



# CSAH 1

## CORRIDOR STUDY

January 2024



In partnership with





## Contents

|      |  |    |
|------|--|----|
| 1.0  | Introduction .....                           | 1  |
| 2.0  | Study Objectives .....                       | 2  |
| 3.0  | Issues and Needs .....                       | 2  |
| 4.0  | Purpose and Need Statement .....             | 20 |
| 5.0  | Alternative Development and Evaluation ..... | 21 |
| 6.0  | Locally Favored Alternative.....             | 31 |
| 7.0  | Financial Considerations .....               | 38 |
| 8.0  | Environmental Risks.....                     | 39 |
| 9.0  | Next Steps .....                             | 41 |
| 10.0 | Appendix.....                                | 42 |

## 1.0 Introduction

CSAH 1 (River Avenue North) is a key connection between Sartell, northern Stearns County, the Saint Cloud Hospital, and downtown Saint Cloud. The roadway is approaching the end of its lifespan and the County needs to determine the future need and vision for the corridor. This study analyzed existing and future conditions and evaluated potential alternatives, while collaborating with the community and impacted stakeholders throughout the process. The study area includes CSAH 1 (River Avenue North) between CSAH 120 and 9th Avenue North.



## 2.0 Study Objectives

There were five key objectives of this study:

|   |   |
|---|---|
| 1 | Identify <b>existing and future issues and needs</b> of the corridor  |
| 2 | Evaluate <b>various alternatives</b> to improve safety and mobility for all corridor users  |
| 3 | Analyze <b>appropriate future alternatives</b> to understand their potential social, economic, and environmental impacts                                      |
| 4 | Conduct <b>engagement</b> with neighborhood residents and roadway users to help identify current issues and assist with the evaluation of future alternatives |
| 5 | Arrive upon <b>local consensus</b> on a favored future alternative for the corridor study area  |

## 3.0 Issues and Needs

An existing and future conditions assessment was conducted to understand issues and needs within the study area. This assessment process included a review of a wide variety of transportation characteristics, operations, and safety. The intent of this assessment was to identify and summarize key issues and needs, along with identifying an approximate timeline or metrics that would prompt infrastructure changes and/or considerations. The following information summarizes the issues and needs assessment process, assumptions, and overall findings, which informed the alternative development and evaluation phase of the study documented later in this report.



**SAFETY AND CRASH  
HISTORY**



**TRAFFIC  
OPERATIONS**



**MULTIMODAL  
FACILITIES**



**GEOMETRIC  
STANDARDS**



**CONTEXT**



**ENVIRONMENT**

## Roadway Characteristics

The CSAH 1 study corridor, from CSAH 120 to 9<sup>th</sup> Avenue, is approximately 0.85-miles. The roadway section is generally a 2-lane undivided roadway, with varying shoulder widths and sections with curb-and-gutter; the overall pavement width varies from 38' to 44'. There are no off-street multimodal (i.e., sidewalk or trail) facilities, except for sidewalk along both sides of the Sauk River bridge. Traffic controls include a roundabout at the CSAH 120 intersection and a traffic signal at the 9<sup>th</sup> Avenue intersection. There is minimal lighting along the corridor, while right-of-way is estimated to be approximately 66', but records are not clearly defined.

## Functional Classification

Roadways are organized according to their functional classification, which is based upon the roadway's access, speed, connectivity, ownership, and function. The functional classification system creates a roadway network that collects and distributes traffic to manage mobility, access, and alignment of routes. It also aligns designations that match current and future land use with the roadway's purpose. CSAH 1 is designated a Minor Arterial roadway, with somewhat controlled access, a combination of local and through traffic, and moderate speeds.

## Access

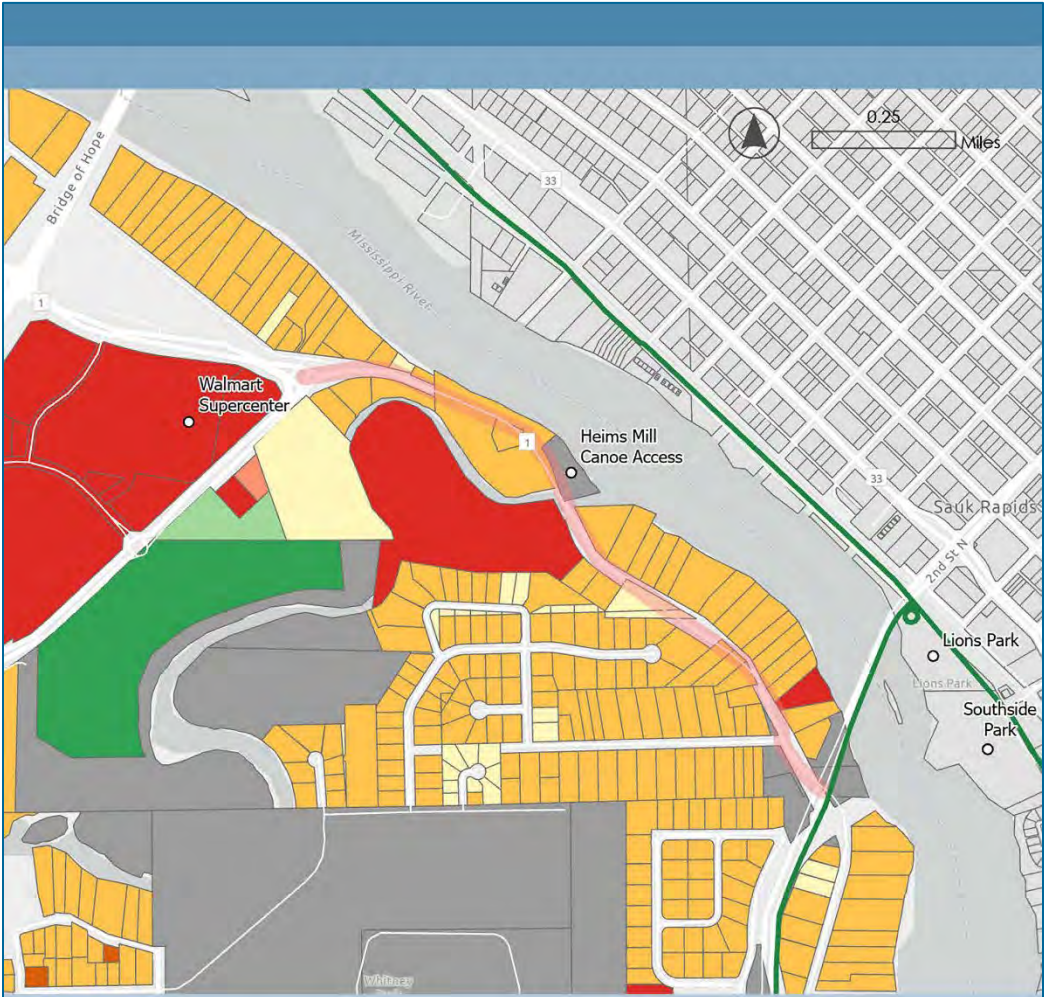
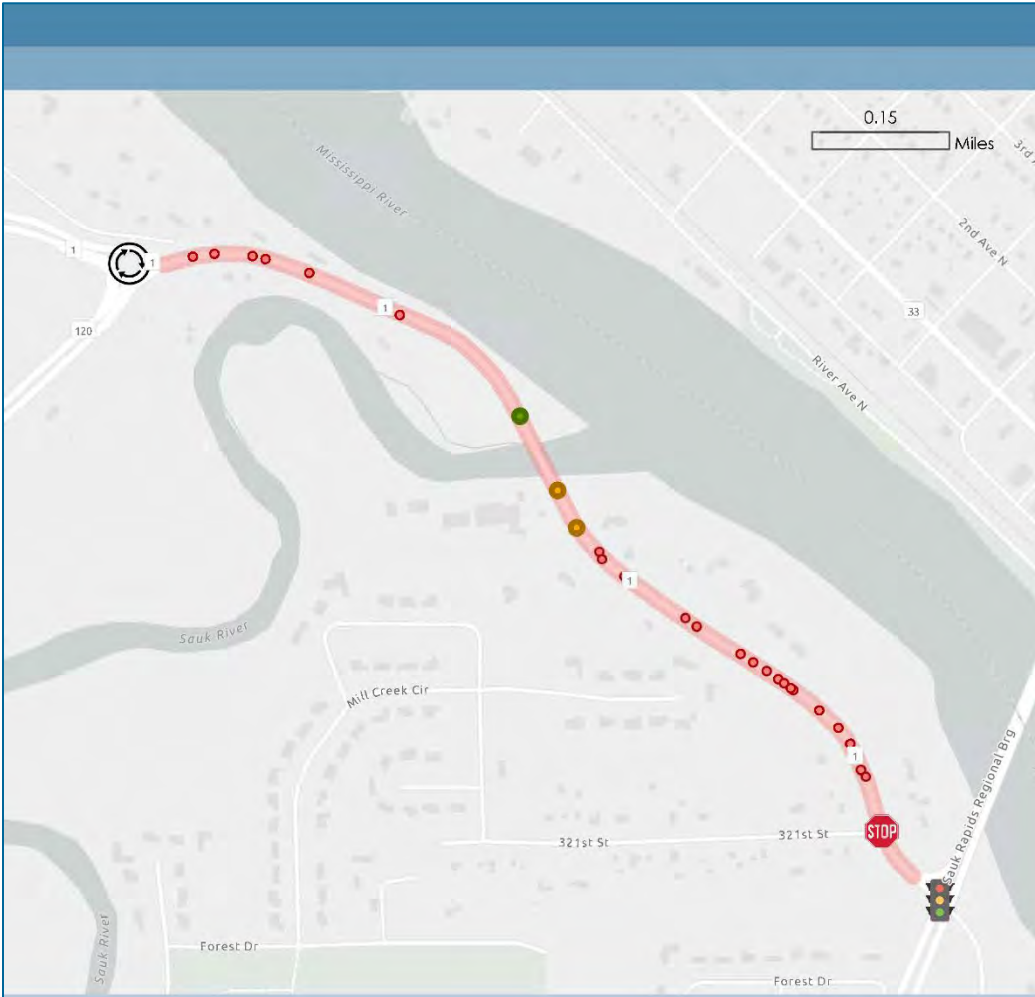
The CSAH 1 corridor has approximately 30 access points within the study area. This includes a combination of public streets (i.e., CSAH 120, 321<sup>st</sup> Street, and 9<sup>th</sup> Avenue), public driveways (Heim's Mill Public Water Access), and residential/commercial driveways. It is important to note that several commercial properties and residences have multiple driveways along CSAH 1. There is a direct correlation between the number of access points and the mobility of a roadway, how the roadway functions, and overall safety/conflicts. The CSAH 1 corridor is functionally classified as a minor arterial roadway; it is intended to provide more of a mobility function, but also serves as the primary access for residences along the corridor.

