

Minnesota Comprehensive Statewide Freight and Passenger Rail Plan

Freight Technical Advisory Committee

May 28, 2009

presented by
Cambridge Systematics, Inc.
Kimley-Horn and Associates, Inc.
TKDA, Inc.



Agenda

- **Introductions and Opening Comments**
 - Bill Gardner, Co-Project Manager, MnDOT
- **Presentation on State Rail Plan, Cambridge Systematics**
 - Outreach Update, Randy Halvorson
 - Study Overview, Marc Cutler
 - Freight System Inventory, Andreas Aeppli
 - Next Steps, Marc Cutler
- **Discussion – Randy Halvorson**

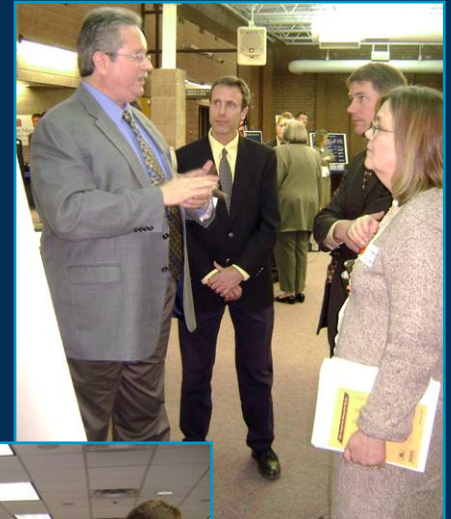


Public Outreach

Randy Halvorson, Facilitator

Public Open House Meetings

- Two rounds of meetings
 - April – introduction to project
 - October – preliminary recommendations
- Locations
 - St. Cloud
 - Rochester
 - Duluth
 - Minneapolis-St. Paul
 - Red Wing
 - Mankato
 - Moorhead



Comments from Open Houses By Theme

- Strong support for new passenger rail service and belief that demand will be sufficient
- New passenger rail services cannot degrade existing freight services, which need more investment
- Decisions should not only be driven by existing land use patterns, growth forecasts, or energy assumptions
- Concern about how to balance data-driven approach and inevitable political influence on ultimate decisions



Comments from Open Houses

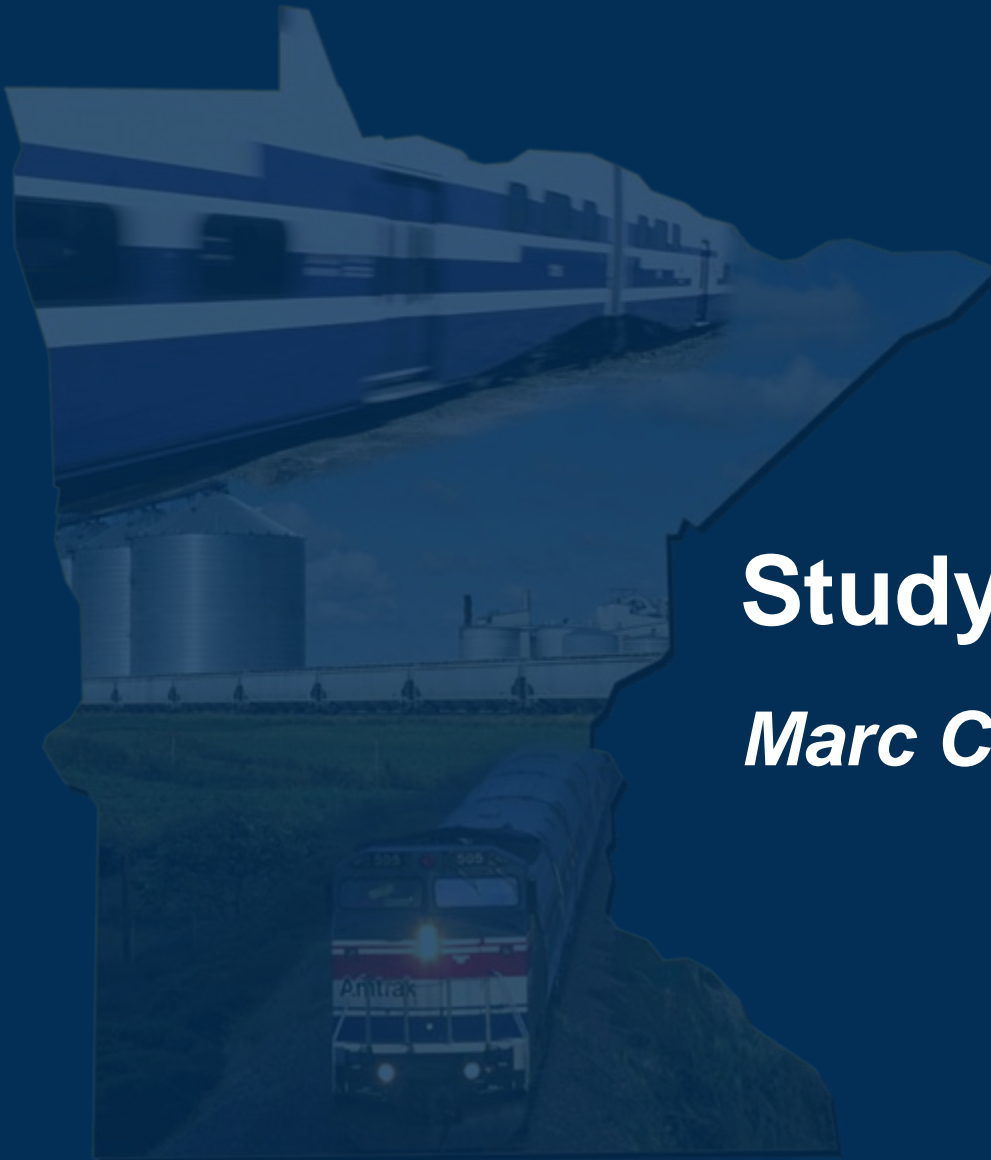
By Location

- **St. Cloud – extend Northstar; consider the relationship between freight and passenger rail**
- **Rochester – connect to MWRRI; move freight service out of downtown**
- **Duluth – dedicated alignment for Northern Lights Express; use union labor to operate**
- **MSP – connectivity between St. Paul and Minneapolis**
- **Red Wing – MWRRI should use River Route**
- **Mankato – passenger rail to St. Paul**
- **Moorhead – more investment in freight rail**

Upcoming Meeting Dates

- **PAC Meetings**
 - August 14
 - November 13
- **Freight and Passenger TAC Meetings**
 - August 13
 - November 12
- **Open Houses – second round**
 - October





