



## VI – ISSUES ANALYSIS

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Many issues arose during the study process that were outside the intended scope of the study. These included design issues, alignment issues and service issues and are discussed in this chapter.

### DOWNTOWN CONNECTION ISSUES

Given the uncertainty of an alignment connecting the proposed transitway to downtown Minneapolis, this connection was not studied at the same level of detail as were issues for the 29th Street Corridor in Minneapolis or the Southwest Corridor from West Lake Street to Hopkins. The direct downtown connections options-exclusive right-of-way, major arterial or local surface street-all have issues. These range from impacts to residential neighborhoods, to business impacts, to traffic impacts arising from the potential need to eliminate on-street parking. Costs and design related to exiting the trench are also issues.

### TRANSIT/TRAIL ISSUES

Ensuring the continuation of multi-modal use of the 29th Street and Southwest Corridors is a critical assumption of this feasibility study. Both Hennepin County and the City of Minneapolis have recognized the importance of these corridors for transit as well as for bicycle and pedestrian transportation. In addition, numerous civic and neighborhood interest groups have been involved in planning these trails.

#### Trail Issues in the Southwest Corridor

The Southwest LRT trail was constructed by Suburban Hennepin Parks in 1999. It is 12 feet wide and, due to adequate separation between the existing freight rail in the southern half of the railroad right-of-way, does not currently require fencing. The trail is expected to continue eastward to Minneapolis, connecting with the Midtown Greenway and the Kenilworth Corridor.

With provision of either busway or LRT, the Southwest LRT trail would need to be reconstructed, shifting the trail elsewhere within the corridor right-of-way. A fence separating the trail from the transitway would need to be constructed for the entire Southwest Corridor.



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### Trail Issues in the 29th Street Corridor

Phase 1 of the Midtown Greenway trail from Chowen Avenue to 5th Avenue began construction in July 1999 and is anticipated to open to the public in July 2000. A planned second and third phase of the project will provide a connection all the way east to the Mississippi River.



The design characteristics of the Midtown Greenway trail change from those found in the Southwest Corridor. The trail becomes wider, with a 20- to 30-foot right-of-way, as opposed to 12 feet in the Southwest Corridor. A fence will also separate the trail from the freight rail that continues to operate in the 29th Street Corridor.

### Midtown Greenway Trail Modifications with Transit

Due to right-of-way constraints within the "trench" (the below-grade portion of the 29th Street Corridor from Hennepin Avenue to Cedar Avenue), modifications to the Midtown Greenway are required for construction of either busway or LRT.

According to the vision in the Master Plan, 1996, the Midtown Greenway was planned and will be constructed in the north side of the 29th Street Corridor, reserving the south side for future transit. Structural modifications to bridges and retaining walls needed to operate busway or LRT are discussed elsewhere in this chapter. See Figures 8 and 9 for a concept sketch of busway and LRT service operating adjacent to the Midtown Greenway.

Trail modifications may include:

- 1,200-feet of reconstructed trail at the following station locations: Hennepin Avenue, Lyndale Avenue, Nicollet Avenue, 4th Avenue, Chicago Avenue and Cedar Avenue to accommodate transit stations (see Figure 10).

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- Potential narrowing of the trail right-of-way to 14 feet at certain station locations where sufficient right-of-way for a 20-foot trail may not exist.
- Constructing a new fence separating the trail from the transitway. Design options exist for this treatment and input from the public will be sought during any future design phase.

### Retaining Walls

Retaining walls would need to be constructed in segments along the southern side of the 29th Street Corridor. This is necessary to provide the amount of right-of-way needed to accommodate either busway or LRT, while also maintaining a safe and adequate bicycle/pedestrian trail.

Retaining walls would need to be constructed between Dean Parkway and Calhoun Parkway; Hennepin Avenue and Dupont Avenue; Nicollet Avenue and Third Avenue; and, Third Avenue and Cedar Avenue (approximately 33 percent of this segment.)

Figures 11 and 12 summarize the needs for infrastructure improvement along the 29th Street and Southwest Corridors.

### ISSUES AT STATION LOCATIONS

Proposed station locations along the Southwest Corridor were identified with input from the Study Management Team.

