Southwest Transitway Alternatives Analysis



## Technical Memorandum No. 1 Purpose and Need

Prepared for: Hennepin County Regional Railroad Authority

Prepared by:

PB Americas, Inc. (PB)

January 2007

## **Table of Contents**

1.	Introduction	1
2.	Southwest Transitway Planning Context	5
3.	Demographics	7
4.	Impact on the Transportation System	10
6.	Southwest Transitway Goals and Objectives	
7.	Supporting Documentation	
Арре	endix	
	Transit Dependency in Southwest Transitway Communities	
	Land Use	
	Study Area Roadway Network	
	Study Area Transit Service	
	Metro Transit	
	SouthWest Metro Transit	
	Southwest Transitway Park-and-Ride Lots	
	Bicycle and Pedestrian Trails	
	Freight Railroads	
Refe	rences	

## List of Tables

8
9
9
15
16
34
34
37
40
41

## List of Figures

Figure 1 Study Area	2
Figure 2 Travel Demand Corridor	13
Figure 3 Analysis Districts in the Travel Demand Corridor	14
Figure 4 Total Home-Based Work Trip Attractions (per Square Mile), 2005	18
Figure 5 Total Home-Based Work Trip Attractions (per Square Mile), 2030	. 19
Figure 6 Origins of Home-Based Work Trips (per Square Mile) to Downtown	
Minneapolis, 2005	20
Figure 7 Origins of Home-Based Work Trips (per Sqaure Mile) to Downtown Minneapolis, 2030	21
Figure 8 Origins of Home-Based Work Trips (per Square Mile) to the Golden Triangle 2005	, 22
Figure 9 Origins of Home-Based Work Trips (per Square Mile) to the Golden Triangle 2030	, 23
Figure 10 Origins of Home-Based Work Trips (per Square Mile) to Opus, 2005	24
Figure 11 Origins of Home-Based Trips (per Square Mile) to Opus, 2030	25
Figure 12 2000 & 2030 PM Peak Hour Travel Times from Eden Prairie	27
Figure 13 2000 & 2030 PM Peak Hour Travel Times from Minneapolis	28
Figure 14 2000 & 2030 PM Peak Hour Travel Times from St. Louis Park	29
Figure 15 Transitway System Map	31

#### APPENDIX

Figure A-1	Land Use Percentages within Study Area Communities	.35
Figure A-2	Transit Advantages for Southwest Study Area	.38
Figure A-3	Southwest Transitway Park-and-Ride Lots	.42

### 1. Introduction

#### Purpose

This technical memorandum documents the methodology, assumptions, and results of the identification of the Purpose and Need task for the *Southwest Transitway Alternatives Analysis (Southwest Transitway AA)*.

#### Background

The Hennepin County Regional Railroad Authority (HCRRA) was established to acquire abandoned freight rail corridors to preserve them for transportation uses and to conduct rail transit planning. In keeping with that mission, HCRRA commissioned an Alternatives Analysis for the Southwest Transitway to identify, analyze, and compare the benefits, costs and impacts of a range of transit options to determine a locally preferred course of action.

The Southwest Transitway study area includes the Cities of Eden Prairie, Minnetonka, Hopkins, St. Louis Park, as well as portions of southwest and downtown Minneapolis (Figure 1).

This technical memorandum documents the changing demographics, travel behavior and resulting transportation problems in the study area and region. It describes the proposed strategy for managing the region's transportation system. It also discusses the purpose and need for the project and identifies the goals and objectives for a proposed Southwest Transitway.

#### **Summary Problem Statement**

The Southwest Transitway study area encompasses many features of Minnesota's famed quality of life. Its attractiveness has produced, and is projected to continue to produce population and employment growth that overloads the area's regional highways. Congestion has led to lengthened travel times for both drivers and transit users. In response, the region invested in highway capacity and operational improvements along with express and local bus transit service, accomplishing what it can within fiscal and environmental constraints.

The Metropolitan Council (Council) projects the Twin Cities metropolitan area will add nearly 40 percent more people and jobs by 2030. According to the Council, by 2030 Southwest cities will account for 17 percent of all regional residents, 18 percent of regional households, and 25 percent of all regional employment.

#### Figure 1 Study Area



Source: Parsons Brinckerhoff, 2006.

Current and programmed roadway improvements to the regional highway network notwithstanding, the Metropolitan Council projects that the network will not keep pace with travel demand. Transit service in the corridor, while extensive, operates primarily on the congested roadway system. To maintain mobility, the transportation system must find additional ways to effectively get people to their destinations and sustain business activity.

In the Metropolitan Council's 2004 survey of metropolitan area residents, Twin Cities residents identified transportation as the most important problem in the region, for the fourth year in a row. When queried further, residents identified three primary solutions: optimizing the existing system, adding more freeway lanes, and expanding the rail system. These proposed solutions reflect the region's transportation plans, and projects like a Southwest Transitway are seen as part of the solution.

In 2002 the HCRRA commissioned a random sample separate survey of Southwest corridor residents to better understand their views on the area's transportation problems and potential solutions. The survey was conduced by CJ Olson, Inc. According to the results of the survey, 66 percent surveyed believed that a combination of both highway improvements and transit will effectively address congestion within the Southwest metropolitan area. In addition, over 71 percent of those surveyed supported light rail transit (LRT) as the best solution for dealing with their transportation problems.

The intent of the Southwest Transitway is to improve mobility, further develop multi-modal options and increase transportation choices for the traveling public. The Southwest Transitway AA will define, evaluate, and recommend selection of a transit option which meets the goals established by the Southwest Transitway communities. Those goals are to:

- Improve mobility;
- Provide a cost-effective, efficient travel option;
- Protect the environment;
- Preserve and protect the quality of life in the study area and the region; and
- Support economic development

#### **Study Management**

In 1980, The Hennepin County Regional Railroad Authority (HCRRA) was established as a separate political entity by county resolution in accordance with Minnesota law. HCRRA's purpose is to acquire abandoned freight rail corridors in order to preserve them for future transportation use and to conduct transit planning. In this capacity, the HCRRA is leading the effort for the Southwest Transitway Alternatives Analysis.

The HCRRA maintains over 52 miles of former freight rail corridors, which accommodate 37 miles of bicycle and pedestrian trails, and leases 80 properties to private and public entities. The seven members of the Hennepin County Board of Commissioners comprise the Authority.

Two committees, the Southwest Transitway Policy Advisory Committee (PAC) and the Southwest Transitway Technical Advisory Committee (TAC), were established to provide guidance on policy and technical issues, respectively, throughout the Southwest Transitway AA.

