

Minnesota Comprehensive Statewide Freight and Passenger Rail Plan

Policy Advisory Committee

May 29, 2009

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



Agenda

- **Introductions and Opening Comments**
 - Dave Christianson – Project Manager, MnDOT
 - Khani Sahebjam – Deputy Commissioner, MnDOT
- **Presentation on State Rail Plan, Cambridge Systematics**
 - Outreach Update, Randy Halvorson
 - Study Overview and Vision, Marc Cutler
 - Freight System Inventory, Andreas Aeppli
 - Passenger Rail System, Allan Rutter
 - Next Steps, Marc Cutler
- **Discussion – Randy Halvorson**

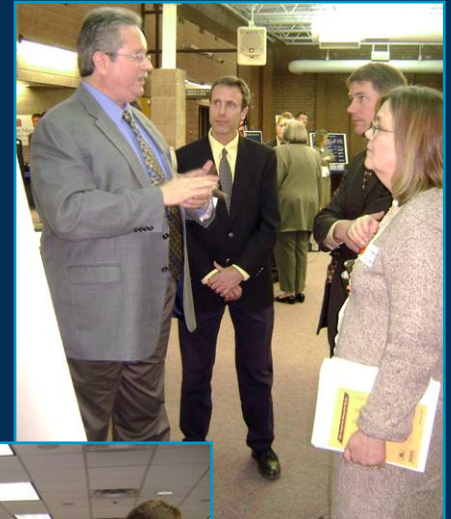


Public Outreach

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

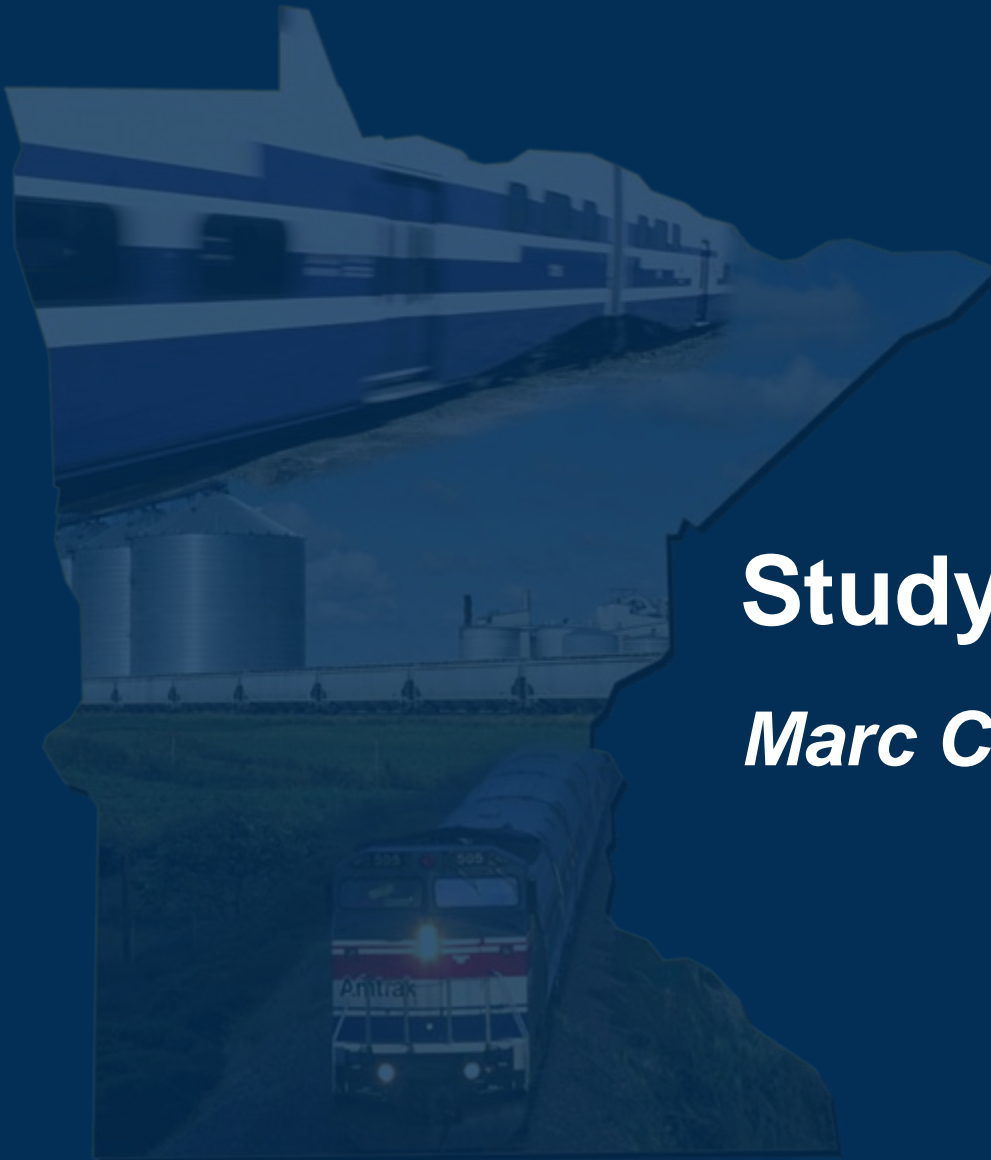
By Location

- **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 Xpress; 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





