1.0 Introduction

1.1 Overview

This chapter presents an introduction to the Southwest Transitway Alternatives Analysis (AA), including the major study elements, the study partners, the history of the project, and the study process.

1.2 Background

In response to continued strong growth in the southwest metropolitan area and downtown Minneapolis and resulting declines in mobility, the Hennepin County Regional Railroad Authority (HCRRA), in partnership with the Metropolitan Council and the cities of Eden Prairie, Minnetonka, Edina, Hopkins, St. Louis Park and Minneapolis, conducted an Alternatives Analysis (AA) for a Southwest Transitway between Eden Prairie and downtown Minneapolis.

The Southwest Transitway AA was conducted in a fashion compliant with Federal Transit Administration (FTA) Section 5309 New Starts guidelines. According to the FTA, the purpose of an Alternatives Analysis (AA) is to compare the benefits, costs and impacts of a range of transit alternatives that address identified mobility needs in order to select a preferred course of action or alternative(s).

A list of the technical reports completed for the Southwest Transitway AA is included in Appendix B of this report. The documents are available on the study website, www.southwesttransitway.org.

1.3 Study Elements

The Southwest Transitway AA included the following key elements:

- Public Outreach: a continuous and comprehensive public outreach process.
- Purpose & Need: Definition of the purpose and need for a Southwest Transitway.
- Goals: Establishment of goals for the Southwest Transitway Project.
- Alternatives: Definition of a broad range of transitway alternatives to meet the mobility needs of the study area cities.
- Evaluation: Development of evaluation measures based upon the identified Southwest Transitway goals and consistent with the FTA New Starts Criteria.
- Recommendation: Selection of a preferred course of action.

1.4 Study Management

The Southwest Transitway AA was funded by the HCRRA and guided by two inter-agency committees, a policy and technical advisory committee. A comprehensive public outreach program was conducted throughout the AA, and the results were considered in all levels of the decision-making process (Figure 1.1).

1.4.1 Hennepin County Regional Railroad Authority (HCRRA)

In 1980, the HCRRA was established as a separate political entity by county resolution in accordance with Minnesota law, Chapter 616. The seven members of the Hennepin County Board

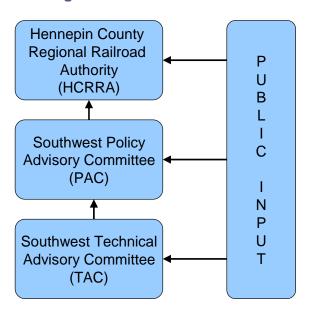
¹US Department of Transportation, Federal Transit Administration, Reporting Instructions for the Section 5309 New Starts Criteria, May 2006. Prepared by the Federal Transit Administration, Office of Planning and Development.

of Commissioners comprise the Authority. The HCRRA's purpose is to acquire abandoned freight rail corridors in order to preserve them for future transportation use and to conduct transit planning.

1.4.2 Southwest Transitway Technical Advisory Committee (TAC)

The Southwest Transitway TAC was composed of technical staff from the cities of Eden Prairie, Minnetonka, Hopkins, St. Louis Park, Edina and Minneapolis; Hennepin County; the Metropolitan Council/Metro Transit; SouthWest Metro Transit; Three Rivers Park District; the Minnesota Department of Transportation (Mn/DOT); and Twin Cities & Western Railroad Company.

Figure 1.1 Study Decision-Making Structure



The Southwest Transitway TAC met approximately monthly to provide technical assistance throughout the study process. The Southwest TAC developed a preliminary recommendation on a preferred course of action that was shared with the public and then forwarded to the Southwest Policy Advisory Committee (PAC) for their consideration.

1.4.3 Southwest Transitway Policy Advisory Committee (PAC)

The Southwest Transitway PAC was composed of elected officials or representatives from Hennepin County; HCRRA; the cities of Eden Prairie, Minnetonka, Hopkins, St. Louis Park, Edina, and Minneapolis; the Metropolitan Council/Metro Transit; SouthWest Metro Transit; Three Rivers Park District; the Midtown Community Works Partnership; the Hopkins Depot; and the Minneapolis Regional, Twin West and Eden Prairie Chambers of Commerce.

The Southwest Transitway PAC met quarterly to provide policy guidance throughout the study process and developed the final recommendation on a preferred course of action. The Southwest PAC recommendation was forwarded to the HCRRA upon completion of the AA.

