LOUISIANA STATION CITY OF ST. LOUIS PARK

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SOUTHWEST CORRIDOR INVESTMENT FRAMEWORK TRANSITIONAL STATION AREA ACTION PLAN

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ABOUT THIS CHAPTER:

The Transitional Station Area Action Plans are the product of a Hennepin County led effort to help communities along the Southwest LRT corridor prepare for SW LRT's opening day in 2018 and beyond.

An individualized plan has been created for each of the 17 stations in the Southwest corridor, each plan comprising a chapter in the larger Southwest Corridor Investment Framework. The station area action plans suggest ways to build on local assets, enhance mobility, identify infrastructure needs, and capitalize on promising opportunities for development and redevelopment near each station.

Two location alternatives are under consideration for the Louisiana Station, noted in this chapter as "Louisiana North" and "Lousiana South". The Louisiana South location is considered as a "betterment". A complete set of recommendations has been developed for each alternative and is included in the "Where are We Going?" section of this report (see description below).

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INTRODUCTION

A brief overview of the station location and its surroundings

WHERE ARE WE TODAY?

A description of existing conditions in the station area, including:

- » Land Use
- » Transit Connections
- » Access + Circulation Issues (Bike, Ped, and Auto)
- » Infrastructure Needs

WHERE ARE WE GOING?

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Louisiana South 9-24

This section presents a number of recommendations for the station area in anticipation of opening day needs and the long-term TOD environment. Recommendations are provided for both potential station locations. This includes:

- » Access + Circulation Plan
- » Station Area Site Plan
- » Infrastructure Plan
- » Development Potential
- » Summary of Key Initiatives



LOUISIANA STATION WITHIN THE CORRIDOR:

An important health and wellness destination with the potential to develop into a significant cluster of medical-related businesses and provide access to neighborhoods throughout St. Louis Park along the Louisiana Avenue Corridor.

HEALTH AND WELLNESS The Louisiana station is the primary Health and Wellness destination (see Place Types discussion beginning on p. 1-19) along the Southwest LRT Corridor. Located just north of Park Nicollet Methodist Hospital, it is the only station along the line with the potential to provide direct service to a major hospital facility. The hospital has been expanding in recent years and has substantial land holdings within the station area, creating a longer term opportunity to develop a cluster of health/medicalrelated office and light industrial uses, as well as services and amenities for employees and residents in the area.

EMPLOYMENT The station area is home to a number of small- to mediumsized businesses located along Oxford Street, Edgewood Avenue, and Cambridge Street. While many of these businesses are currently operating at low employment densities, it is expected that over time some will shift towards higher density commercial/office development, attracting greater numbers of employees to the station area.

NEIGHBORHOODS The closest residential areas are the Meadowbrook, Brooklawns, South Oak Hill, and Elmwood neighborhoods. Although currently pedestrian access to the station is limited, an opportunity exists to improve neighborhood connections through streetscape improvements and the addition of new pedestrian pathways. Louisiana Avenue is the only north-south city street through St Louis Park. As such, the station will be an important point of transfer for bus service to neighborhoods and key destinations throughout the city.

TRAIL CONNECTIONS The Cedar Lake LRT Regional Trail, a popular biking and walking trail that connects downtown Minneapolis to the western suburbs, runs north of the proposed alignment, along the freight rail corridor.

LOUISIANA



NOTE: 10-minute walkshed approximates the area accessible within a 10-minute walk from the station platform using only the existing sidewalk/trail network. See Glossary for walkshed assumptions and methodology.

LOUISIANA STATION AREA TODAY:



Methodist Hospital



Existing big box retail



Existing Cedar Lake LRT Regional Trail

Station Location

Only one of the Louisiana station locations shown here (Lousiana North) is included in the SW LRT anticipated base project scope. The alternate concept location (Louisiana South) is considered a betterment to the base project scope. Louisiana North Station is located on the north side of Oxford Street, to the east of Louisiana Avenue. The Louisiana South station concept draws the LRT tracks farther south, closer to Methodist Hospital, with the station platform just off of Louisiana Avenue.

Many of the existing land uses in the area are industrial and light industrial with low-rise buildings on large parcels and blocks. Methodist Hospital is located within the station area walkshed. With approximately 3,900 employees, the hospital is expected to be a major generator of transit ridership at this station. The station will also serve employees of other businesses in the area, as well as residents in the Meadowbrook, Brooklawns, Elmwood, Creekside, Oak Hill, and South Oak Hill neighborhoods. Minnehaha Creek runs east-west through the station area, southwest of the proposed station platform.



Minnehaha Creek



Louisiana Avenue

Where Are We Today?

The following section describes the station area's EXISTING CONDITIONS, including the local context, land uses, transit and transportation systems, pedestrian and bicycle facilities, assets, destinations, and barriers to accessing the station. This analysis of current conditions presents key issues and opportunities in the station area and informs the recommendations for future station area improvements.

NOTE: Existing conditions maps are based on data provided by Hennepin County and local municipalities. The data used to create each map is collected to varying degrees of accuracy and represents infrastructure and conditions at varying points in time. Actual conditions may vary slightly from what is shown.

WHERE ARE WE TODAY?

Land Use

Many of the land uses in the area are industrial and light industrial. Other land uses include institutional (Methodist Hospital), retail/commercial (Sam's Club), residential (single-family detached and medium-density multi-family). The Minnehaha Creek and associated wetlands meander through the station area. The most significant existing land use anticipated to generate transit ridership is Methodist Hospital, which currently employs approximately 3,900 people. The existing freight rail lines in the station area bisect the potential development areas and cut off access between the proposed station and the hospital.





Roadway Network

The roadway network in the Louisiana station area is limited. Block sizes are large, primarily due to the associated industrial land uses, and roadways are cut off due to the freight rail lines located in the area. Louisiana Avenue is the primary north-south connector roadway near the station platform, delivering movement north into the South Oak Hill and Lenox neighborhoods and south into the Meadowbrook and Brooklawns neighborhoods. State Highway 7 runs east-west about a quarter of a mile north of the station. Excelsior Boulevard runs east-west about a half-mile south of the station. Farther from the station area, away from the industrial and hospital uses, the roadway network returns to a finer grained, residential network.

