

## 8. Transportation Plan

### Overview

As discussed in the Site Conditions section, building connectivity is an important goal for the entire transportation system in Cedar Riverside. While the area benefits from access to interstate highways, local street networks, bicycle and pedestrian paths, and both bus and LRT transit service. However, the development of these transportation facilities has been disjointed, and has left a number of significant gaps in the network – as well as lack of multi-modal connections.

This chapter focuses on some of the major facilities and locations in the neighborhood which need further analysis in order to determine how to best make these connections. The recommendations do not describe every new link, since many will be dependent on timing and opportunity, but rather lays the groundwork for future decisions on building these connections.

### System Analysis

The transportation system in Cedar Riverside includes city and county roads, bike lanes, buses, light rail transit, and sidewalks. While this infrastructure together creates an efficient and cohesive system, some parts of it were identified as holding higher priority for improvements. Through an existing systems analysis and community input, certain system elements were identified for further analysis. They included:

- Riverside Avenue, including an emphasis on improved bicycle facilities
- Cedar/Washington Avenue, including an emphasis on improved pedestrian facilities
- Parking in the neighborhood, with an emphasis on publicly available parking facilities
- Central Corridor, particularly the planned station location in Cedar Riverside

These analyses led to specific recommendations for the neighborhood, as outlined later in the chapter.

### Riverside Avenue

#### Background

The community expressed significant interest in improving bicycle connections throughout the neighborhood and to other parts of the City. While there are existing connections along the LRT line and in the parkland along the river, both are largely disconnected from the rest of the neighborhood and do not offer direct connections to its major corridors and destination points. Additionally, bicycling along neighborhood streets without designated facilities is potentially unsafe due to traffic conflicts.

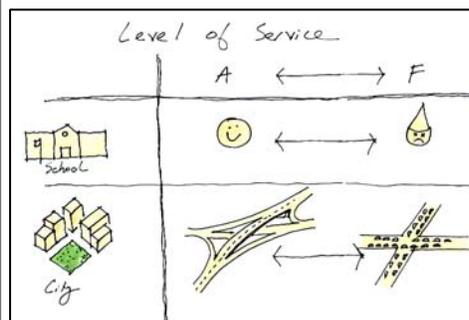
As discussed in Chapter 4, Riverside Avenue has been considered in other City planning efforts as a possible location for improved bicycle facilities. Its central location could serve as a main bicycle route, with side streets and other connections linking to areas within and beyond the neighborhood. However, to ensure that this idea is feasible, an analysis was needed of the traffic impacts of adding bicycle lanes, and thereby removing one or more auto lanes.

The City hired SRF Consulting Group to analyze existing and future travel patterns along the length of Riverside Avenue, both under current roadway conditions and with the option of converting the road from four travel lanes to two travel lanes with a center turn lane and added bicycle lanes. The time horizon was roughly 20 years, and future scenarios reflected the impacts of planned growth along the corridor. The analysis included traffic counts, other data collection, traffic modeling, and development of proposed cross sections. The recommendation is an illustrative concept; the location and sizing of elements will be determined and refined during the final design stage of any improvements that are implemented. A copy of their final report is included in Appendix G.

### Analysis Results

The current conditions analysis showed that Riverside Avenue is now operating under capacity – in other words, it can comfortably handle more traffic than is there now. Map 8.1 shows the level of service (LOS) under existing conditions at intersections along Riverside Avenue, with LOS A being the lightest traffic and LOS F being the heaviest. All intersections were determined to be LOS D or less, with the majority either LOS A or B.

Traffic at LOS D or below is considered acceptable on most urban roadways. Sometimes heavier traffic is preferred, particularly along commercial corridors, since it provides visibility and customers to the businesses located along the way.

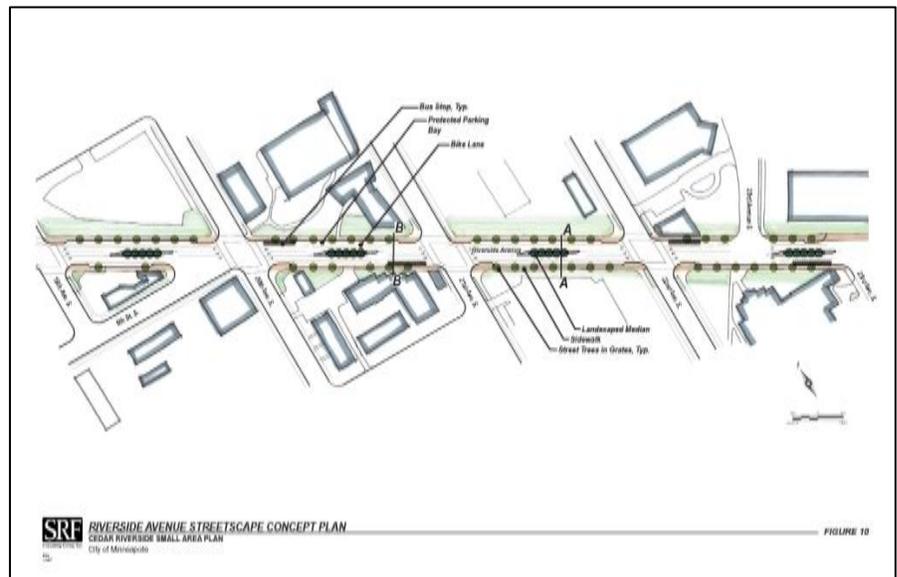


Future scenarios showed similar results. The analysis looked at both a no-build scenario, and one where the four-lane road was converted to two travel lanes with a center turn lane and bicycle lanes on either side. Efficiency improvements at intersections, particularly signal optimization, were used in the analysis to ensure

that future levels of service would be comparable to existing levels, even with increased traffic. This was true for both the no-build future scenario (Map 8.2) as well as the option with bicycle lanes added (Map 8.3). Some increased delays on side streets may be possible, including at 23<sup>rd</sup> Avenue, but most were not significant.

As a result, the analysis suggested that bicycle lanes could be added to Riverside Avenue without a significant increase in traffic congestion. Moreover, the narrower street may have some traffic calming effects, making the pedestrian and bicycle experience on this street more comfortable and safe. Some additional issues were raised for future consideration, including:

- The varying width of the right-of-way and the presence of on-street parking along many stretches means that careful consideration should be given to how to fit the bicycle lane along narrower sections of the roadway.



- The reconfiguration of the roadway to accommodate bicycle lanes can be conducted within the existing paved roadway. Improvements that would widen either the roadway or sidewalks are possible, but somewhat limited due to lack of additional right-of-way.
- Signal optimization is a key assumption of the analysis, particularly with regards to future scenarios. This topic should be revisited upon the initiation of any project.

