

SOUTHWEST

Green Line LRT Extension



# Corridor Management Committee

November 6, 2013



# October 10 Minneapolis Open House

- 165 attendees, 200+ comments received



# Today's Topics

- Project Update
  - SWLRT Key Milestones
  - Freight Rail Relocation Analysis Scope
  - Water Resources Evaluation Scope
  - Kenilworth Corridor Landscaping/Greenscaping Analysis



# Freight Rail Relocation Analysis Scope

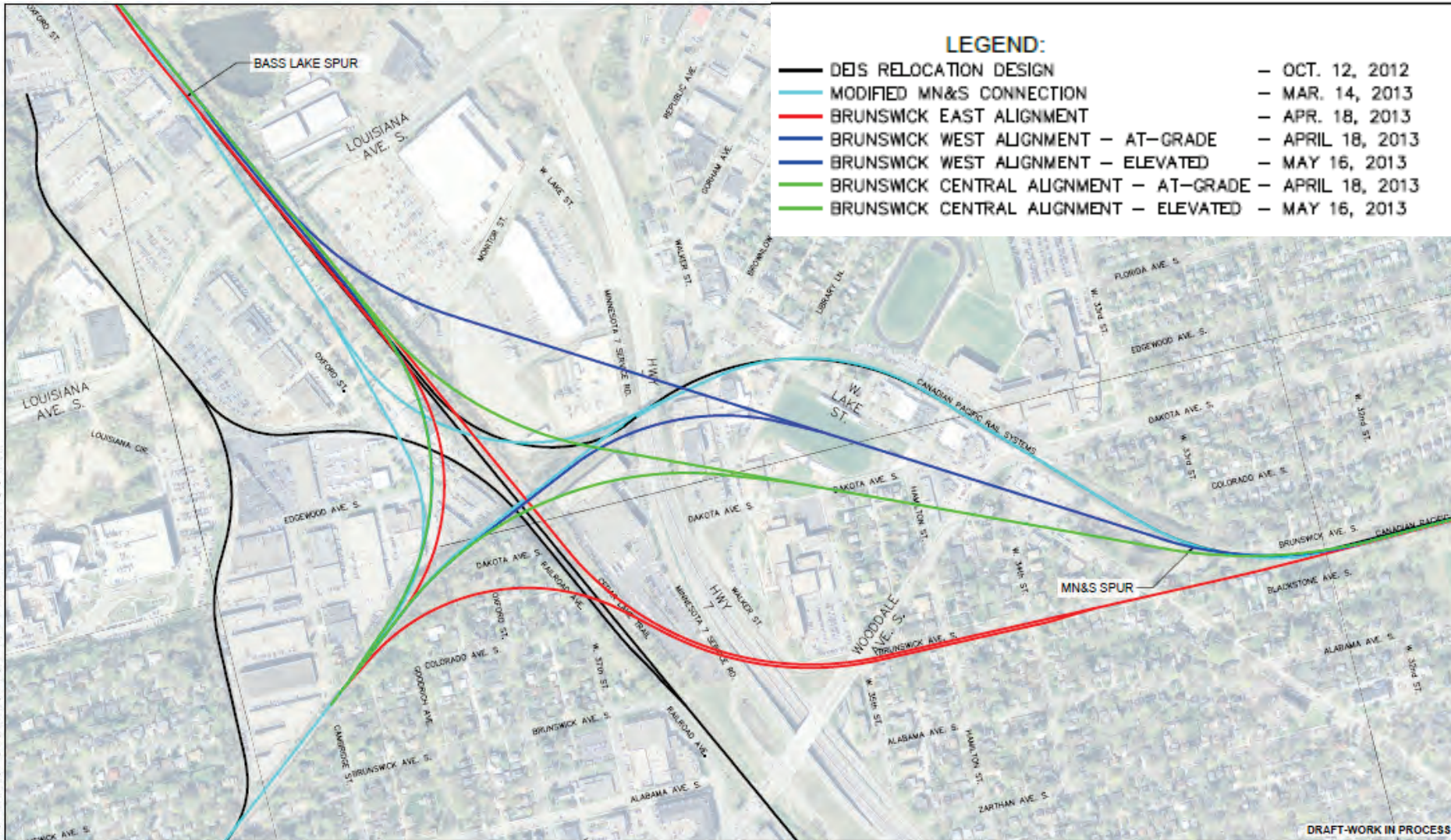
# Freight Rail Relocation Analysis Scope

- Purpose: Review existing studies/designs; assess viability of options considered; and identify any new options
- Activities:
  - Coordinate with cities and County on analysis
  - Review DEIS freight rail relocation design and comments
  - Review previous freight rail relocation studies
  - Review SPO relocation designs
  - Interview freight railroads
  - Identify any new viable options
  - Present results to joint BAC/CAC, CMC

# Freight Rail Relocation Analysis Scope

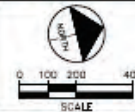
- Previous studies to be reviewed
  - UTU Memorandum, 2013
  - SEH Technical Memorandums #2, 3, 4, 2011
  - SEH Technical Memorandum #1, 2010
  - Evaluation of TCWR Routing Alternatives, Amfahr, 2010
  - TCWR Freight Rail Realignment Study, HCRRA/TKDA, 2009
  - St. Louis Park Railroad Study, RLK Associates, 1999

