HIGHWAY 36
Transit Feasibility Study

FINAL REPORT

Washington County

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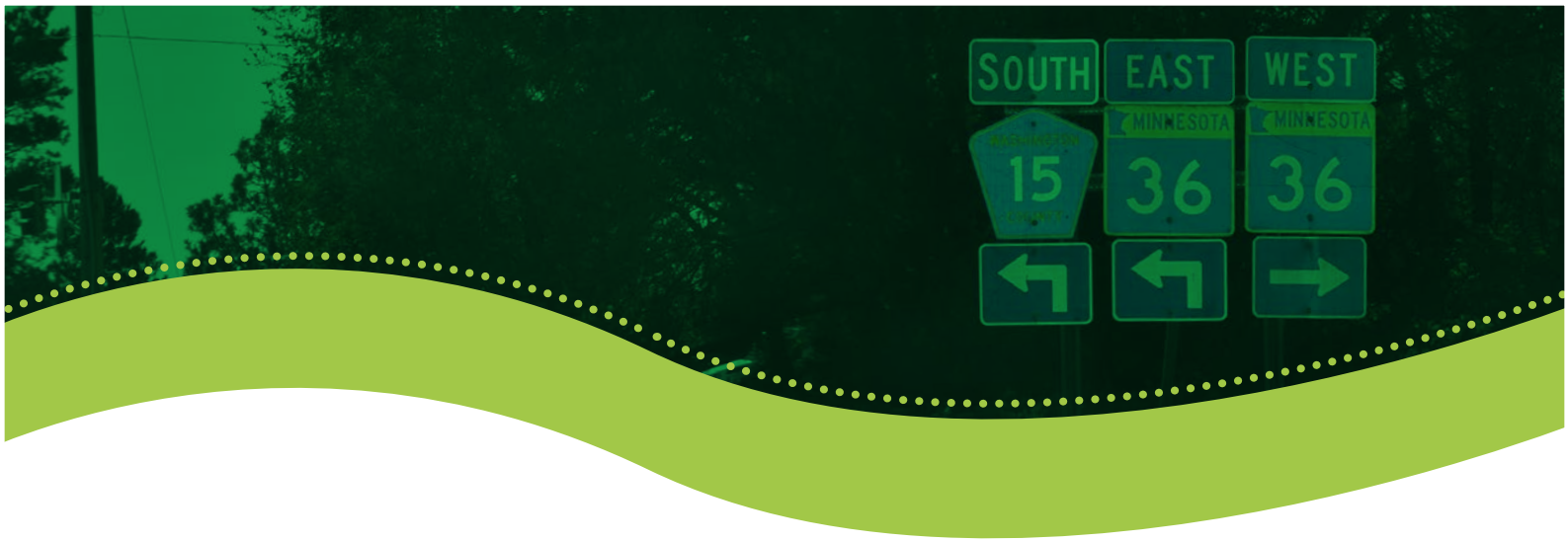


EXECUTIVE SUMMARY

The Highway 36 Transit Feasibility Study began in 2020 in order to define the long-term transit vision of Highway 36 through analysis of existing and emerging mobility needs. The study examines the feasibility of east-west oriented transit service along the Highway 36 corridor in and between the termini of the city of Minneapolis and the cities of Oak Park Heights, Bayport, and Stillwater. It identifies opportunities to further study or develop enhanced transit service operating along the Highway 36 corridor, as well as improve connections to the regional transit system.

The purpose of the Highway 36 Transit Feasibility Study is to expand multimodal travel options, improve mobility for people who rely on transit or have limited access to a vehicle, and to improve access to jobs and opportunities. Improved transit service that satisfies the long-term regional mobility and accessibility needs for residents and businesses supports sustainable development within the study area.

ANALYSIS PROCESS

The project team completed a series of tasks to evaluate transit improvement options for the Highway 36 corridor. First, the project team reviewed previously completed work and plans and study area characteristics of the Highway 36 corridor. These tasks provided a deeper understanding of existing conditions in the corridor. The project team then worked with the project management team and technical advisory working groups to develop the project's purpose statement, goals, objectives, and evaluation framework. This framework was used to establish options for transit improvements and supported the analysis, evaluation, and final recommendations of those options.

The project team utilized two evaluation approaches: a segmented evaluation was conducted for evaluation criteria that are based on study area characteristics, while a scenario-based evaluation was conducted for evaluation criteria that are based on the outcomes of the combination of potential transit improvements in each scenario. The scenario-based evaluation was conducted for objectives that are based on the criteria and outcomes of the combination of potential transit improvements in each scenario to show the performance difference between these combinations of improvements. In addition to data analysis and technical evaluation, the project team engaged the public and stakeholders to learn about transit challenges and opportunities in the Highway 36 corridor and to gather feedback on the draft recommendations.

KEY FINDINGS

Key Transit Issues

The existing conditions analysis for the Highway 36 corridor suggested that the issues that support the need for improved transit in the corridor include the following:

- Limited existing transit service span and coverage
- Limited transit options for people who rely on transit
- Traffic congestion
- Gaps in active & accessible connections
- Planned growth of population, jobs, and density

Segmented Evaluation Key Takeaways

The segmented evaluation analyzed the evaluation criteria that are based on study area characteristics using 19 half-mile buffers of two-mile segments of the study. The key findings from this evaluation included:

- Concentrations of people, jobs, activity centers, and transit-supportive land uses are located throughout the corridor and there is no unifying transit service
- Much of the corridor has many connections with north-south oriented transit service
- Many of the people living and working in this corridor would benefit from improved transit options and would be likely to utilize them
- There is limited existing bicycle and pedestrian infrastructure currently available east of Hadley Avenue, which makes fixed route transit options more challenging
- There is likely demand for east-west transit service along Highway 36, and the demand is higher in the western part of the corridor
- Connecting to Maplewood Mall is beneficial for transfers to other transit services and accessing destinations

Scenario-Based Evaluation Key Takeways

The scenario-based evaluation was conducted for objectives that are based on the criteria and outcomes of the combination of potential transit improvements in each scenario to show the performance difference between these combinations of improvements. The key findings from this evaluation included:

- Scenario 2 (Maplewood Mall Transit Center) had the highest forecasted ridership, which is likely due to the connection to several existing routes at the Maplewood Mall Transit Center and the connections to the University of Minnesota included in this scenario
- Operations and maintenance costs estimates were most affected by the length of the potential BRT service and number of BRT stations. While Scenario 4 (Stillwater/Oak Park Heights/Bayport) was the most expensive with BRT service the entire length of the corridor, Scenario 2 had longer BRT service and more stations than Scenarios 1 (Rice Street) and 3 (Hadley Avenue) and was, therefore, the second most expensive scenario
- The capital costs are fairly similar between the four scenarios, since mobility hubs were assumed at corridor locations where little transit infrastructure currently exists and a BRT station was not included for that scenario. Scenario 2 was estimated to have the lowest capital costs, since it was assumed to utilize the existing Maplewood Mall Transit Center rather than a new mobility hub that was assumed in the other scenarios
- The largest reduction in vehicle miles traveled was forecasted for Scenario 3, which was likely because Scenario 3 would provide higher frequency east-west transit further east in the study area to locations that currently have fewer transit options and also included express service that was attractive to people currently making trips in single-occupancy vehicles

RECOMMENDATIONS

Transit improvement recommendations were developed for the Highway 36 corridor with an equity lens[1] with the intention of expanding multimodal travel options, improving mobility for people who rely on transit or have limited access to a vehicle, improving access to jobs and opportunities, satisfying the long-term regional mobility and accessibility needs for residents and businesses, and supporting sustainable development within the study area. Recommendations were based on technical evaluation and the feedback received from the public and corridor stakeholders.

Technical recommendations are grouped based on their suggested implementation timeframe and include the need and implementation recommendations.