### Opportunities

Due to the city’s recent *Access Minneapolis* study guiding the development of bicycle and pedestrian facilities citywide, and the availability of funding for bicycle and pedestrian transportation improvements through a federal grant program, the timing is good for improvements to Riverside Avenue to be a City priority.

Broader city analysis suggests that Riverside Avenue bicycle lanes could link north along 19<sup>th</sup> Avenue/10<sup>th</sup> Avenue bridge, west to the Hiawatha LRT station, and south to other neighborhoods and bicycle facilities.

Neighborhood input on this option has been very positive. Additional planned upgrades to the 20<sup>th</sup> Ave bicycle lane will further strengthen the network of facilities.

Though outside the scope of a basic bicycle lane project, there are other opportunities to improve Riverside Avenue that could be incorporated. These include the following:

- Landscaped medians.** Converting the road to two lanes with a center turn lane would result in various unused median spaces where the turn lane is not needed. These could be landscaped to improve the overall appearance of the road and to provide a refuge for crossing pedestrians. Preferably, these medians would be landscaped with drought and salt tolerant trees and shrubs that would not require irrigation. It would also be preferable to have a maintenance agreement in place for these medians, possibly with the adjacent institutions that would benefit from the improved “gateway” to their campuses that an attractively landscaped street would provide.
- Other streetscape improvements.** These may include additional street trees, screening of parking lots with either fencing or vegetation, screening of newspaper stands, street furniture (including benches, trash receptacles, bike racks, and kiosks), enhanced transit stops, enhanced paving materials or interesting score patterns in concrete, enhanced crosswalks, integration of public art into streetscape elements, ornamental lighting and banners.
- Improved intersection design.** Due to Riverside’s angular design cutting through the traditional grid, intersection crossings can be longer and more difficult for pedestrians. Bump outs at intersections could assist in making it quicker and easier to cross the street. They could also help define bus stop and parking bays more clearly. Proposed typical designs for cross sections and intersections are shown on this page and in Appendix G.

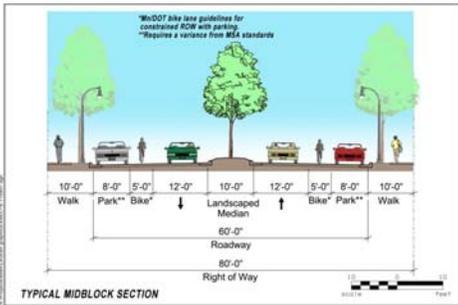


Figure 11  
RIVERSIDE AVENUE STREETScape CONCEPT - CROSS SECTION A-A'  
CEDAR RIVERSIDE SMALL AREA PLAN  
City of Minneapolis

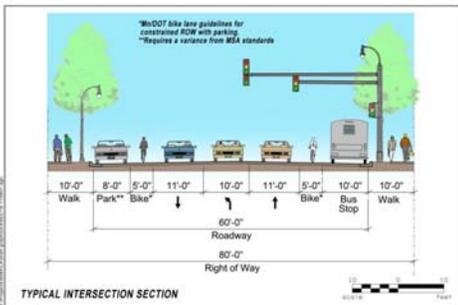


Figure 12  
RIVERSIDE AVENUE STREETScape CONCEPT - CROSS SECTION B-B'  
CEDAR RIVERSIDE SMALL AREA PLAN  
City of Minneapolis

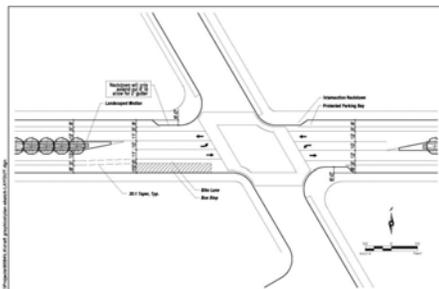


Figure 13  
RIVERSIDE AVENUE STREETScape CONCEPT - TYPICAL INTERSECTION  
CEDAR RIVERSIDE SMALL AREA PLAN  
City of Minneapolis

## Cedar Avenue

### Background

More than most areas of the neighborhood, Cedar Avenue – including its northern end where it joins Washington Avenue – has frequent pedestrian traffic. This is due to its traditional commercial character, the presence of many residents and students with limited access to cars, and the location of many destination entertainment uses. However, as public comment frequently revealed, the pedestrian experience needs some improvements.

In addition to aesthetic concerns (which are addressed elsewhere in the plan), some of the most commonly cited issues were related to traffic safety. As noted in Chapter 4, Cedar Avenue has several high accident locations – including some of the highest rates of pedestrian accidents in the city. This has not gone unnoticed, and various improvements have been tried over the years to address this issue. However, the problem remains.

## **Analysis**

An internal analysis was conducted, including a visual survey of the corridor, meetings with transportation planning staff familiar with the area, and an analysis of collected data. Several major areas of concern were identified, as described below.

### *Complex intersections*

Intersections at Riverside Avenue and Washington Ave/15<sup>th</sup> Ave S (Seven Corners) are sites of many of the pedestrian accidents in the neighborhood. The irregular angles of these intersections, as well as the width of the street to be crossed, make them difficult for a pedestrian to cross. Additionally, accident data indicates that some pedestrians opt to cross illegally mid-block, which may be less safe. Currently, the existing pedestrian crossings and signalization are fairly basic and could be improved to encourage safer crossing and make pedestrians more visible to drivers.

### *Underutilized mid-block crossing*

At one time, there was a pedestrian bridge crossing over Cedar Avenue near the point where 5<sup>th</sup> St S used to intersect before its vacation. The bridge has since been removed and was replaced by a mid-block pedestrian crossing. While the crossing does function, it is not heavily used and not particularly visible. The fact that there is no public pedestrian walkway along the 5<sup>th</sup> St corridor no doubt contributes to this (as discussed in the section below). A few bollards, installed to discourage mid-block crossings except at this point, offer little disincentive. A series of improvements, including curb extensions at the crossings, upgraded pedestrian signals, and more visible pavement markings, could help make this a more prominent and better utilized crossing.

### *Incomplete pedestrian connections and cut-through paths*

A major example of the incomplete pedestrian system is the vacated 5<sup>th</sup> St corridor. While it is frequently used for pedestrian travel, it is not paved, and portions of this connection from Cedar Ave to Riverside Ave are private property, not technically open to the public. Public input has emphasized the importance of making this a paved and publicly-accessible pedestrian corridor. There are other informal pathways along Cedar Ave as well, particularly to and from Riverside Plaza. Clarifying public and private space and clearly identifying public walkways can not only enhance pedestrian connectivity, but it can improve public safety and discourage trespassing.

### *Other factors*

While infrastructure improvements can improve pedestrian safety, human behavior remains an issue. Factors range from bar patrons who may have compromised reasoning capabilities, to new residents who may be unfamiliar with local traffic laws and conventions. Improved public education may be needed to supplement any infrastructure improvements.