WHERE ARE WE TODAY?



Transit

The Louisiana station area is currently served by the #604 bus route, which runs along Louisiana Avenue to Louisiana Circle, then turns east toward the hospital and then south to Excelsior Boulevard where it runs east along Excelsior Boulevard. Existing bus stops for the #604 route are located along Louisiana Avenue at Oxford Street and Louisiana Circle.

Sidewalk, Trails and **Bikeways**

The sidewalk, trails, and bikeway system in the Louisiana station area is extremely limited. Much of this is due to the land uses, large block sizes, and limited roadway network in the area. There is a need for additional and enhanced sidewalks and trails in the area if transit ridership is to be encouraged from nearby businesses and residential areas. The Cedar Lake LRT Regional Trail runs through the station area, providing a link to regional destinations via the multi-use trail.

Sanitary Sewer

Sanitary sewer infrastructure consists of a collection of gravity flow sewer mains, lift stations, and pressurized forcemains that transport sewage to a wastewater treatment plant (WWTP). An efficient collection system has the capacity to accommodate all of the existing land uses within its particular sewershed. Beyond capacity, the material and age of pipes within a system can also impact a system's effectiveness.

Sanitary sewer infrastructure within the project area is maintained by either the City of St. Louis Park or by the Metropolitan Council Environmental Services (MCES) Division. MCES maintains a series of interceptor trunk sewers which collect sewage at key locations and convey sewage across community boundaries to regional WWTPs. Wastewater from the station area is treated by the MCES Metro WWTP located in St. Paul.







Water Main

Water main distribution systems serve to supply potable water to individual properties and to support fire suppression throughout the community. A welldesigned system can maintain adequate pressure to support demand of individual properties and provide high flow rates to fire hydrants/fire suppression systems in emergency situations. Because of the complexity of water distribution networks and the importance of pressure, flow, and water quality, City water system models are used to evaluate a system's adequacy. The material and age of the system's water mains can also be factors in system breaks, leaks, and pressure and flow degradations.

Water pressure and flow rates can be influenced by: size of water main serving an area, proximity and elevation relative to a water tower, proximity to a trunk water main with high flow capacity, if the main creates a loop, demand of adjacent land uses, and the condition of the main.

Stormwater

This station is in the Minnehaha Creek Watershed District (MCWD). A majority of the drainage is directed to Minnehaha Creek. The creek is impaired by dissolved oxygen depletion, chloride, fecal coliform, and fish biology. Some drainage is directed to Bass Lake which is impaired by nutrients. A significant portion of the area, including the station, is within the 100year floodplain.

Discharging near impaired waters may trigger additional National Pollution Discharge Elimination System measures which require more capacity for stormwater management. For impaired waters where a Total Maximum Daily Load has been approved, these requirements may become stricter. Zoning requirements within the 100year floodplain may limit development/ redevelopment potential.

The watershed has recently completed creek remeander and improvement projects near the station. The district is investigating improvements to divert drainage from the proposed station area for regional treatment.

This station area has been subject to flooding in the past. Any development/ redevelopment is anticipated to improve drainage as a result of enforcing City and Watershed requirements.

Where Are We Going? (LOUSIANA NORTH)

The plans and diagrams on the following pages illustrate a range of recommendations for infrastructure improvements, station amenities, and potential redevelopment opportunities for the *LOUISIANA NORTH* station location alternative.

The ACCESS AND CIRCULATION PLAN shown in Figure 9-9 provides a high level view of how future transit, automobile, bike, and pedestrian systems will connect to the station area and its surroundings.

Figure 9-10 illustrates the STATION AREA IMPROVEMENTS that will facilitate access to and from the station and catalyze redevelopment in the station area. This includes opening day and long-term station area improvements

Figure 9-11 focuses on OPENING DAY STATION AREA IMPROVEMENTS only. These recommendations represent the improvements necessary to enhance the efficient function of the transit station, roadways, pedestrian and bicycle connections, and transit connections on opening day in 2018.

Station Area Improvements

The discussion below outlines a range of future station area improvements. While some of the identified improvements may be constructed as part of the LRT project itself, other improvements must be funded, designed and constructed by other entities and will require coordination between the City, County, and Metro Transit as well as local stakeholder and community groups.

ROADWAYS

Long-Term Improvements:

- » Realign Edgewood Avenue between Oxford Street and Cambridge Street to provide a more direct access route to Methodist Hospital.
- » Add a new roadway connection, extending Cambridge Street west across Louisiana Avenue and connecting back to Oxford Street. This connection will enhance the street network to improve circulation and establish pedestrian-scale block sizes.

PEDESTRIAN CONNECTIONS

Opening Day Improvements:

- » Add a new multi-use trail connection from Oxford Street to Louisiana Circle. This connection will provide a more direct access route to Methodist Hospital from the LRT station. Accomodations for pedestrian safety will be needed at the rail crossing. This connection should feature climate protection such as canopy, windscreen, heated sidewalks, etc.
- » Focus sidewalk and streetscape enhancements along Louisiana Avenue, Oxford Street, Cambridge Street, and Louisiana Circle near the station.
- » Improve pedestrian crossings along Louisiana Avenue.
- » Construct the planned multi-use Minnehaha Creek Trail, including a connection between the Meadowbrook neighborhood and Oxford Ave.
- » Provide safe and convenient pedestrian connections to the Cedar Lake LRT Regional Trail, including construction of an underpass between the station platform and trail.

Long-Term Improvements:

- » Construct a trail connection and creek crossing between the Meadowbrook neighborhood and Louisiana Ave.
- » Construct a multi-use trail connection along the existing freight rail switching wye from Cambridge Street southeast to the surrounding neighborhoods.
- » Remove the freight rail switching wye to reduce barriers to development and improve access and circulation in the station area.

