

SOUTHWEST

Green Line LRT Extension



# Corridor Management Committee

October 2, 2013



# Today's Topics

- Project Scope Recommendation
- Project Budget Recommendation
- Municipal Consent Calendar



# Project Scope and Budget Refinement

- Reflects input and coordination:
  - DEIS comments: received 900+ public comments
  - City/Agency input: held 100+ Issue Resolution Team meetings
  - Project advisory input: BAC, CAC, SWCMC
  - Public input received from 15 public open houses (2000+ attendees and 1100+ public comments) and 155+ community/stakeholder meetings
  - TSAAP coordination
- Establishes scope for Municipal Consent Plans
- Provides context for continued discussions with stakeholders as project moves forward

# SWRLT Project Development Technical Issues

# SWLRT Project Development Technical Issues

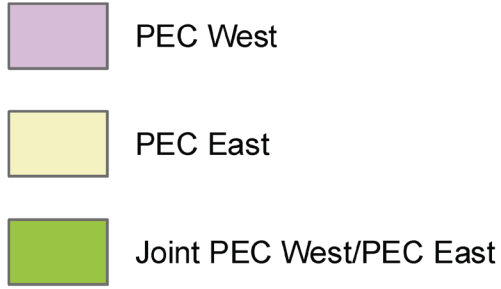
