



# Corridor Management Committee

January 14, 2016



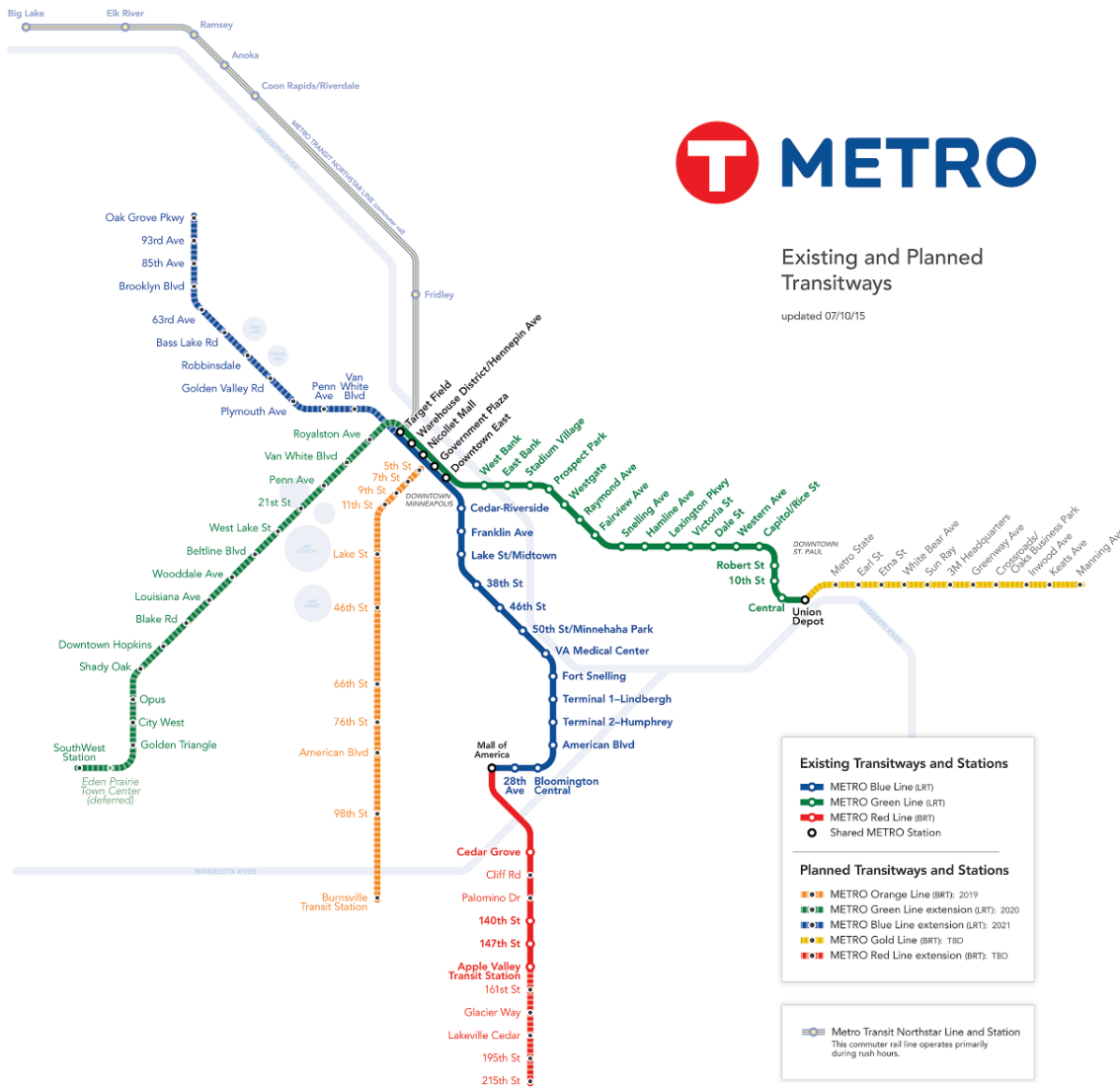
# Today's Topics

- Regional METRO System Overview
- 2016 Project Overview: Key Activities and Milestones
  - Municipal Consent Schedule
  - Design Resolution Schedule
- FEIS Noise Analysis Overview
- 2016 Meeting Schedule



