



Business Advisory Committee

October 6, 2015



Today's Topics

- Hennepin County Community Works Update
- Project Ridership Estimates
- Technical Issue #4: Golden Valley Rd and Plymouth Ave Stations
- Technical Issue #9: 73rd Ave Crossing
- Technical Issue #14: Transmission Line Coordination
- Technical Issue #15: Traction Power Substations
- Outreach Update
- Project Schedule



Hennepin County Community Works Update



Project Ridership Estimates



How Is Ridership Calculated?

- Ridership forecasts are calculated by the regional model to estimate future year daily weekday trips on the Blue Line Extension
- The regional model is a four-step model that includes mathematical equations that simulate travel behavior
- The regional model:
 - Supports Met Council's Thrive 2040 plan, using forecasted population, employment and household data
 - Cities provide direction on how growth gets distributed throughout their cities
 - Complies with Federal Transit Administration (FTA) Requirements
 - Part of New Starts process to help calculate the project justification criteria
 - Regional model methodology is supported by the FTA



Regional Model Assumptions

- LRT service assumptions
 - Current fare structure and hours of service
 - Feeder bus network
 - 10 minute frequency of service
 - 31 minutes from Target Field to Oak Grove Pkwy Station
 - Current downtown Minneapolis parking rates
- Transitways included in the Council's 2040 Transportation Policy Plan (TPP)
 - Existing transitways: Blue, Green, Red Lines, Northstar
 - Transitway expansion: Red Line stage 2, Orange Line, Green Line Extension, Gold Line, Snelling BRT, Penn BRT, Chicago Emerson-Fremont BRT



Comparing to DEIS Ridership

- DEIS ridership: 27,000 (2030)
- What has changed?

	Change
Frequency of service change (7.5 to 10 minutes)	-
End to end running time increase	-
Station added at Plymouth	-
Update development assumptions (to 2040 Thrive)	-
Added Penn BRT (C Line)	-
Updates to model/validation and feeder bus assumptions	+
Park and ride capacity constraint	-



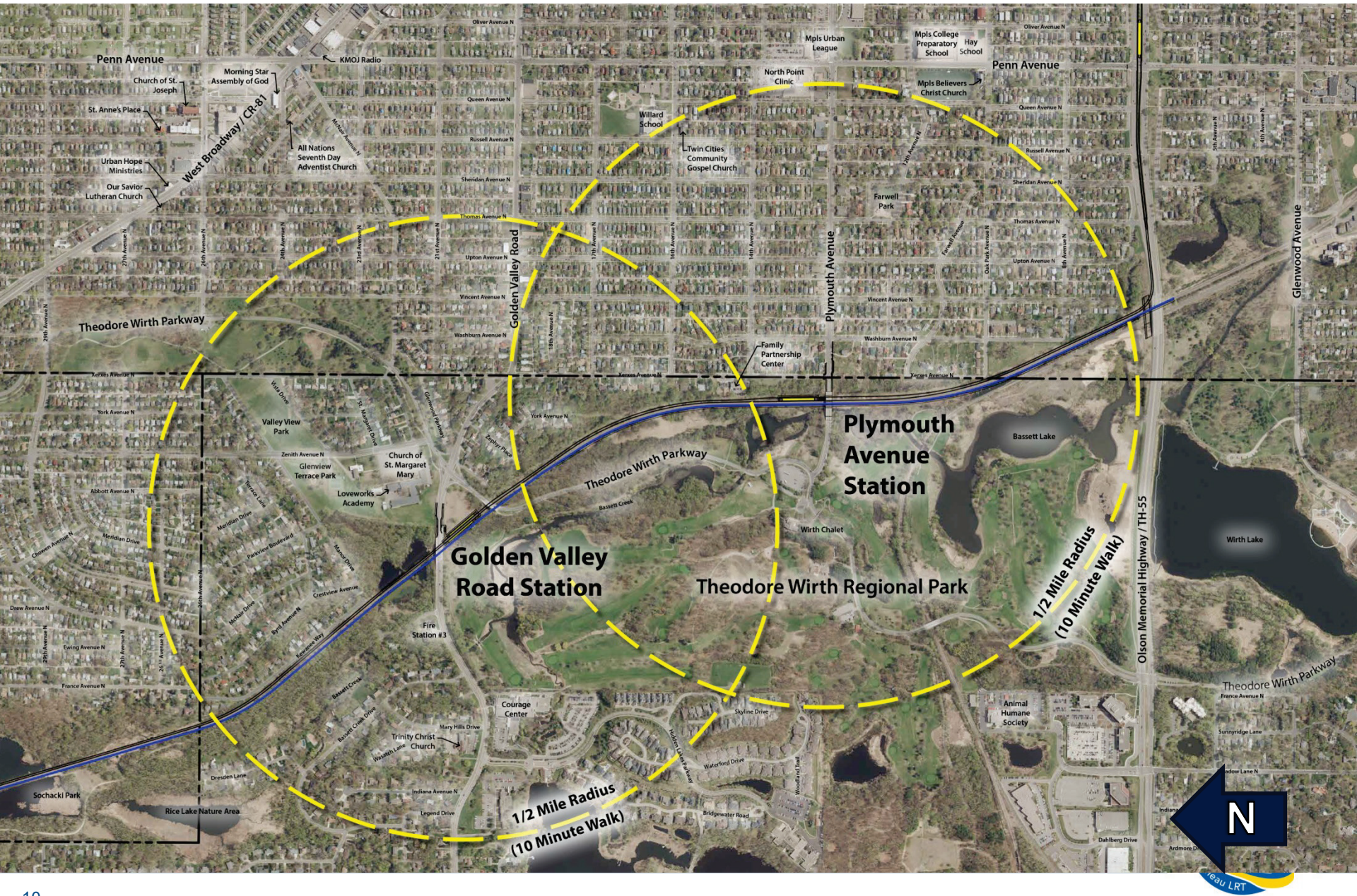
Blue Line Extension LRT Station	2040 Weekday Ridership	Park & Ride Spaces
Oak Grove Parkway	2,350	850
93 rd Avenue	350	-
85 th Avenue	2,200	-
Brooklyn Boulevard	2,400	-
63 rd Avenue	1,350	565
Bass Lake Road	1,650	170
Robbinsdale	3,500	550
Golden Valley Road	900	100
Plymouth Avenue	250	-
Penn Avenue	1,000	-
Van White Memorial Boulevard	650	-
Downtown ridership & transfers from Green & Blue Lines	10,400	
Estimated Project Ridership	27,000	