## Opportunities

As with the option of bicycle lanes on Riverside, there is potential for federal funding for pedestrian improvements along Cedar Avenue, including the mid-block crossing. The project details would need to be clarified by City staff, but this analysis will provide a starting point for a feasible strategy of improvements.

Additional improvements to Cedar that could be incorporated into a pedestrian improvement proposal, or some other approach, are listed below:

- **Improved intersection design and function.** Though it is not possible to completely reconfigure the intersections along this road without significant disturbance of surrounding land uses, there are some improvements which can be made. These may include repaving or improved painting of crosswalks, upgraded pedestrian signals, reconstruction of the triangle island at the Cedar Riverside intersection, better signal timing for cars and pedestrians, new surface materials or patterns, general street repaving, and reconfiguration of turn lanes.
- **Medians and other crossing improvements.** Due to the placement of various mid-block driveway access points and the configuration of turn lanes at intersections, there are limited stretches along Cedar Avenue that would be appropriate for a median. One may be the striped median immediately south of the Cedar Riverside intersection. A landscaped or raised median may help direct traffic flow, improve pedestrian crossing safety, and enhance the overall appearance of the road. The one identified mid-block crossing could benefit from curb extensions to narrow the crossing distance, a treatment that may be applicable at other intersections as well.
- **Other streetscape improvements.** These may include additional street trees, screening of parking lots with either fencing or vegetation, screening of newspaper stands, street furniture (including benches, trash receptacles, bike racks, and kiosks), enhanced transit stops, enhanced paving materials or interesting score patterns in concrete, enhanced crosswalks, integration of public art into streetscape elements, ornamental lighting and banners. While some of these are already present along Cedar Avenue, they are generally in need of updating and/or repair



*Cedar Avenue – Past*



*Cedar Avenue – Present*



*Cedar Avenue – Proposal for Future (Credit: Cunningham Group, PA)*

## **Parking**

### **Background**

Parking has consistently been identified as a major issue for the neighborhood, and it is no surprise that this is the case. The neighborhood experiences a number of factors that contribute to parking problems, including:

- Traditional urban form built before widespread use of the automobile, with limited parking for both residents and businesses
- Many destination businesses and cultural institutions that bring in visitors and patrons from across the region, usually during evening hours
- Two universities and one major health care institution, each with its own parking problems and constraints
- Large scale apartment buildings built with less parking than current residents typically demand

There are some mitigating aspects to these parking constraints, however. These include:

- High level of transit service, with both bus and LRT
- Presence of a fairly high percentage of households with limited access to a car
- Central location relative to Downtown, job centers, and the region as a whole

Nonetheless, these factors are not enough to outweigh parking problems, and it continues to be a major issue for many residents, businesses, and visitors to the neighborhood.

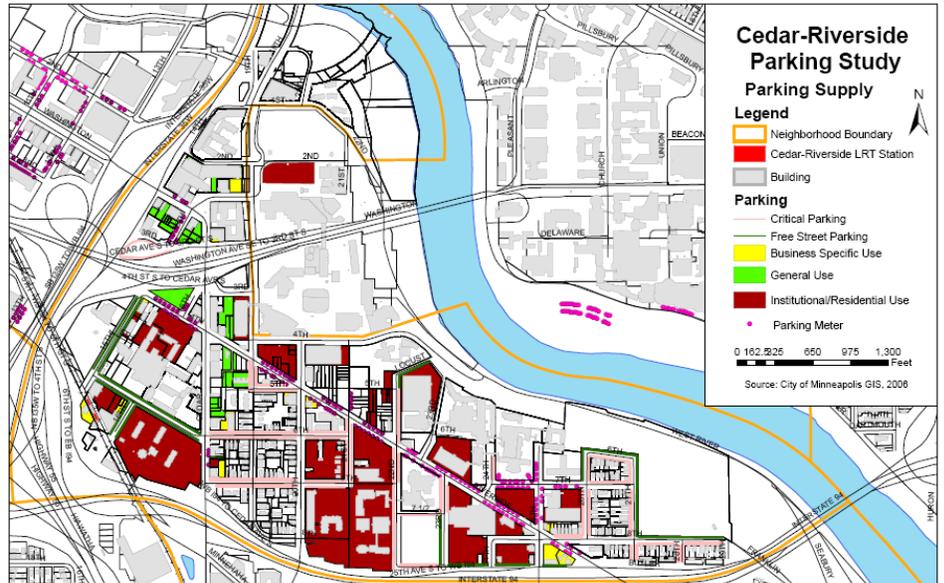
### **Analysis**

Transportation, economic development and community livability are all impacted by the neighborhood's parking issues. The section below summarizes the results of three separate analyses which addressed parking: an inventory of existing supply, a review of the market feasibility of constructing parking and the economic development role it plays, and a discussion of land use implications.

#### *Parking Inventory*

Early in the small area plan process, the City completed a parking study for the Cedar Riverside neighborhood. Findings are summarized below, and a copy of the study is included in Appendix F.

The Cedar Riverside neighborhood has approximately 7,900 parking spaces. Of those, about 28 percent are for general use, while the remainder is restricted for either specific residential or institutional uses. General use parking prices in the neighborhood range from \$1.00 per hour for metered parking to \$2.25 per hour for lot parking.



The remaining 72 percent of neighborhood parking that is restricted (or priced in a way that discourages public use) is designated for:

- Augsburg College students, faculty, and staff
- The Cedars and Riverside Plaza residents
- University of Minnesota parking lots and ramps
- Fairview Hospital parking lots and ramp; and
- On-street critical parking

The neighborhood has two critical parking areas. Licensed drivers living at or operating a business within a critical parking area can apply for and receive a critical parking permit which allows the driver to park along the street for extended periods of time. Without critical parking permits, drivers are allowed to park on most critical parking streets for one or two hours.

Less than half of businesses surveyed for this study had parking spaces specifically designated for their use. Others share parking facilities with other businesses or encourage their customers to use some of the publicly available spaces in the neighborhood. Four city-owned facilities – three lots and one parking garage (which has since been sold) – are a substantial part of this available public parking.

The aforementioned parking study reviewed information on parking requirements for the uses in the neighborhood, and compared it by area to

identify if there was a parking surplus or shortage in various areas of the neighborhood. Overall, the neighborhood had a surplus of approximately 630 spaces. However, this was not evenly distributed. While surpluses were evident in the Seven Corners and East Riverside areas, the area around Cedar Avenue had a parking space deficit of around 250 spaces.