# DEIS & SPO Freight Rail Relocation Designs



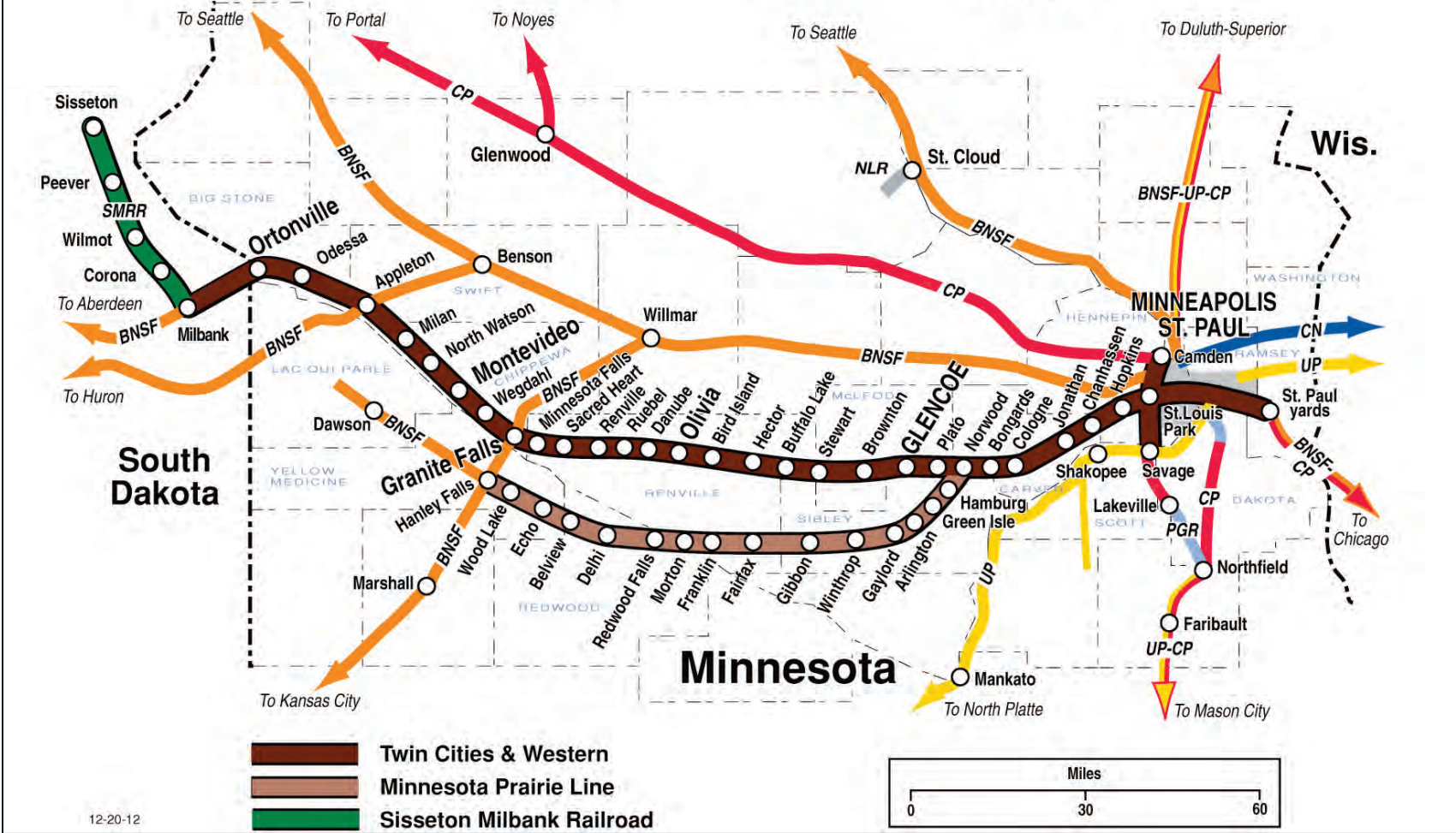
**SOUTHWEST LIGHT RAIL**  
RELOCATION

IRT #21  
Rev 1  
08/23/2013



# TC&W Railroad Network

**TC&W**

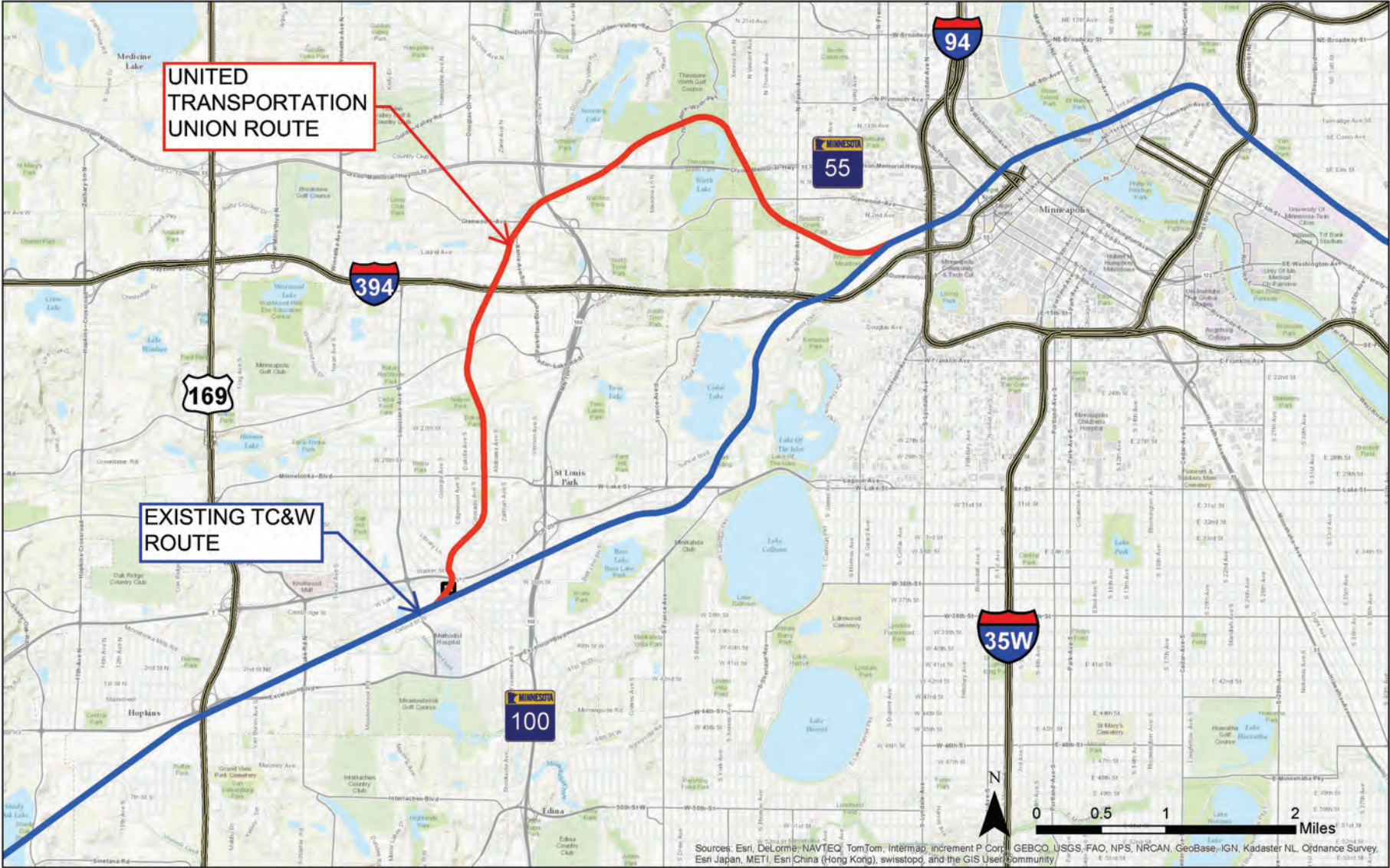


12-20-12



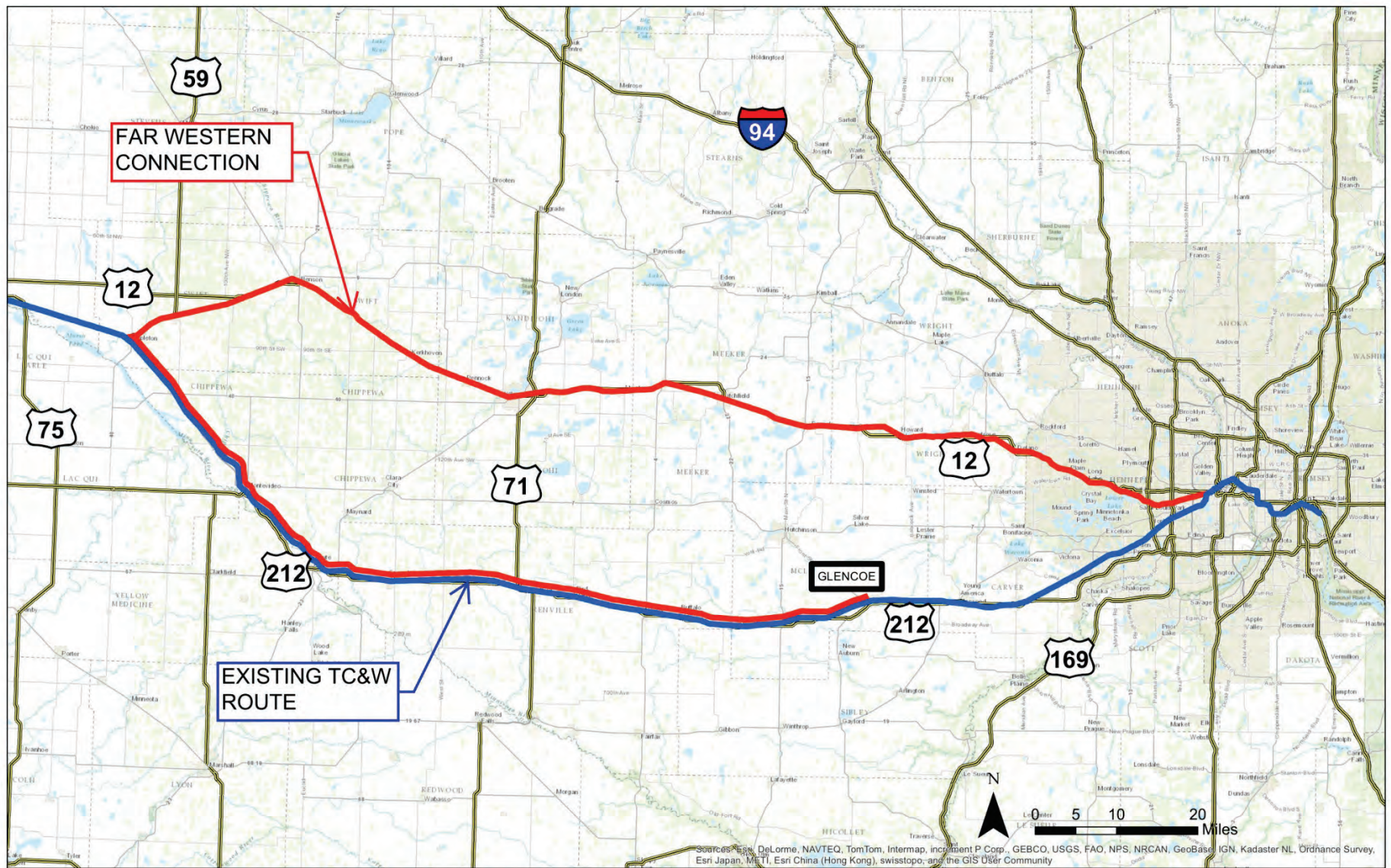


# United Transportation Union (UTU) Route



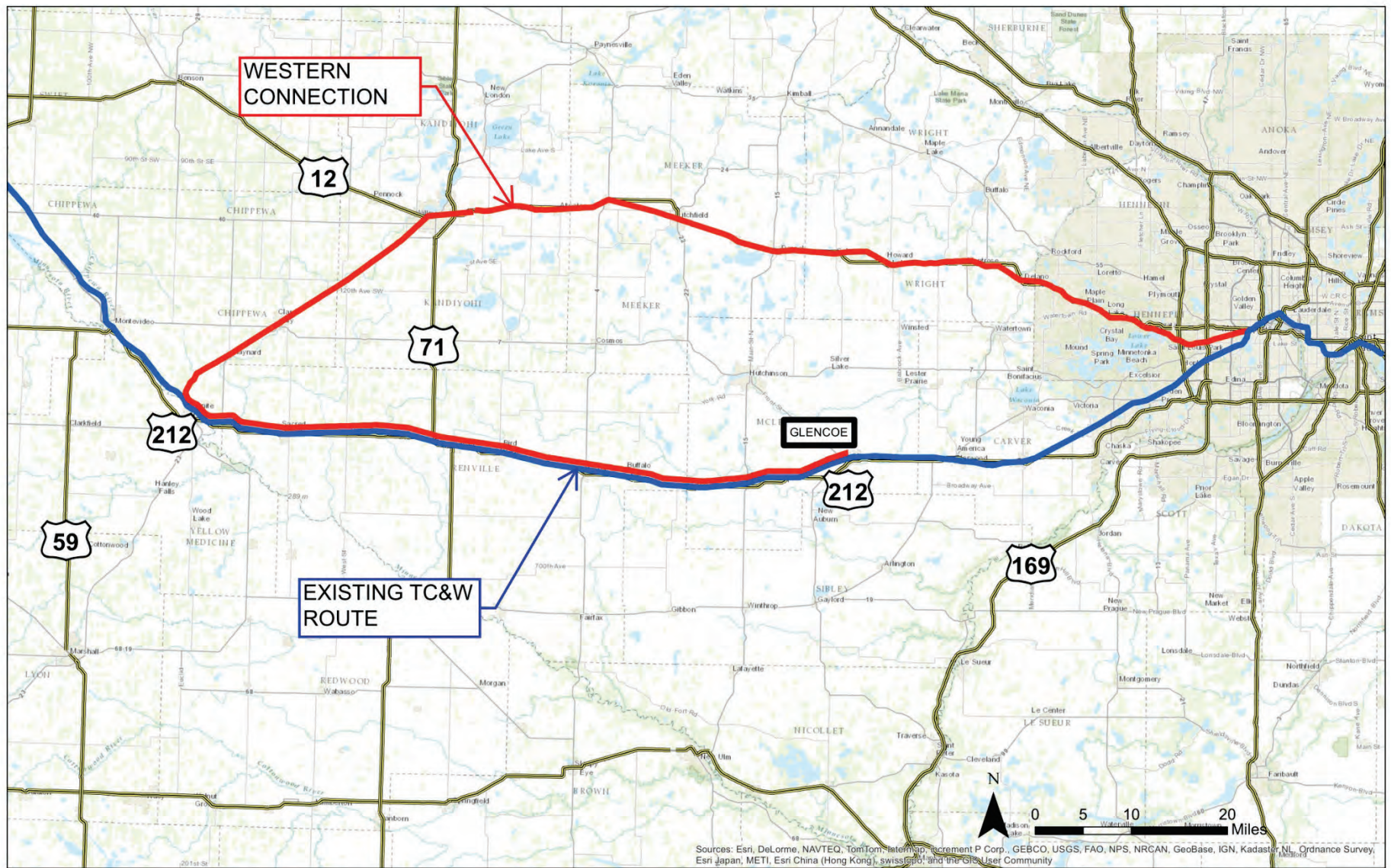