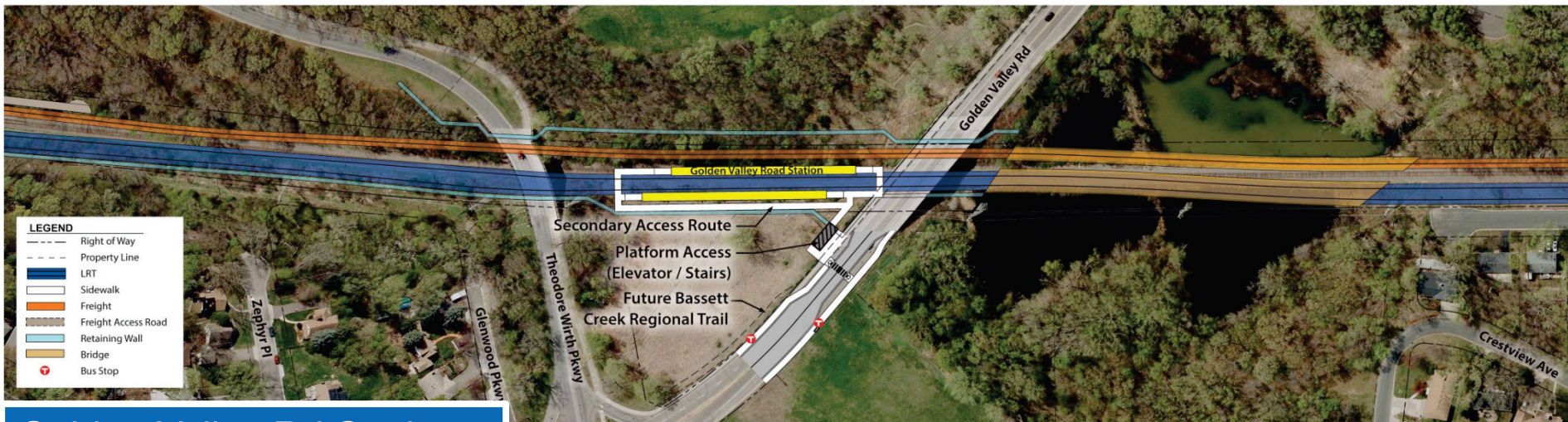
Technical Issue #4: Golden Valley Rd and Plymouth Ave Stations



Golden Valley Rd & Plymouth Ave Stations



Plymouth Ave Station



Golden Valley Rd Station



Golden Valley Rd/Plymouth Ave Stations

- Both stations included within DEIS; only Golden Valley Rd Station in DEIS cost estimate
- Engineering analysis and environmental review conducted for both stations
 - Floodplains, wetlands and noise
 - Cultural resources and impacts to park land
 - Parking, cost and ridership
- Other non-technical factors also analyzed
- Comments from public meetings and events
 - Provided insight into community priorities: safety, parking, environmental concerns, etc.
 - Factored into station analysis



Quantitative Factors Comparison

Factor	Plymouth Ave	Golden Valley Rd
Housing Units (2010)*	873	977
Population (2010)*	2,579	2,218
Employment (2010)*	102	733
Homes within 10 Minute Walk	565	349
Projected Daily Ridership (2040)	250	900
Bus Frequency (2040)	1 route every 30 min.	2 routes every 30 min.
Right of Way Impacts	1/2 acre	1/2 acre
Vegetative Impact	Medium	High
Wetland Impact	Minimal	None
Floodplain Impact	Minimal	Minimal
Cost	\$13M - \$16M	\$15M - \$18M

*Within ½ mile of station



Qualitative Factors Comparison

Factor	Plymouth Ave	Golden Valley Rd
Serving Minneapolis Residents	High	Medium
Serving Golden Valley Residents	Low	High
Environmental Justice	High	Medium
Access to Regional Park	High	Medium
Health Equity	High	Medium
Bicycle Trail Access	High	High
Access to The Grand Rounds	High	High
Existing Adjacent Sidewalk Network	High	Medium
Access to Job Centers	Low	Medium
Adjacent Neighborhood Impacts	Medium	Medium
Visual Impacts	Low	Low
Opportunities for Parking	Low	Medium
Future Redevelopment Opportunity	Low	Medium



