Highway Transitway Corridor Study

Technical Memorandum 1: Existing Conditions

May 2014

SRF No. 7994

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Introduction

The Metropolitan Council's *2030 Transportation Policy Plan* (TPP) recommends a multi-modal transitway system for the Twin Cities that includes commuter rail, light rail transit (LRT), dedicated busways, bus rapid transit (BRT) on both arterial streets and highways, and express bus corridors with transit advantages. Prior to adopting the 2030 TPP, the Metropolitan Council completed the *Transit Master Study* to determine the feasibility of transitway investments along a long list of corridors in the region. At the time, only LRT and dedicated busway were analyzed for these corridors. Many of the corridors are principal arterial highway corridors and could also be considered for a type of BRT that uses either the highway shoulder or a MnPASS lane, rather than an exclusive right-of way as is the case with LRT and dedicated busway.

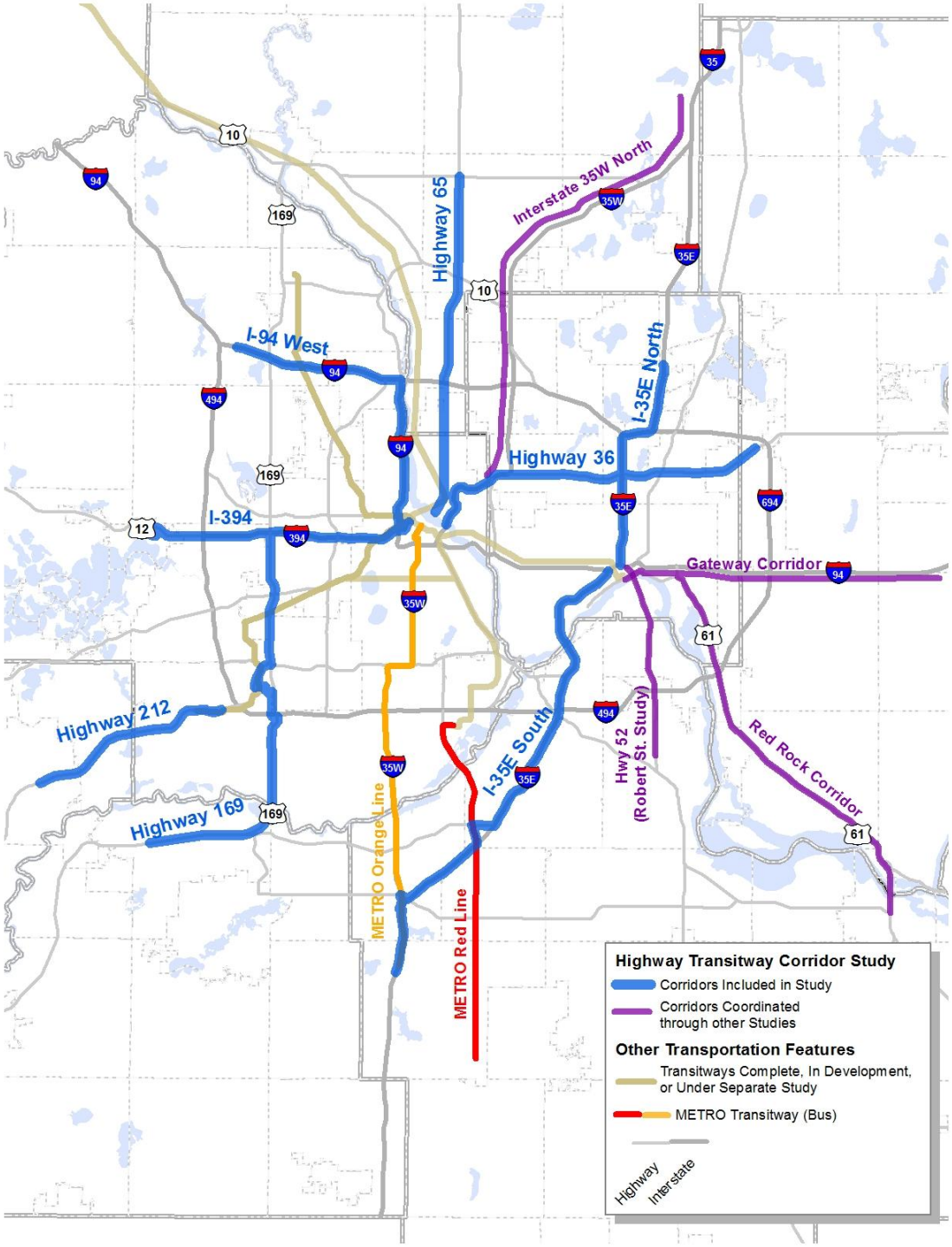
The TPP highway chapter also included recommendations for a system of MnPASS lanes on the freeways in many of the same corridors as the potential transitways. A number of transitway corridors in the region remain undetermined in terms of identification of preferred mode and alignment and the TPP recommends further study on these corridors. The Highway Transitway Corridor Study (HTCS) will examine a number of these corridors, including some express bus with transit advantages corridors, for Highway BRT feasibility, incorporating lessons learned from the I-35W South BRT (METRO Orange Line) and Cedar Avenue BRT (METRO Red Line) projects and other previous studies. Figure 1 shows the eight corridors that will be examined as part of this study. They include:

- TH 36 (Minneapolis to Stillwater)
- I-94 (Minneapolis to Maple Grove)
- Trunk Highway (TH) 65 (Minneapolis to Blaine)
- I-35E North (St. Paul to Forest Lake)
- I-35E South (St. Paul to Burnsville)
- I-394 (Minneapolis to Plymouth)
- TH 169 (Minneapolis to Shakopee)
- TH 212 (Southwest LRT to Chaska)

Several other transitway corridors are being analyzed as part of other studies. The results of these studies will be incorporated in later phases of the HTCS. These corridors include:

- Red Rock Corridor (Along TH 61 from Minneapolis to Hastings)
- TH 52 (Connecting St. Paul to Rosemount, alignment is still being studied through the Robert Street Alternatives Analysis)
- I-35W North (Minneapolis to Forest Lake)
- Gateway Corridor (Along I-94 from Minneapolis to Afton)

Figure 1: HTCS Corridors



The *Regional Transitway Guidelines (Guidelines)*, adopted by the Metropolitan Council in February, 2012, delineate regional standards for highway BRT. These standards define service operations, siting and spacing of stations and support facilities, runningways, vehicles, fare collection, customer information technology, and identity and branding. While the *Guidelines* provide a lot of detail, further corridor-specific investigation is needed to identify:

- When all-day station-to-station service is warranted;
- Types of BRT stations; and
- Technology and station amenities.

Facility and service plans developed as a part of the HTCS will consider the recommendations in the *Guidelines*.

Methodologies, Definitions, and Data Sources

The following sections describe the methodologies used to document existing conditions in each corridor. This study does not address or analyze alignment issues in downtown Minneapolis and downtown Saint Paul. Existing conditions (such as population and employment densities), issues, and constraints in these areas will be addressed in other studies.

Population Estimate Methodology

Population estimates were developed for each corridor. Corridor population is defined as all persons living within two miles of all full-access local interchanges along each highway corridor. Full-access local interchanges are local intersections with the main line that have on- and off-ramps in both directions. The number of persons living within two miles of these interchanges was calculated at the US Census block level using 2010 US Decennial Census data.

Definition of Employment Centers

Corridor employment centers are defined as contiguous areas with 7,000 or more jobs and a job density of ten or more jobs per acre. The Metropolitan Council used a combination of 2010 Quarterly Census of Employment and Wages (QCEW) data and the Metropolitan Council's Generalized Land Use boundaries to identify corridor employment centers. The Council also classified each job center as a Metro Center, a Regional Center, or a Subregional Center. Metro Centers have the most jobs and highest job densities and subregional centers have the fewest jobs. In conjunction with the Metropolitan Council's employment center analysis this report also used Longitudinal Employer-Household Dynamics (LEHD) data trends to estimate the number of people who work at a corridor employment center and also reside in that same corridor. The downtown Minneapolis, downtown Saint Paul, and the capitol area employment centers were excluded from this analysis.

Definition of Education Centers

An education center is defined as any college or university with an enrollment of 500 students or more. Education centers within a two-mile buffer area of the corridor are called out for each corridor. Some education centers appear in multiple corridors.

Park-and-ride Usage Data Collection Methodology

The park-and-ride usage data used in this report is taken from Metro Transit's *2012 Annual Regional Park-and-Ride System Report*. Park-and-ride usage is tracked through a collaborative effort between the state, county, and other regional agencies. Together these agencies counted and recorded license plate data for vehicles parked at every park-and-ride and park-and-pool serving the Twin Cities metropolitan area. Usage data was collected one time for each facility within the following dates:

- Tuesday, September 25–Thursday, September 27, 2012
- Tuesday, October 2–Thursday, October 4, 2012

Metro Transit then obtained user origin data from the Minnesota Driver and Vehicle Services (DVS) and the Wisconsin Department of Transportation databases to acquire vehicle registrants' street address, city/township and zip code. Upon completion of address acquisition, staff members geocoded the home origins of approximately 18,600 system users. Geocoding allows for a visual display of user origin distribution while protecting individual privacy throughout the system.

Congestion Area Data Collection Methodology

Congestion data for freeways in the Twin Cities metro area is collected by the Regional Transportation Management Center (RTMC) via detectors embedded in the roadway. The RTMC collects, evaluates and archives detector data embedded in the mainline roadway which covers approximately 90 percent of the Twin Cities metro area freeway system. The data used in this report is from October 2012 and is representative of regular traffic patterns in the corridor. The speed data ranges from 5:00 AM to 8:00 PM aggregated into 15 minute intervals.

Corridor Summaries

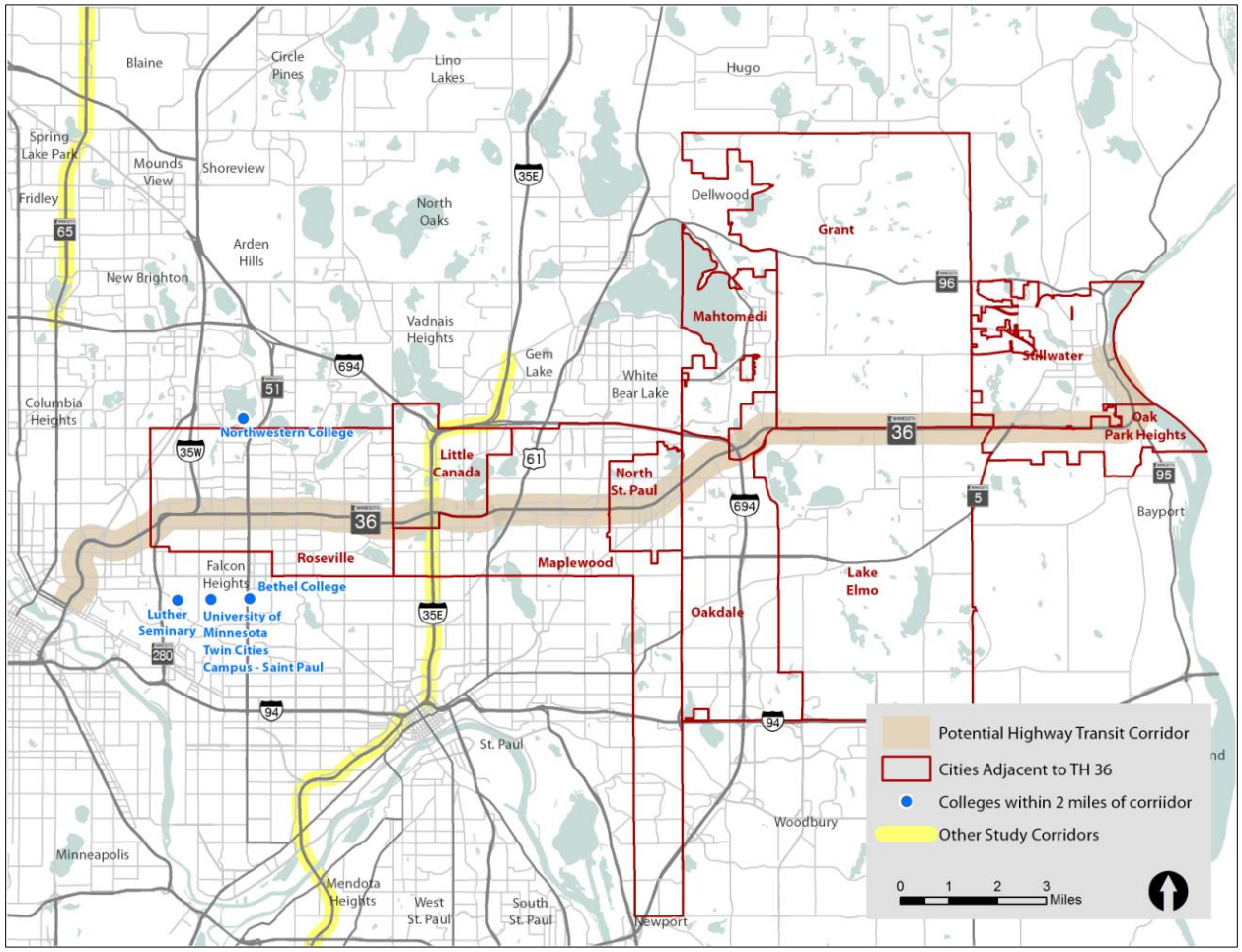
This technical memorandum summarizes the following for each study corridor:

- Demographics
- Employment and Education Centers
- Existing transit routes and infrastructure
- Corridor roadway characteristics and congestion areas

Trunk Highway 36 Corridor

Trunk Highway (TH) 36 runs 20 miles from I-35W in Roseville on the west to the Wisconsin border at Stillwater on the east. TH 36 serves the cities of Roseville, Maplewood, Little Canada, North St. Paul, Pine Springs, Oak Park Heights, and Stillwater, as shown in Figure 2. There are approximately 231,000 persons and 94,000 households living within two miles of a full access interchange in the Highway 36 Corridor.[1]

Figure 2: Highway 36 Corridor



[1] These estimates do not include population and households located in downtown Minneapolis.

Employment Centers

There are five employment centers located within the Highway 36 corridor, as shown in Table 1. The Mid-city Industrial Area is the largest employment center; however the Maplewood Mall, the smallest employment center, has the highest percentage of people who work at the employment center and also live in the Highway 36 corridor.

Table 1: Highway 36 Employment Center Characteristics

Employment Centers	Type of Center	Number of Jobs at Employment Center	Number of People who work at Employment Center and Live in the Corridor	Percentage of People who work at Employment Center and Live in the Corridor
Mid-City Industrial, Minneapolis	Regional Employment	16,900	2,028	12%
I-35W and Co Rd C	Regional Employment	15,200	1,976	13%
Rosedale Center Area	Subregional Employment	11,600	2,088	18%
Maplewood Mall Area	Subregional Employment	7,300	1,898	26%

Education Centers

There are four education centers within the Highway 36 corridor, as shown in Figure 2. Enrollment for all four centers is shown in Table 2.

Table 2: Highway 36 Education Center Enrollment

Education Center	Enrollment
Northwestern College	3,043
University of Minnesota – Saint Paul Campus	52,556*
Luther Seminary	764
Bethel College	4,457

NOTE: *Enrollment number represents students enrolled in the entire college/university. Enrollment at this institution is split between multiple campuses.

Transit Infrastructure

Existing transit routes, transit infrastructure, and transit advantages along the Highway 36 Corridor are shown in Figure 3. Bus routes on TH 36 take advantage of a bus-only shoulder between just west of I-694 and I-35W. The various bus routes along the corridor serve six park-and-rides. Figure 4 shows the home origin of park-and-ride users in the Highway 36 Corridor and Table 3 shows the usage rates of each park-and-ride. Overall, as seen in Figure 4, the majority of park-and-ride users in this corridor are traveling from home origins north of Highway 36. Maplewood Mall has the largest capacity of the six corridor park-and-ride and draws the largest amount of users, but is not operating at capacity. Two smaller park-and-rides, the Hmong Alliance Church and TH 61 and County Road

C, located just west of Maplewood Mall, also draw relatively large numbers of users, but are operating at or near capacity.

Table 3: Highway 36 Park-and-ride Usage

Park-and-Ride Facility	Park-and-Ride Usage		
	Use	Capacity	% Used
St. Croix Valley Rec Center	47	100	47%
Grace Church	62	115	54%
Hmong Alliance Church	113	110	103%
TH 61 & County Road C	225	229	98%
Rosedale Transit Center	175	375	47%
Maplewood Mall	333	420	79%

Source: Metropolitan Council, 2012

Figure 3: Highway 36 Existing Transit Routes and Infrastructure

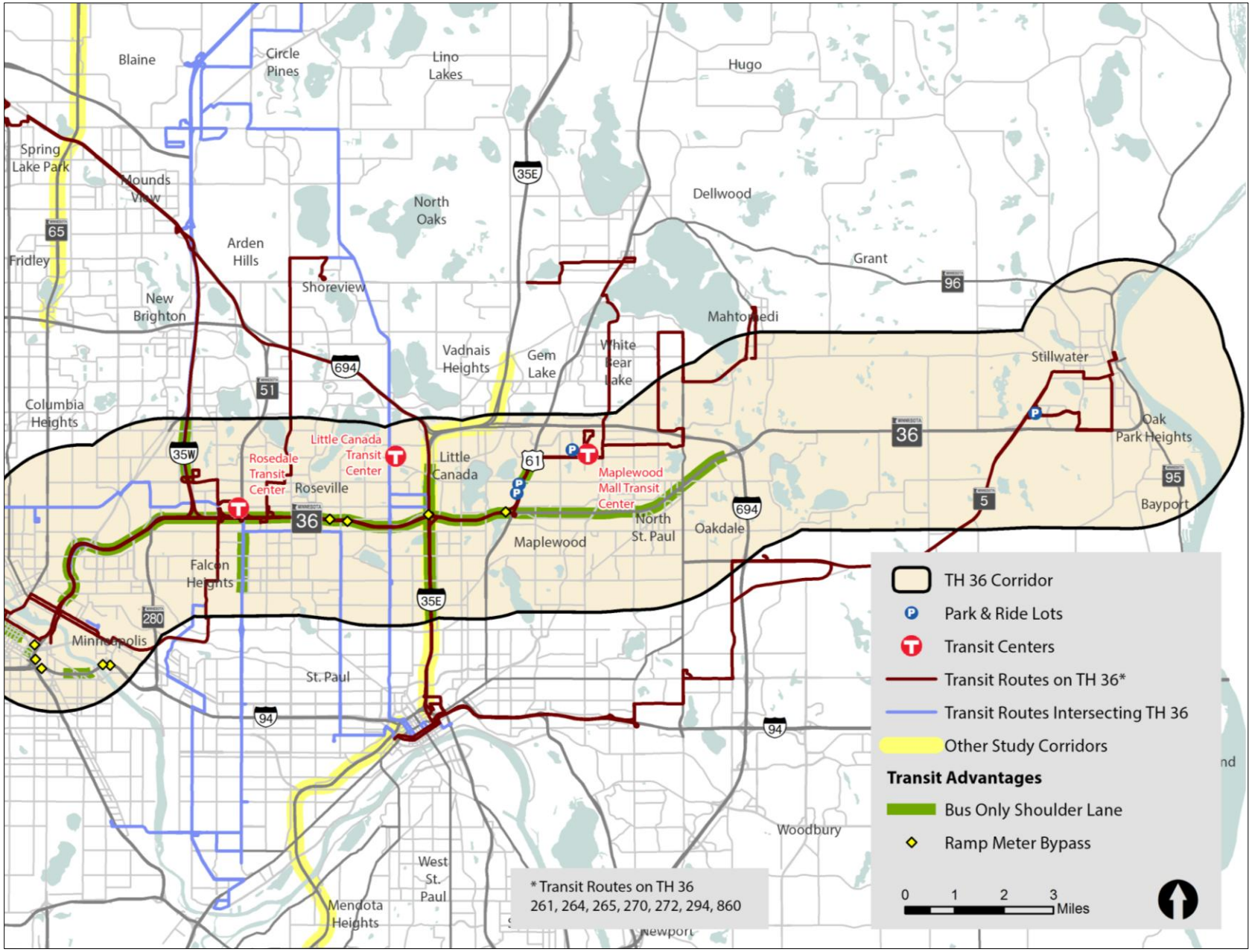
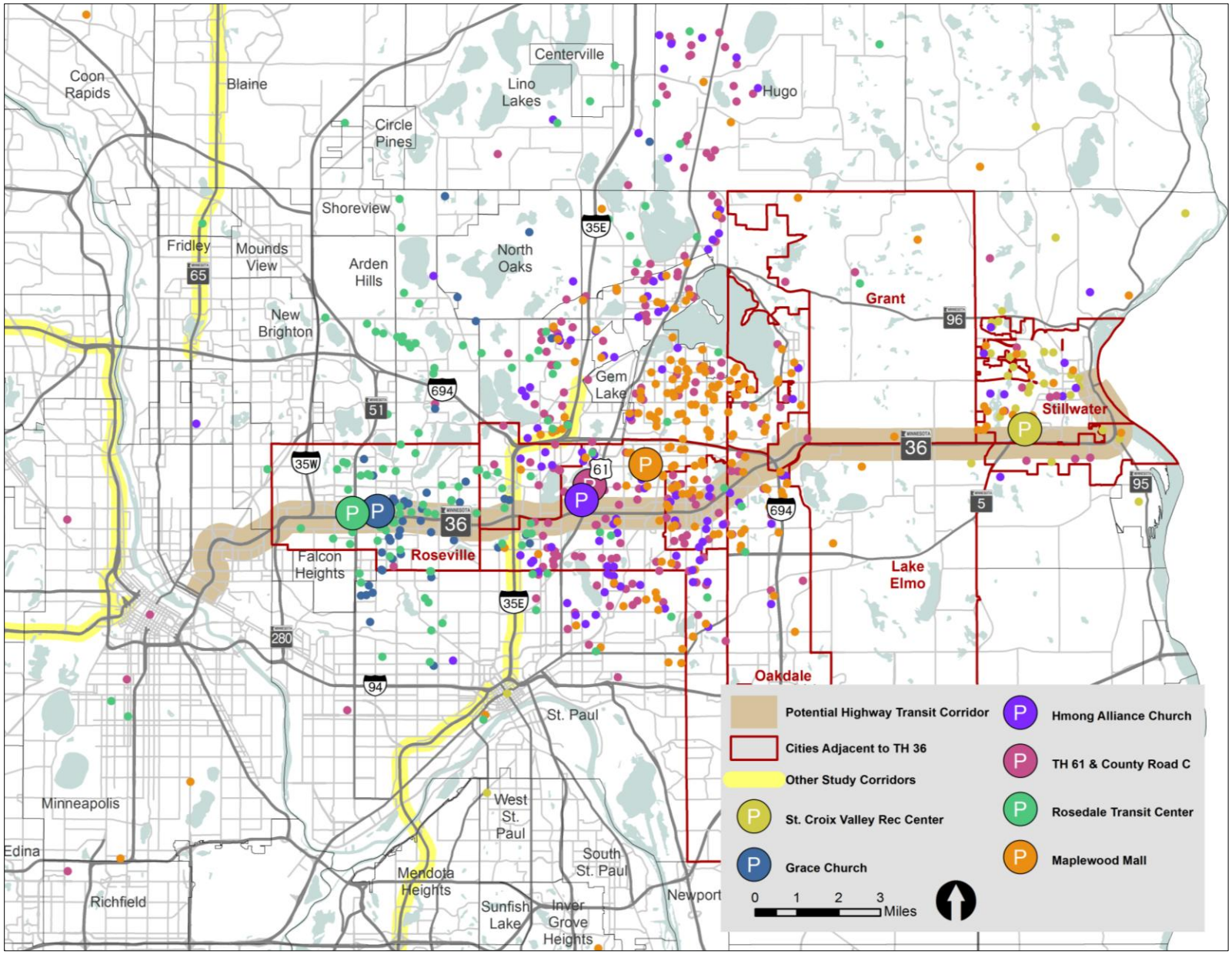


Figure 4: Highway 36 Park-and-Ride User Home Origins



Existing Transit Routes

Currently, eight bus routes operate in the TH 36 Corridor. Table 4 presents current service characteristics of each route.

Table 4: Highway 36 Transit Service Performance Characteristics by Route

Route	Span of Service	Frequency (minutes) (Peak/Mid/Eve)	Number of Trips
261	5:52 am - 6:12 pm	30 / 0 / 0	AM: 7 PM: 8
263	5:52 am – 6:43 pm	15-30 / 0 / 15-30	AM: 7 PM: 7
264	5:49 am - 10:01 pm	15-30 / 60 / 0	AM: 17 PM: 23
265	5:47 am - 6:07 pm	30 / 0 / 0	AM: 5 PM: 5
270	5:50 am - 6:47 pm	5-15 / 0 / 0	AM: 18 PM: 16
272	6:50 am - 5:28 pm	60 / 0 / 0	AM: 3 PM: 2
294	5:47 am - 7:10 pm	30-60 / 0 / 0	AM: 9 PM: 8
860	5:45 am - 6:21 pm	20 / 0 / 0	AM: 6 PM: 6

Roadway Characteristics

TH 36 is an urban two-lane street with a speed limit of 30 miles per hour in the City of Stillwater, a divided four-lane expressway from Oak Park Heights to I-694 in the City of Pine Springs, and a divided four-lane freeway between Margaret Street in North St. Paul and I-35W in Roseville, with speeds varying from 50 to 65 miles per hour. As mentioned above, the corridor has a bus only shoulder between I-694 and I-35W. The Minnesota Department of Transportation's vision for TH 36 is for it to become a limited access freeway to improve safety and traffic flow.[2]

Traffic Volumes

2010 average daily traffic (ADT) volumes on Highway 36 are shown in Figure 5. In this figure road segments with higher ADT volumes are delineated with a thicker beige line. The figure demonstrates that traffic volumes in the corridor are highest in the western half of the corridor, with the highest ADT between volumes between I-35E and Highway 280.