1.5 Study Area

The study area (shown in Figure 1.2) was defined as the geographic area within the cities of Eden Prairie, Minnetonka, Hopkins, St. Louis Park, and southwestern and downtown Minneapolis bounded roughly by I- 494 to the south, the HCRRA right-of-way and I-494 to the west, TH 169

south of Excelsior Boulevard and I-35W south of downtown Minneapolis to the east, and I-394 to the north. Major elements of the study area are described below.

1.5.1 Land Use

Within the study area, a wide variety of development types and intensities exist. The study area encompasses the well-established high-density development of downtown Minneapolis, as well as quickly growing suburban communities. Downtown Minneapolis remains the largest traffic generator in the region with over 140,000 jobs, the HHH Metrodome, the Target Center, the Convention Center, the Guthrie Theater, the Walker Art Center, and Orchestra Hall. The remaining study area cities have grown quickly in recent years, developing employment concentrations in areas such as Opus and the Golden Triangle, which the Metropolitan Council identifies as the sixth largest employment concentration in the region with over 50,000 employees.

1.5.2 Transit Services

The study area is primarily served by Metro Transit, the largest transit provider in the region, and SouthWest Metro Transit, an opt-out (independent) transit provider serving Eden Prairie, Chanhassen, and Chaska. Metro Transit provides express, limited-stop, and local bus service to the study area cities of Minneapolis, St. Louis Park, Hopkins and Minnetonka. SouthWest Metro Transit provides express bus service between downtown Minneapolis and Eden Prairie, Chanhassen, and Chaska as well as local circulator service throughout Eden Prairie, Chanhassen, and Chaska.

A total of 49 bus routes, including 27 express, three limited stop, and 18 local routes, serve the study area. On an average weekday, nearly 28,000 commuters from the study area cities use transit to travel to downtown Minneapolis. Approximately 24,000 weekday study area commuters are carried on Metro Transit buses and 3,600 are carried on SouthWest Metro buses.

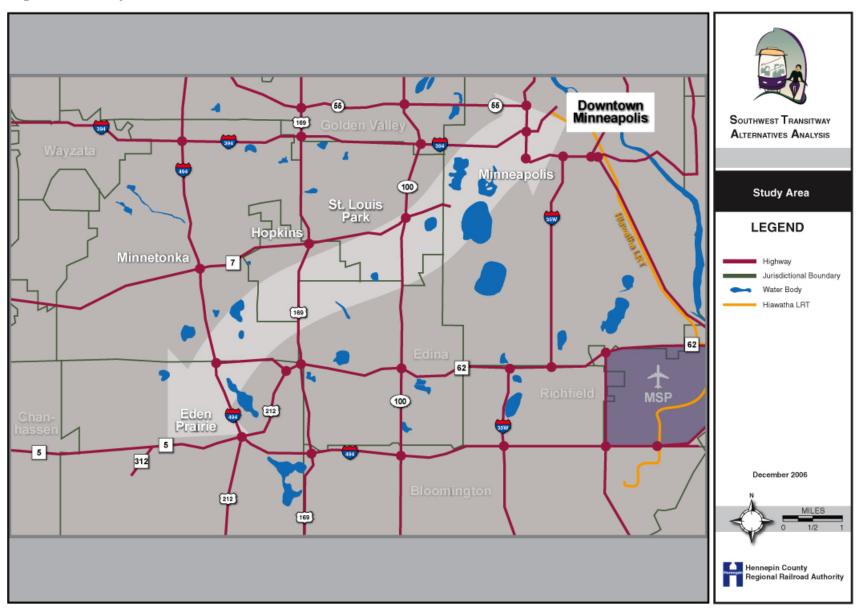
The region has also invested in park-and-ride facilities. While numerous park-and-ride lots are located throughout the study area, the largest single park-and-ride facility with over 1,000 spaces is the SouthWest Metro Transit Station located in Eden Prairie.

Through a partnership called Team Transit, Minnesota Department of Transportation (Mn/DOT), the Metropolitan Council, transit agencies, cities and counties cooperate to provide a system of advantages for transit vehicles on the region's roadway system. These advantages include authorized use of shoulders for bus operations during congested periods, ramp meter bypasses, bus-only freeway ramps, and High Occupancy Vehicle (HOV) lanes. Currently, there are 223 miles of shoulder bus operations, 88 ramp meter bypasses, at least 4 bus-only freeway ramps, and HOV lanes on I-394 and I-35W.

