



# Community Advisory Committee

October 5, 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: 73<sup>rd</sup> 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<br>Weekday<br>Ridership | Park &<br>Ride<br>Spaces |
|--------------------------------------------------------|------------------------------|--------------------------|
| Oak Grove Parkway                                      | 2,350                        | 850                      |
| 93 <sup>rd</sup> Avenue                                | 350                          | -                        |
| 85 <sup>th</sup> Avenue                                | 2,200                        | -                        |
| Brooklyn Boulevard                                     | 2,400                        | -                        |
| 63 <sup>rd</sup> 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                       |                          |

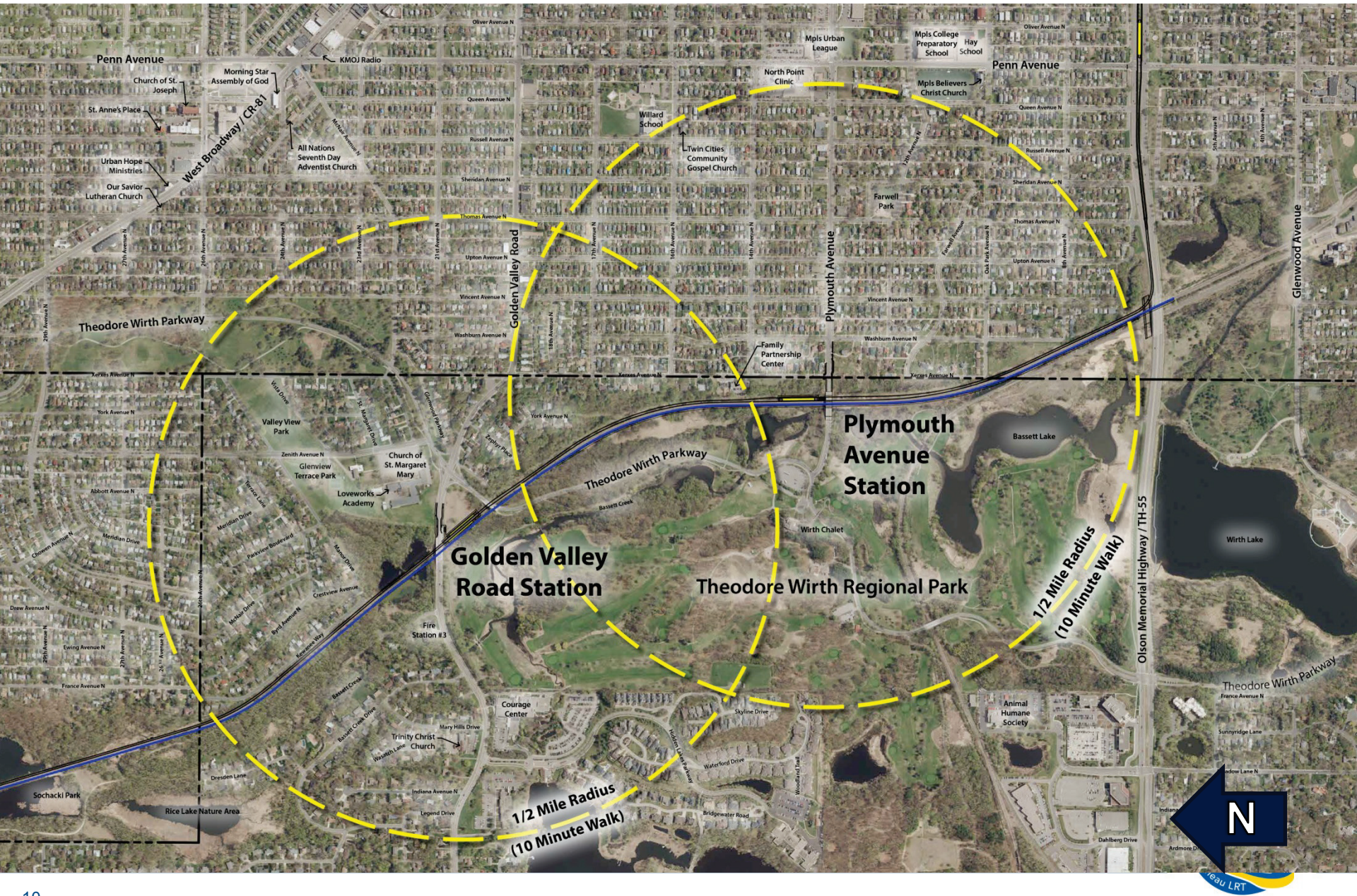


# **Technical Issue #4: Golden Valley Rd and Plymouth Ave Stations**



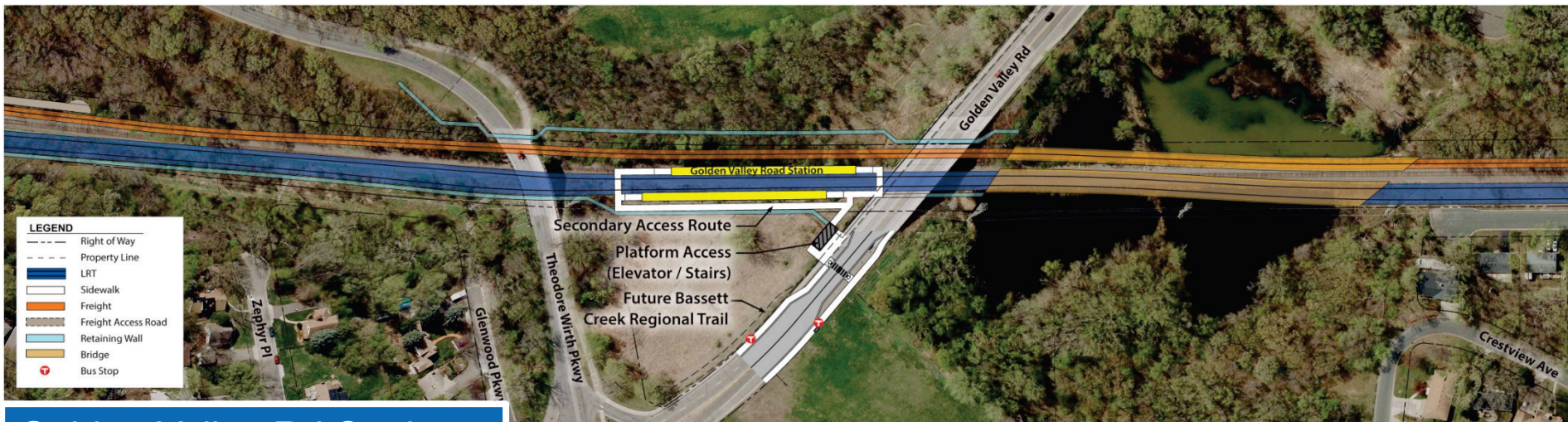


# Golden Valley Rd & Plymouth Ave Stations





# 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: 73<sup>rd</sup> Ave Crossing





# Issues To Be Resolved

- DEIS scope included an at-grade crossing of CR 81 at the 73<sup>rd</sup> 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