Sources: Esri, DeLorme, NAVTEQ, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, and the GIS User Community

# Appleton/Benton Far Western Connection



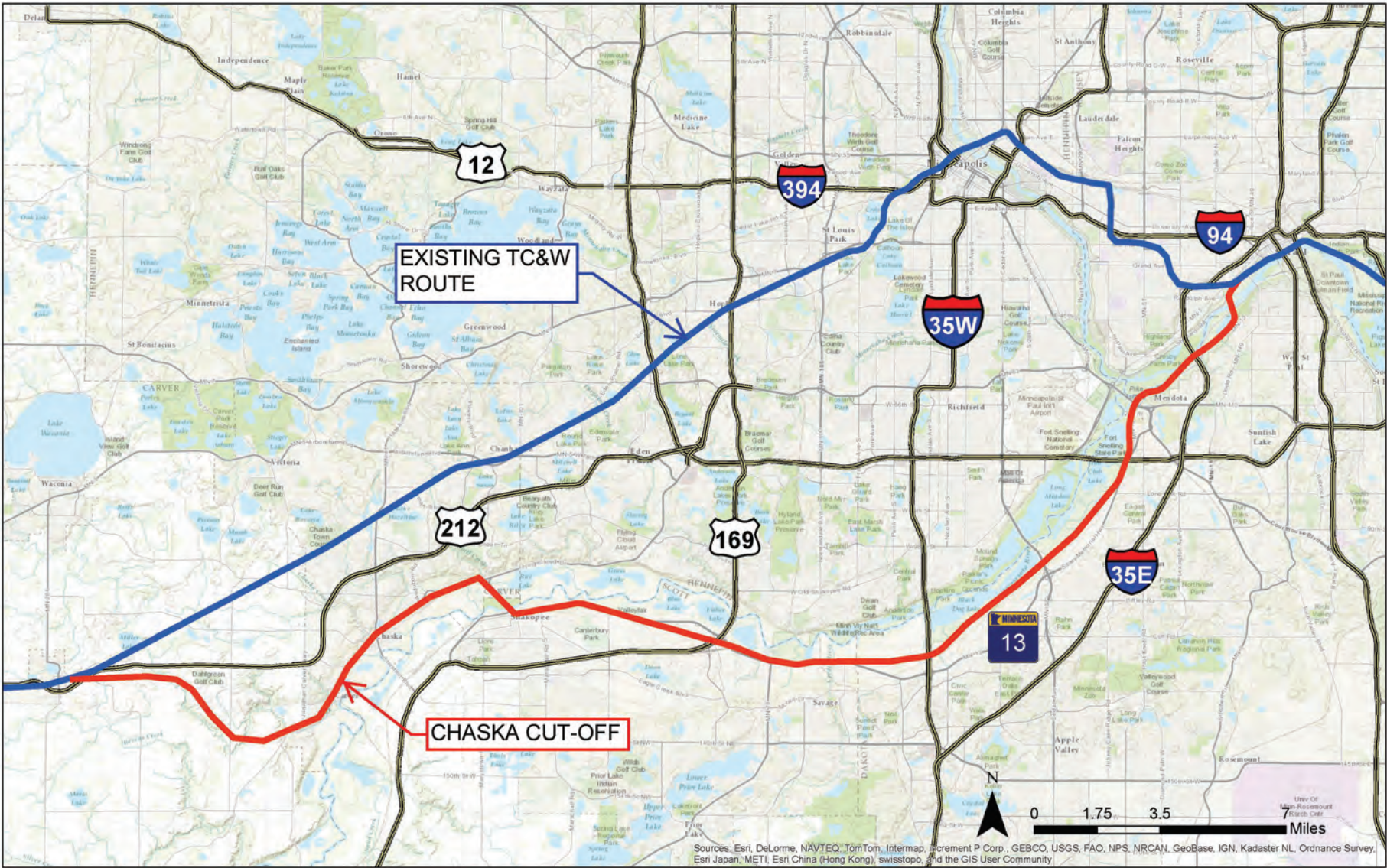
Sources: Esri, DeLorme, NAVTEQ, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, and the GIS User Community