An LRT planning report prepared for HCRRA in 1990 by BRW, Inc. (Light-Rail Transit: Preliminary Design Plans, May 1990) was relied upon in siting stations along the 29th Street Corridor. This report contains engineering concepts for LRT trackwork and stations from France Avenue to Hiawatha Avenue. With the exception of the 4th Avenue and the Cedar Avenue stations, all other stations along the 29th Street Corridor were assumed to be sited as indicated in the HCRRA report.



FIGURE 8

BUSWAY IN THE 29TH STREET CORRIDOR

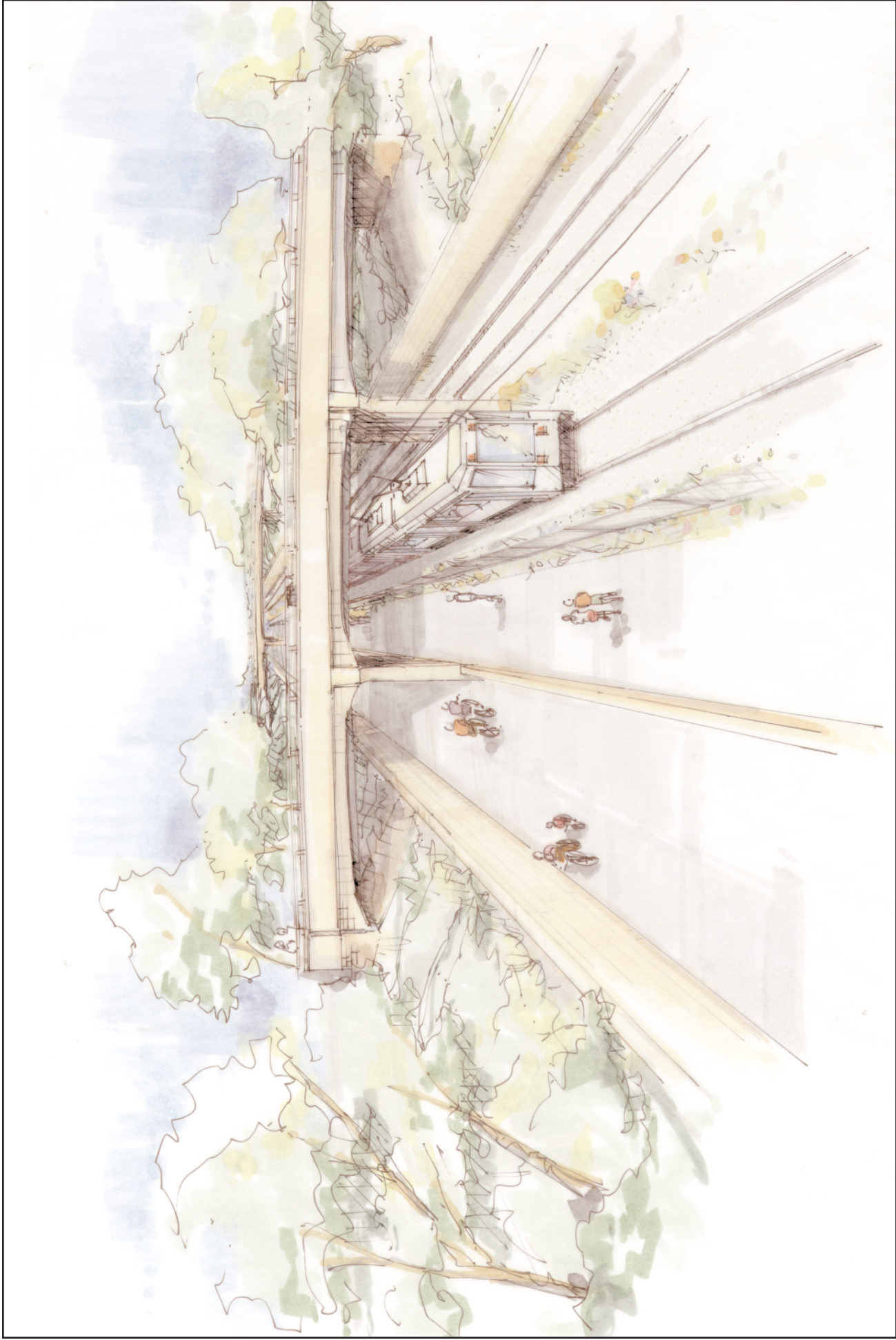
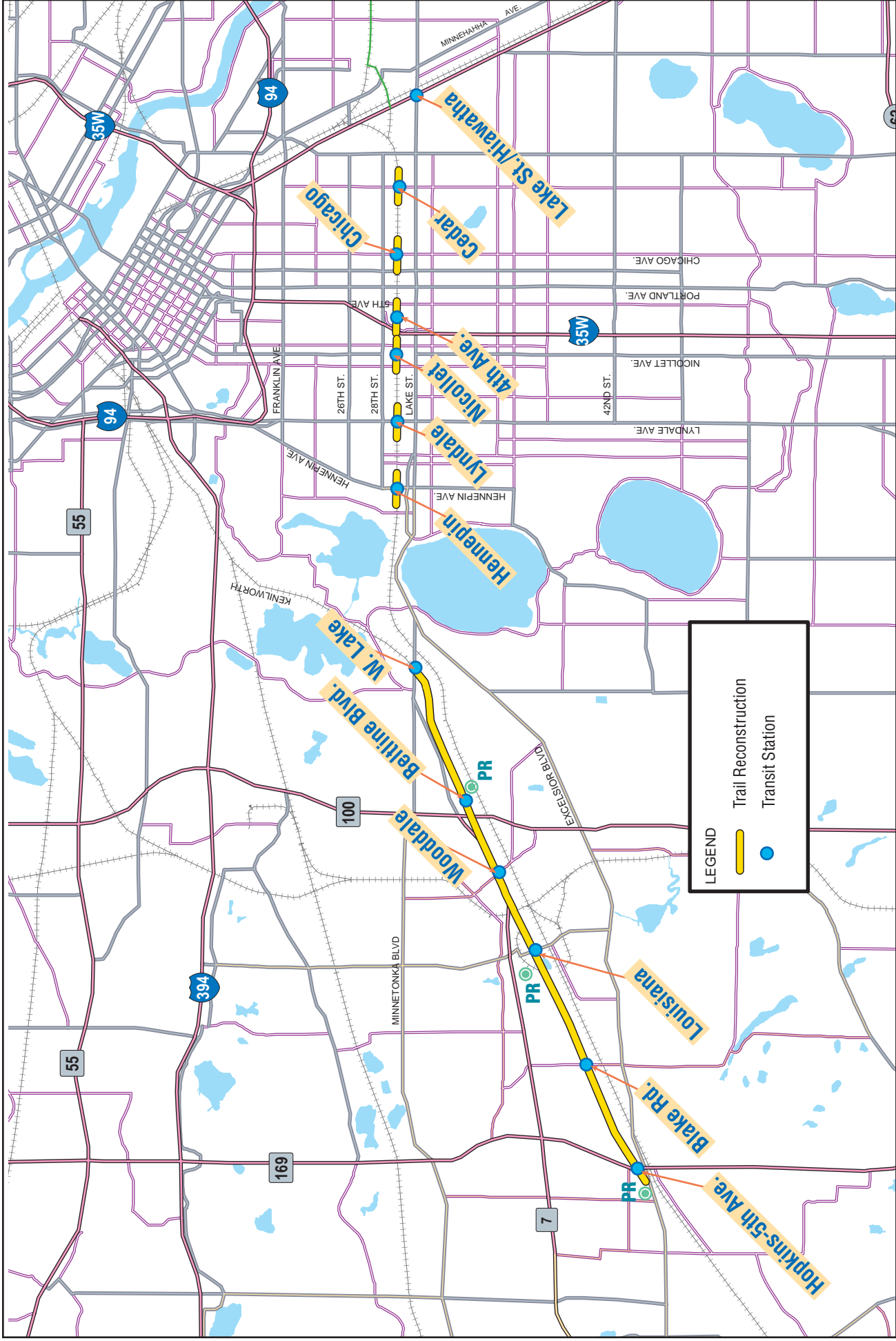