Revision 04: 28 May 2013

## Technical Issues:

- 1. Eden Prairie Alignment
- 2. Nine Mile Creek Crossing
- 3. Golden Triangle Station
- 4. Shady Oak Road & TH 212 Crossing
- 5. City West Station & TH 62 Crossing
- 6. Opus Station
- 7. Opus Hill/Minnetonka-Hopkins Bridge
- 8. Shady Oak Station

- 9. PEC West/PEC East Interface Point

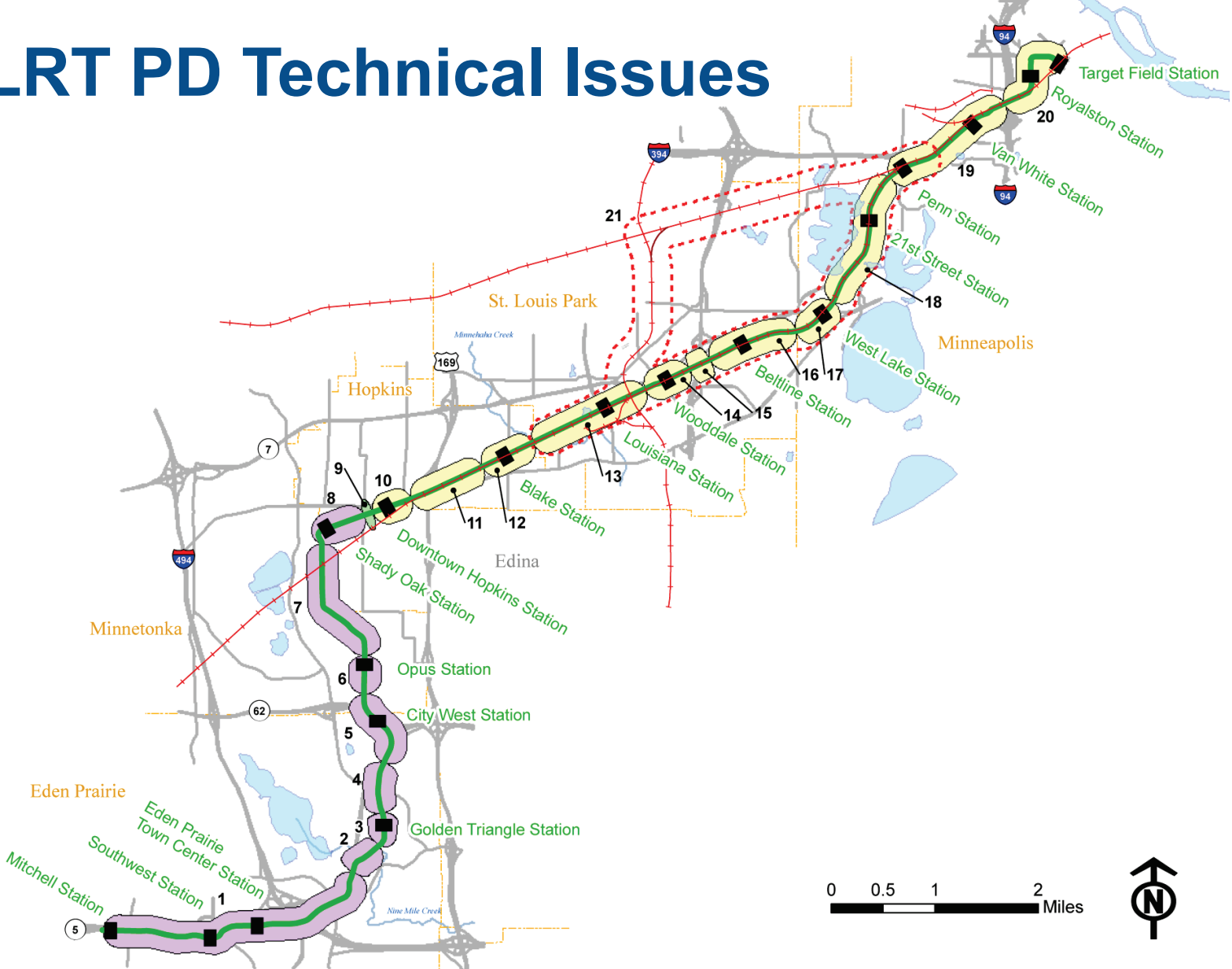
- 10. Downtown Hopkins Station
- 11. Excelsior Blvd. Crossing
- 12. Blake Station
- 13. Louisiana Station
- 14. Wooddale Station
- 15. TH 100
- 16. Beltline Station
- 17. West Lake Station
- 18. Kenilworth Corridor
- 19. Bassett Creek Valley Corridor
- 20. Royalston Station/Interchange Project Coordination
- 21. Freight Rail Co-location/Relocation Alternatives