[1] *An equity lens is a perspective one takes to improve planning, resource allocation, and decision-making by considering who benefits, who is burdened, and how resources can be most impactful in improving people's lives and removing race and income based outcome gaps.*

0-2 YEARS

Immediate-Term Recommendations

- Continue to prioritize, maintain, and invest in mobility management[2]
- Study and consider pilot on-demand public transit service
- Continue to engage residents, employees, businesses, and community organizations in corridor transit planning, especially underrepresented populations, and the hospitality industry
- Continue planning and constructing bicycle and pedestrian infrastructure connecting to the Highway 36 corridor
- Collaborate with state, regional, and local agencies to show a Highway 36 transitway in planning documents as they are updated (SMTP, TPP, Metropolitan Area Comprehensive Transit Finance Report)

3-5 YEARS

Near-Term Recommendations

- Develop a higher frequency (10-15 minute) limited stop service between downtown Minneapolis and Maplewood Mall Transit Center via University of Minnesota
- Develop a lower frequency (30 minute) limited stop service between Maplewood Mall Transit Center and Stillwater/Oak Park Heights/Bayport
- Continue to monitor the need for peak-period, peak-direction express service between Stillwater and downtown Minneapolis
- Form a corridor commission, including city and county policymakers, to:
  - Identify funding sources for corridor improvements
  - Develop multijurisdictional agreements
  - Scope out the projects (transit service and infrastructure, including mobility management)
  - Monitor need for peak period express bus service to report to the corridor commission

5-8 YEARS

Medium-Term Improvements

- Strategically develop a network of mobility hubs in the Highway 36 corridor
- Encourage transit-supportive development near potential transit access areas, especially uses that balance out parking demand for shared parking opportunities
- Protect and enhance the existing bus-only shoulders on Highway 36 and explore/designate and enhance bus-only shoulders on Highway 36 east of 694
- Explore/designate and enhance bus-only shoulders on Highway 280

[2] *Mobility management is an approach for coordinating, managing, and delivering transportation services to workers, people with low incomes, people with disabilities, and older adults. Mobility management focuses on people's individual needs and works to provide a more coordinated and efficient transportation system.*

INTRODUCTION

PROJECT DESCRIPTION

The Highway 36 Transit Feasibility Study began in 2020 in order to define the long-term transit vision of Highway 36 through analysis of existing and emerging mobility needs. The study examines the feasibility of east-west oriented transit service along the Highway 36 corridor in and between the termini of the city of Minneapolis and the cities of Oak Park Heights, Bayport, and Stillwater. It identifies opportunities to further study or develop enhanced transit service operating along the Highway 36 corridor, as well as improve connections to the regional transit system.

Previous transit and highway studies have consistently shown that Highway 36 is a critical multimodal corridor, which serves three counties and 12 cities, as shown in Figure 1. Due to the corridor's importance for the Twin Cities Metro area, connection to Interstates 694, 35E and 35W, and direct links to downtown Minneapolis and Wisconsin, the roadway has a significant impact on the region's connectivity, accessibility, and long-term transportation success.

This study identifies interim steps that can be taken to improve transit mobility in the corridor and support the long-term vision. Recommendations stemming from this study will improve mobility to and from population centers in the Highway 36 corridor, expand the range of travel options in the region, and improve connections for workers to employment. The outcomes and recommendations produced by this study will serve primarily as guidance for the counties, corridor partners, Metro Transit, and MnDOT.

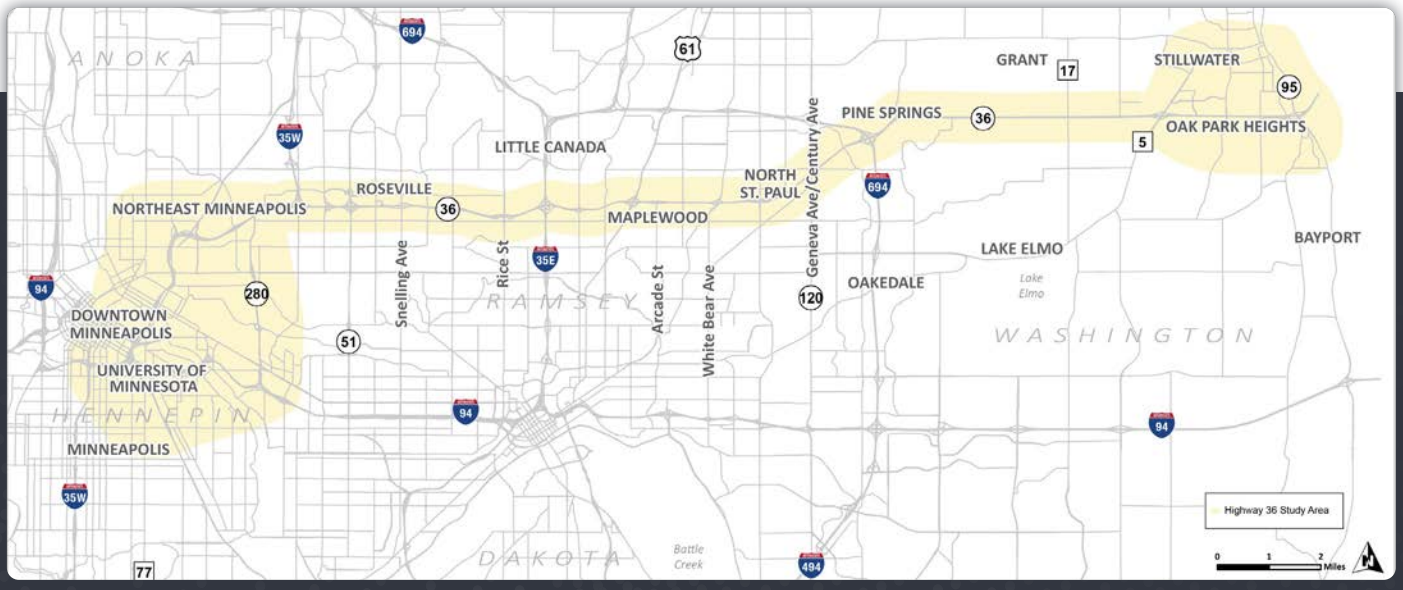


Figure 1: Study Area

PREVIOUSLY COMPLETE WORK AND PLANS

The Highway 36 corridor is an important regional connection. As a result, Highway 36 has been considered in many studies and identified in many area comprehensive plans as an opportunity for transportation improvements. The project team reviewed comprehensive plans from cities and counties in the corridor, transportation plans and transit studies related to the corridor, and various recently completed and programmed projects. This review provided key insights into transit feasibility in the corridor, and provided the foundation to further previous recommendations for BRT in the Highway 36 corridor. Highway 36 station area planning can benefit from the plans and policies adopted by the region's cities in preparation for the other regional transitways. Land use policies that focus on transit-oriented development create an environment along Highway 36 conducive to collaborative planning and the attainment of federal funding. Plans for road expansion with the introduction of HOV/MnPASS lanes have the potential to support transit efficiency. Space at existing corridor park-and-rides can facilitate transit use for corridor residents. The plans reviewed provided a deeper understanding of existing conditions in the corridor.

Key Takeaways from Previous Plans and Studies

SERVICE Metro Transit customers consistently rated service speed, span, and reliability as the most important areas for improved service.

ROADWAY Highway 36 is congested, and studies cited the need for improved transit and lane expansion, recommending MnPASS/HOV lanes in the corridor (projects were included in an increased revenue scenario). The Highway 36 corridor has experienced over 30 percent increase in corridor traffic since the opening of the St. Croix Crossing Bridge in 2017

PARK-AND-RIDE and park & pool facilities within the corridor showed high available capacity (utilization below 50 percent)

TRANSIT-ORIENTED DEVELOPMENT County and city comprehensive plans have prioritized transit by including land use updates that encourage density and mixed-uses for transit-oriented development

ACTIVE TRANSPORTATION Many comprehensive plans included extensive planning regarding active transportation and ADA accessible transportation planning with connections to transit in mind

TRANSIT NEEDS Many city and county plans recognized existing gaps in transit and the need for better connections to activity centers for all residents, particularly given aging populations and vulnerable communities within the corridor, and for access to jobs

REVIEW OF STUDY AREA CHARACTERISTICS

The project team conducted an analysis of economic and demographic existing conditions, current and future transit supportive land uses, travel patterns, existing transit ridership, highway congestion and travel time reliability, and future projects along the Highway 36 corridor.