## Land Use

Adjacent land within the City of St. Cloud is zoned "R1 – Single Family Residential", within the City of Sartell as "R1 – Single Family Residence", and within Le Sauk Township as "R-1: Town Residential." The only exceptions are the Heim Milling Company property, which is zoned as "C-1: Legacy Commercial") and the Heim's Mill Public Water Access, which is public space.

*Heim Milling Company*





**Access**

- Project Corridor
- Roundabout
- Side-Street Stop
- Stoplight
- Parks
- Business Access
- Private Driveway

**Land Use**

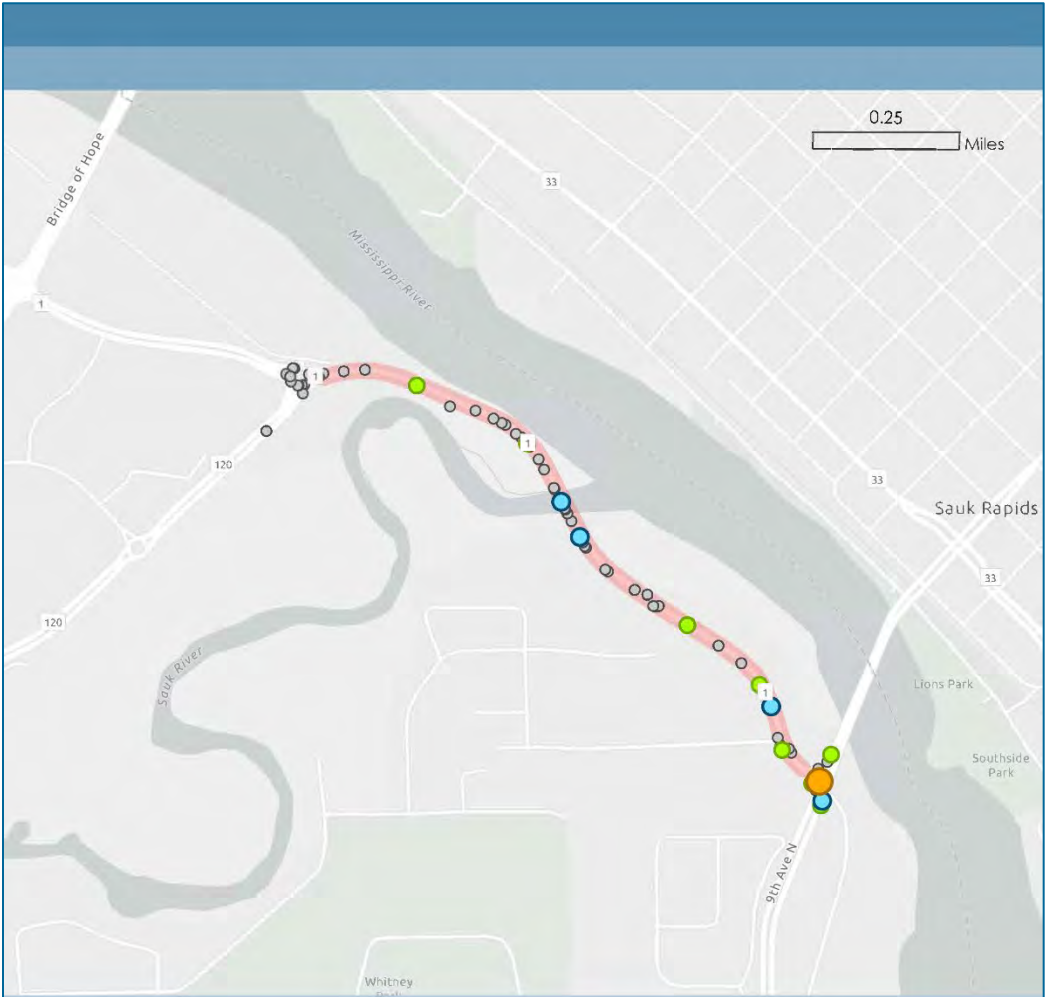
- Classifications
- Residential
  - Residential - 3 Units or Less
  - Residential - Land only
  - Agricultural Homestead
  - Agricultural Homestead - Remainder
  - Commercial/Industrial/Public Utility
  - Commercial/Industrial/Public Utility, Residential Non-Homestead Single Unit
  - Exempt Properties
  - Stearns County Trails
  - Destinations
  - Project Corridor

## Safety and Crash History

Five years of crash history were obtained using the Minnesota Department of Transportation Crash Mapping Analysis Tool (MnCMAT) along CSAH 1. This included data from 2018 through 2022. In reviewing the crash history, the following safety trends were identified:

- Since 2018, a total of 87 crashes have occurred along the entire CSAH 1 study segment.
- No intersections within the study area have crash or severity rates that exceed the critical rates (i.e., a critical index above 1.00).
- *The overall corridor has a crash rate above the critical crash rate, which indicates a significantly higher frequency of crashes as compared to corridors with similar characteristics.*
- The predominant crash types were rear-end, single-vehicle run-off road, and sideswipe.
- Most crashes occurred between 6 a.m. and 8 p.m., although *there was a higher frequency of crashes that occurred between 10 p.m. and 12 a.m. relative to the lower traffic volumes, indicating a lack of lighting could be a concern.*
- No fatal accidents occurred in the past five years.

| CSAH 1 Intersection | Total Crashes | Control Type | Total Crash Rate |               |               |                | Fatal & Serious Injury Rate |               |               |                |
|---------------------|---------------|--------------|------------------|---------------|---------------|----------------|-----------------------------|---------------|---------------|----------------|
|                     |               |              | Actual           | State Average | Critical Rate | Critical Index | Actual                      | State Average | Critical Rate | Critical Index |
| CR 120              | 20            | Roundabout   | 0.688            | 0.942         | 1.452         | 0.48           | 0.000                       | 0.106         | 2.600         | 0.00           |
| 321st St            | 4             | Stop         | 0.150            | 0.128         | 0.330         | 0.45           | 0.000                       | 0.311         | 3.570         | 0.00           |
| 9th Ave N           | 36            | Signal       | 0.715            | 0.592         | 0.880         | 0.81           | 1.986                       | 0.824         | 3.460         | 0.57           |
|                     |               |              |                  |               |               |                |                             |               |               |                |
| Overall Corridor    | 87            | ---          | 3.984            | 0.477         | 0.880         | 4.53           | 4.580                       | 1.095         | 6.260         | 0.73           |



**Crash Hot Spots (2018-2022)**

- Project Corridor
- Crash Hot Spots**
- Very Infrequent
- Somewhat Infrequent
- Somewhat Frequent
- Very Frequent