## System-wide Technical Issues (not shown):

- 22. Traction Power Substation and Signal Bungalow Locations
- 23. Operation & Maintenance Facility (OMF) Location
- 24. Park & Ride, Kiss & Ride and Bus Layover Locations
- 25. Trails and LRT Interface Coordination

# SWLRT PD Technical Issues





# Technical Issues: 2-20, 22, 24 and 25

- Recommend as presented on August 7 and August 28

# Technical Issues: CMC Actions

- At its September 4 meeting, the CMC voted to recommend to the Council
  - Eden Prairie Alignment: Comp Plan Alignment to Southwest Station
  - Removal of the Deep Bore LRT Tunnel option from further consideration
- At its September 11 meeting, the CMC voted to recommend to the Council:
  - Hopkins Site 9A for the OMF location



# Technical Issue #21

## Freight Rail

# Surface Transportation Board

# Surface Transportation Board

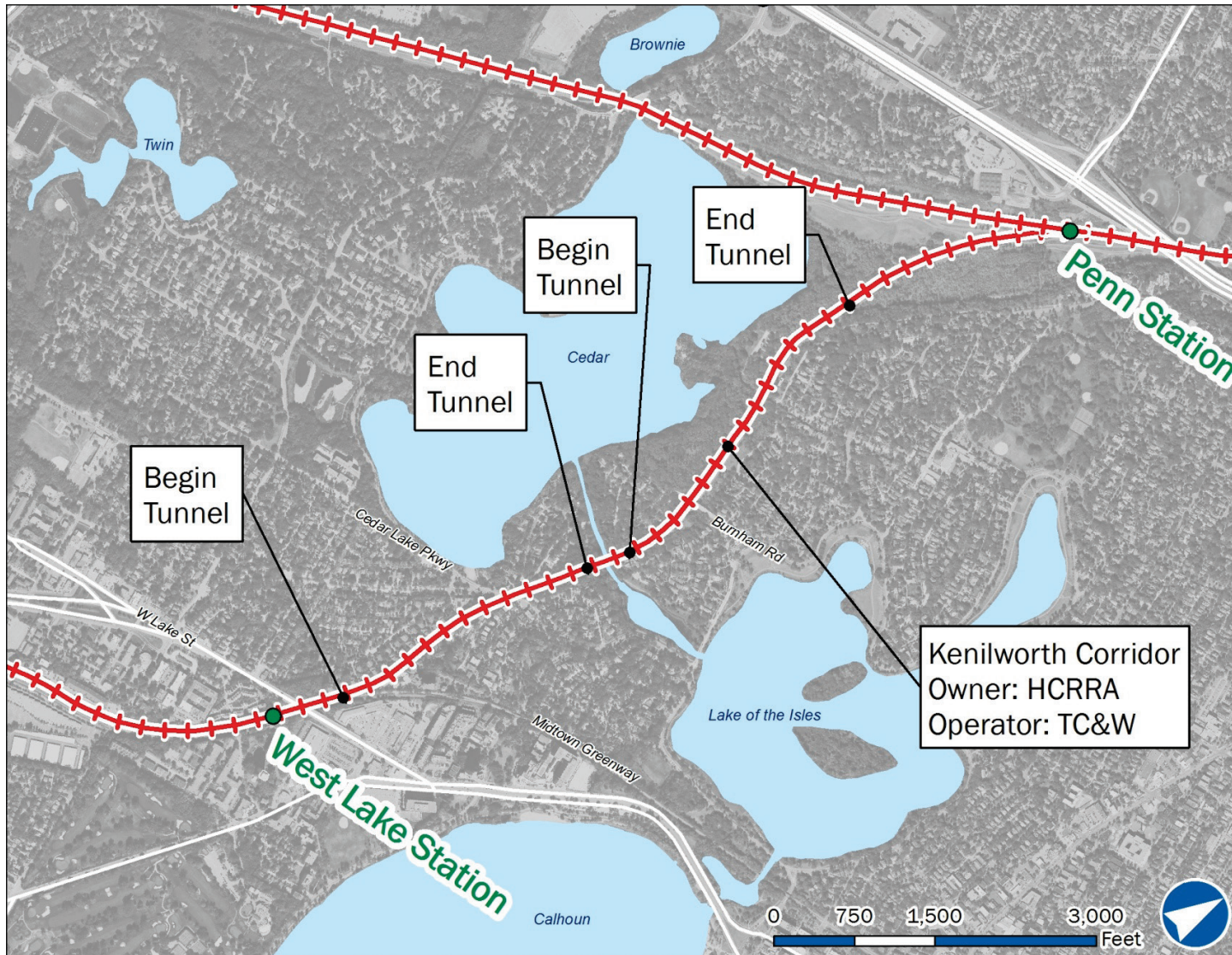
- Federal regulatory agency charged with reviewing railroad abandonments, resolving railroad rate and service disputes and reviewing proposed railroad mergers
- Board approval **is** required for
  - Abandonments
    - Authorization based on Board's assessment of needs of railroads and shippers
    - Class exemption applies if no industries served on line for 2 years and if overhead traffic can be rerouted

