



# Midtown Corridor Alternatives Analysis

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## Purpose and Need

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Prepared by the  
SRF Consulting Group Team

For





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## 1. Executive Summary

The Midtown Corridor Alternatives Analysis (AA) will evaluate the benefits, costs, and impacts of implementing a transitway in south Minneapolis. A critical part of every AA process is the development of the purpose and need for a project. A purpose and need statement identifies transportation problems as the basis for identifying and evaluating alternatives. It is a key factor in determining the range of alternatives to be considered during the AA.

### Core Elements of the Purpose and Need

- Purpose – Clear and succinct statement of the fundamental reasons the project is being proposed
- Needs – Existing transportation problems in the corridor that the project is intended to address
- Goals/objectives – Broader vision and desired outcomes for the project
- Evaluation criteria – Help compare and contrast alternatives based on a set of identified criteria

### What is the purpose of the Midtown Corridor transitway project?

The purpose of the Midtown Corridor Transitway Project is to provide transit service that meets current and future travel needs, attracts new riders, connects users with job centers and key destinations, and supports sustainable growth and development.

### Why is a transitway needed in the Midtown Corridor?

The Midtown Corridor is an important part of the regional multimodal transportation network; however there are several unmet transportation needs that constrain the area's potential development. Several factors contribute to a need for a transitway investment in the Midtown Corridor. These include:

- Unmet transportation needs in the corridor, particularly with transit
  - A lack of fast and convenient transit service in one of the region's busiest east-west commercial corridors
  - Poor access to job centers and key destinations that together form one of the region's largest employment clusters
  - Transit facilities lack amenities commensurate with demand
- A diverse population with a variety of transportation demands
  - Access to range of destinations throughout the entire day, including evenings and weekends
  - A high proportion of residents who rely on transit as their primary means of transportation
- Support of city and regional policies encouraging growth and development in the corridor
  - Existing transportation capacity is inadequate to meet forecast population and employment growth
  - Need to increase intensity of residential and commercial development along the Midtown Corridor



## What are the goals that will be accomplished by a transitway in the Midtown Corridor?

1. Increase transit use among the growing number of corridor residents, employees, and visitors
  - Provide transit service that is fast, frequent, reliable and equitable for all users
  - Provide transitway stations that have a high level of passenger amenities and are easily accessible to riders with limited-mobility
  - Provide service that is identifiable and easy for visitors and new users to understand
  - Provide a transit investment that meets today's needs and has ability to expand for future growth
  - Increase the percentage of people using transit as their transportation choice in the corridor
2. Improve corridor equity with better mobility and access to jobs and activities
  - Enhance physical and visual connections with the three transitways - the Blue, Green and Orange lines – and two transit centers in the study area
  - Provide fast and convenient transfers with transitways and the local bus network
  - Locate transit stations to effectively serve transit customers while maintaining the desired speed of service
  - Improve access to local and regional destinations, activity centers and business nodes
  - Provide a transitway investment that considers the needs of residents who rely on transit and contributes to reduced reliance on auto travel
3. Catalyze and support housing and economic development along the corridor
  - Support a mix of housing choices, including affordable housing
  - Provide transit improvements to help realize city and regional development plans
  - Attract investment along the length of the corridor, concentrated at key nodes
  - Support both small businesses and regional employers by providing better transit options for their customers and employees
  - Minimize construction impacts to businesses, residents and other corridor users
4. Develop a cost-effective transitway that is well-positioned for implementation
  - Develop a transitway operating plan that is well-coordinated with existing service in the corridor
  - Advance transitway alternatives that are financially feasible and minimize new operating resource requirements
  - Provide a transitway with broad support from the community, businesses and policymakers
5. Build upon the vibrancy and diversity of the corridor by supporting healthy, active communities and the environment
  - Ensure safe and direct connections between transit and other multimodal transportation choices such as walking and biking
  - Maintain parkland, trails and green space in the corridor
  - Promote air quality benefits and minimize noise and vibration impacts
  - Recognize impacts to cultural and historic resources
  - Balance impacts to existing traffic operations and curbside uses
  - Enhance safety through increased visibility and activity in the corridor



## 2. Study Area and Background

The Midtown Corridor study area is located entirely within the City of Minneapolis and Hennepin County. The map shown in Figure 3 includes two possible alignments – Lake Street or the Midtown Greenway – between the Lake Street/Midtown Station of the Blue Line (Hiawatha) light rail transit (LRT), and the future location of the West Lake Station of the Green Line (Southwest) LRT. The future Orange Line (I-35W) bus rapid transit (BRT) will intersect the corridor at I-35W. This study area covers 60 percent of Route 21 ridership, and has been used in all previous corridor studies that included a Midtown Greenway alignment option. It is a multimodal transportation corridor that includes transit, other motor-vehicle traffic, bicycles, and pedestrians. These modes all compete for the safe and efficient movement of people and goods. The potential alignments are described in the following sections.

### Lake Street

A former streetcar corridor and current high-frequency bus corridor, Lake Street is the primary east-west commercial corridor in south Minneapolis and contains a mix of retail and residential uses. It is an A-Minor Arterial Augmenter in the region's roadway functional classification system. Augmenters are located within the interstate ring where the network of principal arterials is fully developed and intended to accommodate longer trips. Lake Street serves as a major thoroughfare since there are no east-west principal arterials and no other continuous A-minor arterials between I-94/394 and Highway 62, and as a result it carries the highest volume of east-west vehicle traffic in the area (Figure 4). Data from Minneapolis Public Works shows that in its busiest areas the average daily traffic counts along Lake Street can exceed 22,500 vehicles, including 244 weekday bus trips. Lake Street borders 14 diverse Minneapolis neighborhoods within the study area.

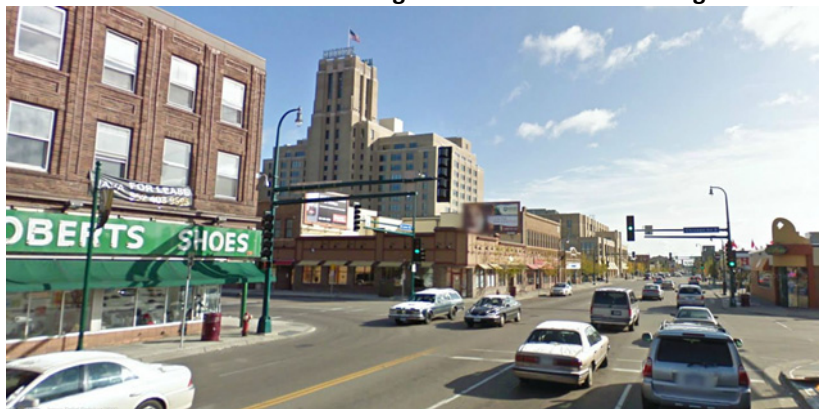


Figure 1. Lake Street at Chicago Avenue

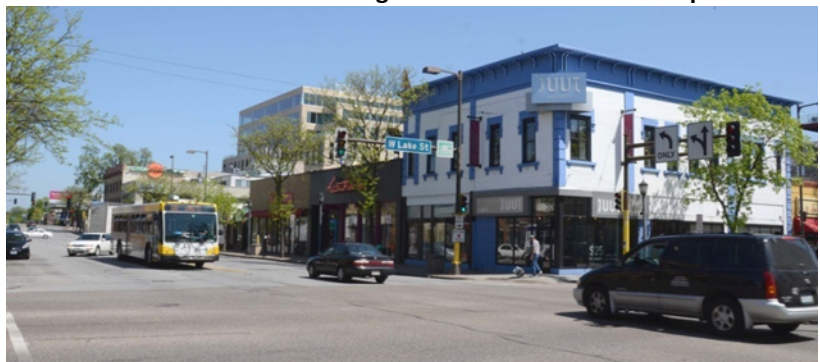


Figure 2. Lake Street at Hennepin Avenue

In addition to high traffic counts, the Midtown Corridor has high levels of pedestrian traffic found in activity centers (Uptown, Lyn-Lake) and major transit connections (Chicago Lake Transit Center, Hiawatha Avenue). Pedestrian counts are comparable to the densest parts of Minneapolis; daily pedestrian counts on Lake Street are over 3,000 per day in Uptown, 3,700 per day around Lake Calhoun, and 4,900 per day near the Blue Line LRT.