# Granite Falls/Willmar Western Connection



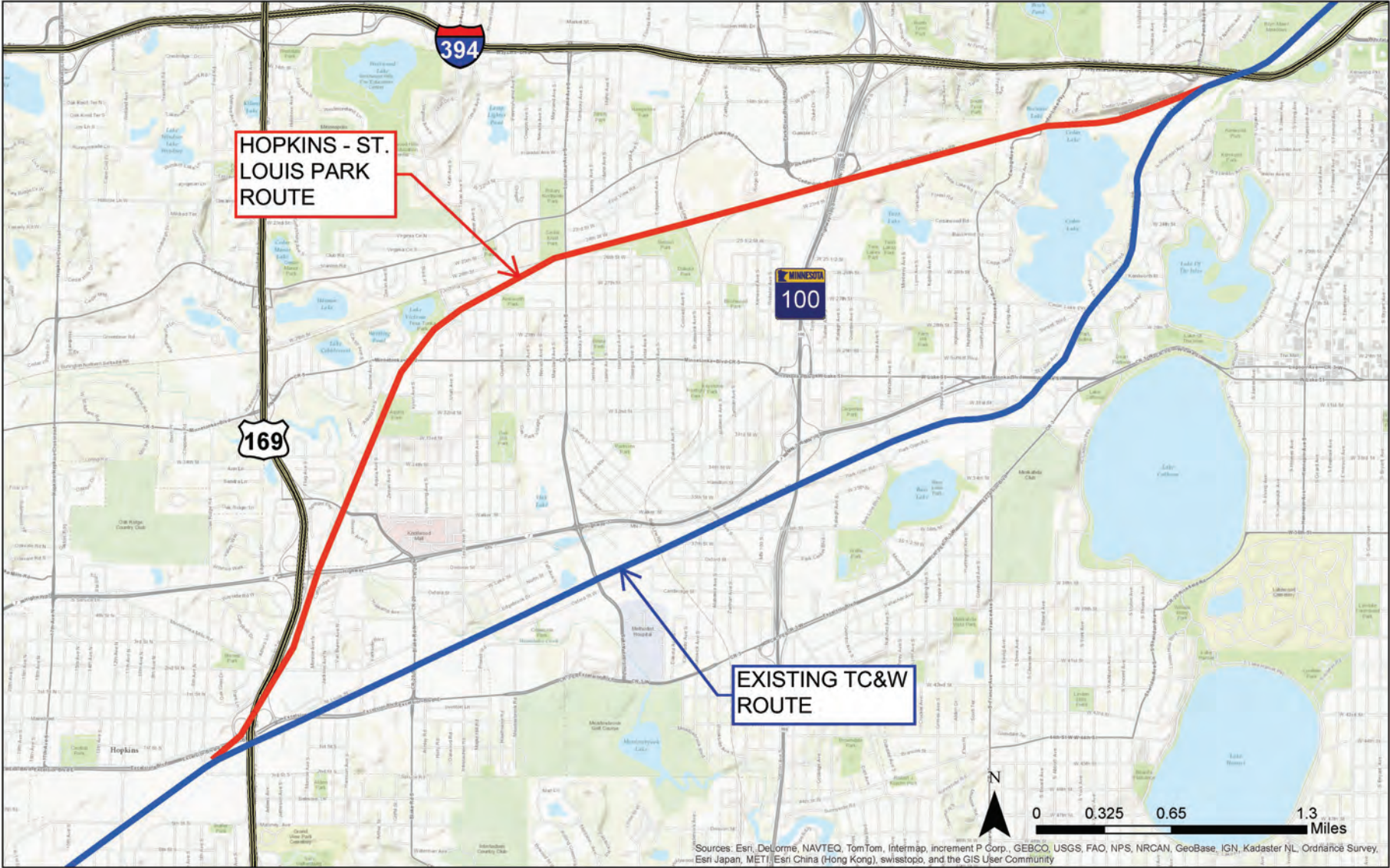
Sources: Esri, DeLorme, NAVTEQ, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster, NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swissTopo, and the GIS User Community

# Chaska Cut-Off



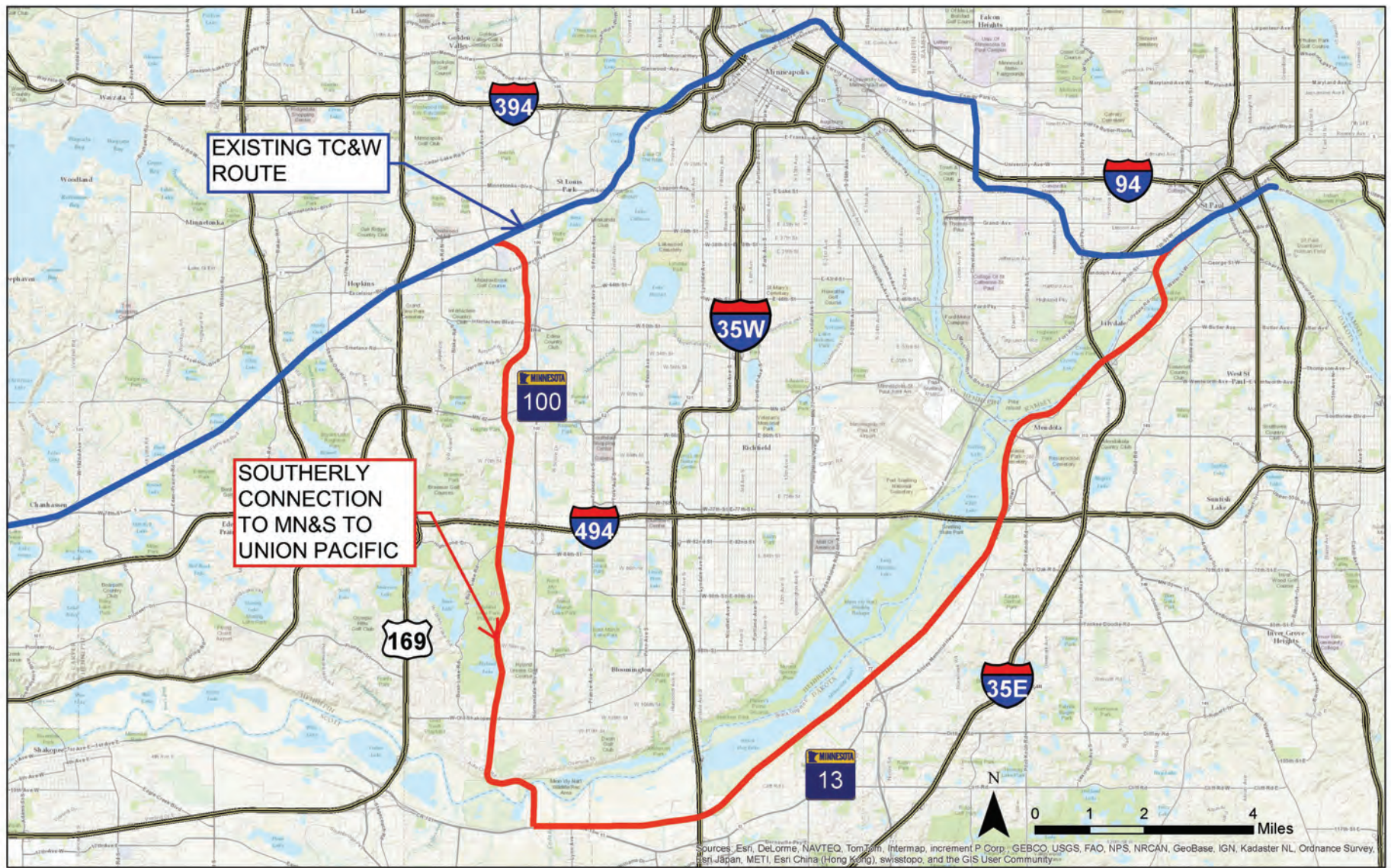
Sources: Esri, DeLorme, NAVTEQ, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, and the GIS User Community

# Hopkins-St. Louis Park Route



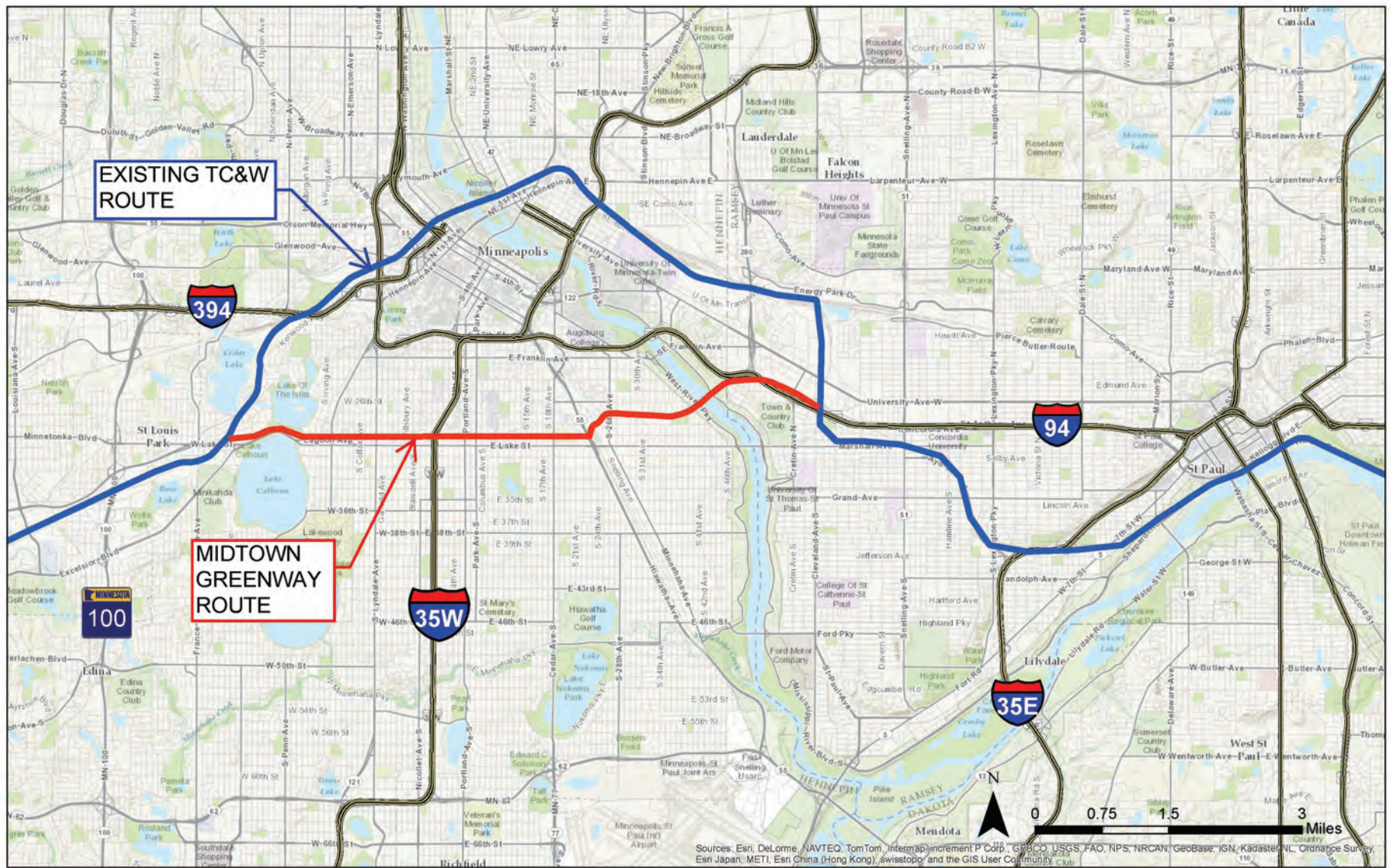
Sources: Esri, DeLorme, NAVTEQ, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, and the GIS User Community