#### Southwest Transitway Policy Advisory Committee (PAC)

The Southwest Transitway PAC is composed of elected, government and organizational officials from the following:

- The cities of Eden Prairie, Minnetonka, Hopkins, St. Louis Park, Edina and Minneapolis
- Hennepin County
- Metropolitan Council
- Metro Transit and SouthWest Metro Transit
- Three Rivers Park District
- Twin West Chamber and Eden Prairie Chamber of Commerce

Southwest Transitway PAC members provide policy guidance throughout the study process. Members met at project milestones in the previous study and will continue to do so with this alternatives analysis to facilitate project analyses and deliverables.

#### Southwest Transitway Technical Advisory Committee (TAC)

The Southwest Transitway TAC is composed of technical staff from the following:

- The cities of Eden Prairie, Minnetonka, Hopkins, St. Louis Park, Edina and Minneapolis
- Hennepin County
- Metropolitan Council
- Metro Transit and SouthWest Metro transit
- Three Rivers Park District
- The Minnesota Department of Transportation (Mn/DOT)
- Twin Cities & Western Railroad Company

Southwest Transitway TAC members provide technical assistance and consideration throughout the study process. Members met monthly throughout the development of this alternative analysis to review technical work products and provide technical assistance. All project deliverables are reviewed by the Southwest Transitway TAC. The Southwest Transitway TAC also develops recommendations on the goals and objectives, alternative alignments, the screening process and the preferred alternative.

## 2. Southwest Transitway Planning Context

#### Southwest Transitway History

The Southwest Transitway study area has a rich history within the Twin Cities metropolitan area. As early as 1988, the Southwest Transitway was considered a potential LRT corridor serving communities from Minneapolis to Hopkins. The following briefly describes the planning history of the Southwest Transitway:

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

29<sup>th</sup> Street and Southwest Busway Feasibility Study, Hennepin County, February 2000 In 1999, Hennepin County and Metro Transit initiated a study to determine the feasibility of constructing and operating a limited-stop, rapid-transit busway located within the HCRRA's Southwest Corridor from Hopkins to Minneapolis.

The study concluded that based on the ridership forecast and cost estimates that the busway was 'technically' feasible.

#### 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 by the year 2020. Findings recommended three potential exclusive busway corridors for implementation by 2010. These three potential corridors were the Southwest Corridor, St. Paul Northeast Corridor and the Minneapolis Northwest Corridor.

#### Southwest Rail Transit Study, 2003

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

The study concluded that study should continue for LRT for the following four alternatives:

- 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.

#### 2030 Transportation Policy Plan (TPP),2004

In 2004, the Metropolitan Council published the 2030 Transportation Policy Plan, which details policies and strategies to mitigate congestion and improve the mobility of the Region over the next 30 years. The TPP, also includes the 2030 Transit System Plan, which identifies the Southwest Transitway as a Tier 2 Transitway for implementation post 2020.

#### **Local Comprehensive Plans**

Each of the study area communities has referenced the Southwest Transitway within their local comprehensive plans. The following are excerpts from these comprehensive plans pertaining 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)* 

#### 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 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 central city (and from the central city outward)." (Comprehensive Plan December 21, 1999)

#### 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 commercial rail." *(The Minneapolis Plan 2000)* 

#### 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)* 

#### 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)* 

#### 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 03/27/2004)

## 3. Demographics

During the ten year period between 1990 and 2000, the Twin Cities Metropolitan Area experienced strong growth, which is anticipated to continue in the future. According to the US Census, this region added 430,000 new residents and 290,000 new jobs between 1990 and 2000. This equates to a 17 percent increase in population and a 23 percent increase in jobs.

By 2030, the Metropolitan Council projects another 37 percent increase in population and 36 percent increase in jobs for the region. In raw numbers, during the 30 year period between 2000 and 2030, the region anticipates adding nearly one million people and over half a million jobs. This sustained growth will continue to have a major impact on the region's transportation system.

#### **Study Area Population**

#### 1980-1990

While most study area communities increased in population from 1980 to 1990, it was Eden Prairie and Minnetonka that experienced the most substantial growth. From 1980 to 1990, Eden Prairie nearly tripled its population while Minnetonka had increased its population by over a quarter.

#### 1990-2000

All study area communities experienced additional population growth between 1990 and 2000. Eden Prairie experienced the most gain with a 40 percent increase in population. These population changes are further detailed in Table 1.

#### 2000-2030

This growth in population is expected to continue over the next thirty years. Between 2000 and 2030, the population for all study area communities is projected to increase, which is depicted in Table 2. St. Louis Park and Eden Prairie are expected to have the strongest percent growth with 17 percent and 15 percent, respectively.

Locality	1980	1990	Percent Change	2000	Percent Change
Eden Prairie	16,300	39,300	141%	54,900	40%
Minnetonka	38,700	48,400	25%	51,000	5%
Hopkins	15,300	16,500	8%	17,000	3%
St. Louis Park	42,900	43,800	2%	44,100	1%
Minneapolis	37,100	368,400	-1%	383,000	4%
Total	484,200	516,400	7%	550,000	7%

#### Table 1 Study Area Population Trends (1980 – 2000)

Source: U.S. Census and Metropolitan Council

#### Table 2 Projected Study Area Population (2000 – 2030)

Locality	2000	2030	Percent Change
Eden Prairie	54,900	63,000	15%
Minnetonka	51,000	53,500	5%
Hopkins	17,000	18,900	11%
St. Louis Park	44,100	51,500	17%
Minneapolis	383,000	435,000	14%
Total	550,000	621,900	13%

Source: U.S. Census and Metropolitan Council

#### **Study Area Employment**

#### 1990-2000

According to the U.S. Census, between 1990 and 2000 the Twin Cities Metropolitan Area added approximately 290,000 new jobs, which increased the job base by 23 percent. During this same period, the study area cities' share of the added jobs was over 43,000 new jobs, increasing their job base by 17 percent.

Nearly half of all jobs in the study area are located in downtown Minneapolis, which is currently the highest traffic generator in the region. Downtown Minneapolis is home to many corporate headquarters, including Target Corporation, American Express, Wells Fargo and Excel Energy. It is also the cultural and entertainment center of the region, with the Guthrie Theatre, Walker Art Center, Orchestra Hall, the HHH Metrodome, and the Target Center Arena. The Downtown Council estimates that downtown Minneapolis will add 40,000 new jobs to its 2004 employment base of 162,000 jobs.

The remaining study area employment is dispersed throughout the other study area cities. Concentrations are located in the Park Commons and Wooddale areas of St. Louis Park, downtown Hopkins, the Opus development in Minnetonka, and the Golden Triangle and Eden Prairie Center Mall areas of Eden Prairie.