It is expected that by 2040 the corridor will grow by over 20 percent both in terms of population and employment, a slightly lower rate compared to the growth in the rest of the metropolitan region. The origin and destination data suggested that there is a higher demand for transit west of Highway 61 than to the east along the Highway 36 corridor. Upcoming projects along Highway 36 provide a potential opportunity to align infrastructure changes with transit needs. The Highway 36 study area shows many priority populations and activity centers that indicate potential for transit demand (Figure 2).

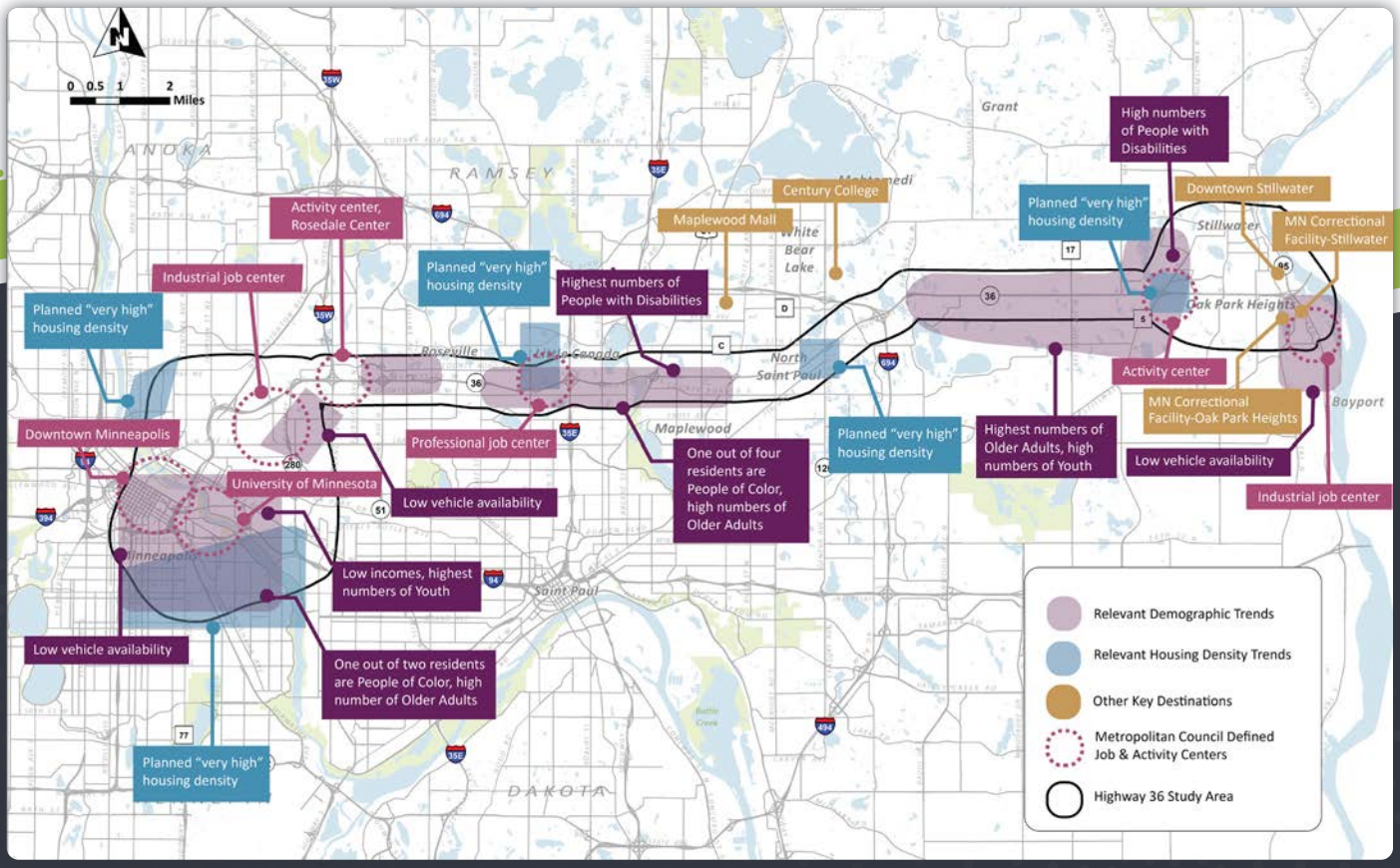


Figure 2: Study Area Characteristics

PUBLIC ENGAGEMENT

The project team aimed to facilitate a comprehensive and impactful process for engaging the public and stakeholders in the Highway 36 Corridor Transit Feasibility Study. The intended outcome was for the public and stakeholders to have opportunities to provide feedback that would inform the proposed transit improvements. Given that this study took place during the COVID-19 pandemic, many people, businesses, and organizations were focused on other priorities during this time. It will be essential to hear from these people and industries as future transit planning is done in this corridor.

Engagement Process and Findings

During fall 2020, the project team conducted focus groups and collected surveys.

Focus groups with businesses, governmental agencies, medical providers, and social service organizations in the Highway 36 corridor had the following results:

- Focus groups shared a variety of people with needs for east-west transit improvements in the Highway 36 corridor:
  - Workers
  - Clients
  - Visitors
  - Students
  - Patients

- A connection from the Washington County part of the corridor to the rest of the transit system would be important, because people are traveling to/from many locations throughout the region

The over 1,200 questionnaires collected from people living, working, or going to school in the Highway 36 corridor showed the following results:

Over half of the respondents from the eastern end of the corridor indicated interest in transit options for traveling within Stillwater/Bayport/Oak Park Heights (Figure 3).

of respondents are interested in taking transit

of respondents are interested in taking transit in the Highway 36 corridor multiple times per week

Barriers to currently riding transit in the Highway 36 corridor included:

- The convenience of driving an automobile
- Travel time on transit
- Challenges of getting to/from the bus stop

Traffic congestion on Highway 36, improving mobility for people who rely on transit, and improving the convenience of traveling without car in this corridor were of most importance to respondents

Top destinations to which respondents are interested in taking transit in Highway 36 corridor

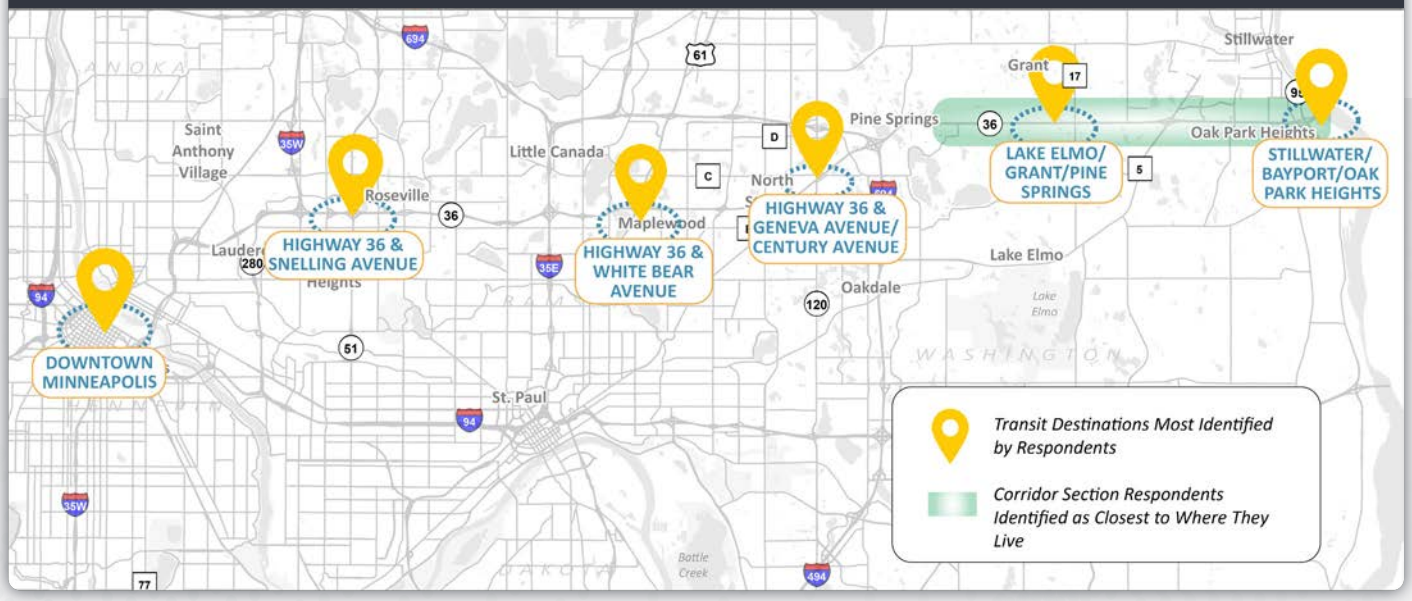
- Stillwater/Oak Park Heights/Bayport
- Downtown Minneapolis
- Highway 36 & Snelling
- University of Minnesota