# Surface Transportation Board (cont.)

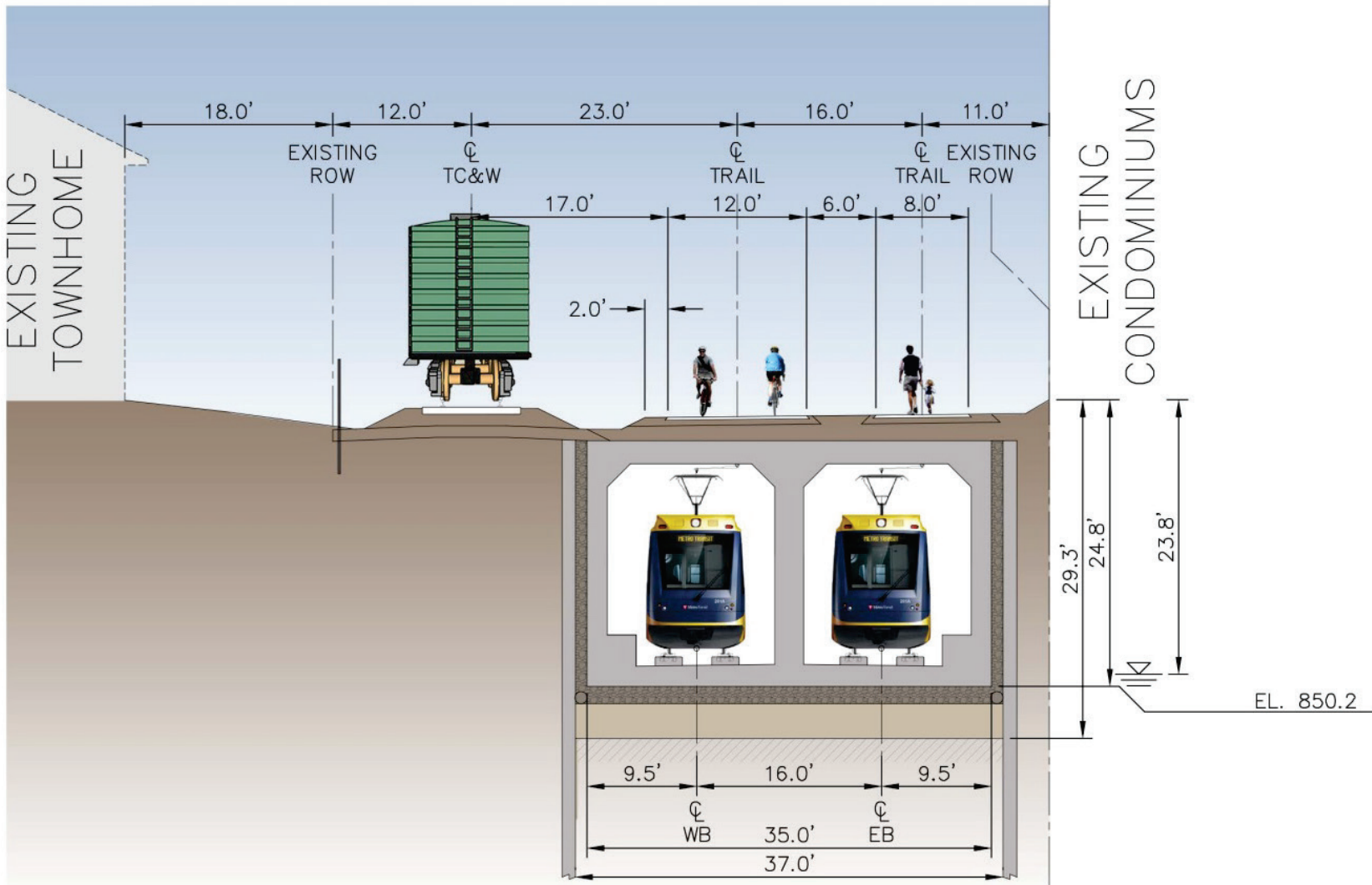
- Twin Cities and Western (TCW) and Canadian Pacific Railway (CPR) have existing rights to operate on the Kenilworth freight line
- In Kenilworth co-location option, freight rail operations remain, no STB action appears necessary
- In freight rail relocation option to St. Louis Park, STB action appears necessary to approve discontinuance of common carrier operations in Kenilworth Corridor by TCW and CPR