# MN&S Southerly Connection via - Union Pacific



Sources: Esri, DeLorme, NAVTEQ, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, and the GIS User Community

# Midtown Greenway Route



Sources: Esri, DeLorme, NAVTEQ, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, Geobase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, and the GIS User Community

# Freight Rail Relocation Analysis Scope

- Deliverables:
  - Draft and final reports
  - Presentations to SWLRT Advisory and Management Committees
- Next Steps:
  - Identify firm and contract with them to complete the scope of work
  - Finalize contract mid- to late November

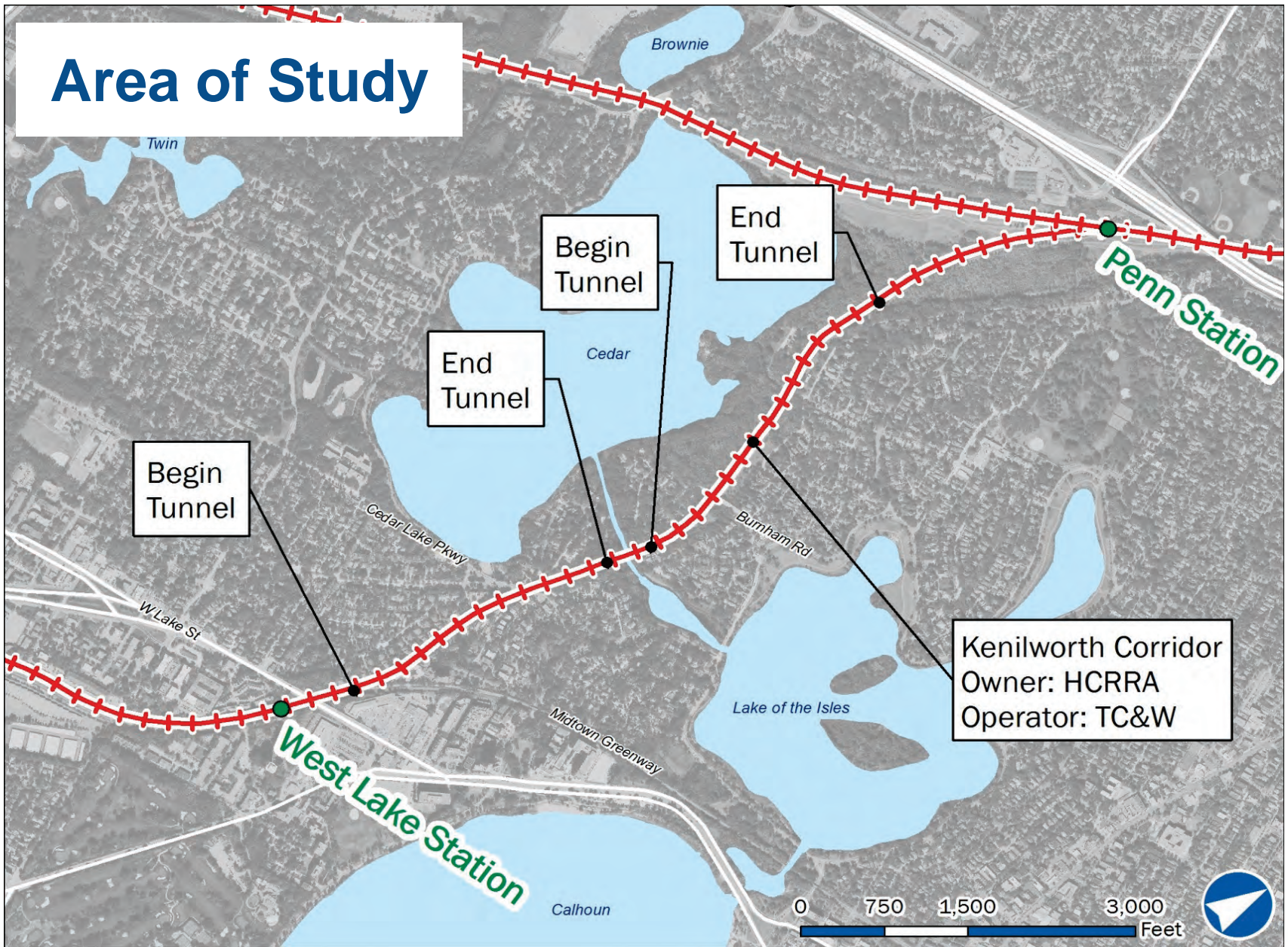


# Water Resources Evaluation Scope

# Water Resources Evaluation Scope

- Purpose: Conduct an independent assessment of water resource impacts with the Kenilworth Shallow LRT Tunnels
- Activities:
  - Coordinate with city, county, park board, watershed district
  - Review all previous reports and documents
    - SPO draft Basis of Design
    - SPO draft Water Monitoring Plan for construction and ongoing operations
    - Minnehaha Creek Watershed District /Wenck technical memo
  - Present results to joint BAC/CAC, CMC

# Area of Study



# Water Resources Evaluation Scope

- Deliverables:
  - Draft and final reports
  - Presentations to SWLRT Advisory and Management Committees
- Next Steps:
  - Seek proposals from water resources firms
  - Finalize contract mid- to late November