Next Steps

- Met Council receives feedback on station comparison from CAC/BAC, project partners
- Project office staff will recommend one or both stations in revised scope and cost estimate at Oct 29 CMC
- Decision to include one or both stations will be part of scope and cost estimate CMC decision on Nov 12



Technical Issue #9A: 73rd Ave Crossing



Issues To Be Resolved

- DEIS scope included an at-grade crossing of CR 81 at the 73rd Ave intersection
 - Concern with intersection performance/traffic operations
- At-grade crossing was recommended at the April 9 CMC
 - LRT at-grade did not impact intersection operations
- Additional feedback/concerns/analysis:
 - High-speed, 6-lane roadway with vehicles travelling more than posted speed (55 mph)
 - LRT crossing diagonally through intersection
 - LRT track and roadway maintenance conflicts
 - CR 81 is designated as a “moving” route



Technical Issue #9A: 73rd Ave Crossing

Issues to be Resolved



73rd Ave Crossing: Recommendation

- Proceed with grade separated crossing of CR 81
- Continue coordination with Hennepin County/City on the CR 81 roadway project

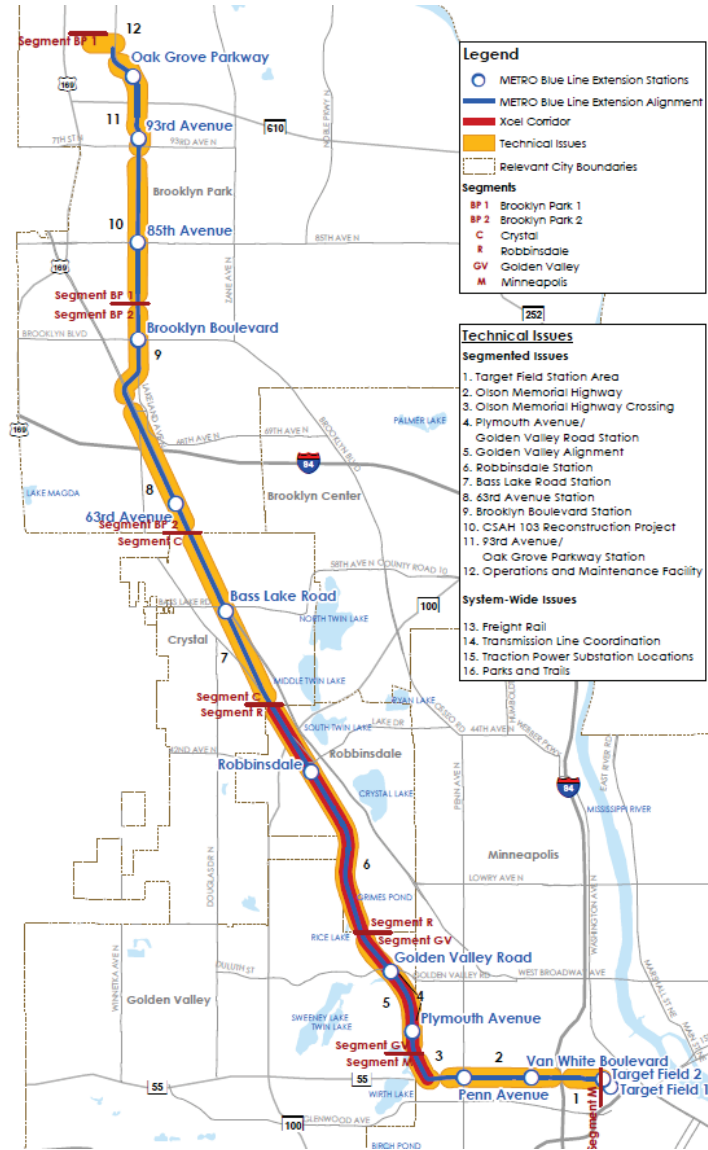


Technical Issue #14

Transmission Line Coordination



Transmission Line Coordination

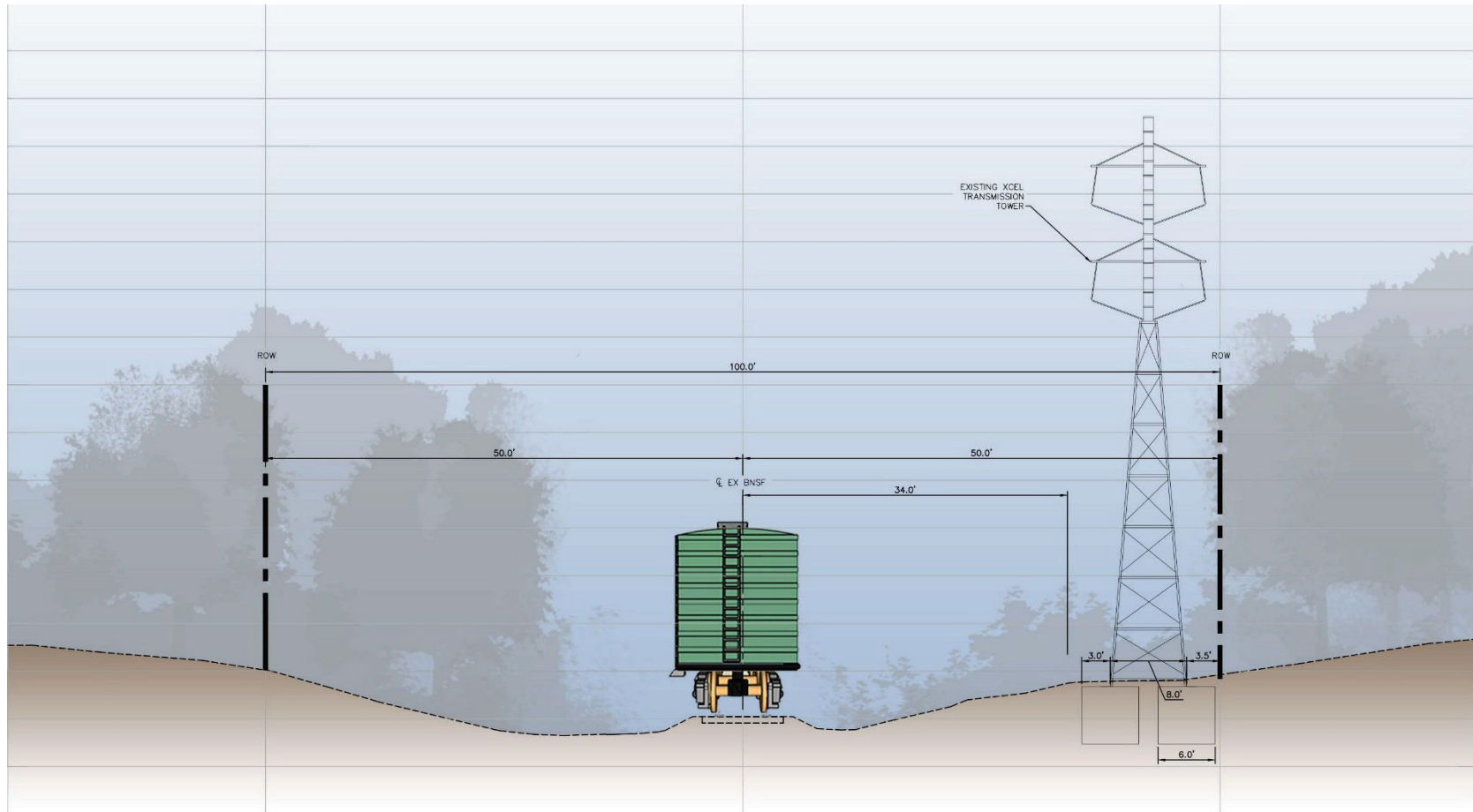


Transmission Line Coordination

- Issues to be resolved:
 - Compatibility with freight rail improvements
 - Compatibility with LRT improvements
 - Constructability
 - Electrical clearances
 - Maintenance access in the future