BIKE CONNECTIONS

Opening Day Improvements:

- » Provide multi-use paths along both sides of Louisiana Ave.
- Provide on-street bike facilities (lanes, routes, signage, etc.) on local streets to better connect the station to nearby neighborhoods, businesses, amenities, and destinations.



Clear pedestrian path from the station to Methodist Hospital

LOUISIANA (NORTH

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Multi-use paths and regional trail connections



Example of public plaza

- » Provide bike parking, lockers, and bike sharing facilities in a highly visible area near the station platform.
- » Provide bike connections to the Cedar Lake LRT Regional Trail through an underpass between the station platform and trail.

Long-Term Improvements:

- » Construct the planned multi-use Minnehaha Creek Trail.
- » Connect to the future north-south CP Regional Trail (included in the Metro Council, Hennepin County, St. Louis Park, and Three Rivers Park District regional park, recreation, and trail comprehensive plans) that will run from Bloomington to Crystal.

TRANSIT CONNECTIONS

Opening Day Improvements:

- » Provide bus transit facilities along Louisiana Avenue.
- » Improve the pedestrian environment between the station platform and the bus stops.
- » Provide a hospital shuttle connection near the LRT station platform.

PARK AND RIDE

Opening Day Improvements:

» Provide a park and ride surface parking lot along Oxford Street adjacent to the station platform.

KISS AND RIDE

Opening Day Improvements:

» Construct kiss and ride facilities within the park and ride lot immediately adjacent to the station platform.

STATION AMENITIES (Beyond SW LRT Base Project Scope)

Opening Day Improvements:

- » Transit Facilities- provide facilities for bus transfers and kiss and ride drop-offs near the LRT station platform.
- » Wayfinding- define and install a cohesive and contextual

wayfinding system near the LRT station platform, major gateways (Louisiana/Hwy 7, Louisiana/Excelsior Blvd, Cambridge Street, Cedar Lake LRT Regional Trail), and major destinations (such as Methodist Hospital campus, Meadowbrook neighborhood, Oxford Street businesses).

- » Seating provide comfortable and durable seating near the station platform.
- » Lighting provide adequate lighting for the safety of pedestrians, bicyclists, and motorists near the station platform and along Oxford Street and Louisiana Avenue.
- » Bicycle Facilities- provide bike parking, lockers, pumping station, and bike sharing facilities near the LRT station platform.
- » Plaza- create a public plaza south of the station platform, next to the park and ride lot, to provide transit users with a paved queue area to wait for LRT trains and move about the station area. Design the plaza to be used for special events and temporary services by providing flexible spaces, multiple power outlets, lighting, etc.
- » Public Art- incorporate public art in the station area to create an attractive and identifiable place.

DEVELOPMENT POTENTIAL

Opening Day Improvements:

- » The site located across Oxford Street from the park and ride lot represents opening day redevelopment potential.
- » The site located north of Louisiana Circle and east of Louisiana Avenue represents opening day redevelopment potential.

Long-Term Improvements:

» See the "Development Potential" discussion on page 9-18 for more on long-term development opportunities.

UTILITIES

» See the "Station Area Utility Plan" beginning on page 9-20 for all utility recommendations.

FIGURE 9-9. ACCESS + CIRCULATION PLAN (LOUISIANA NORTH)

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NOTE: Existing walkshed approximates the area accessible within a 10-minute walk from the station platform using only the existing sidewalk/trail network. Future walkshed incorporates all proposed improvements to the sidewalk/trail network. Walksheds are based on GIS modeling and available sidewalk/trail information- and may not reflect exact on-the-ground conditions. See Glossary for detailed explanation of walkshed assumptions and methodology.

FIGURE 9-10. STATION AREA IMPROVEMENTS (LOUISIANA NORTH)



NORTH

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FIGURE 9-11. OPENING DAY STATION AREA IMPROVEMENTS (LOUISIANA NORTH)

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INTERSECTION

PLAZA SPACE / BUILDING

SETBACK AREA

LOUISIANA (NORTH)

Conceptual Street Sections

The street cross section illustrated below is conceptual and represents a potential future streetscape condition, addressing facilities for a variety of transportation modes, streetscape amenities, and the relationship between buildings and the street edge. Further design and engineering work will be required to ensure the streetscape is in compliance with City and/or County design standards and needs.

LOUISIANA AVENUE

Dimensional Criteria:

- » 106 feet Right-of-Way Width
- » 72 feet Pavement Width (2-way)
- » 6'-0" Median
- » 20'-30' o/c Street Tree Spacing
- » 10'-0" Trail Width (both sides of street)

Design Features:

- » Multi-Use Trails
- » Street Trees/Plantings/Raingardens
- » Streetscape Furnishings (seating, trash receptacles, bicycle racks)
- » Signage/Wayfinding
- » Transit Facilities (bus stops/layovers, shelters, seating, signage, lighting)
- » Street and Pedestrian Lighting
- » Pedestrian-Friendly Crossings (markings, countdown traffic signals, ADA features)

FIGURE 9-12. CONCEPTUAL STREET SECTION - LOUISIANA AVENUE



Conceptual Street Sections (Continued)

The street cross section illustrated below is conceptual and represents a potential future streetscape condition, addressing facilities for a variety of transportation modes, streetscape amenities, and the relationship between buildings and the street edge. Further design and engineering work will be required to ensure the streetscape is in compliance with City and/or County design standards and needs.