<b>Cedar-Riverside Parking Supply</b>		
<i>Parking Location</i>	<i>General Use</i>	<i>Restricted</i>
Augsburg College		315
Business parking	290	
Cedar Towers		211
City of Minneapolis ramp	796	
City of Minneapolis lots	231	
Critical Street Parking		484
Fairview Hospital		2,359
Free street parking	378	
Meters	327	
Privately owned lots	189	
Riverside Plaza		758
University of Minnesota		1,549
<b>Totals</b>	<b>2,211</b>	<b>5,676</b>

This is reflected in the distribution of parking usage rates by facility. While some facilities consistently report a surplus of spaces, others are routinely maxed out. This is in part a product of the neighborhood's

fragmented geography and the way the commercial areas in the neighborhood are likewise separated from one another.

Parking needs may be changing. Proposed expansions at the University of Minnesota, Fairview Hospital, and Augsburg College are likely to increase the demand for parking in the neighborhood. Changes in the business mix, as well as redevelopment of residential and commercial uses, may also have an impact.

#### *Market Feasibility*

As part of the neighborhood market study (see Appendix E), an analysis was done to determine the impacts of parking availability, and the feasibility of constructing additional parking.

It was determined that parking is an important contributor to business viability, and that proper parking management is key in presenting a positive image to those traveling to the neighborhood and to facilitate ready use of area businesses and institutions. However, as shown in a specific analysis of the potential for redevelopment of Lot A (a City owned parking lot), it may be difficult under current market conditions to build new public parking facilities or incorporate existing public parking into redevelopment, without requiring public subsidy.

#### *Land Use*

One unique characteristic of Cedar Riverside is that some of its largest public parking facilities have been owned by the City. As the City has

moved away from the business of owning and operating parking facilities, the issue arises regarding the eventual fate of these facilities. One of them has already changed hands: the Seven Corners parking ramp is now owned by a private developer.

Current land use patterns suggest that, if this public parking were to be removed to make room for new development that did not include public parking, it would be very difficult to compensate for the loss of these spaces – particularly for the businesses that use them as their primary source of parking. The Land Use chapter provides more detail on how this issue is addressed in the plan’s recommendations.

### *Options*

A number of factors should be taken into account when addressing parking issues in a neighborhood such as Cedar Riverside. These include:

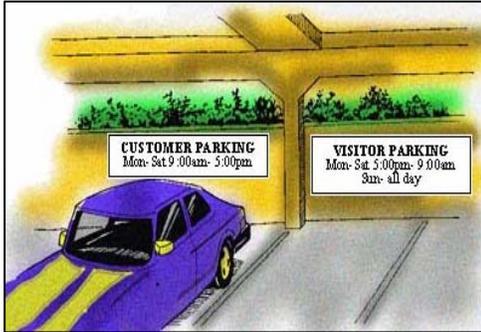
- On-street parking, and how it is managed and used
- Off-street parking, and how it is managed and used
- Enforcement of parking regulations
- Pricing of parking, and how parking improvements are funded
- Relationship between parking demand and availability of transit alternatives

One basic limitation to parking in Cedar Riverside is the limited space available to develop new parking of any scale. Additionally, the market analysis suggests that – at least given current market conditions – new public parking is unlikely to be constructed without government subsidy. Therefore, most of what can be done with parking involves improving management of existing supply, decreasing need for parking, or encouraging non-public entities to make improvements to their parking supplies to decrease spillover to public parking facilities.

Given these constraints, below are listed some potential options for parking improvements within Cedar Riverside:

- **Develop district parking strategies.** The current parking system is rather fragmented, with a wide range of pricing, enforcement, and management strategies. Even in the publicly-owned lots, there are different approaches – for instance, in how parking validation is offered through area businesses. A district-wide approach could help present a more logical and consistent system for all users. Additionally, a more consistent system can make the parking experience for the neighborhood’s many visitors understandable and user-friendly, while helping residents and businesses better define what areas are primarily for their parking needs. This approach has a lot of potential, though it would require additional study and

significant coordination between the multiple parking owners and operators in the neighborhood.



*Illustration of a shared parking arrangement*

- **Improve shared parking arrangements.** The variety of neighborhood uses have a range of parking needs that peak at different times of day. There are already some shared parking arrangements, particularly in publicly-owned lots. However, other opportunities for shared parking arrangements may exist, for instance between uses whose demand peaks at different times of the day. These could help to maximize the efficiency of existing parking. On the other hand, there may be some areas where parking should be designated for a particular use (for instance, only for residents or business patrons during certain designated hours). These would need to be clarified as well, to ensure that priority users of parking are not crowded out by others. An example of this would be designating permit-only parking zones on certain streets.
- **Better signage and way-finding to parking.** In order to make the best use of a district or shared parking strategy, parking needs to be easy to find. Travelers will often seek parking that is close to their destination and highly visible. Due to this tendency, they may miss less visible but still convenient parking. Clear and consistent signage, maps, and other way-finding tools can help users to find parking where it is available. This could also include improvements at the parking site, to make it easy and intuitive for users to see how to pay, as well as consistent signage related to parking validation at participating businesses.
- **Security improvements.** Though this does not alter the amount or availability of parking, security has been identified as a priority by many in the neighborhood. Improved lighting, presence of a parking attendant, and other improvements may help limit property damage and loss, as well as ensuring personal security of individuals. In addition to the strategies above, this could help provide a more user-friendly parking experience.
- **Continued transit and other multi-modal improvements.** Cedar Riverside already has a number of good transit options and, particularly with the planned Central Corridor LRT, is poised to have more. Improvements that make this system easy, intuitive, safe, and convenient for users may serve to decrease demand for parking. Improved bicycle facilities may also help, particularly for shorter trips.
- **Strategic parking additions.** As mentioned above, there are relatively few opportunities in the neighborhood to expand upon parking availability, particularly for general public use. However, there may be some. Though the City has owned and operated public parking facilities for decades, it has recently been divesting itself of this role and has sold several existing facilities, including the Seven Corners Ramp. However, the City still has the



*Parking attendants offer a security presence*

opportunity to influence the development of parking, either through requirements tied to the development of publicly-owned land, on projects which involve public subsidy, or even through the development review process with privately-developed projects. There may be opportunities for the City to influence developers to either create new or retain existing public parking in Cedar Riverside. With the limited supply that is present, these opportunities will almost certainly be explored when they appear.