FIGURE 9

LRT IN THE 29TH STREET CORRIDOR



**FIGURE 10** 29TH STREET/SOUTHWEST CORRIDOR TRAIL RECONSTRUCTION

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### Hopkins-5th Avenue Station

A park-and-ride lot for Metro Transit riders is currently located to the west of the intersection of 5th Avenue and Excelsior Boulevard in Hopkins. As part of the assumptions for this feasibility study, a new park-and-ride lot is assumed to be located slightly to the east of the existing park-and-ride and serving the western-most station of the proposed transitway.



A trailhead for the Southwest LRT trail originates just to the east of the proposed transit station at 5th Avenue in Hopkins. Another feature of note in this area is the Depot Coffee House at Excelsior Boulevard and Highway 169 in Hopkins. Located in an old railway depot, the Coffee House is dedicated to youth leadership and providing a clearinghouse for youth volunteerism and service learning opportunities.

No significant changes are warranted to either the trailhead or the Depot Coffee House. The trail would need to be reconstructed and relocated, potentially to the north of the Coffee House (it is currently located to the south), but sufficient right-of-way exists to accomplish this without compromising safety or aesthetic values.

### Louisiana Avenue

Beginning west of Blake Road and continuing to Wooddale Avenue, the proposed transitway is sited on an embankment that reaches its height at Louisiana Avenue with slopes of 26 feet on the north side. These steep slopes make station provision at this site problematic. Adjacent land uses such as a lift station also may prohibit a transit station at this location.