Study Overview

Marc Cutler

Study Goals

Legislatively Mandated

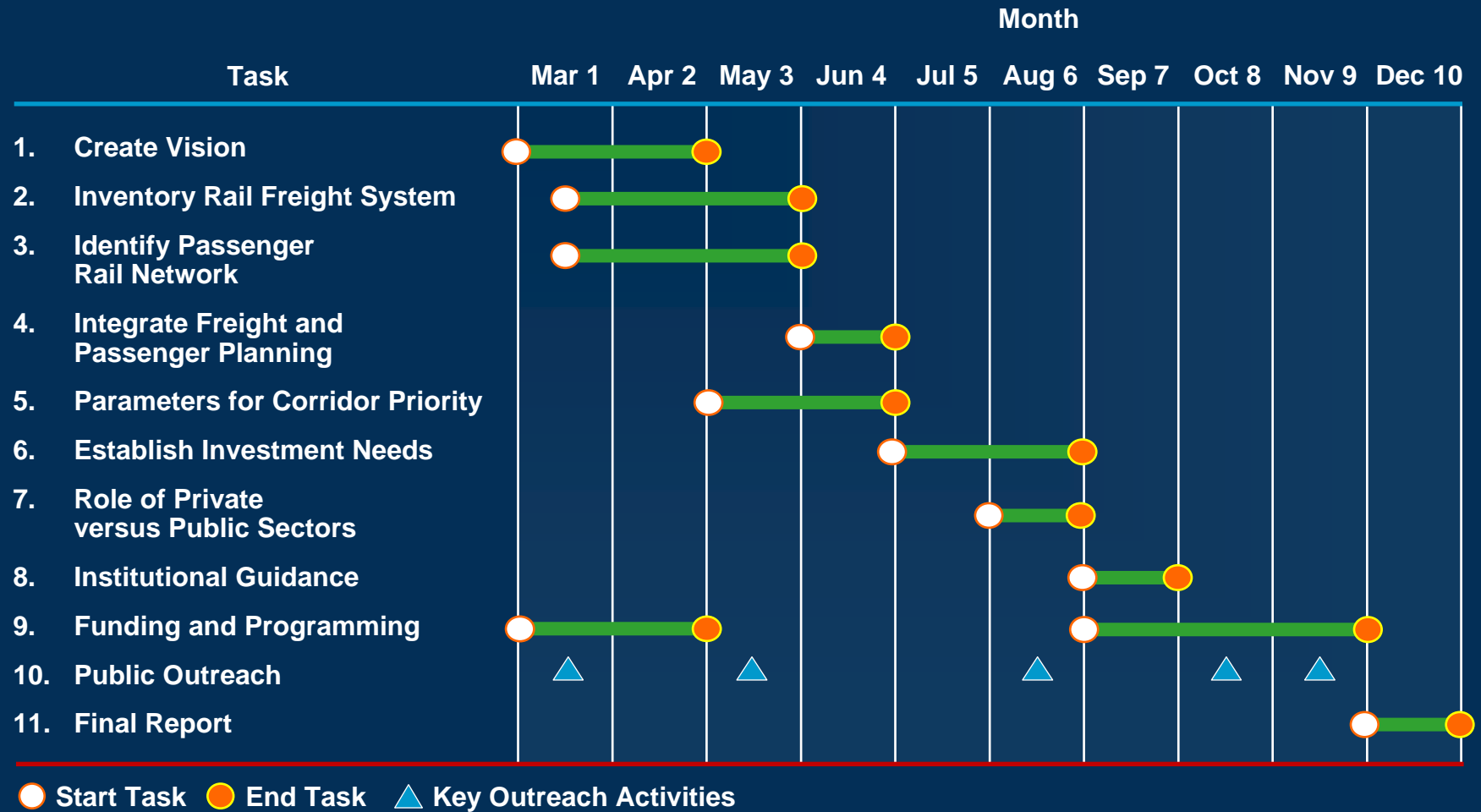
- Comprehensive look at demand for freight and passenger rail services
- Identify infrastructure and other improvements needed to expand rail service
- Explore funding options
- Recommend policy guidelines for state investment and public/private partnerships

*A Strategic Overview to Help Guide
Development of Individual Rail Projects*

Project Phases

Project Phase	Description	Task
Phase I	Rail Vision	Task 1
Phase II	Inventory Freight System and Passenger Rail Plans	Tasks 2 and 3
Phase III	Integration of Passenger and Freight Planning, and Development of Performance Criteria	Tasks 4 and 5
Phase IV	Plan Development – Needs, Institutional Arrangements, Programs, Financing	Tasks 6-9
Continuous Public Outreach		Task 10
Final Report		Task 11

Schedule





Vision

Vision for Rail in Minnesota (Task 1)

Task Objective

Develop a vision for freight and passenger rail in Minnesota as part of the State's overall transportation network

Key Issues

- **Meet business, community, and economic needs**
- **Balance the rail program with environmental, energy, greenhouse gas, development, land use, social and fiscal programs**
- **Allocate public and private benefits, costs, and risks**
- **Adjust as the system evolves**

Vision

Imagining Different Futures

- **Rail Investment Strategies**
 - Short-term (3-5 years TIP/STIP)
 - Mid-term (10 years CWP)
 - Long-term (20+ years LRTP)
- **Growth**
 - Distribution – metro centric or less concentrated
 - Amount – high versus low
- **Fuel**
 - Cheap and plentiful
 - Expensive and scarce

Draft Vision Statement

- Rail contributes to the long-term growth and productivity of business and industry
- Rail knits together Minnesota communities
- Rail balances the State's transportation network as an alternative to highways for freight and to highways and flying for passenger travel
- Rail sustains the environment by reducing fuel use and greenhouse gas emissions
- *Therefore, Minnesota's rail program should share the benefits, costs, and risks of its evolving rail system equitably among users, regions, and public/private sectors*



Freight Rail System

Freight Rail System Inventory and Assessment (Task 2)

Task Objective

Describe Minnesota's present rail system, who it serves today, and how it will accommodate Minnesota's future goods movement needs

Key Issues

- What are the existing conditions, system usage and institutional structure?
- What freight markets are currently served?
- How well does Minnesota's rail system meet current and future logistics needs?
- What is the impact of public sector initiatives and regulations?

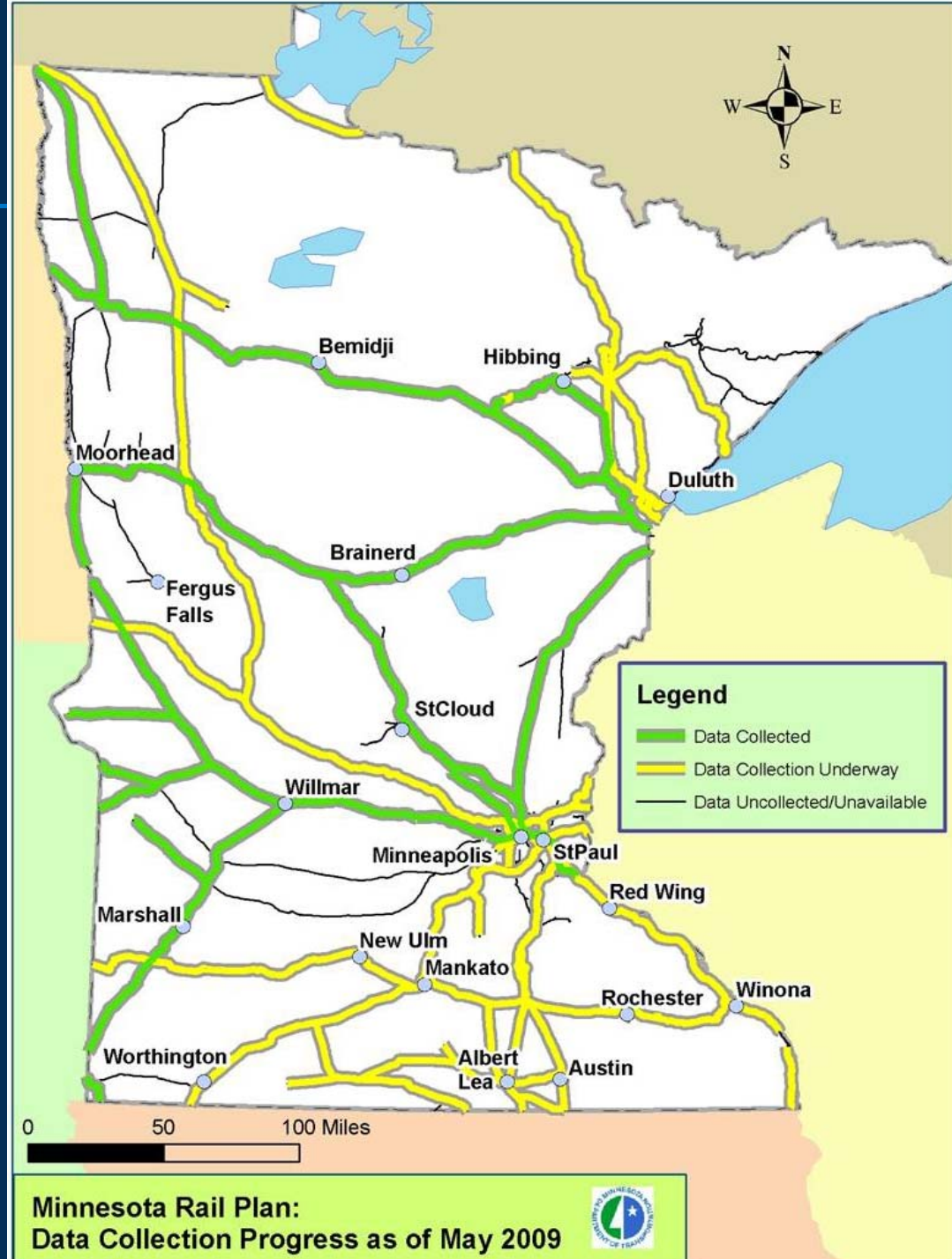
Freight Rail System Inventory (Supply)