Study area communities employment trends are detailed in the Table 3.

Locality	1990	2000	Percent Change
Eden Prairie	36,100	49,400	37%
Minnetonka	35,500	50,500	42%
Hopkins	12,300	11,800	-4%
St. Louis Park	36,800	40,700	11%
Minneapolis - CBD	128,400	139,800	9%
Total	249,100	292,200	17%

#### Table 3 Study Area Employment Trends (1990 – 2000)

Source: U.S. Census and Metropolitan Council

#### 2000-2030

This employment growth is expected to continue. By 2030, the Metropolitan Council projects adding over 500,000 jobs within the region, which is a 36 percent increase.

All Southwest study area communities are projected to experience job growth during the next thirty years. As detailed in Table 4, a 38 percent increase is projected for Hopkins, with substantial gains projected for other study area communities as well.

#### Table 4 Projected Study Area Employment Projections (2000 – 2030)

Locality	2000	2010	Percent Change	2020	Percent Change	2030	Percent Change (2020 – 2030)	Percent Change (2000 – 2030)
Eden Prairie	49,400	55,000	11%	62,000	13%	65,000	5%	32%
Minnetonka	50,500	53,800	7%	56,000	4%	58,600	5%	16%
Hopkins	11,800	13,600	15%	14,800	9%	16,300	10%	38%
St. Louis Park	40,700	46,200	14%	50,500	9%	52,500	4%	29%
Minneapolis	301,800	317,000	5%	332,500	5%	346,500	4%	15%
Total	454,200	485,600	7%	515,800	6%	538,900	5%	84%

Source: Metropolitan Council

## 4. Impact on the Transportation System

Over the past 30 years changing demographic and development patterns in the region have resulted in increased travel. The excess roadway capacity created in the 1970s to accommodate projected population growth has been quickly depleted as people travel more than had been forecasted. The result has been increased congestion, increased delays, more pollution, and an increase in the economic costs of operating a business in the region. With constraints on transportation funding and the social and environmental consequences of roadway expansion, congestion is anticipated to continue to grow.

A number of factors explain the increase in travel demand within this region. These include increases in the number of households, the average number of vehicles per household, the number of multiple-worker households, and the dispersion of jobs and housing throughout the region.

Since the mid-1980s vehicle miles of travel (VMT) has outpaced the population growth in this region. In 1970, people made an average of 2.7 daily trips per capita, with an average trip length of just less than 5 miles. By 2000, the average had increased to 4.2 daily trips per capita and the average trip length had increased to 6.5 miles. The Metropolitan Council projects this trend to continue through 2030, with vehicle miles of travel increasing by 51 percent over the Year 2000 while population increases by 17 percent. <sup>1</sup>

In 1970, the regional road system experienced 10 congested lane miles; by 2000 that number rose to 183 congested lane miles. The Minnesota Department of Transportation (Mn/DOT) projects that by 2025 that number will more than double to 491 congested lane miles. The Texas Transportation Institute's 2004 Urban Mobility Report lists Minneapolis as experiencing a faster increase in delay than its population group average from 1982 to 2002. According to Mn/DOT, the demand for travel in the southwestern metro area has increased substantially since the 1980s and is expected to continue to increase significantly. Between 1980 and 2000, traffic on the major interstates and highways in the Southwest study area increased by between 79 and 150 percent.

The increase in travel demand has impacts on regional residents. According to the Metropolitan Council, Twin Cities' residents spent a total of 54.6 million hours in roadway congestion in 2002, which is the equivalent of approximately 6,200 years or \$740 million in lost time. When including fuel for each traveler in the peak period, this amounts to an overall cost to the region of \$970 million.

<sup>&</sup>lt;sup>1</sup>In the year 2000, daily person-trips for all modes totaled 11,670,000, of which 10,800,000 were motorized trips. This was an increase of 16% from 1990. Daily person-trips are expected to grow to 15 million by 2030. Total vehicle-miles traveled (VMT) is expected to increase to 86 million in 2030 from 57 million in 2000, which is a 51% increase. The 2000 Travel Behavior Inventory (TBI) found that 93% of the trips within the metro area both begin and end in the region, demonstrating the travel demand within the region.

Although the region has implemented several transit advantages to include bus shoulder lanes, meter ramp bypasses and HOV lanes, optimizing travel times remain elusive. Buses within the Southwest study area still share portions of their travel with mixed traffic. Without a dedicated transitway, journey time savings are difficult to achieve.

#### **Travel Demand and Patterns**

According to an analysis of the Metropolitan Council's 2005 Travel Demand Model, approximately one-quarter of all trips in the Twin Cities Metropolitan area currently begin or end within the Southwest Transitway's demand area. The demand area produces and attracts a combined total of 3.4 million daily trips in 2005; this represents just over 27% of the approximately 12.9 million daily trips in the 7-county Twin Cities Metropolitan Area. In the 2030 Metropolitan Council Travel Demand Model, the demand area continues to capture approximately a quarter of all metropolitan area trips. Roughly 24% (or 3.9 million) of the 16.3 million daily regional trips in the 2030 model either begin or end within the demand area.

The analysis also examined existing and future trip-making patterns, or travel demand, (referred to as the demand area in some sources). This analysis showed that, in both 2005 and 2030, a substantial amount of trips that begin within the demand corridor also end in the demand corridor.

For this analysis, the demand corridor (shown in Figure 2) consists of traffic analysis zones within a varying buffer zone around the four alignments identified in the *Southwest Rail Transit Study*. Beginning at the Southwest corner of the transitway, the buffer zone extends 5 miles on either side of the four alignments, and narrows as the alignments approach downtown Minneapolis. This buffer was reduced near downtown Minneapolis based on the assumption that the downtown area would serve as either the beginning or the end for most trips along the Southwest Transitway. This assumption was based on relatively high numbers of trip origins and destinations that occur within downtown Minneapolis.

Trips are defined as one-way trips made by all persons throughout the day using all modes (including transit and non-motorized travel). Trips originating in a particular area are referred to as trip productions; trips ending in a particular area are referred to as trip attractions. The analysis looked at two types of trips: the total number of daily trips and the number of daily home-based work trips. Total trips encompass trips made for all purposes (including both work and non-work trips). Home based works trips consist solely of trips that occur between the traveler's home and workplace, in either direction (e.g. work-to-home and home-to-work). Home-based work trips were differentiated from other trips since work commutes are likely to constitute a major market for transit trips, particularly during peak periods.