## The Midtown Greenway

Owned by the Hennepin County Regional Railroad Authority (HCRRRA), the Midtown Greenway is a former Canadian Pacific Railway/Soo Line freight rail facility. The property was purchased by HCRRRA in 1993 for the purpose of constructing LRT or other transportation systems and associated facilities. The Greenway is located approximately one block north of Lake Street within the study area. One of the unique features of the Greenway is that it is grade-separated from and passes under the street grid between Hennepin and Cedar avenues (with one at-grade crossing at 5<sup>th</sup> Avenue). The right of way is generally 100 feet wide between France Avenue and Hiawatha Avenue, but the width between the embankments varies.

Since 2000, it has been transformed into a bicycle and pedestrian facility, and is now one of the region's most active bicycle corridors and is an important community asset that combines mobility with open space. The Midtown Greenway is one of the busiest bicycle corridors in the region, carrying up to 3,500 cyclists per day according to City of Minneapolis bicycle traffic counts.

**Figure 3. Midtown Greenway at 10th Avenue S**

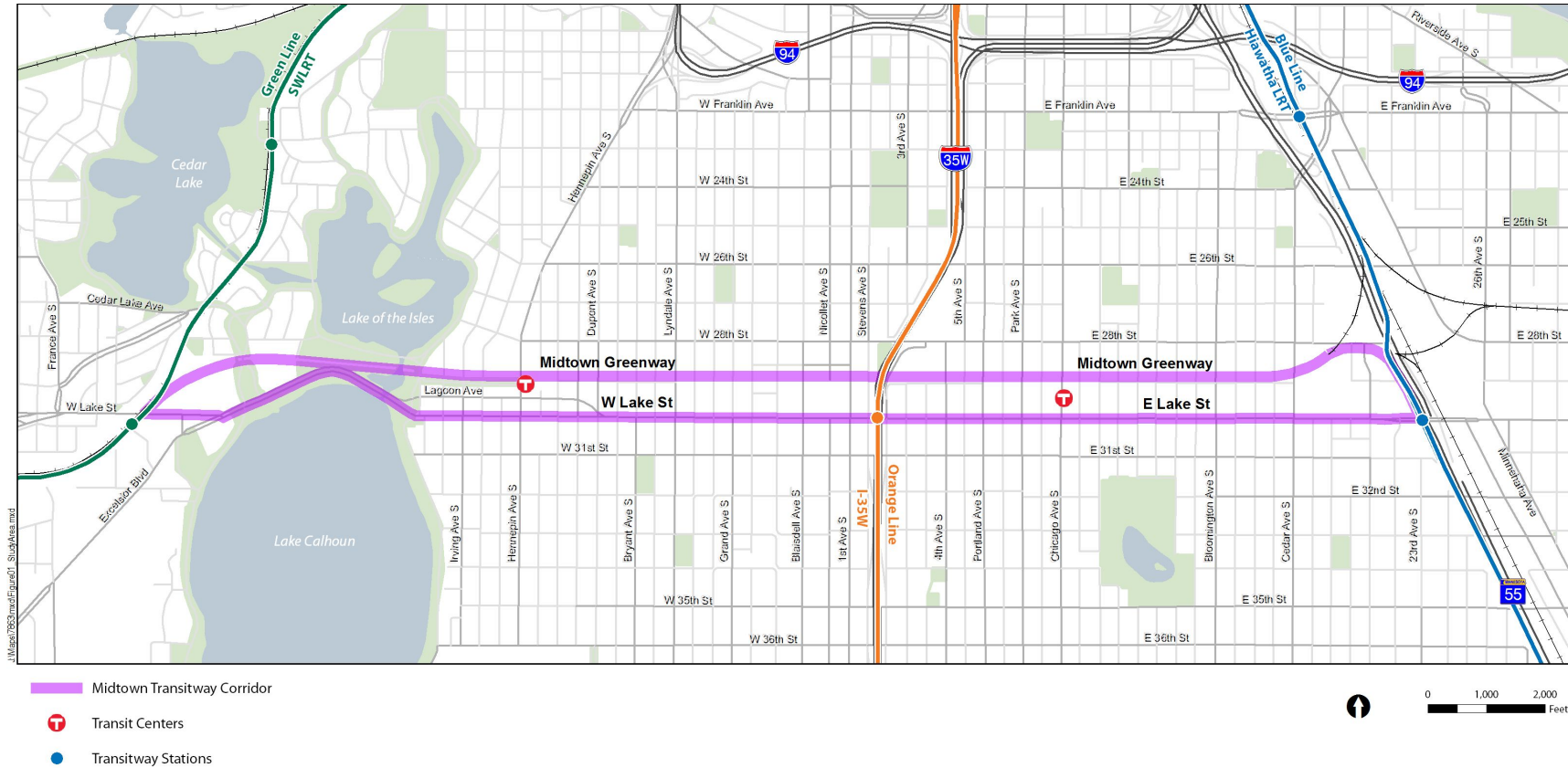


**Figure 4. Midtown Greenway at 17th Avenue S**

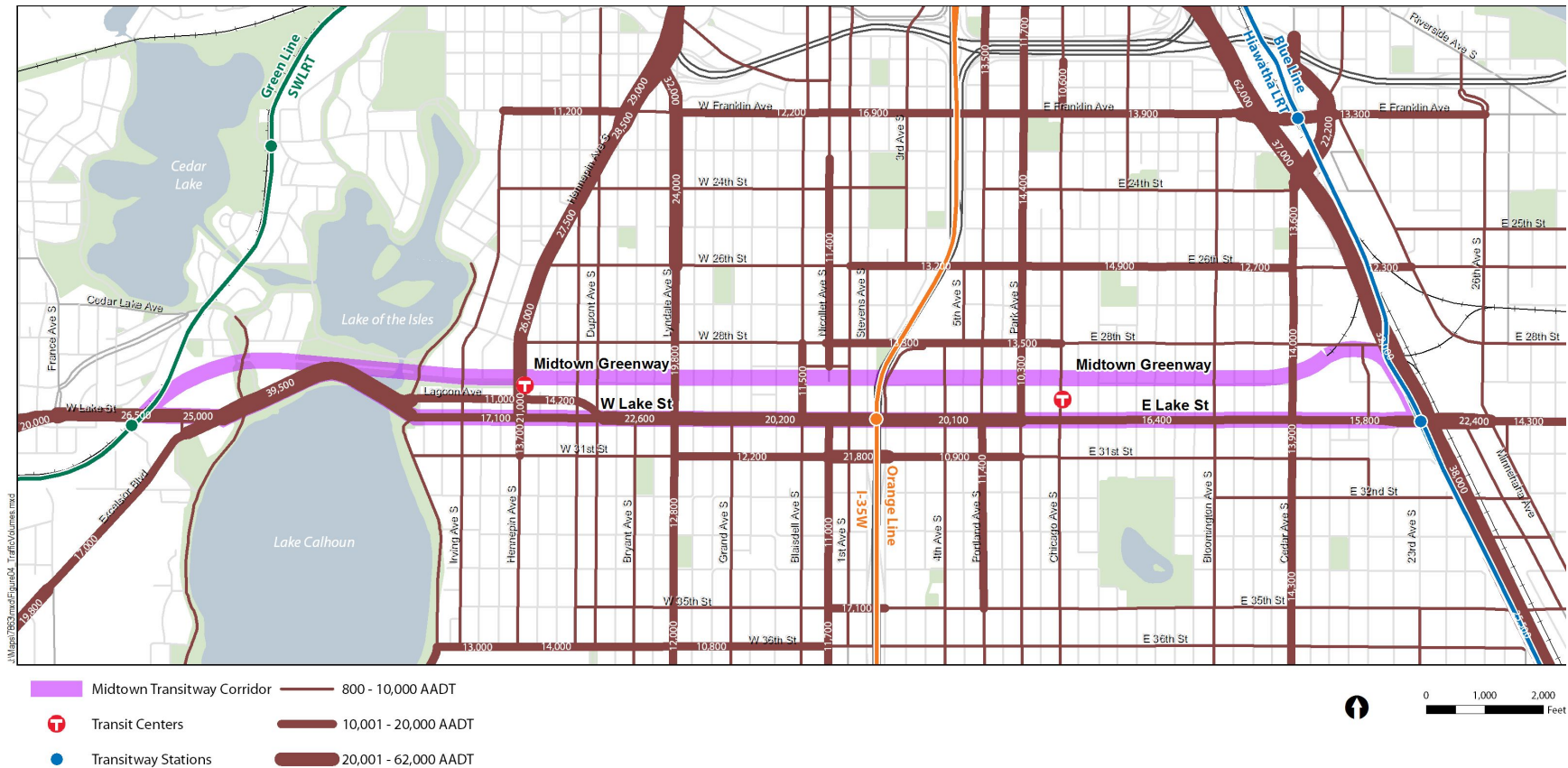




Figure 5. Midtown Corridor Study Area



**Figure 6. Midtown Corridor Traffic Volumes**



Source: MnDOT Annual Average Daily Traffic 1992-2011





## Corridor Planning and Land Use

Many planning documents, transportation studies, and design guidelines have offered recommendations and policy as to the corridor's future development. A timeline of previous Midtown Corridor Studies is shown in Figure 7. More information about these studies can be found in *Tech Memo 2: Review and Summary of Previously Completed Work*. Some of the most relevant recently completed transit studies are summarized below.

### Minneapolis Streetcar Feasibility Study

Completed in 2007, the City of Minneapolis worked with a project management team including Metro Transit, Metropolitan Council, Hennepin County, MnDOT and a 30-member project steering committee to evaluate the possibility of modern streetcar on seven corridors within the city. The purpose of the feasibility study was to determine the physical, operational and financial feasibility of providing streetcar service as a high quality transit and urban circulator option on the most heavily used corridors in Minneapolis, to improve the quality of transit service in those corridors, and to support the city's objectives for strengthening these neighborhoods and directing growth into existing transit corridors.