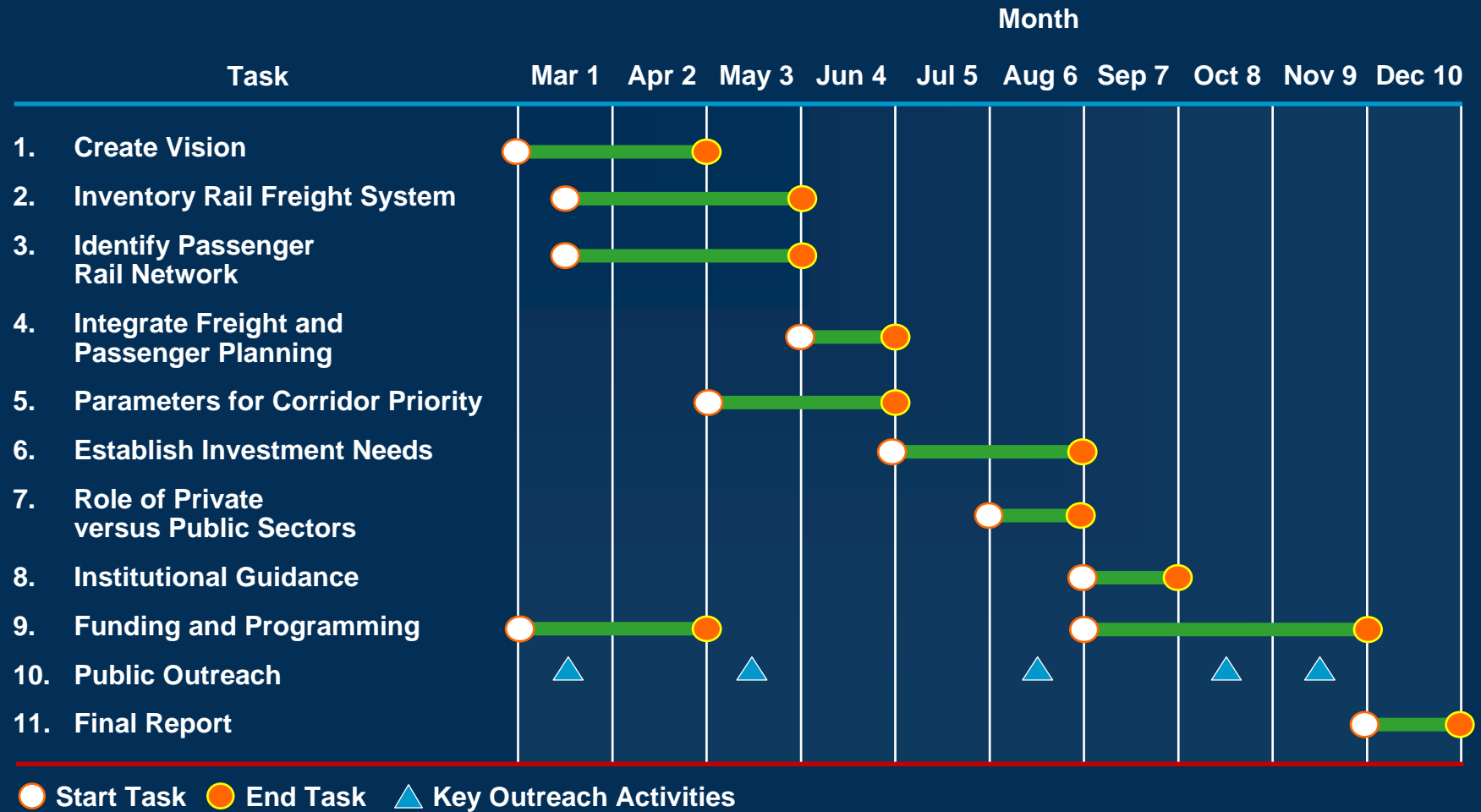
Study Overview

Marc Cutler

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

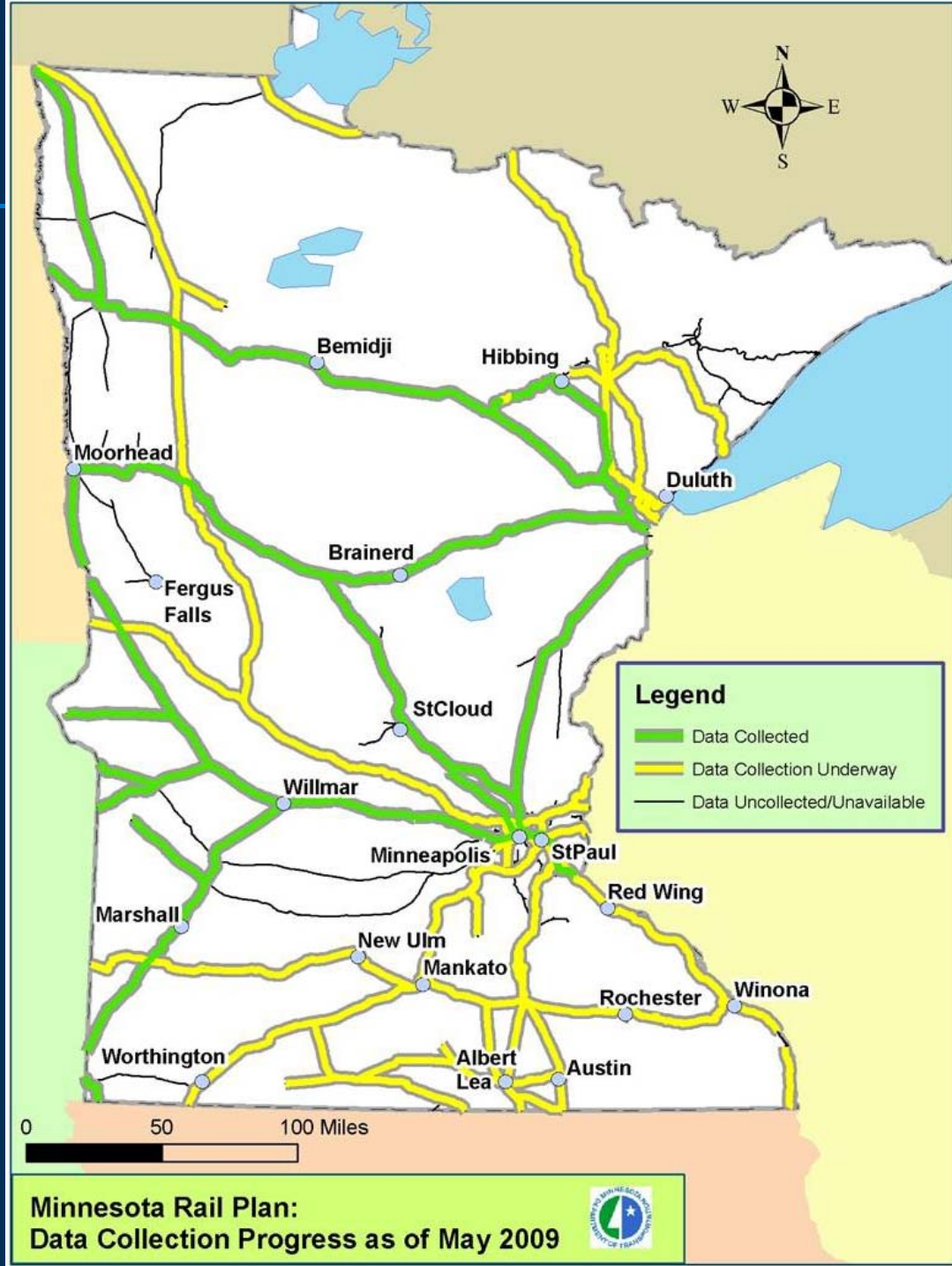
- What are the existing conditions, system usage and institutional structure?
- What freight markets are currently served?
- How well does Minnesota's rail system meet current and future logistics needs?
- What is the impact of public sector initiatives and regulations?