1.5.3 Roadways

The study area roadway network is a comprehensive system of interstates, major highways, arterials, collectors and local streets. Between 1990 and 2000, traffic growth on the major interstates and highways in the southwest metropolitan area increased by approximately 23 percent. With continued population and employment growth, traffic on the southwest metropolitan area major interstates and highways is expected to increase an additional 40% by 2020. This growth in demand for travel, in conjunction with limitations on the region's ability to expand existing roadways, will place a strain on mobility in the southwest metropolitan area.

Figure 1.2 Study Area



1.5.4 Bicycle and Pedestrian Trails

Within the study area, four interim use trails are located on land owned by the HCRRA. This land was purchased by the HCRRA to preserve it for a future transportation use. Those trails are commonly known as the Southwest LRT Trail, the Cedar Lake Trail, the Kenilworth Trail, and the Midtown Greenway Trail. Between downtown Minneapolis and Chaska, Three Rivers Park District categorizes the Southwest and Cedar Lake trails as the Minnesota River Bluffs LRT Regional Trail (between Hopkins and Chaska), and the Cedar Lake and Cedar Lake North LRT Regional Trails (between Hopkins and Minneapolis). These trails are operated and maintained by Three Rivers Park District, formerly Suburban Hennepin Parks. The Kenilworth and Midtown Greenway Trails are operated and maintained by the City of Minneapolis.

These trails are considered allowable "interim" uses according to the HCRRA's 1995 Land Management Plan. The ultimate vision for these corridors is a user-friendly, multi-modal corridor serving the needs of transit riders while accommodating pedestrians and bicyclists. Through the cities of Eden Prairie, Minnetonka, Hopkins, and St. Louis Park, the HCRRA owns approximately of 100 feet of right-of-way along the Southwest, Kenilworth, Cedar Lake and Midtown corridors. One notable exception is a small portion of the Kenilworth Corridor where the HCRRA right-of-way narrows to approximately 62 feet. Typically a trail requires 10 to 14 feet of space and two tracks of LRT or two lanes of BRT require 30 to 35 feet of space. Either LRT or BRT and a trail could be accommodated in 60-100 feet of right-of-way width.

According to the *Rails-to-Trails Conservancy*, trails exist adjacent to active rail lines in over 60 areas in the United States, including a number of areas in Minnesota. Within the study area, rails and trails currently co-exist in the Kenilworth, Cedar Lake, and portions of the Southwest Corridor. The shared use of these corridors has occurred since the mid-1990s with no incidents related to the operation of freight trains next to the trails.

The study area also includes portions of the Grand Rounds in Minneapolis, a National Scenic Byways system including trails and paths. Within the study area, the connecting Grand Rounds system includes trails for pedestrians and bicyclists around Brownie and Cedar Lakes, Lake of the Isles and Lake Calhoun in Minneapolis.

In addition to the trails noted above, the suburban cities in the southwest study area maintain local trail networks, with both on-road and off-road facilities.

1.5.5 Freight Rail Lines

Three active freight lines, the Canadian Pacific (CP), the Burlington Northern Santa Fe (BNSF), and the Twin Cities & Western (TCW), currently operate within the study area. These freight rail companies provide freight service to customers within the study area and the Twin Cities region, as well as to other regions of the country (Seattle, Washington; Aberdeen, South Dakota; and Kansas City, Missouri).

1.6 Previous Planning Studies

The Southwest Transitway was identified in the mid-1980s as a transit corridor, and studied for various transit modes including Light Rail Transit (LRT), Bus Rapid Transit (BRT), and Diesel Multiple Units (DMU). The following briefly describes the planning history of the Southwest Transitway.

1.6.1 Relevant Transportation Studies

Comprehensive Light Rail Transit (LRT) System Plan, Hennepin County, 1988 In 1988, the Hennepin County Regional Railroad Authority (HCRRA) completed a Comprehensive Light Rail Transit System Plan that identified the Southwest transitway from Hopkins to downtown Minneapolis as a future LRT corridor.

29th Street and Southwest Busway Feasibility Study, Hennepin County, February 2000 In 1999, Hennepin County and Metro Transit conducted a study to determine the feasibility of constructing and operating limited-stop, rapid-transit busways in the 29th Street corridor, now known as the Midtown Corridor, and in the southwest corridor from Hopkins to downtown Minneapolis (now a part of the Southwest Transitway). The study concluded that based solely on ridership forecasts and cost estimates, the busway was 'technically' feasible.