Trip Purpose and Timing: Work, Recreation/Social, and Shopping are the trip purposes identified most for improved transit options in the Highway 36 corridor

- 3-7pm was the time of day with the most interest in improved transit trips in this corridor
- Also strong interest in morning and midday service
- Some interest in later evening service
- Little interest in overnight service
- Work was the purpose most indicated for desired transit trips that would be taken multiple times per week

Those who currently ride transit in the Highway 36 corridor reported that the frequency of existing transit services in this corridor is a barrier. For many, there are no existing transit options

Over half of the respondents from the eastern end of the corridor indicated interest in transit options for traveling within Stillwater/Bayport/Oak Park Heights (Figure 3).



Nearly 60% of the respondents from the middle of the corridor indicated interest in improved transit options for traveling to the University of Minnesota(Figure 4).

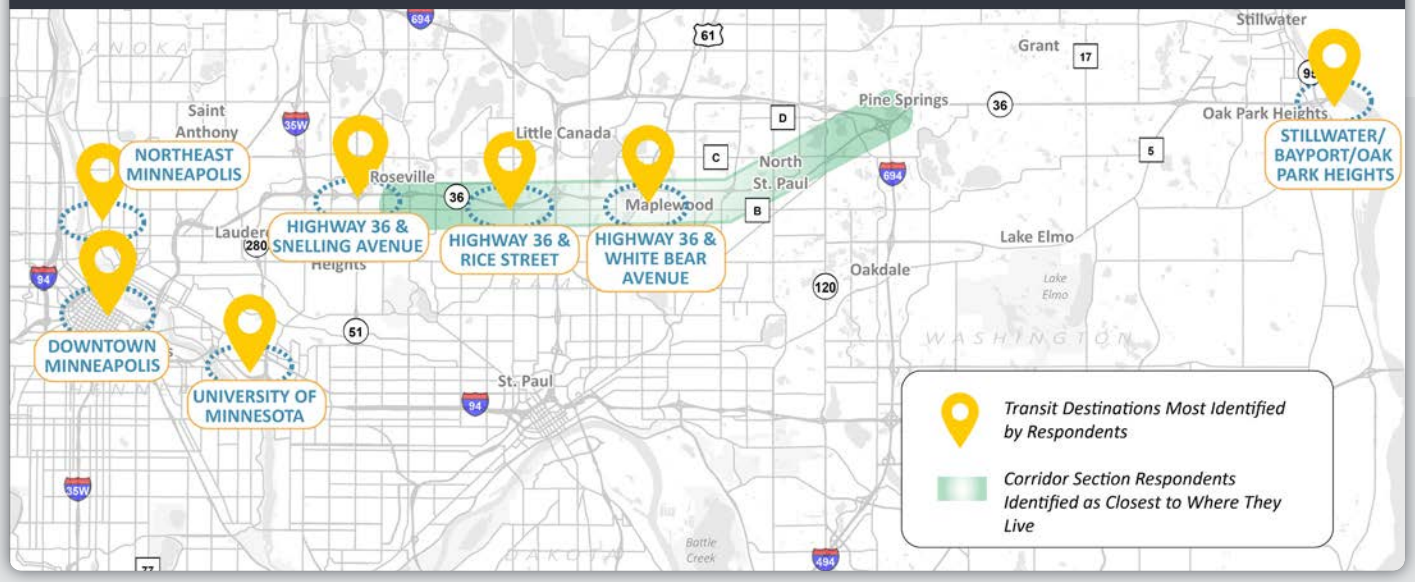


Figure 4: Destinations preferred by respondents living in the central third of the corridor

60% of the respondents from the western end of the corridor indicated interest in improved transit options for traveling to downtown Minneapolis and Highway 36 & Snelling (Figure 5).

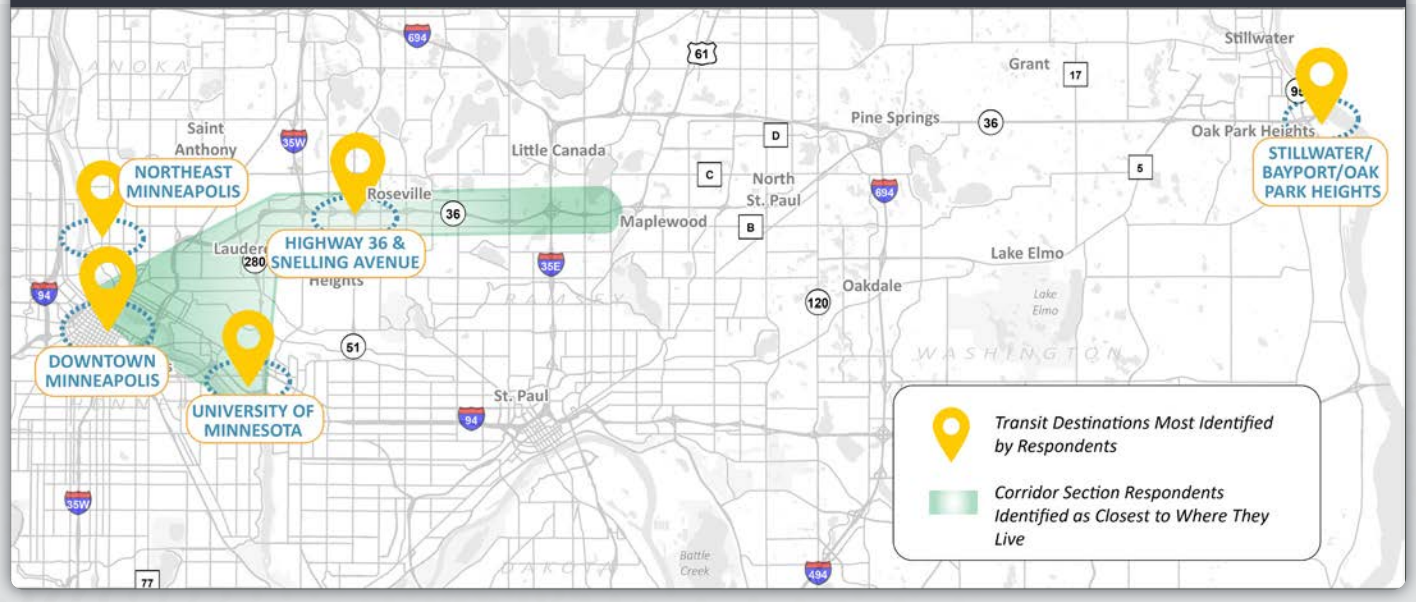


Figure 5: Destinations preferred by respondents living in the western third of the corridor

Results were shared through a virtual presentation in the Spring of 2021. Further engagement is recommended in the final report recommendations.