**Crashes (2018-2022)**

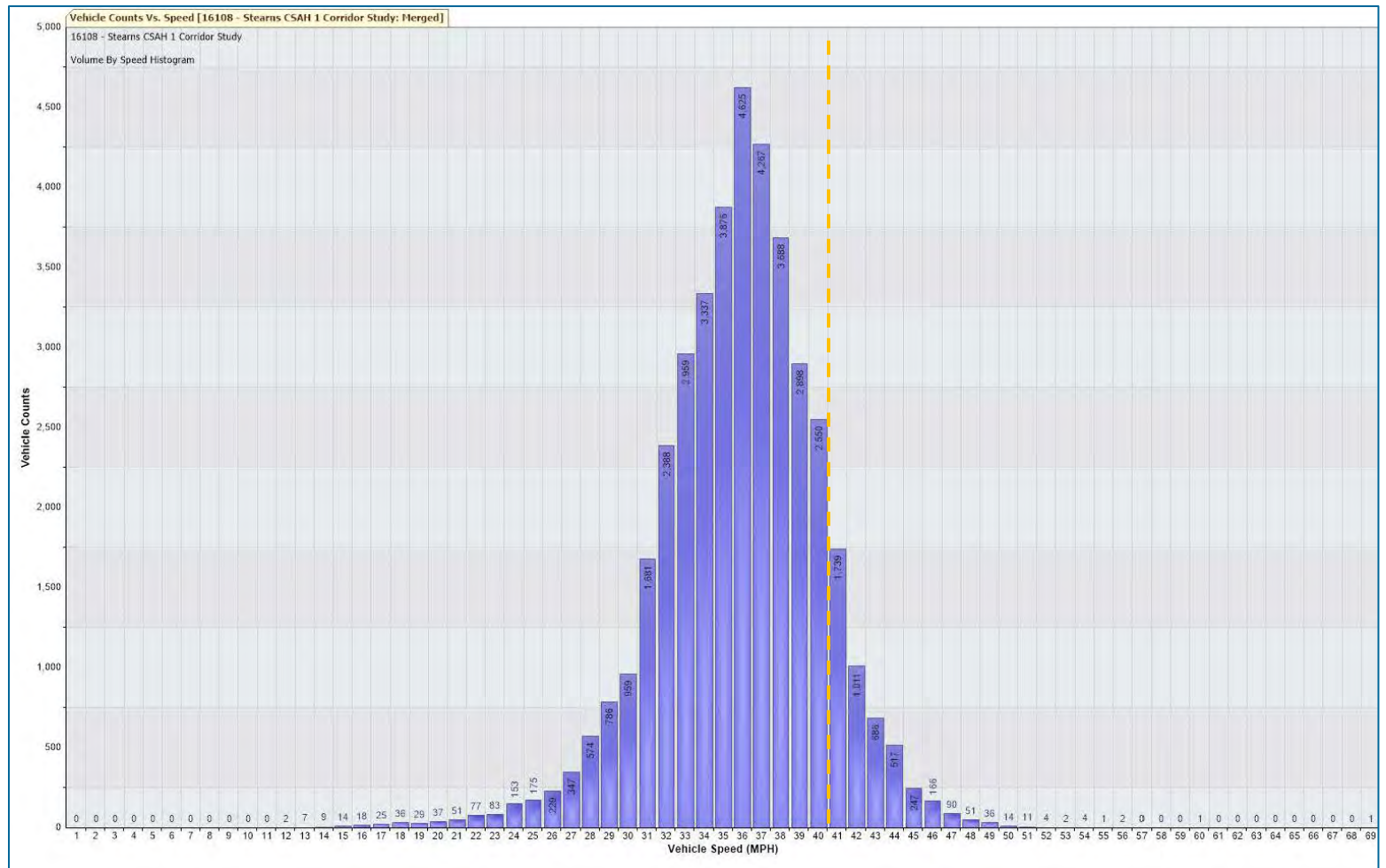
- Project Corridor
- Crash Severity**
- Serious Injury (1)
- Minor Injury (4)
- Possible Injury (9)
- Property Damage Only (73)



## Vehicle Speeds

Vehicular speeds along the corridor have been a concern expressed by area stakeholders. Therefore, as part of the data collection process, vehicle speeds were collected at two locations along the study corridor during Wednesday March 1, 2023 and Thursday March 2, 2023. This data was consolidated and summarized by vehicle speed in the following histogram. The speed data collected indicates that the average and 85<sup>th</sup> percentile vehicle speeds along the corridor are 36 miles per hour (mph) and 40 mph, respectively; the 85<sup>th</sup> percentile speed is typically used as the basis for setting the posted speed limit, which is currently set at 40 mph. However, the vehicle speed data did indicate a high number of vehicles significantly exceeding the posted speed limit, which can influence the perception of vehicle speeds along a corridor and may correlate to the number of single-vehicle run-off road type crashes that have occurred during the past five years.

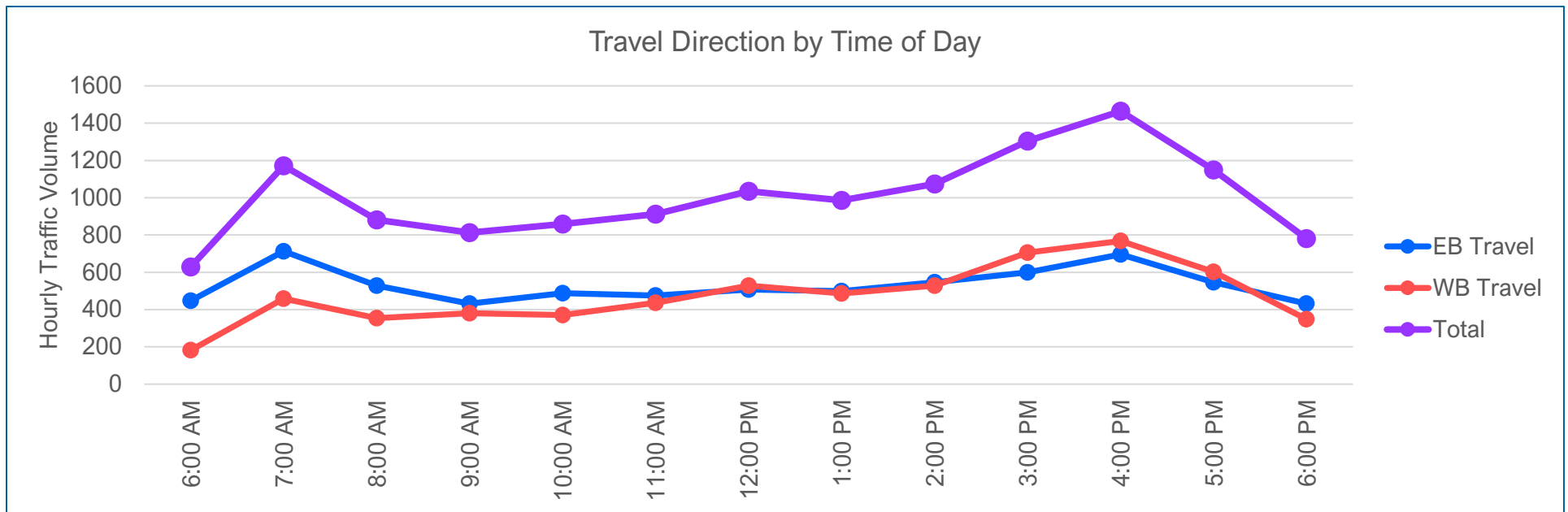
*Stearns County had an additional speed study conducted in the summer of 2023, which indicated that the current 40-mph posted speed limit is reasonable given current travel patterns and no change was recommended at that time.*



## Traffic Volumes

To quantify current traffic operations within the study area, various data resources were leveraged. This included a combination of historical average daily traffic (ADT) volumes provided by MnDOT, Streetlight travel patterns obtained by the Saint Cloud APO, and intersection turning movement counts collected by the project team. Key traffic operational characteristics of note, include:

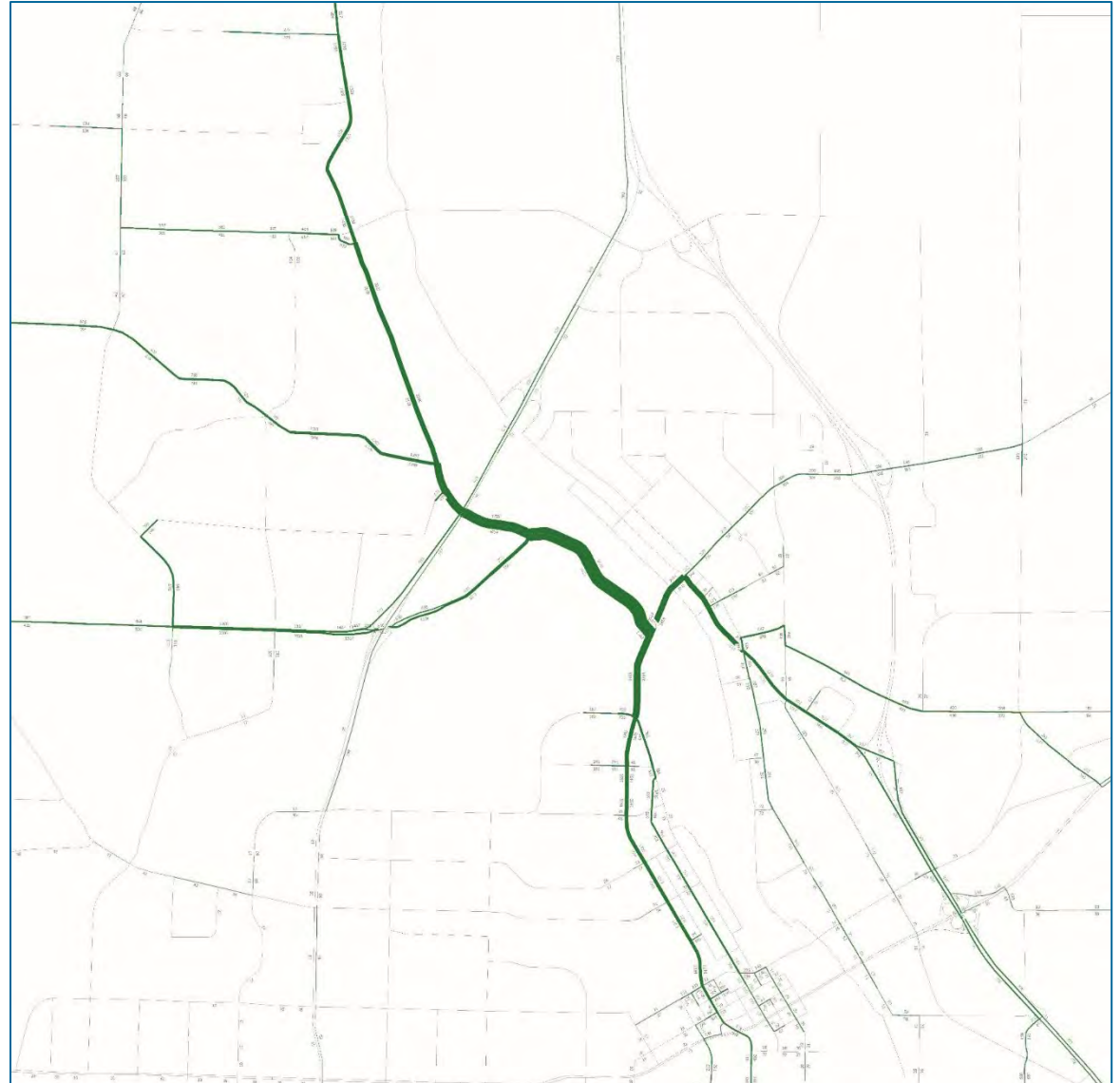
- The ADT volume along CSAH 1 within the study area is approximately 15,000 vehicles per day (vpd).
- 13-hours of intersection turning movement counts were collected on Thursday, March 2, 2023 at the study intersections.
  - The a.m. and p.m. peak hours occur between 7:15 and 8:15 a.m. and 4:30 to 5:30 p.m., respectively.
  - 90% of the daily vehicle activity occurs between 6 a.m. and 7 p.m.
- Heavy commercial vehicle activity represents 2% of all vehicles along the study corridor or less.



## Travel Patterns

A combination of resources, such as the observed intersection turning movement counts, the St. Cloud APO Regional Travel Demand Model, and StreetLight user data, were used to identify who's using the corridor and their overall travel patterns. With about 30 homes located along the corridor, most users are from other areas of the community. Based on the 15,000 vpd that currently use the corridor, local residents along the corridor represent about 5% of the overall corridor traffic.

Other users are relatively well distributed throughout Sartell, St. Cloud, and Stearns/Benton counties. This is to be expected given the limited number of river crossings within the community and the fact that county roads are generally intended to provide mobility for mid- to long-range community trips. This regional distribution of traffic also coincides with key regional destinations, such as the St. Cloud Hospital, St. Cloud Technical and Community College, Downtown St. Cloud, area commercial, and Whitney Park.



## Traffic Forecasts

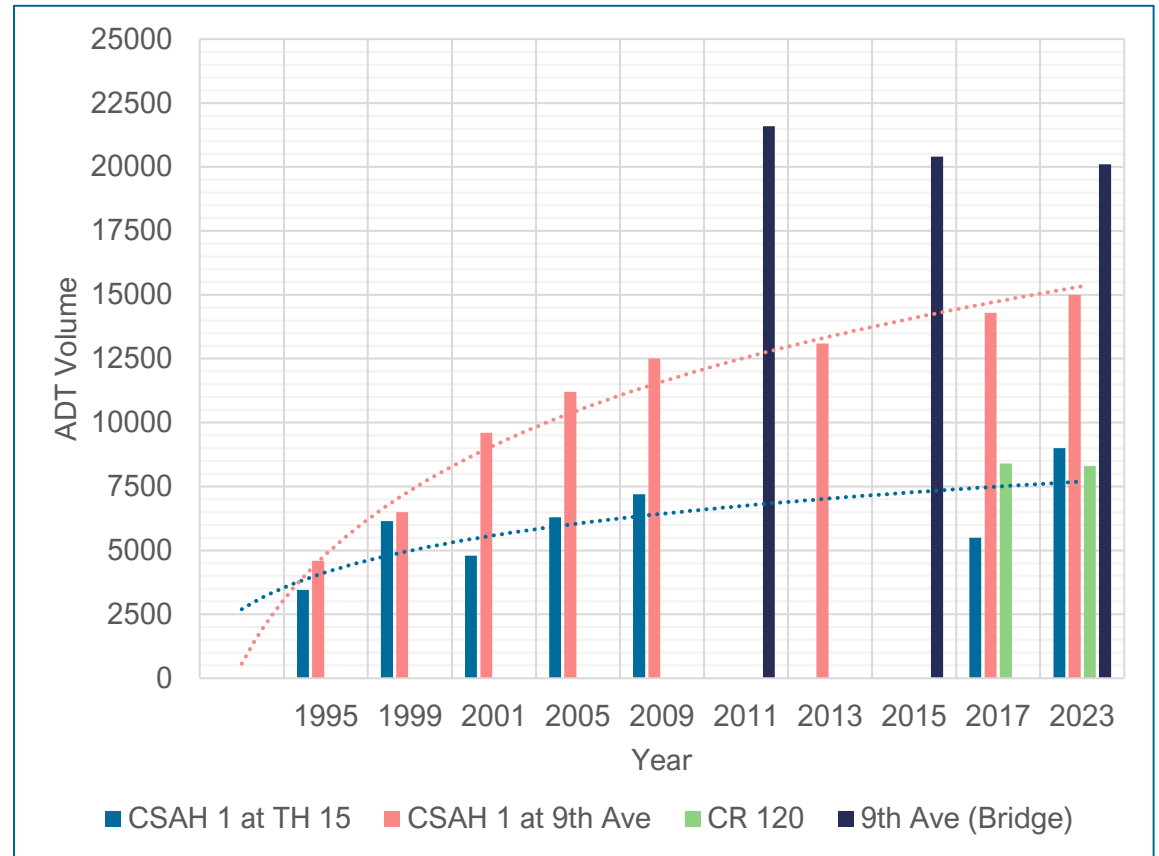
Traffic forecasts were developed for year 2050 conditions, which coincides with the most recent projections from the St. Cloud APO. To develop the forecasts, a combination of resources were used, including historical growth rates, the St. Cloud APO Regional Travel Demand Model, and existing traffic data.