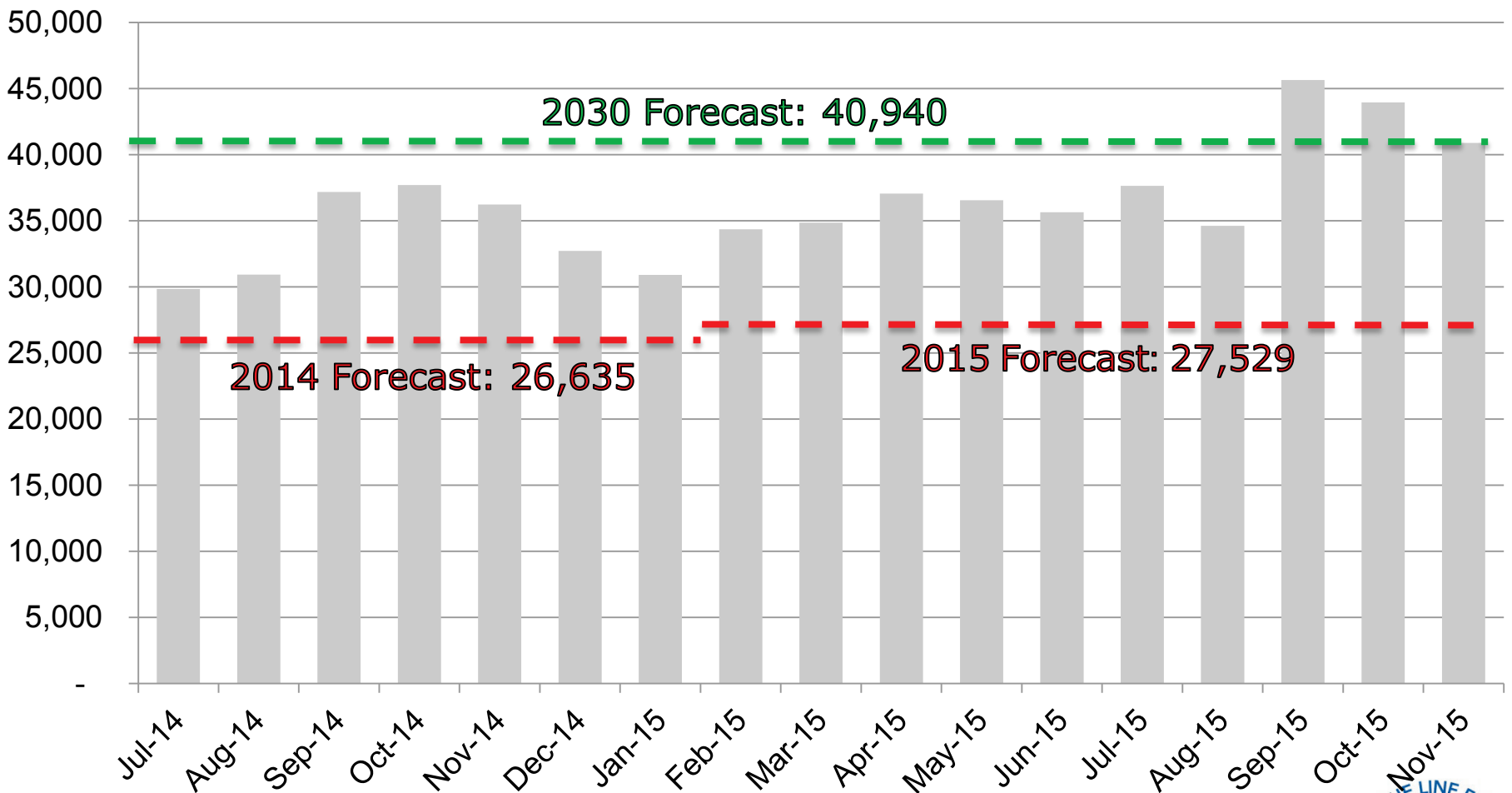
# METRO System: All-Day, Frequent Service

- Light Rail Transit
  - Blue Line (2004)
  - Green Line (2014)
  - Green Line Extension (2020)
  - Blue Line Extension (2021)
- Bus Rapid Transit
  - Red Line (2013)
  - Orange Line (2019)
  - Gold Line (TBD)