OXFORD STREET

Dimensional Criteria:

- » 80 feet Right-of-Way Width
- » 46 feet Pavement Width (2-way)
- » 20'-30' o/c Street Tree Spacing
- » 6'-0" Sidewalk Width
- » 8'-0"
- Trail Width

Design Features:

- » Sidewalk (north side of street)
- » Trail (south side of street)
- » On-Street Parking
- » Street Trees/Plantings/Raingardens
- » Streetscape Furnishings (seating, trash receptacles, bicycle racks)
- » Signage/Wayfinding
- » Street and Pedestrian Lighting
- » Pedestrian-Friendly Crossings (markings, countdown traffic signals, ADA features)

FIGURE 9-13. CONCEPTUAL STREET SECTION - OXFORD STREET





LOUISIANA (NORTH) « « « « « «

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Opening Day Improvements

The following tables and diagrams outline the proposed improvements to be implemented in advance of SW LRT's opening day in 2018. Table 9-1 and Figure 9-14 show opening day improvements that are part of the SW LRT anticipated base project scope; these improvements will be part of the overall project cost for construction of the LRT line. Table 9-2 and Figure 9-15 include opening day improvements that are recommended as part of the Southwest Corridor Investment Framework and are beyond SW LRT's base project scope.

TABLE 9-1. SW LRT ANTICIPATED BASE PROJECT SCOPE - OPENING DAY STATION AREA IMPROVEMENTS (LOUISIANA NORTH)

PLAN KEY	IMPROVEMENT	PROJECT LOCATION	PROJECT NOTES
А	LRT Platform	East of Louisiana Ave along Oxford Street	Includes related LRT infrastructure
В	Park and Ride	Along Oxford Street	225 stall surface park and ride lot (includes private shuttle dropoff, lighting, and ped access to station)
С	Kiss and Ride	On Oxford Street	On-street dropoff area
D	Sidewalk/Trail	Regional trail	Reconstruction of regional trail
E	Sidewalk/Trail	Near station platform	New trail access to station via an underpass
F	Bike Facilities	Near station platform	Allowance for bike storage
G	Wayfinding	Near station platform and park and ride lot	Allowance
Н	Landscaping	Near station platform and park and ride lot	Allowance (includes landscaping for park and ride lot)
I	Water*	Near station platform	New water service and fire hydrant to station
J	Utilities*	Project limit area	Adjustment of existing utilities
К	Stormwater Management*	Near station platform and park and ride lot	Allowance

Note: Anticipated Southwest LRT Base Project Scope as of December 2013 (subject to change)

* Improvement not symbolized on opening day figures (exact location to be determined as part of the base project scope)

PLAN KEY	IMPROVEMENT	PROJECT LOCATION	PROJECT NOTES	PRIORITY
1	Streetscape	Louisiana Ave from W. Lake Street south to Excelsior Blvd	Includes multi-use trails, streetscape plantings, furnishings, lighting and signage	Primary
2	Streetscape	Oxford Street	Includes streetscape plantings, furnishings, lighting , bike facilities and signage	Primary
3	Sidewalk/Trail	Along Oxford Street	Sidewalks	Primary
4	Sidewalk/Trail	From east end of Park and Ride lot south to Louisiana Circle	Multi-use trail connection	Primary
5	Sidewalk/Trail	Meadowbrook neighborhood north to Oxford Street	Multi-use trail connection	Primary
6	Sidewalk/Trail	Along north side of Louisiana Circle east of Louisiana Avenue	Multi-use trail connection	Secondary
7	Sidewalk/Trail	North of regional trail and west of Louisiana Ave	Multi-use trail connections	Secondary
8	Intersection Enhancements	Along Louisiana Ave and Oxford Street (several intersections)	Enhanced crosswalks	Primary
9	Bike Facilities	Near station platform	Bike parking, lockers, pump station and bike share facilities (beyond SPO improvements)	Primary
10	Wayfinding	Station platform and Louisiana Ave	Signage and wayfinding (beyond SPO improvements)	Primary
11	Switching Wye*	East of Louisiana, South of Oxford	Remove rail switching wye	Primary
12	Public plaza	East of Park and Ride	Plaza includes paving, planting, seating, lighting, and signage (beyond SPO improvements)	Primary

TABLE 9-2. SW CORRIDOR INVESTMENT FRAMEWORK (TSAAP) (LOUSIANA NORTH) - OPENING DAY STATION AREA IMPROVEMENTS

* Improvement not symbolized on opening day figures.



FIGURE 9-15. SW CORRIDOR INVESTMENT FRAMEWORK (TSAAP) (LOUSIANA NORTH) - OPENING DAY STATION AREA IMPROVEMENTS



PRIMARY PRIORITY # SECONDARY PRIORITY

Development Potential

OVERVIEW

The presence of the Park Nicollet Methodist Hospital to the south, and Methodist Hospital land holdings in the area, present unique opportunities for future development. The land uses in the Louisiana station area include a mix of light industrial, institutional, commercial/retail, residential, and park/open space uses. Several underutilized industrial sites present opportunities for future redevelopment in the area. Additional medical, office, retail, hotel, light industrial, and residential uses are possible in the Louisiana station area in the mid-term.

Key challenges that should be addressed to facilitate development potential include land uses, additional roadways and existing roadway improvements, smaller block sizes, connectivity in the station area, and the removal of freight rail barriers separating Methodist Hospital from the station.

LAND USES

Development potential for the Louisiana station area is expected to include a mix of medical, office, retail, and light industrial uses.

PLANNING STRATEGIES

Several strategies should be addressed to facilitate future development in the station area. Industrial land uses, large block sizes, limited connectivity, and freight rail line barriers create challenges to accessing the station. Redevelopment should seek opportunities to introduce a finer grain of streets and block sizes to enhance station mobility and set up a framework for higher density development near the station. Streetscape and trail improvements connecting the station area with potential development sites, local destinations, neighborhoods, and bus transit facilities will enhance development potential in the area. Removal of the south rail switching wye will create opportunities to better connect the station with Methodist Hospital and enhance development potential.

WHERE ARE WE GOING?