- Determine current condition, capacity, and performance of system (e.g., track, terminals, traffic control systems)
- Identify planned infrastructure improvements



Rail Lines in Inventory Process

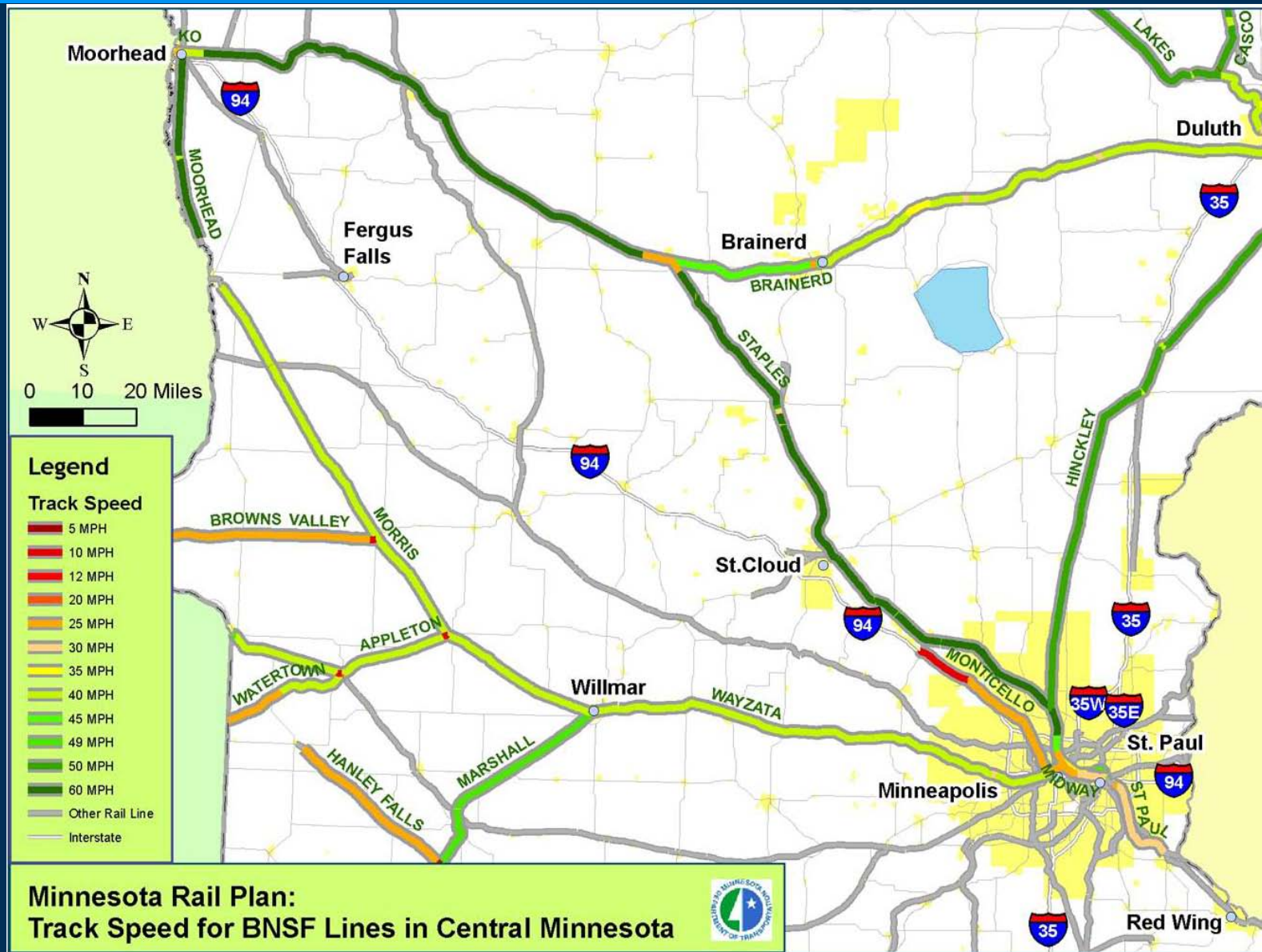
- 4 Class I Railroads
- 16 Short Line Railroads
- 8th highest rail miles in nation