# TI #21: Freight Rail: Shallow LRT Tunnel



# Kenilworth Shallow LRT Tunnel





# Technical Issue #21: Shallow LRT Tunnel

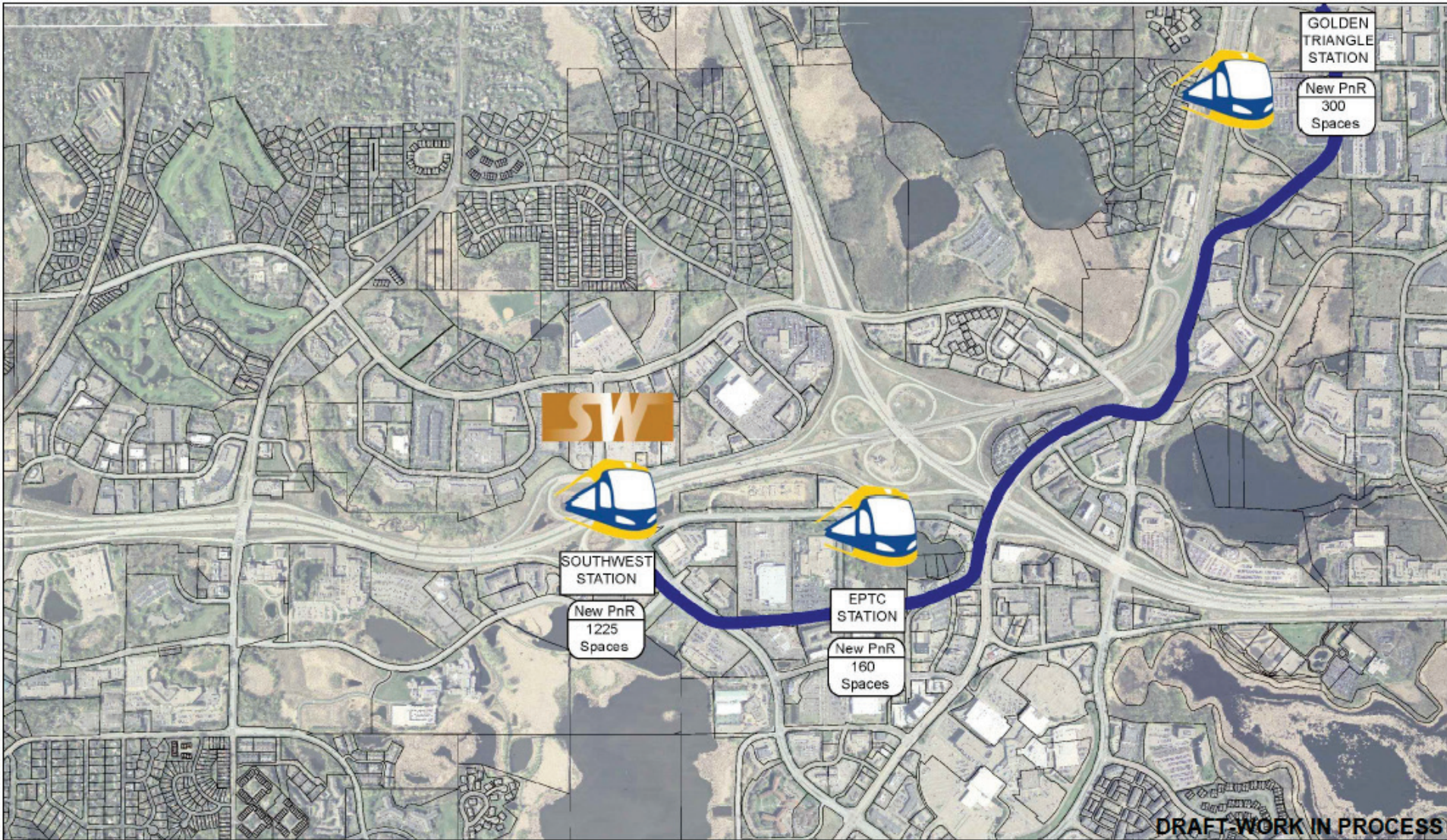
- No acquisition of homes and businesses
- Option most similar to existing condition
- 200+ LRT trips per day mostly below grade through Kenilworth Corridor
- Kenilworth Trail stays within corridor and preserved for the long-term
- Design protects water resources
- Estimated **\$40 M** less expensive than Brunswick Central freight rail relocation



# Technical Issue #1

## Eden Prairie Alignment

# TI #1 Eden Prairie Alignment: Adjustment #5





# TI #1: Eden Prairie Alignment

- Comp Plan alignment with a Town Center Station to Southwest Station
- Benefits:
  - Meets City's desire for a Town Center station location on the Comp Plan alignment
  - Serves Southwest Station
  - Provides multi-modal connection between express and local bus and light rail transit
  - Estimated **\$75-\$80 M** savings
  - Avoids potential wetland and floodplain impacts

# Project Budget Recommendation

# Project Budget Recommendation

• SWLRT Base Project	\$1.390 B
• Freight Rail	
• Common Elements	\$.090 B
• Kenilworth Shallow LRT Tunnel	\$.160 B
• <u>Scope/Cost Reductions</u>	<u>(\$.080 B)</u>
• SWLRT Adjusted Budget	\$1.560 B*

\*Includes 27% contingency allowance

# Budget Recommendation: LRT Base Project

PROJECT COMPONENTS	COST
LRT Base Project	\$1355 - \$1390 M

# Budget Recommendation: Freight Rail

<b>FREIGHT RAIL OPTIONS</b>	<b>COST</b>
Freight Rail Common Costs	\$85 - \$90 M
Kenilworth Shallow LRT Tunnel Options	\$150 - \$160 M
<b>FREIGHT RAIL SUBTOTAL</b>	<b>\$235 - \$250 M</b>