LOUISIANA (NORTH)

Key Considerations for Change and Development Over Time

Redevelopment of the station area should focus on increasing density and mix of uses around the station platform and developing direct accessible connections between the station and the hospital. Key considerations should include:

BUILT FORM AND LAND USE

- » Introduce a mix of higher density employment and institutional uses throughout the station area.
- » Design new buildings to enhance pedestrian access by orienting them towards the street and locating them as close to the street line as possible.
- » Minimize the impact of parking and circulation on pedestrians by locating parking to the rear or side of new buildings, preferably in structures or below grade.
- » Incorporate active ground level uses on buildings adjacent to the station to increase natural surveillance and make it easier for area employees and visitors to the hospital to access food and other services without having to drive.

PUBLIC REALM

- » Improve connections between the station and area destinations through enhanced streetscaping along Louisiana Avenue. This should include sidewalk improvements to increase path widths, consistent curb cuts, new tree planting to fill in the gaps between more mature trees, and new pedestrian-oriented lighting to increase safety for night shift workers walking to the station.
- » Screen outdoor storage areas within the station area so that it does not detract from the image of the area or discourage new higher density employment uses.

MOBILITY

- » Locate park and ride facilities so that they are within a convenient walk but not immediately adjacent to the station so that there is the potential for a higher density mix of uses next to the station.
- » Consolidate access and servicing between adjacent developments and minimize vehicular access points.
- » Align new roads where they can help to support the creation of a walkable street and block pattern that connects with adjacent neighborhoods over time.
- » Develop new streets in the station area to break down the scale of existing superblocks and improve access and circulation.
- » Support pedestrians through the introduction of sidewalks on all streets within the station area, new crossings, and curb cuts for people in wheel chairs or other mobility devices.
- » Develop a clear and direct path from the station platform to the hospital; ensure that it is well-lit, level, and designed to support people with visual and physical impairments
- » Develop a program of wayfinding for the station area to

direct pedestrians to the hospital, trail system, and other local destinations.

- » Limit vehicular access points along Louisiana Avenue.
- » Establish connections across Minnehaha Creek to improve station access for residents of the Meadowbrook neighborhood.
- » Incorporate signed on-street bike facilities along Louisiana Avenue to improve access for cyclists.



Hospital and medical office expansion



New and innovative industrial uses



Office uses

Station Area Utility Plan

OVERVIEW

The station area utility plan and strategies recommended below were developed by considering future transitoriented development within the station area, as depicted by the Station Area Improvements Plan (Figures 9-10 and 9-19). St. Louis Park will need to apply these localized recommendations to the city wide system to ensure that potential development/redevelopment will not be limited by larger system constraints. Existing models or other methods can be used to check for system constraints in the station areas.

St. Louis Park should also consider reviewing the condition of the existing utilities in the station development area. The station construction would provide St. Louis Park an opportunity to address any utilities needing repairs. Once the larger system has been reviewed for system constraints, St. Louis Park will be able to accurately plan for necessary utility improvements in the city Capital Improvement Program (CIP). All utilities located beneath the proposed LRT rail or station platform should be encased prior to the construction of these facilities. The cost associated with encasing these facilities is assumed to be a project cost and is not included in potential improvements identified for the City CIP.

APPROACH

Utility improvement strategies are outlined in this report for the ultimate station area development (2030), as well as improvements which should be considered prior to opening day anticipated in 2018. Although recommendations are categorized in one of these two timeframes, St. Louis Park should weigh the benefits of completing more or less of these improvements as land becomes available for future development. St. Louis Park should take the utility analysis a level further and model future utilities in the city utility system models.

The proposed development and redevelopment areas were evaluated based on Metropolitan Commission Sewer Availability Charge (SAC) usage rates and estimated flows. Estimated flows for one possible development scenario in this area indicate that internal to the station area, no more than 8-inch pipe are necessary to serve the mix of proposed and existing development. Each utility system should still be reviewed to identify capacity and demand constraints to the larger system associated with increase in flows from the proposed developments and existing developments in the area. St. Louis Park should anticipate the construction of new municipal utilities in conjunction with new or realigned roadways.

GENERAL RECOMMENDATIONS - SANITARY SEWER

Sanitary sewer recommendations for station area improvements include opportunities for St. Louis Park to improve the existing sanitary sewer network, without necessarily replacing existing sanitary sewers. When recommendations for "improving" existing sanitary sewer are noted, St. Louis Park should consider the level to which each specific sewer should be improved. Methods of improvement could include: lining the existing sewer, pipe joint repair, sewer manhole repair, relocation, and complete replacement.

The following items should be evaluated prior to opening day of the station, although action may not be required until necessary for development:

- » Televising existing sewer mains in the station area and proposed development area to determine the condition of the sewer mains, susceptibility for backups or other issues and evaluate for Infiltration and Inflow (I&I).
- » Locations of known I&I. If previous sewer televising records, city maintenance records, or an I&I study have shown problems, the city should consider taking measures to address the problem.
- » The age and material of existing gravity and/or forcemain sanitary sewer in the identified station area. If the lines are older than the material's typical design life or materials which are susceptible to corrosion relative to soils in the area, the city should consider repairing, lining or replacing the mains.
- » Locations of known capacity constraints or areas where city sewer models indicate capacity issues. If there are known limitations, the city should further evaluate the benefit of increasing pipe sizes.
- » City sewer system models (existing and future). A review of these models with future development would assist St. Louis Park in determining if sewers in the project area should be increased to meet existing or future city system needs.
- » Existing sewer pipes should be relocated or encased in areas where they cross or are immediately adjacent to the LRT Line/Station.

GENERAL RECOMMENDATIONS - WATER MAIN

Water main recommendations for station area improvements also include opportunities for St. Louis Park to improve the existing water system network. Creating loops in the network can help prevent stagnant water from accumulating along water main stubs, and creating loops of similar sized water main provides the city a level of redundancy in their water network. Redundancy helps reduce the impacts to the community during system repairs, and also helps stabilize the pressure in the network.