Freight Rail System Inventory (Supply)

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

Rail Lines in Inventory Process

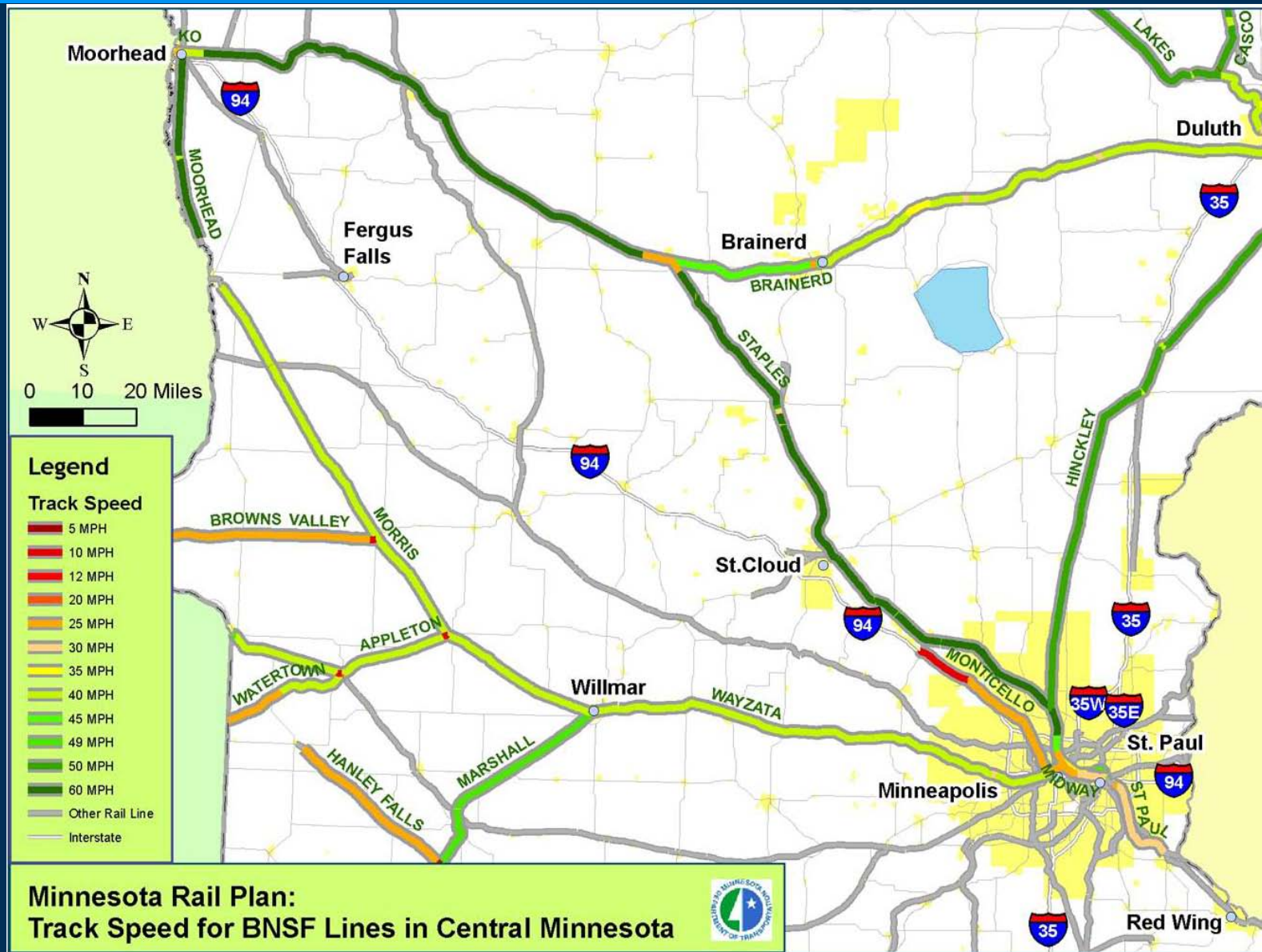
- 4 Class I Railroads
- 16 Short Line Railroads
- 8th highest rail miles in nation