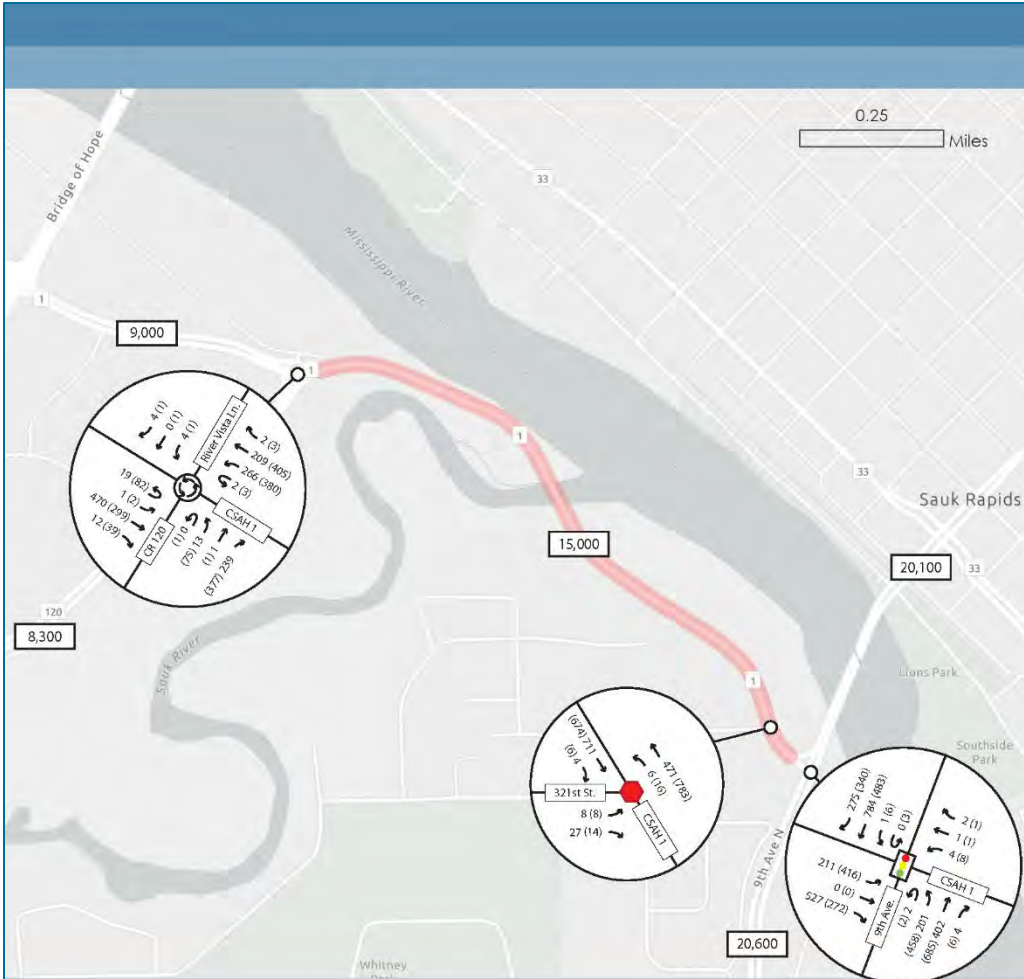
Historical ADT volumes along the CSAH 1 study corridor have increased significantly over the last 25-years, which coincided with commercial and residential development in the Sartell area. During the past 25-years, the average annual growth rate has been approximately 4%. However, most of this growth occurred 15+ years ago and the average annual growth rates have been less than 1% over the last 15 years and relatively minimal during the last 5 years, as illustrated below.

- 25 year: 3.90%
- 15 year: 0.77%
- 5 year: 0.14%

The St. Cloud Regional Travel Demand Model projects annual growth along the corridor to be approximately 0.82%.

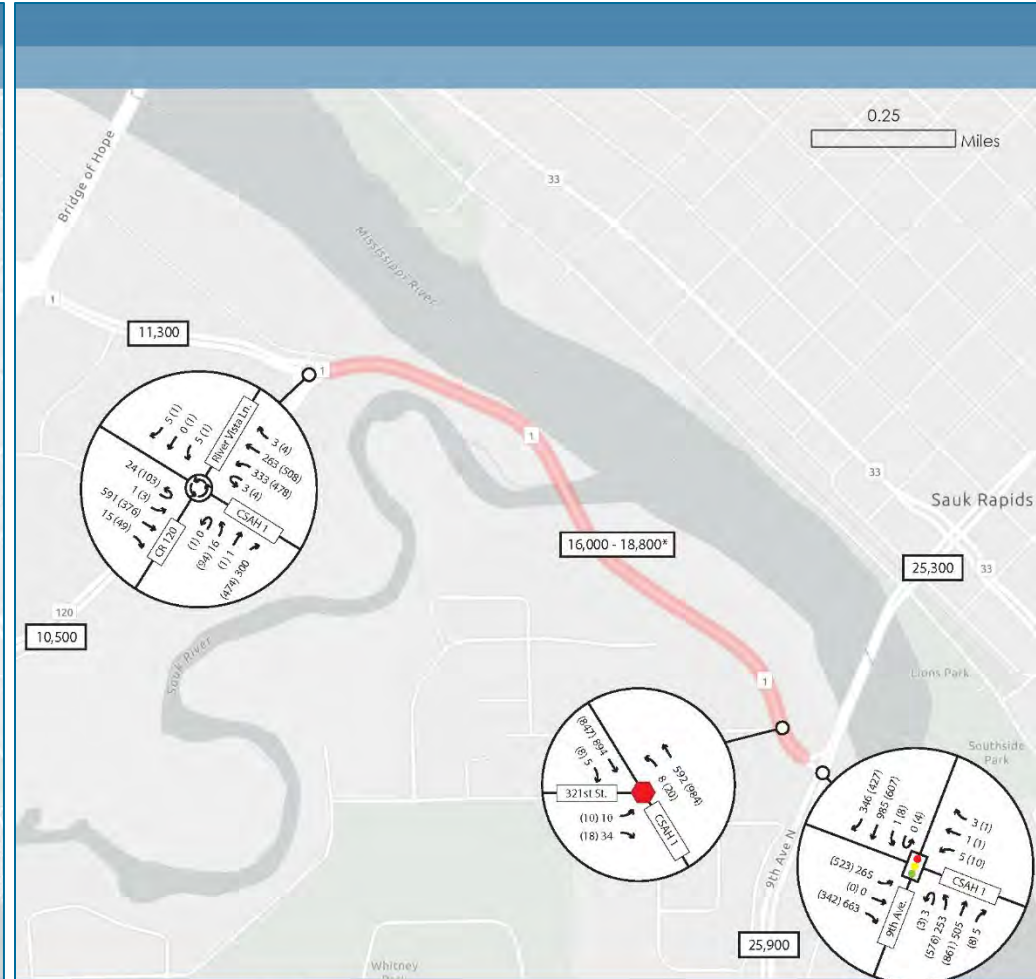
Using this information, the future corridor is likely to see an annual growth rate in the range from 0.25% to 0.85%. These growth rates equate to a year 2050 ADT volume range between 16,000 and 18,800 vehicles per day. Therefore, for the purpose of this study and to provide a conservative assessment, the 0.85% annual growth rate was used to develop the year 2050 traffic forecasts for the corridor. This annual growth rate was applied to the existing a.m. and p.m. peak hour traffic volumes to develop the future year 2050 forecasts.





**Existing Turning Movement Counts**

- Roundabout
- Stop Sign
- Traffic Signal
- Existing AADT
- AM Peak Volume
- (PM Peak Volume)



\*2050 Volume dependent on growth rate

**2050 Turning Movement Counts**

- Roundabout
- Stop Sign
- Traffic Signal
- 2050 AADT
- AM Peak Volume
- (PM Peak Volume)

## Intersection Capacity

Intersection capacity was evaluated using Synchro/SimTraffic Software (version 11), which incorporates methods outlined in the Highway Capacity Manual, 6th Edition. The software is used to develop calibrated models that simulate observed traffic operations and identify key metrics such as intersection Level of Service (LOS) and queues. These models incorporate collected traffic, freight, pedestrian, and bicyclist volumes, traffic controls, and driver behavior factors. Level of Service (LOS) quantifies how an intersection is operating. Intersections are graded from LOS A through LOS F, which corresponds to the average delay per vehicle values shown. An overall intersection LOS A through LOS D is generally considered acceptable in the study area. LOS A indicates the best traffic operation, while LOS F indicates a location where demand exceeds capacity.

| Level of Service | Average Delay / Vehicles    |                          |
|------------------|-----------------------------|--------------------------|
|                  | Stop, Yield, and Roundabout | Signalized Intersections |
| A                | < 10 seconds                | < 10 seconds             |
| B                | 10 to 15 seconds            | 10 to 20 seconds         |
| C                | 15 to 25 seconds            | 20 to 35 seconds         |
| D                | 25 to 35 seconds            | 35 to 55 seconds         |
| E                | 35 to 50 seconds            | 55 to 80 seconds         |
| F                | > 50 seconds                | > 80 seconds             |