# Budget Tool: Potential Scope Reductions

POTENTIAL SCOPE REDUCTIONS		SAVINGS (M)
1. End of line at City Center; Cohabitate at Southwest Station <i>-OR-</i>		(\$5-\$10)
2. End of line near Mitchell Rd. & Technology Dr.; No LRT at Southwest Station <i>-OR-</i>		(\$30-\$40)
3. End of line at Southwest Station; Relocate SouthWest Transit <i>-OR-</i>		(\$85-\$90)
4. End of line near Mitchell Road & Technology Dr.; Cohabitate but no LRT park-and-ride at Southwest Station <i>-OR-</i>		(\$10-\$15)
5. End of line at Southwest Station; Cohabitate at Southwest Station	✓	(\$75-\$80)
Use Oxford properties for Louisiana Station park-and-ride in place of purchasing an easement on the Golden Auto parking lot site (Louisiana Station base design only; CP ROW swap only)	■	(\$6-\$7)
Eliminate CP ROW swap & southerly connection (co-location only with bridge and station adjustments)	■	(\$55-\$60)
Eliminate northern segment of shallow LRT tunnel (co-location only)	■	(\$55-\$60)
Eliminate 200 structured park-and-ride spaces from the program	■	(\$4-\$5)

# Budget Tool: Locally Requested Betterments

LOCALLY PREFERRED BETTERMENTS			COST
Eden Prairie TC Station	Extend Main St. north to Technology Dr.	<input type="checkbox"/>	\$2.5 - \$3
Minnetonka/Hopkins Bridge	Add ped/bike trail along bridge	<input type="checkbox"/>	\$12 - \$13
Shady Oak Station	Extend 17th St. from park-and-ride to K-Tel Drive	<input type="checkbox"/>	\$9 - \$10
	Change from 500 surface spaces to 250 surface/250 structured	<input type="checkbox"/>	\$3 - \$3.5
DT Hopkins Station	Civic plaza at station	<input type="checkbox"/>	\$4.5 - \$5
	Pedestrian enhancements at 8th Ave. & Excelsior Blvd.	<input type="checkbox"/>	\$0.5 - \$1
	Pedestrian crossing improvements at 5th Ave. & Excelsior Blvd. intersection	<input type="checkbox"/>	\$2 - \$2.5
Excelsior Crossing	Trail bridge over Excelsior Blvd.	<input type="checkbox"/>	\$5.5 - \$6.5
Blake Station	Joint development opportunity on NW corner of Blake Rd. & Excelsior Blvd.; site and access improvements	<input type="checkbox"/>	\$13.5 - \$14.5
	Trail underpass at Blake Rd.	<input type="checkbox"/>	\$3 - \$3.5
Louisiana Station	Platform adjacent to Methodist Hospital; Remove entire switching wye; park-and-ride east of Louisiana and south of freight rail corridor on Oxford properties	<input type="checkbox"/>	\$18 - \$23
Wooddale Station	Trail underpass at Wooddale	<input type="checkbox"/>	\$3 - \$3.5
Beltline Station	Grade-separate Beltline roadway under LRT/Freight/Trail <i>-OR-</i>	<input type="checkbox"/>	\$18 - \$23
	Trail overpass at Beltline Blvd.	<input type="checkbox"/>	\$3.5 - \$4
West Lake Station	Realign Chowen and Abbott on private property	<input type="checkbox"/>	\$2 - \$2.5

# Municipal Consent Calendar

# Municipal Consent Process

- Metropolitan Council submits municipal consent design plans to cities/county
- Metropolitan Council/Hennepin County Regional Railroad Authority hold joint public hearing 30 days following municipal consent design plan submittal
- City/County open house/public hearing/approval of plans within 45 days of joint public hearing

# Municipal Consent Calendar

- **Oct 10:** Municipal Consent Plans Submitted To Cities/County
- **Week of Nov. 12:** Joint Metropolitan Council and Hennepin County Regional Railroad Authority Open House/Public Hearing
- **Nov 14 – Dec 28:**
  - Cities hold open houses/public hearing
  - Cities/County Board take action on Municipal Consent for SWLRT Project

# 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)



**Southwest LRT Resolution**

WHEREAS:

1. State statute designated the Metropolitan Council (Council) as the lead agency for the Southwest LRT (SWLRT) Project;
2. The Council established the Corridor Management Committee (CMC) to advise the Council in the design and construction of the SWLRT Project;
3. The Council established the Southwest LRT Project Office (SPO) to advance the design, manage construction and overall delivery of the SWLRT Project;
4. The SPO developed a list of technical issues and an issue resolution process to seek input from project stakeholders on the design of the SWLRT Project, holding over 150 issue resolution team meetings with agency technical staff;
5. The SPO sought public input on technical issues on the SWLRT project by holding 15 public open houses, which were attended by over 2,000 people, receiving over 1,100 comments;
6. The SPO presented designs to the CMC that were developed through the issue resolution process; and
7. The CMC discussed the designs and provided input to the SPO.