# Kenilworth Corridor Landscaping/Greenscaping Analysis

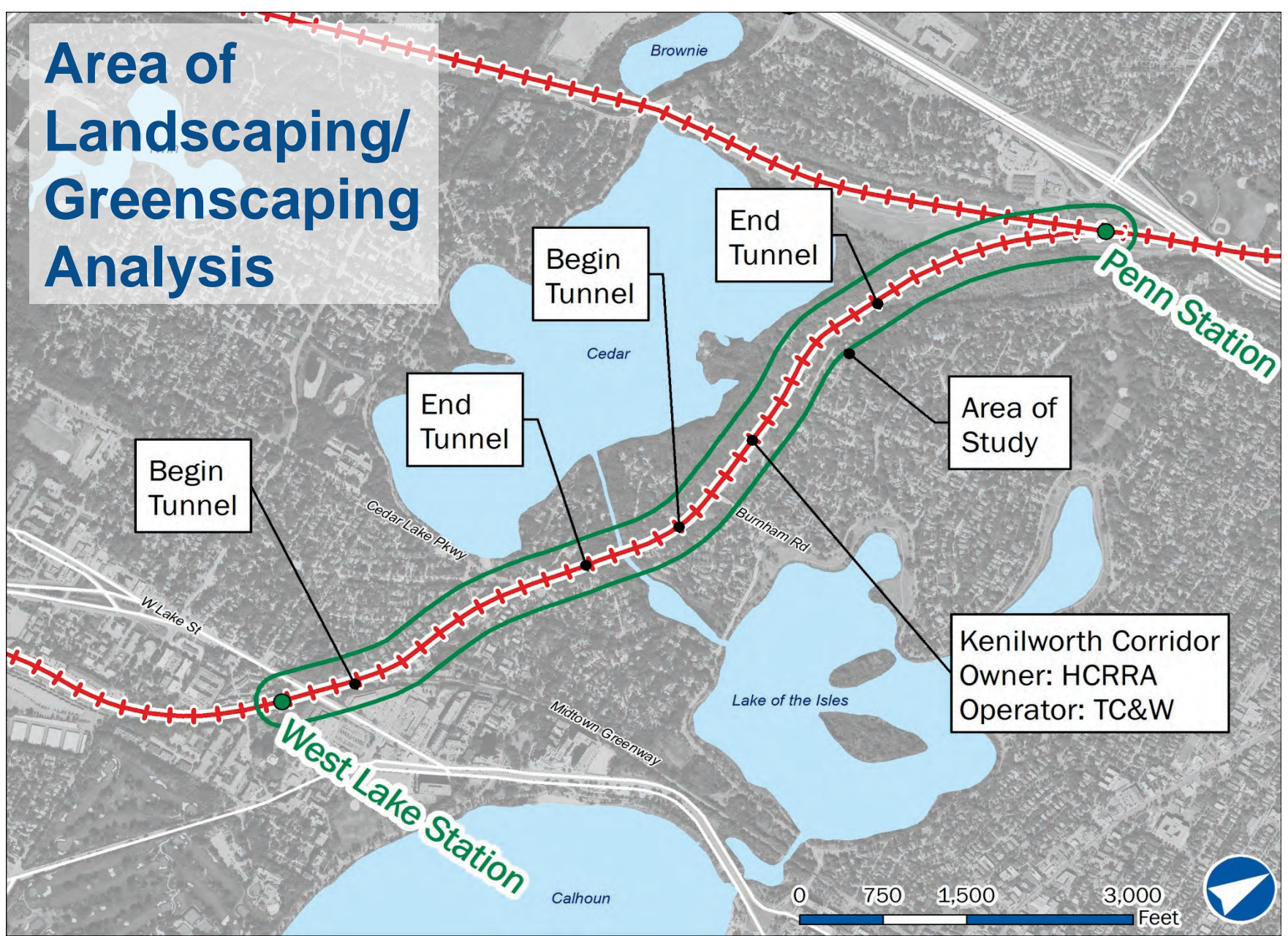
# Landscaping/Greenscaping Analysis

- Purpose: Systematically identify existing vegetation and identify re-vegetation opportunities with the Kenilworth Shallow LRT Tunnels
- SPO Activities:
  - Coordinate with city, county, park board, watershed district
  - Review previous studies
  - Inventory trees, understory vegetation and groundcover
  - Identify re-vegetation opportunities
  - Develop a public involvement plan and charrette process

# Landscaping/Greenscaping Analysis

- Deliverables:
  - Database of existing vegetation
  - Draft and final reports
  - Presentations to SWLRT Advisory and Management Committees
  - Public involvement plan
- Next Steps:
  - Complete tree, understory vegetation and groundcover inventory
  - Conduct re-vegetation analysis

# Area of Landscaping/ Greenscaping Analysis





# Stakeholder Involvement

# Stakeholder Involvement: November 2013

- Review Study Scopes/Receive Input
  - Technical staff with the cities, county, park board, and watershed district (Oct. 24 - Nov. 1)
  - SW Corridor Management Committee (Nov. 6)
  - SWLRT Community Advisory Committee (Nov. 7)

# Stakeholder Involvement: Mid-January 2014

- Present draft report and seek input:
  - Technical staff with the cities, county, park board and watershed district
  - Joint SWLRT Business & Community Advisory Committees
  - SW Corridor Management Committee
    - Public testimony opportunity
  - Metropolitan Council
    - Public testimony opportunity

# Stakeholder Involvement: Late-January 2014

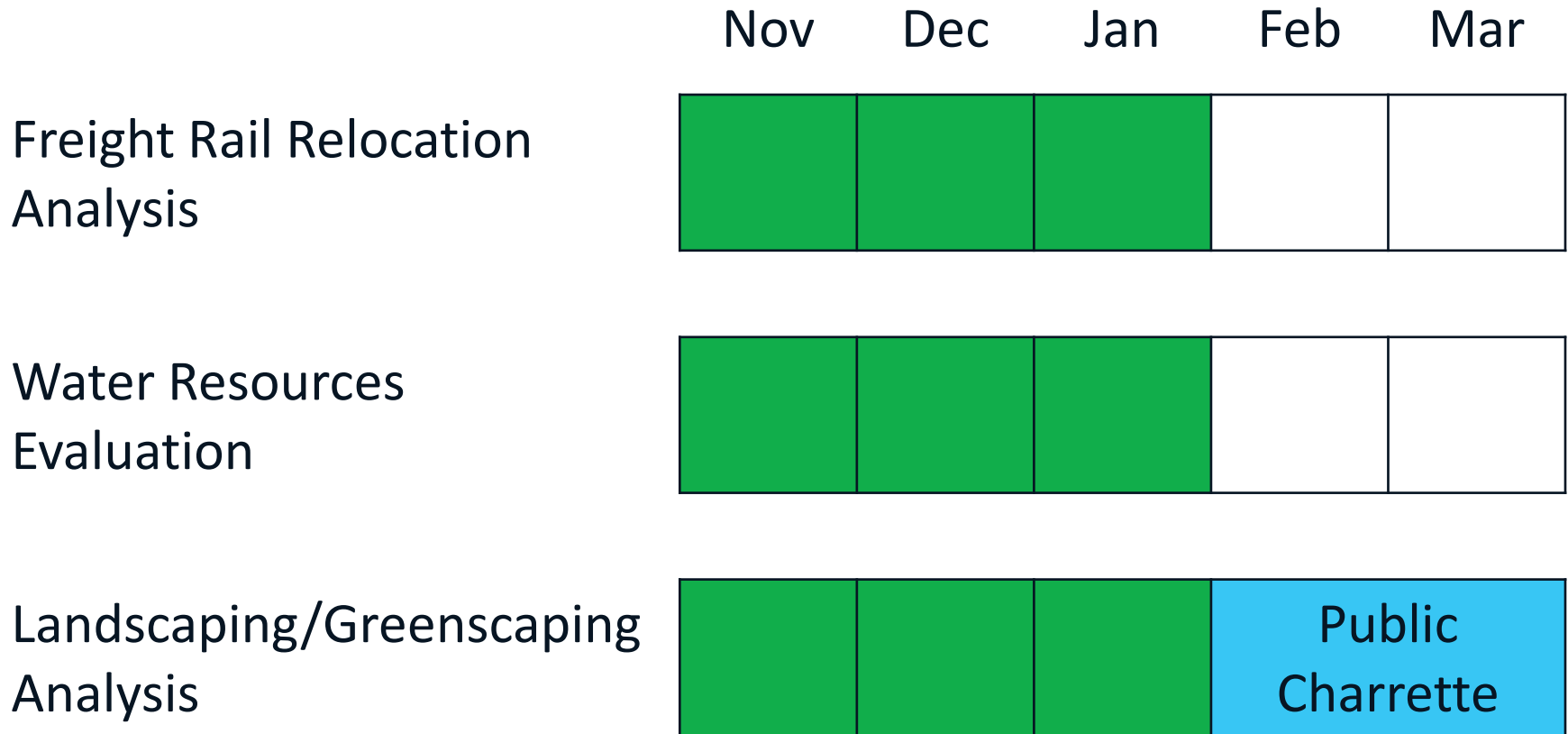
- Present final report and approve project scope and budget:
  - Technical staff with the cities, county, park board and watershed district
  - SW Corridor Management Committee
  - Metropolitan Council
- Met Council authorizes distribution of municipal consent plans

# Access and Distribution of Information

- Presentations to CMC, BAC, CAC Committees
- Public testimony at CMC and Council meetings
- Draft and final reports posted on [swlrt.org](http://swlrt.org)
- Community/neighborhood presentations
- Project newsletter
- Press releases
- Twitter

# Schedule

# Timeline for Completing 3 Additional Studies



# SWLRT Key Milestones

- DEIS Published Q4 2012
- PE Work Begins Q1 2013
- Three Studies Q4 2013
- Municipal Consent Q1 2014
- SDEIS Published Q2 2014
- FEIS Published Q1 2015
- Record of Decision Q1/Q2 2015
- Engineering Q1/Q2 2015
- Full Funding Grant Agreement Q4 2015
- Heavy Construction 2016-2018
- Revenue Operation Q4 2018



# More Information

Online:

[www.SWLRT.org](http://www.SWLRT.org)

Email:

[SWLRT@metrotransit.org](mailto:SWLRT@metrotransit.org)

Twitter:

[www.twitter.com/southwestlrt](http://www.twitter.com/southwestlrt)



## Engineering Evaluation of Freight Rail Relocation Alternatives

### Background

The COUNCIL has hired Kimley-Horn and Associates (KHA) to develop designs related to connecting freight rail between the Canadian Pacific (CP) owned Bass Lake Spur and the BNSF owned Wayzata Subdivision. These tracks are currently connected via the Hennepin County Regional Railroad Authority owned tracks that extend through the Kenilworth Corridor in Minneapolis. The primary freight railroad operating on this trackage is Twin Cities and Western Railroad (TC&W).