# Average Green Line Daily Ridership

## Green Line Passenger Trips Weekday Average





# Green Line: Over \$3B In Private Development



Westgate



Hamline



Fairview

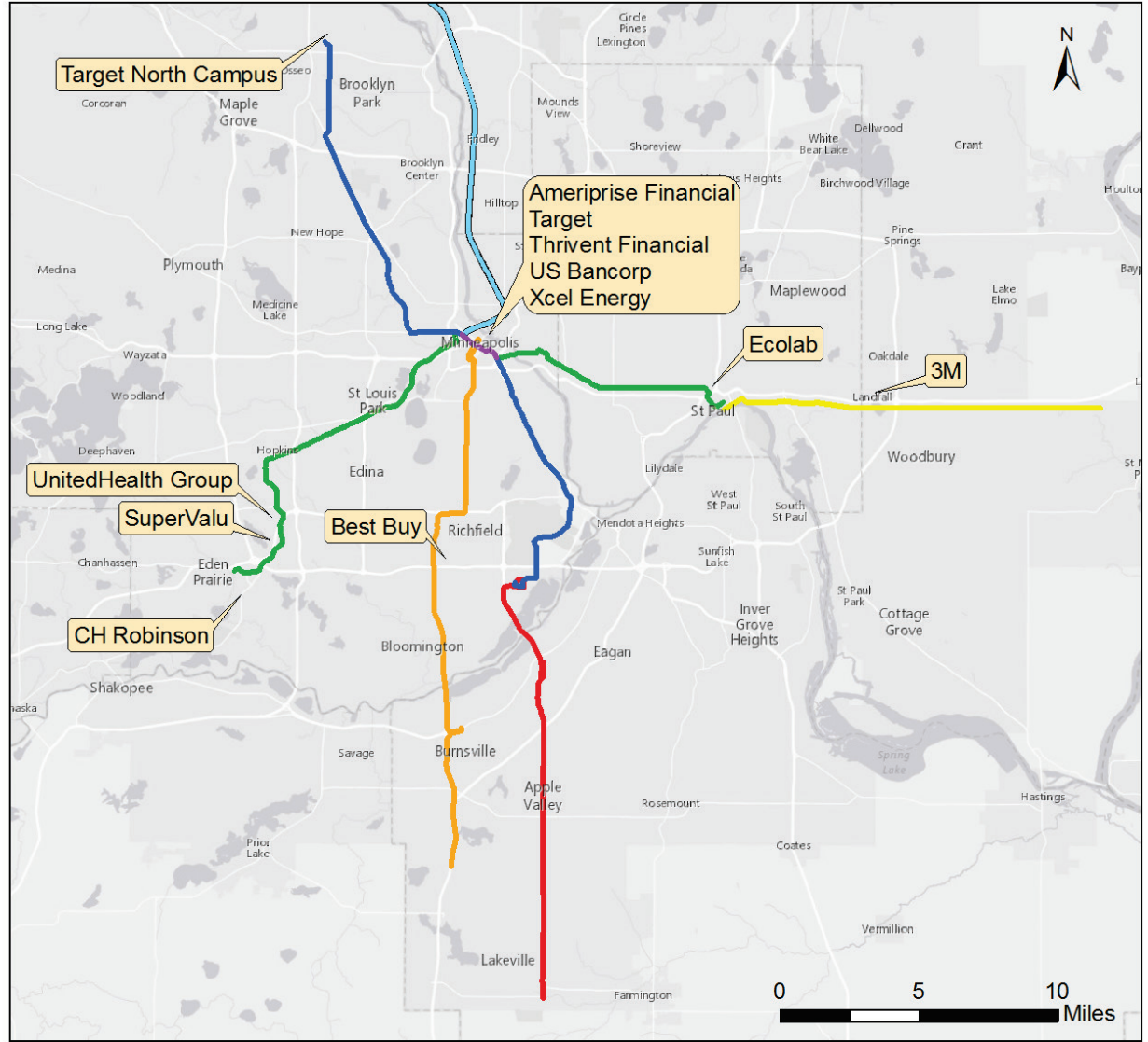


Victoria



# METRO System: Fortune 500 Companies

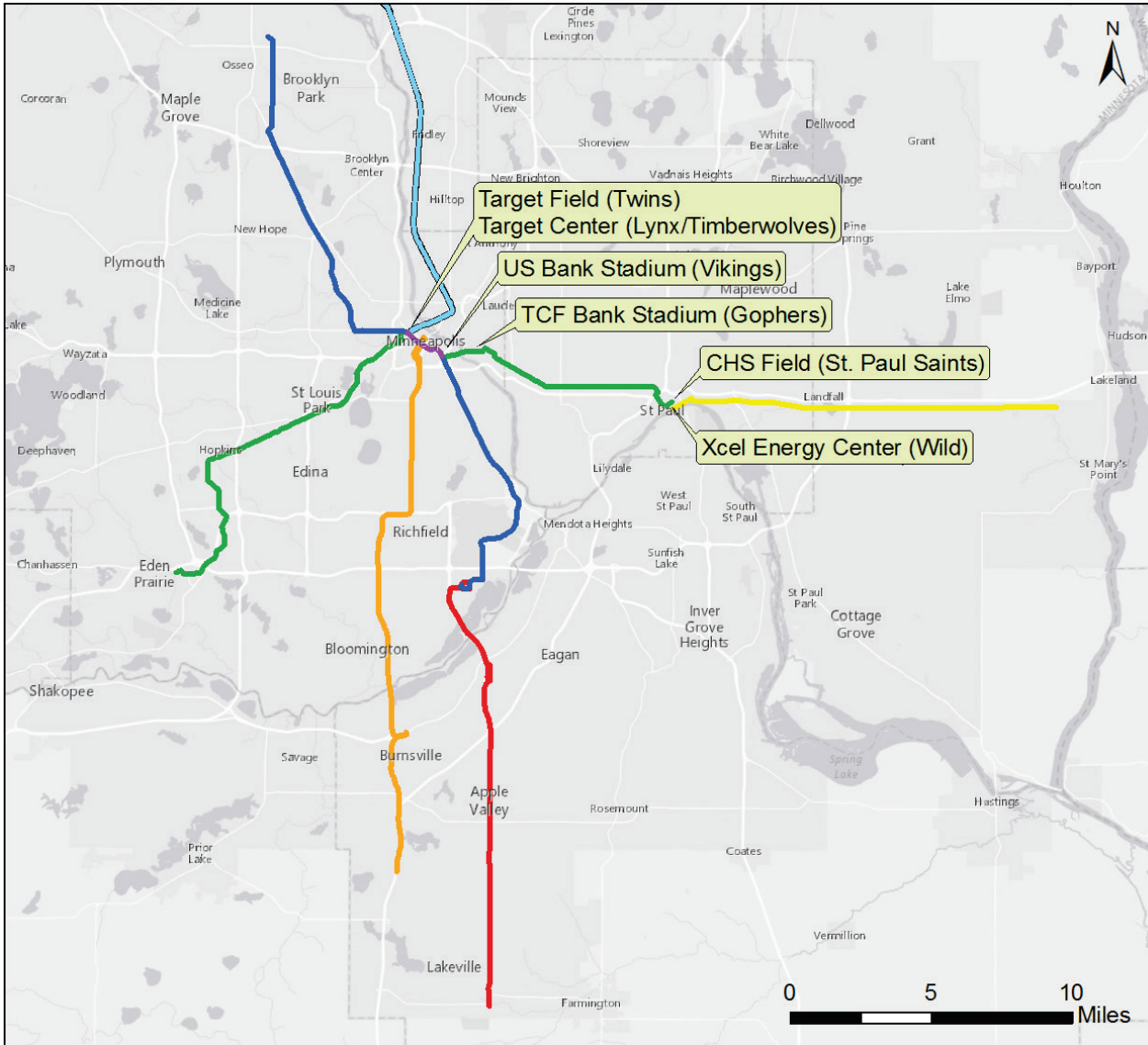
- 17 Fortune 500 Companies headquarters in Minnesota
- 16 are in the Twin Cities metro area
- 11 are on an existing or planned regional transitways