The following items should be evaluated prior to opening day of the station, although action may not be required until necessary for development:

- » The age and material of the existing mains in the identified station area. If the mains are older than the materials typical design life or materials which are susceptible to corrosion relative to soils in the area, the city should consider replacing the main.
- » Locations of previous water main breaks. If water main breaks repeatedly occur in specific areas, the city should consider replacing or repairing the main.
- » Locations with known water pressure issues or areas where city models indicate low pressure. If there are known limitations (for either fire suppression or domestic uses), the city should further evaluate the benefit of increasing main sizes.
- » Locations with known or potential water quality issues. If there are mains known to be affecting the water quality (color, taste, odor, etc.) of their system, St. Louis Park should consider taking measures to address the problem affecting water quality.
- » City water system models (existing and future). A review of these models with future development would assist St. Louis Park in determining if mains in the project area should be improved to meet existing or future city system needs based on demand constraints.
- » Existing water main pipes should be relocated or encased in areas where they cross or are immediately adjacent to the LRT Line/Station.

GENERAL RECOMMENDATIONS - STORM SEWER

Local storm sewer improvements are recommended to be completed in conjunction with other improvements in the station area. Improvements which will likely require storm sewer modifications include: roadway realignments, roadway extensions, and pedestrian sidewalk/street scape improvements. Storm sewer improvements may consist of: storm sewer construction, manhole reconstruction, drain tile extensions, storm sewer relocation, and complete replacement. These local storm sewer improvements are included as part of the overall costs of roadway and streetscape improvements recommended in this plan. Where roadway/streetscape improvements are part of the SW LRT anticipated base project scope, associated storm sewer improvements are assumed to be a project cost. St. Louis Park should also consider coordinating with the local watershed district and other agencies to review the condition of and capacity of existing trunk storm sewer systems serving more regional surface water needs.

STORMWATER BEST MANAGEMENT PRACTICES

There are numerous stormwater best management practices (BMPs) that can be used to address stormwater quality and quantity. As part of this project, BMP guides were developed for four stations (Royalston, Blake, Shady Oak, and Mitchell) which exemplify the range of development intensity and character in the urbanized environment along the Southwest LRT Corridor. The recommendations and practices identified in each of the four BMP guides are applicable to various stations along the corridor.

Potential stormwater management strategies for this station area may be similar to those shown in the BMP guide for the Blake station (see p. 10-28). St. Louis Park should consider implementing applicable best management practices similar to those in the Blake station BMP guide. Stormwater management recommendations should be constructed in conjunction with public and private improvements and future development/ redevelopment in the station area.



Station Area Utility Plan (Continued)

STATION AREA UTILITY RECOMMENDATIONS

Utility recommendations (illustrated in Figure 9-17) are based on a localized analysis of proposed development. It is recommended that the City of St. Louis Park take this analysis a step further and review system constraints to the existing and future sanitary sewer and water main systems using existing sewer CAD or water CAD models, or other methods of modeling these systems.

Opening Day Recommendations:

1. Encase existing sanitary sewer crossing LRT rail construction (east of station area).

Long Term Recommendations:

- 1. Reconfigure/protect forcemain beneath existing Edgewood Avenue.
- 2. Reconfigure/protect MCES interceptor beneath existing Edgewood Avenue.
- Construct 12-inch minimum water main in conjunction with roadway construction. Tie to existing main on Cambridge Street.

FIGURE 9-17. STATION AREA UTILITY PLAN (LOUSIANA NORTH)



WATER TOWER \bigcirc

'HERE ARE WE GOING?

NORTH

<u>LOUISIANA</u>

MCES SANITARY INTERCEPTOR

SANITARY SEWER FORCEMAIN

LIFT STATION

Where Are We Going? (LOUSIANA SOUTH)

The plans and diagrams on the following pages illustrate a range of recommendations for infrastructure improvements, station amenities, and potential redevelopment opportunities for the *LOUISIANA SOUTH* station location alternative. The South station location is a project "betterment".

The ACCESS AND CIRCULATION PLAN shown in Figure 9-18 provides a high level view of how future transit, automobile, bike, and pedestrian systems will connect to the station area and its surroundings.

Figure 9-19 illustrates the STATION AREA IMPROVEMENTS that will facilitate access to and from the station and catalyze redevelopment in the station area. This includes opening day <u>and</u> long-term station area improvements

Figure 9-20 focuses on OPENING DAY STATION AREA IMPROVEMENTS only. These recommendations represent the improvements necessary to enhance the efficient function of the transit station, roadways, pedestrian and bicycle connections, and transit connections on opening day in 2018.

Station Area Improvements

The discussion below outlines a range of future station area improvements. While some of the identified improvements may be constructed as part of the LRT project itself, other improvements must be funded, designed and constructed by other entities and will require coordination between the City, County, and Metro Transit as well as local stakeholder and community groups.

ROADWAYS

Opening Day Improvements:

- » Add a roadway connection from Oxford Street to Louisiana Avenue. This connection could serve as an access route to the station platform for bus and kiss and ride drop off.
- » Realign the eastern end of Oxford Street where it meets Edgewood Avenue to provide a more direct access route to Methodist Hospital and improve redevelopment potential for parcels north of Oxford Street.

PEDESTRIAN CONNECTIONS

Opening Day Improvements:

- » Focus sidewalk and streetscape enhancements along Louisiana Avenue, Oxford Street, and Louisiana Circle near the station.
- » Improve pedestrian crossings along Louisiana Ave.
- » Provide safe and convenient pedestrian connections to the Cedar Lake LRT Regional Trail.
- » Add a new multi-use connection from the east end of the station platform to Louisiana Circle. This connection will provide a more direct access route to Methodist Hospital from the station. Connection should feature climate protection such as canopy, windscreen, heated pavers, etc.
- » Construct the planned multi-use Minnehaha Creek Trail including connection between the Meadowbrook neighborhood, Oxford Street, and Louisiana Avenue.

Long-Term Improvements:

» Construct a multi-use connection along the existing freight rail switching wye from Cambridge Street southeast to the surrounding neighborhoods. This connection is predicated on the future removal of the freight rail switching wye.