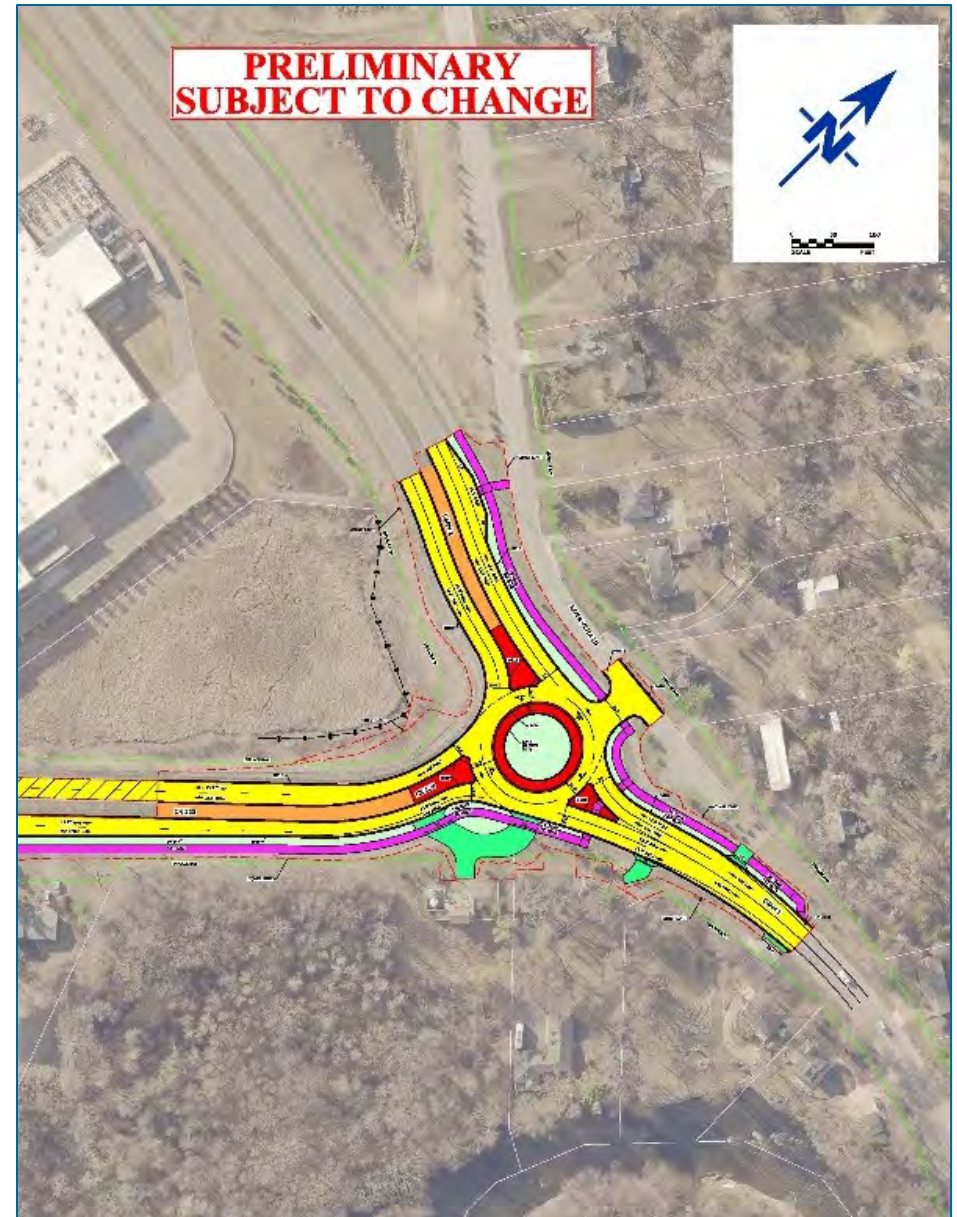
For side-street stop-controlled intersections, special emphasis is given to providing an estimate for the level of service of the side-street approach. Traffic operations at an unsignalized intersection with side-street stop control can be described in two ways. First, consideration is given to the overall intersection level of service, which takes into account the total number of vehicles entering the intersection and the capability of the intersection to support the volumes. Second, it is important to consider the delay on the minor approach. Since the mainline does not have to stop, most delay is attributed to the side-street approaches. It is typical of intersections with higher mainline traffic volumes to experience high-levels of delay (i.e., poor levels of service) on the side-street approaches, but an acceptable overall intersection level of service during the peak hours.

| CSAH 1 Intersection                           | Level of Service (Delay) |                |               |                |
|---|--------------------------|----------------|---------------|----------------|
|   | AM Peak Hour             |                | PM Peak Hour  |                |
|   | Existing                 | 2050 Base      | Existing      | 2050 Base      |
| County Road 120                               | A (8 sec)                | B (11)         | A (7 sec)     | A (8 sec)      |
| 321st Street                                  | A / A (7 sec)            | A / C (19 sec) | A / A (9 sec) | A / C (21 sec) |
| 9th Avenue                                    | C (25 sec)               | C (34 sec)     | C (26 sec)    | D (54 sec)     |
| Notable Queuing (95 <sup>th</sup> Percentile) |                          |                |               |                |
| EB @ County Road 120                          | 165 feet                 | 220 feet       | 170 feet      | 150 feet       |
| WB @ County Road 120                          | 50 feet                  | 80 feet        | 100 feet      | 140 feet       |
| NB @ County Road 120                          | 65 feet                  | 160 feet       | 70 feet       | 130 feet       |
| EB approach @ 9 <sup>th</sup> Avenue          | 205 feet                 | 265 feet       | 210 feet      | 330 feet       |
| NB LT @ 9 <sup>th</sup> Avenue                | 310 feet                 | 410 feet       | 430 feet      | 700+ feet      |
| SB Thru @ 9 <sup>th</sup> Avenue              | 350 feet                 | 575 feet       | 255 feet      | 645 feet       |

The existing intersection capacity analysis identified that all study intersections currently operate at an overall LOS C or better during the peak hours, as well as throughout the day. In addition, all approaches currently operate at LOS D or better during the peak hours. Existing queues at the study intersections are generally maintained within the turn lanes, although eastbound queues along CSAH 1 at 9<sup>th</sup> Avenue can occasionally extend beyond the provided turn lanes during the a.m. and p.m. peak hours.

Under future year 2050 conditions, the study intersections are expected to operate at an overall LOS D or better during the a.m. and p.m. peak hours. However, the CSAH 1 and 9<sup>th</sup> Avenue intersection is expected to operate near the LOS D / LOS E threshold during the p.m. peak hour, and queues will extend beyond the existing turn lanes on several approaches during both the a.m. and p.m. peak periods. Therefore, the future intersection capacity analysis indicates that eventually, an intersection improvement will need to be considered at the CSAH 1 and 9<sup>th</sup> Avenue intersection. *Note that the base 2050 analysis assumed optimized signal timing, as well as the CSAH 1 / CSAH 120 roundabout modifications planned for 2024.*

*CSAH 1 / CSAH 120 roundabout  
modifications planned for 2024.*



## Pavement Conditions

Agencies regularly assess pavement conditions using the Ride Quality Index (RQI), Surface Rating (SR), and Pavement Quality Index (PQI). RQI effectively scores how smooth the pavement is from 0-5. SR quantifies pavement distress using visible defects on the pavement surface and scoring between 0-4. The PQI is a combined score of the RQI and SR, which gives an overall score based on ride and condition quality. The pavement condition ratings for 2022 are listed, which indicates that the pavement is nearing the end of its life-span and reconstruction is expected to be needed within the next five to ten years, depending on regular maintenance and/or repairs.

| CSAH 1 Segment (2022 Conditions) | RQI (0-5) | SR (0-4) | PQI (Combined) |
|----------------------------------|-----------|----------|----------------|
| <b>1 (0.000 – 0.622) EB</b>      | 2.7       | -        | -              |
| <b>2 (0.000 – 0.622) WB</b>      | 2.8       | 3.7      | 3.2            |
| <b>3 (0.622-0.945) EB</b>        | 2.4       | -        | -              |
| <b>4 (0.622-0.945) WB</b>        | 2.2       | 2.9      | 2.5            |

## Bridge Conditions

The Sauk River bridge was constructed in 1979 and is 44 years old; the design service life of the bridge is estimated to be 75-years. The bridge is about 220' in length and 58' wide, which includes 44' of travel lanes/shoulder area, 5' sidewalks (both sides), and 2' walls. The current local planning index (LPI) is 85 and has an NBI appraisal rating greater than 6; the current condition of the bridge is not expected to qualify for MnDOT's bridge funding. This information indicates that the bridge has a fair amount of life remaining before replacement or significant repairs would be needed.