FIGURE 11

SOUTHWEST CORRIDOR ISSUES



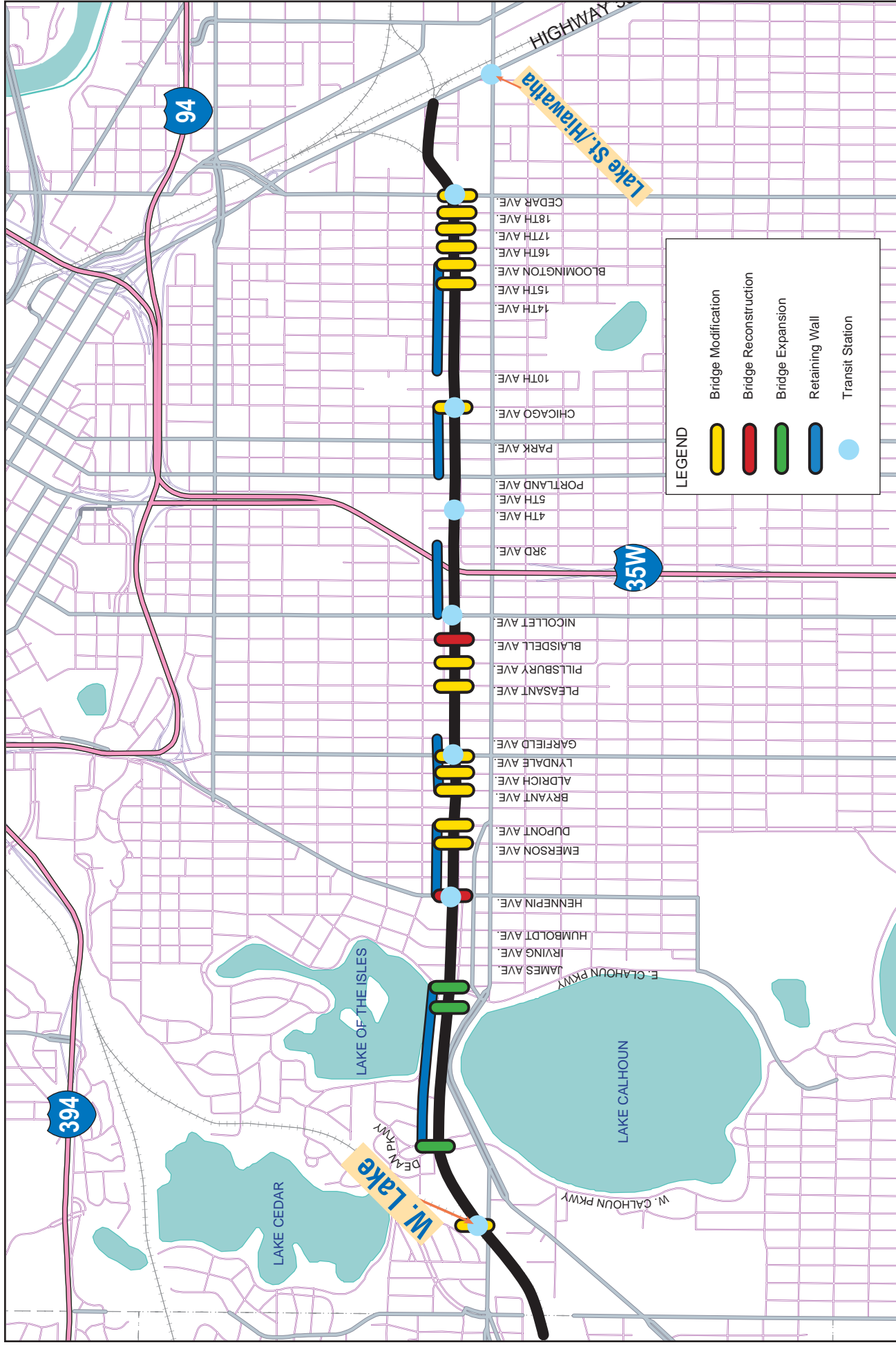


FIGURE 12

# 29TH STREET CORRIDOR ISSUES

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A park-and-ride lot was proposed for Louisiana Avenue. If a transit station is determined to be infeasible at this location, the park-and-ride lot would be relocated as well.



### Wooddale Avenue

Wooddale Avenue crosses the Southwest Corridor at grade, causing serious traffic conflicts with any proposed transit service. Highway 7, a principal arterial carrying 33,000 ADT, lies approximately 300 feet to the north of the intersection of the Southwest Corridor and Wooddale Avenue, with a frontage road serving local traffic just to the south of the highway. Traffic turning from the frontage road onto Wooddale Avenue and crossing the Southwest Corridor does not have sufficient stacking capacity to avoid blocking the intersection of Wooddale and the Southwest Corridor. This makes installing the necessary traffic equipment, signals and gates at this intersection location infeasible. As relocating Highway 7 to provide the necessary separation for adequate stacking capacity was also not a feasible alternative, another alternative is proposed.

The proposed alternative that has been incorporated into the cost element for either project alternative (see Appendix B) is to bridge over the intersection at Wooddale Avenue, providing an elevated station platform. In doing so, safety is maintained for the vehicles along Wooddale Avenue, Highway 7 and the south frontage road, while maintaining mobility and safety for the proposed transit alternatives.

### Hennepin Avenue

The Light Rail Transit: Preliminary Design Plans prepared for the HCRRA in 1990 assumed the Hennepin Avenue Station would include a center platform and be located east of the Hennepin Avenue Bridge. Under these assumptions reconstruction of the Hennepin Avenue Bridge is required in order to widen the single-portal opening to accommodate the need for the transitway (i.e., busway or LRT) to ‘taper’ out around a center platform while still leaving the clearance and

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right-of-way necessary for a bicycle-pedestrian trail. As such, the cost estimates contained in this study include the costs associated with reconstructing the Hennepin Avenue Bridge.

The cost estimates contained in this study did not consider the proposed design for the Uptown Transit Hub because at the time the cost estimates were being compiled the Uptown Transit Hub design plans were not finalized. Metro Transit is currently working on a design for the Uptown Transit Hub, which will be located on Hennepin Avenue above the 29th Street Corridor. In order to avoid future reconstruction of the Hennepin Avenue Bridge, Metro Transit design assumes that a split side platform station will be located in the 29th Street Corridor west of the Hennepin Avenue Bridge. This design is assumed to avoid reconstruction of the Hennepin Avenue Bridge because the bridge portal will be wide enough to accommodate the space required for both the transitway (i.e., busway or LRT) and the bicycle/pedestrian trail. The Uptown Transit Hub is also being designed to provide access to Hennepin Avenue bus routes and to provide for future vertical circulation from the potential transitway (i.e., busway or LRT) on the west side of the Hennepin Avenue Bridge. If this proposed design is determined feasible, the costs associated with reconstruction of the Hennepin Avenue Bridge may be avoided.

### **Chicago Avenue**

Due to the Great Lake Center redevelopment planned for the old Sears site, this station has extraordinary needs for vertical circulation. Two sets of elevators would need to be provided, one for internal circulation for passengers needing direct access to the Great Lake Center, and another for external circulation for those passengers wishing to either transfer to other transit services or end their trip at one of the other

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destinations near Chicago Avenue.

### Hiawatha Avenue at Lake Street

A connection to the station proposed as part of the Hiawatha LRT service at Lake Street and Hiawatha could be provided. Buses or light-rail vehicles would provide transfers to and from the 29th Street and Southwest Corridors via 29th Street running at grade and using surface streets. Hiawatha-Lake Street station planning needs to account for a potential linkage with the transit service proposed to run on 29th Street.

### BRIDGES

Table 16 lists the anticipated bridge construction, reconstruction, expansion, and modification necessary to accommodate both transit (busway or LRT) and trails in the 29th Street and Southwest Corridors.