PURPOSE STATEMENT, GOALS, OBJECTIVES, AND EVALUATION FRAMEWORK

In order to develop the project purpose statement and project needs in the corridor, the project team considered public input in addition to available data regarding socioeconomics, travel patterns, land use and other relevant studies.

Purpose Statement

The purpose statement developed for transit improvements in the Highway 36 corridor was as follows:

The purpose of the Highway 36 Transit Feasibility Project is to expand multimodal travel options, improve mobility for people who rely on transit or have limited access to a vehicle, and to improve access to jobs and opportunities. Improved transit service that satisfies the long-term regional mobility and accessibility needs for residents and businesses supports sustainable development within the study area.

Project Needs

The existing conditions analysis for the Highway 36 corridor suggested that the issues that support the need for improved transit in the corridor include the following:

- Limited existing transit service span and coverage
- Limited transit options for people who rely on transit
- Traffic congestion
- Gaps in active & accessible connections
- Planned growth of population, jobs, and density

Goals, Objectives, and Evaluation Framework

In order to evaluate various transit options, the project team used an evaluation framework that included goals, objectives, and evaluation criteria to distinguish between transit options and identify the transit improvements that best meet the needs of various parts of the study area.

Goal 1: Identify improvements that increase transit access and connections

OBJECTIVE	CRITERIA	MEASUREMENT
IMPROVE TRANSIT ACCESS FOR PEOPLE WHO LIVE ALONG HIGHWAY 36	Residents served by potential transit improvements	Number of people who live within the buffered area
IMPROVE TRANSIT ACCESS FOR PEOPLE FORECASTED TO LIVE ALONG HIGHWAY 36	Forecasted residents (2040) served by potential transit improvements	Number of people forecasted to live within the buffered area in 2040
IMPROVE TRANSIT ACCESS TO JOBS ALONG HIGHWAY 36	Jobs served by potential transit improvements	Number of jobs within the buffered area
IMPROVE TRANSIT ACCESS TO JOBS FORECASTED TO BE ALONG HIGHWAY 36	Forecasted jobs (2040) served by potential transit improvements	Number of jobs forecasted to be within the buffered area in 2040
IMPROVE TRANSIT ACCESS TO REGIONAL JOB AND ACTIVITY CENTERS[3]	Regional job and activity centers served by potential transit improvements	Number of job and activity centers within the buffer area
INCREASE ALL-DAY (6AM-8PM) WEEKDAY TRANSIT ACCESS	Residents gaining access to all-day weekday transit service who do not have it now	Number of people who live within the buffered area who would gain all-day weekday transit access who do not have it now
MAXIMIZE REGIONAL CONNECTIVITY, INCLUDING LOCAL CONNECTIONS	Connections to existing transit routes	Number of connecting transit trips per weekday

[3]*The Metropolitan Council designates Job and Activity Centers using employment data from state and national sources. This designation represents areas where there are at least 1,000 jobs and an employment density of at least ten jobs per acre. It also includes regionally significant manufacturing and distribution centers that have at least 1,000 jobs.*

Goal 2: Identify improvements that benefit people who rely on transit and historically disadvantaged populations

OBJECTIVE	CRITERIA	MEASUREMENT
INCREASE TRANSIT ACCESS FOR PEOPLE WITH LIMITED ACCESS TO A VEHICLE	People with limited access to a vehicle served by potential transit improvements	People to vehicle ratio within the buffered area
PROVIDE TRANSIT IMPROVEMENTS FOR PEOPLE WITH LOW INCOMES	People with low incomes served by potential transit improvements	People with low incomes within the buffered area
INCREASE TRANSIT ACCESS TO LOW- AND MODERATE-INCOME JOBS	Low- and moderate-paying jobs served by potential transit improvements	Number of low- and moderate-paying jobs (<$40,000) within the buffered area
PROVIDE INCREASED MOBILITY OPTIONS FOR PEOPLE WITH DISABILITIES, INCLUDING OLDER ADULTS	People with disabilities served by potential transit improvements	Number of people with disabilities within the buffered area
PROVIDE TRANSIT IMPROVEMENTS FOR HISTORICALLY DISADVANTAGED POPULATIONS/ TITLE VI[4]	People of color served by potential transit improvements	Number of people of color within the buffered area
PROVIDE INCREASED MOBILITY OPTIONS FOR YOUTH (AGES 15-24)	Youth served by potential transit improvements	Number of people ages 15-24 within the buffered area

Goal 3: Identify Improvements that are Cost-Effective and Efficient

OBJECTIVE	CRITERIA	MEASUREMENT
SUPPORT LEVELS AND TYPES OF TRANSIT SERVICE THAT MATCH SPECIFIC NEEDS OF THE COMMUNITY BASED ON 2040 RIDERSHIP FORECASTS	Number of people likely to utilize proposed transit improvements	Forecasted ridership
PROVIDE TRANSIT SERVICES THAT ARE OPERATIONALLY COST-EFFECTIVE	New transit service required for proposed transit improvements	Annual operations and maintenance cost of the proposed transit improvements
LEVERAGE EXISTING TRANSIT FACILITIES IN THE CORRIDOR	New transit capital that is required for proposed transit improvements	Capital cost of proposed transit improvements

[4]*Title VI prohibits discrimination on the basis of race, color and national origin, including the denial of meaningful access for limited English proficient (LEP persons). These communities and environmental justice populations which are defined as minority and low-income populations will be included in consideration for this objective. For more information see: https://www.transit.dot.gov/regulations-and-guidance/civil-rights-ada/title-vi-guidance*

Goal 4: Identify improvements that support the environment and health

OBJECTIVE	CRITERIA	MEASUREMENT
ENCOURAGE HEALTHY COMMUNITIES AND PRACTICAL ALTERNATIVES TO PERSONAL AUTOMOBILES	Connections with existing bicycle and pedestrian infrastructure	Miles of existing bicycle and pedestrian infrastructure within buffer area
REDUCE TRANSPORTATION-RELATED AIR EMISSIONS	Reduction in single-occupancy vehicle miles traveled	Forecasted reduction in single-occupancy vehicle miles traveled

Goal 5: Identify improvements that are supported by existing and planned land use

OBJECTIVE	CRITERIA	MEASUREMENT
SERVE LAND USE PATTERNS THAT ARE SUPPORTIVE OF TRANSIT	Connection to existing transit-supportive land uses	Percent of existing land uses in buffer that are transit-supportive[5]
PROMOTE LAND USE PATTERNS THAT ARE SUPPORTIVE OF TRANSIT, ESPECIALLY INFILL AND REDEVELOPMENT	Connection to planned transit-supportive land uses	Percent of planned land uses in buffer that are transit-supportive

[5] *In the 2040 Transportation Policy Plan (TPP) the Metropolitan council defines transit development in two ways: "1) the density of future residential development; and 2) planning for activity that generates ridership, such as employment, schools, retail, and recreational uses."*

OPTIONS FOR TRANSIT IMPROVEMENTS

The project team developed a set of transit improvement options tailored to the Highway 36 corridor. The project team then analyzed four combinations of these improvements and looked at tradeoffs between locations served and which type of transit improvement would best serve the transit needs of different parts of the corridor. The project team reviewed potential locations for bus stops along these transit improvements, but further study will be needed to determine stop locations and the type of transit infrastructure at them.