Vintage Rail Trolley Study, 29th Street and Southwest Corridors, Hennepin County, September 2000 In 2000, the Hennepin County Regional Railroad Authority (HCRRA) in partnership with the Metropolitan Council completed the Vintage Rail Trolley Study as an addendum to the 29th Street and Southwest Corridors Busway Feasibility Study. This study evaluated the feasibility of constructing and operating a vintage rail trolley as a precursor to future LRT service in the 29th Street (Midtown Corridor) and the Southwest Transitway from Hopkins to downtown Minneapolis.

Twin Cities Exclusive Busway Study, Mn/DOT, August 2000

In 2000, Mn/DOT conducted a study to ascertain the cost of constructing and operating an exclusive busway system in the metropolitan area by the year 2020. The study recommended three potential exclusive busway corridors for implementation by 2010: the Southwest Transitway (defined as Eden Prairie to downtown Minneapolis), the St. Paul Northeast Transitway (now known as the Rushline), and the Minneapolis Northwest Transitway (now known as the Bottineau Boulevard).

Southwest Rail Transit Study, 2003

In 2002, the HCRRA, in partnership with the cities of Eden Prairie, Minnetonka, Hopkins, St. Louis Park and Minneapolis, conducted the Southwest Rail Transit Study to determine if rail transit should be part of the transportation strategy for the southwest metropolitan area. The study evaluated twelve routes using light rail transit (LRT) and one using the diesel multiple unit (DMU) technology.

The study concluded that the following four LRT alternatives be retained for further analysis:

- LRT 1A: from TH 312 in Eden Prairie to downtown Minneapolis via the HCRRA property and the Kenilworth Corridor.
- LRT 2A: from the SouthWest Metro Transit Station in Eden Prairie to downtown Minneapolis via I-494, the HCRRA property, and the Kenilworth Corridor.
- LRT 3A: from the SouthWest Metro Transit Station in Eden Prairie to downtown Minneapolis via the Eden Prairie Center Mall, the Golden Triangle, Opus, downtown Hopkins, the HCRRA property, and the Kenilworth Corridor.
- LRT 4A: from downtown Hopkins to downtown Minneapolis via the HCRRA property and the Kenilworth Corridor.

In addition, the *Southwest Rail Transit Study* recommended that future studies should include an analysis of a rail transit connection in the Midtown Corridor, environmental impacts and mitigation measures, public involvement, and retention of the trails.

2030 Transportation Policy Plan (TPP), 2004

In 2004, the Metropolitan Council published the 2030 *Transportation Policy Plan* (TPP). The TPP incorporates the transportation policies and plans that support the Metropolitan Council's Regional Development Framework and describes the Council's approach to investments between now and 2030. The TPP was prepared pursuant to the federal Transportation Equity Act for the 21st Century (TEA-21) requirements and to Minnesota Statutes section 473.145 and 146. The TPP also includes the *2030 Transit Plan*, which identifies the Southwest Transitway as a Tier 2 Transitway for implementation after 2020.

2030 Transit Plan

The Metropolitan Council's 2030 Transit Plan is the region's long-range plan for transit investments. The Council goal is to double transit ridership by 2030 through doubling bus service and implementing transitways. The Transit Plan targets a 50% increase in regional transit ridership by 2020, and a 100% increase by 2030 through increased bus service and implementing a series of transitways in key regional corridors. The transitways may use light rail, commuter rail, or bus rapid transit technologies.

A system of transitways is a key component of this plan because transitways provide a travel time advantage over single-occupant automobiles, improve transit service reliability, and boost the potential for transit-oriented development, all goals and objectives of the Southwest Transitway Alternatives Analysis (AA).

The Council projects that implementing the transitway system could save approximately \$2 billion in local road and utilities costs, save \$2 billion through reducing time lost in congestion, reduce automobile trips by 245,000 annually in the region, reduce vehicle miles traveled by 550 million miles annually, save 27 million gallons of fuel, and reduce carbon monoxide emissions by 6,600 tons annually.

The overall plan to increase transit ridership includes the Southwest Transitway, identified as a future transitway on dedicated right-of-way. Figure 1.3 illustrates the Metropolitan Council's planned 2030 Transitway System.

1.6.2 Local Comprehensive Plans

The Southwest Transitway is referenced in the adopted local comprehensive plans of Hennepin County, Eden Prairie, Minnetonka, Hopkins, St. Louis Park, and Minneapolis. The following excerpts from current comprehensive plans pertain to the Southwest Transitway.