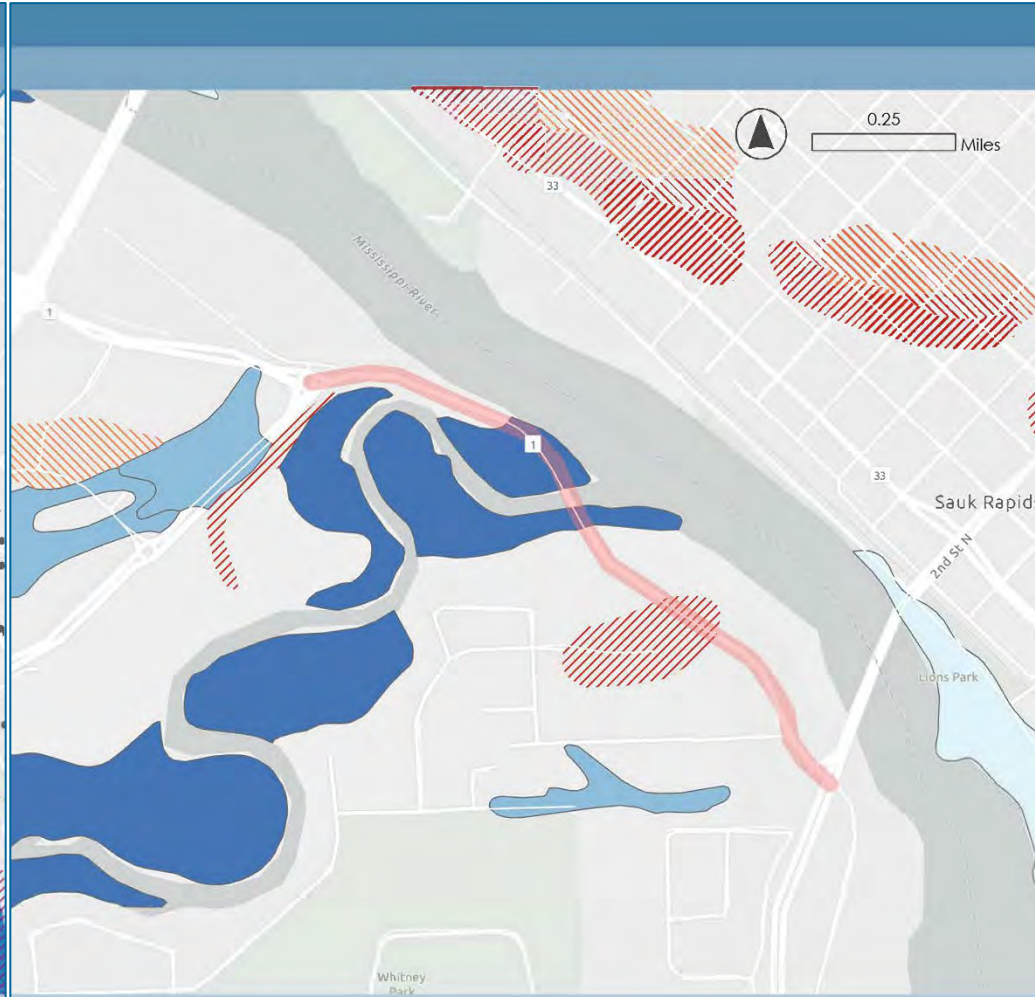
## Environmental Considerations

A social, environmental, and economic (SEE) scan was conducted to identify key considerations within the area, including:

- Demographics (Environmental Justice)
- Historical and Cultural Resources
- Potential 6(f) Properties
- Water & Soil Resources
- Contaminated Properties
- Endangered Species
- Ecologically Significant Areas

This SEE scan is summarized in the Appendix, which documents key demographics and environmental considerations. Further discussion regarding environmental risks is documented later in this report.





**Natural Resources and Hazards**

- Wetland Type**
- Freshwater Emergent
- Freshwater Forested
- Riverine
- Freshwater Pond
- Drinking Water Supply Management Areas
- Wellhead Protection Areas
- Sites of Biodiversity Significance
- 100 Year Floodplain
- Potentially Contaminated Sites near CSAH 1
- Other Potentially Contaminated Sites
- MDA Incident Investigation Site
- Project Corridor

Source: National Wetland Inventory, Minnesota DNR, MPCA, MDH, MDA

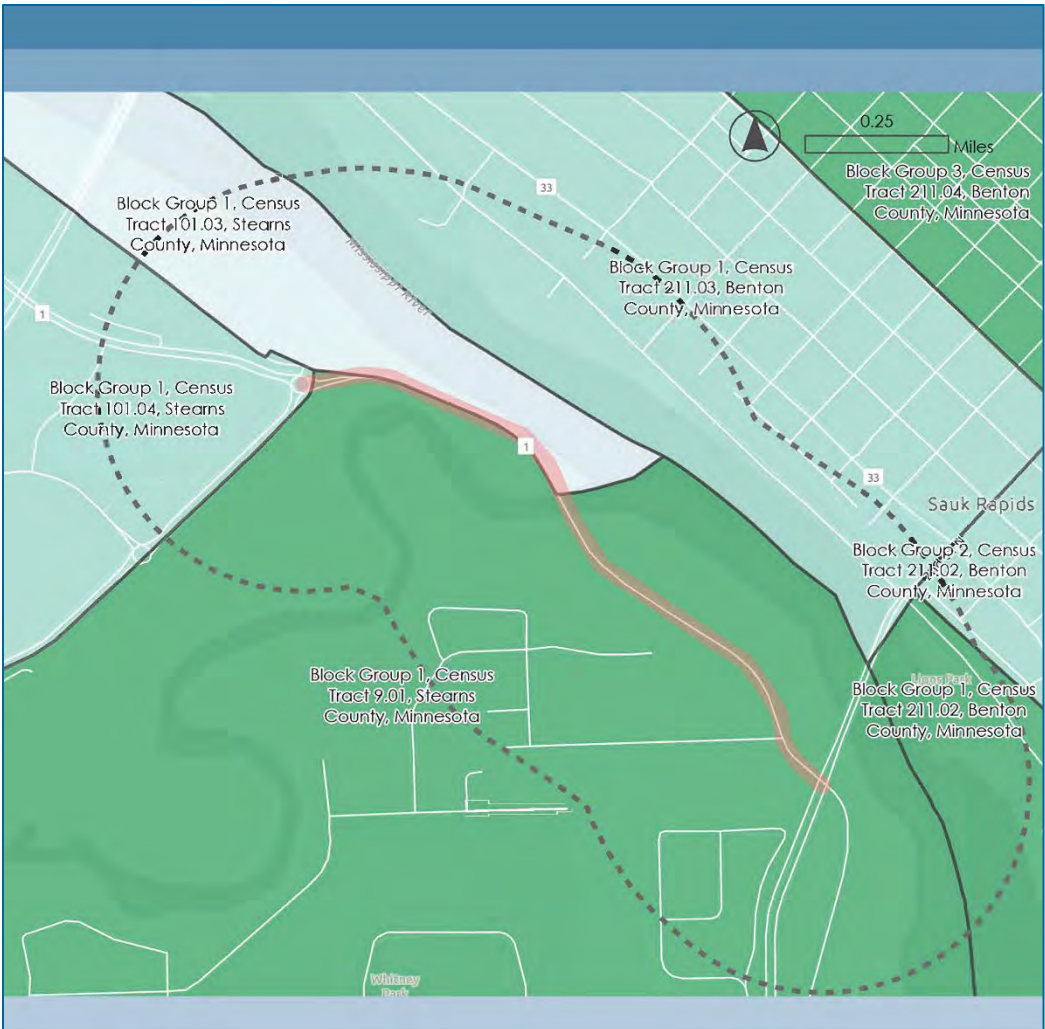
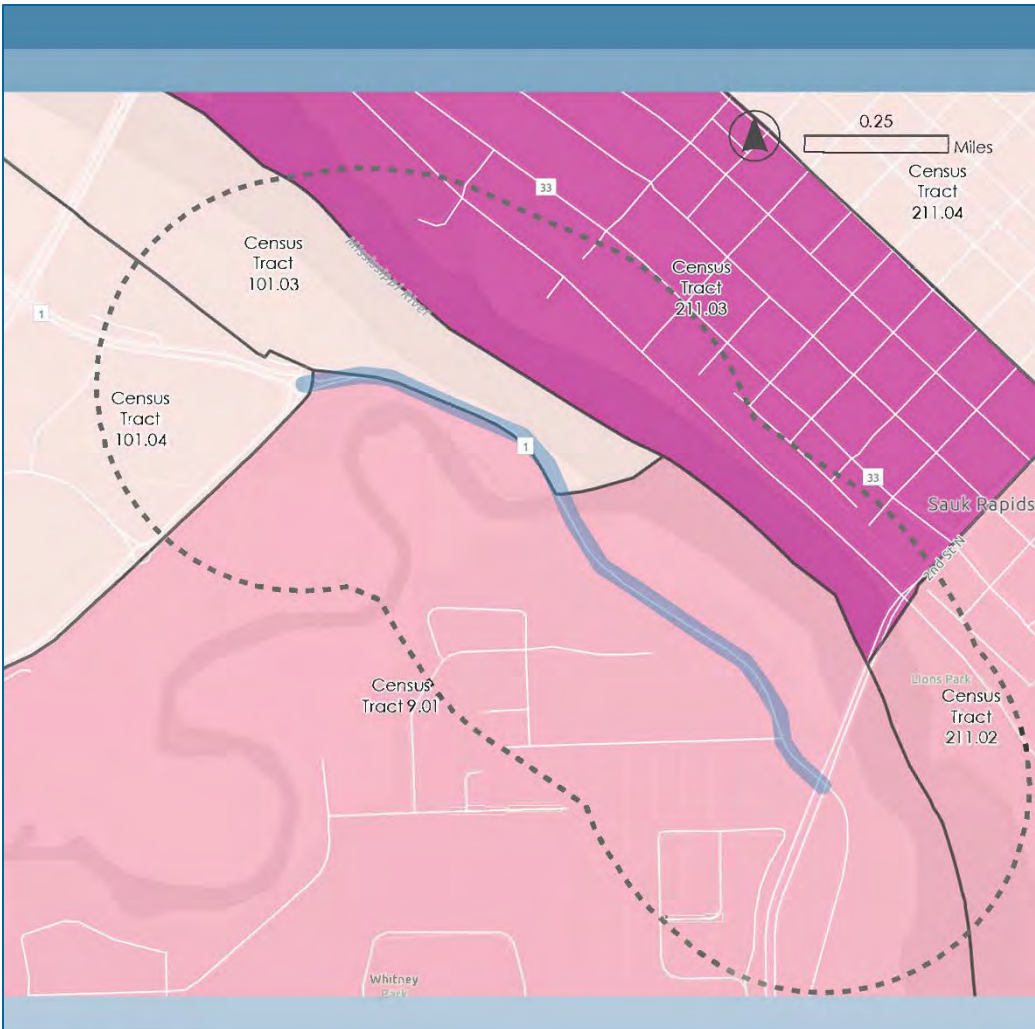