BIKE CONNECTIONS

Opening Day Improvements:

- » Provide multi-use paths along both sides of Louisiana Ave.
- » Provide on-street bike facilities (lanes, routes, signage, etc.) on local streets to better connect the station to nearby neighborhoods, businesses, amenities, and destinations.
- » Provide bike parking, lockers, and bike sharing facilities in a highly visible area near the station platform.



Clear pedestrian path from the station to Methodist Hospital



Multi-use paths and regional trail connections



Example of public plaza

» Provide bike connections to the Cedar Lake LRT Regional Trail near the LRT station platform.

Long-Term Improvements:

» Construct the planned multi-use Minnehaha Creek Trail.

TRANSIT CONNECTIONS

Opening Day Improvements:

- » Provide bus transit facilities along Louisiana Avenue.
- » Improve the pedestrian environment between the station platform and the bus stops.
- » Provide a hospital shuttle connection near the LRT station platform.

PARK AND RIDE

Opening Day Improvements:

- » Provide a park and ride surface parking lot along Oxford Street a block north of the station platform.
- » Improve pedestrian connections between the park and ride lot and the station platform, along Louisiana Avenue and the new loop street.

KISS AND RIDE

Opening Day Improvements:

» Construct kiss and ride facilities near the station platform along the new loop street.

STATION AMENITIES (Beyond SW LRT Base Project Scope)

Opening Day Improvements:

- » Transit Facilities provide facilities for bus transfers and kiss and ride drop-offs near the LRT station platform.
- » Wayfinding define and install a cohesive and contextual wayfinding system near the LRT station platform, major gateways (Louisiana/Hwy 7, Louisiana/Excelsior Blvd, Cedar

Lake LRT Regional Trail), and major destinations (such as Methodist Hospital campus, Meadowbrook neighborhood, Oxford Street businesses).

- » Seating provide comfortable and durable seating near the station platform.
- » Lighting provide adequate lighting for the safety of pedestrians, bicyclists, and motorists near the station platform and along the new loop street, Oxford Street, and Louisiana Avenue.
- » Bicycle Facilities- provide bike parking, lockers, pumping station, and bike sharing facilities near the LRT station platform.
- » Plaza- create a public plaza near the station platform to provide transit users with a paved queue area to wait for LRT trains and move about the station area.
- » Public Art- incorporate public art in the station area to create an attractive and identifiable place.

DEVELOPMENT POTENTIAL

Opening Day Improvements:

- » The park and ride site along Oxford Street is a potential opening day development site, possibly as a joint development with a park and ride ramp.
- » The site south of Oxford Street and east of the kiss and ride area also represents opening day development potential.

Long-Term Improvements:

» See the "Development Potential" discussion on page 9-32 for more on long-term development opportunities.

UTILITIES

» See the "Station Area Utility Plan" beginning on page 9-20 for general utility recommendations. See page 9-34 for stationspecific utility recommendations. LOUISIANA (SOUTH

FIGURE 9-18. ACCESS + CIRCULATION PLAN (LOUISIANA SOUTH)

WHERE ARE WE GOING?

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SIANA

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NOTE: Existing walkshed approximates the area accessible within a 10-minute walk from the station platform using only the existing sidewalk/trail network. Future walkshed incorporates all proposed improvements to the sidewalk/trail network. Walksheds are based on GIS modeling and available sidewalk/trail information- and may not reflect exact on-the-ground conditions. See Glossary for detailed explanation of walkshed assumptions and methodology. FIGURE 9-19. STATION AREA IMPROVEMENTS (LOUISIANA SOUTH)



FIGURE 9-20. OPENING DAY STATION AREA IMPROVEMENTS (LOUISIANA SOUTH)

WHERE ARE WE GOING?

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LOUISIANA



Street Sections

The proposed street sections for Louisiana South location alternative are the same as those proposed for the North alternative. Refer to street section discussion beginning on p. 9-13.

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Opening Day Improvements

The following tables and diagrams outline the proposed improvements to be implemented in advance of SW LRT's opening day in 2018. As of December 2013, the Louisiana South alternate station concept is considered a locally requested betterment to the SW LRT anticipated base project scope. Table 9-4 and Figure 9-21 show opening day improvements included in the betterment. Table 9-5 and Figure 9-22 include opening day improvements that are recommended as part of the Southwest Corridor Investment Framework and are beyond the scope of the requested betterment.

TABLE 9-3. SW LRT BETTERMENT CONCEPT SCOPE - OPENING DAY STATION AREA IMPROVEMENTS (LOUISIANA SOUTH)

PLAN KEY	IMPROVEMENT	PROJECT LOCATION	PROJECT NOTES
А	LRT Platform	East of Louisiana Ave, adjacent to existing South Wye rail alignment	Includes related LRT infrastructure
В	Park and Ride	Along Oxford Street	Approx. 225 stall surface park and ride lot (includes lighting)
С	Kiss and Ride	On Oxford Street	Dropoff area north of station platform
D	Sidewalk/Trail	Regional trail	Reconstruction of regional trail
E	Bike Facilities	Near station platform	Allowance for bike storage
F	Wayfinding	Near station platform and park and ride lot	Allowance
G	Landscaping	Near station platform and park and ride lot	Allowance (includes landscaping for park and ride lot)
Н	Water*	Near station platform	New water service and fire hydrant to station
Ι	Utilities*	Project limit area	Adjustment of existing utilities
J	Stormwater management*	Near station platform and park and ride lot	Allowance

Note: As of December 2013, this alternate station concept is a betterment and is not part of the SW LRT base project scope * Improvement not symbolized on opening day figures

TABLE 9-4. SW CORRIDOR INVESTMENT FRAMEWORK (TSAAP) - OPENING DAY STATION AREA IMPROVEMENTS (LOUSIANA SOUTH)