Congestion Areas

Eastbound and westbound Highway 36 congestion areas are shown in Figure 6 and Figure 7. In the eastbound direction in the TH 36 corridor heavy congestion occurs between White Bear Avenue and I-35E, and between Lexington Avenue and TH 280 from 4:00 PM to 6:30 PM. The bus only shoulder lane is not affected by the congestion and provides reliable transit service while the main line is congested. In the westbound direction, mild congestion occurs near McKnight Road from 7:00 AM to 8:30AM. Heavy congestion occurs during the same time period between I-35E and Hamline Avenue. Again, the bus only shoulder lane is not affected by this congestion.

[2] http://www.dot.state.mn.us/metro/projects/hwy36pinesprings/pdf/hwy36hiltononepager.pdf

Figure 5: Highway 36 Traffic Volumes

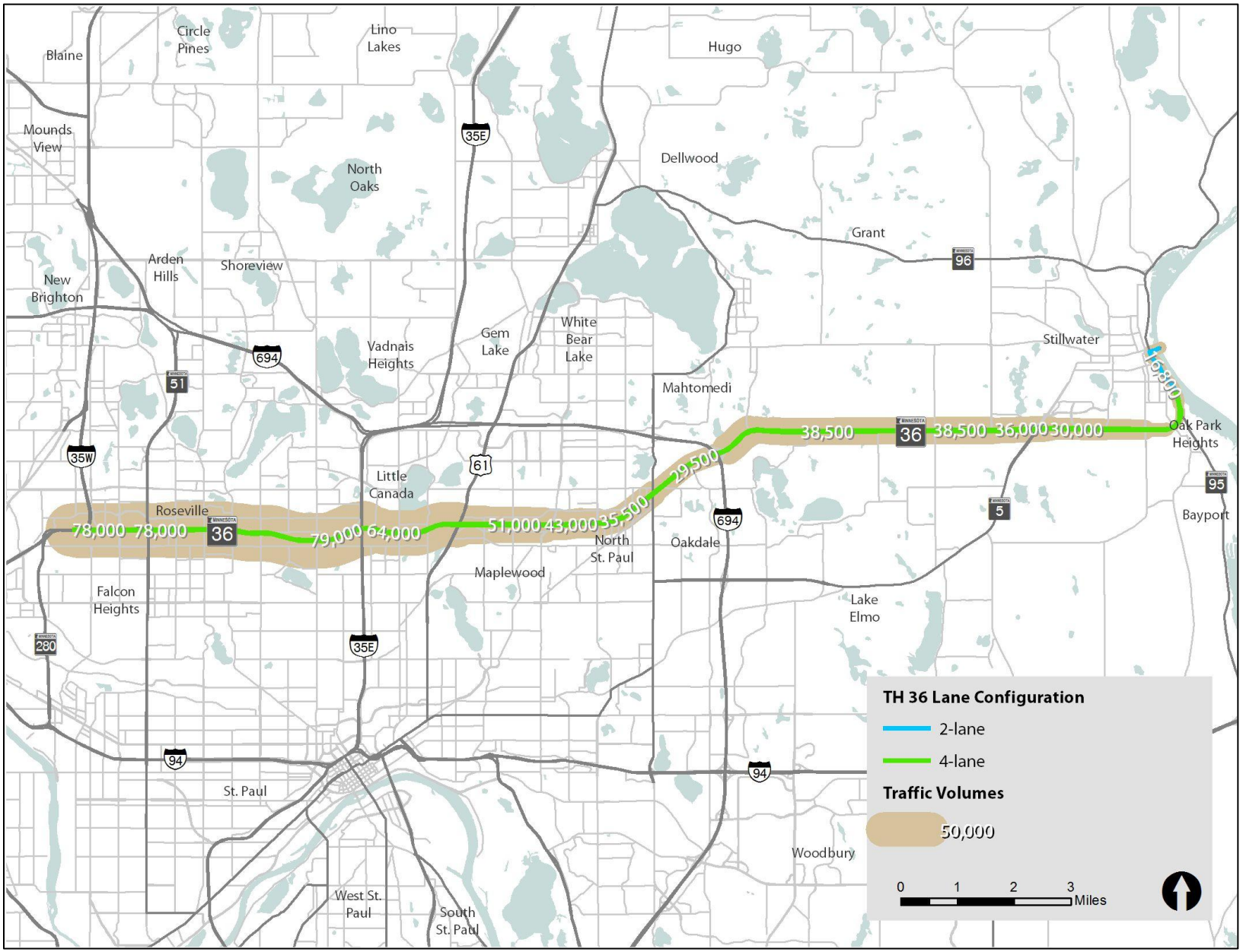
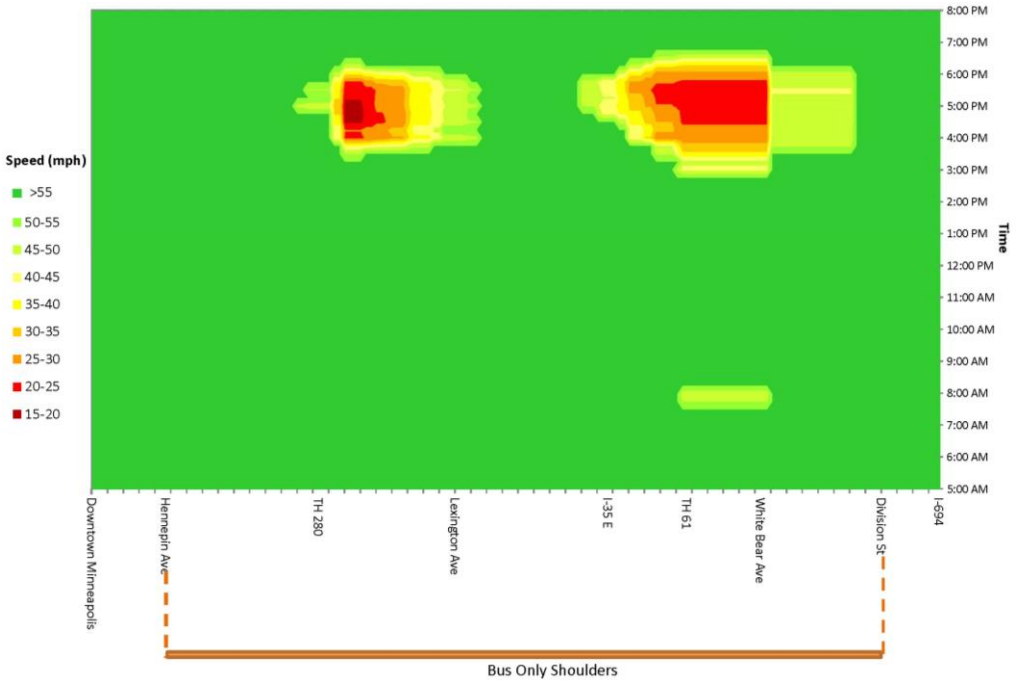
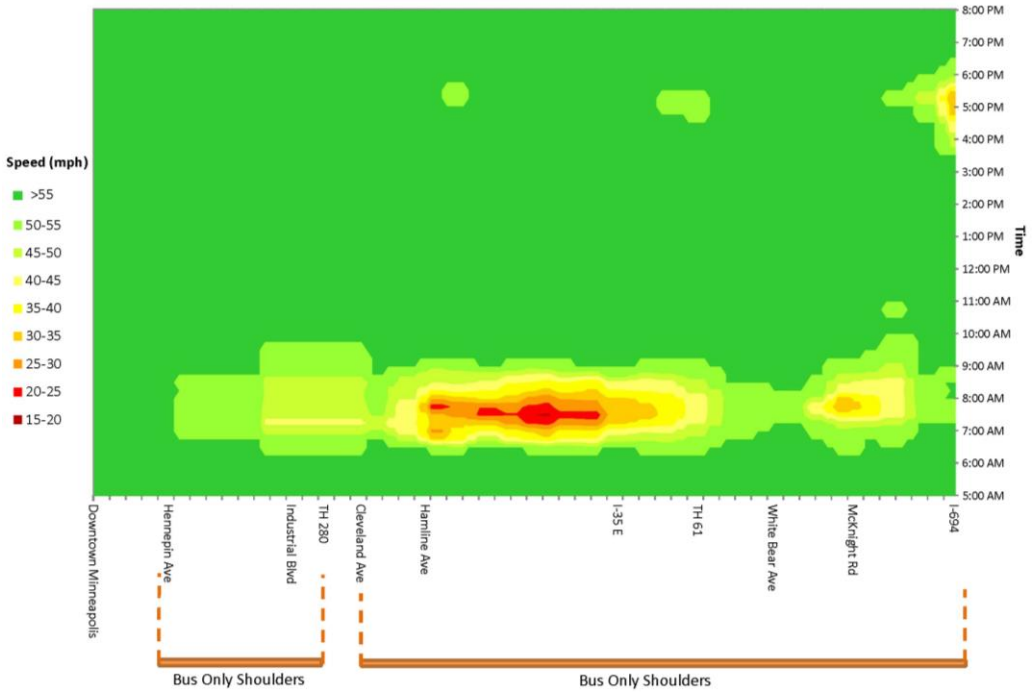


Figure 6: Highway 36 Eastbound Congestion Areas



Source: Regional Transportation Management Center, October 2012

Figure 7: Highway 36 Westbound Congestion Areas

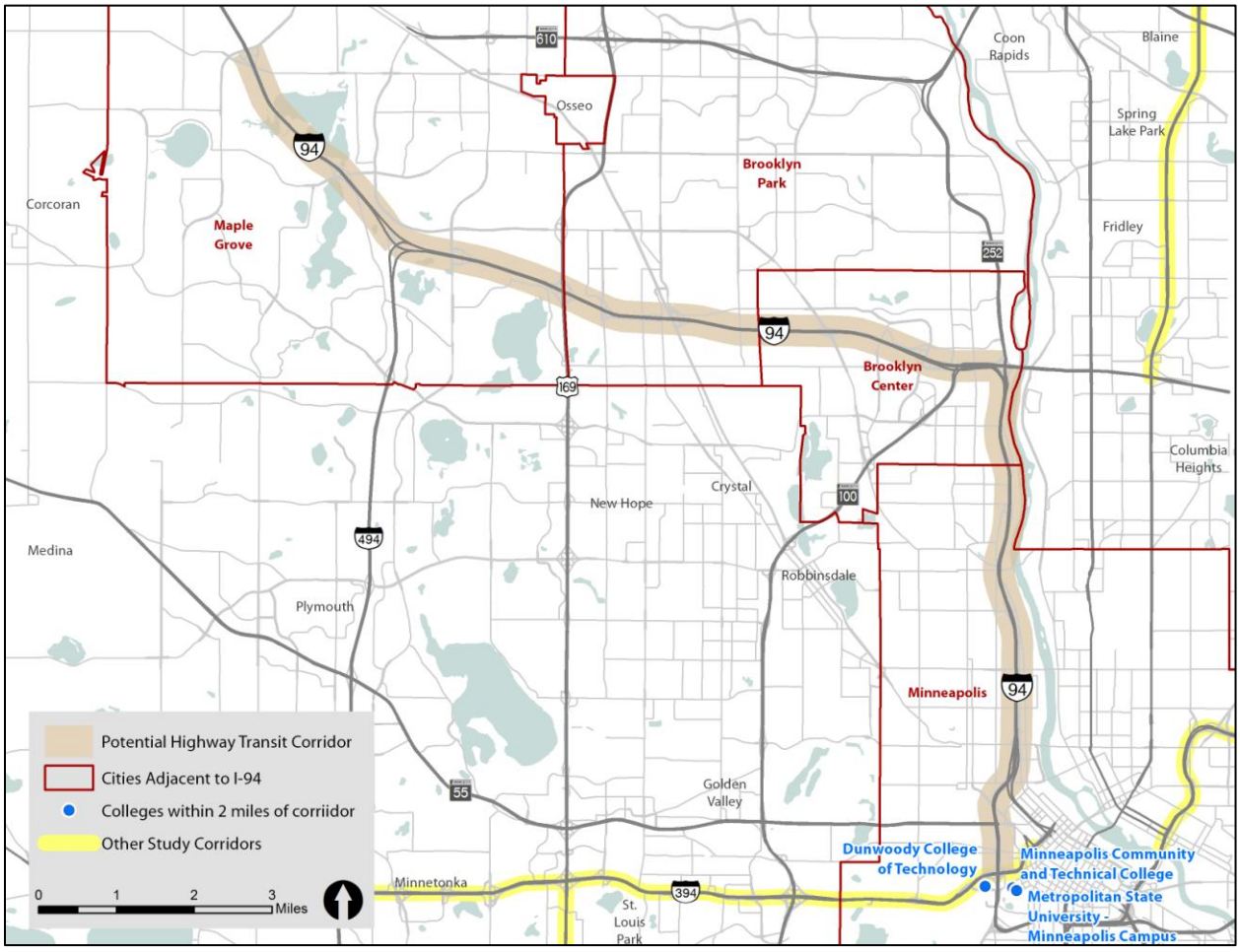


Source: Regional Transportation Management Center, October 2012

I-94 Corridor

The Interstate 94 (I-94) corridor runs 20 miles from Maple Grove in the northwest to downtown Minneapolis. I-94 serves the cities of Maple Grove, Brooklyn Park, Brooklyn Center, and Minneapolis, as shown in Figure 8. There are approximately 224,000 persons and 85,000 households living within two miles of a full access interchange in the I-94 Corridor.[3]

Figure 8: I-94 Corridor



[3] These estimates do not include population and households located in downtown Minneapolis.

Employment Centers

The I-94 corridor has three employment centers, as shown in Table 5. The Maple Grove/I-94 employment has the highest number jobs as well as the highest percentage of people who work at the employment center and also live in the corridor.

Table 5: I-94 Corridor Employment Center Characteristics

Employment Centers	Type of Center	Number of Jobs at Employment Center	Number of People who work at Employment Center and Live in the Corridor	Percentage of People who work at Employment Center and Live in the Corridor
I-694 and Shingle Creek Parkway	Subregional Employment	7,300	1,825	25%
I-94 and Hemlock Lane, Arbor Lakes	Subregional Employment	8,800	2,640	30%
I-494 and Bass Lake Road	Subregional Employment	7,600	2,052	27%

Education Centers

There are four education centers in the I-94 corridor, as shown in Figure 8. The majority of these centers are located in or near downtown Minneapolis. The enrollment at each education center is shown in Table 6.

Table 6: I-94 Education Center Enrollment

Education Center	Enrollment
Minneapolis Community and Technical College	10,191
Hennepin Technical College - Brooklyn Park Campus	6,745*
Metropolitan State University – Minneapolis Campus	8,170*
Dunwoody College of Technology	1,041

NOTE: *Enrollment number represents students enrolled in the entire college/university. Enrollment at this institution is split between multiple campuses.

Transit Infrastructure

Existing transit routes, transit infrastructure and transit advantages along the I-94 Corridor are shown in Figure 9. Bus-only shoulder lanes are present on most of the corridor, with the exception of approaches to major interchanges and from Brooklyn Boulevard east to the I-94/I-694 interchange. There are seven park-and-ride facilities in the I-94 corridor, as shown in Table 7. Figure 10 shows park-and-ride user home origins for the seven park-and-rides; the figure demonstrates that a large concentration of park-and-ride users live in the City of Maple Grove and use the Parkway Station, Crosswinds Methodist and the Maple Grove Transit Station park-and-ride facilities. The Maple Grove Transit Station park-and-ride lot has the highest parking capacity and also draws the largest amount of users. The Maple Grove Transit Station park-and-ride is also the only facility in the corridor that operates near capacity.

Table 7: I-94 Park-and-Ride Usage

Park-and-Ride Facility	Park-and-Ride Usage		
	Use	Capacity	% Used
63rd Avenue and Bottineau	50	556	9%
65th Avenue and Bottineau	124	239	52%
Regal Cinemas	92	200	46%
Crosswinds Methodist	68	125	54%
Maple Grove Transit Station	844	924	91%
Parkway Station	366	502	73%
Shepard of the Grove	14	50	28%

Source: Metropolitan Council, 2012

Figure 9: I-94 Existing Transit Routes and Infrastructure

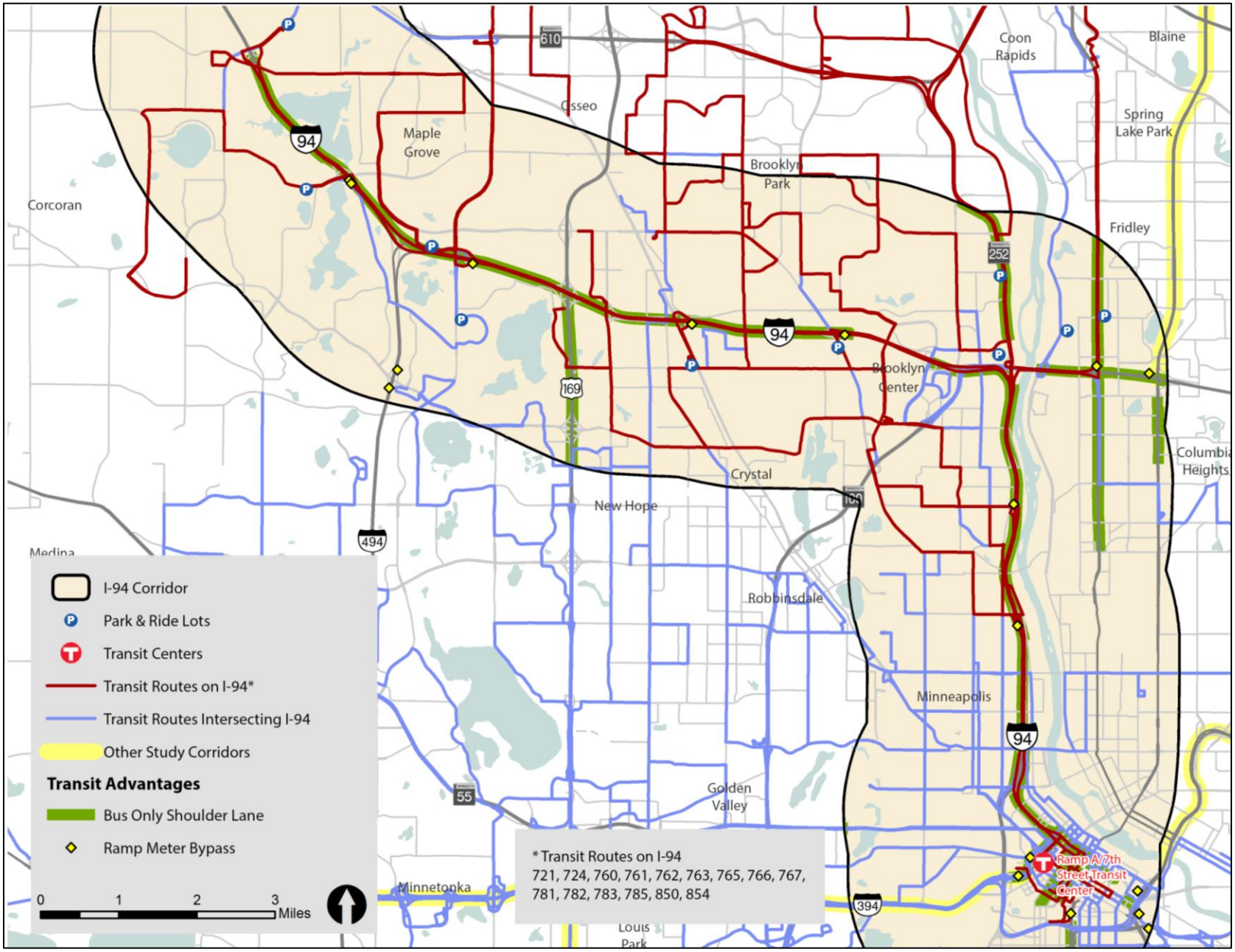
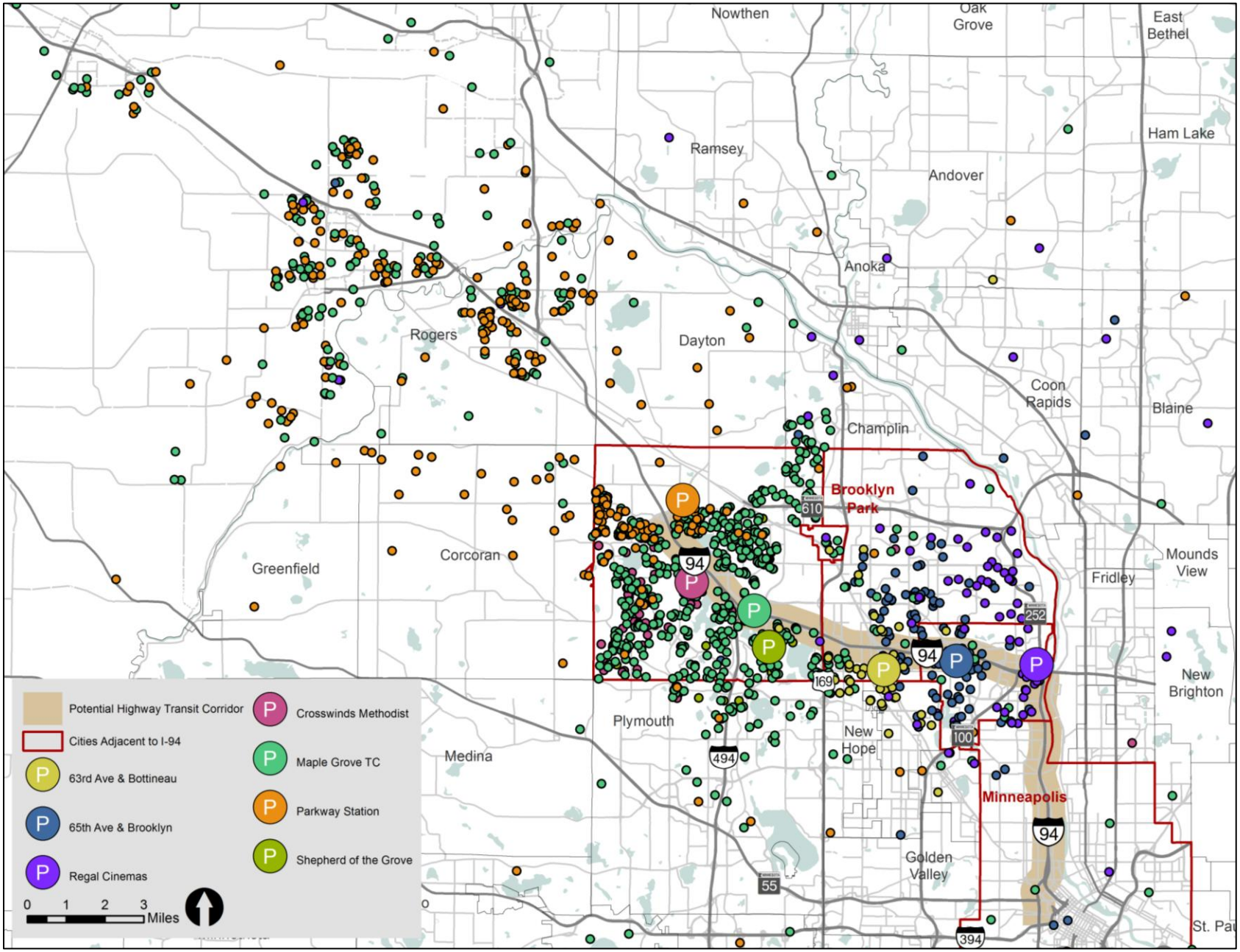


Figure 10: I-94 Park-and-Ride User Home Origins



Existing Transit Routes

Fifteen bus routes currently operate on the I-94 Corridor. Table 8 presents current service characteristics for each route.

Table 8: I-94 Transit Service Performance Characteristics by Route

Route	Span of Service	Frequency (minutes) (Peak-Mid-Eve)	Number of Trips
721	5:30AM – 9:28PM	30 / 60 / 60	AM: 16 PM: 27
724	3:54AM – 2:03AM	30 / 30 / 30-60	AM: 34 PM: 45
760	5:26AM – 6:55PM	5-30 / 0 / 0	AM: 8 PM: 7
761	6:04AM – 6:25PM	15-30 / 0 / 0	AM: 5 PM: 5
762	6:49AM – 5:12 PM	30 / 0 / 0	AM: 2 PM: 2
763	6:02AM – 6:27PM	30 / 0 / 0	AM: 5 PM: 5
765	6:25AM – 6:09PM	30-60 / 0 / 0	AM: 4 PM: 4
766	4:33AM – 8:45PM	5-10 / 60-120 / 60	AM: 35 PM: 34
767	5:16AM – 6:01PM	30-60 / 0 / 0	AM: 5 PM: 4
781	5:49AM – 7:10PM	10-30 / 120 / 0	AM: 21 PM: 23
782	5:30AM – 6:32 PM	30 / 0 / 0	AM: 5 PM: 5
783	5:33AM –6:29PM	30 / 0 / 0	AM: 6 PM: 5
785	5:48AM – 6:45PM	15-30 / 0 / 0	AM: 9 PM: 9
850	4:51AM – 6:44PM	5-30 / 0 / 0	AM: 29 PM: 28
854	5:49AM – 7:00 PM	5-20 / 0 / 0	AM: 10 PM: 10

Roadway Characteristics

The entire length of the I-94 corridor is a freeway. The corridor is a six-lane roadway from Brooklyn Boulevard to the westernmost portion of the study area. From Brooklyn Boulevard to TH-55 (Olson Memorial Highway) it is eight lanes, and as it approaches downtown Minneapolis and converges with I-394 it gradually becomes four lanes. West of Weaver Lake Road the speed limit on I-94 is 70 miles per hour. The portion of the corridor between Weaver Lake Road and TH-55 has a speed limit of 60 miles per hour, and the final approach to downtown Minneapolis has a speed limit of 55 miles per hour. With the exception of the I-94/I-694/I-494 interchange in Maple Grove, which is divided by a depressed median, the I-94 corridor is a highway divided by a barrier.