The feasibility study evaluated fourteen of the most heavily used transit corridors for streetcar and proposed a long-term network of seven streetcar corridors that is a 20-50 year vision for streetcar service in Minneapolis. The long-term network includes the Midtown Corridor between the future Southwest LRT and existing Hiawatha LRT; Lake Street was also studied, but not recommended for the long-term network. The operating plans and cost estimates in the Feasibility Study for the Midtown Corridor assumed a single-track design with passing tracks where necessary.

### Arterial Transitway Corridors Study

In 2011, Metro Transit completed the *Arterial Transitway Corridors Study* (ATCS). The ATCS was a year-long study of some of the most heavily traveled transit corridors in the Twin Cities area as identified in the Metropolitan Council's 2030 Transportation Policy Plan. The study was performed to develop a bus facility and service plan to enhance efficiency, speed, reliability, customer experience, and transit market competitiveness. Though not as detailed as an AA, it completed an initial evaluation of corridors that showed strong potential for arterial BRT. Lake Street was identified as a top candidate for arterial BRT based on the technical evaluation, and was recommended for more detailed study in the AA.

### Land Use Planning

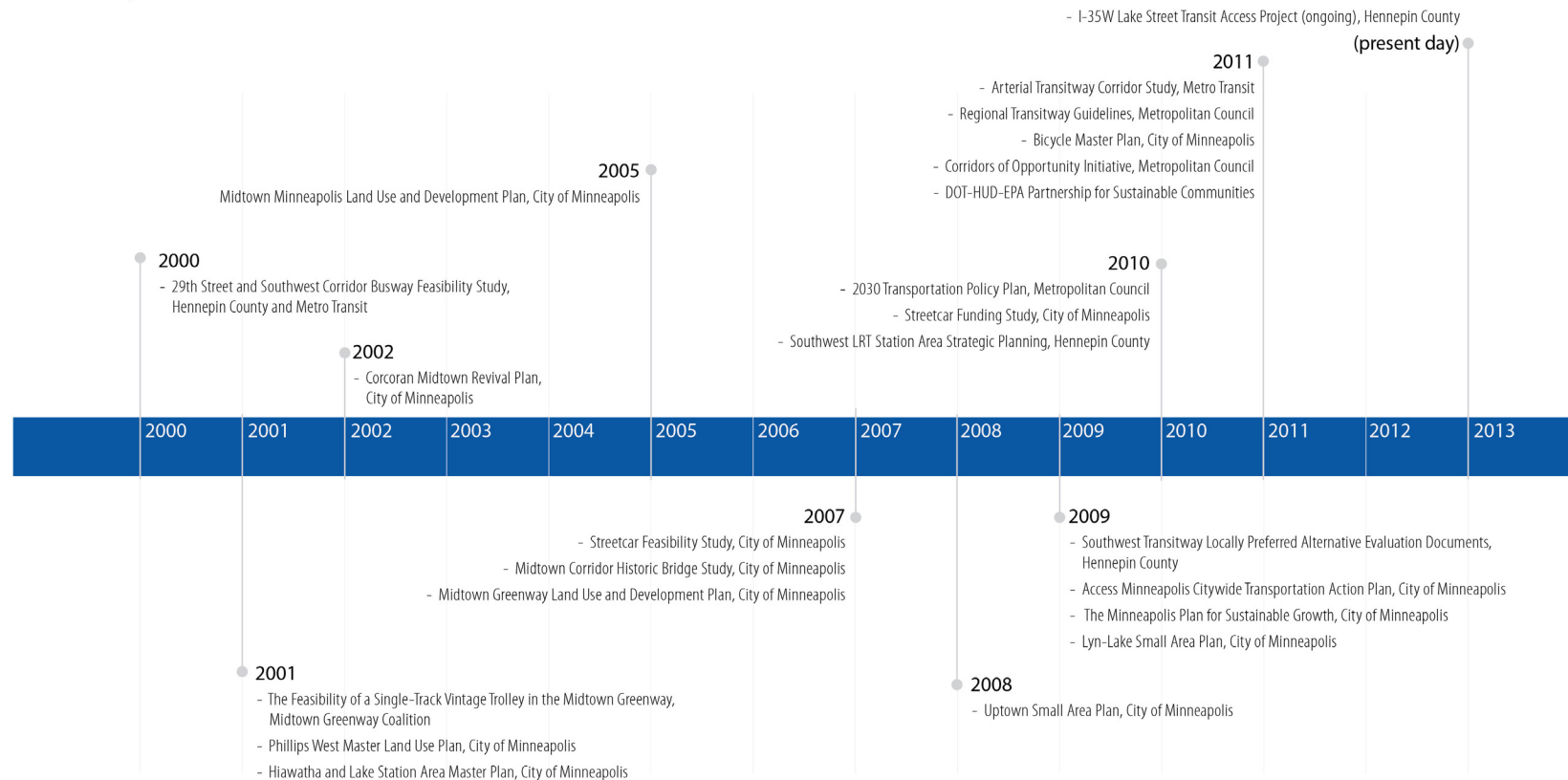
The land use and development patterns in the Midtown Corridor have experienced a great deal of change over the past 10 to 15 years. Some of this change has resulted from the abandonment of the railroad line, while other changes can be attributed to changes in the real estate and development market. These market-based development pressures will continue to shape the kinds of redevelopment proposed by the private sector in the corridor. The city's proactive planning efforts offer an opportunity to influence these market-based transitions so that further changes to development patterns strengthen the community, support enhanced transit service and business districts, and are compatible with existing development in the surrounding neighborhoods.