In the 2005 model, the demand corridor produces approximately 2.2 million trips and attracts roughly 2.6 millions trips. These demand corridor productions and attractions increase to 2.5 million and 2.9 million, respectively, in the 2030 model. At a regional level, this means that 17% of all 2005 trips in the 7-county area begin in the demand

corridor, and 20% end within the demand corridor. 2030 trips show a similar pattern, with 15% of all regional trips originating in the demand area, and 18% ending in the demand area.

A large amount of these trips both begin and end within the demand corridor. In both the 2005 and 2030 models, 65% of all trips originating in the demand corridor have destinations within the corridor. In 2005, of the 2.2 million trip productions in the demand corridor, 1.45 million have attractions within the corridor. In 2030, the number of trips with both productions and attractions within the demand corridor increases to over 1.6 million.

To further distinguish trip making patterns within the corridor, the analysis also examined the travel demand for three districts within the corridor: downtown Minneapolis, the Golden Triangle and the Opus Development in Minnetonka. These areas represented large concentrations of employment, as determined by an examination of home-based work attractions. Figure 3 shows the different districts examined in the analysis.

#### Figure 2 Travel Demand Corridor



Source: Parsons Brinckerhoff



Figure 3 Analysis Districts in the Travel Demand Corridor

Source: Parsons Brinckerhoff

Table 5 summarizes 2030 productions and attractions for total trips and home-based work trips within three subsets: 1) the entire demand corridor; 2) each district within the corridor; and 3) the entire region. The table includes only 2030 numbers because travel patterns between the three subsets are similar for both 2005 and 2030 model trips; although the magnitude of 2030 trips is higher, the distribution of travel between each district, the study area, and the rest of the region is similar to the distribution of 2005 trips.

In Table 5, the sum of the horizontal rows identifies the number of attractions by district. The sum of the vertical columns represents the number of productions by district. The shaded areas represent the attractions that begin within the study area or the trip productions that end within in the demand corridor. The numbers in bold type signify trips with both productions and attractions within demand corridor.

Attractions			Golden	Rest of	Outside of	Total Within	Total Production
Productions	Downtown	Opus	Triangle	Corridor	Corridor	Corridor	s
Downtown	126,800	400	500	50,600	135,500	178,300	313,800
Opus	600	2,200	400	8,900	5,900	12,100	18,000
Golden Triangle	200	200	1,700	4,500	4,200	6,600	10,800
Rest of Corridor	124,200	18,300	24,000	1,248,200	737,700	1,414,600	2,152,300
Outside Corridor	398,200	18,800	25,500	939,500	12,410,700	1,382,100	13,792,800
Total Within Corridor	251,800	21,100	26,500	1,312,200	883,300	1,611,600	2,494,900
Total Attractions	650,000	40,000	52,000	2,251,700	13,294,000	2,993,600	16,287,700

#### Table 5 Daily Total Trips, 2030

Source: Parsons Brinckerhoff, Data from Metropolitan Council Travel Demand Model

The Downtown Minneapolis district accounts for a substantial portion of these trips with both productions and attractions within the demand corridor. In both the 2005 and 2030 models, roughly 40% of all downtown Minneapolis attractions also originate within the demand corridor. In 2005, this means that just over 200,000 of the 520,000 downtown Minneapolis trip attractions are produced within the demand corridor. In 2030, 252,000 of the 650,000 trips attracted to the downtown are produced in the demand corridor.

The majority of trips attracted to the Golden Triangle and the Opus also originate within the demand corridor. In the 2005 and 2030 models, over half of all trips attracted to the

Golden Triangle and to Opus are also produced within the demand corridor. In 2030, out of 40,000 attractions to the Opus district, 21,100 are produced in the demand corridor. For that same year, 26,500 of the 52,000 Golden Triangle trip attractions are produced within the demand corridor.

The analysis of home-based work trips showed similar results; a majority of the trips that begin within the demand corridor also end within the demand corridor. Table 6 summarizes the home-based work productions and attractions for each district.

Approximately 325,000 daily home-based work trips begin in the corridor in 2005; of these trips roughly 166,000 end in the demand corridor. In 2030, the number of demand corridor home-based work attractions increases to 349,000; nearly 195,000 of these trips end in the demand corridor.

The significant numbers of home-based work trips with both origins and destinations in the demand corridor is likely the result of the mixture of both housing and employment within the demand corridor. Dense concentrations of home-based work attractions are found within the Southwest demand corridor. As shown in Figures 4 and 5, which shows the home-based work trip attractions per square-mile for 2005 and 2030 respectively, high concentrations of work attractions form a radial pattern from downtown Minneapolis to the southwest. Much of this concentration lies within three districts analyzed: Opus, the Golden Triangle, and Downtown Minneapolis. In 2030, Figure 5 also shows growing employment density in Eden Prairie south of the beltway.

Attractions Productions	Down- town	Opus	Golden Triangle	Rest of Corridor	Outside of Corridor	Total Within Corridor	Total Productions
Downtown	10,000	100	100	3,500	11,800	13,700	25,500
Opus	200	100	100	1,000	1,200	1,500	2,700
Golden Triangle	<100	<100	<100	<100	<100	<100	<100
Rest of Corridor	42,700	4,500	8,000	124,300	141,400	179,700	321,000
Outside Corridor	177,500	8,000	13,500	236,600	1,670,900	435,700	2,106,600
Total Within Corridor	53,000	4,800	8,200	128,900	154,400	194,900	349,200
Total Attractions	230,500	12,800	21,700	365,500	1,825,300	630,500	2,455,800

#### Table 6 Daily Home-Based Work, 2030

Source: Parsons Brinckerhoff, Data from Metropolitan Council Travel Demand Model

Downtown Minneapolis alone accounts nearly half of all home-based work trip attractions within the demand corridor (176,000 in 2005 and 230,000 in 2030). Of these downtown trip attractions, nearly 22% of home-based work trips attracted to Downtown Minneapolis also originate with the demand corridor in both the 2005 and 2030 model.

Figures 6 and 7 illustrate, respectively, the 2005 and 2030 geographic distribution of trip productions per square mile for all regional home-based work trips attracted to downtown Minneapolis – in other words, where work trips to Downtown come from. As the map shows, high concentrations of downtown Minneapolis trip attractions are produced in the surrounding communities of South Minneapolis, St. Louis Park, and Hopkins in 2005.

In the 2030, this concentration increases in each of those cities, and spreads further southwest. Among the downtown home-based work trip attractions that are produced outside the demand corridor, communities immediately to the north, east and south show the highest concentration of downtown home-based work origins. In 2030, this demand also spreads out, especially in the communities to the north and southeast of the Minneapolis downtown area.

The Opus district attracts nearly 13,000 daily home-based trips in both the 2005 and 2030 models the Golden Triangle district attracts over 21,300 home-based work trips in 2005, and 21,800 in 2030. Forty percent of both the Opus and Golden Triangle home-based work attractions are also produced within the demand corridor.