Transmission Line Coordination: Existing Steel Lattice Structures

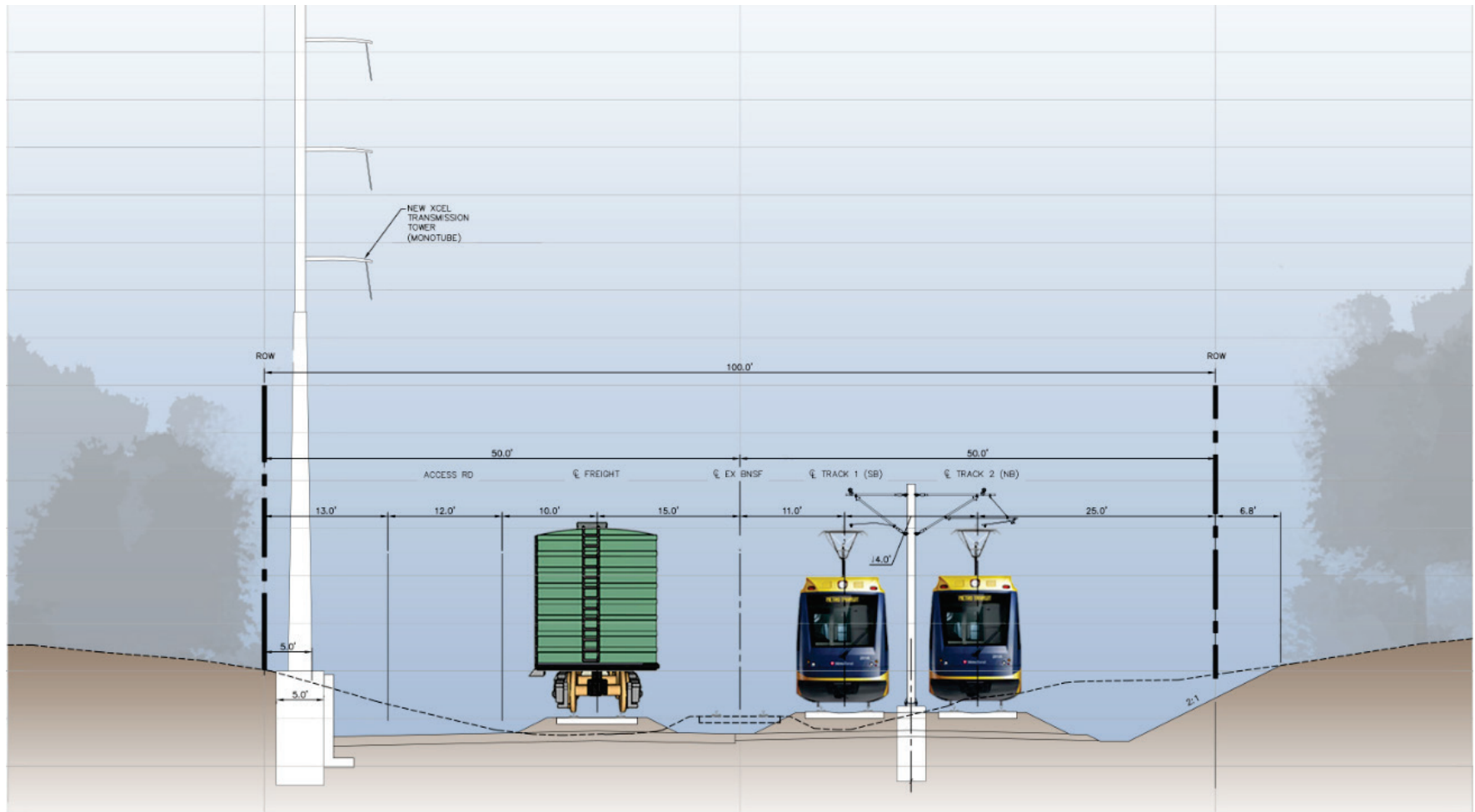


Transmission Line Coordination

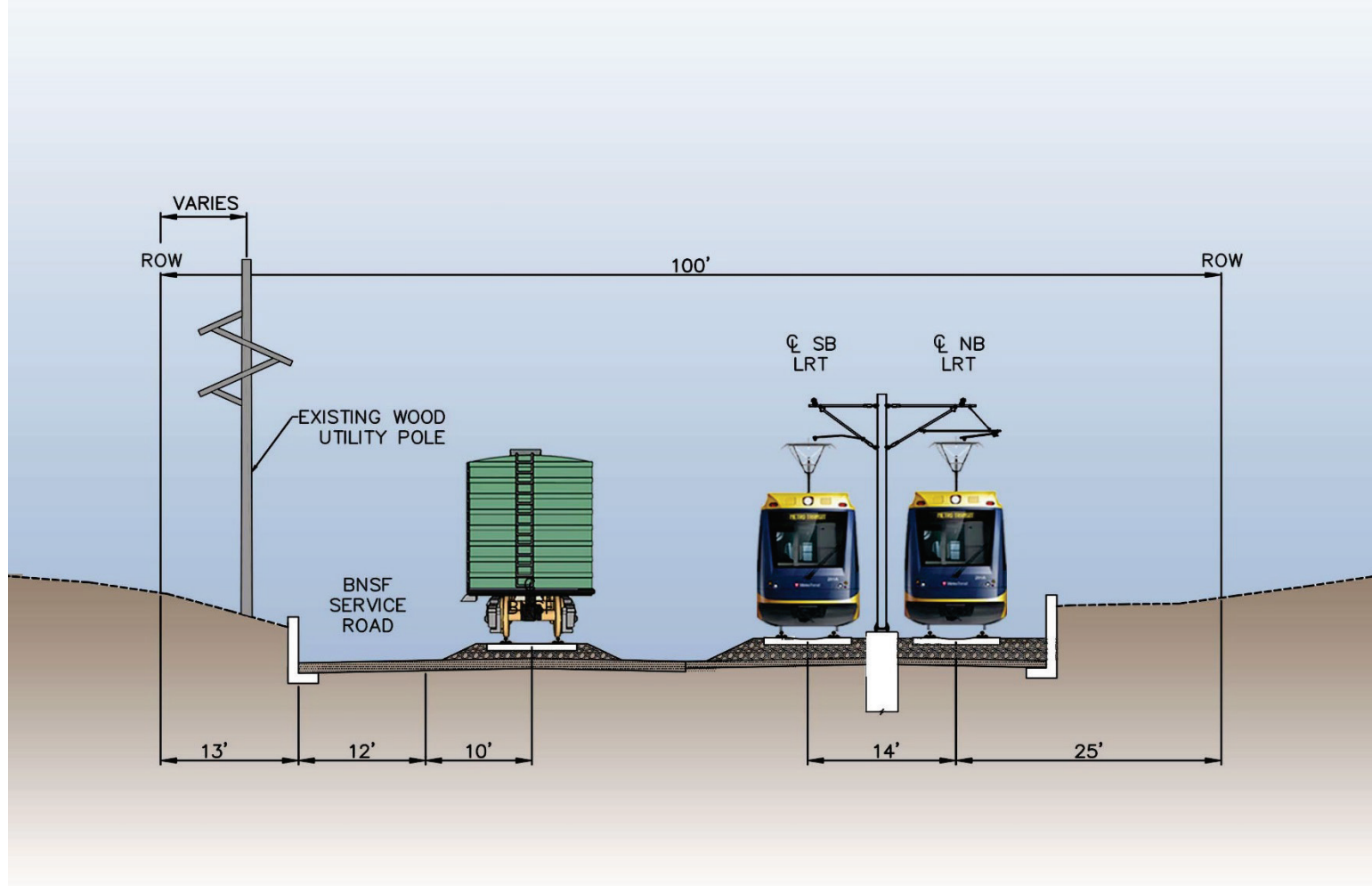
- Potential Xcel Energy transmission line accommodations:
 - Remain in current location
 - Steel poles east of LRT tracks
 - Steel poles west of BNSF tracks
 - Steel poles between LRT tracks



Transmission Line Coordination: New Poles West of BNSF Track



Transmission Line Coordination: Existing Wood Poles West of BNSF Track



Transmission Line Coordination: Recommendation

South of the Indiana Substation:

- Shift the existing Xcel 115 kV transmission line to new poles west of the BNSF track.