Rail Inventory Sample Trains/Day

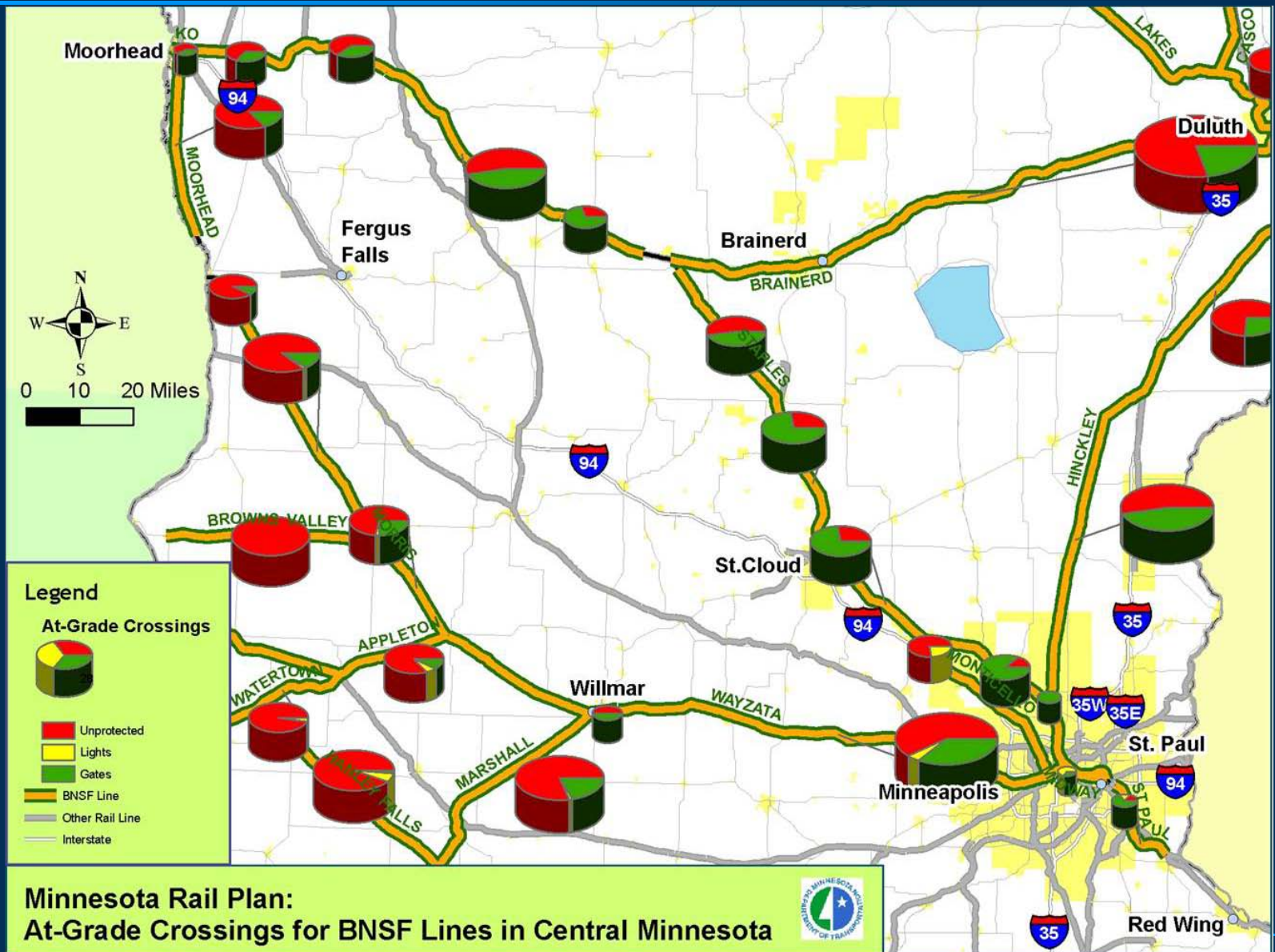


Rail Inventory Sample Track Speed



Rail Inventory Sample

Grade Crossings – 4,500 Public Crossings



Freight Rail System Usage (Demand)