Rail Inventory Sample Trains/Day

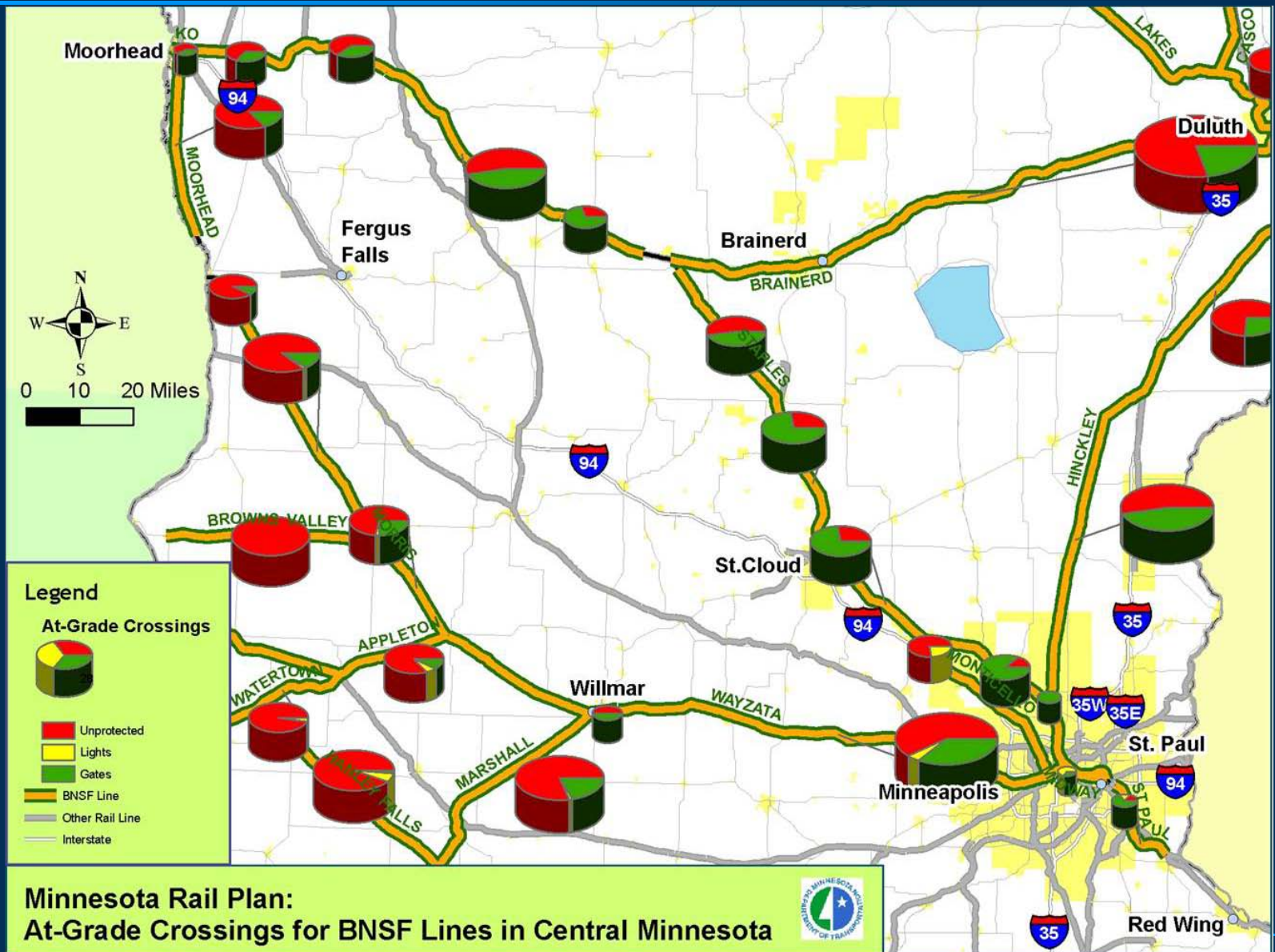


Rail Inventory Sample Track Speed

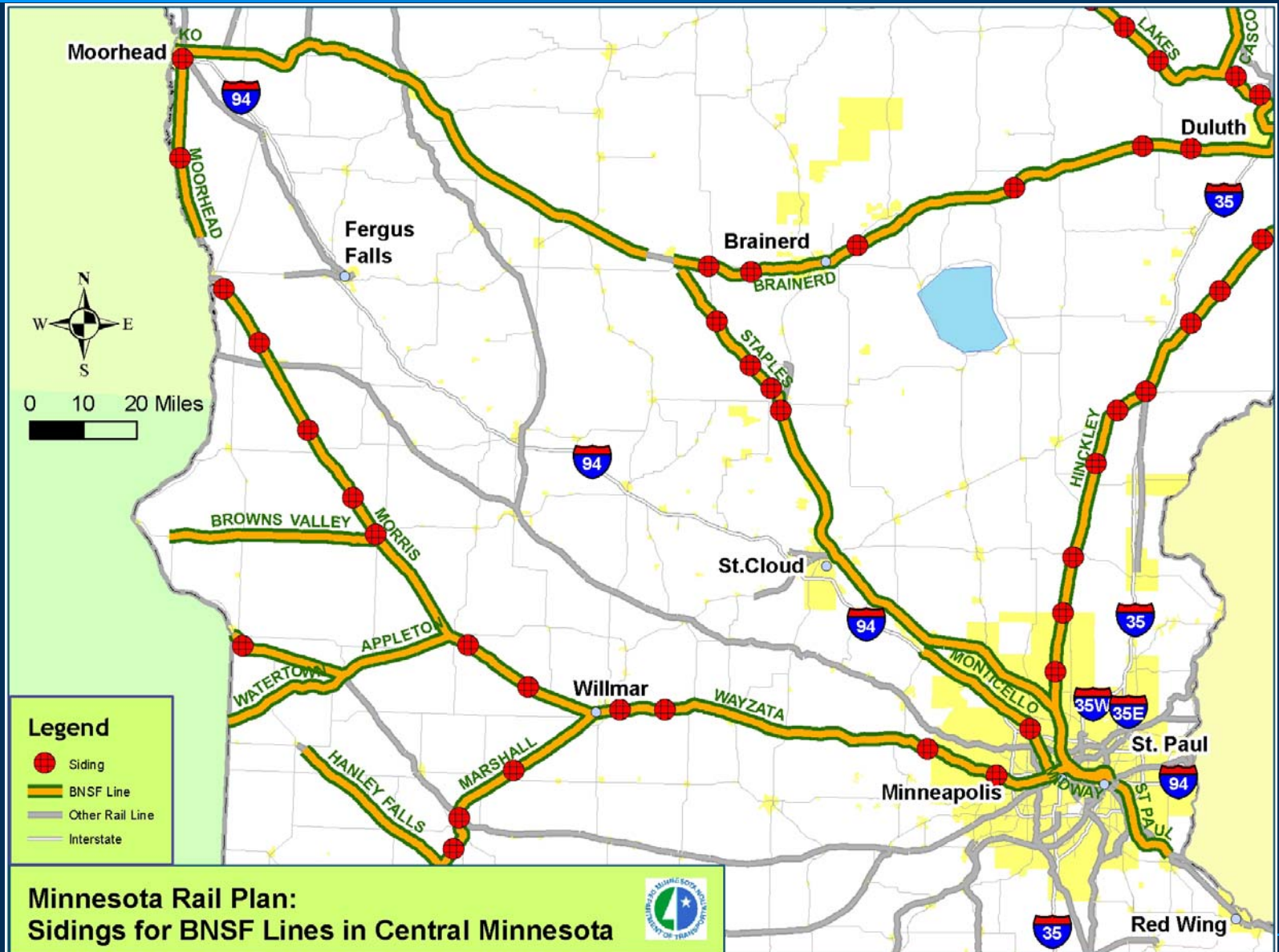


Rail Inventory Sample

Grade Crossings – 4,500 Public Crossings



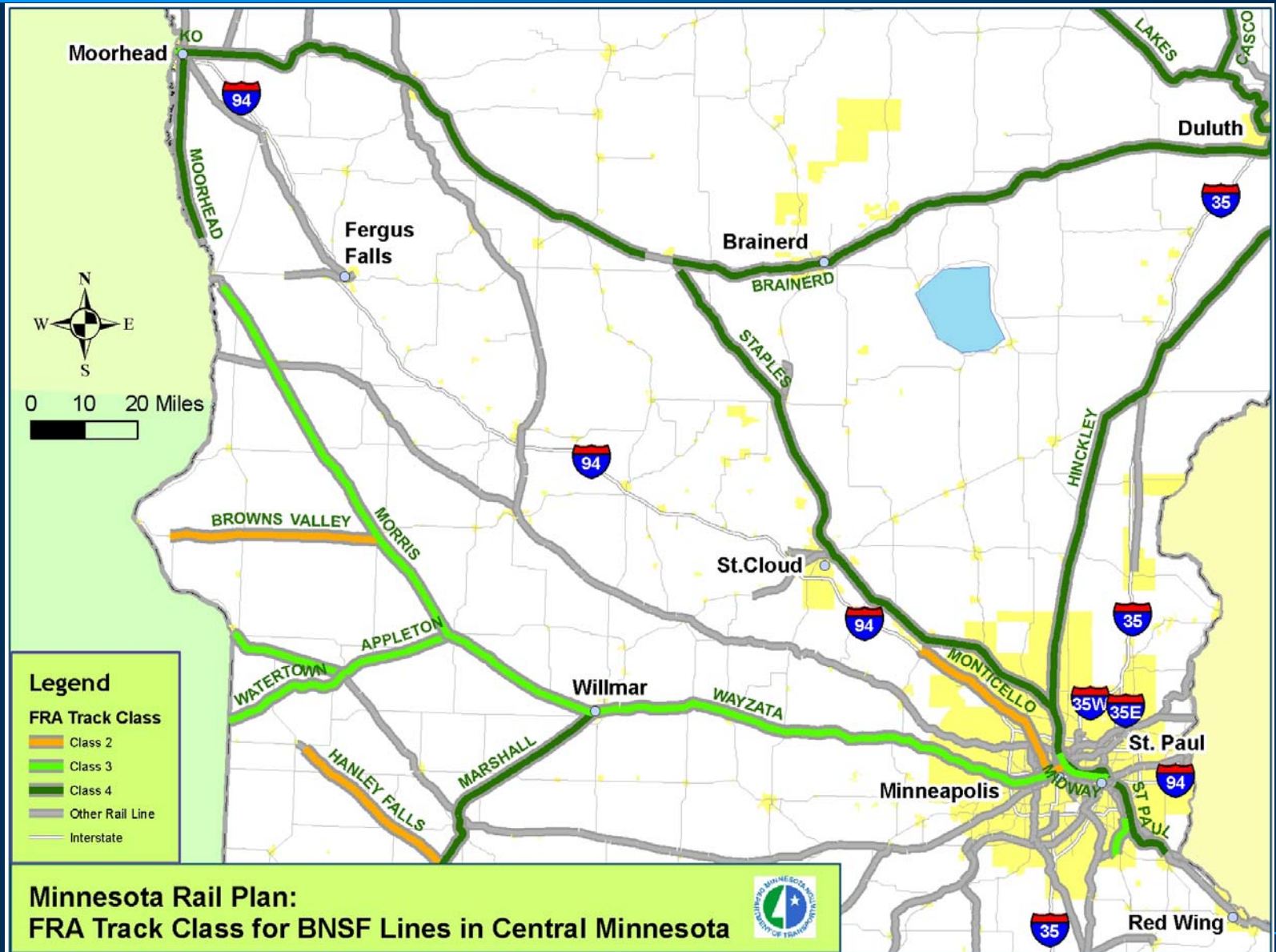
Rail Inventory Sample Sidings



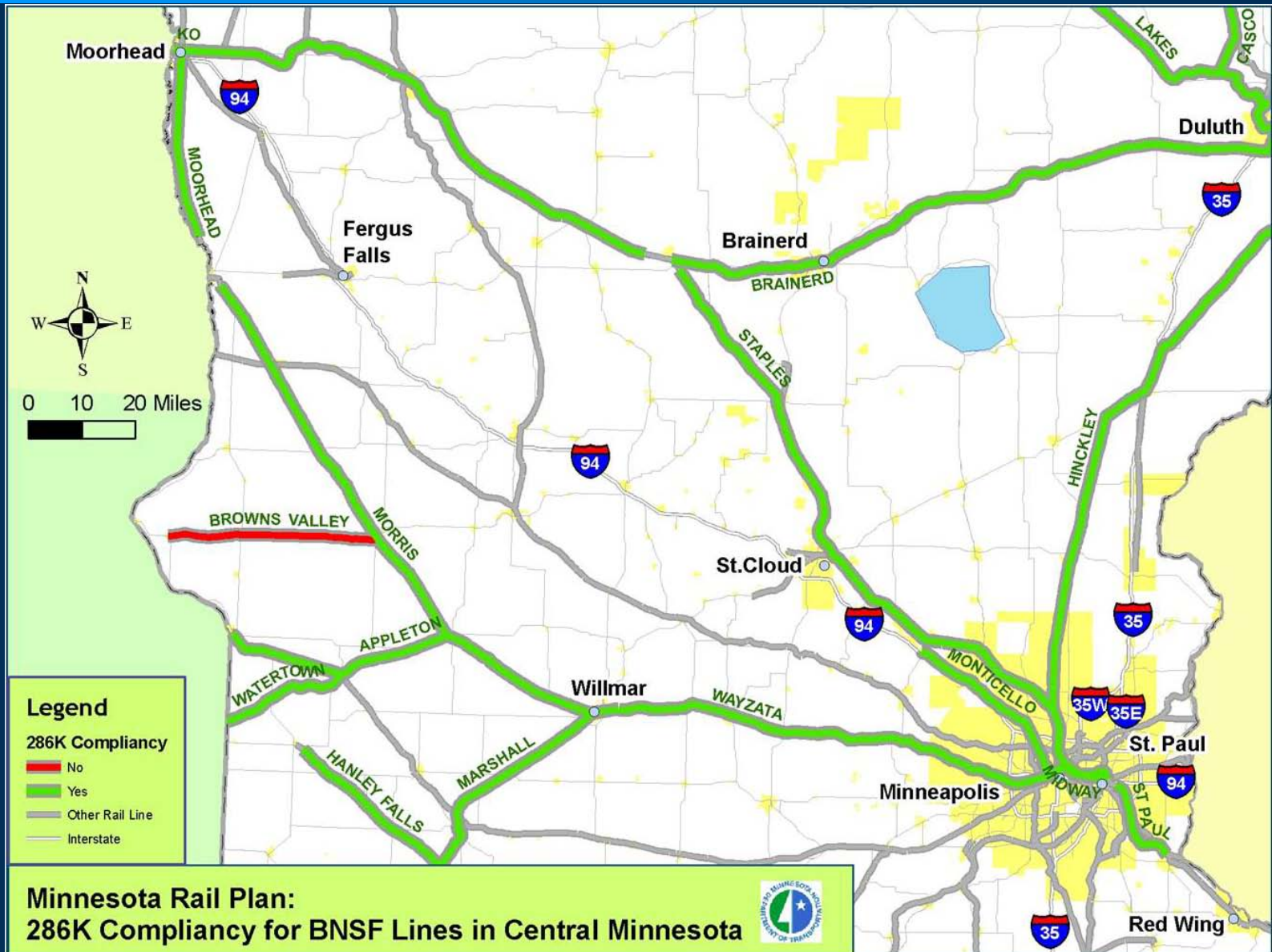
Rail Inventory Sample Signal Control