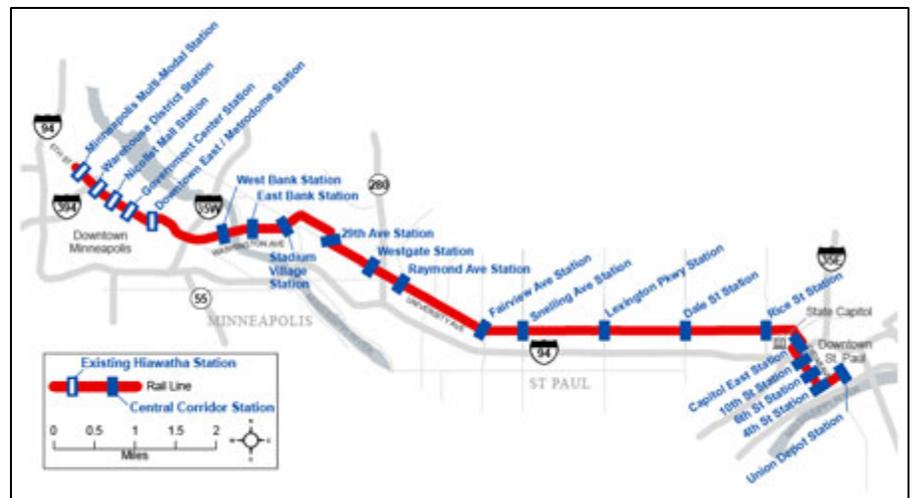
Due to the significant overlap between parking and economic development strategy, the main recommendations for parking in this plan are found in the Economic Development chapter.

## Central Corridor

### Background

Although it was known that a station for the Central Corridor Light Rail Transit (LRT) project is planned in the Cedar Riverside/West Bank area, addressing this station was not originally part of the scope of this small area plan. However, as the plan progressed, it became clear that the timing was right to address the potential station location and design. Through the public input process, the station location emerged as a major concern of neighborhood residents.

The Central Corridor LRT is a planned 11-mile transit line connecting downtown Saint Paul to downtown Minneapolis. The alignment of the line through Cedar Riverside will follow the Washington Avenue trench, and will feature one stop serving both the neighborhood and the University of Minnesota's West Bank. Alternative alignments have been discussed, but at the time of this writing the alignment described above is the preferred one.

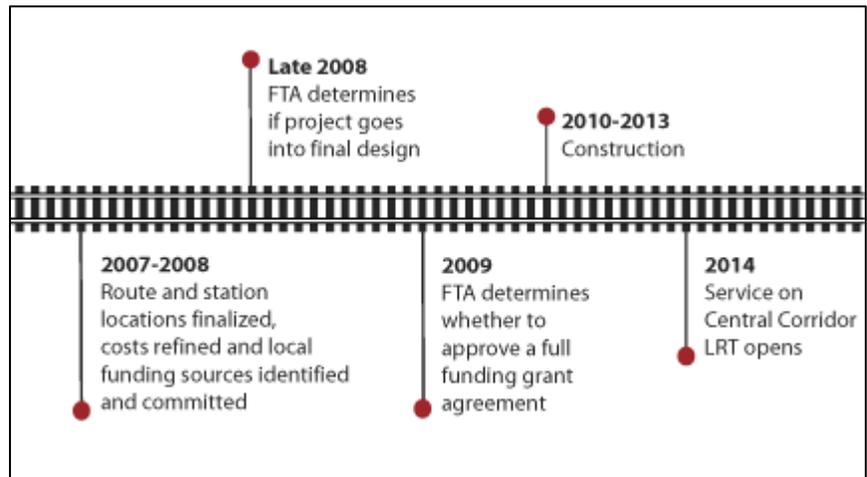


The Metropolitan Council estimates that around 4,250 riders will use this stop daily, with the majority of them walking to and from the station. This number comes from the high number of transit users in the area, reflecting the presence of University students traveling between the East Bank and

West Bank, the concentration of transit-dependent households in the neighborhood, and the area's overall concentration of population and jobs.

The new station has the potential to have a tremendous positive impact on the neighborhood. Besides the distinction of being the only area outside of downtown Minneapolis to be served by two LRT lines, it also makes important connections east towards shopping and employment centers in St. Paul – as well as linking together the University's campus.

During the planning process, there was some debate as to the best location of the station serving Cedar Riverside. Neighborhood residents strongly advocated for a location closer to Cedar Avenue, stating that this would better serve residents (including significant elderly, disabled, and disadvantaged populations), provide more opportunities for neighborhood businesses, and be more likely to spur transit-oriented redevelopment near the station. The University of Minnesota desires a station location that is situated closer to Blegen and Willey Halls where there is currently a bus stop with the most transit ridership in the neighborhood.



The purpose of this small area plan was not to make a final decision on station location because, quite simply, the plan and the City itself do not have the authority to do this. The decision will be made ultimately by the Metropolitan Council, after weighing input from various stakeholders and taking into account various practical considerations, including feasibility and cost. However, this plan does provide guidance as to elements of the station location and design that are most important to the neighborhood. This information, and the supporting analysis, can be used to guide the City's position in advocating for these aspects.

## Analysis

### Overview

The City hired URS Corporation to do an analysis of the station location, create conceptual illustrations of the station, identify key bicycle and pedestrian routes to the station, and develop general cost estimates for the various components of the proposed design. A copy of their report is

included in Appendix H. Although the consultant did review some conceptual renderings developed by another consulting firm for the University of Minnesota, this was an independent exercise and produced different results from the earlier analysis.

The analysis considered several options, settling on two that were considered feasible: locations: one between Cedar Ave and 19<sup>th</sup> Ave, and another one between 19<sup>th</sup> Ave and the University of Minnesota skyway. A location to the west of Cedar was eliminated due to a curvature of the road which could not accommodate the standard station alignment. Another location, directly at the University skyway (identified in the EIS as the preferred location) was eliminated due to lack of space to accommodate the station. All station design concepts assumed the need to accommodate a three-car platform, the standard for all of the stations on the Central Corridor LRT line.

Some key factors were considered in developing a proposed station design:



*A sample concept for creating a prominent station access point at street level*

- *Access to Cedar, 19th and the University skyway.* All three of these provide important access points for LRT riders. A super-station serving all three directly is less feasible since it would require convincing decision makers to build a station platform twice as big as any along the line, and therefore more expensive. Therefore, a couple options are presented for how to link the station platform to these points.
- *Presence of station at street level.* Since the LRT line will be located below grade in the Washington Ave trench, having a station presence at street level is key for visibility and ease of access. The obvious place to put this type of access would be along one or more of the bridges which span Washington Ave.
- *Bicycle and pedestrian access.* Ease of access by bicycle and on foot is critical to the station design, particularly due to its below-grade location. This includes ensuring convenient access for a range of physical abilities. Additionally, looking at the availability and quality of bicycle and pedestrian connections at alternative station locations provides a measure of their relative accessibility to riders – since conventional transit analysis would suggest they are too close to one another to calculate a difference in forecasted ridership.
- *Place making.* This station design provides an opportunity to address one of the major themes of this plan: building connections. The Washington Ave trench currently divides Seven Corners physically and psychologically from the rest of the neighborhood. A positive, visible presence in this space could help to literally bridge the gap for residents and businesses.
- *Benefits of having all in median.* The proposed location of the Central Avenue LRT corridor will be in the median of Washington Avenue, with auto travel lanes and ramps on either side. Any

station design that requires riders to reach the platform at the street level will require them to cross over free-flowing lanes of traffic to get there. An alternative would be to have the access directly from the skyway and/or bridges crossing over the road, so that riders could travel to and from the station within the median and not have to cross lanes of traffic to get there.