Summary of Transit Improvement Options

HIGHWAY BUS RAPID TRANSIT (BRT): transit service that operates all day at frequent intervals and provides enhanced passenger facilities and amenities

PEAK-PERIOD, PEAK-DIRECTION EXPRESS SERVICE: transit service that operates from a park-and-ride into one of the downtowns in the morning and out in the afternoon

SUBURBAN EXPRESS SERVICE: transit service that operates primarily on the highway between suburban cities and has a limited number of stops (at least 4 miles apart)

ON-DEMAND PUBLIC TRANSIT: transit service that offers flexible routing and scheduling via smaller vehicles and allows users to request a trip through a smartphone app, over the phone, or through a companion website and go anywhere within a set boundary

MOBILITY HUB: physical locations that act as converging points for different types of transportation, allowing for easy transfer between modes

MANAGED MOBILITY: an innovative approach for managing and delivering coordinated transportation services to customers, including older adults, people with disabilities, and individuals with lower incomes that focuses on meeting individual customer needs through a wide range of transportation options and service providers and coordinates these services and providers to achieve a more efficient transportation service delivery system

COORDINATED TRANSPORTATION COMMITTEE OF WASHINGTON COUNTY

Scenarios

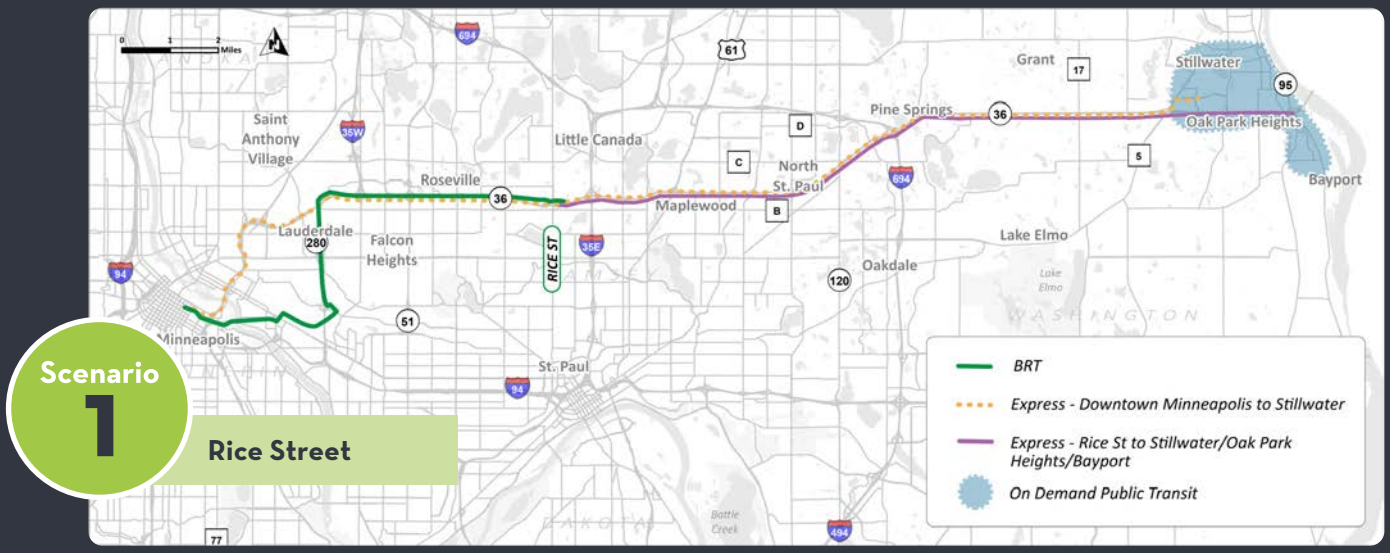


Figure 6: Scenario 1

Scenario 1: Rice Street (Figure 6) includes four transit improvements:

- BRT between downtown Minneapolis and Rice Street via the University of Minnesota
- A peak-period, peak-direction express route between Stillwater and downtown Minneapolis
- Suburban express route between Rice Street and Stillwater/Oak Park Heights/Bayport
- On-demand public transit in the greater Stillwater area

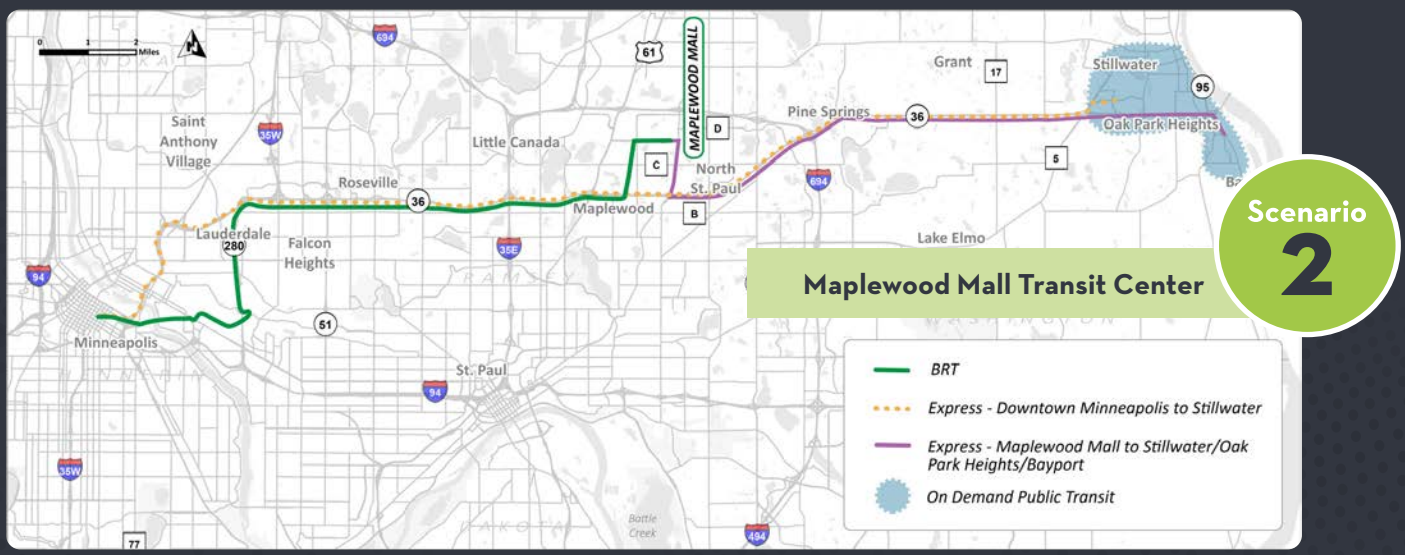


Figure 7: Scenario 2

Scenario 2: Maplewood Mall Transit Center (Figure 7) includes four transit improvements:

- BRT between downtown Minneapolis and Maplewood Mall Transit Center via the University of Minnesota
- A peak-period, peak-direction express route between Stillwater and downtown Minneapolis
- Suburban express route between Maplewood Mall Transit Center and Stillwater/Oak Park Heights/Bayport
- On-demand public transit in the greater Stillwater area