Traffic Volumes

Existing ADT volumes in the I-94 corridor are shown in Figure 11. ADT volumes hold fairly steady along the entire corridor, with the highest volumes occurring between Brooklyn Boulevard and the intersection of I-94 with I-694.

Congestion Areas

Eastbound and westbound I-94 congestion areas are shown in Figure 12 and Figure 13. As the figures show, there was no major congestion observed in this corridor.

Figure 11: I-94 Traffic Volumes

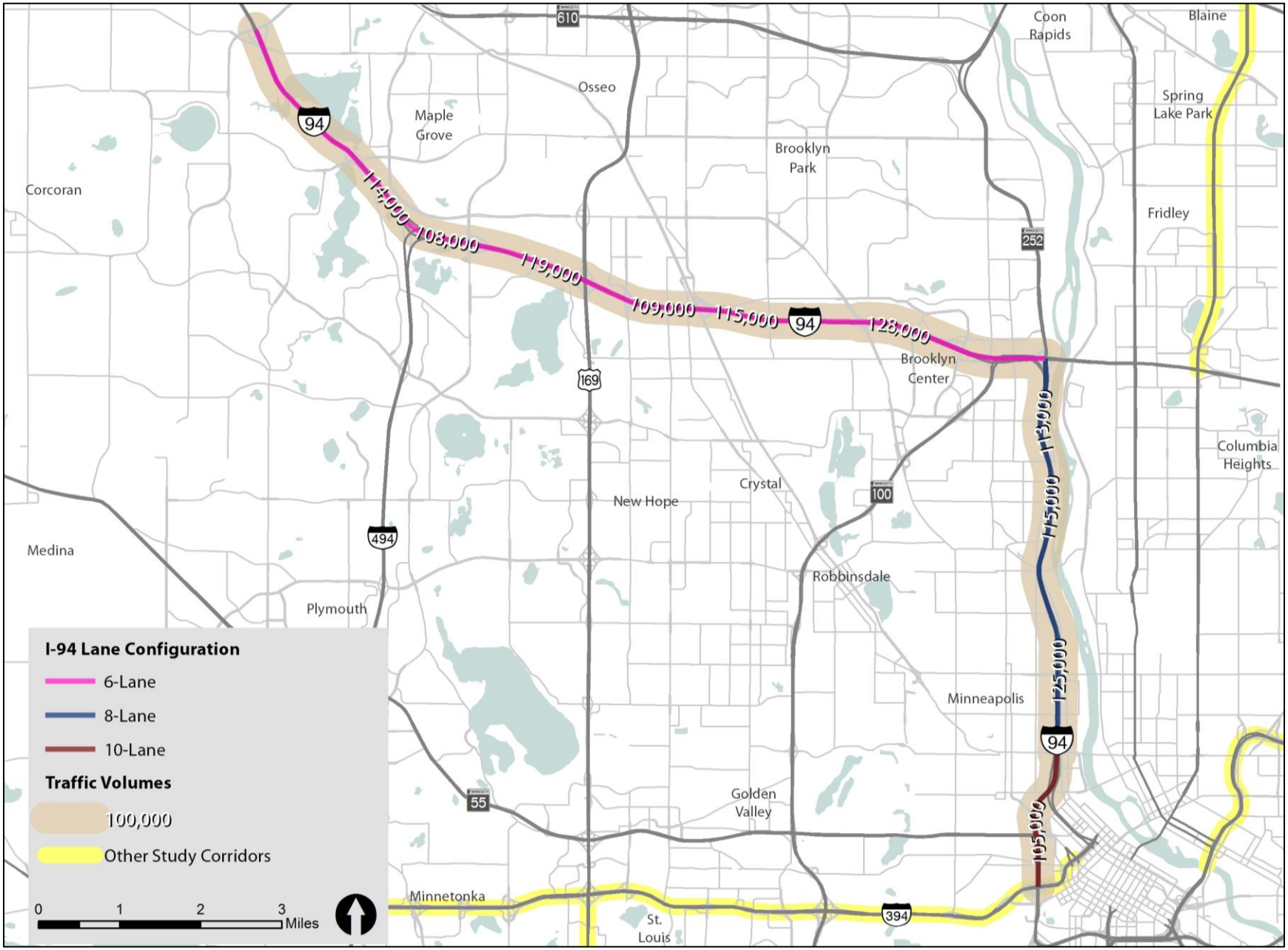


Figure 12: I-94 Eastbound Congestion Areas

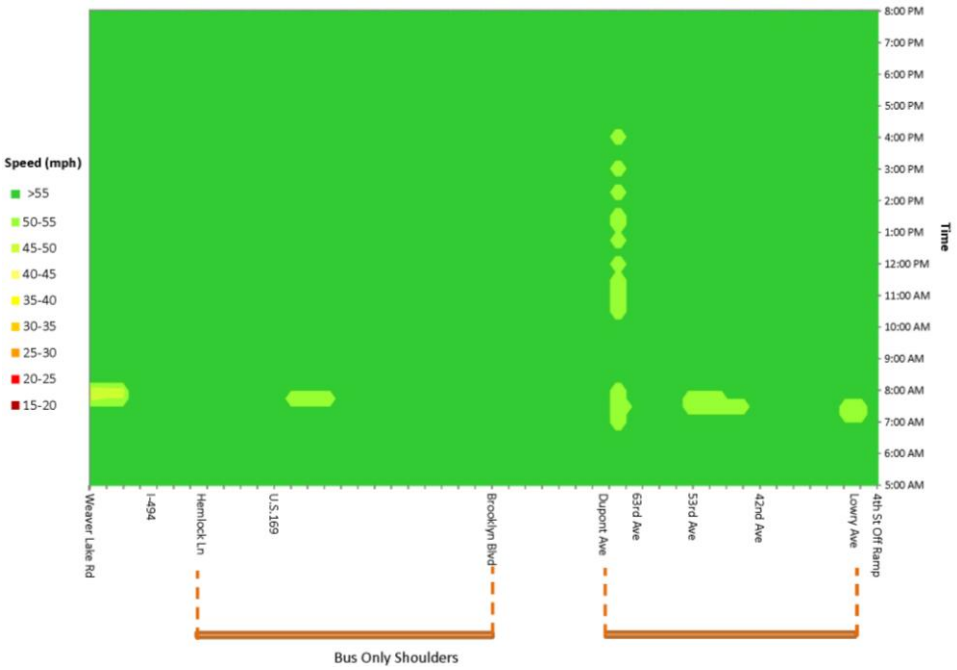
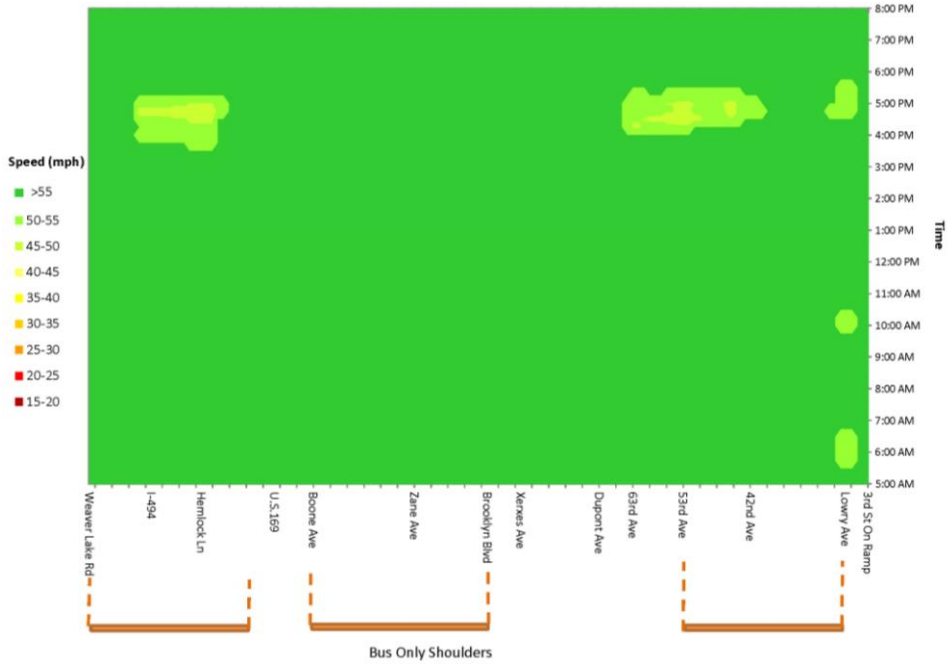


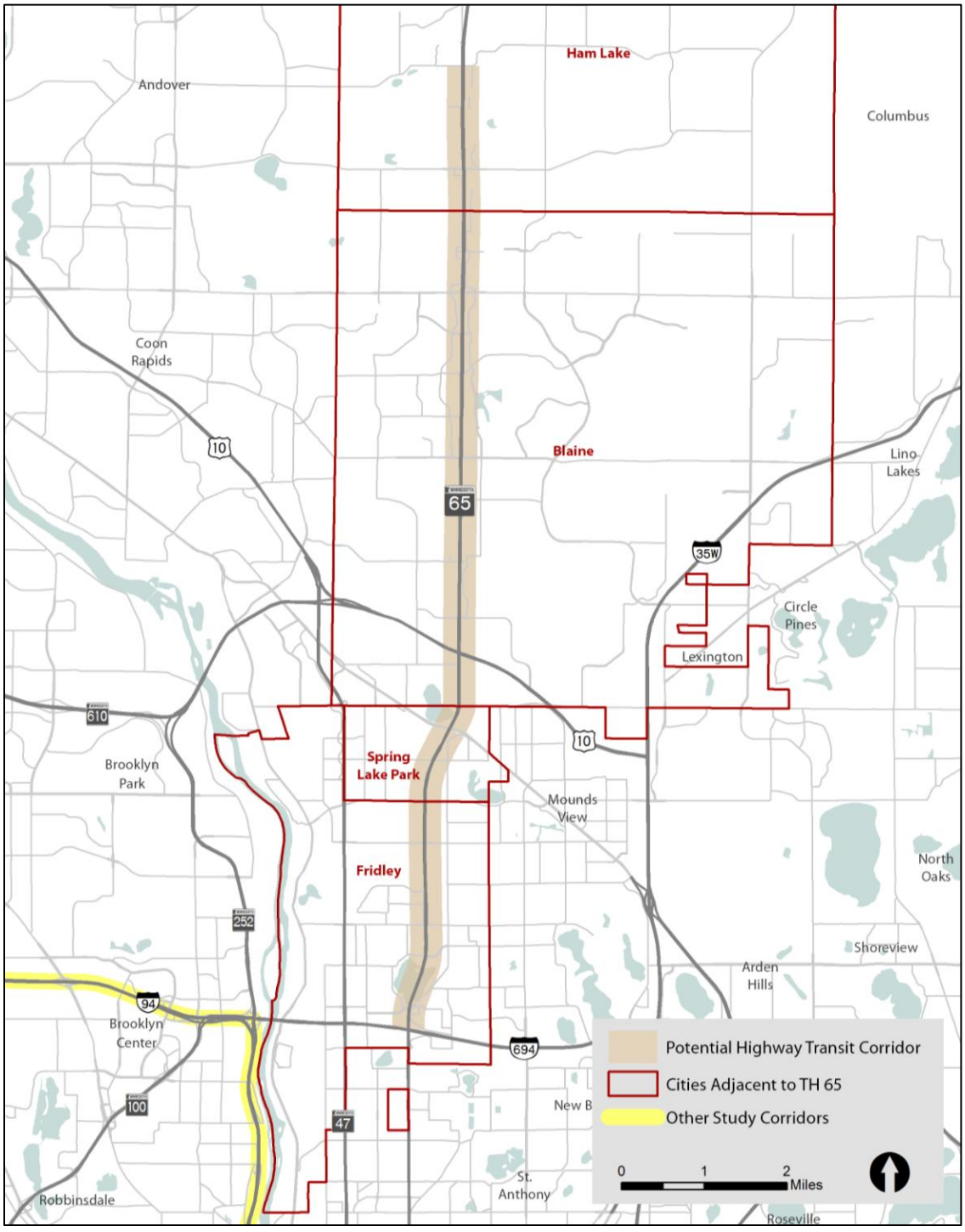
Figure 13: I-94 Westbound Congestion Areas



Trunk Highway 65

The Trunk Highway (TH) 65 corridor runs approximately 20 miles from downtown Minneapolis to the communities of Blaine and Ham Lake, as shown in Figure 14. TH 65 serves the cities of Ham Lake, Blaine, Spring Lake Park, Fridley, and Minneapolis. There are approximately 132,000 persons and 51,000 households living within two miles of a full access interchange in the Highway 65 Corridor.

Figure 14: Highway 65 Corridor



Employment Centers

There are two subregional employment centers in the TH 65 corridor, as shown in Table 9. The employment center at Highway 47 and Osborne Road has the largest number of jobs as well as the highest percentage of people who work at the employment center and also live in the TH 65 corridor.

Table 9: Highway 65 Corridor Employment Center Characteristics

Employment Centers	Type of Center	Number of Jobs at Employment Center	Number of People who work at Employment Center and Live in the Corridor	Percentage of People who work at Employment Center and Live in the Corridor
Hwy 47/Osborne Road	Subregional Employment	7,500	1,800	24%
Northtown/CR 10	Subregional Employment	8,000	1,280	16%

Education Centers

There are four education centers in the TH 65 corridor, as shown in Figure 14. All four are located in or near downtown Minneapolis. Enrollment for each education center is shown in Table 10.

Table 10: Highway 65 Education Center Enrollment

Education Center	Enrollment
University of Minnesota Twin Cities Campus - Minneapolis	52,556*
Minneapolis Community and Technical College	10,191
Augsburg College	3,908
Metropolitan State University – Minneapolis Campus	8,170*

NOTE: *Enrollment number represents students enrolled in the entire college/university. Enrollment at this institution is split between multiple campuses.

Transit Infrastructure

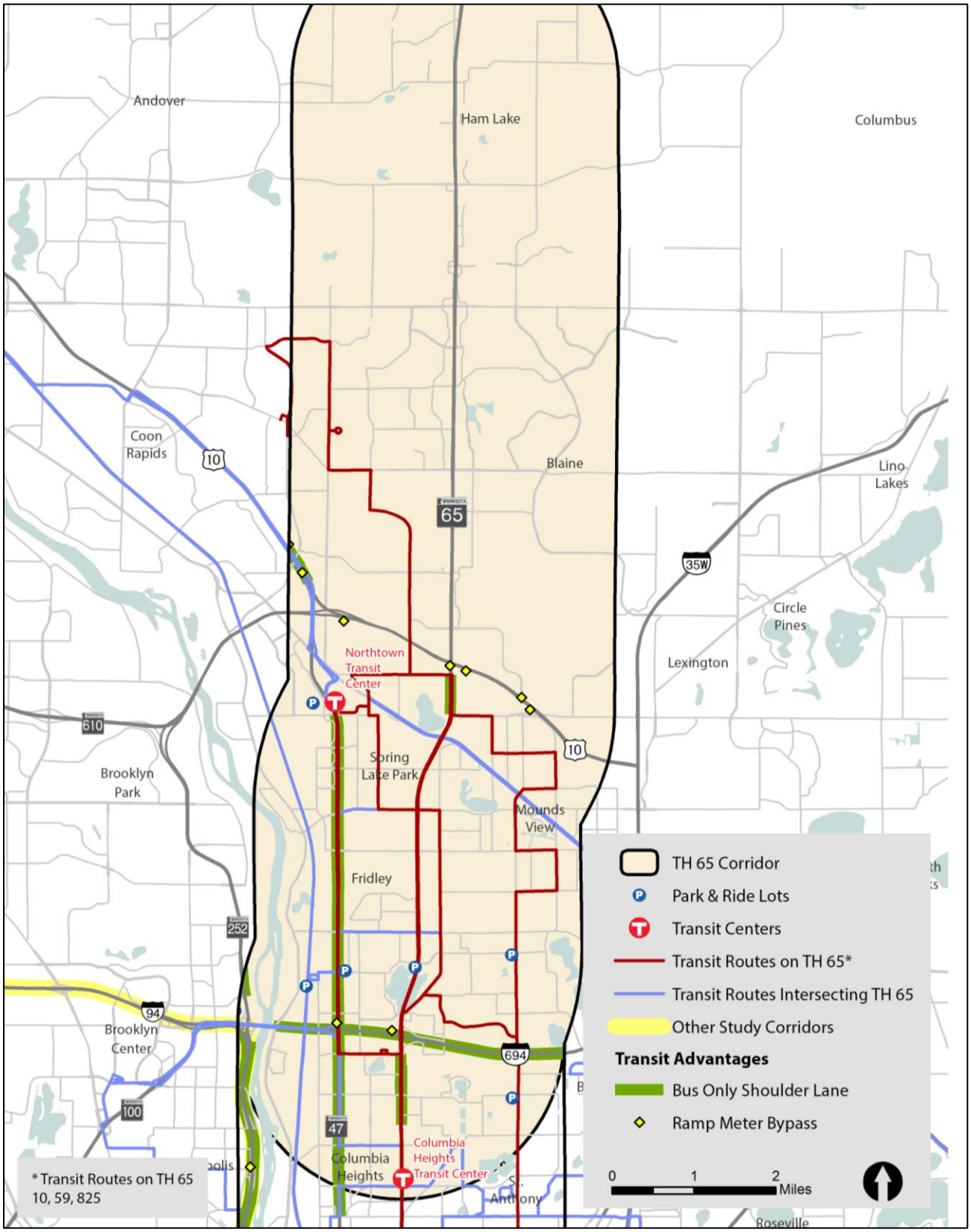
Existing transit routes, transit infrastructure, and transit advantages are shown in Figure 15. Bus-only shoulder lanes are planned for the corridor north of Highway 10, and on the I-94 and I-694 portions of the corridor. Additionally there is a park-and-ride facility at St. Philip's Lutheran Church in Fridley with approximately 20 spaces served by the Route 59 during peak periods. However, as shown in Table 11, the park-and-ride is not heavily utilized.

Table 11: Highway 65 Park-and-Ride Usage

Park-and-Ride Facility	Park-and-Ride Usage		
	Use	Capacity	% Used
St. Philip's Lutheran Church	0	20	0%

Source: Metropolitan Council, 2012

Figure 15: Highway 65 Existing Transit Routes and Infrastructure



Existing Transit Routes

Currently three bus routes serve the TH 65 corridor. Table 12 presents current service characteristics of each route.

Table 12: Highway 65 Transit Service and Performance Characteristics by Route

Route	Span of Service	Frequency (minutes) (Peak/Mid/Eve)	Number of Trips
10	4:24AM – 2:39AM	7-10 / 10 / 30-60	AM: 58 PM: 87
59	5:36AM – 6:34PM	10-30 / 0 / 0	AM: 3 PM: 3
825	5:40AM- 7:04PM	10-20 / 0 / 0	AM: 6 PM: 7

Roadway Characteristics

In the study area Highway 65 begins as a 4 lane divided expressway in Blaine and becomes six lanes between 97th Avenue and CSAH 32. From 27th Avenue to downtown Minneapolis, the majority of the corridor is a conventional, undivided four lane roadway. Speed limits gradually decline from 55 miles per hour in the rural and suburban areas to 30 miles per hour as the corridor passes through Columbia Heights.

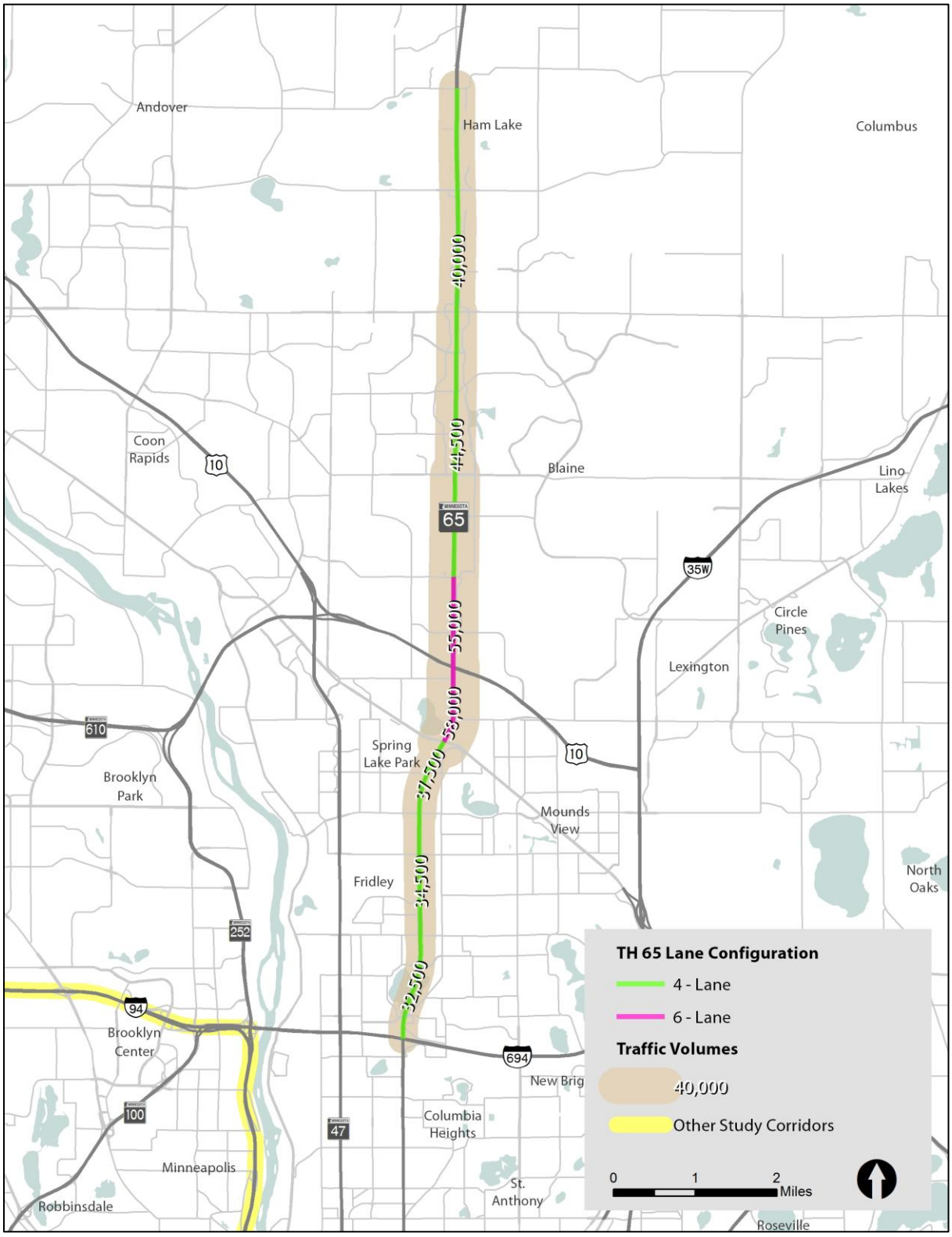
Traffic Volumes

2010 ADT volumes on TH 65 are shown in Figure 16. Traffic volumes in the TH 65 corridor are highest between Crosstown Boulevard in the north and I-694; volumes peak in the segments directly north and south of Highway 10. Traffic volumes are significantly lower south of I-694.

Congestion Areas

There is no congestion data available for TH 65, because it is a not a freeway, and therefore is not electronically monitored by the RTMC.