Two conceptual designs were developed, based on the identified locations and the criteria described above. These are not finalized designs, but rather scenarios that present a range of options that could be used separately or together. The main purpose of the plan's Central Corridor analysis was to broaden the conversation about the strengths and weaknesses of various scenarios before any official decisions were made by the Metropolitan Council on location and design.

#### *Cedar-19<sup>th</sup> Scenario*

The first scenario, shown in Map 8.4, places the LRT station platform between Cedar Ave and 19<sup>th</sup> Ave. This space is just long enough to accommodate a platform, which fills the full extent between the bridges. Direct access points to the station are shown on the Cedar Ave and 19<sup>th</sup> Ave bridges, with both stairs and elevators. The station is linked to the University of Minnesota skyway by another skyway originating at the 19<sup>th</sup> Ave bridge station access point. This skyway design allows for future University development on either side of Washington to link directly into it at a midway point – something a platform-level walkway would not allow. The skyway would also provide weather protection and thereby make the station more appealing for riders on cold or wet days.

The main station entrance is located on the Cedar Ave bridge, highlighted by a enclosed structure with high visual interest, as shown in Map 8.5. This would be the most visible aspect of the station at street level. Additionally, it could serve as a point of identification for the neighborhood itself, even providing space for information about neighborhood attractions and points of interest. Widening of the bridge around this point could allow for enhanced bus access, bicycle parking, and other facilities.

This scenario provides an immediate station presence at both Cedar and 19<sup>th</sup>, and is therefore convenient to the neighborhood. The access to the University is somewhat less efficient, though portions of the West Bank campus are near the 19<sup>th</sup> Ave access point.

#### *19<sup>th</sup>-University Skyway Scenario*

The second scenario, shown in Map 8.6, places the LRT station platform between 19<sup>th</sup> Ave and the University of Minnesota Skyway. Since this is a significantly larger gap than between Cedar and 19<sup>th</sup>, the platform layout is more spread out, though it contains similar elements to the previous scenario. Stair and elevator access would be provided directly from the 19<sup>th</sup> Ave bridge and the University skyway down to the platform. Cedar Ave would be accessed by a sloping enclosed walkway from the Cedar Ave

bridge access point. The slope would be gradual enough to be handicap accessible – in part because the Cedar Ave bridge is actually lower than the 19<sup>th</sup> Ave bridge. As mentioned above, the skyway link would also have a weather protection benefit.

The main station entrance at Cedar Ave would remain with basically the same configuration. The exception would be that the entrance would lead to the covered walkway, rather than a stair/elevator access.

This scenario provides more immediate access to the University with somewhat less convenient access from Cedar (19<sup>th</sup> Ave access is comparable in both scenarios). However, the sloping walkway to Cedar Ave does provide an extra level of redundancy for handicap access, in the event of an equipment failure with platform elevators.

#### *Bicycle and Pedestrian Access*

The consultants performed an analysis to show the most direct bicycle and pedestrian routes to each of the three access points, regardless of station design. This is shown in Map 8.7. The average walk time for those traveling from throughout the neighborhood ranges from as little as 2 minutes from Seven Corners to as much as 11 minutes from the southeastern end of the neighborhood. Bicycle access is simplified by the proposed plan for bicycle lanes along Riverside and 19<sup>th</sup> Ave, which would provide direct access to the 19<sup>th</sup> Ave entrance point.

For many transit riders who live, work, or go to school on the eastern side of the neighborhood, one of the most direct routes to the station is through the University of Minnesota campus, particularly if a station access point is placed at the skyway. Therefore, coordination would be necessary with the University regarding provision of direct routes and signage for those wishing to travel to and from the station this way.

The proposed bicycle and pedestrian system, which will allow for these station linkages, is shown on Map 8.8.

#### *Cost Estimates*

The consultant's analysis produced draft cost estimates for both scenarios, which are included in Appendix H. The estimates are broken down by line item, so that the components can be compiled in various configurations based on preference. In general, the two scenarios have similar costs for the basic station layout. However, there is a significant cost differential for the proposed skyway connections, based on their length and placement. While these features may be desirable, they may be too expensive to be considered part of the original project, and may have to be constructed separately as add-ons.

The decision-making process for the Central Corridor station location is a larger discussion, and is currently ongoing. It is the objective of this plan to provide valuable input, including an indication of community preference and

potential scenarios, to help inform both the City's position on this decision and the decision itself.

## Recommendations

### General

1. Promote the development of transportation connections within the neighborhood and between the neighborhood and surrounding areas.
  - a. Explore opportunities to reconnect the street grid in connection with redevelopment projects.
  - b. Investigate ways to rebuild road connections across the surrounding freeways to reconnect with surrounding local streets, particularly when connections improve traffic flow, create bicycle and pedestrian linkages, and/or open up land for development.
  - c. Consider reconnection of 15<sup>th</sup> Ave S across the Washington Ave S, to provide a more connected street grid and better accessibility for adjacent properties.
  - d. Maintain existing transportation connections of all types whenever possible, except in the case of compelling public interest.
2. Make improvements to enhance the role of the neighborhood as a accessible, safe, pleasant, and comfortable place to walk and bike.
  - a. Improve the condition, quality, accessibility, and safety of existing pedestrian and bicycles routes when possible.
  - b. Identify pedestrian routes and corridors through the neighborhood between the major streets, including east/west connections along 4<sup>th</sup>, 5<sup>th</sup>, and 6<sup>th</sup> Streets.
  - c. Construct additional bicycle and pedestrian facilities where needed to create a more complete and connected network.
  - d. Explore options to connect public bicycle and pedestrian paths to internal bicycle and pedestrian systems within large development and institutional campuses (e.g. University of Minnesota, Fairview Hospital, Augsburg College, Riverside Plaza).
  - e. Develop safe and accessible bicycle and pedestrian linkages to parks, open spaces, LRT stations, and other public places, including places for people to gather and children to play.