KHA, working with the COUNCIL as part of the Southwest LRT Project Office (SPO), has developed several relocation designs that would connect the Bass Lake Spur with the Wayzata Subdivision through St. Louis Park via the CP owned Minneapolis, Northfield and Southern (MN&S) Subdivision. The primary freight railroad that would operate on this trackage is TC&W. CP would continue to operate on the MN&S Subdivision. The relocation designs were developed following a review of the Draft Environmental Impact Statement (DEIS) freight rail relocation design and subsequent comments submitted by the railroads on the DEIS design.

The attached map shows the track locations as well as track ownership and operators.

In addition to this work by the COUNCIL, prior studies have evaluated alternatives rerouting the TC&W freight traffic in and around the Twin Cities area. These prior studies have identified various freight rail routes for TC&W operations. These studies are as follows:

- St. Louis Park Railroad Study, by RLK for St. Louis Park and Hennepin County, 1999
- TCWR Freight Rail Realignment Study, by HCRRA/TKDA, 2009
- Evaluation of TCWR Routing Alternatives, By Amfahr for Hennepin County, 2010
- Technical Memorandum #1, by SEH for St. Louis Park, 2010
- Technical Memorandum #2, by SEH for St. Louis Park, 2011
- Technical Memorandum #3, by SEH for St. Louis Park, 2011
- Technical Memorandum #4, by SEH for St. Louis Park, 2011

In addition to these studies, United Transportation Union (UTU) identified a potential variation of rerouting in their October 4 and 7, 2013 letters.

Other information relevant to the Work includes:

- Minnesota Comprehensive Statewide Freight and Passenger Rail Plan, 2010
- DEIS Freight Rail Relocation design, by Hennepin County, 2011
- DEIS comments on Freight Rail Relocation design, 2011

### Scope of Work

The CONSULTANT shall prepare a report that includes a matrix summarizing the freight rail relocation alternatives and the CONSULTANT's conclusions and recommendations on viable relocation alignments based on its professional judgment and industry standards, technical (track plan and profile), safety and operational considerations, conformance with other applicable standards (AREMA, MN Statutes, Railroad Design Criteria), any significant obstacles to implementation and other potential impacts that may need to be taken into consideration. The CONSULTANT shall also report on feedback received from the railroads regarding these

considerations. Specifically, the CONSULTANT shall provide the following services according to the schedule provided:

1. Review freight rail relocation information provided by SPO including, but not limited to, the documents described above.
2. Review the results of train performance simulations developed by KHA for the COUNCIL.
3. Participate in a project kickoff meeting at the SPO in St. Louis Park, MN with project stakeholders including, but not limited to, the cities of Minneapolis and St. Louis Park, Hennepin County and the freight railroads, BNSF, CP and TC&W. The kick-off meeting will consist of an overview of the following:
  - Existing freight rail track configuration and freight rail operations;
  - Alignments developed by the SPO; and
  - Alignments evaluated by others, as identified above.

This activity will include a site tour.

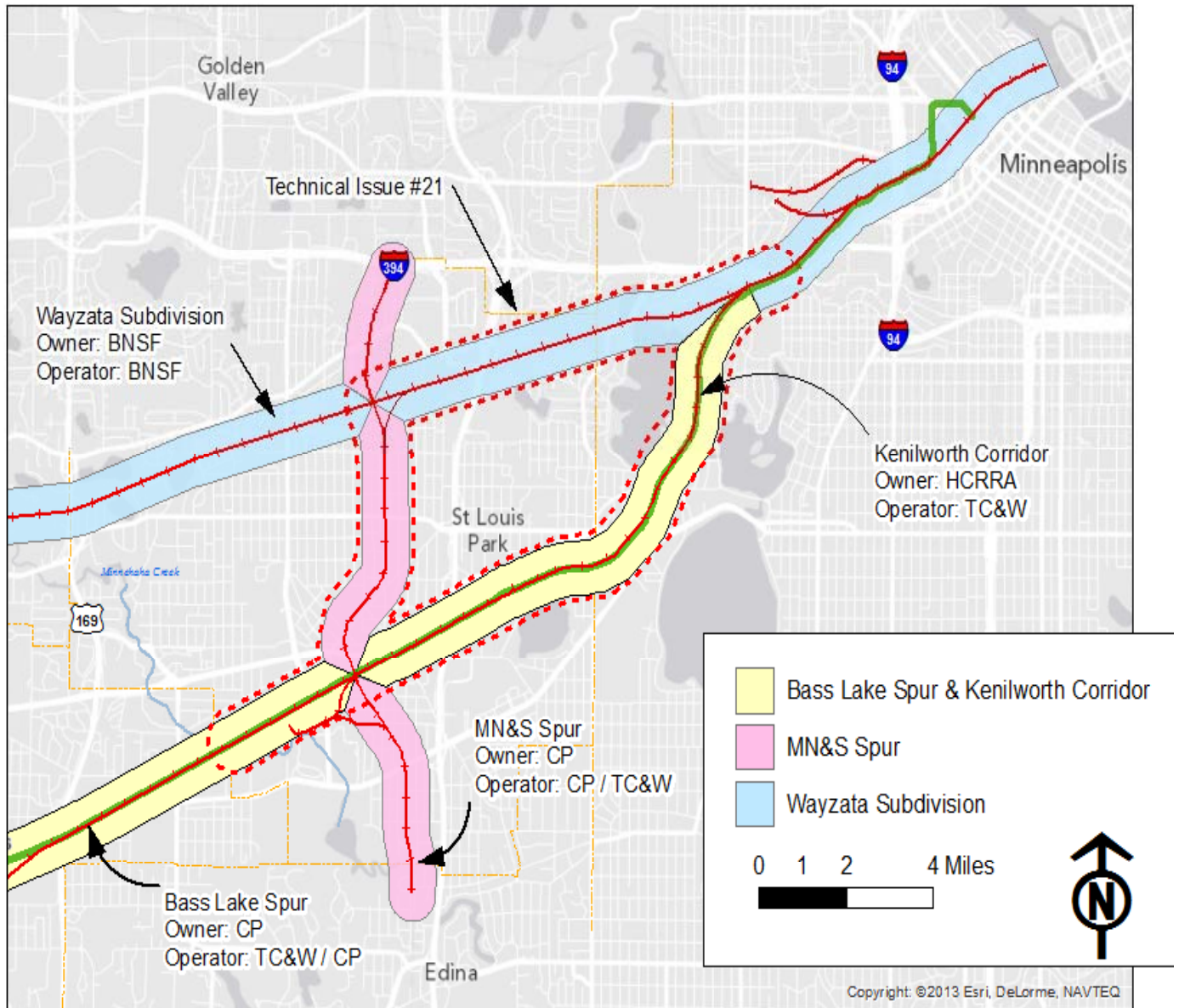
4. Conduct interviews with BNSF, CP Rail and TC&W Railroad technical staff regarding current operations and potential relocation alternatives.
5. Conduct evaluations of the following freight rail relocation alternatives, as identified below:
  - Modified MN&S;
  - Alternative route identified by UTU;
  - At-grade Brunswick Central;
  - Elevated Brunswick Central;
  - Alternative(s) deemed feasible during the review of prior studies;
  - Any new alternative(s) that the CONSULTANT may identify as part of the Work;
  - At-grade Brunswick West;
  - Elevated Brunswick West; and
  - Brunswick East.

Evaluations shall include identification of operational cost drivers, identification of community and other impacts and an assessment of possible operational adjustments, including the viability of breaking trains into two or more trainsets that may be required to negotiate alignments.

6. Provide input to SPO on capital costs associated with alternative alignments that are deemed viable, as appropriate.
7. Prepare a summary, as described above, of the alignment alternatives.
8. Prepare and provide a draft report for review by the COUNCIL that includes the results of the evaluations and other reviews conducted under this Scope of Work.
9. Participate in a meeting at the SPO with project stakeholders to review the draft report and receive comments.
10. Prepare and provide a final report for presentation to Project advisory committees.
11. Participate in up to three Project advisory committee meetings as directed by the COUNCIL.
12. The CONSULTANT shall provide services, support or assistance not defined above as necessary and as authorized by the COUNCIL.



# Freight Rail



## Engineering Evaluation of Water Resources for Shallow LRT Tunnels

### Background

The COUNCIL has hired Kimley-Horn and Associates (KHA) to conduct preliminary engineering activities to develop plans and designs for the Southwest Light Rail Transit (SWLRT) Project.

In August 2013, the COUNCIL's Southwest LRT Project Office (SPO) met with City of Minneapolis staff, Minneapolis Park and Recreation Board (MPRB) staff and Minnehaha Creek Watershed District (MCWD) staff to share technical information related to the design and construction of the shallow LRT tunnels in the Kenilworth Corridor in Minneapolis. The area addressed by this potential design option is located between the proposed locations of the West Lake Station and the Penn Station in the general area of the Kenilworth Corridor.

SPO developed a draft Kenilworth Shallow LRT Tunnel Basis of Design Report that provides technical information on the proposed approach to constructing the tunnels including control of groundwater during construction and addresses potential impacts to the area water resources both during construction and during operations.