**Table 16 – Bridge Work**

New Bridge	Reconstructed Bridge	Expanded Bridge	Modified Bridge (slope paving to open portal)
Woodale Avenue	Minnehaha Creek Bridge (St. Louis Park) Louisiana Avenue  Hennepin Avenue Blaisdell Avenue Nicollet Avenue (either reconstructed or removed)	Dean Parkway  Causeway Bridge (bet. Lake Calhoun and Lake of the Isles) Calhoun Parkway	West Lake Street  Emerson Avenue  Dupont Avenue Bryant Avenue Aldrich Avenue Lyndale Avenue Pleasant Avenue Pillsbury Avenue Chicago Avenue 15th Avenue Bloomington Avenue 16th Avenue 17th Avenue 18th Avenue Cedar Avenue

### At-Grade Crossings

The following at-grade crossings require the installation of traffic signals and gates for transit operation: Excelsior Boulevard, Blake Road, Beltline Boulevard, James Avenue, Irving Avenue, Humboldt Avenue, 5th Avenue, 21st Avenue and 22nd Avenue.

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Based on the number of transit vehicles operating during peak hours, there may be operational issues needing future analysis related to cross-street traffic. One key issue will be whether or not adequate crossing opportunities exist during the peak hour given transit vehicle flow and the need for gated crossings.

### EXISTING RAIL SERVICE

#### Freight Rail Issues in the 29th Street Corridor (CEPRO)

Although the HCRRA owns the 29th Street Corridor, freight rail service continues to operate serving the CEPRO grain elevator located at 11th Avenue. In order to utilize this corridor for transit, freight rail service to CEPRO must be discontinued. The County is in negotiations to purchase the elevator, thereby eliminating freight rail in the corridor. Costs of acquiring CEPRO were not included in the cost estimates for this study.



As part of the original negotiations when HCRRA purchased the 29th Street and Southwest Corridors, provisions were made for the Twin Cities and Western Railroad to use the railroad right-of-way in Minneapolis, known as the Kenilworth corridor, when the 29th Street rail corridor was severed at Highway 55. Assuming freight rail service is eliminated from the 29th Street Corridor, an issue would remain of the freight rail crossing right-of-way reserved for transit as it proceeds north through the Kenilworth Corridor.

#### Freight Rail Issues in the Southwest Corridor

An alternative connection for the Twin Cities and Western Railroad to use existing north-south track through St. Louis Park was identified in a St. Louis Park Railroad Study (March 1999). Two sub-alternatives for this connection were identified. This connection, whether the north or south sub-alternative, was recommended for construction within the short-term, or one to six years. Construction of this

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connection affects the functioning of the proposed transitway, as it would eliminate an at-grade freight-rail crossing at West Lake Street in Minneapolis. Figure 13 depicts freight rail in the corridor study area including the proposed north-south connection in St. Louis Park.

**Alternative 1 (northern interconnection or rail "swap"):** The northern interconnection would be made on a superfund site, lying just to the north of the Southwest Corridor and directly east of Louisiana Avenue, known as the Golden Auto site. In April 1997, state legislation was passed providing funds to the City of St. Louis Park through Hennepin County Environmental Services to acquire the Golden Auto site and to provide a rail right-of-way replacing the Kenilworth corridor freight rail connection for the TCWR. This plan is complicated by the location of the HCRRA right-of-way for the Southwest Corridor. Currently, CP Rail operates on the southern half of the right-of-way, while HCRRA owns the northern half of the overall right-of-way. A right-of-way swap may have to take place, moving the CP rail trackage to the north and the HCRRA's right-of-way to the south enabling all east-west freight rail movements to the north and south to take place without necessitating a grade crossing of the proposed transitway.

**Alternative 2 (southern interconnect):** This connection would eliminate the need for a right-of-way swap between HCRRA and CP Rail in the Southwest Corridor. It would, however, require property acquisition and have potential adverse effects on the businesses and residents in the vicinity.

### Commuter Rail

Commuter rail is defined as the transport of passengers over existing freight rail trackage. Two phases studying the feasibility of providing commuter rail services have now been completed for the Twin Cities metro area. Two routes with potential impacts were short-listed for future study. These routes are Route L: Northfield to Minneapolis, and Route H: Norwood/Young America to Minneapolis. Both of these routes either parallel or cross the Southwest Corridor, providing the opportunity for potential connections to and from the proposed transit service.