Figure 4 Total Home-Based Work Trip Attractions (per Square Mile), 2005

Source: Parsons Brinckerhoff, Data from Metropolitan Council Travel Demand Model



Figure 5 Total Home-Based Work Trip Attractions (per Square Mile), 2030

Source: Parsons Brinckerhoff, Data from Metropolitan Council Travel Demand Model



## Figure 6 Origins of Home-Based Work Trips (per Square Mile) to Downtown Minneapolis, 2005

Source: Parsons Brinckerhoff, Data from Metropolitan Council Travel Demand Model



## Figure 7 Origins of Home-Based Work Trips (per Square Mile) to Downtown Minneapolis, 2030

Source: Parsons Brinckerhoff, Data from Metropolitan Council Travel Demand Model

Figures 8 and 9 illustrate, respectively, the 2005 and 2030 geographic distribution of trip productions per square mile for all regional home-based work trips attracted to the Golden Triangle district.



Figure 8 Origins of Home-Based Work Trips (per Square Mile) to the Golden Triangle, 2005

Source: Parsons Brinckerhoff, Data from Metropolitan Council Travel Demand Model

Both maps show high concentrations of downtown trips attractions produced within the demand corridor communities of South Minneapolis, St. Louis Park, Hopkins, Minnetonka and Eden Prairie.



Figure 9 Origins of Home-Based Work Trips (per Square Mile) to the Golden Triangle, 2030

Source: Parsons Brinckerhoff, Data from Metropolitan Council Travel Demand Model

Figures 10 and 11 illustrate respectively, the 2005 and 2030 geographic distribution of trip productions per square mile for all regional home-based work trips attracted to the Opus district. As the maps illustrate, high concentration of home-based work trips to the Opus district originate within demand corridor cities, especially cities north of Opus, such as Minneapolis, Minnetonka and Hopkins.



Figure 10 Origins of Home-Based Work Trips (per Square Mile) to Opus, 2005

Source: Parsons Brinckerhoff, Data from Metropolitan Council Travel Demand Model



Figure 11 Origins of Home-Based Trips (per Square Mile) to Opus, 2030

Source: Parsons Brinckerhoff, Data from Metropolitan Council Travel Demand Model

#### **Future Conditions**

For major roadway segments in the Southwest Transitway study area, average annual daily traffic is forecasted to grow by 49 percent between 2000 and 2020. As daily travel

for work, education, shopping and other purposes continues to outpace the capacity of the transportation system, congestion and delay will continue to result.

Travel times greater than 60 minutes are anticipated to substantially increase by 2030. In 2000, travelers from Southwest Transitway study area communities could reach many destinations within the metro area within 30 to 60 minutes. Figures 12-14, which follow, illustrate the projected decline in accessibility for travel to these same destinations by 2030 from Minneapolis, St. Louis Park and Eden Prairie.

Roadway improvements have not kept pace with transportation demand. The result has been increased congestion, delay, pollution, and business costs. This trend is projected to continue, exacerbating the problem. According to both the Metropolitan Council and Mn/DOT, funding for transportation, both roadways and transit, will be insufficient to meet the demand. Planned and funded improvements include the widening of I-494, new interchanges along Highway 169, reconstruction of Highway 100, and bridge improvements along Shady Oak Road over the HCRRA Southwest Transitway. Even with those capacity increases, Mn/DOT projects traffic will increase on Southwest area highways by 49 percent, adding 826,000 vehicles per day to the 1.7 million vehicles on study area roads in 2002.

#### • Transportation System Plan (TSP)

Mn/DOT Metro Division's *Transportation System Plan* (TSP) is the long-range plan for maintaining and improving the Twin Cities highway system. The TSP, currently being updated to 2030, is a comprehensive planning foundation upon which the system and strategy decisions are made. The TSP is intended to bridge the gap between the policy direction contained in the Metropolitan Council's TPP and specific roadway projects. In its TSP to 2025, Mn/DOT anticipates that expansion and improvement projects on the metro area highway system would total more than \$2.4 billion between 2001 and 2025. Mn/DOT also documented that the metropolitan area's transportation needs total \$9 billion between 2001 and 2025.

#### • 2030 Transit System Plan

The Metropolitan Council's *2030 Transit System Plan* is the region's long-range plan for transit investments. The Council 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 corridor. The transitways may use light rail, commuter rail, or bus rapid transit technologies.

Figure 12 2000 & 2030 PM Peak Hour Travel Times from Eden Prairie



Figure 13 2000 & 2030 PM Peak Hour Travel Times from Minneapolis



#### Figure 14 2000 & 2030 PM Peak Hour Travel Times from St. Louis Park



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 AA.

The Council projected that implementing the transitway system could save approximately \$2 billion in local roads and utilities, 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 miles annually, save 27 million gallons of fuel, and reduce carbon monoxide emissions by 6,600 tons annually.

The overall planned increases include the Southwest Transitway, identified as a future transitway on dedicated right-of-way. Figure 15 illustrates the Metropolitan Council's planned 2030 Transitway System.

#### 5. Southwest Transitway Need

In 2005, just over 27 percent of the Twin Cities regional daily trips occur within the seven-county metropolitan area. With Southwest Transitway communities projected to encompass 25 percent of the regional employment base by 2030, the Twin Cities region needs to maintain the ability to travel to, from, and through Southwest Transitway communities efficiently, and at acceptable cost. The five communities which make up the Southwest Transitway study area need to accommodate additional transportation capacity while preserving the corridor's business advantages, environmental features, and quality of life for residents.

#### 6. Southwest Transitway Goals and Objectives

To address these needs, the cities and agencies participating in planning for the corridor identified goals and objectives for the Southwest Transitway AA. On February 11, 2005, the Southwest Transitway Technical Advisory Committee (TAC) developed a proposed set of goals and related objectives for consideration by the Southwest Transitway Policy Advisory Committee (PAC). On March 2, 2005, the PAC unanimously approved the following goals and objectives for a Southwest Transitway. These goals and objectives serve as the foundation for evaluating the proposed alternatives.

The Southwest Transitway AA Goals are:

- 1. Improve Mobility
- 2. Provide a Cost-Effective, Efficient Travel Option
- 3. Protect the Environment
- 4. Preserve and Protect the Quality of Life in the Study Area and the Region
- 5. Support Economic Development





Source: Metropolitan Council, 2004

In addition, the PAC decided to prioritize the goals into two tiers. Tier one goals are those that must be achieved in order for a project to move forward. Tier two goals are those that should be achieved once it is determined a viable project exists. The tier one goals are Improve Mobility and Provide a Cost-Effective, Efficient Travel Option. The tier two goals are Protect the Environment, Preserve and Protect the Quality of Life in the Study Area and the Region, and Support Economic Development.