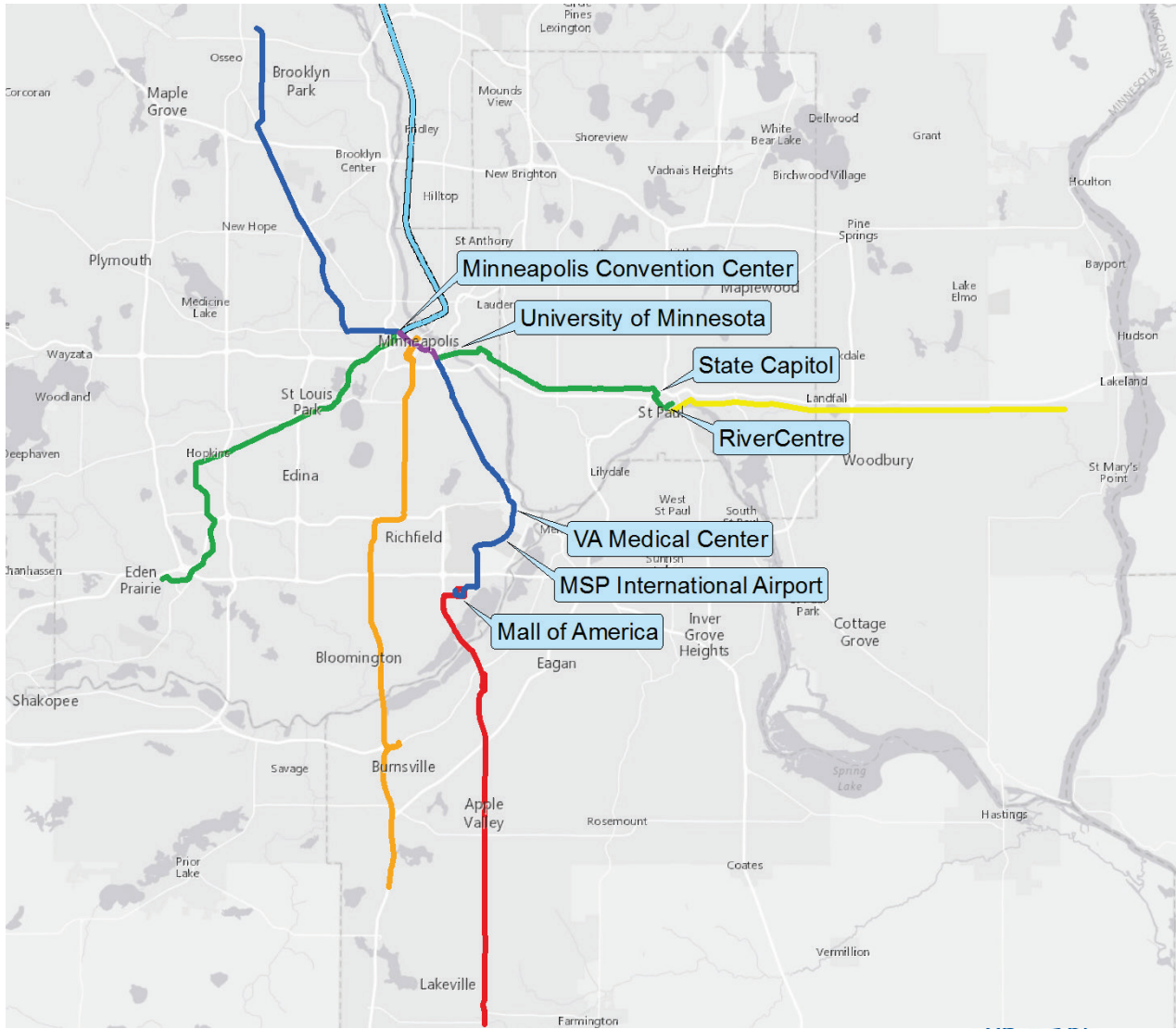
# METRO System: Sports Venues

- Target Field
- Target Center
- US Bank Stadium
- TCF Bank Stadium
- Xcel Energy Center
- CHS Field