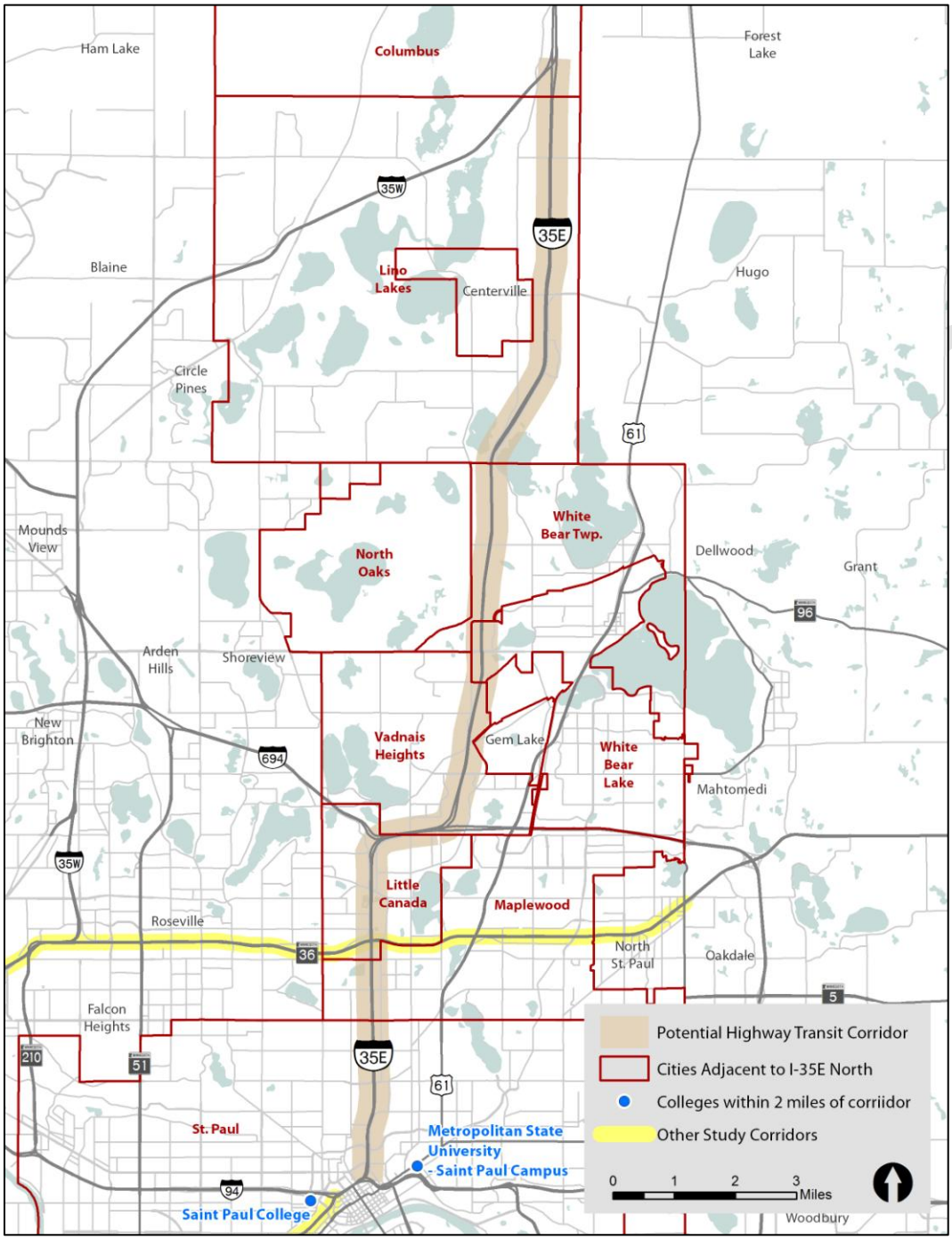
Figure 16: Highway 65 Traffic Volumes



I-35E North - St. Paul to Forest Lake

Interstate 35E travels northeast from St. Paul to Forest Lake. I-35E serves the communities of Forest Lake, Centerville, White Bear Lake, Vadnais Heights, Little Canada, and St. Paul, as shown in Figure 17. There are approximately 138,000 persons and 51,000 households living within two miles of a full access interchange in the I-35E North Corridor.[4]

Figure 17: I-35E North Corridor



[4] These estimates do not include population and households located in downtown Minneapolis.

Employment Centers

With the exception of the areas near or within downtown St. Paul, there are no employment centers in the I-35E North Corridor.

Education Centers

There are two education centers in the I-35E North corridor and both centers are located in or near downtown Saint Paul, as shown in Figure 17. The enrollment at each education center is shown in Table 13.

Table 13: I-35E North Education Center Enrollment

Education Center	Location
Saint Paul College	6,322
Metropolitan State University - Saint Paul Campus	8,170*

NOTE: *Enrollment number represents students enrolled in the entire college/university. Enrollment at this institution is split between multiple campuses.

Transit Infrastructure

Existing transit routes, transit infrastructure, and transit advantages along the Highway 36 Corridor are shown in Figure 18. There are currently bus-only shoulder lanes in both directions that begin north of Phalen Boulevard terminating at I-694, and then resuming north of County Road 15 in Vadnais Heights. The corridor also has four park-and-rides, as shown in Table 14. The Running Aces park-and-ride has the highest capacity in the corridor, but the Cub Foods-White Bear Township park-and-ride facility has the highest percentage of usage. None of the I-35E North park-and-ride facilities are operating at or near capacity. Park-and-ride user home origins are scattered throughout the northern suburbs, as show in Figure 25.

Table 14: I-35E North Park-and-Ride Usage

Park-and-Ride Facility	Park-and-Ride Usage		
	Use	Capacity	% Used
White Bear Township Theater	22	50	44%
Cub Foods – White Bear Twp.	26	50	52%
White Bear Lake Shopping Ctr.	1	10	10%
Running Aces	97	300	32%

Source: Metropolitan Council, 2012

Figure 18: I-35E North Transit Existing Transit Routes and Infrastructure

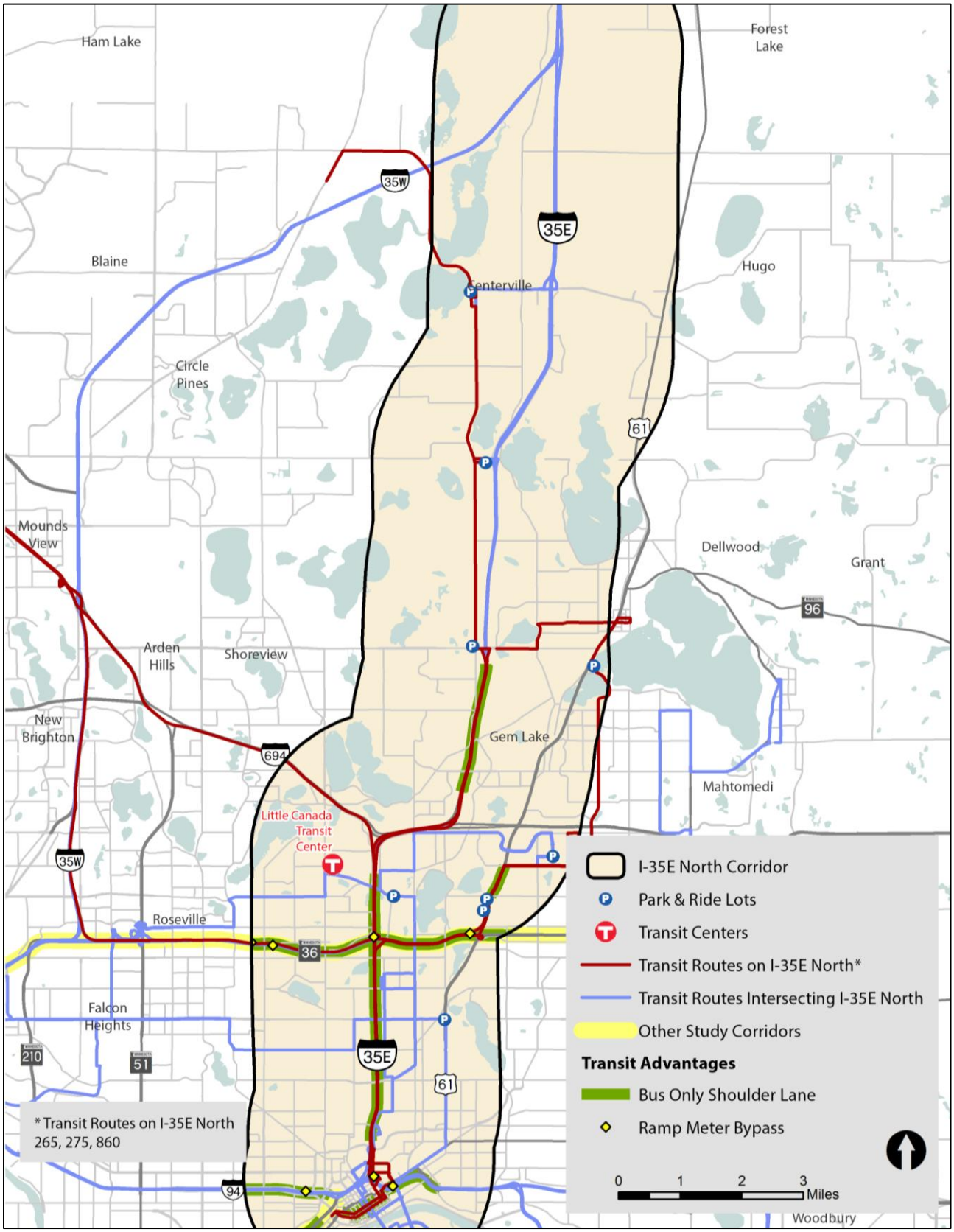
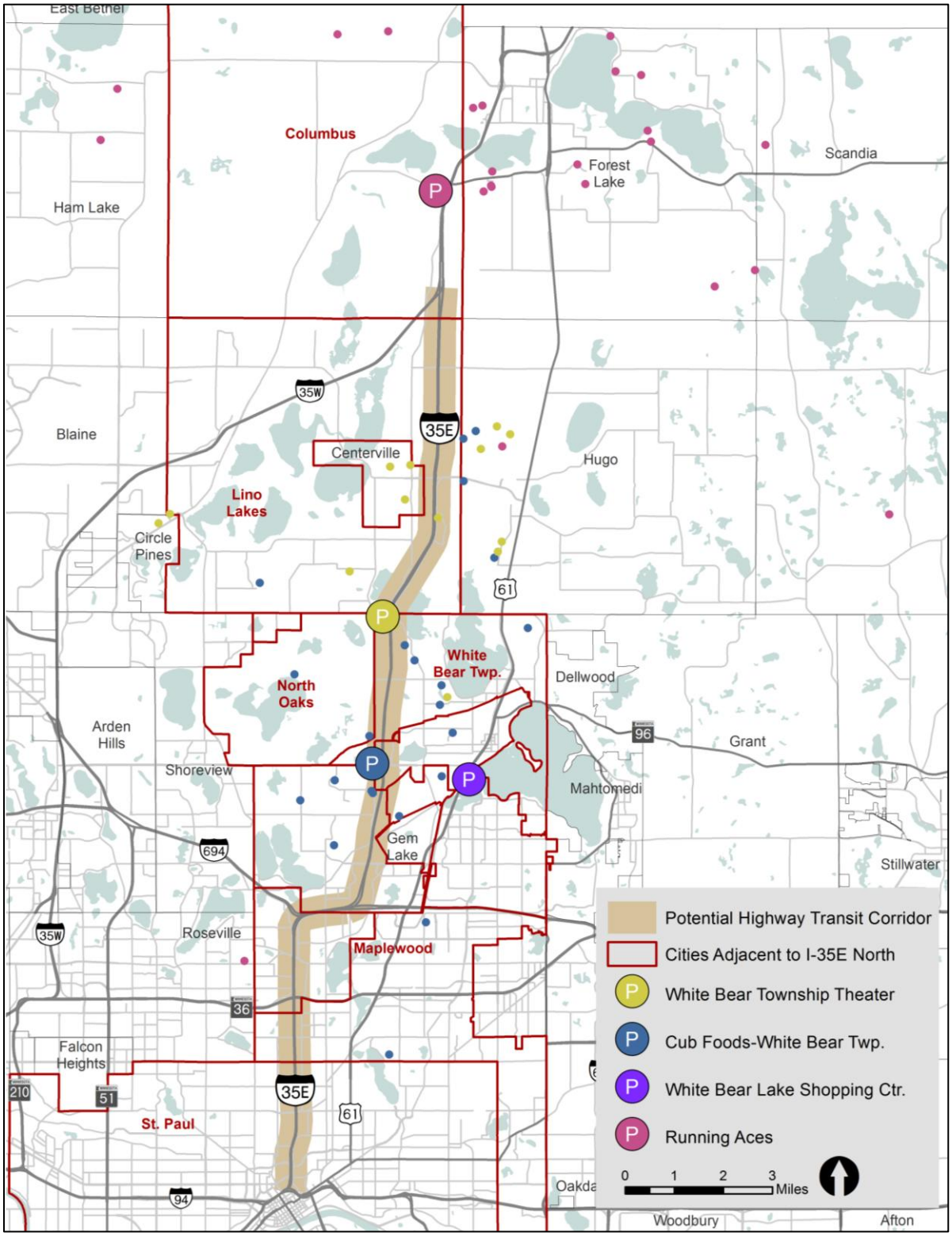


Figure 19: I-35E North Park-and-Ride User Home Origins[5]



[5] The majority of Running Aces park-and-ride facility's user origins are located north of the extent of this map.

Existing Transit Routes

Three bus routes currently serve the I-35E North corridor from downtown St. Paul. Table 15 presents current service characteristics for each route.

Table 15: I-35E North Transit Service and Performance Characteristics by Route

Route	Span of Service	Frequency (minutes) (Peak/Mid/Eve)	Number of Trips
265	5:54AM – 6:08PM	30 / 0 / 0	AM: 3 PM: 3
275	6:20AM – 6:02PM	30-40 / 0 / 0	AM: 3 PM: 3
860	5:45AM – 6:21PM	15-30 / 0 / 0	AM: 6 PM: 6

Roadway Characteristics

In the study area the I-35E North corridor begins in Forest Lake as a 4 lane freeway divided by a depressed median. The corridor expands to six lanes at County Road E and is divided by a barrier after crossing I-694. Speed limits decreases from 70 miles per hour to 60 miles per hour in the suburban areas, and decreases again to 55 miles per hour after crossing Maryland Avenue.

Traffic Volumes

2010 ADT volumes for the I-35E North Corridor are shown in Figure 20. Traffic volumes increase as the corridor runs south towards downtown Saint Paul, with the highest volumes occurring south of TH 36.

Congestion Areas

Northbound and Southbound congestion areas in the I-35E North corridor are shown in Figure 21 and Figure 22. In the northbound direction, from 4:00 – 6:00 PM there is heavy congestion around Jackson Street and then moderate congestion north of Jackson Street until Maryland Avenue. When traveling north, the bus only shoulder lane does offer transit users relief from the heaviest congestion at Jackson Street, but it does not help transit users avoid moderate congestion from Maryland Avenue to Little Canada Road. In the southbound direction, there is heavy congestion in the morning from 6:30 – 8:30am from I-694 to Maryland Avenue. There is also heavy congestion in the afternoon from 3:30 – 6:00 PM from TH 36 to Jackson Street. In the southbound direction, the bus only shoulder offers partial relief from congestion areas during both morning and afternoon time periods.

Figure 20: I-35E North Traffic Volumes and Roadway Characteristics

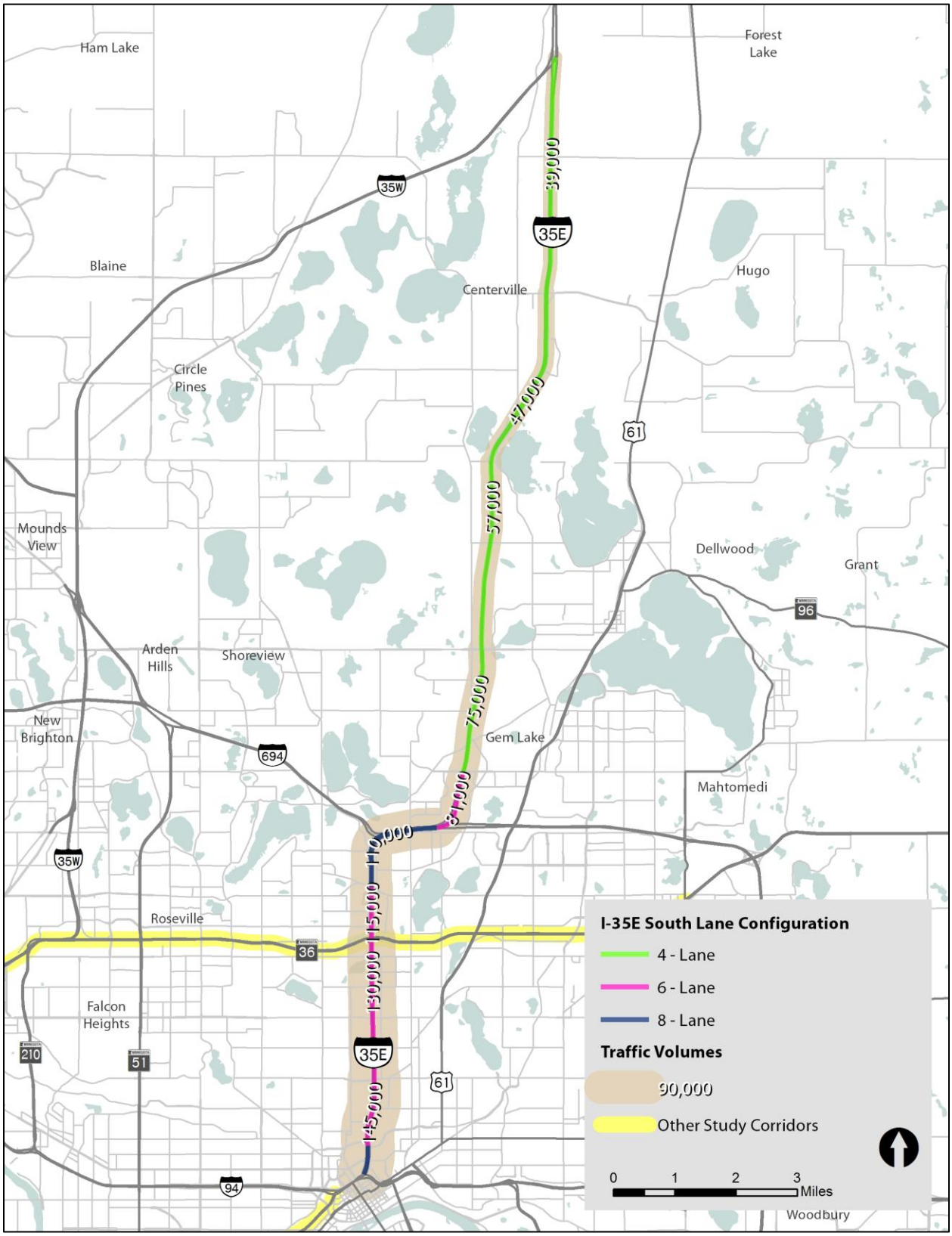


Figure 21: I-35E North, Northbound Congestion Areas

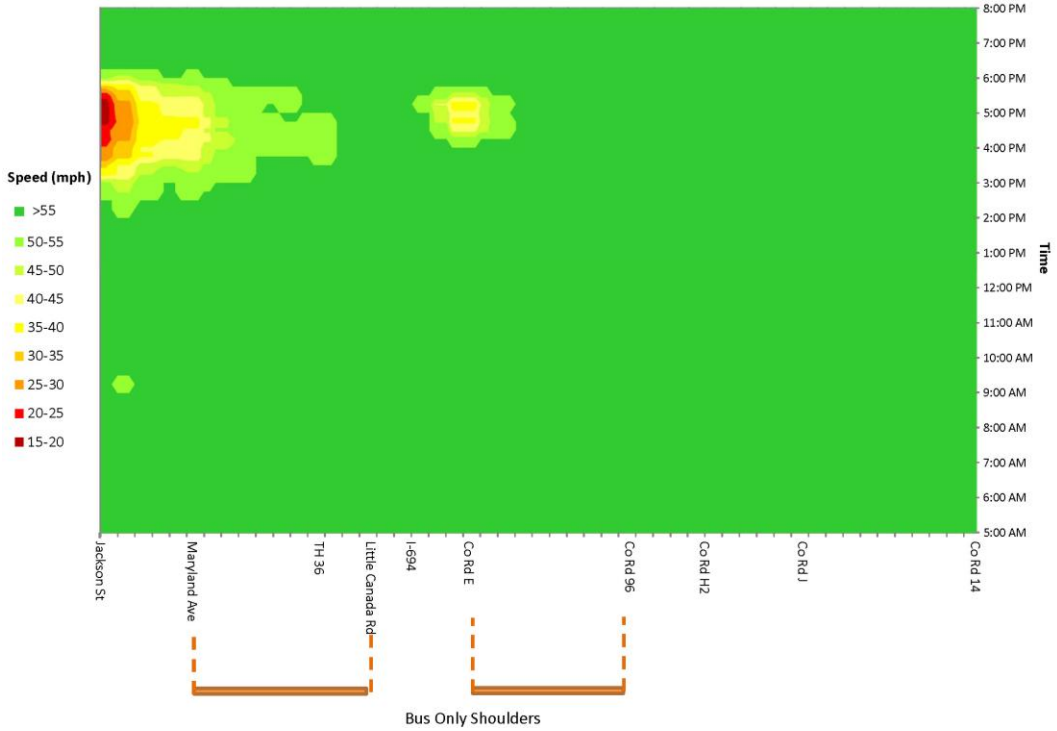
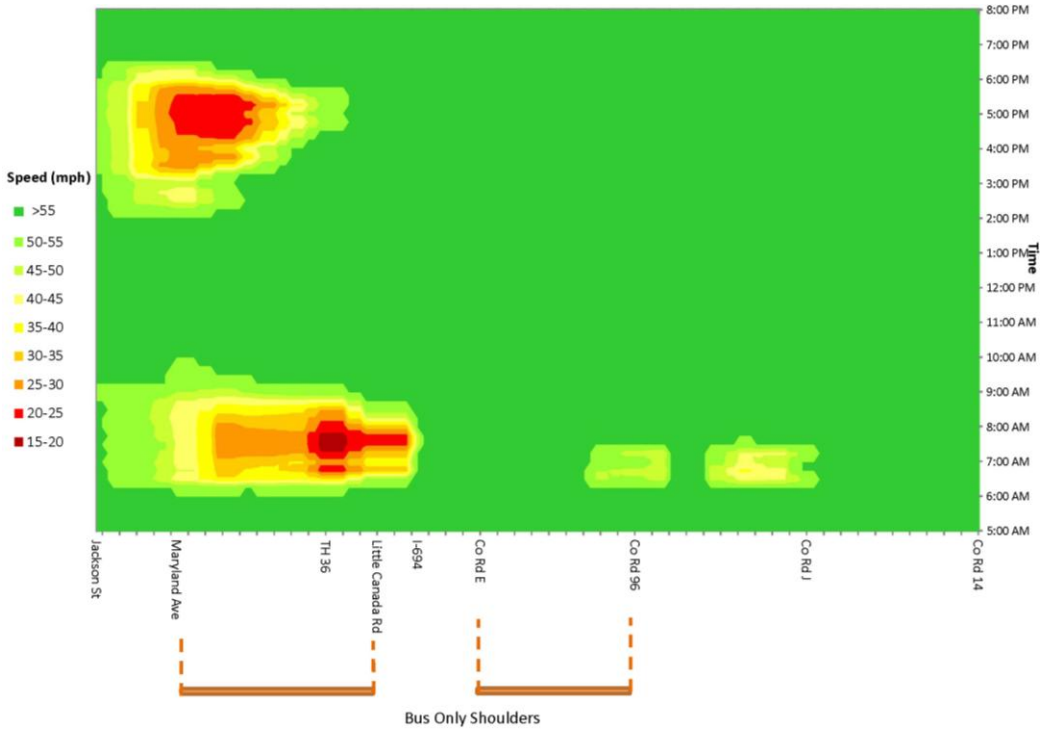


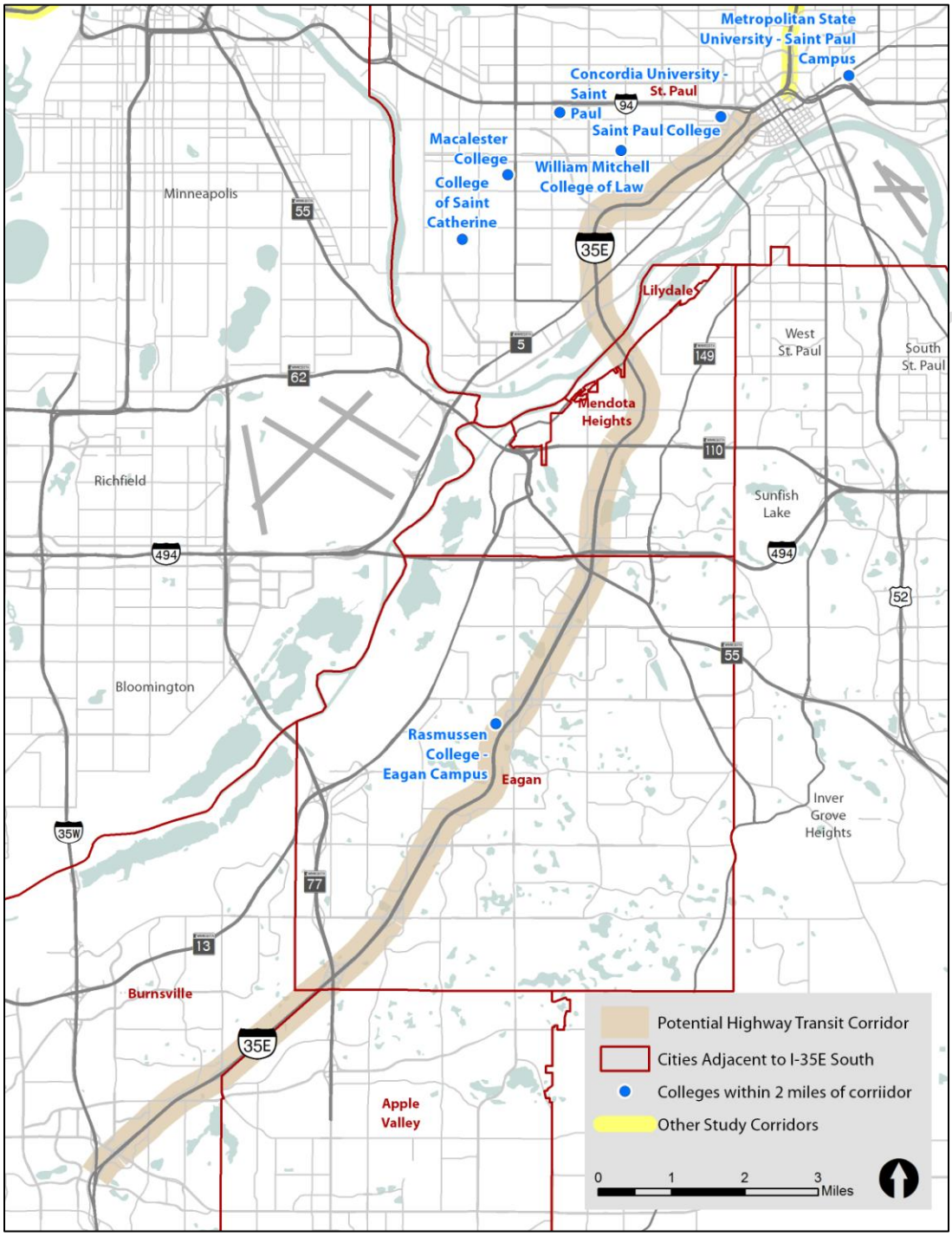
Figure 22: I-35E North, Southbound Congestion Areas



I-35E South – St. Paul to Burnsville

The I-35E South Corridor runs approximately 22 miles from downtown St. Paul to Burnsville. I-35E serves the cities of Burnsville, Eagan, Mendota Heights, and St. Paul, as shown in Figure 23. There are approximately 215,000 persons and 89,000 households living within two miles of a full access interchange in the I-35E South Corridor.[6]

Figure 23: I-35E South Corridor



[6] These estimates do not include population and households located in downtown Minneapolis.