- f. Develop accessible bicycle and pedestrian connections between the neighborhood and the river.
  - g. Incorporate good design features, including public art and streetscape amenities, into public paths and corridors.
  - h. Ensure that bicycle and pedestrian corridors are well lit, properly maintained, and clearly signed.
  - i. Support a public safety approach that creates a safe and comfortable environment for bicyclists and pedestrians throughout the day and evening.
3. Build on the neighborhood's existing transit amenities to create a system that is understandable, convenient, and accessible.
    - a. Improve wayfinding to and from transit stops within the neighborhood, including between stops where transfers may occur.
    - b. Improve signage and amenities at transit stops to make transit ridership easier, safer, more accessible, and more convenient for new and existing riders.
    - c. Support institutions who are investigating strategies for improving transit service within the neighborhood.
  4. Encourage improvements to the surrounding freeway system which promote neighborhood connectivity, reduce cut-through traffic, and open up new areas for development.
    - a. When possible, promote improved connections between neighborhood streets and surrounding streets, possibly in conjunction with freeway improvement projects.
    - b. Ensure that freeway improvement projects do not decrease neighborhood connectivity or otherwise hinder local traffic flow in and to the neighborhood.
    - c. Seek to identify and implement freeway improvements that would reduce cut-through traffic on local streets, including adding freeway movements from northbound I-94 to northbound I-35W.
    - d. Support additional studies and projects related to the freeway system, including proposed reconfigurations to ramps at 3<sup>rd</sup>, 4<sup>th</sup>, and Washington.

### **Cedar Avenue/Washington Avenue**

1. Make improvements to Cedar Avenue consistent with its role as a pedestrian-oriented Commercial Corridor.

- a. Improve and enhance sidewalks and crosswalks with new materials and markings.
  - b. Add streetscape improvements including street trees and other landscaping, street furniture (e.g. benches, trash receptacles, bike racks, and kiosks), and pedestrian scale lighting.
  - c. Look for opportunities to add raised or landscaped medians to enhance street appearance and safety, while still maintaining traffic flow and needed turn movements.
  - d. Identify ways to provide a gateway to the neighborhood at northern and southern ends of Cedar/Washington Avenues, including public art, landscaping, signage, and other improvements.
  - e. Improve bus stops along Cedar Avenue with improved seating, signage, and other amenities.
2. Improve Cedar Ave intersections at Riverside Avenue and at Seven Corners to enhance pedestrian safety and accessibility.
- a. Make improvements including more visible intersection crosswalks, upgraded pedestrian signals, reconstruction of the triangle island at the Cedar Riverside intersection, new surface materials or patterns, general street repaving, and reconfiguration of turn lanes.
  - b. Ensure that signal timing and turn prohibitions are in place to maximize safe and efficient travel for both pedestrians and vehicles.
  - c. Investigate use of bollards, planters, or similar barriers to discourage crossing at unsafe points outside of the intersection.
  - d. Continue to monitor traffic collisions, particularly involving pedestrians, to identify recurring problems that could be addressed to improve safety.
  - e. Promote enforcement of traffic laws for all travelers, and educate the public on these laws and traffic safety in general.
3. Upgrade the mid-block crossing at vacated 5<sup>th</sup> Street (near Riverside Plaza), and create a public walkway through the corridor to Riverside Avenue, to improve pedestrian connectivity.
- a. Pursue funding for a pedestrian improvement project that includes improvements to this crossing point.

- b. Work with property owners to ensure a permanent public easement or right-of-way through private property between Cedar and Riverside along the vacated 5<sup>th</sup> Street corridor.
  - c. Construct a pedestrian walkway on vacated 5<sup>th</sup> Street right-of-way, and coordinate with the redevelopment of the Dania Hall site to ensure compatibility.
  - d. Upgrade the mid-block crossing to ensure it is a more attractive and noticeable option for pedestrians, including curb extensions, a more visible crosswalk, better pedestrian signals, and adequate signal timing.
  - e. Integrate the improved crosswalk with surrounding improvements to landscaping, street furniture, and other enhancements.
4. Create strong visual and physical connections for pedestrians and bicyclists between street and LRT stations.
- a. Add signage, lighting and public art improvements which guide pedestrians and bicyclists between Cedar and the LRT stations.
  - b. Improve way-finding for people wishing to make a transfer between Cedar Ave buses and the LRT.
  - c. Better integrate physical connections to the Hiawatha LRT station into the neighborhood as a whole, and ensure that the same is done with the new Central Corridor LRT.

### **Riverside Avenue**

1. Reconfigure Riverside Avenue within the existing curbs to allow for bicycle lanes, connecting over to both 19th Avenue and the Hiawatha LRT station, while ensuring maintenance of on-street parking and adequate traffic flow.
- a. Reduce the travel lanes from four to two along the road wherever possible, using the additional space for center turn lanes and bike lanes on both sides.
  - b. Develop a detailed strategy to ensure that all uses of the road – including bike lanes, transit stops, travel lanes, turn lanes, and on-street parking – are accommodated efficiently and safely.
  - c. Maintain existing on-street parking along the road wherever possible.

- d. Coordinate improvements with other street upgrades, including resurfacing, signal timing optimization, and streetscape improvements.
  - e. Ensure consistent and clear signage for the bicycle lanes and integrate with neighborhood way-finding signs.
2. Improve safety and accessibility at pedestrian crossings, particularly at difficult intersections, including 20<sup>th</sup> Ave/5<sup>th</sup> St intersection.
    - a. Encourage use of upgraded pedestrian crossings, including improved pedestrian signals and visible crosswalks.
    - b. Investigate ways to limit turn movements at irregular intersections to improve traffic safety while still allowing access to adjacent uses.
  3. Improve traffic flow on Riverside through traffic signal changes at intersections.
    - a. Ensure that signal timing and turn prohibitions are in place to maximize safe and efficient travel for both pedestrians and vehicles.
  4. Investigate other potential long term projects to enhance the Riverside Avenue corridor, including improved pedestrian facilities, landscaping along the street and in the median, and other amenities.
    - a. Coordinate potential improvements to the pedestrian realm along the street with new development and with other street improvement projects.
    - b. Work in partnership with nearby institutions to create and maintain an attractive gateway to the neighborhood along Riverside Avenue.
    - c. Identify opportunities to green the corridor, including street trees, planters, pocket parks, and other landscaping.

### **Central Corridor**

1. The Central Corridor station serving the area should be in the heart of the neighborhood.
  - a. Locate the station in an area along the Washington Avenue trench in the neighborhood, convenient to residents, businesses, and institutions.
2. The Cedar Riverside/West Bank station of the Central Corridor should have a primary entrance point at Cedar Avenue.
  - a. Create a direct connection between Cedar Avenue and the station platform.