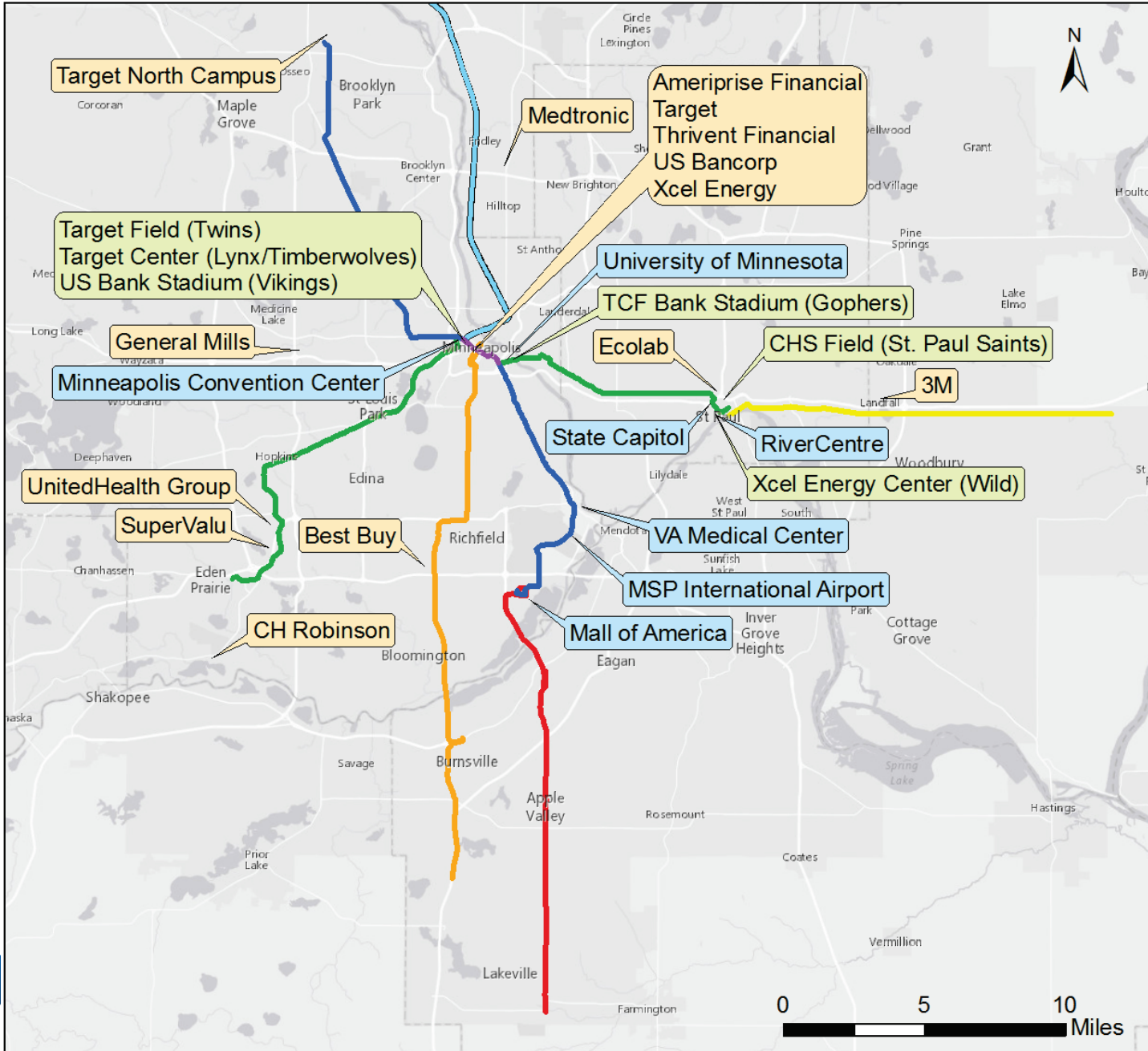
# METRO System: Regional Attractions

- Mall of America
- MSP Int'l Airport
- VA Hospital
- University of Minnesota
- State Capitol





# METRO System: Regional Destinations



# 2016 Project Overview: Key Activities and Milestones



# Project Timeline

2014-2016

- Project Development

2016

- Environmental/Municipal Consent

2017

- Engineering

2018

- Full Funding Grant Agreement

2018-20

- Heavy Construction

2021

- Passenger Operations





# Major Project Milestones

<b>FTA Grants Entry to Project Development</b>	<b>Aug 22, 2014</b>
<b>Technical Issues (1-16) Resolution</b>	<b>Oct 29, 2015</b>
<b>Met Council Approves Municipal Consent Scope</b>	<b>Dec 9, 2015</b>
<b>Municipal Consent Starts</b>	<b>Dec 15, 2015</b>
Municipal Consent Concludes	Mar 4, 2016
Publication of FEIS Notice of Availability	June 2016
Record of Decision	Aug 2016
Complete 30% Design	Q3 2016
FTA Grants Entry to Engineering	Q4 2016
Complete 100% Design	Q4 2017
Full Funding Grant Agreement	Q4 2017
Heavy Construction	2018-2020
Revenue Service	2021



# 2016 Activities

Activity	J a n	F e b	M a r	A p r	M a y	J u n	J u l	A u g	S e p	O c t	N o v	D e c
Project Development												
Municipal Consent												
Notice of Intent to Enter Engineering												
FEIS/Record Of Decision												
Project Development Continuance												
Entry to Engineering												



# Municipal Consent Schedule

**Dec 15, 2015:** Plans delivered to city halls, community and reference libraries; posted on project website

**Jan 19, 2016:** Joint Met Council/Hennepin County/HCRRA Public Hearing

**Open House:** 5:00 PM, **Public Hearing:** 6:00 PM

**Location:** Hennepin County’s Minneapolis Central Library

City/County	Open House/ Public Hearing	Committee/ Council/ Board Action
Brooklyn Park <b>(Published)</b>	Jan 25	Feb 22
Crystal <b>(Published)</b>	Jan 14: Open House Feb 2: Public Hearing	Feb 16
Robbinsdale	Feb 16	March 2
Golden Valley <b>(Published)</b>	Feb 2	Feb 16
Minneapolis (T&PW) <b>(Published)</b>	Feb 2 (Public Hearing Only)	Feb 2
Minneapolis (Council)	n/a	Feb 12
Hennepin County	Jan 19	TBD
Hennepin County Regional Railroad Authority	Jan 19	n/a