PLAN KEY	IMPROVEMENT	PROJECT LOCATION	PROJECT NOTES	PRIORITY
1	Roadway	North of station platform	New loop road north of station platform, connecting Louisiana Ave to Oxford Street	Primary
2	Streetscape	Louisiana Ave from W. Lake Street south to Excelsior Blvd	Includes multi-use trails, streetscape plantings, furnishings, lighting and signage	Primary
3	Streetscape	Oxford Street	Includes sidewalks, streetscape plantings, furnishings, lighting , bike facilities and signage	Primary
4	Streetscape	Louisiana Circle	Includes streetscape plantings, furnishings, lighting , bike facilities and signage	Primary
5	Sidewalk/Trail	Along new roadways	Include sidewalks along new roadway segments	Primary
6	Sidewalk/Trail	Along north side of Louisiana Circle east of Louisiana	Multi-use trail connection	Primary
7	Sidewalk/Trail	Meadowbrook neighborhood north to Oxford Street and east to station platform	Multi-use trail connections	Primary
8	Sidewalk/Trail	Oxford Street, west of Louisiana Ave	Multi-use trail connection along south side of street	Primary
9	Sidewalk/Trail	Station platform south to Louisiana Circle	Multi-use trail connection	Primary
10	Sidewalk/Trail	North of regional trail and west of Louisiana Ave	Multi-use trail connections	Secondary
11	Sidewalk/Trail	Along new loop road	Sidewalks along new loop road, connecting the Park and Ride to the station platform	Primary
12	Sidewalk/Trail	Along Oxford Street and Lousiana Ave	Sidewalk improvements along Oxford Street and Louisiana to connect the Park and Ride with the station platform	Primary
13	Intersection Enhancements	Along Louisiana Ave and Oxford Street (several intersections)	Enhanced crosswalks	Primary
14	Bike Facilities	Near station platform	Bike parking, lockers, pump station and bike share facilities (beyond SPO improvements)	Primary
15	Wayfinding	Station platform, park and ride lot and Louisiana Ave	Signage and wayfinding (beyond SPO improvements)	Primary
16	Sanitary Sewer	Station area	Relocate existing 12" and 15" sanitary sewer and MSCE interceptor	Primary
17	Public Plaza	Adjacent to station platform	New plaza with paving, seating, plantings, shelter, lighting and signage (beyond SPO improvements)	Secondary



FIGURE 9-22. SW CORRIDOR INVESTMENT FRAMEWORK (TSAAP) - OPENING DAY STATION AREA IMPROVEMENTS (LOUSIANA SOUTH)



 #
 PRIMARY PRIORITY
 #
 SECONDARY PRIORITY

Development Potential

OVERVIEW

The presence of the Park Nicollet Methodist Hospital to the south and Methodist Hospital land holdings in the area present unique opportunities for future development. The land uses in the Louisiana station area include a mix of light industrial, institutional, commercial/retail, residential, and park/open space uses. Several underutilized industrial sites present opportunities for future redevelopment in the area. Additional medical, office, retail, hotel, light industrial, and residential uses are possible in the Louisiana station area in the mid-term.

Key challenges that should be addressed to facilitate development potential include land uses, additional roadways and existing roadway improvements, smaller block sizes, connectivity in the station area, and the removal of freight rail barriers separating Methodist Hospital from the station.

LAND USES

Development potential for the Louisiana station area is expected to include a mix of medical, office, retail, and light industrial uses.

PLANNING STRATEGIES

Several strategies should be addressed to facilitate future development in the station area. Industrial land uses, large block sizes, limited connectivity, and freight rail line barriers create challenges to accessing the station. Redevelopment should seek opportunities to introduce a finer grain of streets and block sizes to enhance station mobility and set up a framework for higher density development near the station. Streetscape and trail improvements connecting the station area with potential development sites, local destinations, neighborhoods, and bus transit facilities will enhance development potential in the area. Removal of the south freight rail switching wye will create opportunities to better connect the station with Methodist Hospital and enhance development potential.



Key Considerations for Change and Development Over Time

Key considerations for change and development over time for the Louisiana South location alternative are the same as those proposed for the North alternative. Refer to the "Key Considerations" discussion on p. 9-19.

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Station Area Utility Plan

GENERAL RECOMMENDATIONS

General utility recommendations for the Louisiana South location alternative are the same as those proposed for the North alternative. Refer to p. 9-20 for general water main, sanitary sewer, and stormwater recommendations. Detailed utility recommendations for the Louisiana South location are outlined below.

STATION AREA UTILITY RECOMMENDATIONS

Utility recommendations (illustrated in Figure 9-24) are based on a localized analysis of proposed development. It is recommended that the City of St. Louis Park take this analysis a step further and review system constraints to the existing and future sanitary sewer and water main systems using existing sewer CAD or water CAD models, or other methods of modeling these systems.

Opening Day Recommendations:

- 1. Encase existing sanitary sewer crossing LRT rail construction (east of station area)
- 2. Encase existing sanitary sewer crossing LRT rail construction
- 3. Encase existing sanitary sewer crossing LRT rail construction (west of station area)
- 4. Relocate existing sanitary sewer in conjunction with construction of LRT rail corridor
- 5. Relocate existing MCES interceptor in conjunction with construction of LRT rail corridor
- 6. Encase existing water main crossing LRT rail construction (east of station area)
- 7. Encase existing water main crossing LRT rail construction
- 8. Encase existing water main crossing LRT rail construction (west of station area)

Long Term Recommendations:

1. Consider upsizing existing 6-inch water main to 8-inch minimum to create 8-inch loop system (confirm with City model).

LOUISIANA (SOUTH

FIGURE 9-24. STATION AREA UTILITY PLAN (LOUSIANA SOUTH)



LOCAL SANITARY

TRUNK SANITARY

LIFT STATION

MCES SANITARY INTERCEPTOR

SANITARY SEWER FORCEMAIN

EXISTING UTILITIES

PROPOSED UTILITIES

<u>'HERE ARE WE GOING?</u>

SOUTH

LOUISIANA

 \bigcirc

LOCAL WATER MAIN

TRUNK WATER MAIN

WATER TOWER

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