Rail Inventory Sample Track Class



Rail Inventory Sample 286K Capability



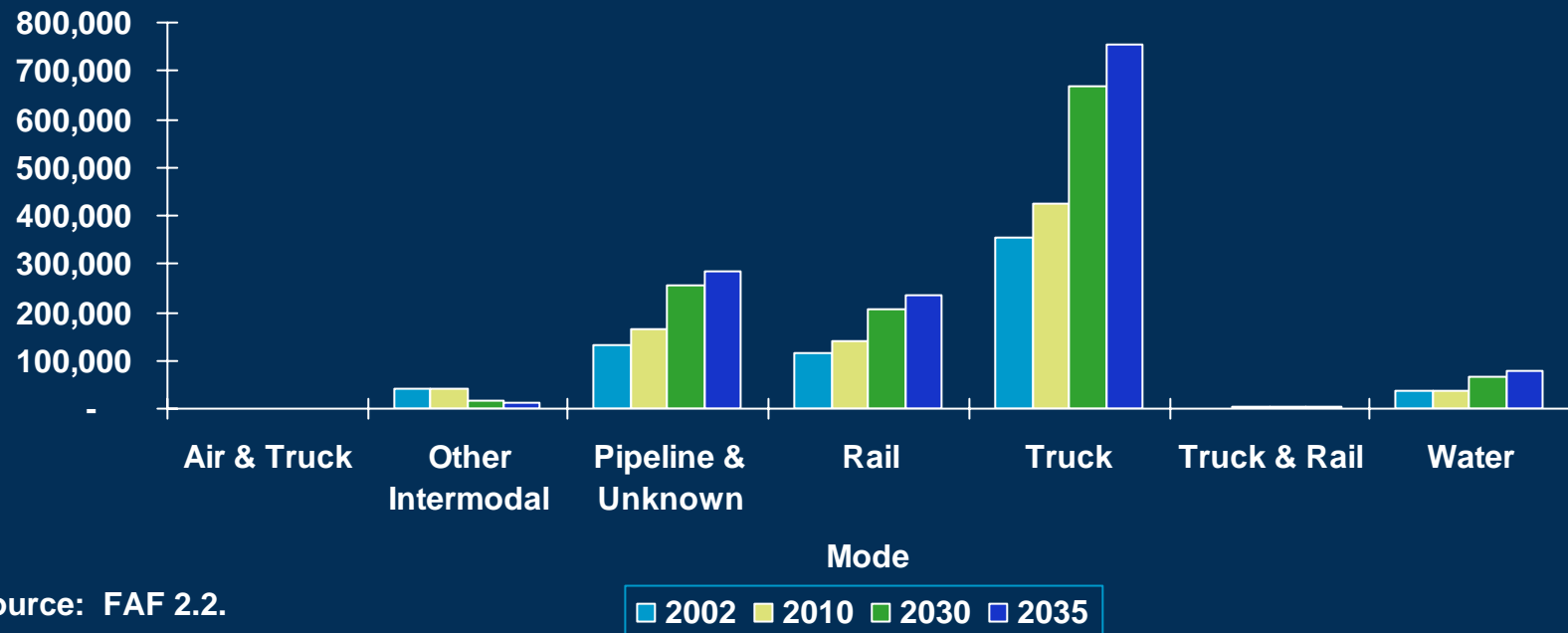
Freight Rail System Usage (Demand)

- Estimate rail network usage

Total Minnesota Tonnage by Mode Current and Projected

- “Rail” tonnage in MN represents 6% of national category total
- “Truck and Rail” tonnage in MN represents 5% of national category total