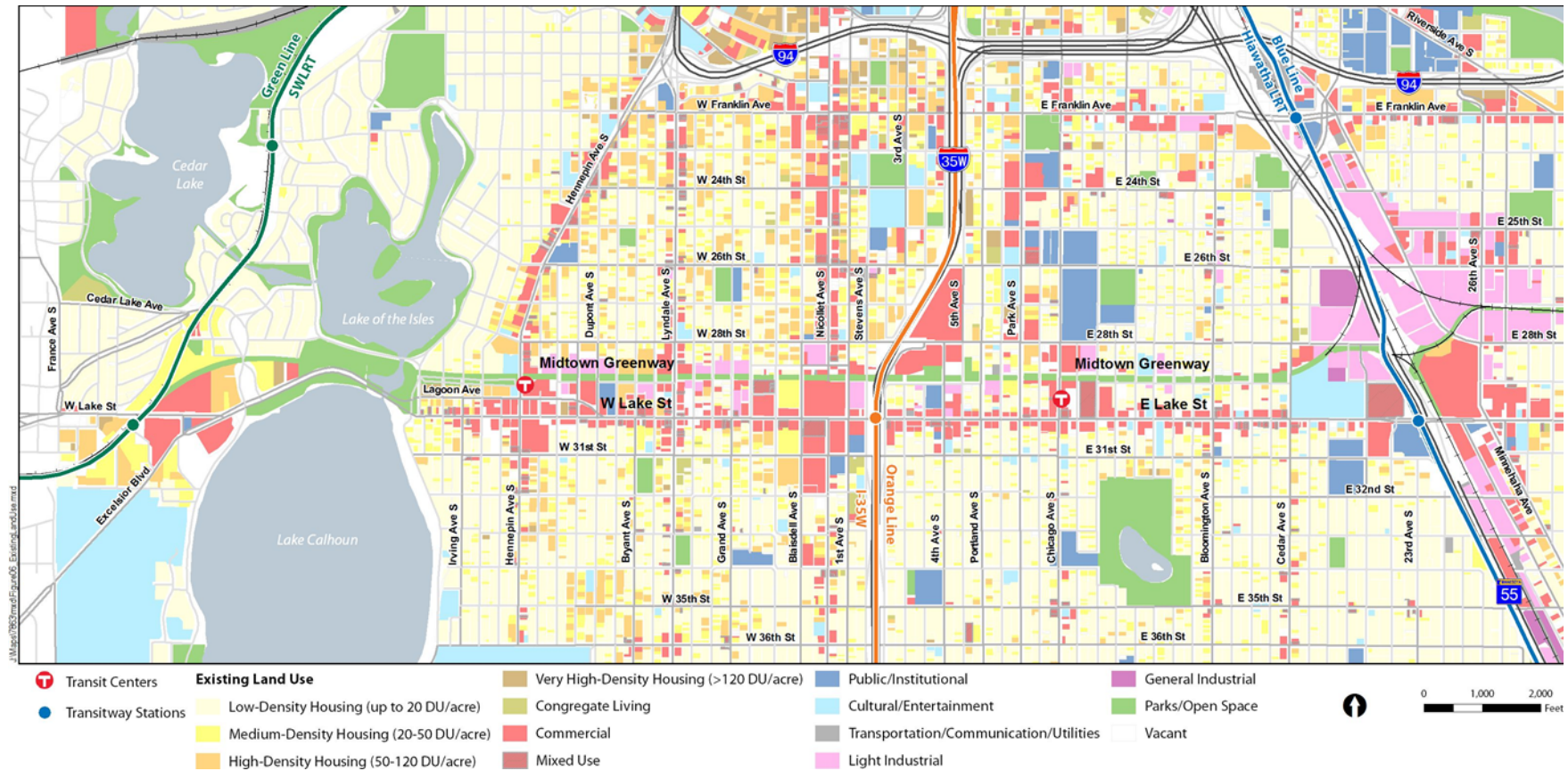
- On the western end of the corridor current and future land uses are significantly affected by the presence of Lake Calhoun and Lake of the Isles (Figure 8). Park land is identified on the map between the lakes in the central part of this western subarea. Future land use plans support the location and scale of existing residential development on both the east and west sides of the lakes; however, it suggests a change of the development pattern for property along Lake Street just west of its intersection with Excelsior Boulevard.
- In the center sections of the corridor (roughly Hennepin Avenue to I-35W), mixed-use commercial/retail development is proposed at key business nodes. This is quite compatible with the historical development patterns at these locations. These areas include activity centers at Lagoon and Hennepin Avenues in the Uptown area, at Lyndale Avenue and at Nicollet Avenue (Figure 9). For the latter, consideration was given to the potential for reconnecting Nicollet south through the Lake Street area as indicated in the *Midtown Land Use and Development Plan*.
- Finally, the eastern end of the corridor includes larger commercial parcels at the Wells Fargo campus immediately east of I-35W and at the Midtown Exchange area between Columbus and 10th Avenues. These areas have exhibited strong commercial and institutional growth trends in recent years. Larger industrial parcels near Hiawatha Avenue continue to be guided for industrial development.