**NOTE:** Dates are tentative until officially noticed by city/county.



# Design Resolution Schedule: January

- Municipal Consent Check-In
- PE Plans/Schedule
- BNSF Update
- Utilities
- Bridge Design
- Noise Walls
- Pedestrian Facilities
- Grade Crossings
- Secondary Platform Access



# Design Resolution Schedule: February

- Signal/Communication House Locations
- Water Resources
- Bus Stops/Passenger Drop-Off
- Station Typology



# Design Resolution Schedule: March

- Noise Walls
- TPSS Locations
- Bicycle Facilities
- Fencing
- Bridge Design





# Design Resolution Schedule: April/May

- Utilities
- BNSF Update
- Station Typology/Platform Design
- Landscape/Vegetation
- Lighting
- Retaining Wall Design
- Traffic
- Station Typology/Platform Design
- Station Site Plans

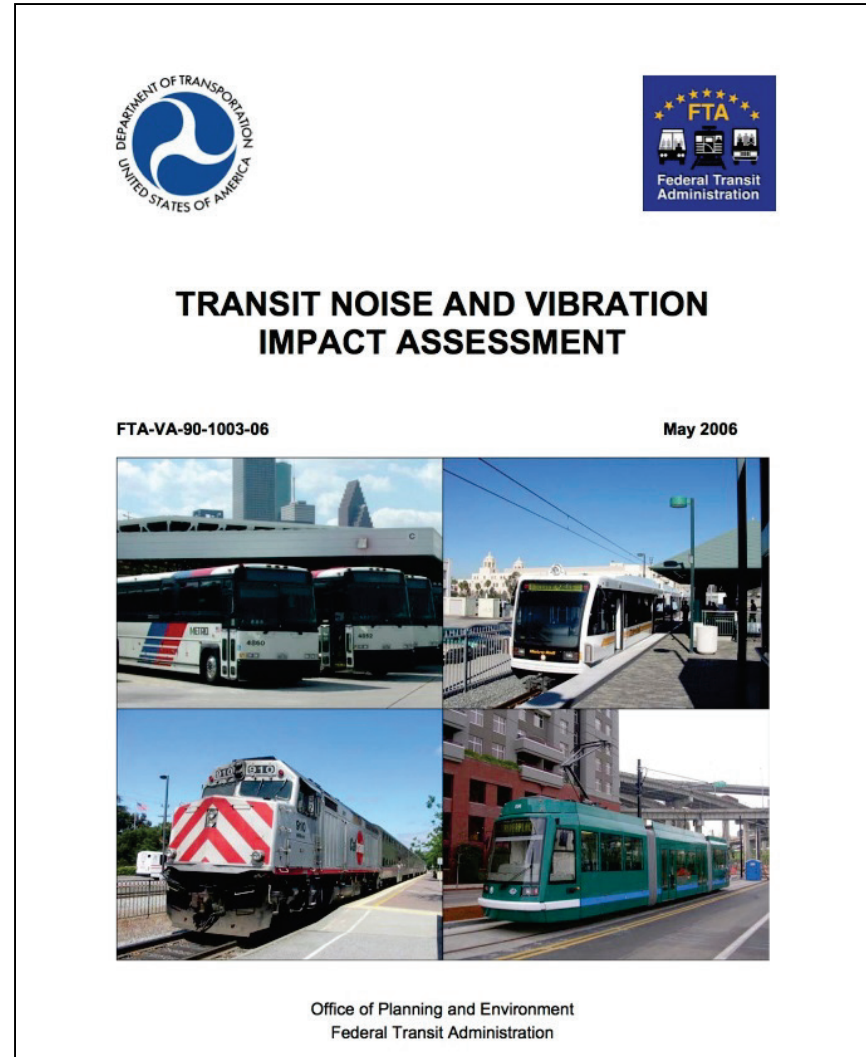


# FEIS Noise Analysis Overview



# Noise Overview

- Basics
- Criteria
- Assessment methods
- Mitigation options
- Construction

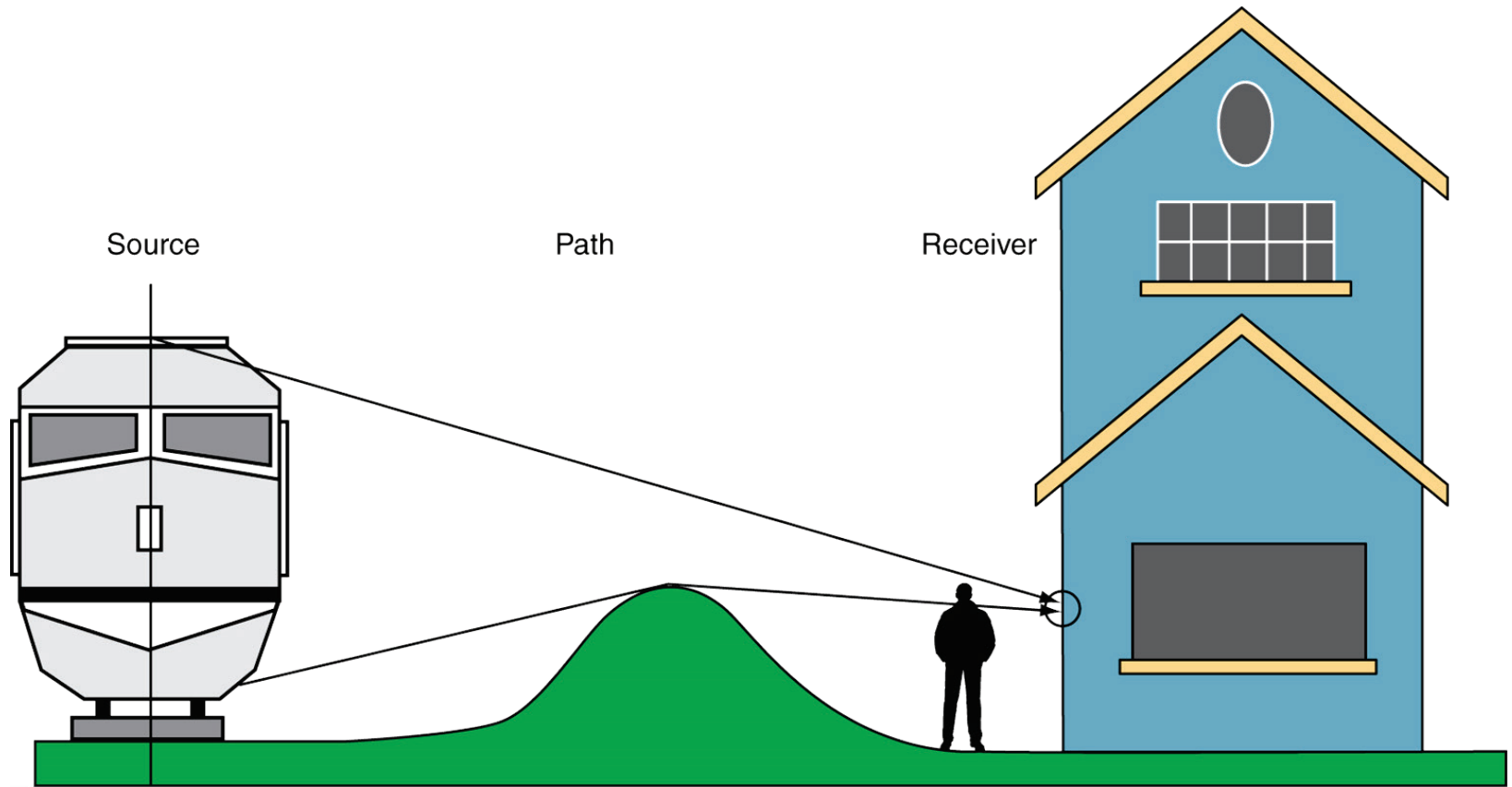


# Sources of Transit Noise

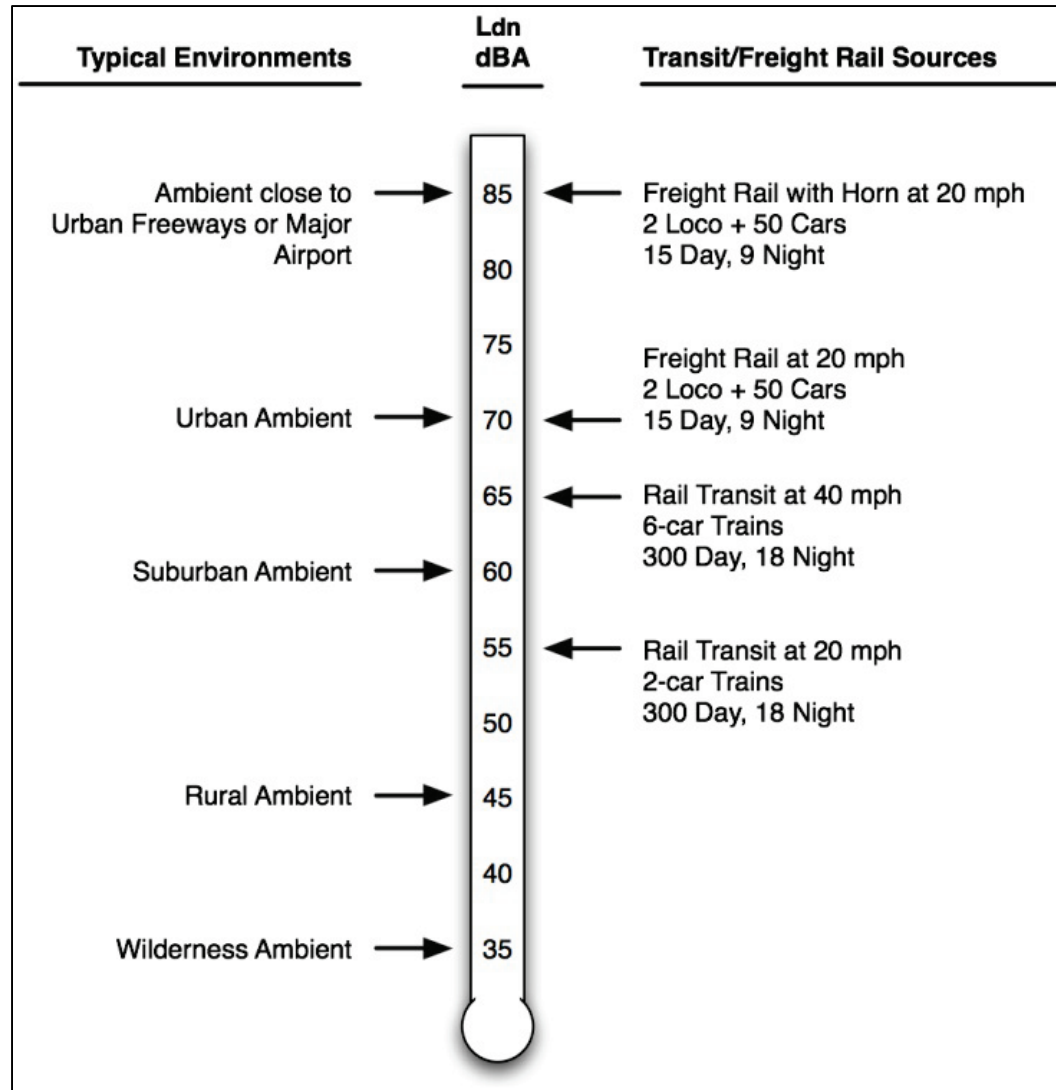
- LRT
  - Wheel/rail interaction
  - Propulsion system
  - Wheel squeal
  - Horns and bells
- Stations
  - Automobile and bus traffic
  - Idling autos, busses
  - P.A. systems
- Buses
  - Diesel engine, exhaust & fans
  - Traction motors (electric buses)
  - Tire/roadway
- Maintenance/storage yards
  - Maintenance vehicle activity
  - Signal horns and bells