- b. Develop a station entrance on the Cedar Avenue bridge with strong visual interest and prominence.
  - c. Expand open areas at the station entrances to create attractive, landscaped pedestrian plaza spaces.
- 3. Ensure good pedestrian and bicycle linkages between the station and all areas of the neighborhood.
  - a. Develop safe, convenient, and accessible connections between the station platform and major bicycle and pedestrian access points.
  - b. Support the development of wayfinding signage to the station from various points in the neighborhood.
  - c. Develop bicycle and pedestrian amenities at station entrance points, including bicycle parking, benches, trash receptacles, landscaping, and informational kiosks.
  - d. Incorporate bicycle access, bicycle parking, and related amenities into the Central Corridor LRT station and other transit stations and stops where appropriate.
- 4. Promote station design that is attractive and reflects the unique character of the Cedar Riverside neighborhood.
  - a. Work in coordination with neighborhood representatives, including arts and cultural institutions, to develop themes consistent with neighborhood character.
  - b. Incorporate public art into the station design.
- 5. Encourage convenient and accessible connections between the LRT station and major bus routes through the neighborhood, including enhanced bus facilities at Cedar Avenue and 19th Avenue.
  - a. Incorporate enhanced bus stops at station entrances.
  - b. Work to coordinate bus routes and stops with LRT station access points.
  - c. Include way-finding signage at bus and LRT stops to ensure good connections between the two modes

## Map 8.1: Riverside Avenue Existing Conditions



### EXISTING PEAK HOUR CAPACITY ANALYSIS

CEDAR-RIVERSIDE SMALL AREA PLAN TRAFFIC ANALYSIS  
City of Minneapolis

Figure 3

## Map 8.2: Riverside Avenue 2020 No Build



### YEAR 2020 EXISTING ROADWAY PEAK HOUR CAPACITY ANALYSIS

CEDAR-RIVERSIDE SMALL AREA PLAN TRAFFIC ANALYSIS  
City of Minneapolis

Figure 5

007604  
August 2007

## Map 8.3: Riverside Avenue 2020 Build



URS Cedar-Riverside / West Bank Central Corridor LRT Station Analysis:  
**Map 8.4: Station Layout Scenario A**



URS Cedar-Riverside / West Bank Central Corridor LRT Station Analysis:  
**Map 8.5: Cedar Avenue Entry Scenario A**



URS Cedar-Riverside / West Bank Central Corridor LRT Station Analysis:  
**Map 8.6: Station Layout Scenario B**



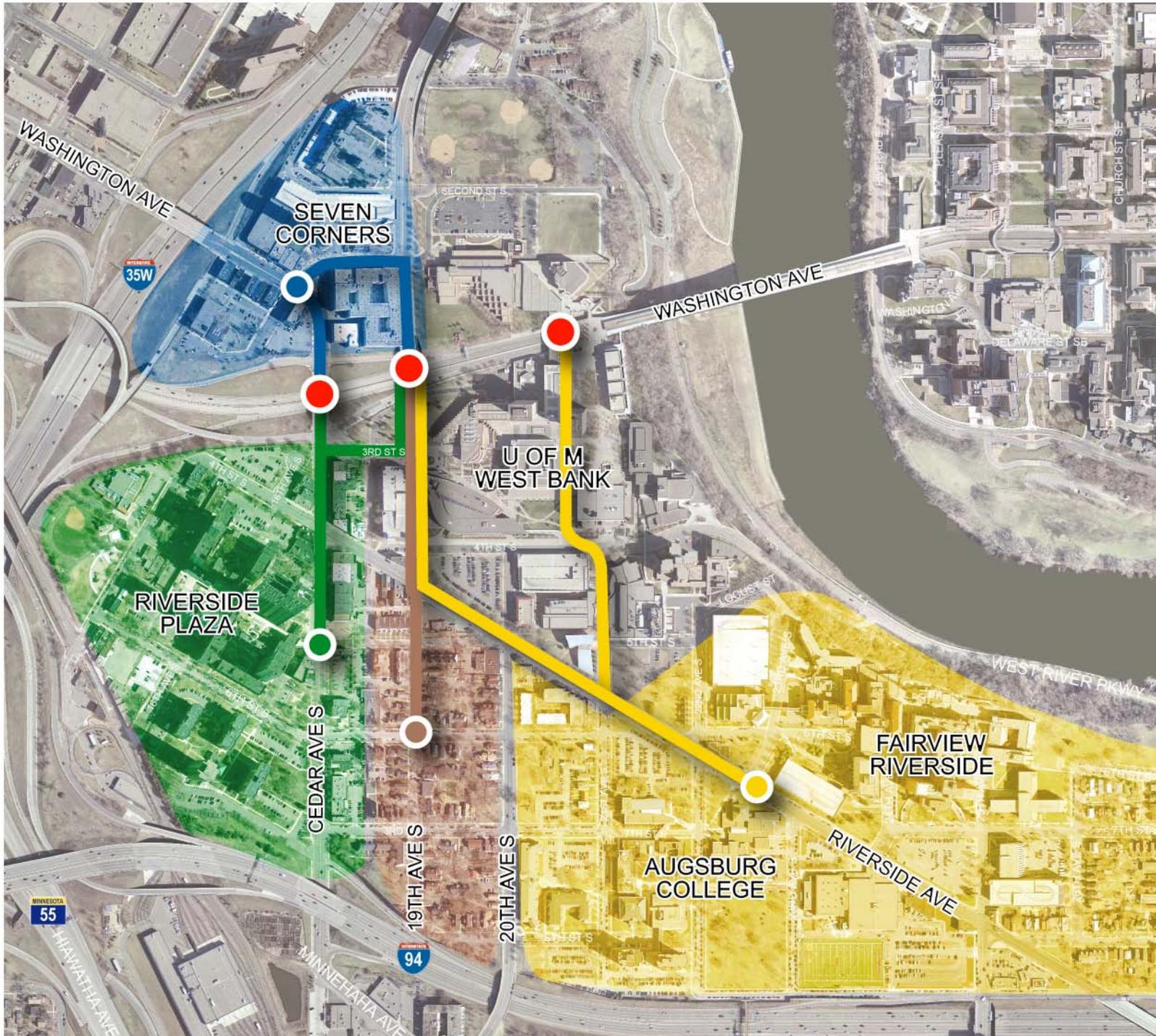
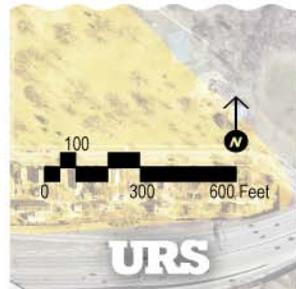
**NEIGHBORHOOD  
WALK ACCESS  
TO CENTRAL  
CORRIDOR LRT  
STATION**

Note:

Walking routes include links to closest access point (i.e. Cedar Avenue or West Bank Skyway)

Estimated walk times depend on access point used and is based on an average walking speed of 3 miles per hour.

-  Potential Station Access Point
-  Fairview/Augsburg District
-  Primary Walking Routes (10-11 min.)
-  7 Corners District
-  Primary Walking Routes (2-4 min.)
-  Riverside Plaza/ Cedars District
-  Primary Walking Routes (5-7 min.)
-  Coop District
-  Primary Walking Routes (6 min.)

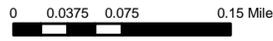


# Map 8.8: Proposed Bicycle Paths & Trails

## Legend

### Bike paths

-  Existing lanes or routes
-  Proposed bike lane
-  Existing trails
-  Study Area



Approved  
April 18, 2008