North of the Indiana Substation:

- Leave the existing Xcel 115 kV transmission line in-place west of the BNSF track.



Technical Issue #15

Traction Power Substation (TPSS)

Locations



Standard TPSS: Blue Line



TPSS Example: Green Line



TPSS – CC03 at 25th and U of M Transitway



TPSS Locations

- Converts electrical power (AC to DC) to operate trains
- Requires climate controlled environment
- Placement criteria
 - Located within 500' of track preferred
 - Spacing of approximately 5000' between substations preferred to maintain continuous power to trains
 - Requires closer spacing for steeper track grades
 - Located at-grade to minimize cost and provide adequate access for maintenance



TPSS Locations

- Location determined by a load flow study
 - 17 TPSS locations identified
 - Initial location review and refinement by BPO staff
 - Additional location review with project partners as part of the IRT process.

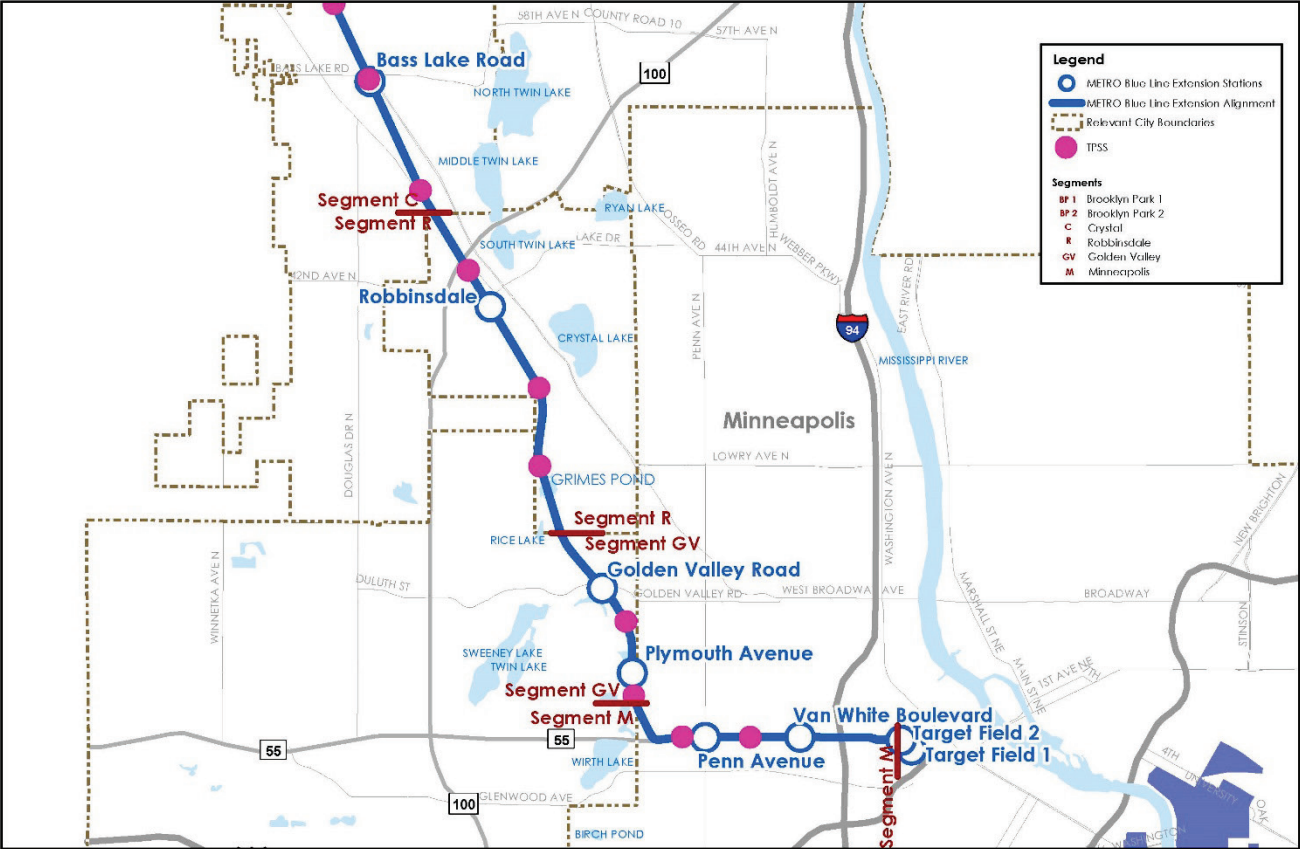


TPSS Locations

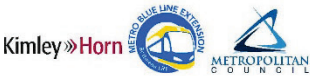
- Location review looked at parcel ownership and followed the following order in determination of the optimal sites.
 1. Met Council property
 2. Hennepin County Railroad Authority property
 3. Other public agency property (MnDOT, County, City)
 4. Private property acquired as part of the LRT project
 5. Vacant private property