NOW, THEREFORE:

BE IT RESOLVED, that the Corridor Management Committee recommends that the Metropolitan Council adopt Southwest LRT Project Scope (Attachment A) and direct the SPO to proceed with advancing the design and complete and submit Municipal Consent Plans in early 4Q 2013 to the County and the five host cities for their approval;

BE IT RESOLVED, that the CMC recommends that the Council adopt a project budget of \$1.56 billion consistent with adopted project scope;

BE IT RESOLVED, that the CMC recommends that the project scope include shallow LRT tunnels in the Kenilworth Corridor, a south segment generally between West Lake Street Bridge and Kenilworth Channel and a north segment generally from Kenilworth Channel to north of 21<sup>st</sup> Street;

BE IT FURTHER RESOLVED, that the CMC recommends that the Council direct the SPO to discontinue all work related to freight rail relocation, effective immediately;

BE IT FURTHER RESOLVED, that the SPO continue to work with project stakeholders to provide updates on the design and cost of the SWLRT project and to seek their input as the design advances;

BE IT FURTHER RESOLVED, that the parties represented in the CMC agree to continue to work cooperatively as the SPO advances the design of the SWLRT and to provide input to the Council and the SPO; and

BE IT FURTHER RESOLVED, that the parties represented in the CMC agree to work cooperatively to enable the Council to: a) submit a New Starts application in mid 2014 for entry into the Engineering phase; b) advocate for timely federal approval of the New Starts application; and c) take all necessary actions with the FTA to maintain the project on its current schedule, with entrance into Engineering in late 2014.



## **Southwest LRT Project Scope**

### **Technical Issue #1 – Eden Prairie Alignment**

Comp Plan Town Center Station with a 160 stall surface park and ride (on property to be leased) ending at Southwest Station adding a 1,225 stall parking structure. Southwest Transit express and local bus operations remain.

### **Technical Issue #2 – 9 Mile Creek Crossing**

Alignment includes an LRT bridge over Flying Cloud Drive, avoiding impacts to charter school and minimizing property impacts.

### **Technical Issue #3 – Golden Triangle Station**

Golden Triangle Station platform located north of 70<sup>th</sup> Street and includes a 275 stall park and ride surface lots east and south of the station platform (on properties to be leased).

### **Technical Issue #4 – Shady Oak Road and TH 212 Crossings**

LRT crosses Shady Oak Road and TH212 on a single bridge from the west side of TH 212 into Golden Triangle Station, accommodating City of Eden Prairie's interchange improvements at Shady Oak Road/TH 212.

### **Technical Issue #5 –City West Station and TH 62 Crossing**

City West Station platform located at grade adjacent to United Health Group development and TH 62 and includes a 190 stall surface park and ride. Includes a cut and cover tunnel under TH 62 from City West into the Opus development.

### **Technical Issue #6 – Opus Station**

Opus Station platform located south of Bren Road West on the east side of Bren Road East with a 90 stall surface park and ride (on property to be leased). Includes trail connections to the platform from both adjacent roadways.

### **Technical Issue #7 – Opus Hill/Minnetonka-Hopkins Bridge**

Alignment runs along "Opus Hill" (between Bren Road West and Smetana Road) minimizing wetland impacts and realigns the intersection of Smetana and Feltl Roads. Includes 3,200' long, 120'- span pre-stressed beam bridge over the wetlands south of the Canadian Pacific Bass Lake Spur Rail alignment and over the CP line towards K-Tel Road.

### **Technical Issue #8 – Shady Oak Station**

Shady Oak Station platform located north of the Minnesota River Bluffs LRT Regional Trail with a 500 stall surface park and ride and minimizing property impacts. Extends 17<sup>th</sup> Avenue from Excelsior Boulevard south into the park and ride and to the station.

October 2, 2013

**ATTACHMENT A**

**Technical Issue #9 – PEC-West & PEC East Interface**

Interface point between West and East segments located 100' east of 11<sup>th</sup> Avenue in Hopkins.