**Figure 7. Timeline of Previously Completed Midtown Corridor Studies**

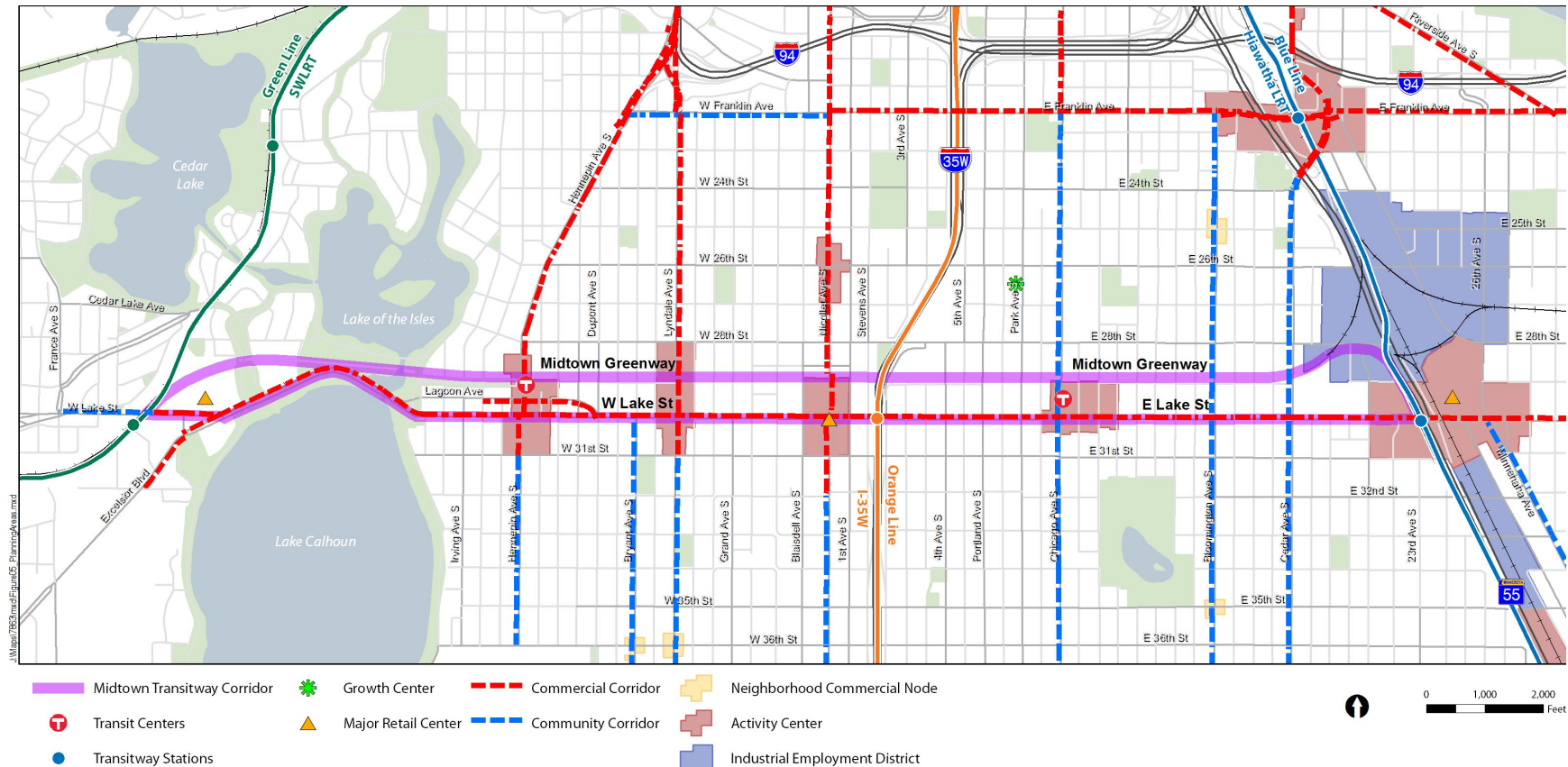


**Figure 8. Existing Land Uses**



Source: City of Minneapolis Planning and Economic Development

**Figure 9. Midtown Corridor Land Use Designations**



Source: *The Minneapolis Plan for Sustainable Growth, 2011*



## Existing transit network

The Midtown Corridor is rich with transit service, as shown in Figure 10. Metro Transit currently operates two bus routes along Lake Street: Route 21, which provides frequent, all-day local service, and Route 53, which offers peak-period limited-stop service. Both routes continue to St. Paul past the eastern boundary of the Midtown Corridor study area.

Key destinations served by these routes within the study area include the Uptown Transit Station, the Uptown commercial district, Calhoun Square, Kmart at Nicollet Avenue, the I-35W/Lake Street stop, the Chicago Lake Transit Center and Midtown Exchange (east of Chicago Avenue), South High School, Hi-Lake Shopping Center, and the Lake Street/Midtown Station on the Blue Line LRT. Transfer opportunities to other transit service include:

- Uptown Transit Station – Routes 6, 12, 17, 23, 53, 114, 115
- Lyndale – Route 4
- Nicollet Avenue – Route 18
- I-35W and Lake Street – Multiple express and local routes
- 4th Avenue – Route 11
- Chicago Avenue – Route 5
- Chicago Lake Transit Center – Routes 5, 39, 53
- Bloomington Avenue – Route 14
- Cedar Avenue – Routes 22, 27, 111
- Lake Street/Midtown Station – Routes 7, 27, 53, 55 (Blue Line LRT)

Other routes, such as Routes 12, 17 and 27, operate on only a portion of the Midtown Corridor. Ridership on all corridor routes is shown in Table 1. Route 21 has the third-highest average daily ridership of all Metro Transit routes, with a \$1.62 subsidy per passenger that is significantly lower than the Metro Transit weekday urban local average of \$3.19. It serves considerably more passengers per in-service hour (61) than the average urban local route (41) but collects a lower average fare per passenger, partly attributed to the high level of transfer activity. At \$2.20, Route 53 also has a lower per-passenger subsidy than the average urban local route, and has route productivity near the urban local average.

**Table 1. Ridership of Corridor Routes**

Route	Weekday		Saturday		Sunday	
	In Corridor	Route Total	In Corridor	Route Total	In Corridor	Route Total
12	788	2,687	518	1,164	351	768
17	999	7,153	798	4,894	463	2,877
21	8,435	14,175	7,177	11,481	5,070	8,081
27	187	303				
53	401	864				
114	105	903				

Source: Metro Transit

**Figure 10. Midtown Corridor Existing Transit Routes**



Source: Metro Transit Bus Routes, Planned Transitways, and Transit Centers



### 3. Purpose and Need

#### Purpose for the Proposed Action

The purpose of the Midtown Corridor Transitway Project is to provide transit service that meets current and future travel needs, attracts new riders, connects users with job centers and key destinations, and supports environmentally sustainable growth and development.

#### Need for the Proposed Action

The Midtown Corridor is an important part of the regional multimodal transportation network; however there are several unmet transportation needs that constrain the area's potential development. Key destinations for employment, recreation, commerce, and high-density residential housing are located along many of the major north-south streets intersecting Lake Street and the Midtown Greenway. These are the types of features that could support a transitway; however, today's transit experience is not competitive with other transportation modes, including the automobile. Several factors contribute to a need for a transitway investment in the Midtown Corridor.

#### Unmet transportation needs in the corridor, particularly with transit

Existing bus service in the Midtown Corridor is frequent; however, it is slow and unreliable. There is also a need for improved connectivity between regional transitways as well as at transit stations and transit centers. Deficiencies in existing transit service limit the ability to serve and integrate the Midtown Corridor with future growth and development.

#### A lack of fast and convenient transit service in one of the region's busiest east-west commercial corridors

Travel times for existing transit service are not competitive with other modes of transportation on Lake Street. On a typical bus trip, total trip time consists of five main factors:

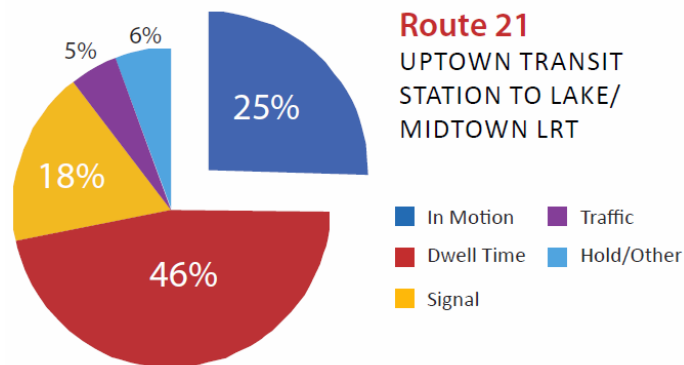
- In motion time (the share of run time that a transit vehicle is moving)
- Dwell time (the time it takes for customers to board/alight the vehicle at a bus stop)
- Traffic signal delay
- Traffic/roadway congestion delay
- Hold time (if the trip is early) or other unspecified delay factors

Route 21 has an average speed of 6 miles per hour on Lake Street in the Midtown Corridor, and for an average trip the bus is in motion for only 25 percent of the time, as shown in Figure 11. A high number of customer boardings and frequent bus stops contribute to significant boarding delay and an extend trip travel time. Additionally, Lake Street has many signalized intersections, and buses operate in mixed traffic. Together these factors result in a slow speed of service. For example, via transit it takes approximately 29-35 minutes to travel from the Uptown Transit Center to the Lake Street/Midtown Station on the Blue Line LRT, a distance of roughly three miles, with no unscheduled delays. The same



trip by car takes about 11 minutes, and by bicycle using the Midtown Greenway it takes 15 minutes. Lower transit travel speeds lead to decreased service attractiveness.

**Figure 11. Delay Factors for Route 21**



*Source: Arterial Transitway Corridors Study, 2011*

### Poor access to job centers and key destinations that together form one of the region's largest employment clusters

The Midtown Corridor has regional significance as both an origin and destination as it is home to multiple job centers and key destinations. Some of the key job centers and destinations inside the Midtown Corridor include Uptown, the Midtown Exchange, Hi-Lake Shopping Center, Allina Health, and Wells Fargo Home Mortgage. Improved access to job centers and key destinations along the corridor is needed.