Employment Centers

There are two employment centers in the I-35E South corridor, as shown in Table 16. The I-494/ I-35E employment center has the highest number of jobs; however the Burnsville Center/CR 42 employment center has the highest percentage of people who work at the employment center and also live in the corridor.

Table 16: I-35E South Corridor Employment Center Characteristics

Employment Centers	Type of Center	Number of Jobs at Employment Center	Number of People who work at Employment Center and Live in the Corridor	Percentage of People who work at Employment Center and Live in the Corridor
I-35E and Highway 55	Regional Employment	26,000	5,200	20%
Burnsville Center/CR 42	Regional Employment	15,000	4,500	30%

Education Centers

There are seven education centers in the I-35E South Corridor, as shown in Figure 23. All the centers in this corridor are located within the City of Saint Paul, with the exception of Rasmussen College's Eagan campus. The enrollment for each education center is shown in Table 17.

Table 17: I-35E South Education Center Enrollment

Education Center	Enrollment
Macalester College	2,005
Saint Paul College	6,322
College of Saint Catherine	10,836
Concordia University - Saint Paul	2,764
Metropolitan State University - Saint Paul Campus	8,170*
William Mitchell College of Law	1,011
Rasmussen College - Eagan Campus	6,651

NOTE: *Enrollment number represents students enrolled in the entire college/university. Enrollment at this institution is split between multiple campuses.

Transit Infrastructure

Existing transit routes, transit infrastructure, and transit advantages along the I-35E South corridor are shown in Figure 24. There are currently bus-only shoulder lanes in in the inbound direction on I-35E South in portions of Mendota Heights and in both directions in the City of St. Paul. The corridor also has three park-and-rides, as shown in Table 18. Park-and-ride user home origins in this corridor are concentrated in the cities of Apple Valley and Eagan, as shown in Figure 25. The park-and-ride facility with the highest capacity is the Eagan Transit Center with 679 spaces, and the facility with the highest usage is the Palomino Hills park-and-ride with 79 percent usage.

Table 18: I-35E South Corridor Park-and-Ride Usage

Park-and-Ride Facility	Park-and-Ride Usage		
	Use	Capacity	% Used
Eagan Transit Center	324	679	48%
Blackhawk Park-and-Ride	281	367	77%
Palomino Hills Park-and-Ride	246	312	79%

Source: Metropolitan Council, 2012

Figure 24: I-35E South Existing Transit Routes and Infrastructure

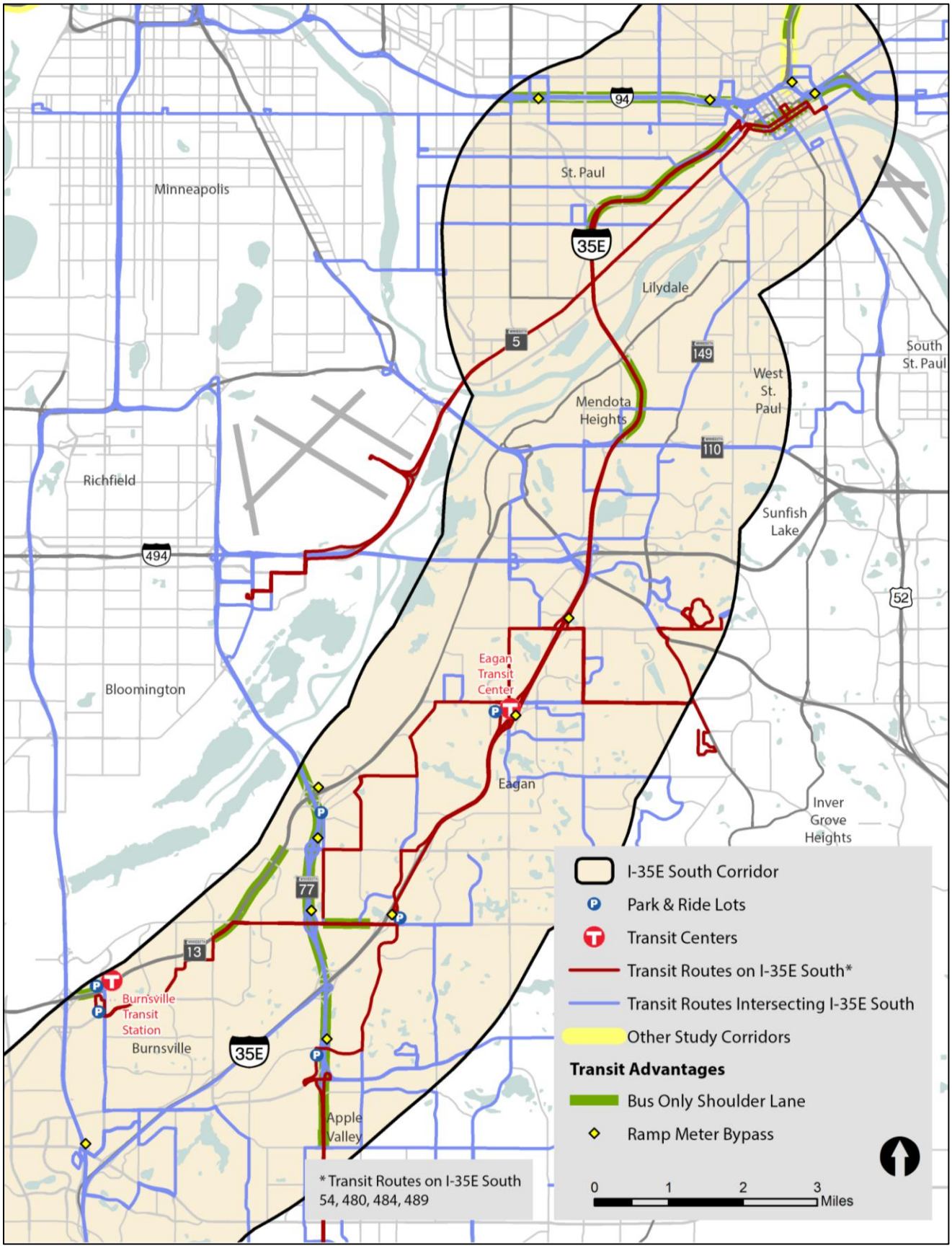
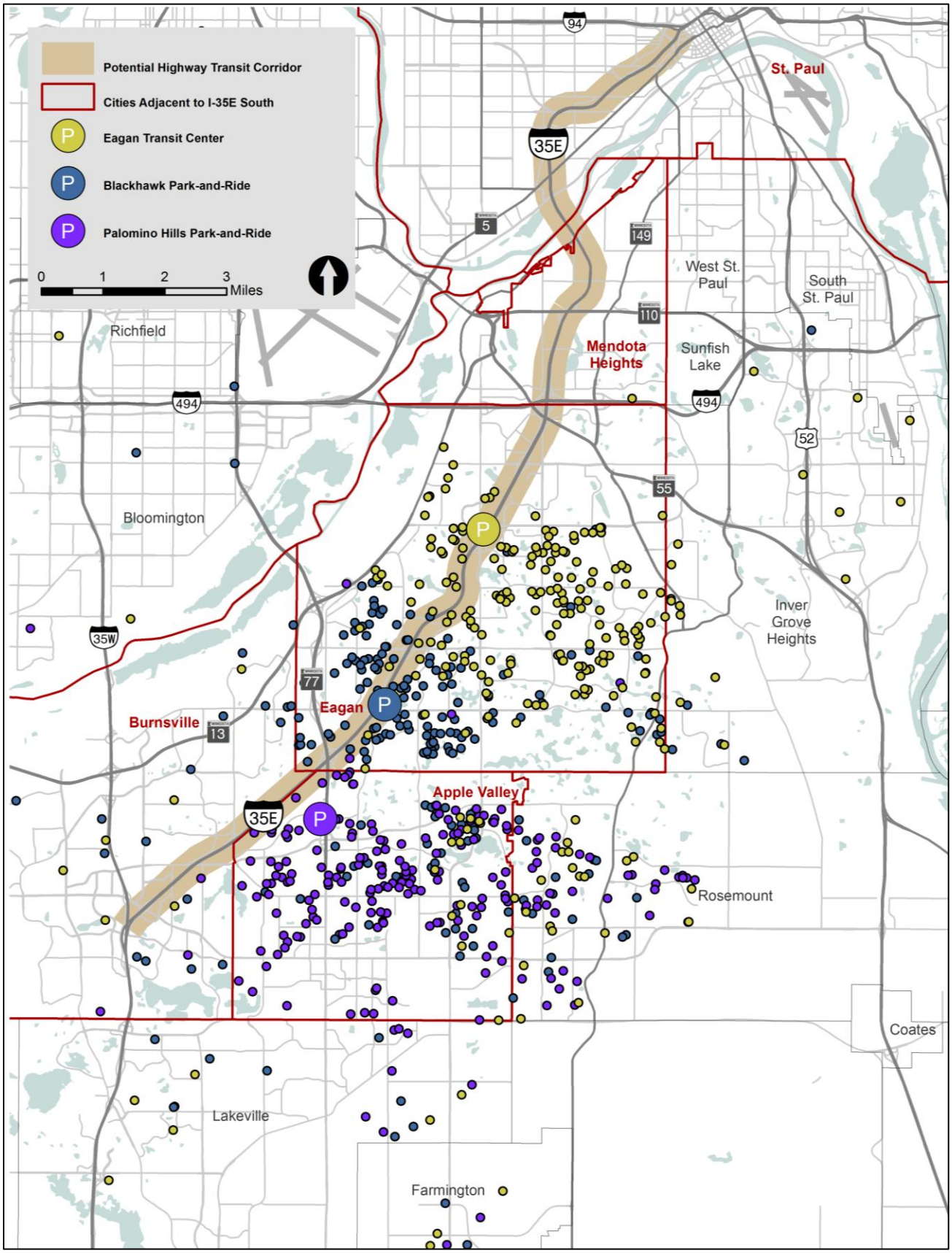


Figure 25: I-35E South Park-and-Ride User Home Origins



Existing Transit Routes

Four bus routes currently serve the I-35E South corridor southbound from downtown St. Paul. Table 19 presents current service characteristics for each route.

Table 19: I-35E Transit Service Performance Characteristics by Route[7]

Route	Span of Service	Frequency (minutes) (Peak/Mid/Eve)	Number of Trips
54	4:05AM – 1:11AM	15 / 15 / 15-30	AM: 61 PM: 89
480	6:05AM – 6:48PM	30 / 0 / 0	AM: 8 PM: 8
484	6:02AM – 5:54PM	30 / 0 / 0	AM: 3 PM: 4
489	6:13AM – 5:48PM	30-60 / 0 / 0	AM: 3 PM: 3

Roadway Characteristics

In the study area the I-35E South corridor begins at the Burnsville Split near the junction with I-35W as a 4-lane freeway divided by a depressed median. The corridor expands to six lanes at Pilot Knob Road, and expands further to 8 lanes near the I-494 interchange. The corridor reverts back to 6 lanes until reaching Highway 110 where it becomes 4 lanes divided by a barrier. The speed limit is 70 miles per hour in the outer rural and suburban areas, and after crossing Highway 110 the speed limit becomes 55 miles per hour. The urban freeway portion of I-35E in the City of St. Paul has a speed limit of 45 miles per hour.

Traffic Volumes

2010 ADT volumes in the I-35E South Corridor are shown in Figure 26. ADT volumes are fairly uniform throughout the corridor, generally ranging from 60,000 to 80,000 vehicles per day. ADT volumes peak in this corridor in the segment between Lone Oak Road and Highway 55.

Congestion Areas

Northbound and southbound congestion areas in the I-35E South corridor are shown in Figure 27 and Figure 28. In the northbound direction, moderate congestion occurs in the morning between Lone Oak Road to TH 13 from 7:00 – 8:00 AM. Heavy congestion occurs during the same time period between I-494 to TH 110. As the bus only shoulder begins at TH 110, transit users will be delayed by this heavy congestion area. In the southbound direction, in the afternoon there is heavy congestion near West 7th Street from 4:30 - 6:00 PM.

[7] Route schedules effective as of June 2013

Figure 26: I-35E South Traffic Volumes and Roadway Characteristics

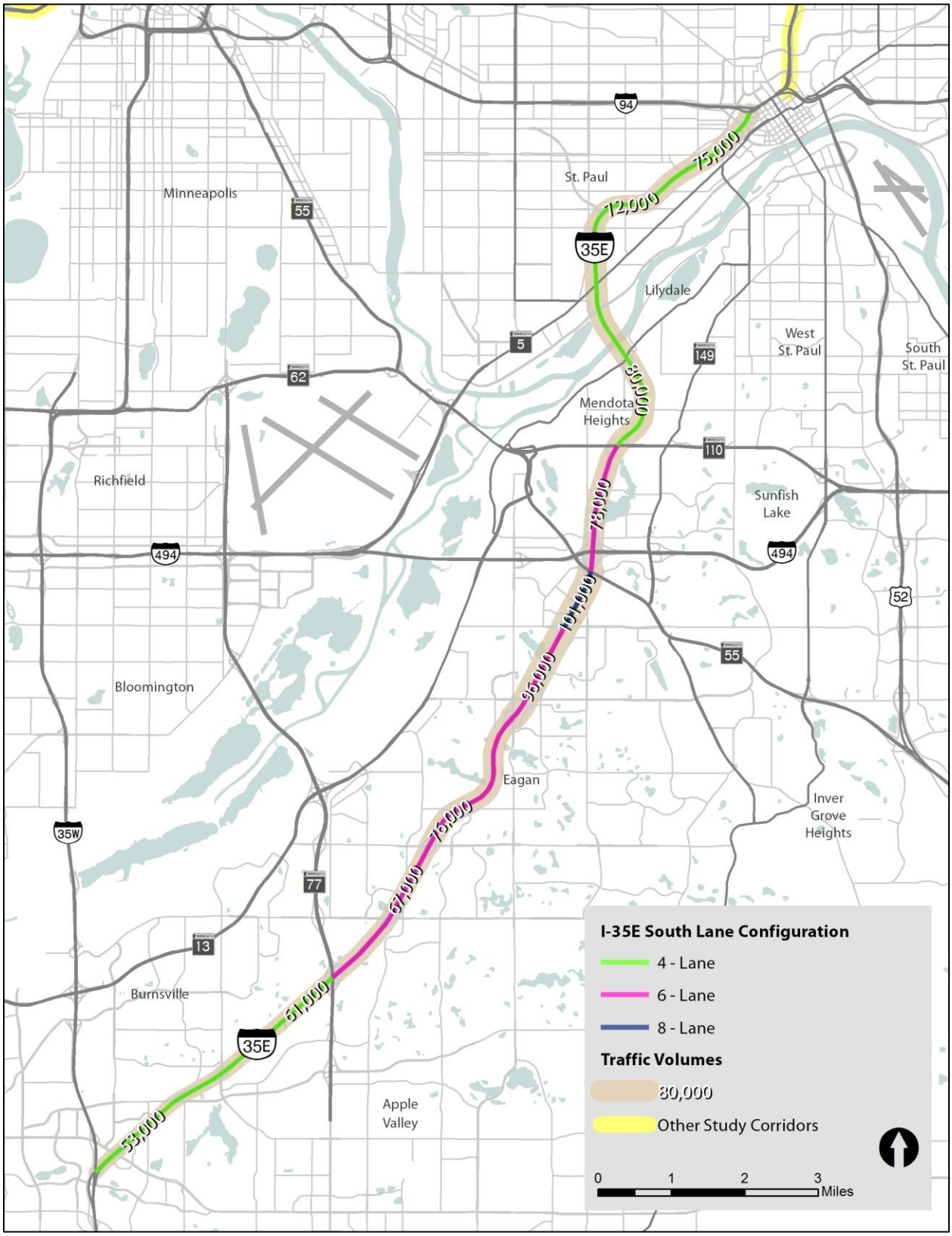


Figure 27: Highway I-35E South, Northbound Congestion Areas

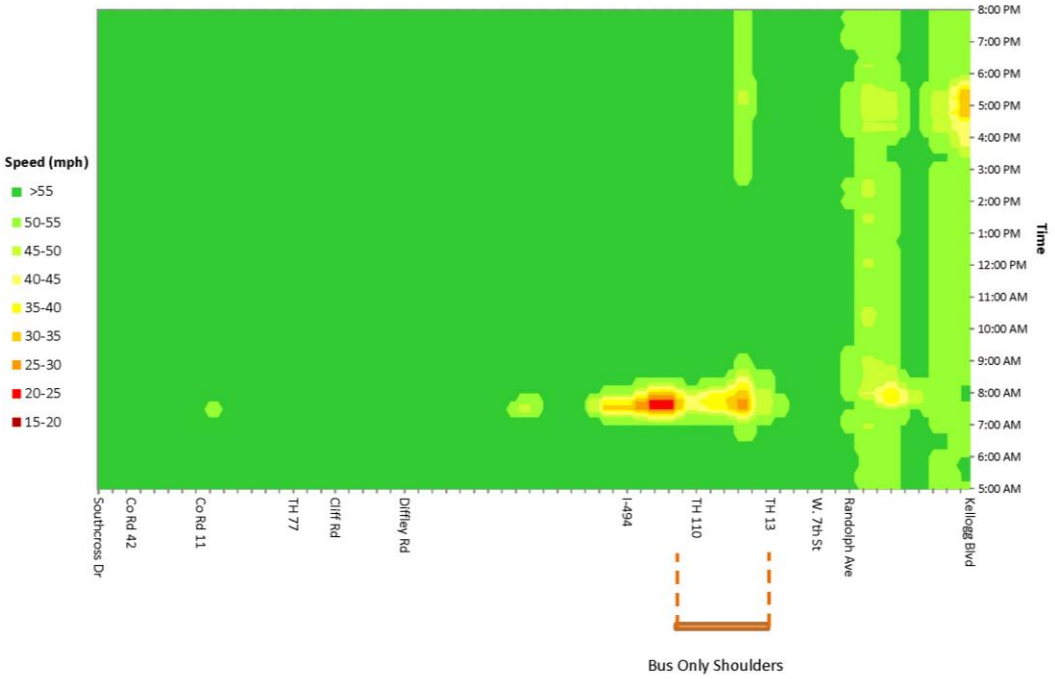
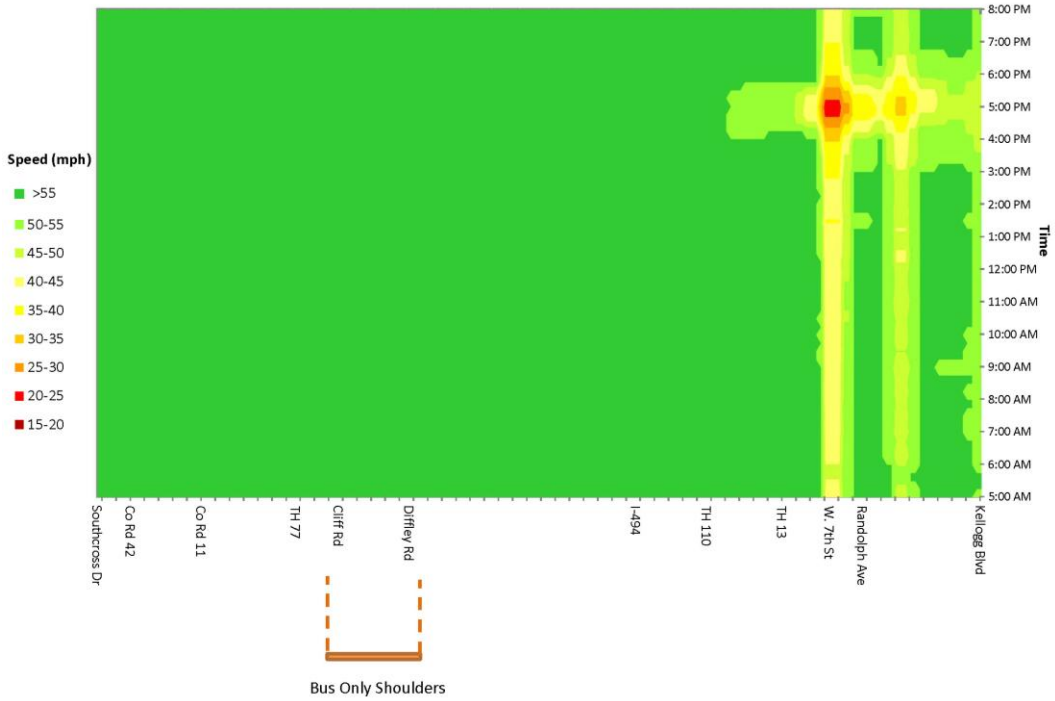


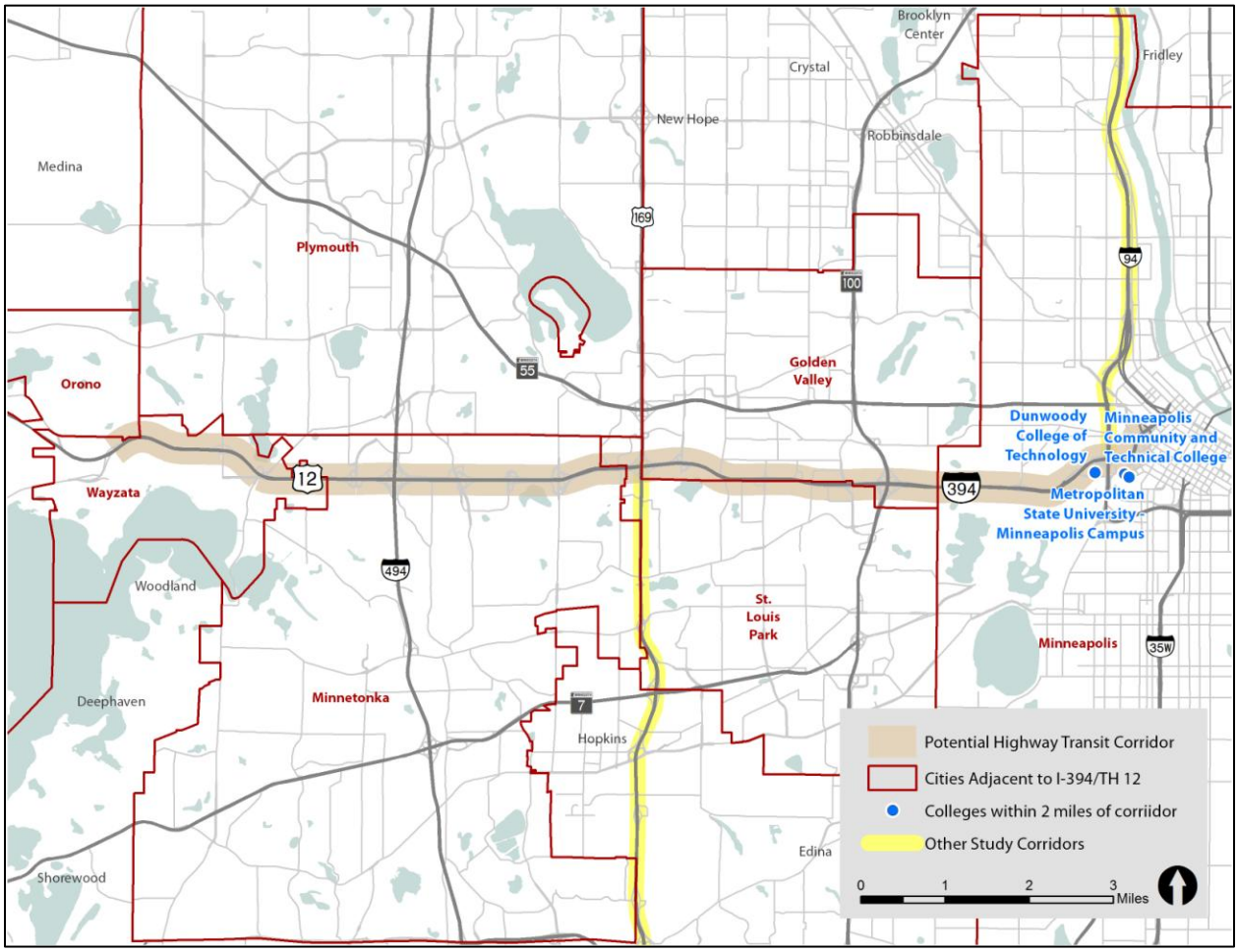
Figure 28: Highway I-35E South, Southbound Congestion Areas



I-394 Plymouth to Minneapolis

The I-394 Corridor runs approximately 11 miles from Minneapolis to Plymouth in a westerly direction from downtown Minneapolis. I-394 runs through the communities of Plymouth, Minnetonka, St. Louis Park, Golden Valley, and Minneapolis, as shown in Figure 29. There are approximately 143,000 persons and 67,000 households living within two miles of a full access interchange in the I-394 Corridor.[8]

Figure 29: I-394 Corridor



[8] These estimates do not include population and households located in downtown Minneapolis.