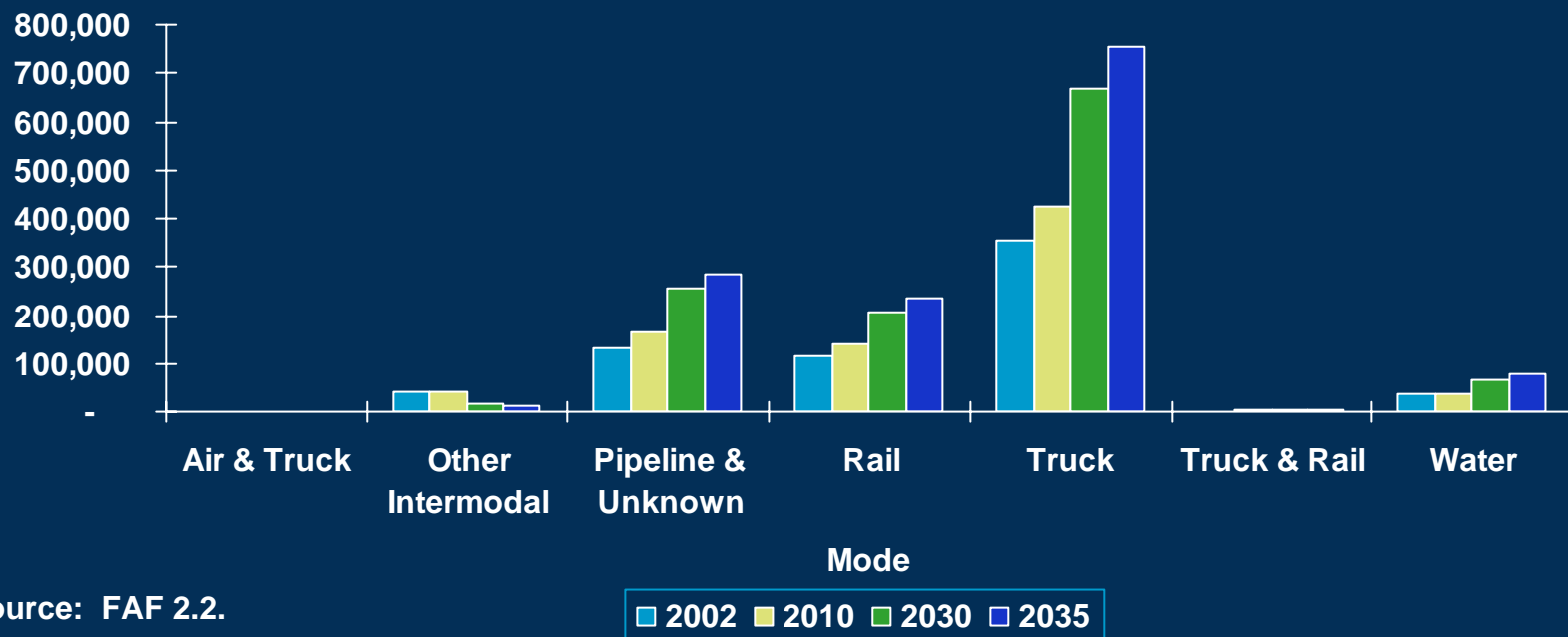
- Estimate rail network usage

Total MN Tonnage by Mode Current and Projected

Preliminary Data

- “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)



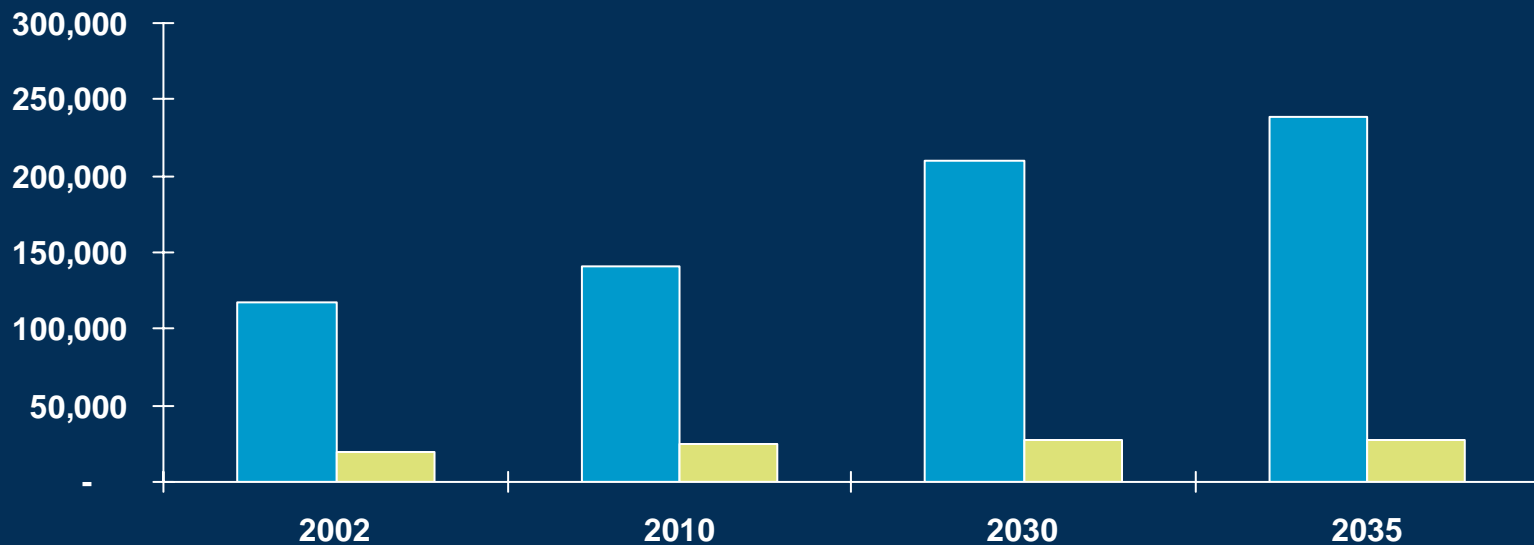
Source: FAF 2.2.