These goals and objectives will then be used to assist in the development of alternatives to address transportation needs. They also will form the basis for the development of the evaluation measures which, when applied to the alternatives, lead to the selection of a local preferred course of action.

#### **Improve Mobility**

#### **Objectives**:

- Provide a travel option competitive with other modes in terms of journey time
- Provide a reliable travel option that improves mobility throughout the day
- Provide a travel option that serves population and employment concentrations
- Provide a travel option that adds capacity and access to the regional and local transportation system
- Provide a travel option that serves people who depend on transit
- Provide a travel option that enhances pedestrian and bicycle activity and access to community nodes

#### Provide a Cost-effective, Efficient Travel Option *Objectives:*

- Provide a travel option with acceptable capital and operating costs
- Provide a travel option that efficiently and effectively moves people
- Provide a travel option that integrates efficiently with other modes and avoids significant negative impacts to the existing roadway system
- Provide a travel option that supports regional system efficiency

#### **Protect the Environment**

#### **Objectives:**

- Provide a travel option beneficial to the region's air quality
- Provide a travel option that avoids or minimizes alterations to environmentally sensitive areas
- Provide a travel option that supports efficient, compact land use that facilitates accessibility
- Provide a travel option that avoids significant environmental impacts on adjacent properties, such as noise and vibration

## Preserve and Protect the Quality of Life in the Study Area and the Region *Objectives:*

- Provide a travel option that contributes to the economic health of the study area and region through improving mobility and access
- Provide a travel option that is sensitively designed with respect to existing neighborhoods and property values
- Provide a travel option that protects and enhances access to public service and recreational facilities
- Provide a travel option that supports sound planning and design of transit stations and park-and-ride lots
- Provide a travel option that enhances the image and use of transit services in the region

#### Support Economic Development *Objectives:*

- Provide a travel option that supports economic development and redevelopment with improved access to transit stations
- Provide a travel option that supports local sustainable development/redevelopment goals
- Provide a transportation system element that facilitates more efficient land development patterns and saves infrastructure costs
- Provide a travel option that accommodates future regional growth in locations consistent with local plans and the potential for increased ridership

These goals and objectives will be utilized at future points in the Southwest Transitway AA to assist in the evaluation of the study alternatives.

## 7. Supporting Documentation

The Appendix to this document includes supporting information on land use, transit service, and other transportation characteristics of the corridor.

## Appendix

### **Transit Dependency in Southwest Transitway Communities**

Based on current Census data, Minneapolis is home to the highest percentage of zerocar households. Hopkins and St. Louis Park have the highest percentages of elderly residents; while Hopkins has the highest percentage of mobility impaired residents.

Community	Percent Elderly	Percent Mobility Limitation	Percent Zero-car Households
Eden Prairie	5%	1%	1%
Hopkins	15%	4%	11%
Minneapolis	9%	3%	23%
Minnetonka	14%	2%	3%
St. Louis Park	15%	3%	8%

#### Table A-1 Study Area Characteristics as a Percent of Community Population

Source: United States Census Bureau, 2000 Census

Another indicator used to identify the transit dependent population is the number of vehicles per household. Based on the results of the Metropolitan Council's Travel Behavior Inventory Home Interview Survey (2000), the number of households by vehicle availability and county was identified. The mean number of vehicles per household in 2000 for Hennepin County excluding Minneapolis, and for Minneapolis only, is 1.83 and 1.34 respectively. Table A-2 reports the results for Hennepin County.

## Table A-2 Number of Households by Vehicle Availability for Hennepin County

Vehicles Per Household	Hennepin County excluding Minneapolis	Minneapolis
0	8,064	28,644
1	104,548	67,990
2	143,900	51,841
3	36,957	10,421
4	9,522	2,964
5+	3,448	490
Total	306,439	162,350
Mean # Vehicles	1.83	1.34

Source: Metropolitan Council Travel Behavior Inventory Home Interview Survey, 2000

## Land Use

While various types of land development are present in each of the five study area communities, single family residential land use predominates. In all cases, commercial and industrial properties comprise less than 15 percent of each city's overall land use, although the Southwest Transitway study area includes several commercial and industrial areas along transportation routes. Based on the regionally defined land use categories, Figure A-1 illustrates the land use categories present within the study area



#### Figure A-1 Land Use Percentages within Study Area Communities

Source: Metropolitan Council, Land Use Summaries, 2005

Each Southwest Transitway city has pursued development and redevelopment planning for areas within its boundaries, including several areas within the Southwest Transitway study area. Notable areas for redevelopment potential include the industrial corridor paralleling downtown St. Louis Park and Hopkins, the Golden Triangle area of Eden Prairie, and portions of the Opus development in Minnetonka.

## **Study Area Roadway Network**

The roadway network in the Southwest Transitway study area is a comprehensive system of urban interstate freeways, major highways, arterial roadways and local collector and access streets.

As detailed in Table A-3, the Southwest study area has roadway segments that experience substantial annual average daily traffic (AADT), which is projected to continue. For example, the roadway segment of I-494 and Hwy 169 east had an AADT of 106,000 in 2002, which is expected to increase 98% to 210,000 by 2030. Another roadway segment expected to have a substantial increase is I-494 and 62 south with an AADT of 69,000 in 2002, which is project to increase 96% to 135,000 by 2030.

Overall, AADT for roadway segments in the Southwest study area, as shown in Table A-3, is forecasted to grow by 49%. As with other growing areas within the Twin Cities, transportation demand continues to increase out pacing available roadway capacity.

#### **Study Area Transit Service**

The Twin Cities has an extensive transit system composed of a regional transit agency and opt-out agencies that together provide express and local bus service. Two transit operators currently provide transit service to study area communities. These are Metro Transit and SouthWest Metro Transit. Metro Transit is the regional transit agency within the Metropolitan Council, and is one of the largest transit agencies in the United States. Metro Transit provides express, limited-stop, and local bus service throughout the metropolitan area. Metro Transit also operates the Hiawatha Light Rail Transit line within Hennepin County. SouthWest Metro Transit is an "opt-out agency" (i.e. opt-out from Metro Transit service) that provides express bus routes to downtown Minneapolis and the University of Minnesota, as well as limited local bus service to the communities of Eden Prairie, Chanhassen and Chaska. SouthWest Metro Transit also provides connections to Metro Transit and other opt-out agencies' routes and services.