Employment Centers

Four major employment centers are located on the I-394 corridor, as shown in Table 20. The I-394/Xenia employment center, the location with the highest number of jobs, has numerous commercial office space locations and retail establishments. The General Mills headquarters and its adjacent office buildings are located at the subregional professional center at I-394 at US-169. All four employment centers have a similar percentage of people who work at a corridor employment center and also live in the corridor.

Table 20: I-394 Employment Center Characteristics

Employment Centers	Type of Center	Number of Jobs at Employment Center	Number of People who work at Employment Center and Live in the Corridor	Percentage of People who work at Employment Center and Live in the Corridor
I-394/Xenia	Regional Employment	16,100	1,610	10%
I-394/Hwy 169	Subregional Employment	7,900	1,027	13%
Hwy 55/Hwy 169	Subregional Employment	12,400	1,240	10%
Ridgedale/I-394	Subregional Employment	7,500	975	13%

Education Centers

There are three education centers in the I-394 corridor all three are located in or near downtown Minneapolis, as shown in Figure 29. The enrollment for each education center is shown in Table 21.

Table 21: I-394 Education Center Enrollment

Education Center	Enrollment
Minneapolis Community and Technical College	10,191
Metropolitan State University – Minneapolis Campus	8,170*
Dunwoody College of Technology	1,041

NOTE: *Enrollment number represents students enrolled in the entire college/university. Enrollment at this institution is split between multiple campuses.

Transit Infrastructure

The I-394 corridor has several transit advantages including ramp meter bypasses, dedicated bus lanes, bus-only shoulder operations, and the price dynamic high occupancy toll lane from Minneapolis to Highway 100, as shown in Figure 30. There are currently bus-only shoulder lanes in in the inbound direction on I-394 between where the standard price dynamic HOT lane terminates and the reversible HOT lane begins. The corridor also has eight park-and-rides, as shown in Table 22. Figure 31 demonstrates that park-and-ride user home origins are generally evenly distributed between areas north and south of the I-394 corridor. The County Road 73 has the highest capacity of all the facilities in this corridor, but the facility with the highest use is the Messiah United

Methodist Church, which is operating over-capacity. Additionally the General Mills and Louisiana Avenue facilities are both at capacity.

Table 22: I-394 Corridor Park-and-Ride Usage

Park-and-Ride Facility	Park-and-Ride Usage		
	Use	Capacity	% Used
General Mills	119	123	97%
Louisiana Avenue	323	330	98%
Park Place	34	55	62%
Co. Rd. 73	514	732	70%
Plymouth Road	69	111	62%
Station 73	95	280	34%
Messiah United Methodist	106	85	125%
Wayzata/Barry	73	102	72%

Source: Metropolitan Council, 2012

Figure 30: I-394 Existing Transit Routes and Infrastructure

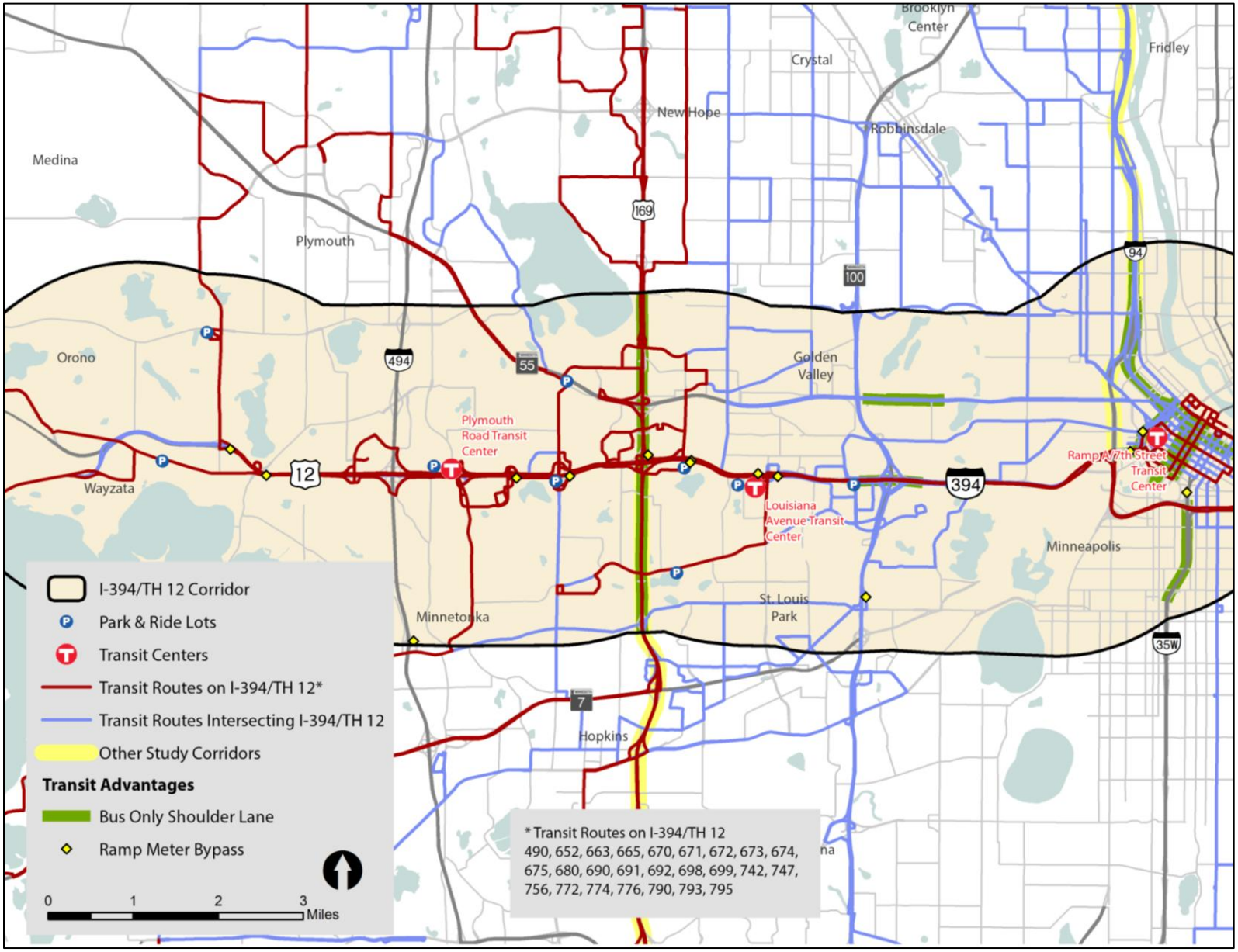
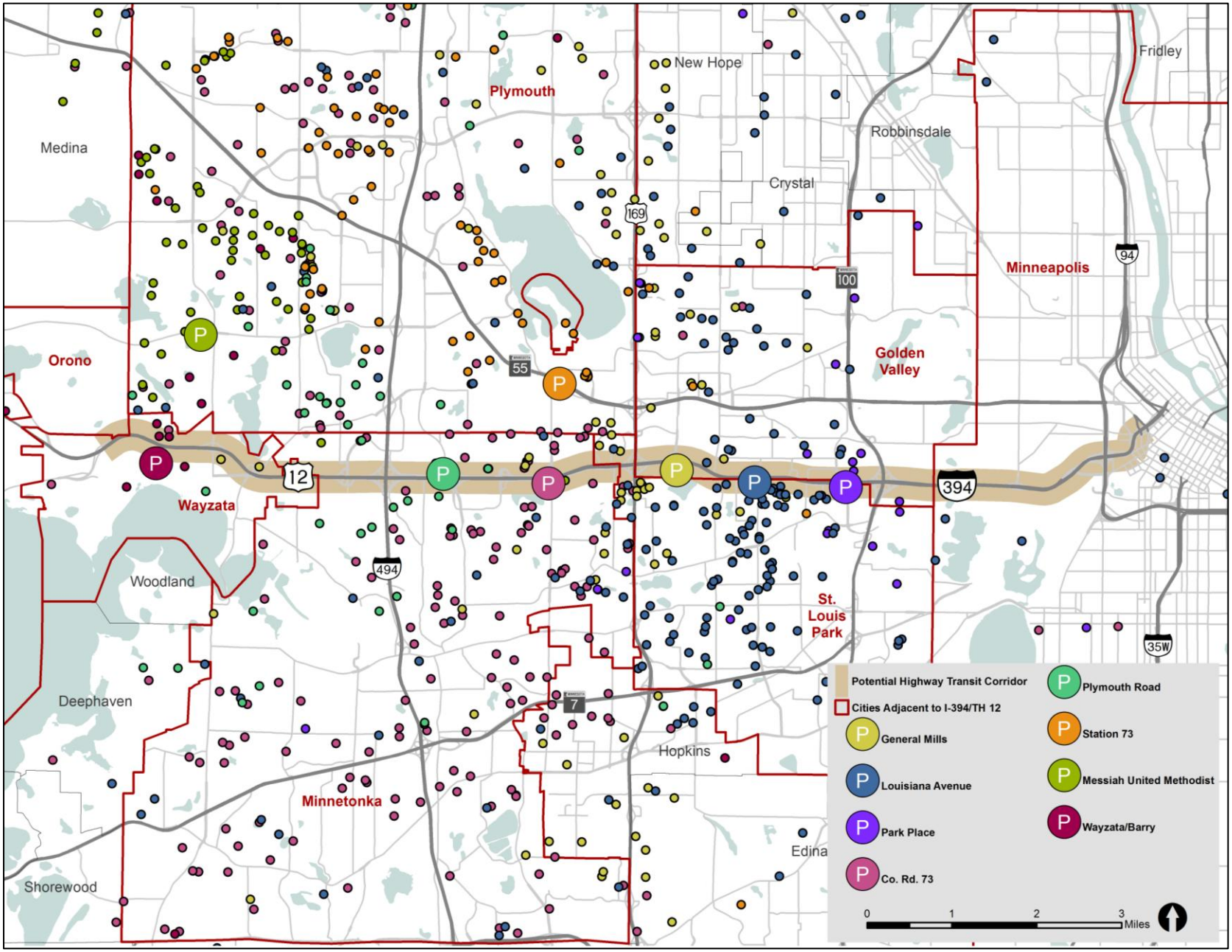


Figure 31: I-394 Park-and-Ride User Home Origins



Existing Transit Routes

Twenty-five bus routes operate on the I-394 corridor between Plymouth and downtown Minneapolis. Table 23 presents current service characteristics for each route.

Table 23: I-394 Transit Service Performance Characteristics by Route

Route	Span of Service	Frequency (minutes) (Peak/Mid/Eve)	Number of Trips
490	5:37AM – 7:21PM	10-20 / 0 / 0	AM: 10 PM: 11
652	6:53AM – 6:25PM	10-60 / 0 / 0	AM: 4 PM: 5
663	6:17AM – 6:46PM	15-30 / 0 / 0	AM: 8 PM: 8
665	6:11AM – 5:49PM	30-35 / 0 / 0	AM: 3 PM: 3
670	6:12AM – 6:16PM	30 / 0 / 0	AM: 3 PM: 3
671	6:19AM – 6:08PM	25-35 / 0 / 0	AM: 3 PM: 3
672	6:06AM – 6:42PM	15-60 / 0 / 0	AM: 9 PM: 10
673	5:53AM – 6:53PM	10-30 / 0 / 0	AM: 16 PM: 12
674	6:15AM – 6:15PM	25-35 / 0 / 0	AM: 3 PM: 3
675	4:57AM – 10:59PM	30-60 / 30-60 / 60	AM: 30 PM: 34
680	6:45AM – 5:33PM	0 / 0 / 0	AM: 1 PM: 1
690	6:04AM – 7:27PM	5-15 / 0 / 0	AM: 24 PM: 22
692	6:30AM – 6:07PM	15-25 / 0 / 0	AM: 4 PM: 5
698	5:36AM – 10:39PM	30-60 / 60 / 30-60	AM: 13 PM: 20
699	5:55AM – 6:41PM	10-20 / 0 / 0	AM: 11 PM: 11
742	5:46AM – 7:00 PM	45-60 / 0 / 0	AM: 3 PM: 4
747	5:11AM – 6:10PM	25-30 / 0 / 0	AM: 8 PM: 9
756	6:37AM – 5:49PM	25-35 / 0 / 0	AM: 3 PM: 3
772	5:57AM – 6:31PM	20-30 / 0 / 0	AM: 6 PM: 5
774	6:09PM -7:41PM	60 / 0 / 0	AM: 0 PM: 2
776	5:25AM –6:58PM	15-30 / 0 / 0	AM: 7 PM: 7
777	5:43AM – 6:48PM	25-30 / 0 / 0	AM:5 PM:5
790	5:43AM – 6:38PM	15-20 / 0 / 0	AM: 8 PM: 8
793	6:29AM – 7:49PM	30-60 / 0 / 0	AM: 2 PM: 4
795	12:11 PM- 2:58PM	0 / 120 / 0	AM: 0 PM: 2

Roadway Characteristics

The I-344 corridor is a six lane freeway divided by a barrier from I-494 until it reaches I-94. It has MnPASS lanes for the entirety of the study area, and bus-only shoulder operations near Highway 100 in the inbound direction. From Highway 100 to downtown Minneapolis there is also a reversible HOT lane in a center runningway. The speed limit in the I-394 corridor is 55 miles per hour.

Traffic Volumes

2010 ADT volumes for the I-394 Corridor are shown in Figure 36. ADT volumes increase as the corridor runs west into downtown Minneapolis. ADT volumes are highest between Highway 100 and I-94.

Congestion Areas

Eastbound and westbound congestion levels in the I-394 corridor are shown in Figure 32 through Figure 36. In the morning, traveling eastbound in the general purpose lane, there is moderate congestion between US 169 to Linden Avenue from 7:00 – 8:30AM. There is also heavy congestion between US 169 and Louisiana Avenue and between TH 100 and Penn Avenue during the same time frame. In the evening, traveling eastbound in the general purpose lane, there is moderate congestion between Louisiana Avenue to I-94 from 4:00 – 6:30 PM and heavy congestion from TH 100 to Penn Avenue during the same time frame.

Traveling eastbound in the MnPass Lane in the morning, there is moderate congestion between US 169 and TH 100 from 7:00 – 8:30 AM. Heavy congestion occurs near TH 100 from 4:30 PM to 6:00 PM, because MnPass users must merge into the general purpose lane at this point as the reversible lane is open for westbound travelers during the evening.

Traveling in the westbound direction in the general purpose lane there is heavy congestion between Linden Avenue and I-94 in the evening from 4:00 – 6:00 PM. The RTMC detectors show no congestion areas in the MnPass lane when traveling westbound on I-394.

Figure 32: I-394 Eastbound Congestion Areas, General Purpose Lane

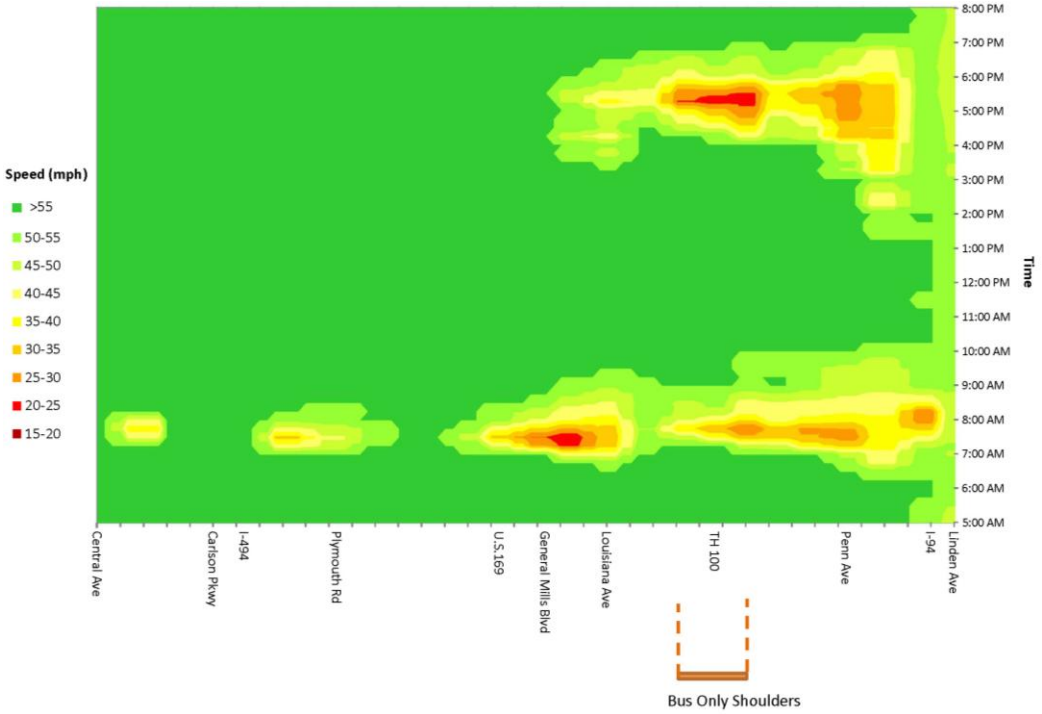


Figure 33: I-394 Westbound Congestion Areas, General Purpose Lane

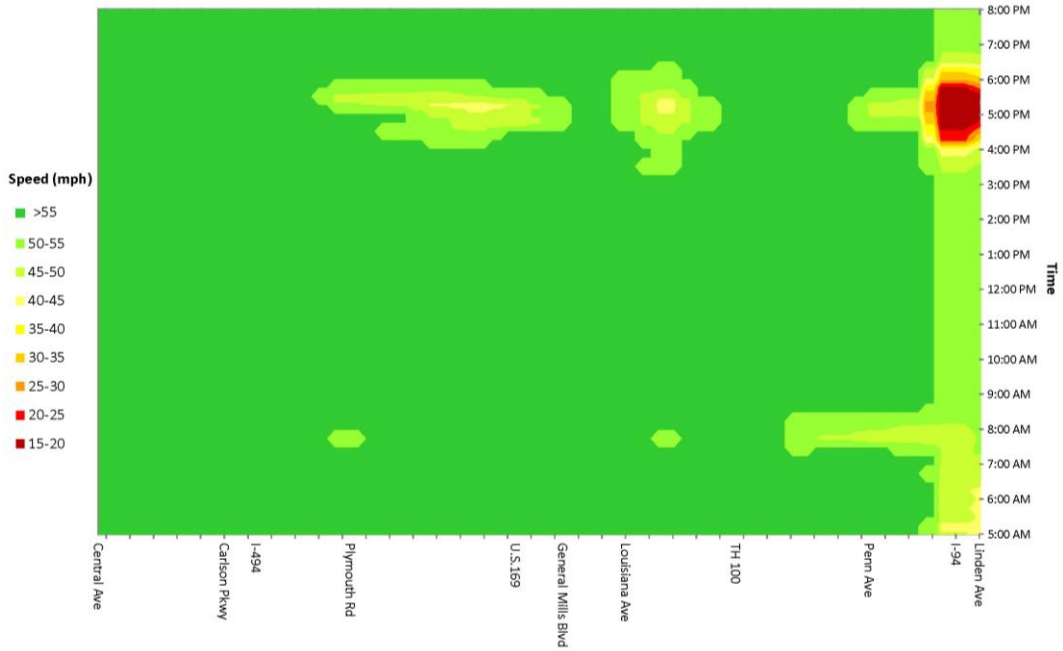


Figure 34: I-394 East Bound Congestion Areas, MnPass Lane

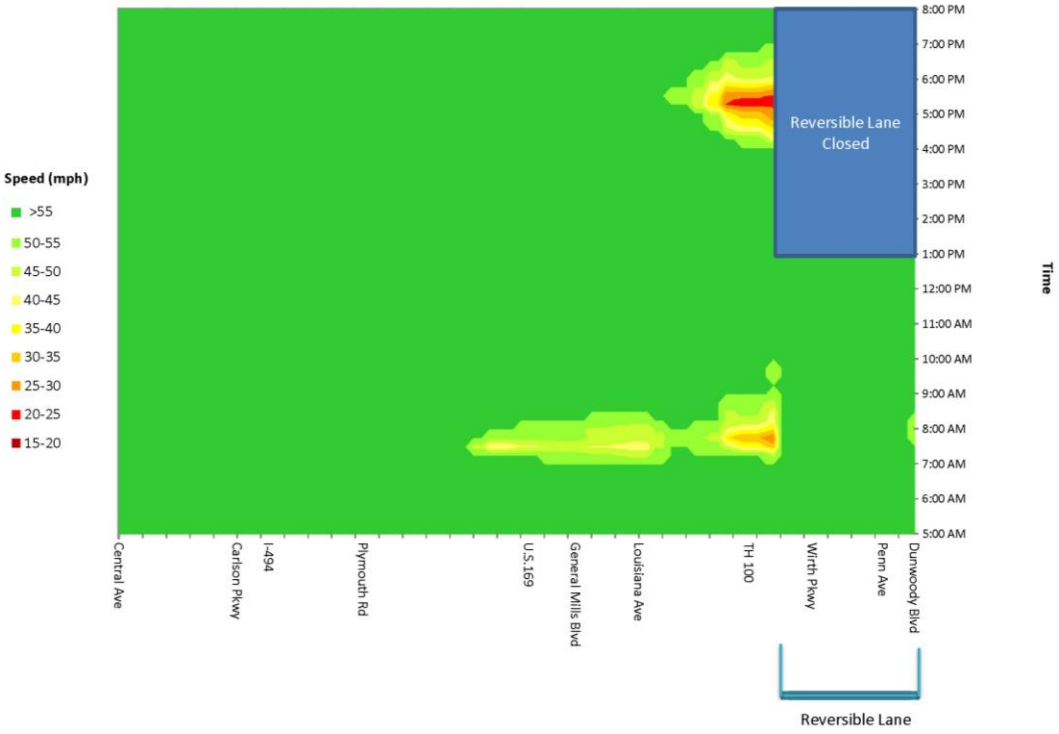


Figure 35: I-394 West Bound Congestion Areas, MnPass Lane

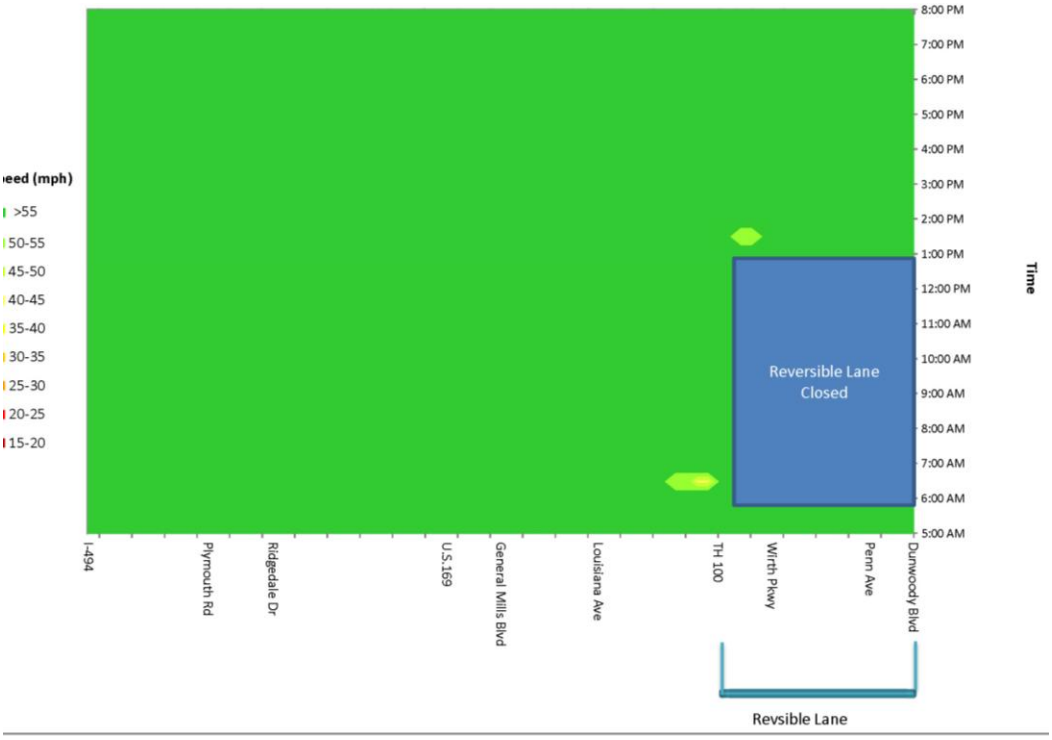
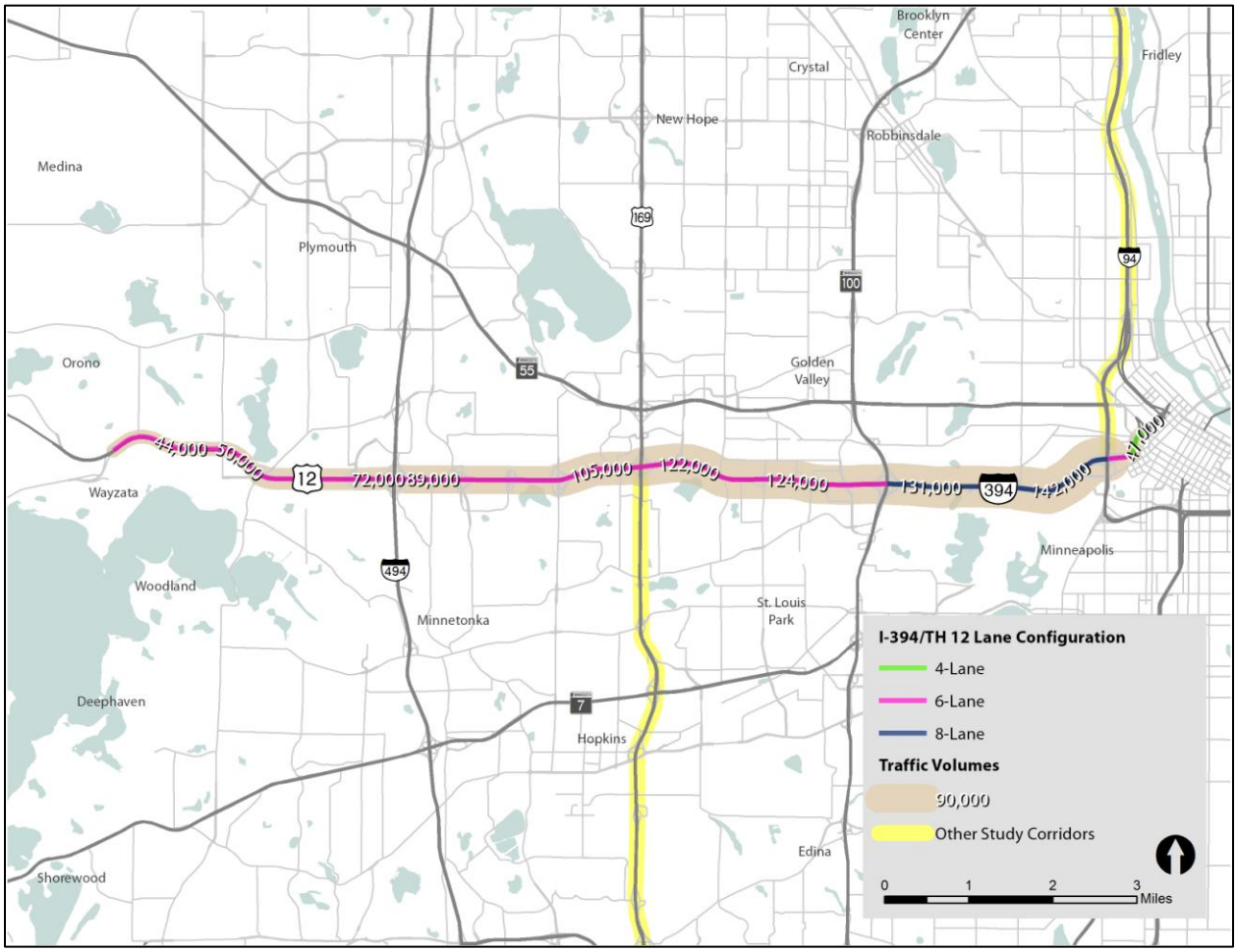