Total MN Rail Tonnage Current and Projected

Preliminary Data

- 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)



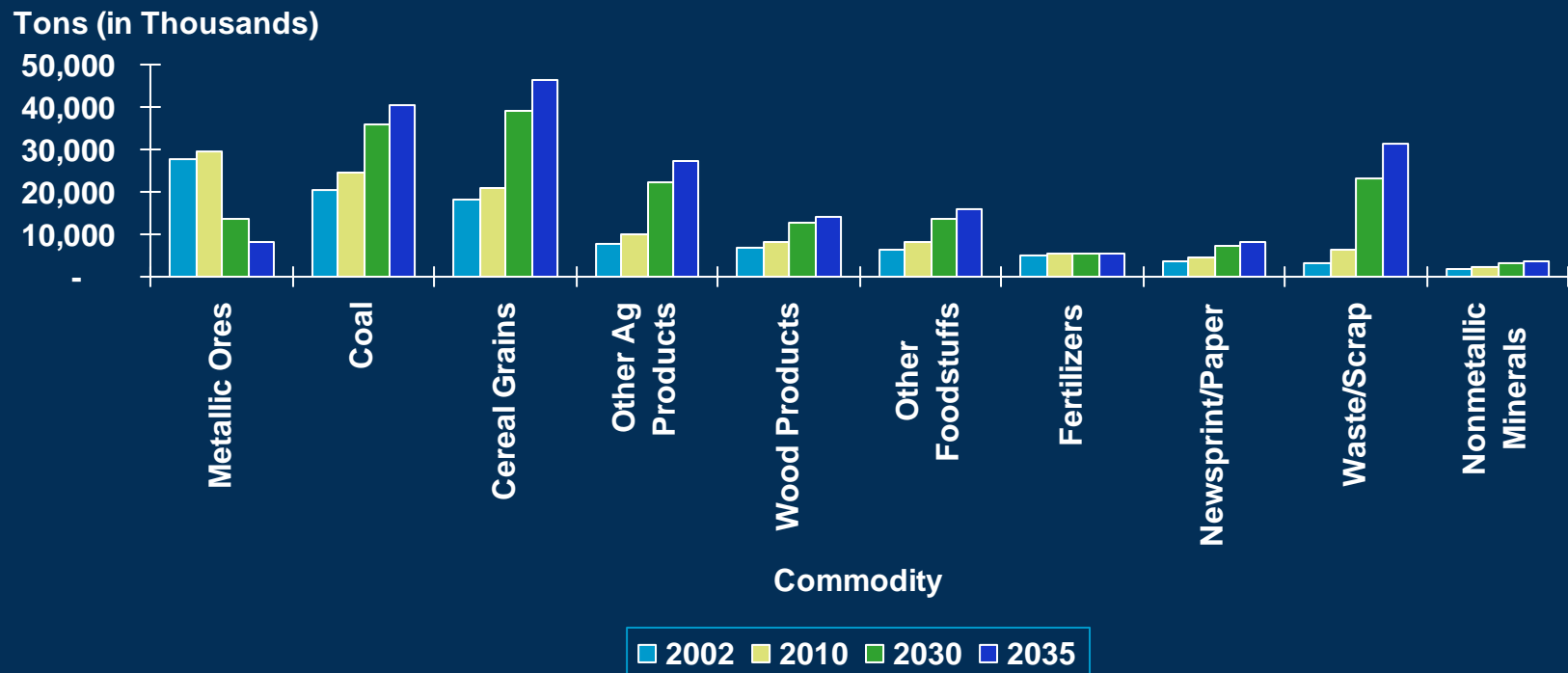
■ Interstate Rail Tons ■ Intrastate Rail Tons

Source: FAF 2.2.