Tons (in Thousands)



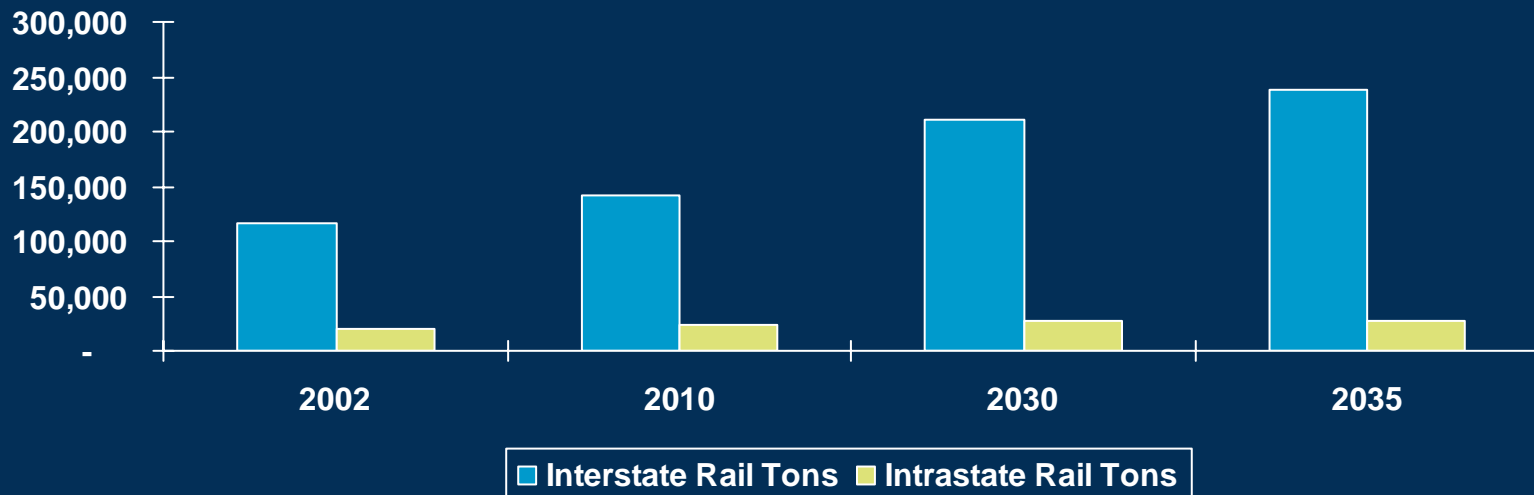
Source: FAF 2.2.

Total Minnesota Rail Tonnage

Current and Projected

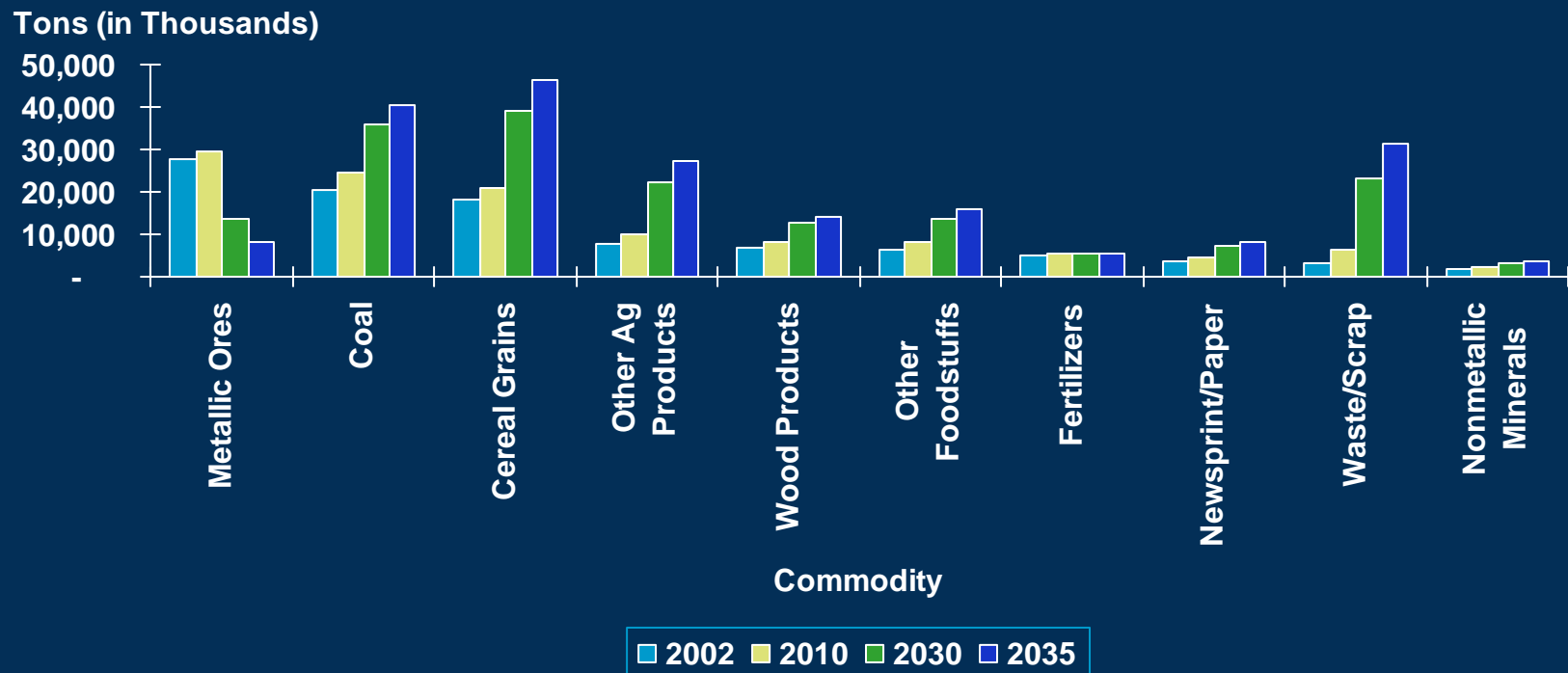
- Over 117,000,000 tons carried by rail in MN in 2002 – projected to grow to nearly 240,000,000 by 2035
- In 2002 nearly 20,000,000 tons had origins and destinations in Minnesota