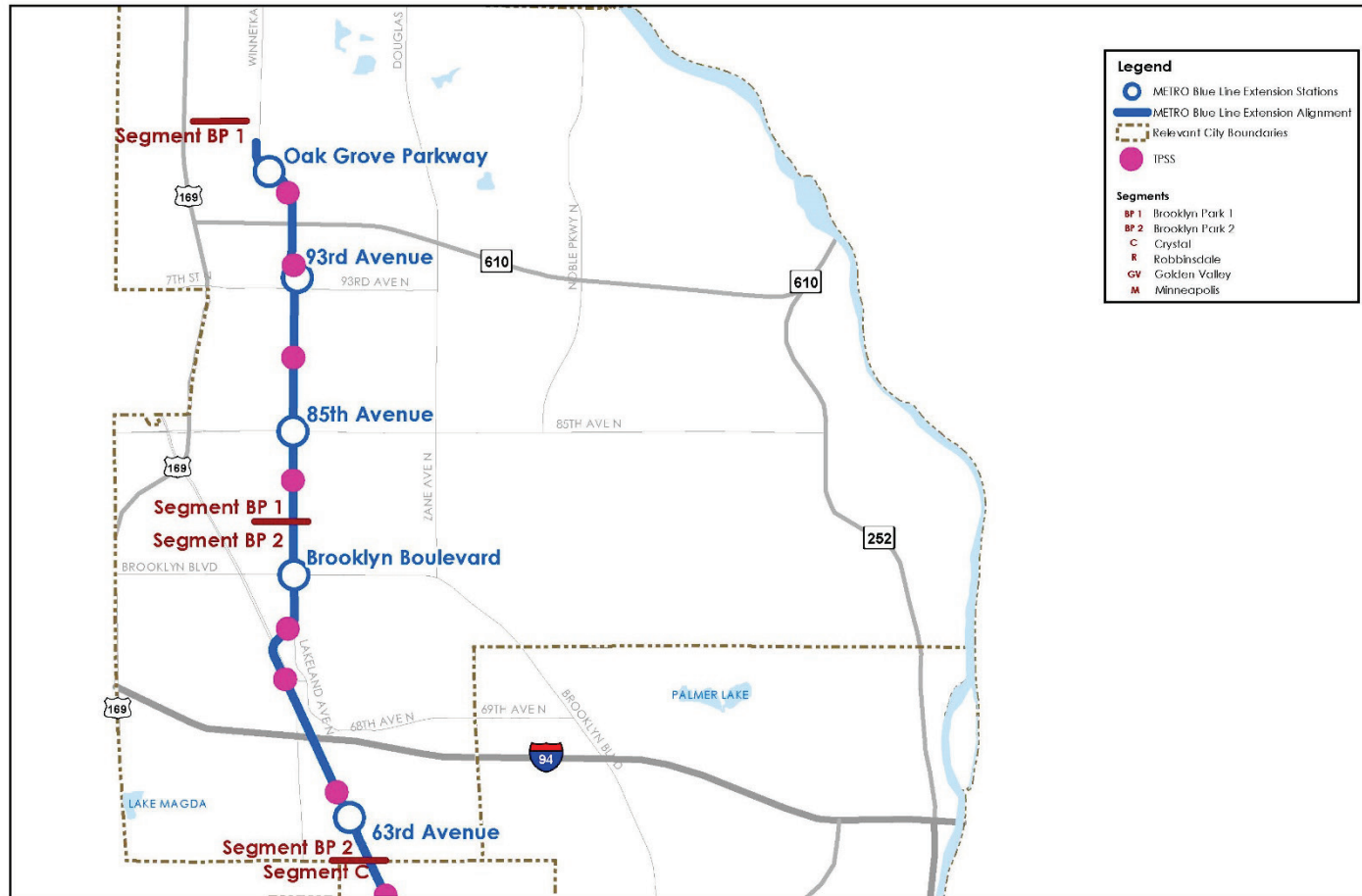
TPSS Locations: Minneapolis, Golden Valley, Robbinsdale and Crystal



METRO Blue Line LRT Extension TPSS



TPSS Locations: Brooklyn Park



METRO Blue Line LRT Extension TPSS



0 0.5 1
Miles

Kimley»Horn



TPSS Locations Recommendation

- Continue working with project stakeholders to finalize locations as identified.



Outreach Update



Upcoming Community Open Houses

- Open house format
- Environmentally focused:
 - Noise/vibration
 - Water resources
 - Stormwater
 - Cultural resources
 - Wild life
- Updated roll-plots: stations and alignment



Upcoming Community Open Houses

Crystal	Mon Oct 19	Crystal Community Center 5:00 – 7:30pm
Brooklyn Park	Tues Oct 20	Hennepin Technical College 5:00 – 7:30pm
Robbinsdale*	Wed Oct 21	Robbinsdale Middle School 6:00 – 7:00pm
Golden Valley	Wed Oct 28	Golden Valley City Hall 5:00 – 7:30pm
Minneapolis	Thurs Oct 29	Harrison Community Center 5:00 – 7:30pm

* Combined with Hennepin County Station Area Planning Meeting



Schedule for Roll-out of Project Scope and Cost Estimate



Upcoming Meetings

Date	Cmt.	Agenda
Sept 28 Oct 1 Oct 5/6	TPAC CMC CAC/BAC	• Ridership • Present results of Golden Valley Rd & Plymouth Ave station analysis • 73rd Ave Crossing • Environmental update • Schedule for roll-out of updated project scope/cost estimate
Oct 5/6 Oct 12 Oct 15	CAC/BAC TPAC CMC	• Presentation of issues 13 – 15 • TH 55 Recap
Oct 26 Oct 26	TPAC CAC/BAC	• Presentation of recommendation on revised project scope
Oct 29	CMC	• Presentation of recommendation on revised project scope/cost estimate