Top MN Rail Commodities Current and Projected

Preliminary Data

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



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**



Passenger Rail System

Passenger Rail System Inventory and Forecasts (Task 3)

Task Objective

Synthesize information from existing studies to identify corridors and rail lines most likely to support effective passenger rail service

Key Issues

- **Compile previous and ongoing reports on other relevant planning efforts**
- **Inventory physical characteristics on rail lines in likely passenger corridors**
- **Synthesize demand-related forecasts to evaluate corridors**

Passenger Rail Corridors Studied

- Corridors that connect to the Twin Cities
- Some corridors begin with commuter rail studies
- Other corridors have been the subject of intercity passenger rail and high speed rail studies
- Still others have been suggested

Commuter Rail Corridors

- **Twin Cities to**
 - **Big Lake/St. Cloud (Northstar)**
 - **Hastings (Red Rock)**
 - **Hinckley (Rush)**
 - **Bethel/Cambridge (Bethel)**
 - **Norwood-Young America**
- **Red Rock and Rush Lines are still under active study**

Intercity Passenger Rail Corridors

- **Twin Cities to**
 - **Chicago, Milwaukee, Madison (Midwest Regional Rail Initiative-MWRRI)**
 - **Duluth, Hinckley (Northern Lights Express-NLX)**
 - **Rochester (either directly or as route of MWRRI)**

Other Passenger Rail Corridors

- **Twin Cities to**
 - **Willmar (Little Crow), Sioux Falls, South Dakota**
 - **Shakopee/Mankato (Sioux Trail)**
 - **Des Moines, Iowa**
 - **Eau Claire, Wisconsin**
 - **Fargo, North Dakota**
 - **Grand Forks, North Dakota**

Study Process

- **Collected, reviewed existing studies**
- **Synthesized passenger rail forecasts**
 - Created new spreadsheet tools to estimate demand
 - Used highway traffic, aviation, Amtrak, motor coach data sets
- **This helps generate demand data to select intercity corridors that need further study, integration with freight rail needs**

Corridors Showing Strong Demand

Corridor	Demand Profile	Implementation Issues
MWRRI through Minnesota	Strong demand from Chicago	Good track, heavy freight train volumes, multiple states

Corridors Showing Moderate Demand

Corridor	Demand Profile	Implementation Issues
St. Cloud	Moderate demand	Good track, heavy freight volumes, new commuter trains
Rochester	Moderate demand	New route to MSP, poor track – Winona, low freight volumes
Duluth (Northern Lights Express)	Moderate demand	Fair track, modest freight, poor infrastructure near Duluth
Des Moines	Moderate demand	Fair track, modest freight volumes, multiple states
Shakopee/Mankato (Sioux Trail)	Moderate demand	Fair track, modest freight volumes
Eau Claire	Moderate demand	Fair track, modest freight volumes, multiple states

Corridors Showing Modest Demand

Corridor	Demand Profile	Implementation Issues
Red Wing, Winona, La Crosse	Part of MWRRI, intrastate demand lighter	Good track, heavy freight volumes
Willmar (Little Crow)	Modest demand to West	Fair track, modest freight volumes
Sioux Falls, Omaha	Modest demand	Fair track, modest freight volumes, multiple states
Fargo, Grand Forks	Modest intrastate demand	Existing Amtrak service, heavy freight volumes, multiple states

Implementation Issues

Federal Funding Opportunities

- **FRA Funding**
 - Application guidance coming mid-June
 - Three types of grants
 - Projects (ARRA)
 - Corridor planning (ARRA, PRIIA appropriations)
 - State rail planning (FY 09, PRIIA appropriations)
- **Surface Transportation Authorization**
 - Bill may have new rail title
 - High priority project applications already in
- **MN needs to coordinate project advocacy, priorities**

Implementation Issues

State Funding Needs

- **State funding will be needed to match capital costs of infrastructure, rolling stock, positive train control**
 - Can be funded through bonds to match Federal funds
 - Are there limits to state debt available for matching?
 - Transportation funding has been a contentious issue in Minnesota
- **State funding will be needed for operating costs**
 - Passenger rail lines rarely cover operations and maintenance costs, never mind capital costs
 - O&M costs require annual funding
 - Can state funding sources be identified, set aside?

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 freight**
 - **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

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**

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

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