# 73<sup>rd</sup> Ave Crossing: Recommendation

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



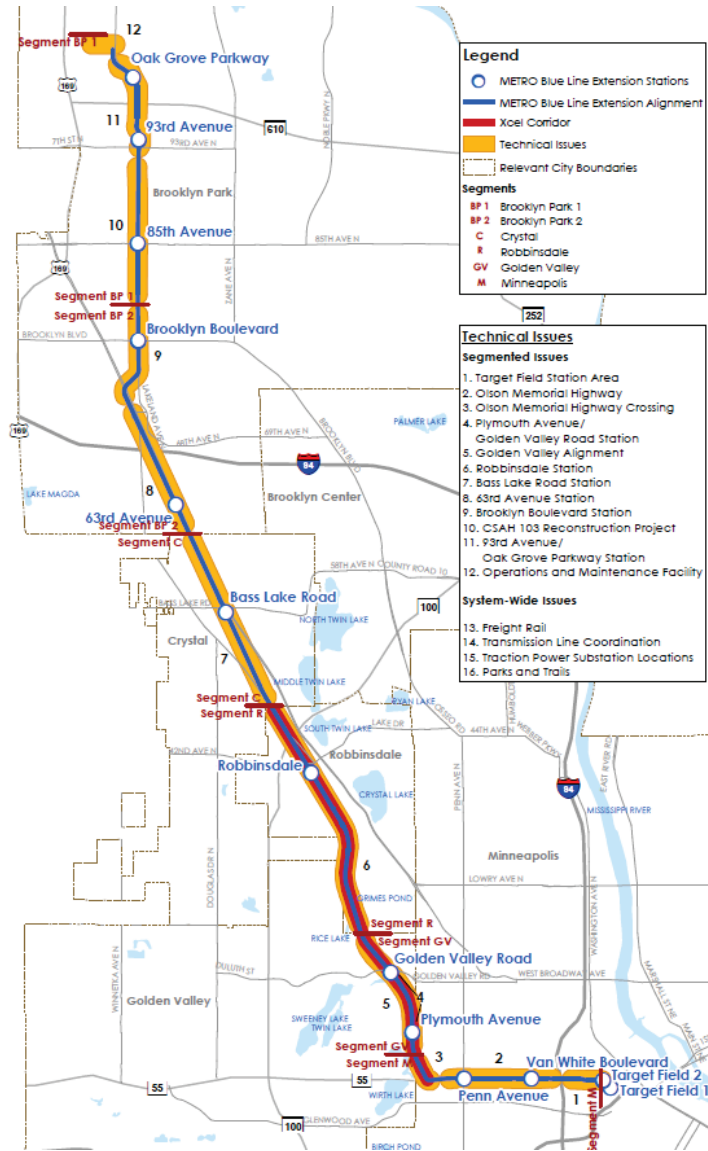


# **Technical Issue #14**

## **Transmission Line Coordination**



# Transmission Line Coordination



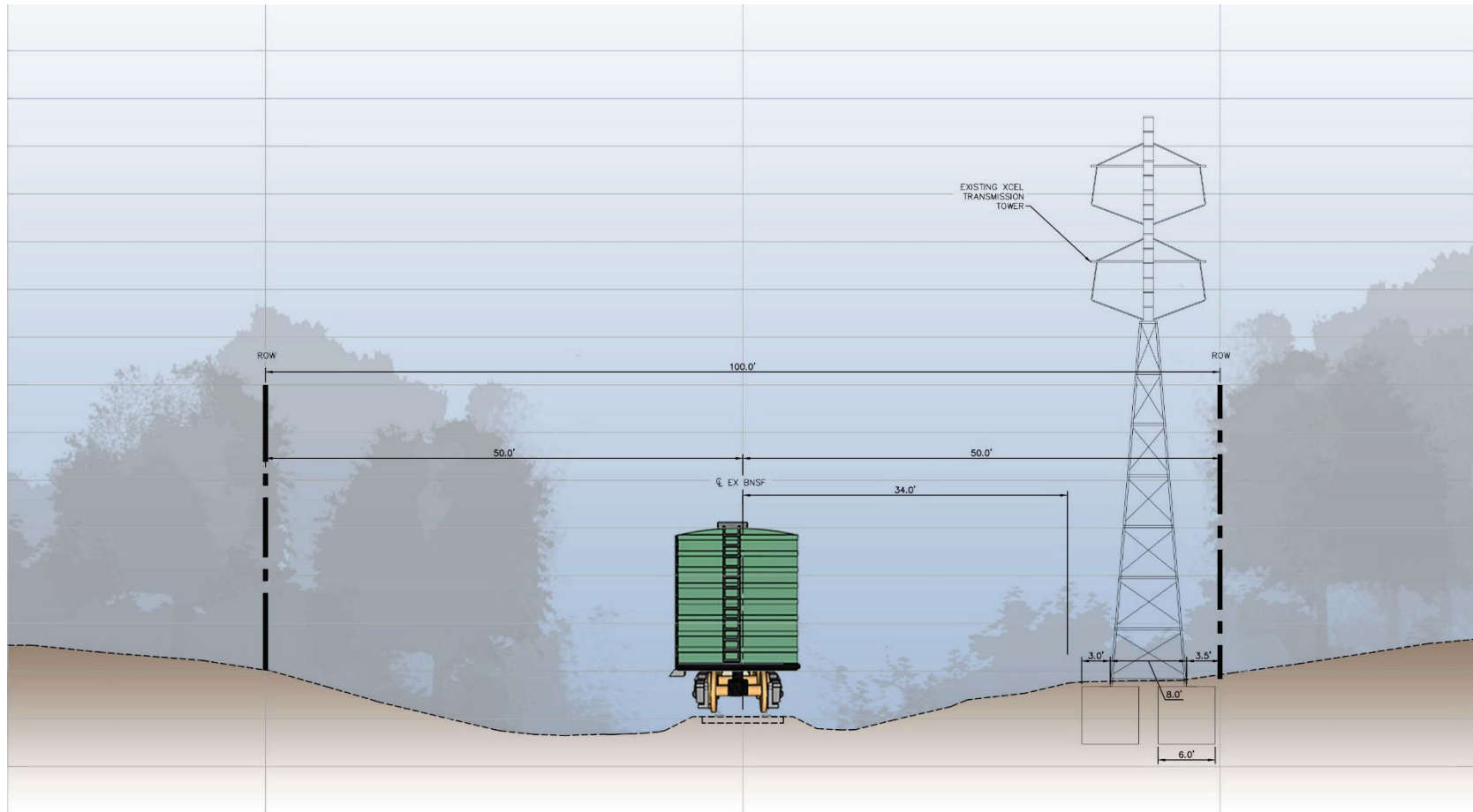


