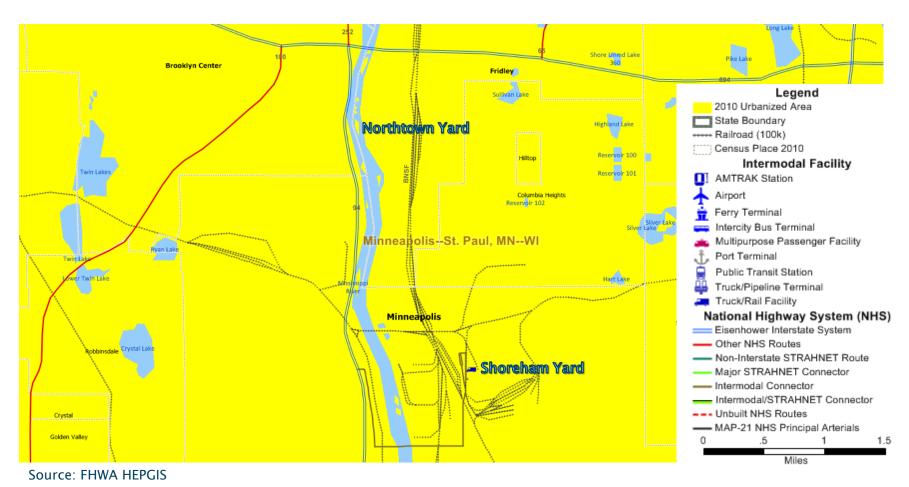








Northtown Yard (BNSF) and Shoreham Yard (CP)





















Rice's Point Yard (BNSF/CP)



