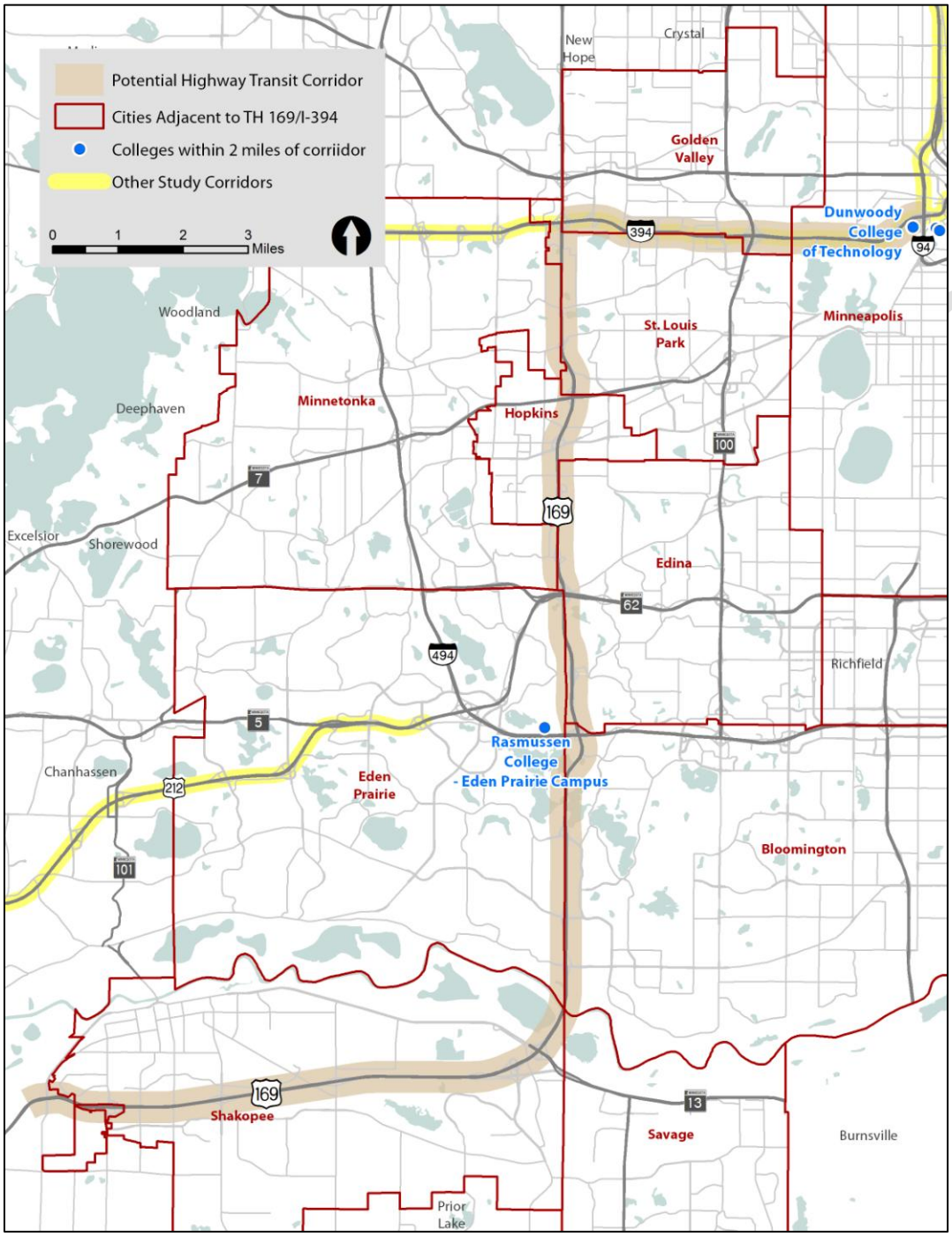
Figure 36: I-394 Traffic Volumes and Roadway Characteristics



Highway 169/I-394 – Minneapolis to Shakopee

The Highway 169/I-394 Corridor runs approximately 25 miles from Minneapolis to Shakopee in a southwesterly direction from downtown. The corridor runs through the communities of Shakopee, Bloomington, Edina, Hopkins, St. Louis Park, Minnetonka, Golden Valley, and Minneapolis, as shown in Figure 37. There are approximately 241,000 persons and 107,000 households living within two miles of a full access interchange in the Highway 169/I-394 Corridor.[9]

Figure 37: Highway 169/I-394 Corridor



[9] These estimates do not include population and households located in downtown Minneapolis.

Employment Centers

There are seven employment centers located in the Highway 169/I-394 corridor, as shown in Table 24. The corridor shares three employment centers, I-394 and Xenia, I-394 and Highway 169, and Highway 55 and Highway 169, with the I-394 corridor. The I-394 and Xenia employment center has the highest number of jobs, but the Hopkins employment center has the highest percentage of people who work at an employment center and also live in the corridor.

Table 24: Highway 169/I-394 Corridor Employment Center Characteristics

Employment Centers	Type of Center	Number of Jobs at Employment Center	Number of People who work at Employment Center and Live in the Corridor	Percentage of People who work at Employment Center and Live in the Corridor
I-394 and Park Place Blvd.	Regional Employment	16,100	1,610	10%
Golden Triangle	Regional Employment	16,000	2,560	16%
Hwy 169 and Bren Road	Subregional Employment	13,000	2,210	17%
Hwy 169 and Excelsior Blvd., Hopkins	Subregional Employment	9,500	1,995	21%
I-394 and Hwy 169	Subregional Employment	7,900	1,185	15%
Eden Prairie Center Area	Subregional Employment	12,400	2,356	19%
Hwy 55 and Hwy 169	Subregional Employment	12,400	1,488	12%

Education Centers

There are four education centers in the Highway 169/I-394 corridor. Three of these education centers are located in or near downtown Minneapolis, as shown in Figure 37. Enrollment at each education center is shown in Table 25.

Table 25: Highway 169/I-394 Education Center Enrollment

Education Center	Enrollment
Minneapolis Community and Technical College	10,191
Metropolitan State University – Minneapolis Campus	8,170*
Dunwoody College of Technology	1,041
Rasmussen College – Eden Prairie Campus	6,651*

NOTE: *Enrollment number represents students enrolled in the entire college/university. Enrollment at this institution is split between multiple campuses.

Transit Infrastructure

Existing transit routes, transit infrastructure, and transit advantages along the Highway 169/I-394 Corridor are shown in Figure 38. There are currently bus-only shoulder lanes in both directions on Highway 169 from Shakopee to I-394 with the exception of major interchanges. Additionally, Highway 169 has several ramp meter bypasses for transit vehicles and HOV's. In the I-394 segment, the price dynamic high occupancy toll lane runs from Highway 100 to Minneapolis. There are also bus-only shoulder lanes in in the inbound direction on I-394 between where the standard price dynamic HOT lane terminates and the reversible HOT lane begins.

The corridor has eight park-and-rides, as shown in Table 26. Figure 39 demonstrates that south of the Minnesota River, park-and-ride user home origins are concentrated in Shakopee, Savage, and Prior Lake. North of the river, there is a fairly large gap and then park-and-ride user home origins are clustered near St. Louis Park and Golden Valley. The park-and-ride facility with the highest capacity is the Eagle Creek Transit Center with 535 spaces. Additionally the General Mills and Louisiana Avenue facilities are at capacity.

Table 26: Highway 169/I-394 Corridor Park-and-Ride Usage

Park-and-Ride Facility	Park-and-Ride Usage		
	Use	Capacity	% Used
Seagate Technology	9	11	82%
Southbridge Crossing	274	515	53%
Eagle Creek Transit Center	79	535	15%
Preserve Village	5	50	10%
Hopkins Transit Center	30	52	58%
General Mills	119	123	97%
Louisiana Avenue	323	330	98%
Park Place	34	55	62%

Source: Metropolitan Council, 2012

Figure 38: Highway 169/I-394 Existing Transit Routes and Infrastructure

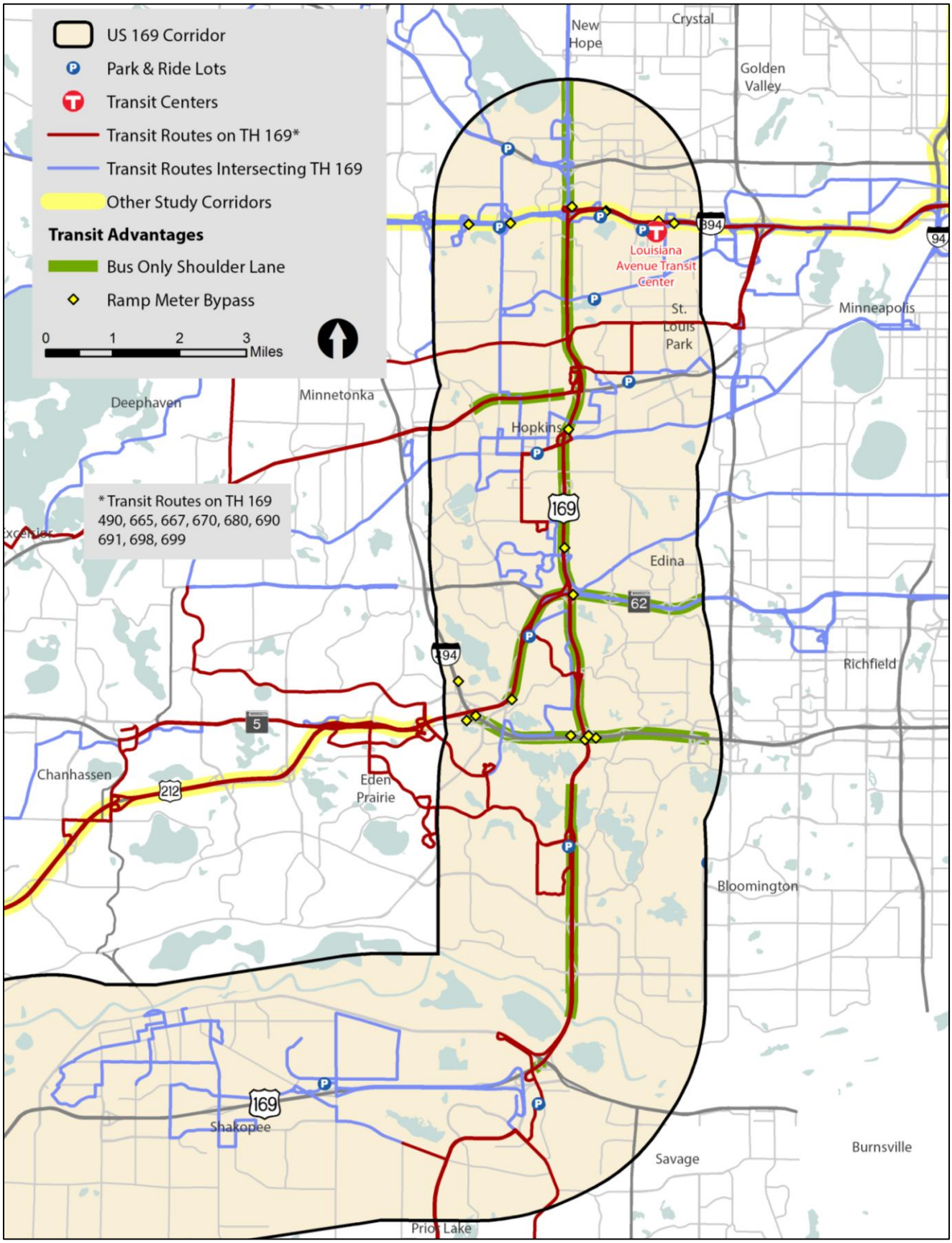
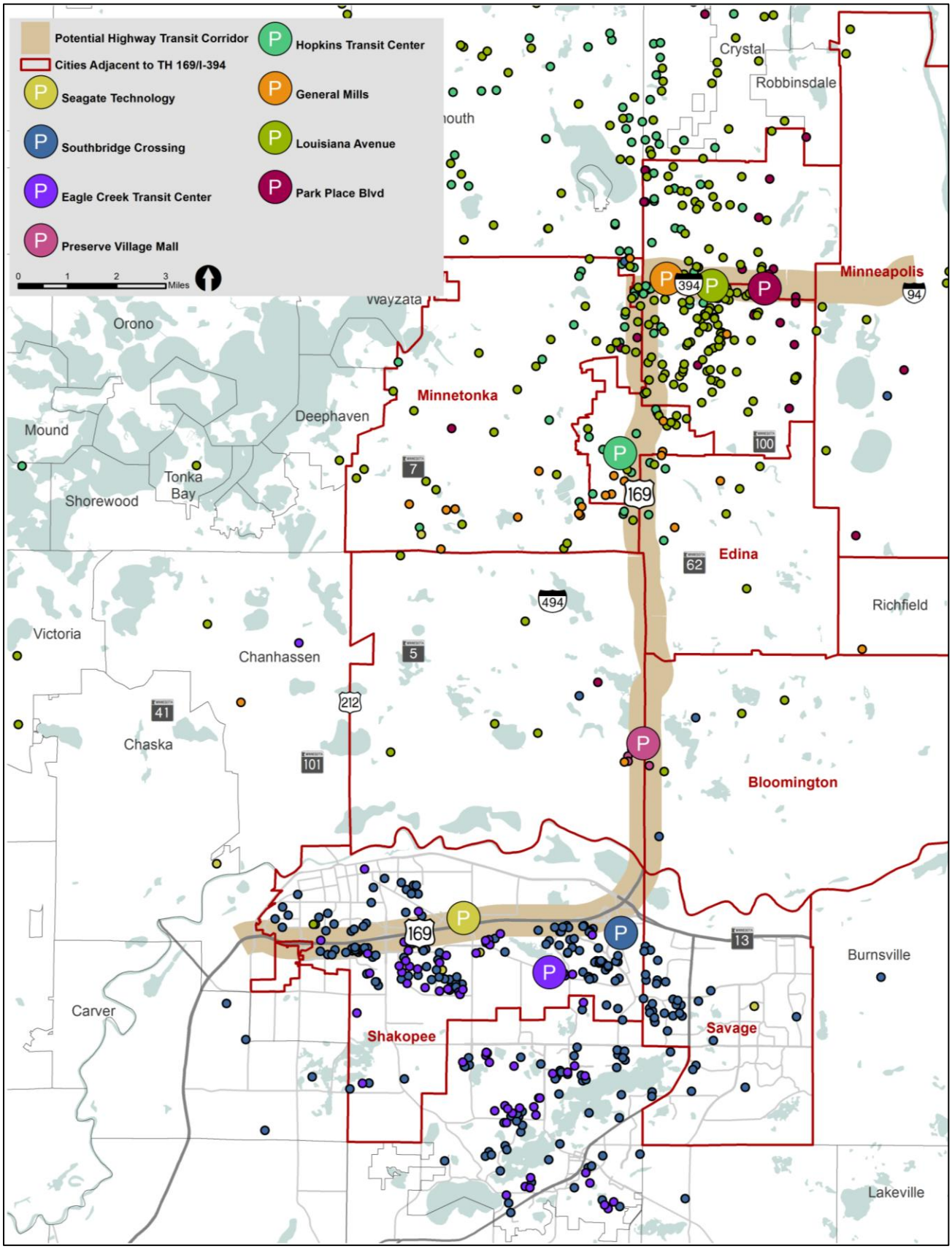


Figure 39: Highway 169/I-394 Park-and-Ride User Home Origins



Existing Transit Routes

Nine bus routes operate on the Highway 169 corridor between Shakopee and downtown Minneapolis. Table 27 presents current service characteristics of each route.

Table 27: Highway 169/I-394 Transit Service Performance Characteristics by Route

Route	Span of Service	Frequency (minutes) (Peak-Mid-Eve)	Number of Trips
665	6:11AM – 5:49PM	30-35 / 0 / 0	AM: 3 PM: 3
667	5:29AM – 6:49PM	10-60 / 0 / 0	AM: 12 PM: 9
670	6:12AM – 6:16PM	20-30 / 0 / 0	AM: 3 PM: 3
680	6:45AM – 5:33PM	0 / 0 / 0	AM: 1 PM: 1
690	6:04AM – 7:27PM	5-15 / 0 / 0	AM: 24 PM: 22
691	5:15AM – 6:16AM	0 / 0 / 0	AM: 1 PM: 0
698	5:36AM – 10:39PM	30-60 / 60 / 30-60	AM: 13 PM: 20
699	5:55AM – 6:41PM	10-20 / 0 / 0	AM: 11 PM: 11
490	5:37AM – 7:21PM	10-20 / 0 / 0	AM: 10 PM: 11

Roadway Characteristics

The Highway 169 segment of the corridor is a four-lane freeway divided by a depressed median for the majority of the study area with the exception of the Bloom Ferry Bridge and north of Highway 62 where it is divided by a solid barrier. The speed limit is 55 miles per hour west of CSAH 69, 65 miles per hour between CSAH 69 and I-494, and 55 miles per hour between I-494 and I-394. In the Highway 169 segment, there are existing bus-only shoulder operations east of CSAH 69, and the I-394 segment has dynamically prices MnPASS lanes, and. The entire I-394 segment is a six lane freeway divided by a barrier and the speed limit in this segment is 55 miles per hour.

Traffic Volumes

2010 ADT volumes in the Highway 169/I-394 corridor are shown in Figure 40. ADT volumes are fairly similar throughout the Highway 169 segment, but are highest between West 108 Street and Highway 13. In the I-394 segment, ADT volumes increase as the corridor runs west into downtown Minneapolis. ADT volumes are highest between Highway 100 and I-94.

Congestion Areas

Congestion areas in the Highway 169/I-394 corridor are shown in Figure 41 and Figure 42. In the northbound direction along the Highway 169 segment, there is moderate congestion in the morning between Old Shakopee Road to Anderson Lakers Parkway from 6:30 – 8:30 AM. In the afternoon, there is moderate congestion between TH 62 and Bren Road from 3:30-6:00 PM. There is also moderate congestion near Excelsior Boulevard from 7:00- 8:00 PM.

In the southbound direction in the Highway 169 segment, there is heavy congestion in the morning near I-394 from 7:00-8:00 AM and moderate congestion between I-394 and Bren Road from 7:00–8:30 AM. There was no congestion data available for the Highway 169 segment south of I-494 in the southbound direction.

For a discussion of congestion on the I-394 segment please see the I-394 corridor section.