# Transmission Line Coordination

- 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

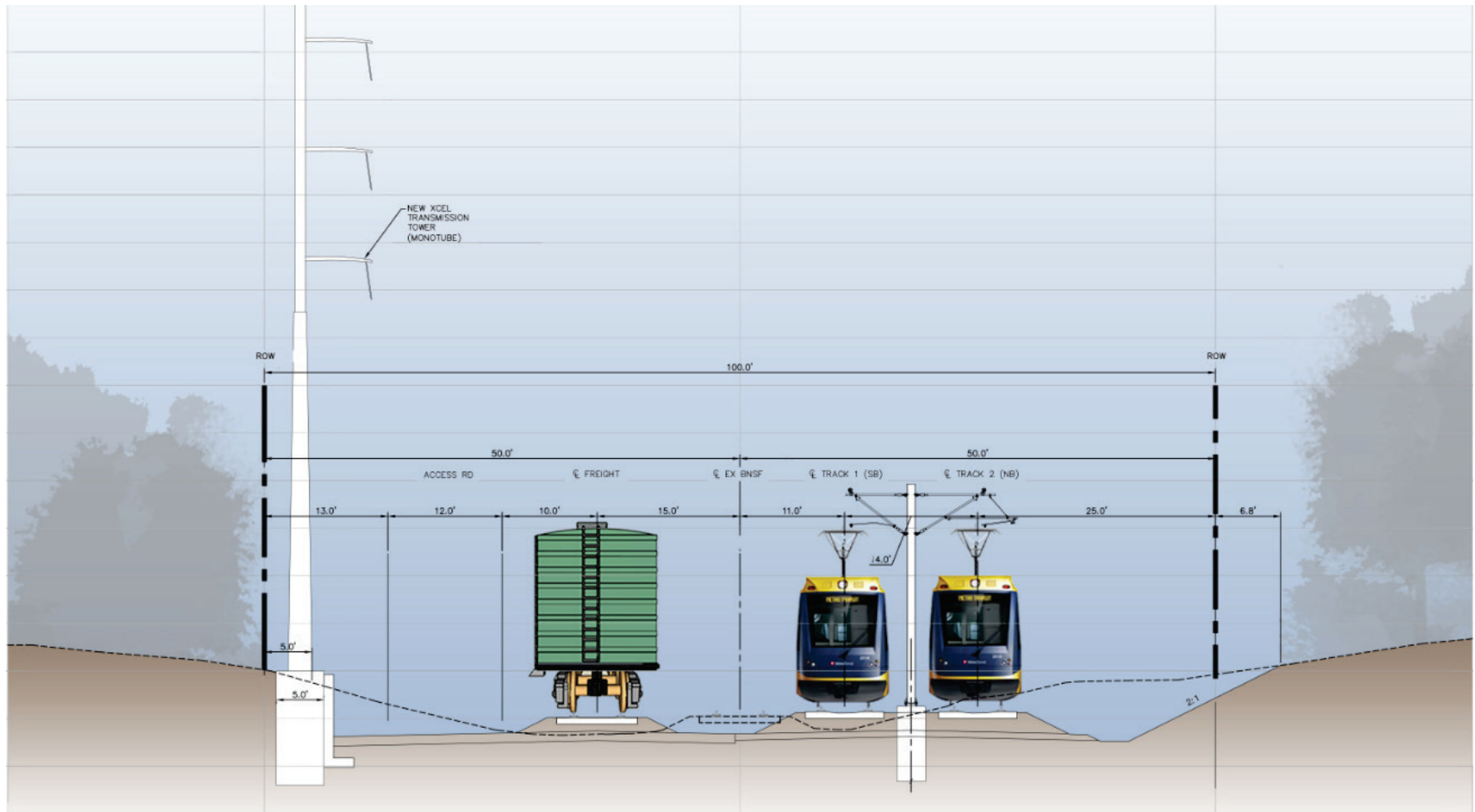


# Transmission Line Coordination

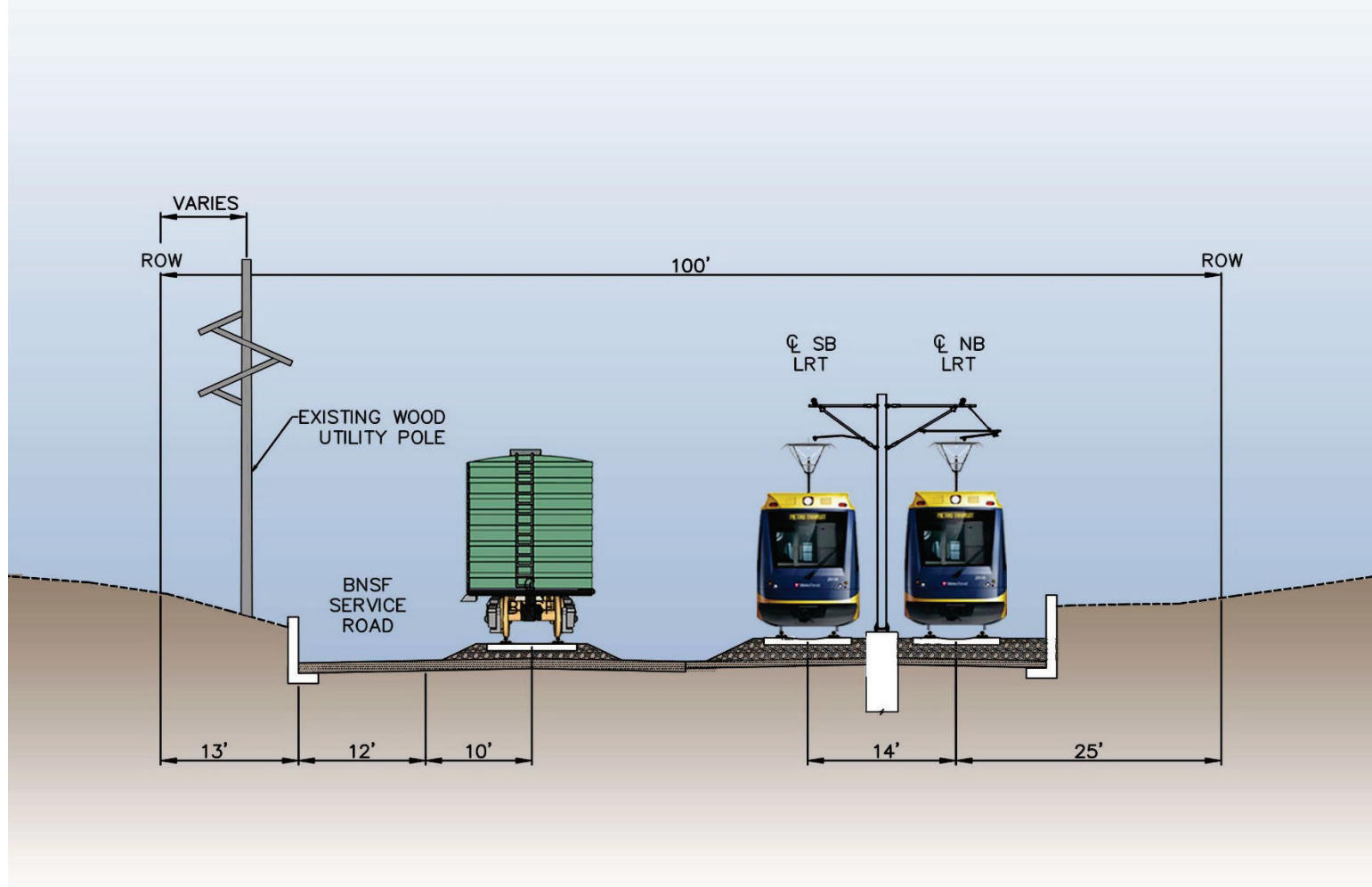
- Potential Xcel Energy transmission line accommodations:
  - Remain in current location
  - Steel poles east of LRT tracks
  - Steel poles west of BNSF tracks
  - Steel poles between LRT tracks



# 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 25<sup>th</sup> 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.