Tons (in Thousands)



Top Minnesota Rail Commodities Current and Projected

- In 2002, top 10 commodities accounted for 84% of tonnage
- Predicted shift in top commodity in 2035, from metallic ores to cereal grains

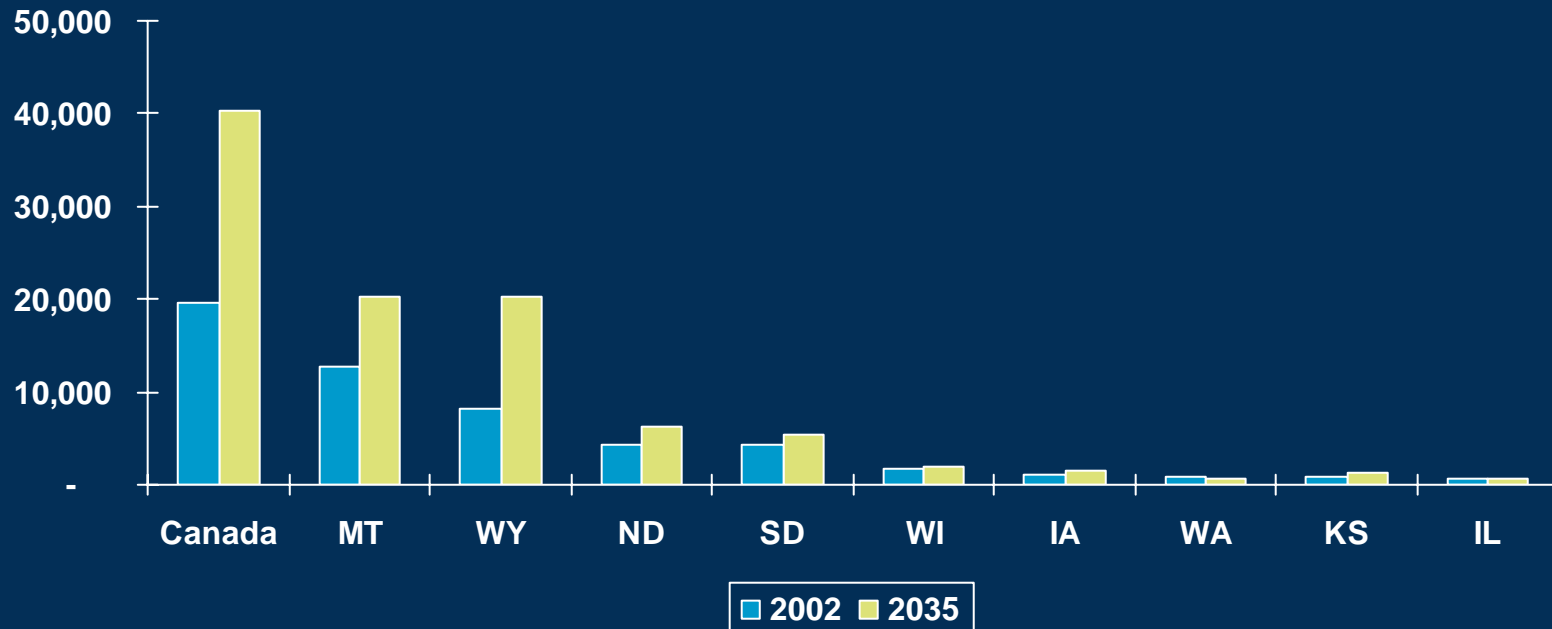


Top Minnesota Rail Trading Partners

Goods Shipped **to** Minnesota

- Rail tonnage from Canada to Minnesota is expected to double between 2002 and 2035
- Shipments from Canada accounted for 17% of all 2002 Minnesota rail traffic

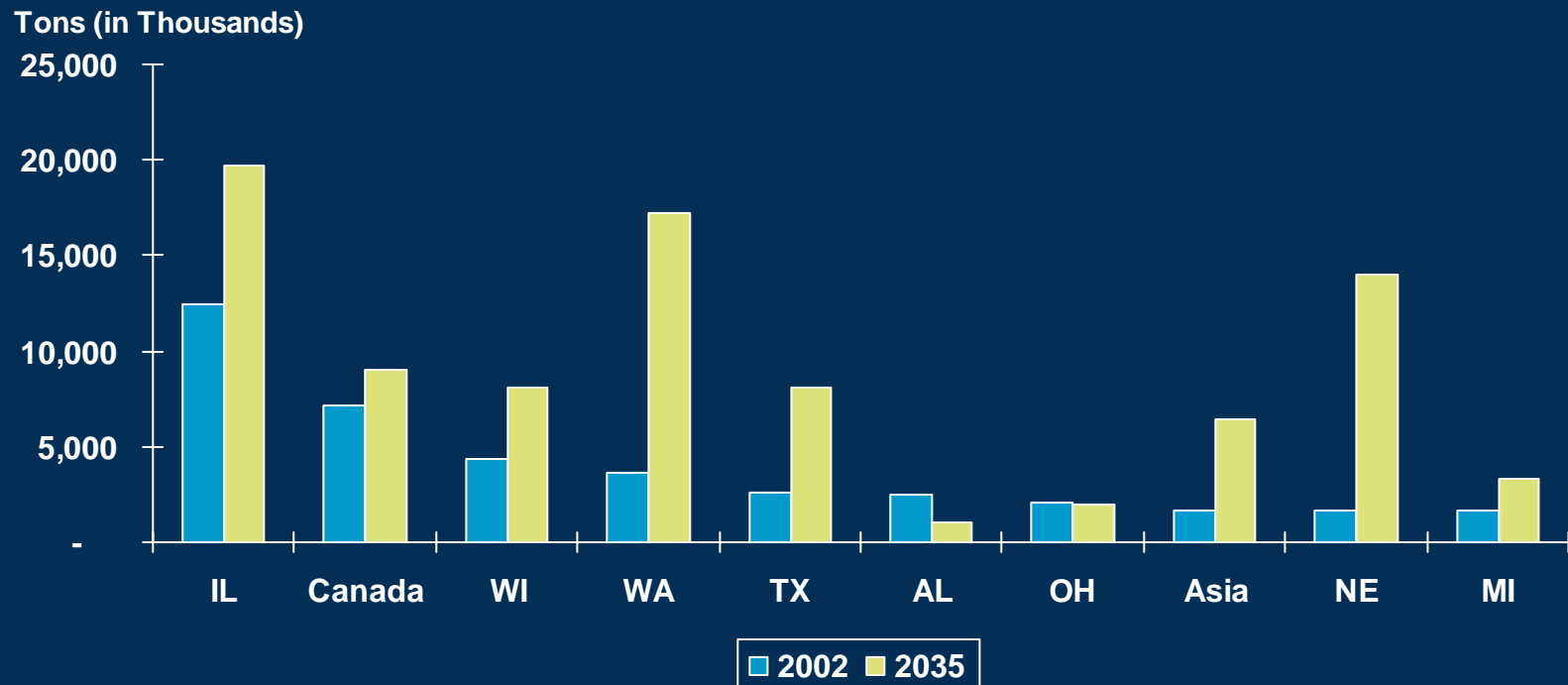
Tons (in Thousands)