**Technical Issue #10 – Downtown Hopkins Station**

Downtown Hopkins Station platform located east of 8<sup>th</sup> Avenue. Bus stop and layover on Excelsior Boulevard. No park and ride at station.

**Technical Issue #11 – Excelsior Boulevard Crossing**

LRT bridge over Excelsior Boulevard and extended to allow for LRT alignment to be placed on the southerly portion of the corridor with CP Bass Lake Spur freight tracks located north of the LRT tracks and the Cedar Lake LRT Regional Trail located north of the CP tracks.

**Technical Issue #12 – Blake Station**

Blake Station platform located west of Blake Road on the southern portion of the corridor. Includes a 445 stall structured park and ride south of the station with potential joint development.

**Technical Issue #13 – Louisiana Station**

Louisiana Station platform located east of Louisiana Avenue and north of Oxford Street. LRT crossing of Louisiana Avenue is grade separated on a new LRT bridge structure. Includes a minimum 225 stall surface park and ride utilizing the Golden Auto site north of the freight/HCRRA corridor with a pedestrian underpass to allow access to the station.

**Technical Issue #14 – Wooddale Station**

Wooddale Station platform located just east of Wooddale Avenue on the southern portion of the corridor. No park and ride at station.

**Technical Issue #15 – TH 100 Crossing**

Freight bridge relocated from the southern portion of the corridor to the north of the LRT tracks. New double track LRT bridge constructed on the southern portion of the corridor utilizing existing freight bridge abutments. Trail bridge remains on the northern portion of the corridor.

**Technical Issue #16 – Beltline Station**

Beltline Station platform located east of Beltline Boulevard on the southern portion of the corridor. Includes a minimum 540 stall surface park and ride east of Beltline Boulevard north of the platform. Bus stop and layover located within surface park and ride area. Includes grade separated trail over freight and LRT east of the station.

**Technical Issue #17 – West Lake Station**

West Lake Station platform located south of the West Lake Street Bridge. Bus stop and layover located on West Lake Street east of the bridge and additional bus stop and layover located on Abbott Avenue/Chowen Avenue east of station platform. No park and ride at station. Vertical circulation is included from both sides of the bridge to the station platform level.

**Technical Issue #18 – Kenilworth Corridor**

LRT alignment within a shallow LRT tunnel from West Lake Street Bridge to a point approximately 1,000 north of 21<sup>st</sup> Street. Shallow tunnel has a 1,088 foot gap between south and north tunnels to cross on an LRT bridge structure over the Kenilworth Channel. Cedar Lake Parkway has freight and trail at-grade as exists today.

21<sup>st</sup> Street Station is eliminated.

**Technical Issue #19 – Bassett Creek Valley Corridor**

Penn Station platform located south of I-394 with vertical circulation and a pedestrian walkway from Penn Avenue. Includes a grade separated trail connection to the North Cedar Lake Regional Trail. No park and ride at station.

Van White Station located under newly constructed Van White Boulevard Bridge with vertical circulation to connect to bridge roadway. Bus stop and layover provided south of platform with access to Linden Avenue and Van White Boulevard at I-394. No park and ride at station.

**Technical Issue #20 – Royalston Station**

Royalston Station platform located south of 5<sup>th</sup> Avenue North on the east side of Royalston Avenue. LRT alignment includes at-grade crossings at both Glenwood Avenue and Holden Street intersection with a bridge over 7<sup>th</sup> Street North to connect with the Interchange Project. No park and ride at station.

**Technical Issue #21 – Freight Rail Co-location/Relocation Alternatives**

LRT Kenilworth alignment within a shallow LRT south tunnel segment from West Lake Street Bridge to the Kenilworth Channel and north tunnel segment from the Kenilworth Channel a point approximately 1,000 feet north of 21<sup>st</sup> Street. Shallow tunnel has a 1,088 foot gap between south and north tunnels to cross on an LRT bridge structure over the Kenilworth Channel. Cedar Lake Parkway has freight and trail at-grade as exists today. The 21<sup>st</sup> Street Station is eliminated.

**Technical Issue #23 – Operation & Maintenance Facility**

Facility located in Hopkins south of 5<sup>th</sup> Street and east of the LRT alignment. The facility is also bounded by the CP Bass Lake Spur to the south and 15<sup>th</sup> Avenue to the east. The site design limits property impacts and offers redevelopment opportunities.