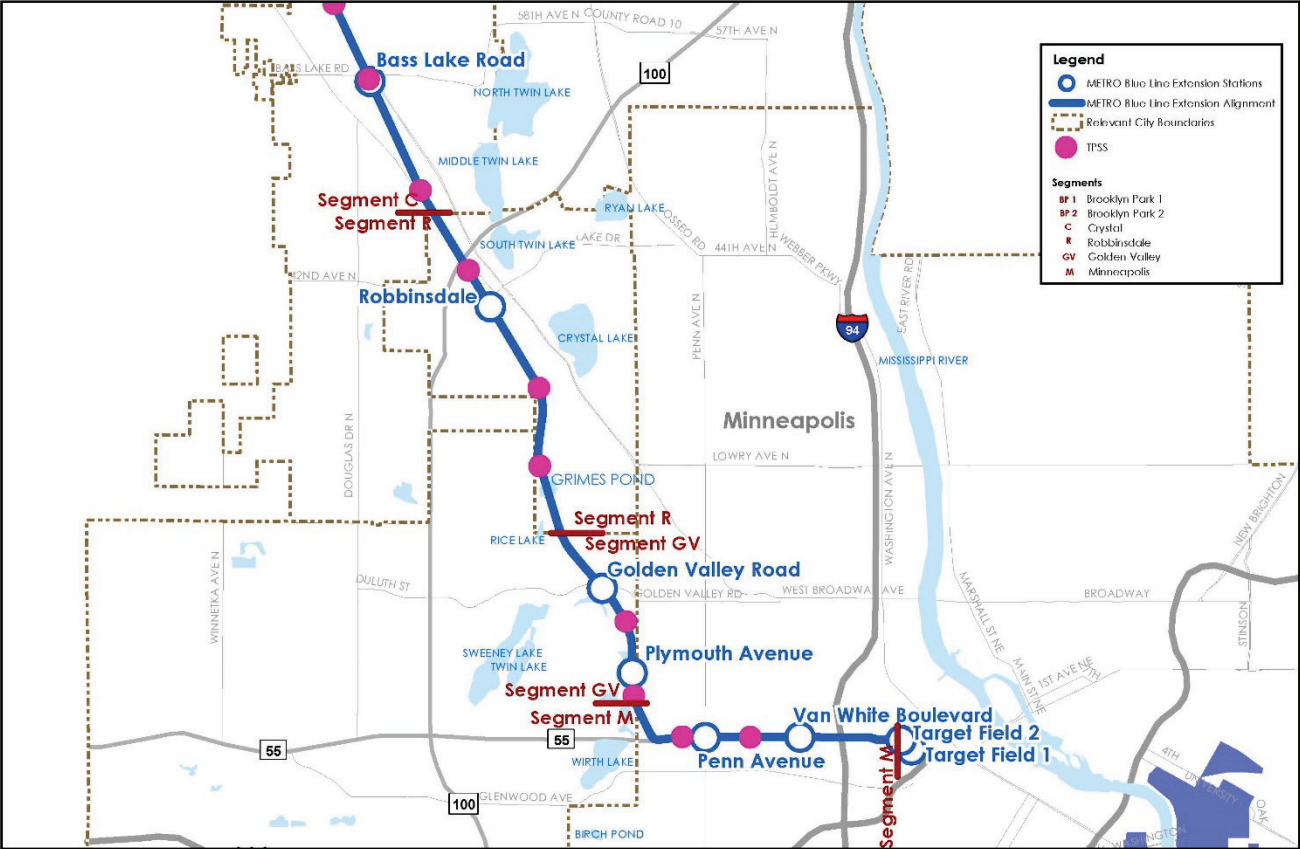


# TPSS Locations

- 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

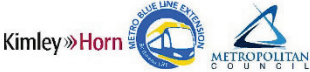


# TPSS Locations: Minneapolis, Golden Valley, Robbinsdale and Crystal

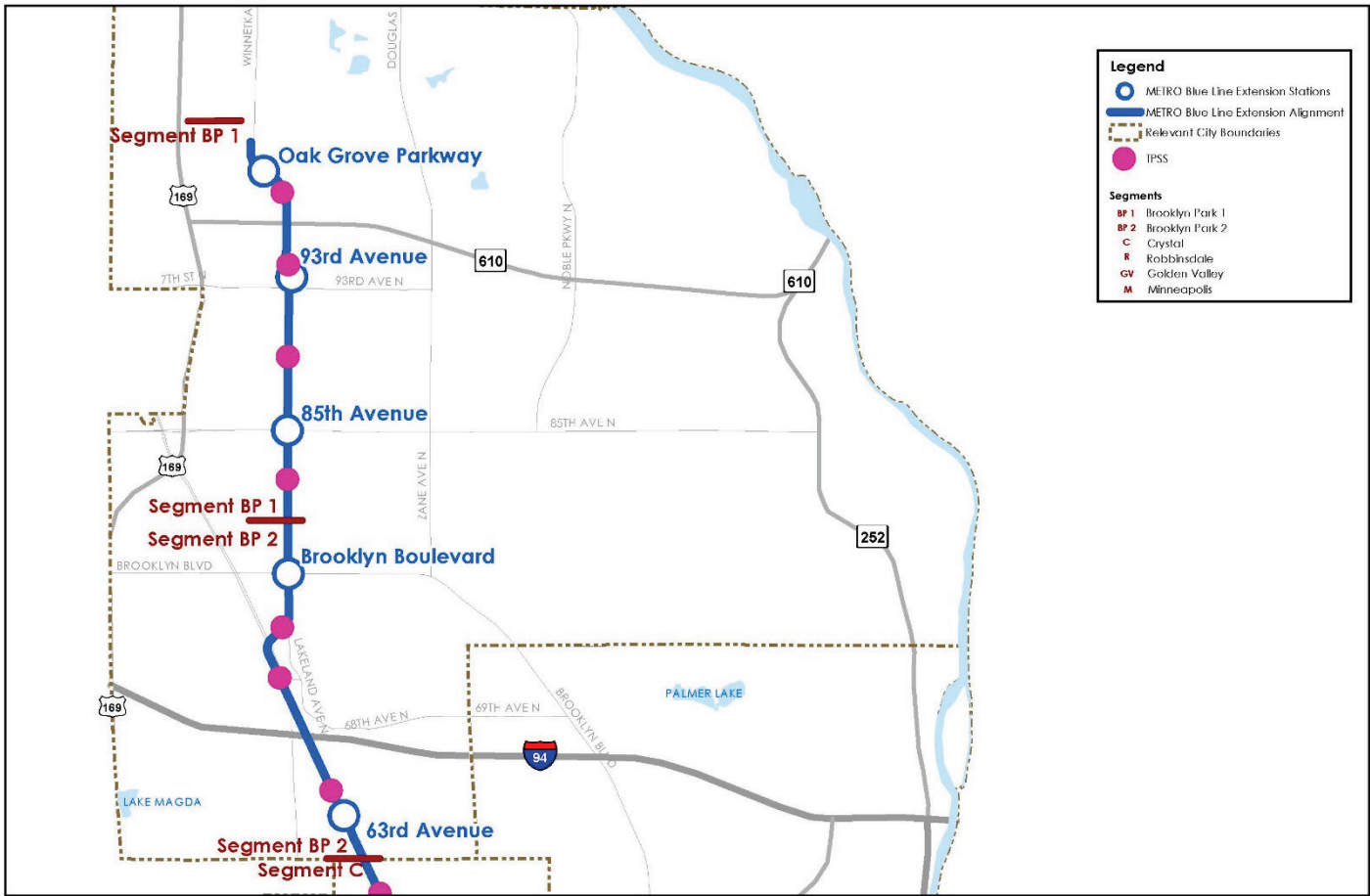


0 0.5 1 Miles

METRO Blue Line LRT Extension TPSS

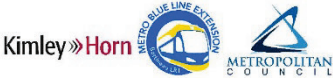


# TPSS Locations: Brooklyn Park



0 0.5 1  
Miles

METRO Blue Line LRT Extension TPSS



# 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

|                      |                 |                                             |
|----------------------|-----------------|---------------------------------------------|
| <b>Crystal</b>       | Mon<br>Oct 19   | Crystal Community Center<br>5:00 – 7:30pm   |
| <b>Brooklyn Park</b> | Tues<br>Oct 20  | Hennepin Technical College<br>5:00 – 7:30pm |
| <b>Robbinsdale*</b>  | Wed<br>Oct 21   | Robbinsdale Middle School<br>6:00 – 7:00pm  |
| <b>Golden Valley</b> | Wed<br>Oct 28   | Golden Valley City Hall<br>5:00 – 7:30pm    |
| <b>Minneapolis</b>   | Thurs<br>Oct 29 | Harrison Community Center<br>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<br>Oct 1<br>Oct 5/6 | TPAC<br>CMC<br>CAC/BAC | <ul style="list-style-type: none"> <li>• Ridership</li> <li>• Present results of Golden Valley Rd &amp; Plymouth Ave station analysis</li> <li>• 73rd Ave Crossing</li> <li>• Environmental update</li> <li>• Schedule for roll-out of updated project scope/cost estimate</li> </ul> |
| Oct 5/6<br>Oct 12<br>Oct 15 | CAC/BAC<br>TPAC<br>CMC | <ul style="list-style-type: none"> <li>• Presentation of issues 13 – 15</li> <li>• TH 55 Recap</li> </ul>                                                                                                                                                                             |
| Oct 26<br>Oct 26            | TPAC<br>CAC/BAC        | <ul style="list-style-type: none"> <li>• Presentation of recommendation on revised project scope</li> </ul>                                                                                                                                                                           |
| Oct 29                      | CMC                    | <ul style="list-style-type: none"> <li>• Presentation of recommendation on revised project scope/cost estimate</li> </ul>                                                                                                                                                             |