In addition to containing multiple job centers and key destinations, the Midtown Corridor is located in a vital location. It is anchored on the west by the Green Line (Southwest LRT), bisected in the middle by the Orange Line (35W BRT), and on the east by the Blue Line (Hiawatha LRT). A lack of fast and efficient connections to the regional transitway system (Figure 13) limits access to opportunities inside and outside the corridor.

### Transit facilities lack amenities commensurate with demand

Passenger facilities are not adequate along the Midtown Corridor to meet existing and future demand. Passenger facilities at bus stops along the corridor are adequate for low volume local bus service, but do not support the demand of today's high ridership. Currently 26 out of 57 stops on the corridor have over 100 boardings per day. The greatest number of boardings and alightings are at major transfer points:

- WB Lake St. at Midtown Station (Blue Line LRT) – 733 daily boardings (Figure 12)
- EB Uptown Station – 732 daily boardings
- EB Chicago-Lake Transit Center – 728 daily boardings
- WB Chicago-Lake Transit Center – 660 daily boardings
- EB Lake at Blaisdell – 537 daily boardings
- EB Lake at 1<sup>st</sup> Avenue – 468 daily boardings



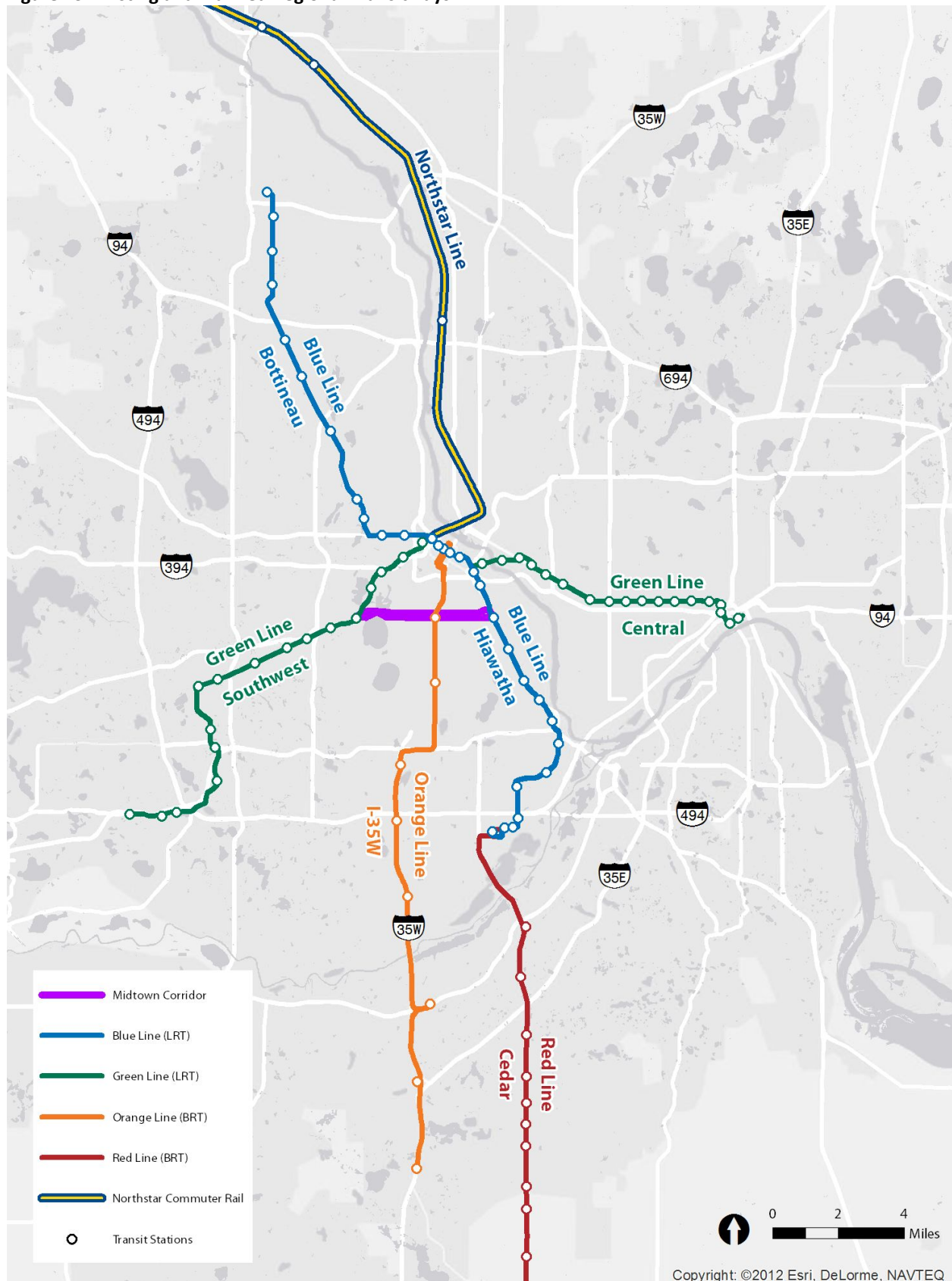
Customer boarding time and fare collection cause significant delay in the corridor. Current bus stop facilities do not offer features that accelerate and better organize boarding and alighting.

**Figure 12: Existing Transit Facility at Lake Street and Hiawatha Ave**





**Figure 13. Existing and Planned Regional Transitways**





### **A diverse population with a variety of transportation demands**

One of the assets of the Midtown Corridor is its diversity, both in terms of resources and area population. The Midtown Corridor has a wide variety of retail and employment destinations, from upscale national retail chains in the Uptown area to smaller, locally owned retailers in the Phillips and Powderhorn Park neighborhoods. These thriving small businesses are located near some of Minneapolis' most visible large corporations such as Allina Health and Wells Fargo contributing to a diverse set of commercial uses and employment types in the corridor.

### **Access to range of destinations and throughout the entire day, including evenings and weekends**

The existing Midtown corridor transit system serves a wide variety of trip purposes. Over two-thirds of the weekly ridership on Route 21 is off-peak, that is, outside of the traditional hours of commuter travel during the morning and afternoon. This correlates well with the results of Metro Transit's 2012 Customer Satisfaction Survey, where over 60 percent of Route 21 riders responded that they were riding for reasons other than work. The demand for non-work trips can also be quantified by comparing the ratio of average weekend to average weekday riders. The Route 21 averages approximately 12,400<sup>1</sup> weekday rides. Comparatively, Saturday and Sunday ridership totals approximately 10,400 and 7,300 rides, respectively. The route is the third highest percent of ridership on Saturday (80 percent) and the second highest on Sunday (56 percent) compared to other Metro Transit's urban local routes. Consequently, transit demand in the Midtown Corridor is well-balanced throughout the week and across trip purposes.

Work trip data is more available than non-work; because of this commuter trends are often easier to analyze at a detailed level. The geographic distribution of Midtown Corridor resident commuter trips to employment destinations is summarized in Table 2. Destinations along current and planned transitways provide a sense of key commuter transit markets. Currently, there are approximately 26,300 commuters originating within the Midtown Corridor. Nearly half of these commuters (49 percent) work in places that will be served by the major transit corridors. Of these, 17 percent of commuters from the Midtown Corridor are traveling to downtown Minneapolis and 20 percent commute to locations that are served by the Green (Central and Southwest corridors) and Blue (Hiawatha<sup>2</sup>) Line LRT outside of downtown. Finally, approximately 10 percent of Midtown residents both live and work within the corridor. Of corridor residents, 11 percent commute via transit, and two percent walk to work<sup>3</sup>. By year 2030, nearly half of the study area commuters will have jobs accessible by to a major intersecting transitway.

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<sup>1</sup> Transit On-Board Survey, 2010

<sup>2</sup> The Blue Line LRT does not include portion in Bottineau Corridor.