On September 4, 2013, the SPO sent a letter to MCWD requesting that MCWD provide technical feedback in a written response to the materials provided regarding the Shallow LRT Tunnel.

On September 10, 2013, MCWD sent a letter to SPO responding to the SPO request. The MCWD letter included an attached letter dated September 9, 2013 from MCWD District Engineer (Wenck Associates, Inc.) that included comments to the SPO request for technical feedback.

The SPO is currently developing a draft water monitoring program that will address water levels, ground water levels and water quality during construction of the Shallow LRT Tunnels and during LRT operations.

### Scope of Work

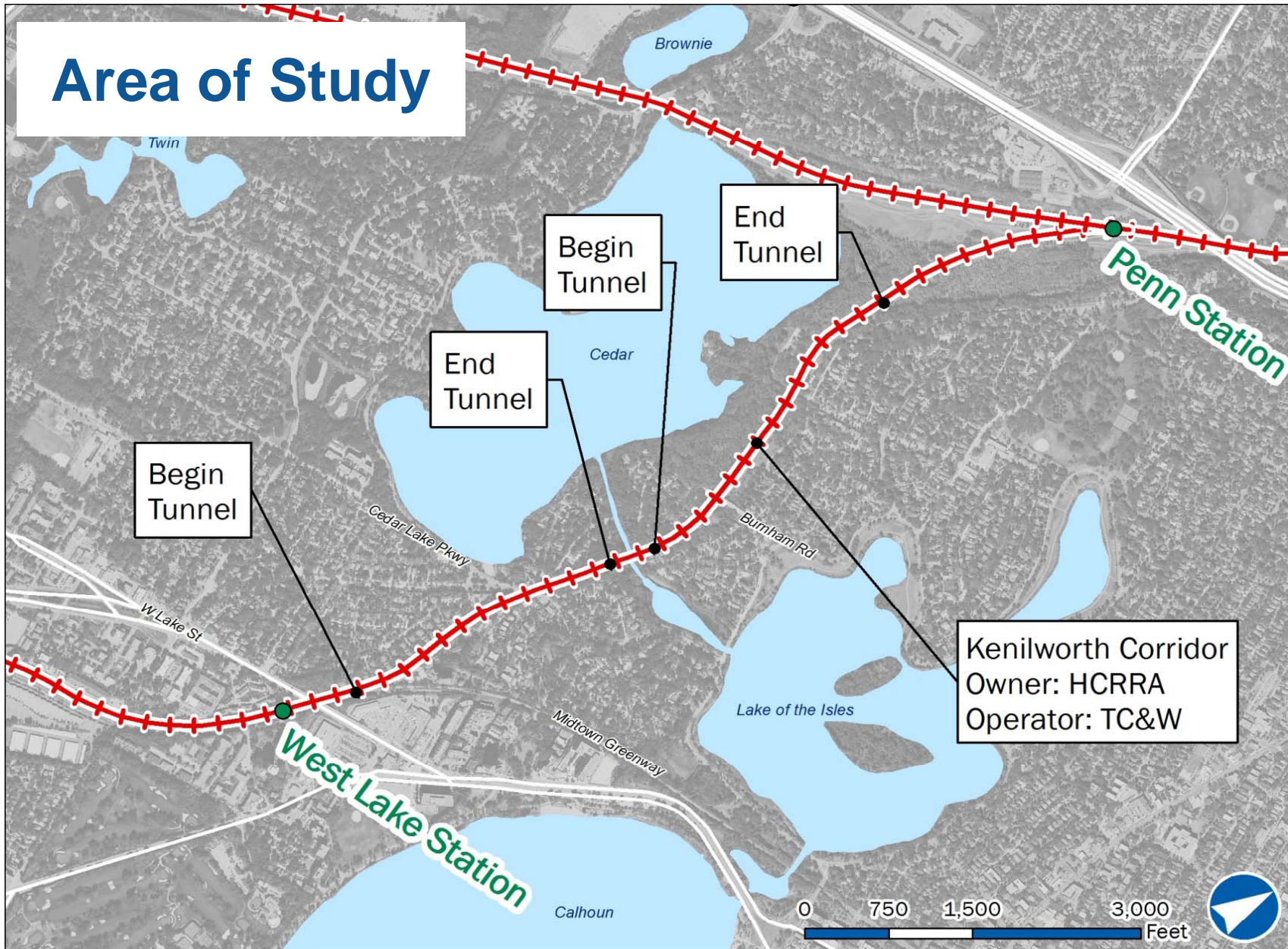
The CONSULTANT shall conduct an engineering evaluation and technical review of the following documents:

- Kenilworth Shallow LRT Tunnel Basis of Design Report (DRAFT)
- September 4, 2013 SPO letter to MCWD
- September 10, 2013 MCWD response letter to SPO
- September 9, 2013 Wenck Associates, Inc. letter to MCWD
- SWLRT Water Monitoring Program (DRAFT)
- Phase I ESA

Specifically, the CONSULTANT shall provide the following services according to the schedule provided below:

1. Review the materials and information listed above provided by the SPO.
2. Participate in a kickoff meeting at the SPO in St. Louis Park, MN with project stakeholders. The kick-off meeting will consist of an overview of the work performed to date by the SPO and the technical feedback received to date by the SPO.

3. Conduct an engineering evaluation and technical review on the materials provided in the draft Basis of Design Report based on the issues identified in the September 4, 2013 SPO letter sent to MCWD.
4. Conduct an engineering evaluation and technical review of the draft water monitoring program as developed by the SPO for the Shallow LRT Tunnel.
5. Prepare and provide a draft report for review by the COUNCIL that includes the results of the engineering evaluations and other reviews conducted under this Scope of Work.
6. Participate in a meeting at SPO with project stakeholders to review the draft report and receive comments.
7. Prepare and provide a final report for presentation to Project advisory committees.
8. Participate in up to three Project advisory committee meetings as directed by the COUNCIL.



## **Kenilworth Corridor Landscape/Greenscape Analysis for the Shallow LRT Tunnels**

### **Background**

The COUNCIL's Southwest LRT Project Office (SPO) has proposed to design and construct the SWLRT line through the Kenilworth Corridor by means of two shallow tunnels that would carry the LRT tracks and would extend next to the existing freight rail tracks and lie beneath the at-grade Kenilworth trail.

In order to assist policy makers in the decision of whether to pursue the shallow tunnel design, SPO has been requested to:

- Conduct an independent analysis of freight rail relocation alternatives that may be viable in lieu of keeping the freight rail in the Kenilworth Corridor;
- Conduct an independent evaluation of potential impacts to water resources that may result from the construction and/or operation of the shallow LRT tunnels; and
- Complete a survey of the existing vegetation in the Kenilworth Corridor and identify impacts to the vegetation and identify areas suitable for planting trees and areas suitable for planting understory vegetation or groundcover under the shallow LRT tunnel configuration.

The results of these analyses will be shared with Project stakeholders and policy makers to inform the decision of whether to pursue the shallow LRT tunnels in the Project scope or other design alternative.

### **Scope of Work**

The objective of this phase of the work is to complete an inventory of existing conditions and identify impacts to help inform decisions on the scope of this portion of the SWLRT Project.

The following activities are planned:

- SPO to conduct an inventory of the existing physical conditions within the Corridor. The inventory shall include: location, diameter, species and condition of existing trees; general species, quantity and condition of existing understory vegetation; and type, condition and limits of groundcover (turf).
- SPO to conduct an analysis of historic vegetation in the Corridor, surficial soil conditions and Corridor access.
- SPO to develop a graphical representation of the impacts to trees and other vegetation within the Corridor by comparing existing conditions within the Corridor to conditions within the corridor immediately following construction.
- SPO to review available studies, reports and meeting materials related to landscape design of the Kenilworth Corridor with the SWLRT prepared by agency led committees. SPO to prepare a summary of the document research which identifies an understanding of concerns and issues, establishing an overall design direction for SPO design staff to



prepare landscape plans for the Kenilworth Corridor. This summary will be reviewed and confirmed with City, Minneapolis Park and Recreation Board (MPRB), Minnehaha Creek Watershed District (MCWD) and County staff.

- SPO to identify areas suitable for planting trees and areas suitable for planting understory vegetation or groundcover under the shallow LRT tunnel configuration. SPO to develop a graphical representation of this information.
- SPO to review and evaluate impacts with the City, MPRB, MCWD and County staff.
- SPO to prepare a draft report documenting the impacts and potential mitigation measures.
- SPO to present the findings to the Project advisory committees.
- SPO to develop a draft public involvement plan that includes coordination activities with Project stakeholders and an active engagement process with community members and businesses within the Kenilworth Corridor. The plan will identify steps to develop a public charrette or other public engagement process to seek input to inform the landscape design of the Kenilworth Corridor. The plan will incorporate stakeholder input as appropriate.