Both providers operate on the regional highway system and local roads. Working in collaboration with the Minnesota Department of Transportation (Mn/DOT), the region has provided a network of transit advantages for buses, including the following high occupancy vehicle (HOV) lanes, HOV bypass ramps at freeway entrance ramps, and a BRT-like system on freeway shoulders in the metro area for exclusive use by buses.

There are several transit advantages available within the Southwest Transitway study area. As illustrated in Figure A-2, these advantages include bus shoulder lanes (depicted in red), ramp meter bypasses (depicted in blue) and HOV lanes (depicted in green).

## Table A-3Average Annual Daily Traffic (AADT) for Southwest Study AreaRoadway Segments

Location	2002 *	2030 **** Forecast	Forecasted Growth (2000-2020)	Growth % (2000- 2020)
35W and 62 (north of interchange)	168,000	230,000	62,000	37%
35W and I-494 (north)	97,000	157,000	60,000	62%
62 and Hwy 100 (east)	97,000	130,000	33,000	34%
62 and Hwy 169 (east)	93,000	84,000	-9,000	-10%
62 and I-494 (east)	35,000	55,000	20,000	57%
I-494 and Hwy 100 (east)	146,000	260,000	114,000	78%
I-494 and Hwy 169 (east)	106,000	210,000	104,000	98%
I-494 and Hwy 212 (east)	91,000	150,000	59,000	65%
I-494 and 62 (south)	69,000	135,000	66,000	96%
I-494 and I-394 (south)	93,000	165,000	72,000	77%
Hwy 100 and Minnetonka Blvd (north)	102,000	144,000	42,000	41%
Hwy 100 and Excelsior Blvd (south)	99,000	135,000	36,000	36%
Hwy 100 and Hwy 62 (north)	96,000	130,000	34,000	35%
Hwy 100 and I-494 (north)	77,000	105,000	28,000	36%
Hwy 169 and Minnetonka Blvd (north)	97,000	132,000	35,000	36%
Hwy 169 and Hwy 62 (north)	87,000	120,000	33,000	38%
Hwy 169 and I-494 (north)	56,000	84,000	28,000	50%
Minnetonka Blvd and Hwy 100 (east)	21,600 **	14,000	-7,600	-35%
Minnetonka Blvd and I-494 (east)	13,900 ***	18,500	4,600	33%
Hwy 7/CR 25 and Hwy 100 (east)	26,300 **	34,000	7,700	29%
Hwy 7 and I-494 (east)	30,000	34,000	4,000	13%
Totals	1,700,800	2,526,500	825,700	49%

Sources:

2002 AADT taken from 2002 Trunk Highway Traffic Volumes St. Paul-Minneapolis and Suburban Area Map prepared by the Minnesota Department of Transportation Office of Transportation Data and Analysis

\*\* 2003 AADT taken from 2003 Traffic Volumes Street Series St. Paul-Minneapolis Seven County Area Map, Sheet 4E, prepared by the Minnesota Department of Transportation Program Support Group

\*\*\* 2003 AADT taken from 2003 Traffic Volumes Street Series St. Paul-Minneapolis Seven County Area Map, Sheet 4D, prepared by the Minnesota Department of Transportation Program Support Group

\*\*\*\* 2030 Traffic Projections provided by the Metropolitan Council, 2/4/05



Figure A-2 Transit Advantages for Southwest Study Area

Source: Metro Transit, October 2004

Note: red indicates bus shoulder lanes, blue indicates ramp meter bypasses and green indicates HOV lanes.

#### **Metro Transit**

Currently, Metro Transit operates twenty-six routes within the study area. Of the 25 routes, seven are local, three are limited stop, and fifteen are express route services. Table A-4 provides further details of these routes to include the service area, ridership and hours of operation.

A number of transit facilities are located in the study area, including transit centers and park-and-ride lots positioned to offer efficient access to regional roadways.

#### **SouthWest Metro Transit**

Ridership increased 20 percent to 603,000 annual trips on SouthWest Metro Transit buses in 2004, with an average of 1,500 passengers taking two trips per day. The agency operates a total of 23 routes and 60 buses, primarily over-the-road coaches, with several standard 40-foot and small local circulator buses as well. Of the 23 routes SouthWest Metro Transit operates, eleven are local and twelve are express route services. Table A-5 details these routes to include service area, service time and ridership. Service to the University of Minnesota is a growing market as demonstrated by the strong ridership of the Route 690. Routes 690, 693 and 694 made up nearly 25 percent of all express service to downtown Minneapolis in 2001. The agency's local routes serve Eden Prairie's Golden Triangle business park and other retail and commercial development.

SouthWest Metro Transit planned and implemented the successful SouthWest Metro Station transit oriented development around its 900-space parking ramp and station. On an average day, 800 of the 900 spaces are filled. Based on the success in Eden Prairie, SouthWest Metro Transit continues to expand its transit oriented development and new facilities in Chanhassen and Chaska, along the new Highway 212 Transitway southwest of the study area.

### Southwest Transitway Park-and-Ride Lots

The Twin Cities' Region has an extensive park-and-ride lot program that also serves the study area. Facilities within the study area include transit oriented development, transit centers and park-and-ride lots. As detailed in Figure A-3, there are several park-and-ride lots within the study area that are near or at capacity, indicating the continual need for this type of transportation service.

## **Bicycle and Pedestrian Trails**

There are several bicycle and pedestrian trails within the study area. The Hennepin County Regional Railroad Authority (HCRRA) owns the property that houses the Southwest LRT trail, the Kenilworth trail and Midtown Greenway trail. These trails are located on property abandoned by the freight rail companies and acquired by the HCRRA. The HCRRA allows trails to operate on their property by interim use permit. The HCRRA does not own, operate, or maintain the trails located on its property.