Eden Prairie

"Transit rail options for the City are anticipated, as Hennepin County acquired the old Chicago Northwestern Railroad right-of-way through Eden Prairie in 1990 for a future Light Rail Transit (LRT) System...Possible completion of the system would occur around 2015. Until LRT is developed, the right-of-way will be available for public use as a recreational trail. It is the stated goal of this Comprehensive Plan that the City will support regional transit initiatives such as Light Rail Transit and Commuter Rail." (Comprehensive Plan Vision Goals and Policies, December 17, 2002 – pages 2-16 through 2-18)

Minnetonka

"The City will work with existing and new employers located in the City to ensure that employers support transit use and carpooling by their employees." (Comprehensive Plan, April 1999 – pages 4-2 and 4-3)

Hopkins

"The City will encourage the HCRRA to construct the Minneapolis Southwest Corridor light rail transit line as soon as feasible, including the planned station in Hopkins. The City supports the proposed locations for the light rail transit station in Hopkins and will work with HCRRA on station planning and design. The City will publicize the expected location of the LRT station in the community in order to promote the use of this new travel mode and also to make the general public aware of the easy access Hopkins enjoys to the central city (and from the central city outward)." (Comprehensive Plan December 21, 1999 – Transportation Chapter, Subheading Light Rail Transit)

St. Louis Park

"A new location was recently identified as part of the Southwest Regional Trail connecting the Hopkins trailhead to the future Midtown Greenway in Minneapolis. The regional trail has been named 'LRT' this railroad corridor is designated as a future light rail transit route and may be developed as a dedicated busway in the interim." (Comprehensive Plan 2000-2010 – pages 1-46)

Minneapolis

"Light Rail Transit is considered a high priority investment for express transit corridors in both regional and city transit plans. Minneapolis will continue to aggressively pursue transit improvements in corridors which serve major transit origins and destinations, with the eventual goal of a region-wide rail system, including light rail (LRT) and commuter rail." (The Minneapolis Plan 2000 – Movement 1.8.1)

Hennepin County

"Hennepin County and its departments are committed to supporting a multitude of travel modes. The Hennepin County Regional Rail Authority will continue to lend strong support for the development and implementation of LRT and provide for interim bus, pedestrian and bicycle uses along their future LRT corridors." (Hennepin County Transportation Systems Plan, March 27, 2004 – Chapter 10, page 10-3)

1.7 Current Planning

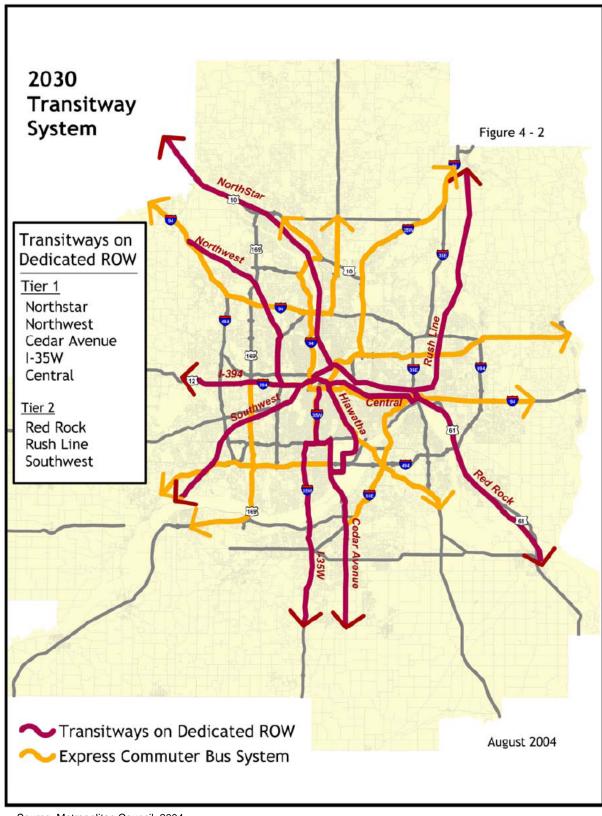
1.7.1 2030 Transportation Policy Plan (TPP), 2008

In 2008, the Metropolitan Council will be updating their systems plans including the TPP.

1.7.2 Local Comprehensive Plan Updates

Comprehensive plan updates are underway in all communities within the Twin Cities, for transmission to the Metropolitan Council in September 2008.

Figure 1.3 Metropolitan Council 2030 Transitway System



Source: Metropolitan Council, 2004