Figure 40: Highway 169/I-394 Traffic Volumes

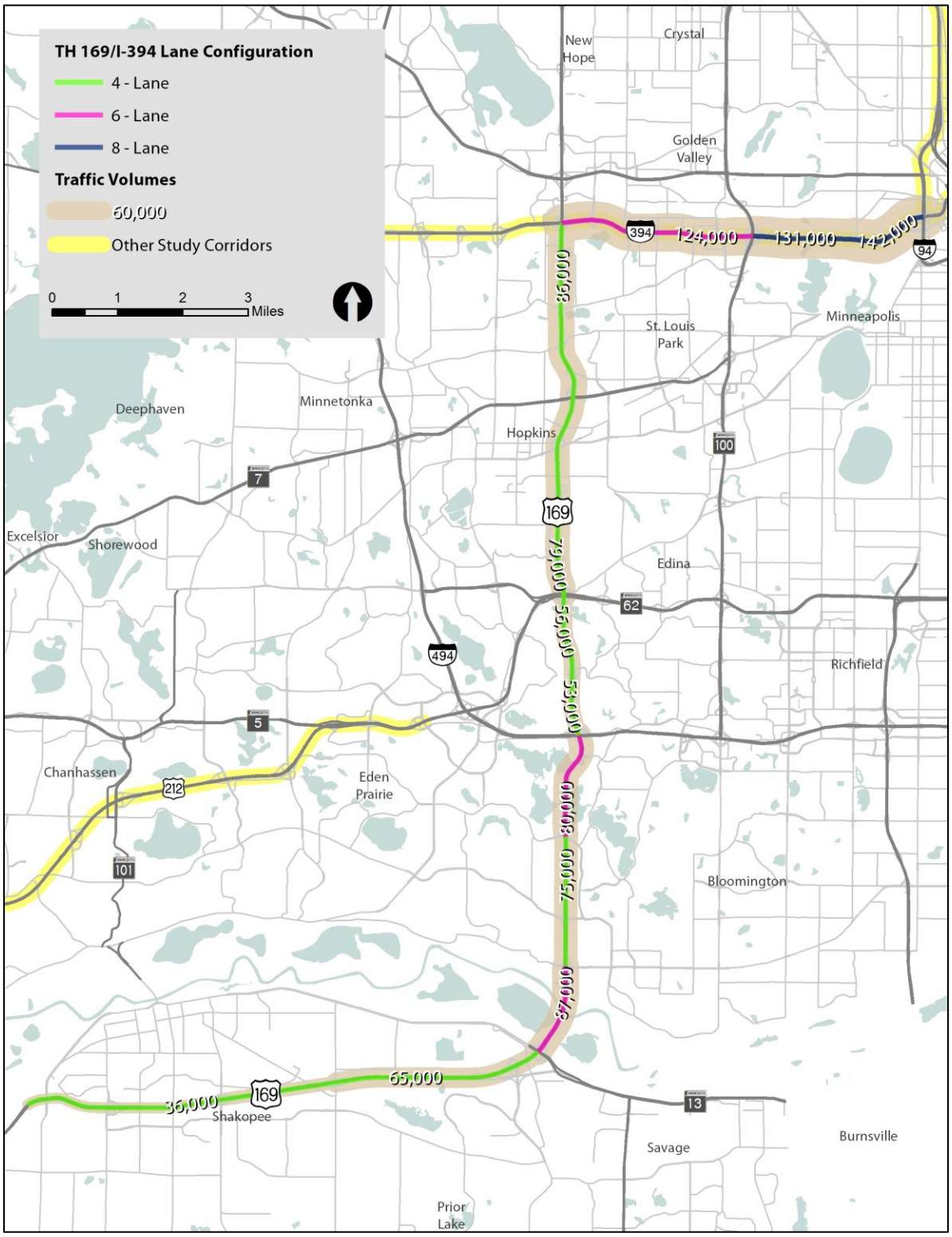


Figure 41: Highway 169/I-394 Northbound Congestion Areas

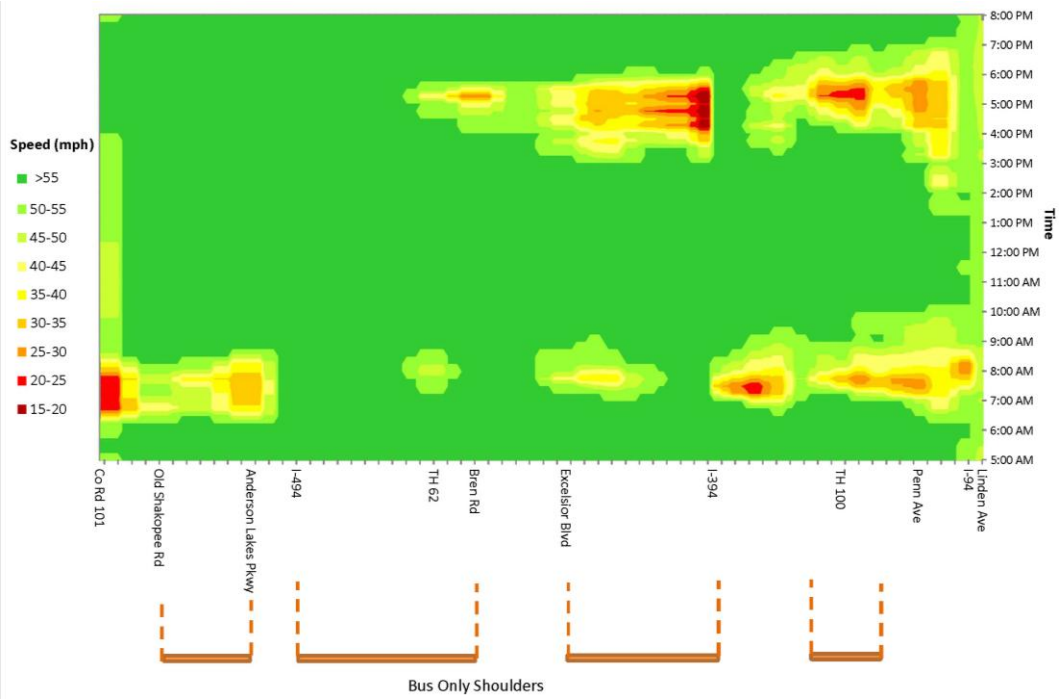
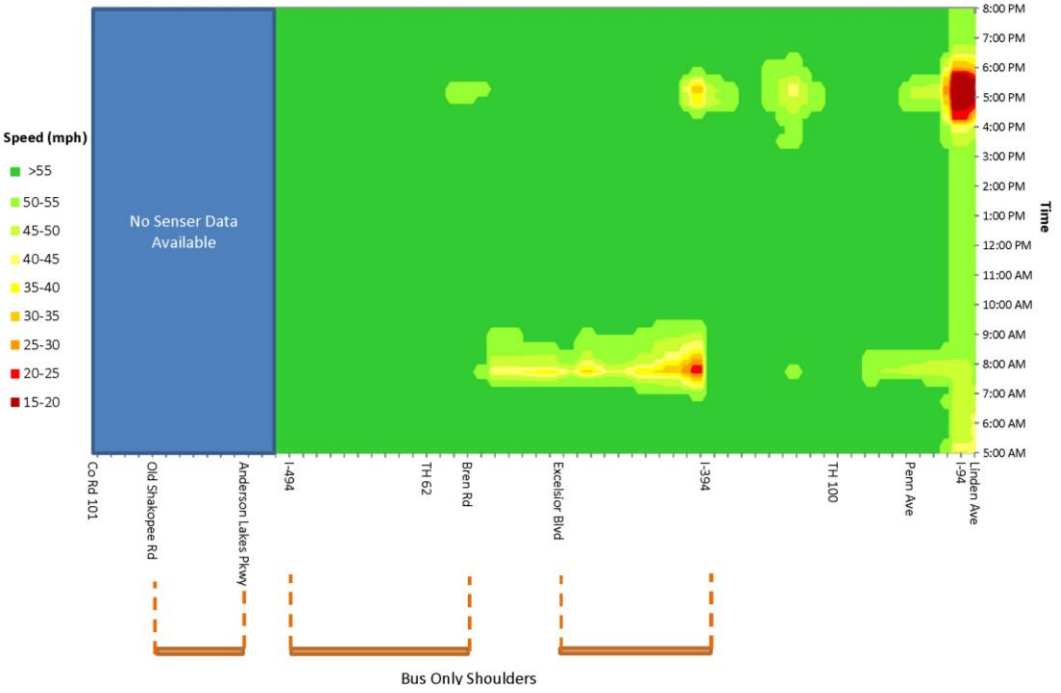


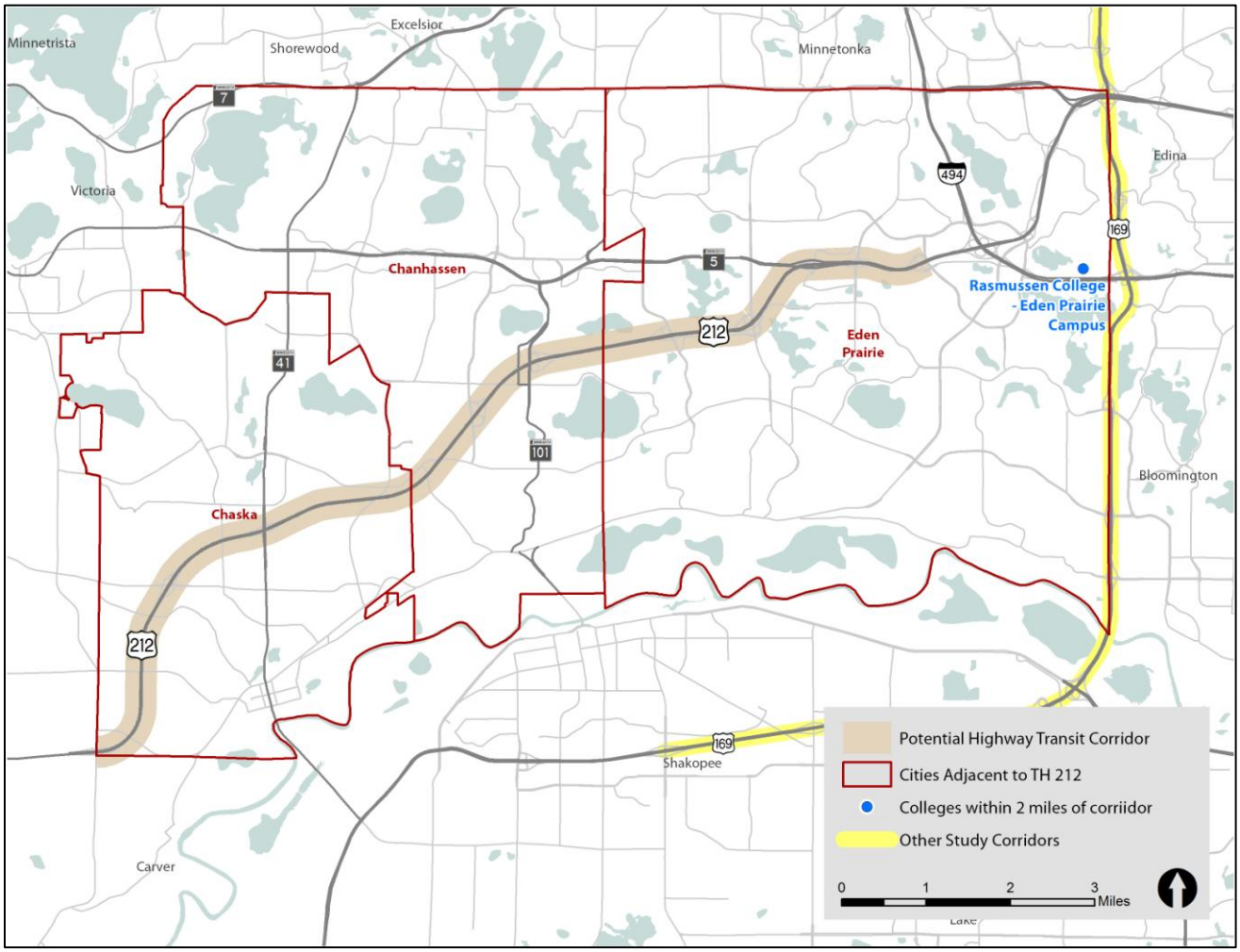
Figure 42: Highway 169/I-394 Southbound Congestion Areas



Highway 212 – Chaska to Eden Prairie

The Highway 212 Corridor runs approximately 12 miles from the terminal of the Southwest LRT line in Eden Prairie to Chaska. The corridor includes the communities of Eden Prairie, Chanhassen, and Chaska, as shown in Figure 43. There are approximately 74,000 persons and 28,000 households living within two miles of a full access interchange in the Highway 212 Corridor.[10]

Figure 43: Highway 212 Corridor



[10] These estimates do not include population and households located in downtown Minneapolis.

Employment Centers

There are two employment centers located in the Highway 212 corridor, as shown in Table 28. Of the two centers, the Eden Prairie Center has the highest number of jobs and the highest percentage of people who work at the employment center and also live in the corridor.

Table 28: Highway 212 Corridor Employment Characteristics

Employment Centers	Type of Center	Number of Jobs at Employment Center	Number of People who work at Employment Center and Live in the Corridor	Percentage of People who work at Employment Center and Live in the Corridor
Hwy 212 and Mitchell Road	Subregional Employment	9,800	1,274	13%
Eden Prairie Center Area	Subregional Employment	12,400	1,860	15%

Education Centers

There is one education center, the Rasmussen College – Eden Prairie Campus, in the Highway 212 corridor, as shown in Figure 43. Enrollment at the education center is shown in Table 29.

Table 29: Highway 212 Education Center Enrollment

Education Center	Enrollment
Rasmussen College – Eden Prairie Campus	6,651*

NOTE: *Enrollment number represents students enrolled in the entire college/university. Enrollment at this institution is split between multiple campuses.

Transit Infrastructure

Existing transit routes, transit infrastructure, and transit advantages along the Highway 212 Corridor are shown in Figure 44. There are currently bus-only shoulder lanes in both directions on Highway 212 for the portion of the corridor addressed in this study. The corridor also has five park-and-rides, as shown in Table 30. The park-and-ride with the highest capacity is Southwest Station with 924 spaces, and it also has the highest usage at 100 percent capacity. Figure 45 shows that Southwest Station park-and-ride user home origins are mainly concentrated in Eden Prairie.

Table 30: Highway 212 Park-and-Ride Usage

Park-and-Ride Facility	Park-and-Ride Usage		
	Use	Capacity	% Used
Clover Fields	15	39	38%
East Creek Station	14	50	28%
Southwest Station	923	924	100%
Southwest Village	421	511	82%
Chanhassen Transit Station	98	420	23%

Source: Metropolitan Council, 2012

Figure 44: Highway 212 Existing Transit Routes and Infrastructure

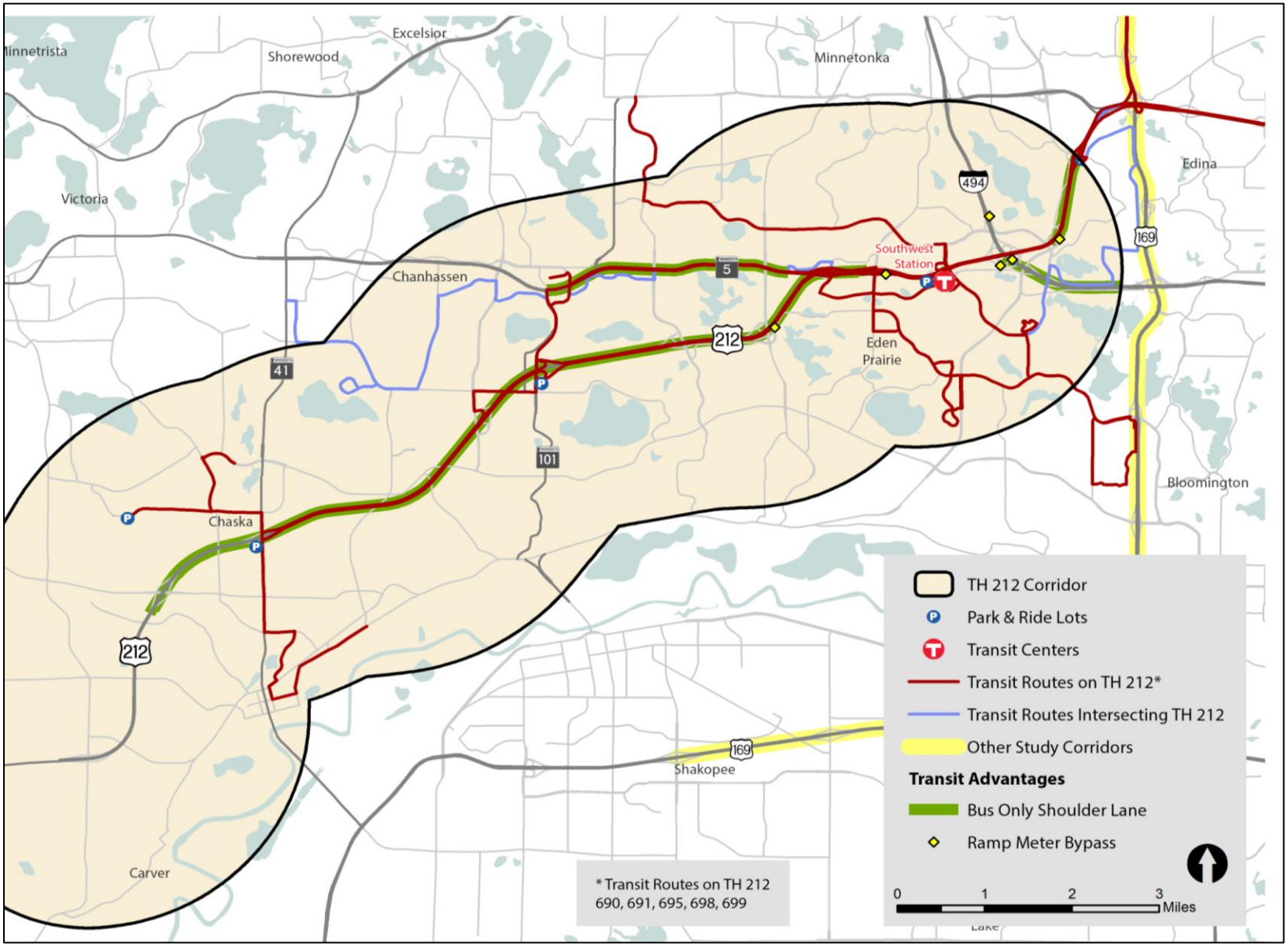
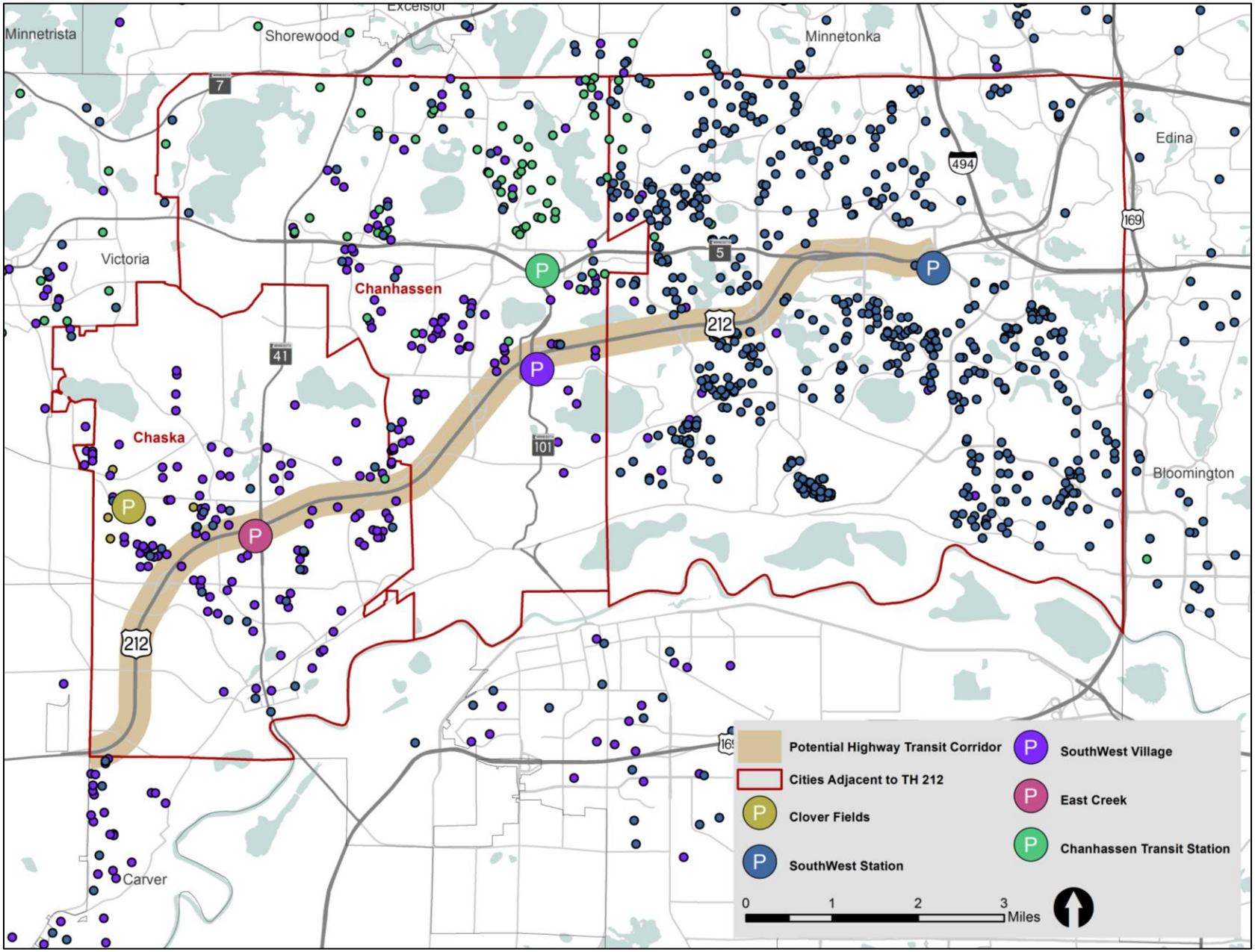


Figure 45: Highway 212 Park-and-Ride User Home Origin



Existing Transit Routes and Performance Conditions

Five bus routes operate on the Highway 212 corridor between Chanhassen and Eden Prairie. Table 31 presents current service characteristics for each route.

Table 31: Transit Service Performance Characteristics by Route

Route	Span of Service	Frequency (minutes) (Peak-Mid-Eve)	Number of Trips
690	6:04AM – 7:27PM	5-15 / 0 / 0	AM: 24 PM: 22
691	5:15AM – 6:16AM	0 / 0 / 0	AM: 1 PM: 0
695	6:35AM – 6:12PM	15-35 / 0 / 0	AM: 6 PM: 4
698	5:36AM – 10:39PM	30-60 / 60 / 30-60	AM: 13 PM: 20
699	5:55AM – 6:41PM	10-20 / 0 / 0	AM: 11 PM: 11

Roadway Characteristics

The majority of the Highway 212 corridor is a four lane roadway divided by a median.

Traffic Volumes

2010 ADT volumes for the Highway 212 corridor are shown in Figure 46. ADT volumes in the corridor gradually increase as the corridor runs to the east. The highest ADT volumes in the corridor are west of Mitchell Road.

Congestion Areas

The eastbound and westbound Highway 212 congestion areas are shown in Figure 48 and Figure 46. In the eastbound direction, moderate congestion occurs in the morning between Dell Road and Mitchel Road from 7:00 – 8:00 AM. The bus only shoulder allows transit users to bypass this congestion as well as any other congestion that may occur in this corridor. No congestion was observed on Highway 212 in the westbound direction.

Figure 46: Highway 212 Traffic Volumes and Roadway Characteristics

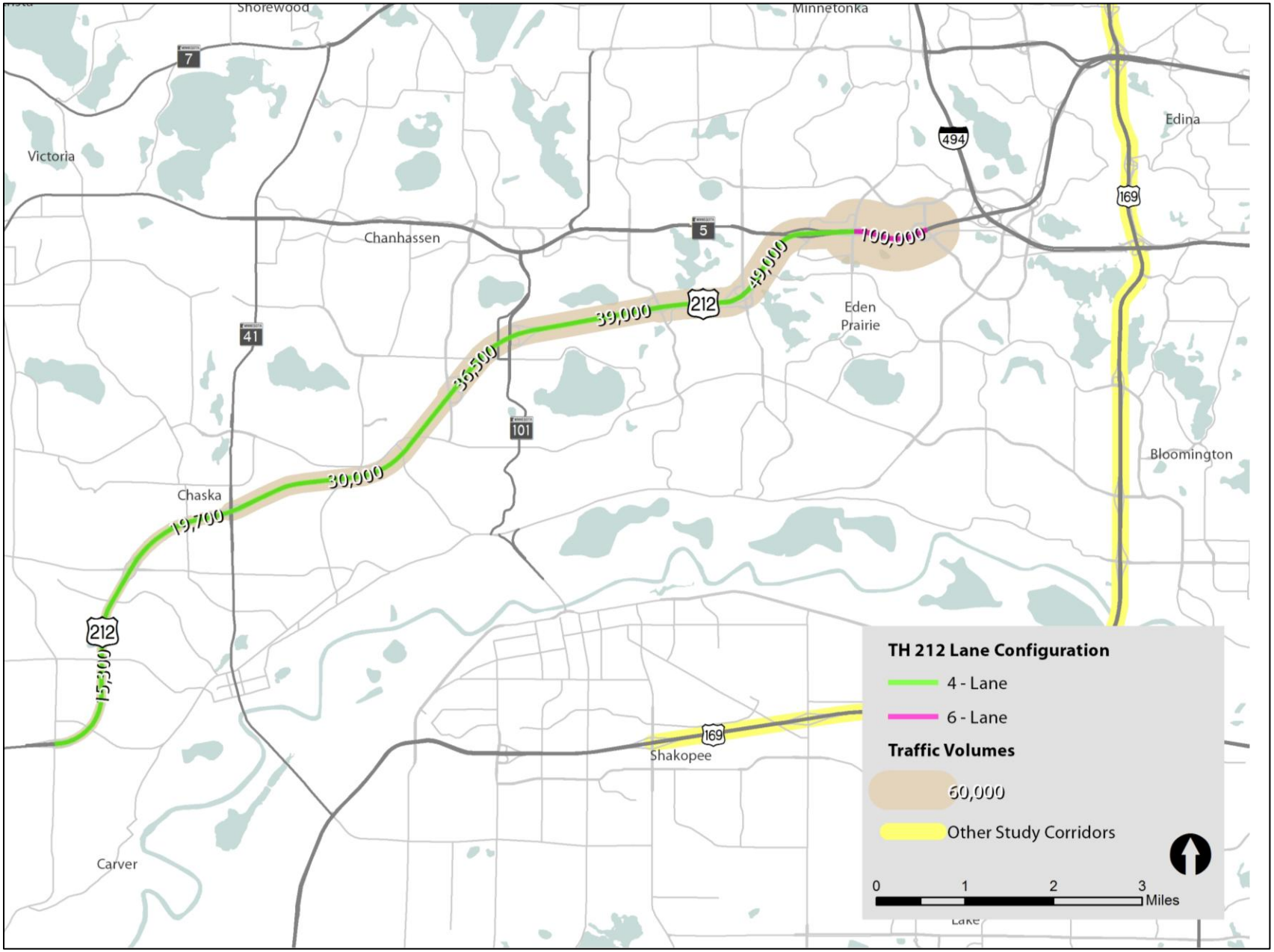


Figure 47: Highway 212 Eastbound Congestion Areas

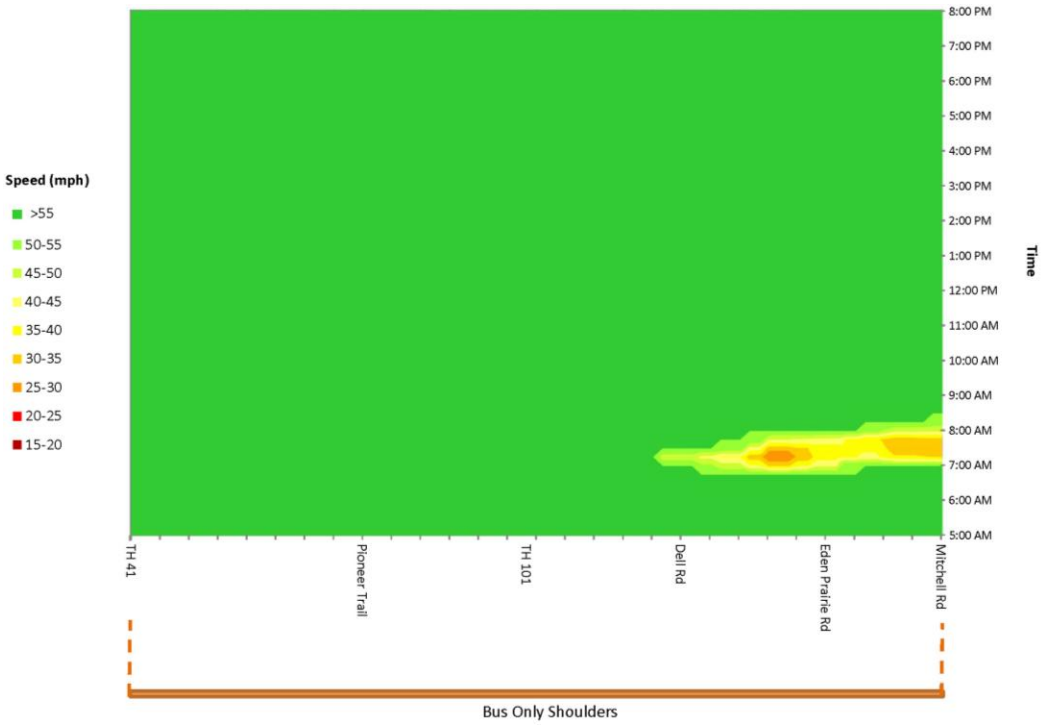


Figure 48: Highway 212 Westbound Congestion Areas