Route	Type of Route	Service Times	Communities Served		Est. Off- Peak Headway	Est. Average Weekday Ridership
6	Local	All day	Downtown Minneapolis, Edina	5-7	10-15	4,696
9	Local					3,164
12	Limited Stop	All day	Minnetonka, Hopkins, Downtown Minneapolis	15-20	30	2,352
17	Local	All day	Hopkins, St. Louis Park, Downtown Minneapolis	5-15		6,457
604	Local	All day	St. Louis Park	60	60	90
605	Local	All day	St. Louis Park	60	60	98
612	Local	All day	Hopkins & Minnetonka	60	60	43
614	Local	All day	Hopkins & Minnetonka	60	60	92
641	Express	Peak	Minnetonka, Downtown Minneapolis	N/A	N/A	11
643	Limited Stop	Peak	Minnetonka, St. Louis Park, Golden Valley, Downtown Minneapolis	30-50	N/A	105
649	Limited Stop	Peak	St. Louis Park, Downtown Minneapolis	15-30	N/A	260
652	Express	Peak	University of Minnesota		N/A	219
661	Express	Peak	Minnetonka, Hopkins, Eden Prairie	30-60	N/A	26
663	Express	Peak	Minnetonka, St. Louis Park, Golden Valley, Downtown Minneapolis	15-60	N/A	354
664	Express	Peak	Minnetonka, Hopkins, St. Louis Park, Downtown Minneapolis	N/A	N/A	164
665	Express	Peak	Minnetonka, Hopkins, Downtown Minneapolis	N/A	N/A	120
667	Express	Peak	Minnetonka, Hopkins, St. Louis Park, Downtown Minneapolis	N/A	N/A	489
668	Express	Peak	Minnetonka, Hopkins, St. Louis Park, Downtown Minneapolis	N/A	N/A	295
670	Express	Peak	Orono, Tonka Bay, Shorewood, Minnetonka, Hopkins, Downtown Minneapolis	N/A	N/A	130
671	Express	Peak	Shorewood, Excelsior, Greenwood, Deep Haven, Minnetonka, Downtown Minneapolis	N/A	N/A	172
672	Express	Peak	Orono, Long Lake, Wayzata, Downtown Minneapolis	20-35	N/A	482
673	Express	Peak	Minnetonka, Downtown Minneapolis	10-20	N/A	566
674	Express	Peak	Orono, Long Lake, Wayzata, Downtown Minneapolis	N/A	N/A	153
675	Express	Peak	Mound, Wayzata, Minnetonka, Golden Valley, St. Louis Park, Downtown Minneapolis	30-60	N/A	1,358
677	Express	Peak	Mound, Wayzata, Minnetonka, Golden Valley, St. Louis Park, Downtown Minneapolis	N/A	N/A	245

#### Table A-4 Major Routes Operated by Metro Transit within the Southwest Study Area

Source: Metro Transit, October 2004.

# Table A-5 Major Routes Operated by SouthWest Metro Transit within theSouthwest Study Area

Route	Type of Route	Service Times	Communities Served	Est. Average Weekday Ridership
603	Local	All Day	Eden Prairie, Chanhassen, Chaska	62
126	Local	Mid-day		
631	Local	All Day	Normandale, Southdale, Eden Prairie, Chanhassen	55
632	Local	All Day	Eden Prairie	10
633	Local	All Day		21
636	Local	All Day	Eden Prairie, Chanhassen, Chaska	35
680	Local	Peak	Downtown Minneapolis, University of Minnesota, Eden Prairie	93
681	Local	All Day	Downtown Minneapolis, University of Minnesota, Eden Prairie, Chanhassen, Chaska, Victoria	285
682	Local	Peak	Downtown Minneapolis, University of Minnesota, Eden Prairie, Chanhassen, Chaska, Victoria	189
685	Local	Peak	Downtown Minneapolis, University of Minnesota, Eden Prairie	135
686	Local	Peak	Downtown Minneapolis, University of Minnesota, Eden Prairie	30
687	Express			40
688	Express	Peak	Downtown Minneapolis, University of Minnesota, Eden Prairie, Chanhassen, Chaska, Victoria	32
689	Express	Peak	Downtown Minneapolis, University of Minnesota, Eden Prairie, Chanhassen, Chaska, Victoria	37
690	Express	All Day	Downtown Minneapolis, University of Minnesota, Eden Prairie, Chanhassen, Chaska, Victoria	1,019
691	Express	Peak	Downtown Minneapolis, University of Minnesota, Eden Prairie, Chanhassen, Chaska, Victoria	24
692	Express	Peak	Downtown Minneapolis, University of Minnesota, Eden Prairie, Chanhassen, Chaska, Victoria	194
693	Express	Peak	Downtown Minneapolis, University of Minnesota, Eden Prairie	47
694	Express	Mid-day	Downtown Minneapolis, University of Minnesota, Eden Prairie, Chanhassen, Chaska, Victoria	89
695	Express	Peak	Downtown Minneapolis, University of Minnesota, Eden Prairie, Chanhassen, Chaska, Victoria	75
697	Express	Peak	Downtown Minneapolis, University of Minnesota, Eden Prairie, Chanhassen, Chaska, Victoria	11
698	Express	Mid-day	Downtown Minneapolis, University of Minnesota, Eden Prairie, Chanhassen, Chaska, Victoria	40
699	Express	Peak	Downtown Minneapolis, University of Minnesota, Eden Prairie, Chanhassen, Chaska, Victoria	190

Source: SouthWest Metro Transit, 2005



#### Figure A-3 Southwest Corridor Park-and-Ride Lots

Source: Metro Transit, 2005

### **Freight Railroads**

Two active freight lines currently operate parallel to or within the study area. The Twin Cities & Western Railroad Company operates service within the study area from Minneapolis to St. Louis Park and Hopkins westward toward South Dakota. The Burlington Northern & Santa Fe (BNSF) Railway Company also operates freight service in the study area, along the Cedar Lake rail line through northern sections of St. Louis Park, Hopkins and Minnetonka. This rail line eventually diverges into three separate lines terminating in Seattle, Washington (the proposed Northstar commuter rail Transitway location); Aberdeen, South Dakota; and Kansas City, Missouri. A third rail line, abandoned by Canadian Pacific Railway, was acquired by the HCRRA in the early 1990's and later converted to interim trail use, as noted above. An additional north-south line extends through St. Louis Park in the eastern end of the corridor.

## References

Hennepin County Regional Rail Authority. 2003. Southwest Rail Transit Study.

Hennepin County Regional Rail Authority. 2004. Southwest Rail Transit Study Addendum; Modified LRT 3A Alignment Alternatives.

Metro Transit. 2004. Metro Transit Operated Routes within the Southwest Study Area.

Metro Transit. 2004. Transit Advantages Map.

Metropolitan Council. 2005. Average Annual Daily Traffic (AADT) for Southwest Study Area Roadway Segments.

Metropolitan Council. 2005. Land Use Summaries.

Metropolitan Council. 2005. 2004 Metro Residents Survey.

Metropolitan Council. 2005. Presentation to ASCE Minnesota Chapter.

Metropolitan Council. 2004. 2030 Regional Development Framework.

Metropolitan Council. 2004. 2030 Regional Transportation Plan.

Metropolitan Council. 2004. 2030 Transitway System Map.

Metropolitan Council. 2004. 2030 Transportation Policy Plan.

Metropolitan Council. 2000. Travel Behavior Inventory Home Interview Survey.

Minnesota Department of Employment and Economic Development. 2005. Community Profile Reports.

SouthWest Metro Transit. 2005. SouthWest Operated Routes within the Southwest Study Area.

United States Census Bureau. 2000 Census.