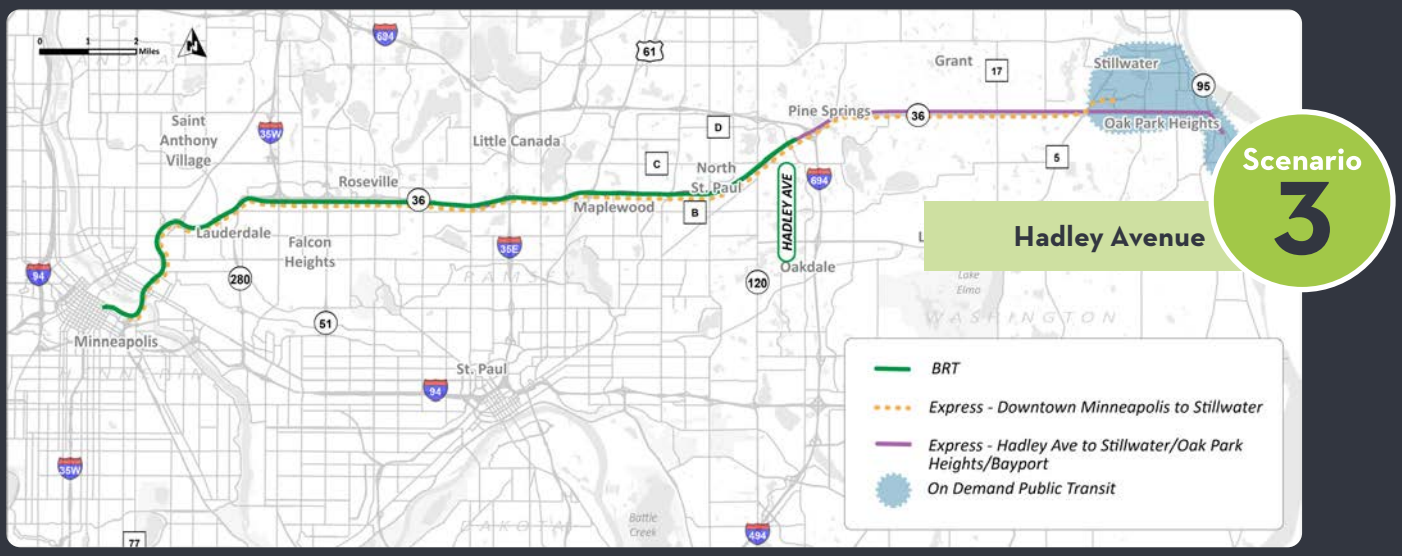


Figure 8: Scenario 3

Scenario 3: Hadley Avenue (Figure 8) includes four transit improvements:

- BRT between downtown Minneapolis and Hadley Avenue via Northeast Minneapolis
- A peak-period, peak-direction express route between Stillwater and downtown Minneapolis
- Suburban express route between Hadley Avenue and Stillwater/Oak Park Heights/Bayport
- On-demand public transit in the greater Stillwater area

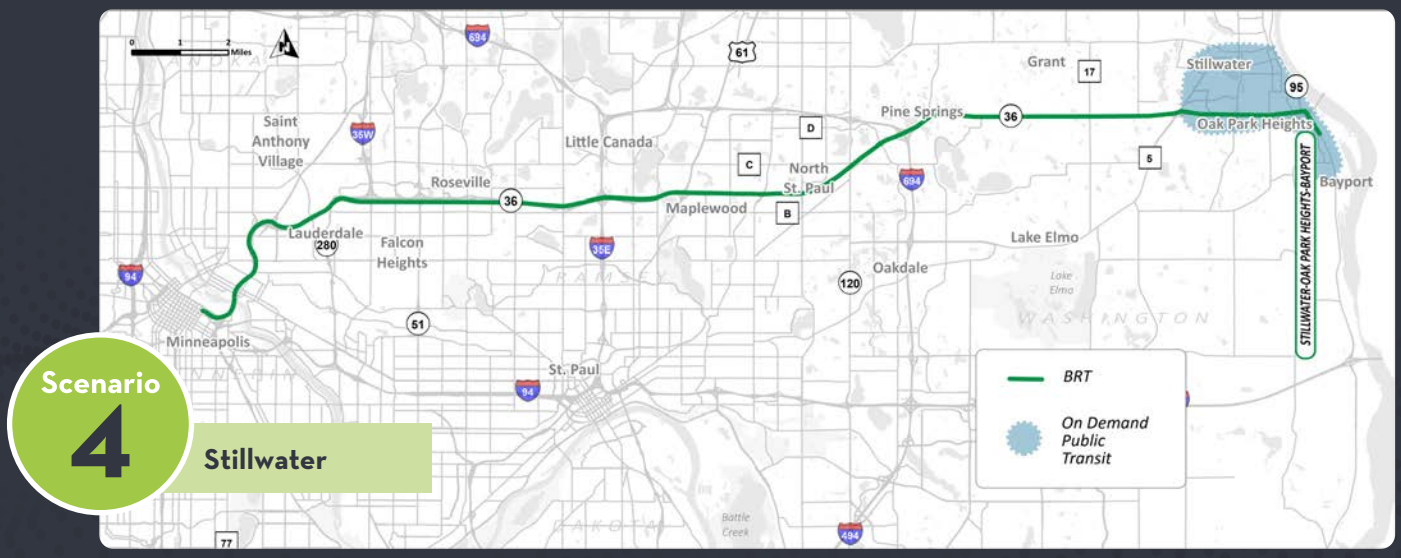


Figure 9: Scenario 4

Scenario 4: Stillwater (Figure 9) included two transit improvements:

- BRT between downtown Minneapolis and Bayport via Northeast Minneapolis
- On-demand public transit in the greater Stillwater area

**Due to the high level of service that would be provided by BRT serving the entire length of the corridor, peak-period, peak-direction express service was not included in this scenario.*

EVALUATION

The evaluation process focused on identifying transit improvements that would best serve the transit need of different parts of the corridor based on project goals and corridor characteristics. A segmented evaluation was conducted for evaluation criteria that are based on study area characteristics, while a scenario-based evaluation was conducted for criteria that are based on the outcomes of the combination of potential transit improvements in each scenario. Additional information on the evaluation methodology and findings can be found in the Evaluation and Recommendations Technical Memorandum.

Segmented Evaluation Key Takeaways

The segmented evaluation analyzed the evaluation criteria that are based on study area characteristics using 19 half-mile buffers of two-mile segments of the study. The key findings from this evaluation included:

- Concentrations of people, jobs, activity centers, and transit-supportive land uses are located throughout the corridor and there is no unifying transit service
- Much of the corridor has many connections with north-south oriented transit service
- Many of the people living and working in this corridor would benefit from improved transit options and would be likely to utilize them
- There is limited existing bicycle and pedestrian infrastructure currently available east of Hadley Avenue, which makes fixed route transit options more challenging
- There is likely demand for east-west transit service along Highway 36, and the demand is higher in the western part of the corridor
- Connecting to Maplewood Mall is beneficial for transfers to other transit services and accessing destinations

Scenario-Based Evaluation Key Takeaways

The scenario-based evaluation was conducted for objectives that are based on the criteria and outcomes of the combination of potential transit improvements in each scenario to show the performance difference between these combinations of improvements. The key findings from this evaluation included:

- Scenario 2 had the highest forecasted ridership, which is likely due to the connection to several existing routes at the Maplewood Mall Transit Center and the connections to the University of Minnesota included in this scenario
- Operations and maintenance costs estimates were most affected by the length of the potential BRT service and number of BRT stations. While Scenario 4 was the most expensive with BRT service the entire length of the corridor, Scenario 2 had longer BRT service and more stations than Scenarios 1 and 3 and was, therefore, the second most expensive scenario
- The capital costs are fairly similar between the four scenarios since mobility hubs were assumed in the corridor in locations where little transit infrastructure currently exists and BRT stations were not assumed. Scenario 2 was estimated to have the lowest capital costs, since it was assumed to utilize the existing Maplewood Mall Transit Center rather than a new mobility hub that was assumed in the other scenarios
- The largest reduction in vehicle miles traveled was forecasted for Scenario 3, which was likely because Scenario 3 would provide higher frequency east-west transit further east in the study area to locations that currently have fewer transit options and also included express service that was attractive to people currently making trips in single-occupancy vehicles

Recommendations

- Transit improvement recommendations were developed for the Highway 36 corridor with an equity lens with the intention of expanding multimodal travel options, improving mobility for people who rely on transit or have limited access to a vehicle, improving access to jobs and opportunities, satisfying the long-term regional mobility and accessibility needs for residents and businesses, and supporting sustainable development within the study area. Recommendations were based on technical evaluation and the feedback received from the public and corridor stakeholders.
- Technical recommendations are grouped based on their suggested implementation timeframe and include the need and implementation recommendations.