# Upcoming Meetings

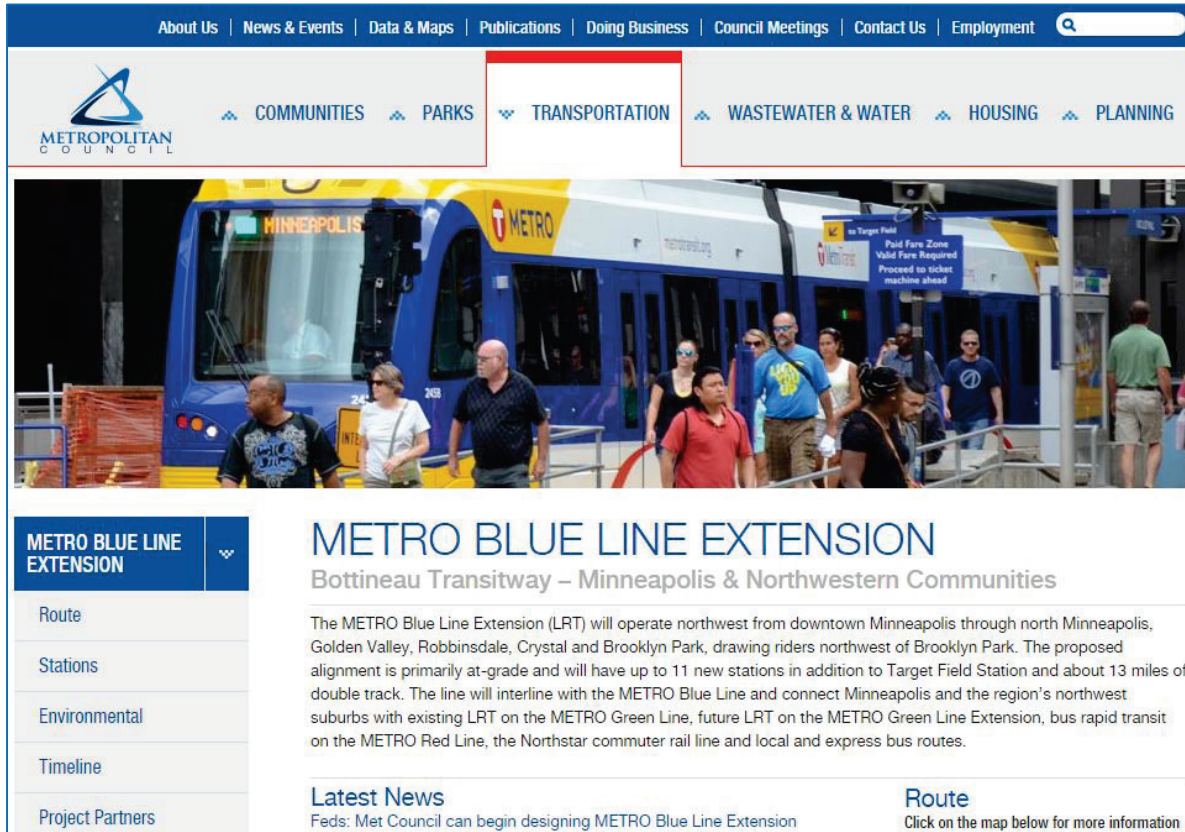
| Date             | Cmt.            | Agenda                                                                                                                               |
|------------------|-----------------|--------------------------------------------------------------------------------------------------------------------------------------|
| Nov 2<br>Nov 2/3 | TPAC<br>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<br>Council  | • Met Council Transportation Committee recommendation on revised project scope/cost estimate                                         |
| Dec 9            | Met<br>Council  | • Met Council action on revised project scope/cost estimate; authorize the submittal of Municipal Consent plans to cities and county |



**Next CAC Meeting: October 26, 2015**



# 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 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". To the left of the text is a sidebar menu with options: Route, Stations, Environmental, Timeline, and Project Partners. The main text describes 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 the text are two sections: "Latest News" with the headline "Feds: Met Council can begin designing METRO Blue Line Extension" and "Route" with the text "Click on the map below for more information".

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**METRO BLUE LINE EXTENSION**

Route

Stations

Environmental

Timeline

Project Partners

## 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](http://BlueLineExt.org)

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

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