<sup>3</sup> American Community Survey, 2011

**Table 2. Employment Destinations of Midtown Corridor Residents within ½ Mile Study Area**

Work Location	Number of Daily Commuters	Percent of Daily Commuters
Midtown Corridor	2,600	10%
Hiawatha Corridor	1,500	6%
Southwest Corridor	1,000	4%
Central Corridor	2,700	10%
I-35W BRT Corridor	600	2%
Downtown Minneapolis	4,400	17%
Other	13,500	51%
<b>TOTAL</b>	<b>26,300</b>	<b>100%</b>

Source: Year 2010 Longitudinal Employer-Household Dynamic Data

The Midtown Corridor is a major non-downtown center of professional employment in the region. Table 3 shows individuals commuting to the Midtown Corridor originate from locations that are relatively dispersed across the region. Currently, there are approximately 33,500 daily commuters traveling to the corridor. Approximately 20 percent of these commuters originate from residences that are within a ½ mile of a planned or current regional transitway that connects to the Midtown Corridor. Approximately 2,600 residents both live and work within the Midtown Corridor.

**Table 3. Origins of Individuals Working within the ½ Mile Midtown Corridor Study Area**

Residence Location	Number of Daily Commuters	Percent of Daily Commuters
Midtown Corridor	2,600	8%
Hiawatha Corridor	1,200	4%
Southwest Corridor	550	2%
Central Corridor	550	2%
I-35W BRT Corridor	1,400	4%
Downtown Minneapolis	400	1%
Other	26,800	80%
<b>TOTAL</b>	<b>33,500</b>	<b>100%</b>

Source: Year 2010 Longitudinal Employer-Household Dynamic Data

Approximately 115,000<sup>4</sup> existing households are located within a 40-minute transit ride of the Midtown Corridor. This represents a significant labor force market for employers within in the Midtown Corridor. Improving connections in the Midtown corridor will provide improved transit opportunities for Midtown resident commuters and therefore transit will capture an increased market share of work commuters to and from the Midtown Corridor.

<sup>4</sup> Twin Cities Regional Travel Demand Model



### A high proportion of residents who rely on transit as their primary means of transportation

The Midtown Corridor is home to a large and diverse population of individuals, many of whom rely on transit for access to jobs and opportunity. As shown in Table 5 and Figure 14, approximately 22 percent of households in the Midtown Corridor study area do not have an automobile, which is nearly three times the metropolitan area average of eight percent. Approximately 47 percent of households have only one car. These percentages are higher than City of Minneapolis and seven-county metro area percentages.

**Table 4. Zero and One-Car Households within ½ mile of Corridor Alignments**

	Total Households	Average Household Size	Percent of zero-car households	Percent of one-car households
<b>Midtown Corridor</b>	35,878	2.36	22%	47%
<b>Minneapolis</b>	168,273	2.17	19%	43%
<b>Seven-County Metro</b>	1,117,438	2.62	8%	33%

Source: 2010 American Community Survey- 5-year estimate, reported at Census Block Group Level

As shown in Table 5, approximately 25 percent of the population living in the Midtown Corridor is living in poverty according to the U.S. Census definition<sup>5</sup>. This is higher than both the Minneapolis and seven-county metro area percentages.

**Table 5. Population Living in Poverty within ½ mile of Corridor Alignments**

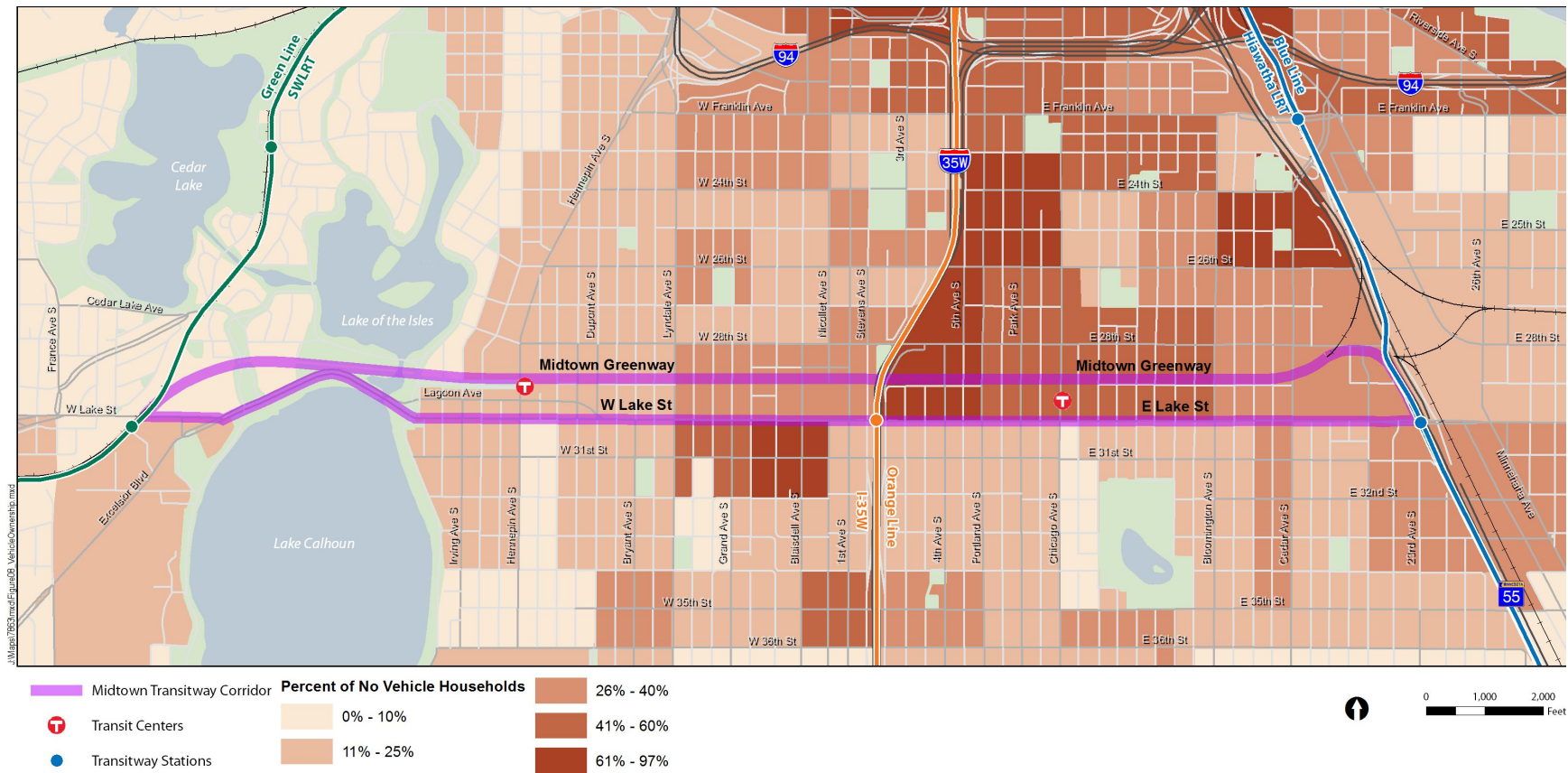
	Population	Population in Poverty	Percent of Population in Poverty
<b>Midtown Corridor</b>	77,096	19,448	25%
<b>Minneapolis</b>	381,833	81,889	21%
<b>Seven-County Metro</b>	2,833,150	288,346	10%

Source: 2010 American Community Survey- 5-year estimate, reported at Census Block Group Level

<sup>5</sup> Following the Office of Management and Budget's (OMB) Statistical Policy Directive 14, the Census Bureau uses a set of money income thresholds that vary by family size and composition to determine who is in poverty. If a family's total income is less than the family's threshold, then that family and every individual in it is considered in poverty. The official poverty thresholds do not vary geographically, but they are updated for inflation using Consumer Price Index (CPI-U). The official poverty definition uses money income before taxes and does not include capital gains or noncash benefits (such as public housing, Medicaid, and food stamps).