Top Minnesota Rail Trading Partners

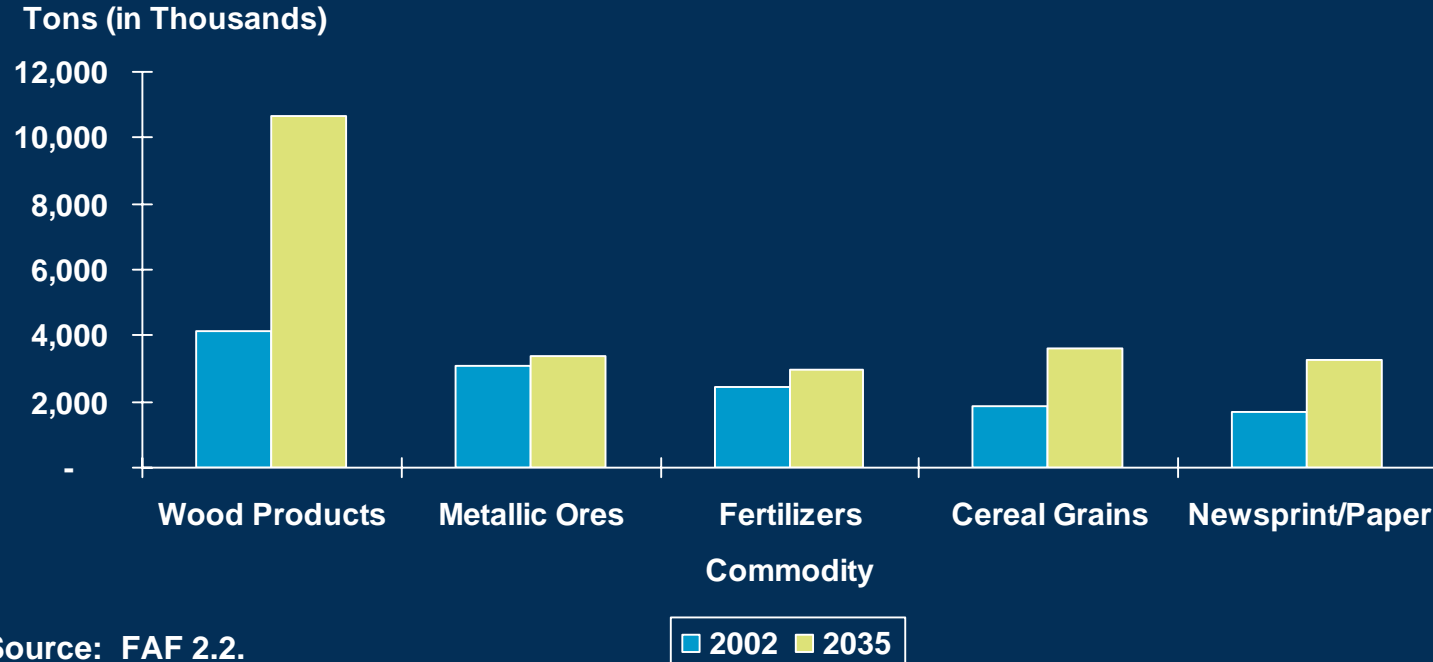
Goods Shipped *from* Minnesota

- Strong rail growth projected from Minnesota to Washington, Texas, and Nebraska between 2002 and 2035
- Shipments to Illinois accounted for 11% of all 2002 Minnesota rail traffic



Minnesota Rail Trade via Port of Entry

- International Falls, Minnesota serves as a key gateway for rail freight for the U.S.
- Only 25% of port activity had origin or destination in Minnesota in 2002, expected to decline to 19% in 2035
- Wood products has the highest tonnage of Minnesota rail port activity



Institutional Structure

- **Examine the institutional structure of Minnesota's railroads**
- **Produce a high-level assessment of the impacts of important public sector initiatives and regulatory activities**
- **Create new governance structure for state rail programs**

Implementation Issues

Working with Freight Railroads

- Freight railroads own underlying rail lines, land for passenger rail routes
- Freight railroad negotiating principles
 - Uncompromised safety for passengers and freights
 - Enhanced capacity for freight services
 - No fault liability for passenger services
 - Appropriate compensation for use of tracks/ROW
- Other issues – PTC, financial participation on low volume lines and in difficult times



Next Steps

Marc Cutler

Integrate Freight and Passenger System Planning (Task 4)

Task Objective

Identify infrastructure improvements needed to provide better services and meet capacity, safety, efficiency, reliability, and mobility goals

Key Issues

- Define key network
- Estimate line capacity
- Calculate LOS
- Estimate future service demand
- Identify improvements
- Assemble and test three alternative portfolios

Identify Performance Measures (Task 5)

Task Objective

Develop performance measures that will assist in prioritizing freight and passenger rail improvements by corridor

Key Issues

- Review national and state measures
- Identify measures by stakeholder group
- Select those most appropriate to Minnesota's vision and goals



Discussion

Randy Halvorson, Facilitator

Discussion

What Does This Mean to Future Logistics Needs?

- **System performance from the standpoint of markets needs and policy goals?**
- **Current and future freight markets and demand for goods movement?**
- **Ability of Minnesota's rail system to meet current and future freight logistics needs?**

Freight Technical Advisory Committee (FTAC)

Agricultural Association

Blandin Paper

BNSF RR

Canadian Pacific RR

Cargill, Inc.

CHS, Inc.

FHWA

Ford Motor Company

FRA

Met Council

**Midwest Shippers
Association**

**Minnesota
Railroad Association**

Minnesota

Trucking Association

Mn Commercial RR

MnDOT Districts 1, 7, 8

North Dakota DOT

NW Minnesota RDC

Port of Duluth, MFAC

**Southwest
Leadership Initiative**

TC&W, MFAC

Twin Modal, Inc.

UTU

Passenger Technical Advisory Committee (PTAC)

Amtrak

Anoka County RRA

BNSF Railway

Canadian Pacific RR

Dakota County

FRA

Hennepin County

Met Council

**Mid-Minnesota
Development**

Minnesota Commercial RR

MnDOT Districts 3, 6, Metro

MnDOT Office of Transit

Ramsey County RRA

Rochester Area

St. Louis County

St. Cloud APO

Twin Cities and Western RR

Union Pacific Railway

UTU

Washington County

WisDOT

Aaron Isaacs

Dave Simpson

Policy Advisory Committee (PAC)

Cities and Counties

**Counties Transit
Improvement Boards (CTIB)**

**Environmental
Organizations**

**Legislators and
Other Elected Officials**

**Metropolitan Planning
Organizations (MPOs),
Metropolitan Council**

Organized Labor

Rail Corridor Coalitions

Railroads

**Regional Development
Commissions (RDCs)**

**Regional
Railroad Authorities**

Shippers

State DOTs

Trade Associations

**Transportation
Associations, Ports,
Minnesota Trade
Associations**