Upcoming Meetings

Date	Cmt.	Agenda
Nov 2 Nov 2/3	TPAC CAC/BAC	• Discussion on revised project scope/cost estimate
Nov 4	MPRB	• MPRB resolution on project as it relates to park properties
Nov 12	CMC	• Final recommendation and CMC action on revised project scope/cost estimate
Nov 23	Met Council	• Met Council Transportation Committee recommendation on revised project scope/cost estimate
Dec 9	Met Council	• Met Council action on revised project scope/cost estimate; authorize the submittal of Municipal Consent plans to cities and county

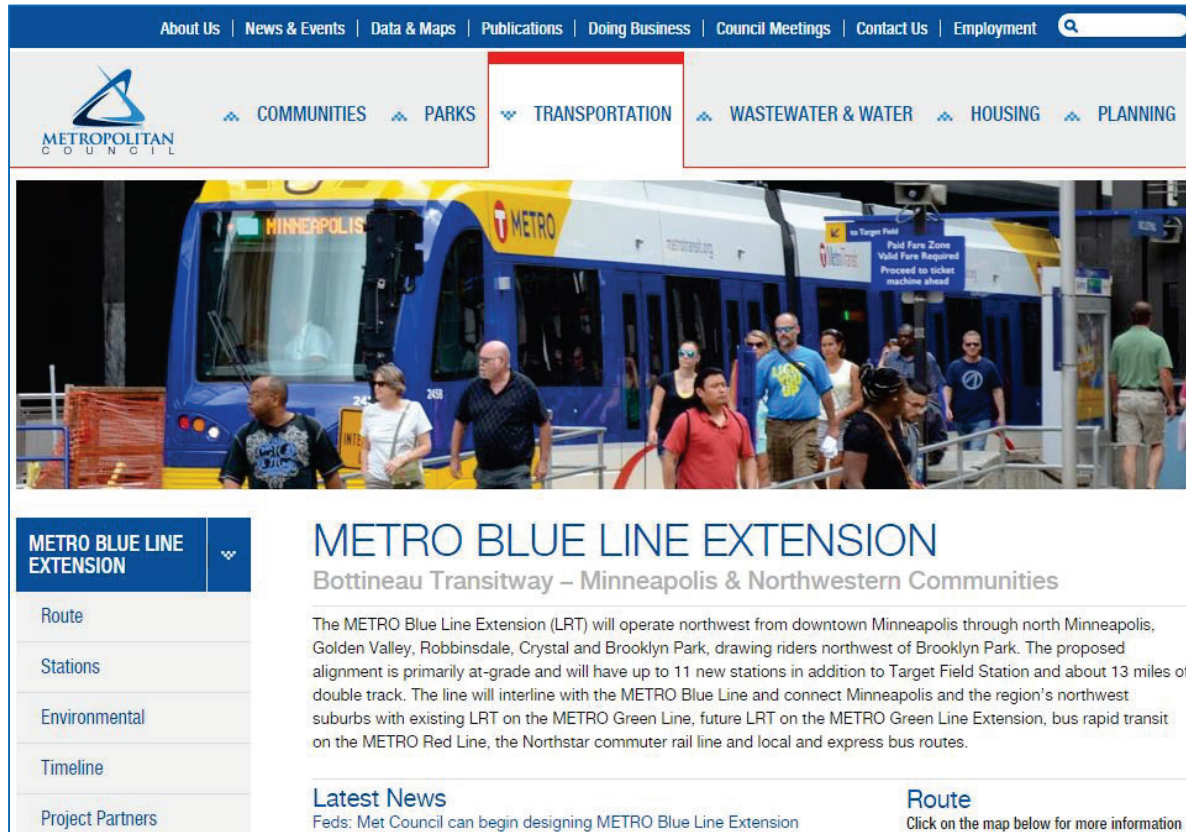


Next BAC Meeting: October 26, 2015

Joint Meeting with CAC



More Information



The screenshot shows the Metropolitan Council website with a navigation bar at the top containing links: About Us, News & Events, Data & Maps, Publications, Doing Business, Council Meetings, Contact Us, and Employment. Below this is a secondary navigation bar with categories: COMMUNITIES, PARKS, TRANSPORTATION (highlighted with a red border), WASTEWATER & WATER, HOUSING, and PLANNING. The main content area features a large photo of a blue and yellow METRO light rail train at a station with passengers. Below the photo is a section titled "METRO BLUE LINE EXTENSION" with a sub-header "Bottineau Transitway – Minneapolis & Northwestern Communities". A sidebar on the left lists links: Route, Stations, Environmental, Timeline, and Project Partners. The main text describes the METRO Blue Line Extension (LRT) route from downtown Minneapolis through north Minneapolis, Golden Valley, Robbinsdale, Crystal, and Brooklyn Park. It mentions 11 new stations and a 13-mile alignment. A "Latest News" section at the bottom left states "Feds: Met Council can begin designing METRO Blue Line Extension". A "Route" section at the bottom right says "Click on the map below for more information".

METRO BLUE LINE EXTENSION
Bottineau Transitway – Minneapolis & Northwestern Communities

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.

Latest News
Feds: Met Council can begin designing METRO Blue Line Extension

Route
Click on the map below for more information

Website: BlueLineExt.org

Email: BlueLineExt@metrotransit.org

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