0-2 YEARS

Immediate-Term Recommendations

Immediate-term recommendations are those that are recommended for implementation in the next two years or ongoing as strategic opportunities arise. Immediate-term recommendations include:

- Continue to prioritize, maintain, and invest in mobility management
- Study and consider pilot on-demand public transit service (Figure 10)
- Continue to engage residents, employees, businesses, and community organizations in corridor transit planning, especially underrepresented populations, and the hospitality industry
- Continue planning and constructing bicycle and pedestrian infrastructure connecting to the highway 36 corridor
- Collaborate with state, regional, and local agencies to show a Highway 36 transitway in planning documents as they are updated (SMTP, TPP, Metropolitan Area Comprehensive Transit Finance Report)

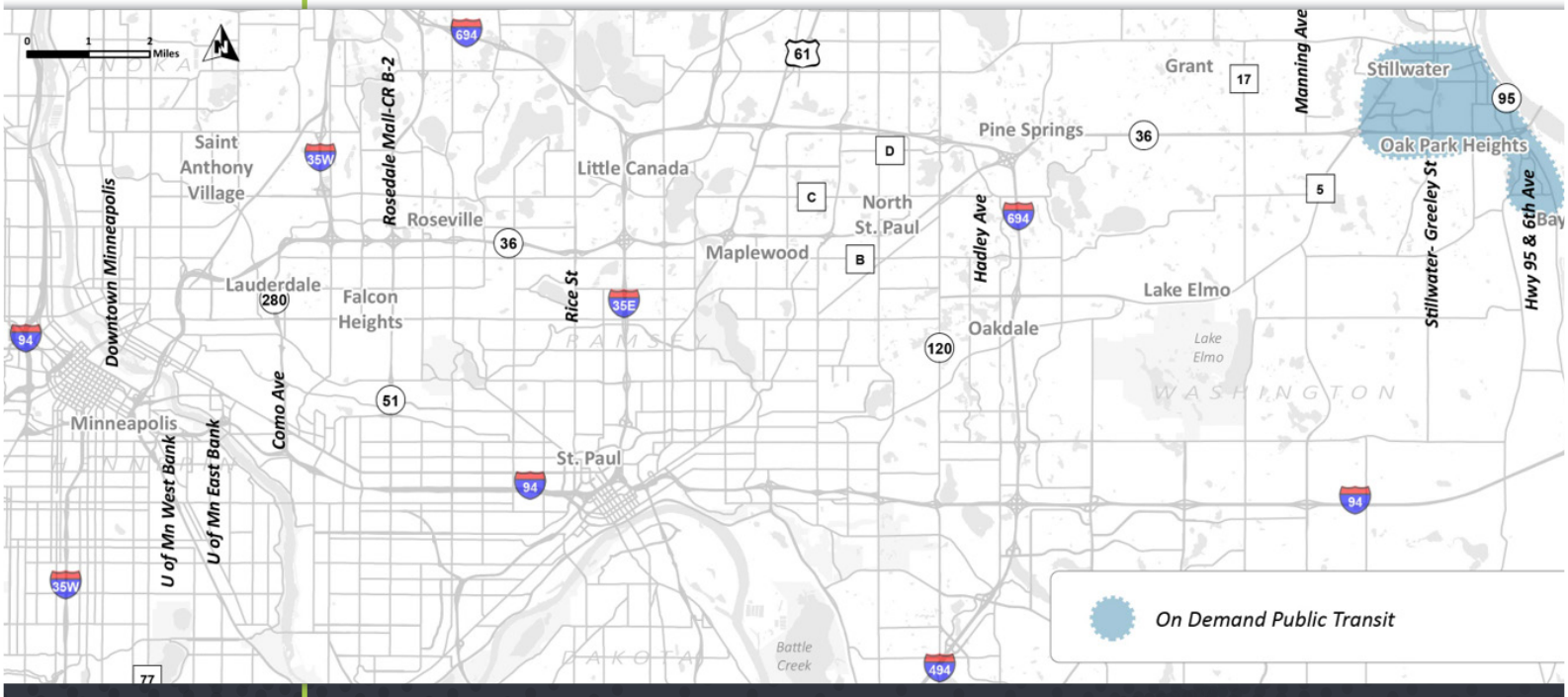


Figure 10: Immediate-term on-demand public transit service recommendation

3-5 YEARS

Near-Term Recommendations

Near-term recommendations are those that are recommended for implementation in the next three to five years. Near-term recommendations include:

- Develop a higher frequency (10-15 minute) limited stop service between downtown Minneapolis and Maplewood Mall Transit Center via University of Minnesota (Figure 10)
- Develop a lower frequency (30 minute) limited stop service between Maplewood Mall Transit Center and Stillwater/Oak Park Heights/Bayport (Figure 10)
- Continue to monitor the need for peak-period, peak-direction express service between Stillwater and downtown Minneapolis
- Form a corridor commission, including city and county policymakers, to:
  - Identify funding sources for corridor improvements
  - Develop multijurisdictional agreement
  - Scope out the projects (transit service and infrastructure, including mobility management)
  - Monitor need for peak period express bus service to report to the corridor commission

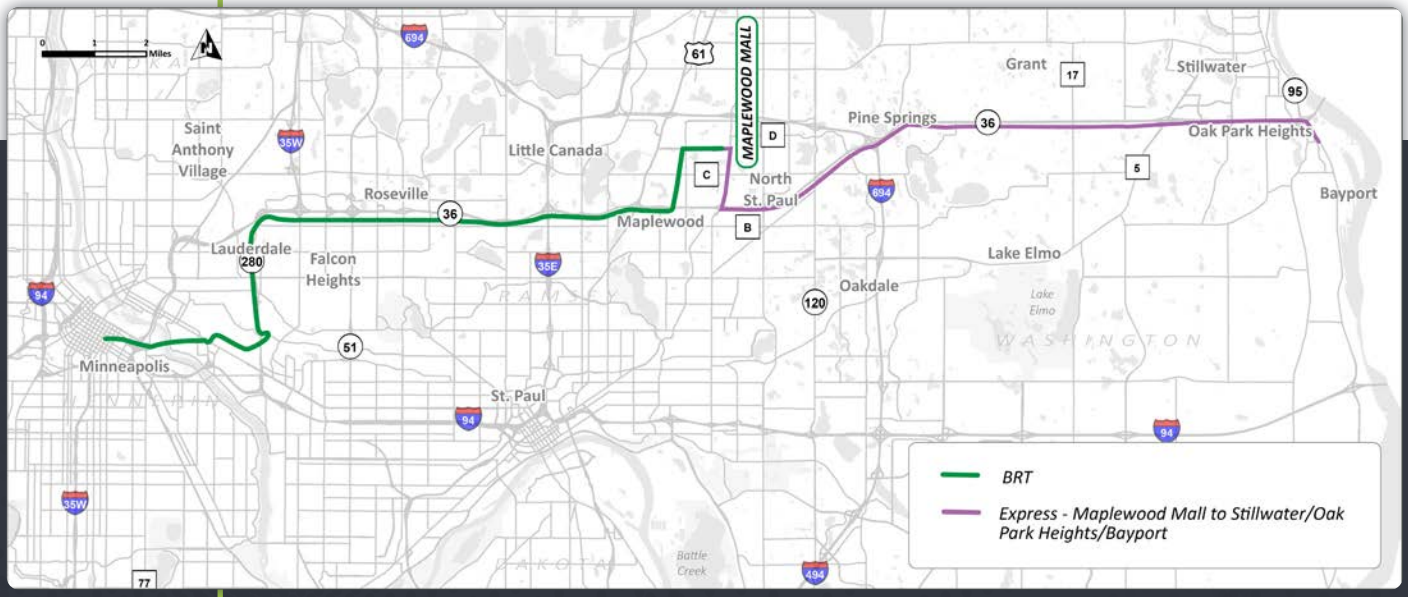


Figure 11: Near-term, limited-stop transit service recommendations

5-8 YEARS

Medium-Term Improvements

Medium-term recommendations are those that are recommended for implementation in the next five to eight years. Medium-term recommendations include:

- Strategically develop a network of mobility hubs in the Highway 36 corridor
- Encourage transit-supportive development near potential transit access areas, especially uses that balance out parking demand for shared parking opportunities
- Protect and enhance the existing bus-only shoulders on Highway 36 and explore/designate and enhance bus-only shoulders on Highway 36 east of 694
- Explore/designate and enhance bus-only shoulders on Highway 280