# Source-Path-Receiver



# Typical Noise Levels



Source: Federal Transit Administration





# Construction Noise Sources

- Diesel engines: excavators, backhoes, dozers
- Impacts: jackhammers, pile drivers, hoe-rams
- Backup alarms



# Construction Typical Noise Levels

Typical Noise Levels at 50Ft (DBA)	
Pile Driver (impact)	101
Hoe-Ram	95
Jackhammer	88
Excavator	82
Backhoe	80
Pickup Truck	60

Source: Federal Transit Administration



# Noise Assessment Inputs

- Number of cars per train
- Number of trains per hour
- Speed
- Hours of operation
- Path factors
- Track type
- Distance



# Combined Transit and Roadway Projects

- Two projects assessed independently
  - Blue Line LRT Extension
  - West Broadway Ave Reconstruction: Candlewood to 94<sup>th</sup> Ave
- Combined effects of both projects (cumulative effects) will be documented in the FEIS for the Blue Line LRT
  - Will include combined LRT and traffic noise
  - Mitigation, if required, will be designed for both projects



# FTA Noise Mitigation Policy

- No Impact
  - Mitigation not required
- Moderate Impact
  - Mitigation to be considered and adopted, if reasonable
- Severe Impact
  - Seek alternatives to avoid impacts
  - If not practical to avoid, mitigation must be considered





# Potential Noise Mitigation

- Source
  - Vehicle noise specs
  - Lubrication/friction modification
  - Wheel truing/rail grinding
  - Vehicle design
  - Wheel treatments
  - Crossovers
  - Quiet zones
  - Wayside devices
- Path
  - Barriers
  - Berms
- Receiver
  - Sound insulation





# Mitigation of Construction Noise

- Design considerations and project layout
- Sequence of construction phasing
- Alternative construction methods



# Noise Analysis Status & Next Steps

- Share results of detailed noise analysis with city staff
- Discuss mitigation options/recommendations
- Document results in Final EIS; planned for publication in June 2016
- Work with city staff to develop public communications/outreach plans



# 2016 Meeting Schedule



# 2016 Meeting Schedule

- Second Thursday of the month: 1:00 to 2:30 PM
- Held at Hennepin County Brookdale Library (6125 Shingle Creek Parkway, Brooklyn Center) unless otherwise noted:
  - February 11
  - **March 10** (Hennepin County Rockford Road Library, 6401 42nd Avenue N, Crystal)
  - April 14
  - May 12
  - June 9
  - July 14
  - August 11
  - September 8
  - October 13
  - November 10
  - December 8



# More Information

The screenshot shows the Metropolitan Council website with the 'TRANSPORTATION' menu item highlighted. Below the navigation is a large photograph of a blue and yellow METRO Blue Line train at a station platform with passengers waiting. The main content area features a sidebar with a dropdown menu for 'METRO BLUE LINE EXTENSION' containing links for Route, Stations, Environmental, Timeline, and Project Partners. The main text area is titled 'METRO BLUE LINE EXTENSION' and 'Bottineau Transitway – Minneapolis & Northwestern Communities'. It contains a paragraph describing the project: 'The METRO Blue Line Extension (LRT) will operate northwest from downtown Minneapolis through north Minneapolis, Golden Valley, Robbinsdale, Crystal and Brooklyn Park, drawing riders northwest of Brooklyn Park. The proposed alignment is primarily at-grade and will have up to 11 new stations in addition to Target Field Station and about 13 miles of double track. The line will interline with the METRO Blue Line and connect Minneapolis and the region's northwest suburbs with existing LRT on the METRO Green Line, future LRT on the METRO Green Line Extension, bus rapid transit on the METRO Red Line, the Northstar commuter rail line and local and express bus routes.' Below this text are two sections: 'Latest News' with a link to 'Feds: Met Council can begin designing METRO Blue Line Extension' and 'Route' with a link to 'Click on the map below for more information'.

Website: [BlueLineExt.org](http://BlueLineExt.org)

Email: [BlueLineExt@metrotransit.org](mailto:BlueLineExt@metrotransit.org)

Twitter: [@BlueLineExt](https://twitter.com/BlueLineExt)