Figure 14. Zero Car Households



Source: 2007-2011 American Community Survey- 5-year estimate



## Support of city and regional policies encouraging growth and development in the corridor

The Midtown Corridor is a place within the Minneapolis-St. Paul region that is targeted for growth and investment which is supportive of enhanced transit and increased densities. This projected growth will result in increased travel demand within the Midtown Corridor, demand which cannot be accommodated with the existing transportation system in the corridor. Lake Street has limited right-of-way and already high volumes of vehicular traffic. Existing transit service is at or near capacity and will not be able to accommodate additional growth.

## Existing transportation capacity is inadequate to meet forecast population and employment growth

Both population and employment are forecasted to grow significantly through 2030 in the Midtown Corridor (Table 6). Employment growth is projected to outpace population growth in both retail and non-retail sectors. This development is geographically concentrated at Midtown Exchange, Wells Fargo, Abbott Northwestern Hospital, and Children's Hospital, as well as in Uptown and the area near the West Lake Street Station on the Green Line LRT.

**Table 6: Population and Employment Growth**

	2010	2030	2010-2030 Growth	Percentage Growth
<b>Population</b>	103,653	114,779	11,126	10.7%
<b>Households</b>	47,653	54,374	6,748	14.2%
<b>Retail Employment</b>	9,051	10,913	1,862	20.6%
<b>Non-Retail Employment</b>	39,976	47,970	7,994	20.0%

Source: Metropolitan Council Regional Forecast TAZ Data

As previously mentioned, Route 21 has the third-highest average daily ridership of all Metro Transit routes. Over the years, Metro Transit has adjusted service plans to provide more frequent service and serve the high demand in the corridor. Route 21 buses are often near or at capacity, with 45 weekday trips averaging 30 or more riders on-board at any one time. Currently, the Route 21 runs every 6-10 minutes during the peaks. Increased transit demand in the corridor causes increased capacity constraints.

## Need to increase intensity of residential and commercial development along the Midtown Corridor

Regional plans support population and housing growth near transitway corridors. Local policies direct compact, mixed-use development near transitway corridors as well. While development in the Midtown Corridor is strong, there is a need to catalyze further development along the length of the corridor.

The *Minneapolis Plan for Sustainable Growth* promotes development of a balanced multimodal transportation system, including automobile, transit, bicycle, and pedestrian modes. The plan identifies transit as the principal means to efficiently meet the needs of the traveling public. Linking transportation planning with land use planning will promote a consistent vision. Transit should serve key markets and



future growth. The plan emphasizes new housing and employment development adjacent to major transit investments.

Many locations within the Midtown Corridor are identified for redevelopment, and the corridor has been the focus of numerous local plans. The City of Minneapolis has completed several land use plans along the corridor, including the *Lyn-Lake Small Area Plan*, the *Uptown Small Area Plan* and the *Midtown Greenway Land Use Development Plan*. These plans encourage intensifying land use to support transit and creating a more walkable, pedestrian-friendly environment. Other transit-related policies include:

- Promote a safe, vibrant and active environment with calmed streets and widened sidewalks. Focus investments toward developing an enlivened, pedestrian-friendly public realm.
- Encourage redevelopment projects to be transit-supportive by integrating bicycle and pedestrian amenities as well as accessible and visually appealing transit stops into projects.
- Promote opportunities for additional public green space, dedicated parks, trail connections and public art along the Greenway edge, especially near transit stops and higher-intensity developments.
- Support compact development and promote mixed use in existing commercial areas. Create a more lively and diverse urban environment.
- Focus the most intensive development near future transit stops and existing commercial nodes and encourage the provision of open space and active storm-water management in new developments.



## 4. Goals and Objectives

Based on the identified purpose and need for transit improvements in the Midtown Corridor, broader goals and objectives were developed. These goals and objectives are desired outcomes associated with a transitway investment.

1. Increase transit use among the growing number of corridor residents, employees, and visitors
  - Provide transit service that is fast, frequent, reliable and equitable for all users
  - Provide transitway stations that have a high level of passenger amenities and are easily accessible to riders with limited-mobility
  - Provide service that is identifiable and easy for visitors and new users to understand
  - Provide a transit investment that meets today's needs and has ability to expand for future growth
  - Increase the percentage of people using transit as their transportation choice in the corridor
2. Improve corridor equity with better mobility and access to jobs and activities
  - Enhance physical and visual connections with the three transitways - the Blue, Green and Orange lines – and two transit centers in the study area
  - Provide fast and convenient transfers with transitways and the local bus network
  - Locate transit stations to effectively serve transit customers while maintaining the desired speed of service
  - Improve access to local and regional destinations, activity centers and business nodes
  - Provide a transitway investment that considers the needs of residents who rely on transit and contributes to reduced reliance on auto travel
3. Catalyze and support housing and economic development along the corridor
  - Support a mix of housing choices, including affordable housing
  - Provide transit improvements to help realize city and regional development plans
  - Attract investment along the length of the corridor, concentrated at key nodes
  - Support both small businesses and regional employers by providing better transit options for their customers and employees
  - Minimize construction impacts to businesses, residents and other corridor users
4. Develop a cost-effective transitway that is well-positioned for implementation
  - Develop a transitway operating plan that is well-coordinated with existing service in the corridor
  - Advance transitway alternatives that are financially feasible and minimize new operating resource requirements
  - Provide a transitway with broad support from the community, businesses and policymakers
5. Build upon the vibrancy and diversity of the corridor by supporting healthy, active communities and the environment
  - Ensure safe and direct connections between transit and other multimodal transportation choices such as walking and biking

- Maintain parkland, trails and green space in the corridor
- Promote air quality benefits and minimize noise and vibration impacts
- Recognize impacts to cultural and historic resources
- Balance impacts to existing traffic operations and curbside uses
- Enhance safety through increased visibility and activity in the corridor

## 5. Evaluation Criteria

The establishment of goals and objectives articulates the desired benefits of a transit improvement in the Midtown Corridor, and establishes a foundation of evaluation measures including quantitative and qualitative criteria to be used in comparing the performance of alternatives. Evaluation criteria help compare and contrast between alternatives. Evaluation criteria tie back to stated goals and objectives; however, not all objectives have evaluation measures associated with them. Evaluation criteria may be qualitative or quantitative in nature. Table 7 identifies potential evaluation criteria to be used in the Midtown Corridor AA.

**Table 7. Potential Evaluation Criteria**

Goal	Evaluation Measures
1. Increase transit use among the growing number of corridor residents, employees, and visitors	<ul style="list-style-type: none"> <li>• Total ridership</li> </ul>
2. Improve mobility and access to jobs and activities	<ul style="list-style-type: none"> <li>• Ridership change on connecting transit</li> <li>• Travel time</li> <li>• Frequency</li> <li>• Number of transit-reliant riders</li> </ul>
3. Catalyze and support housing and economic development along the corridor	<ul style="list-style-type: none"> <li>• Consistency with land use plans</li> <li>• Forecasted change in population and employment</li> <li>• Access to affordable housing</li> </ul>
4. Develop a cost-effective transitway that is well-positioned for implementation	<ul style="list-style-type: none"> <li>• Capital and operating costs</li> <li>• Cost per trip</li> <li>• Passengers per in-service hour</li> <li>• Subsidy per passenger</li> </ul>
5. Support healthy, active communities and the environment	<ul style="list-style-type: none"> <li>• Environmental impacts including: historic and cultural resources; parklands; noise and vibration; air quality</li> <li>• Right of way impacts</li> <li>• Traffic impacts</li> <li>• Multi-modal compatibility</li> </ul>