## SOCIAL ENVIRONMENTAL AND ECONOMIC IMPACTS

The potential social, environmental and economic impacts of constructing and operating an exclusive busway were not addressed in this study, but will be studied in future planning stages assuming the region decides to pursue a busway or LRT in these corridors. See Figure 14 in Chapter VIII for a planning process diagram.

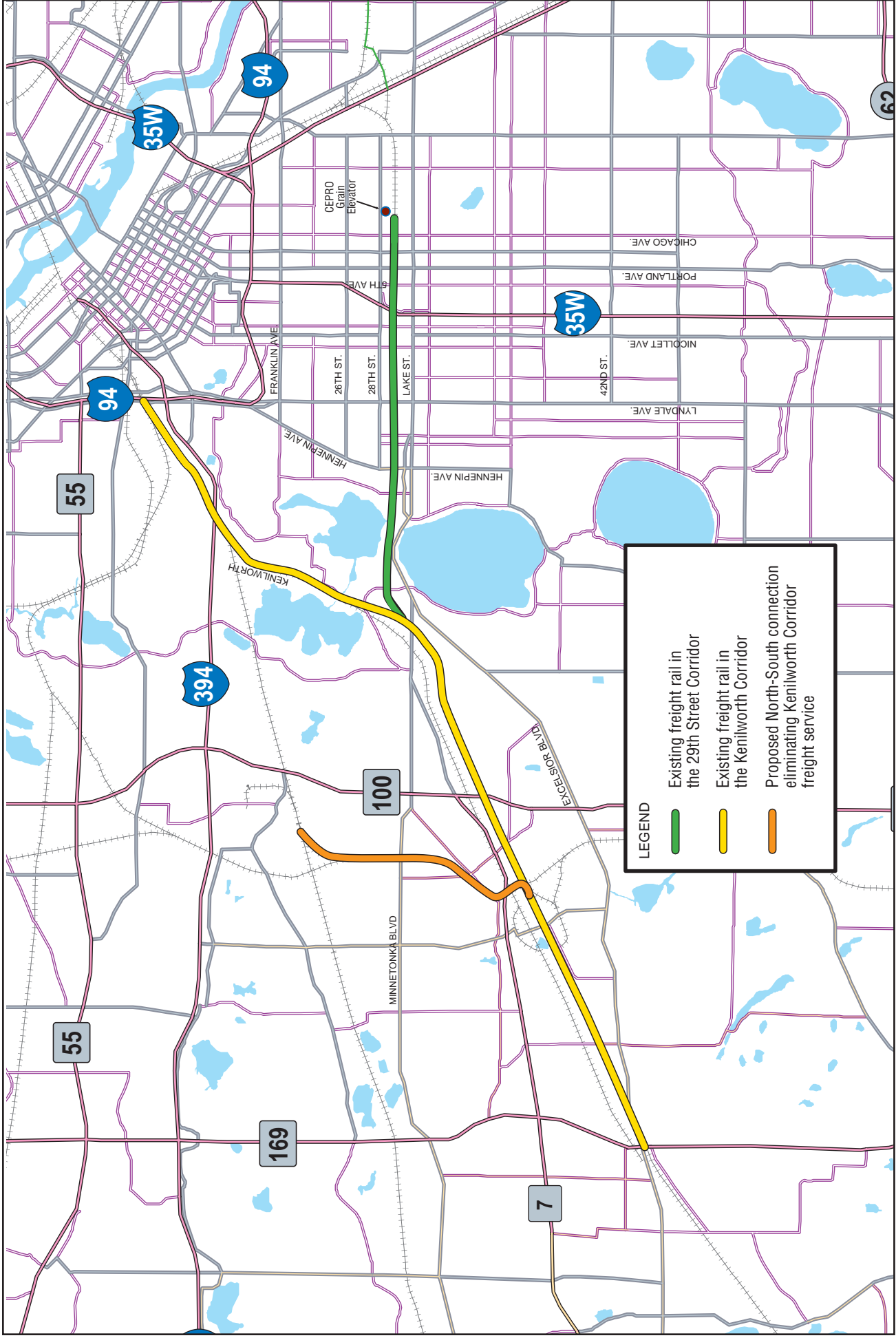


FIGURE 13

FREIGHT RAIL