**Soils**

- Hydric Classification - Presence (integer)**
- 75%
- 90%
- 100%
- Potential Erosion Hazard (Road/Trail)**
- Moderate
- Severe
- Project Corridor

Source: Minnesota Department of Natural Resources; Stearns County





**Disability**

Percent of Population with a Disability

- 12.2 - 15%
- 15 - 20%
- 20 - 25.2%

Project Corridor  
1/4 Mile Buffer

Source: 2021 American Community Survey: 5-Year Data Sex by Age by Disability Status

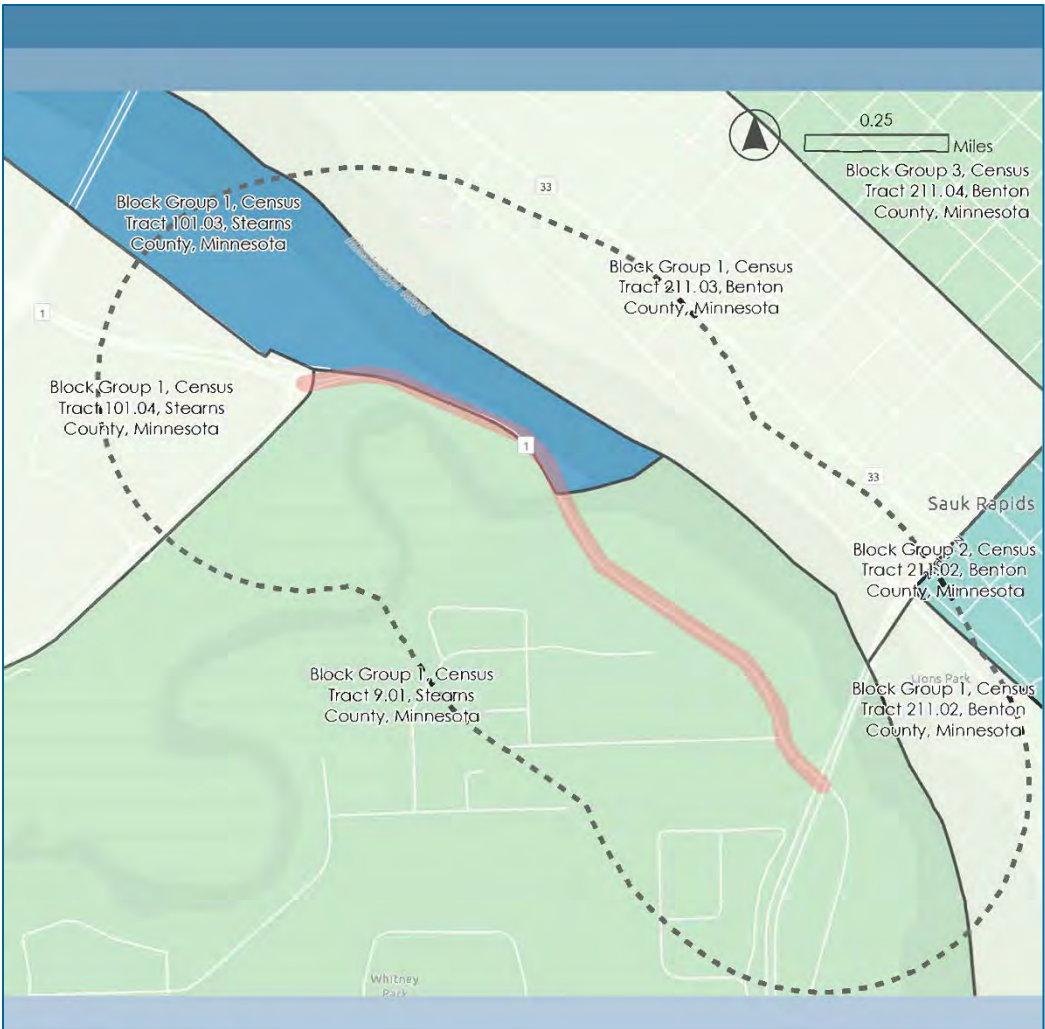
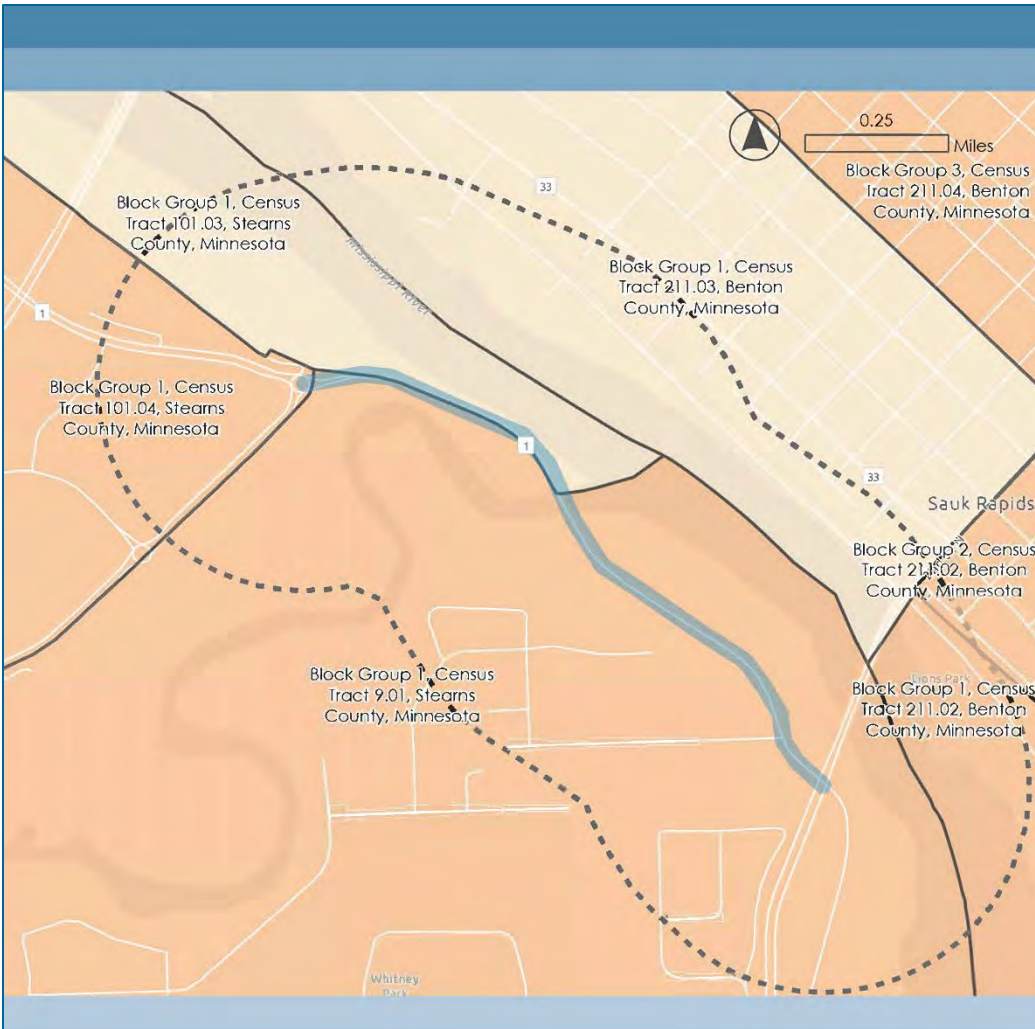
**Older Adults**

Percent of Population 65 or Older

- 7.8 - 10%
- 10 - 20%
- 20 - 29.3%

Project Corridor  
1/4 Mile Buffer

Source: 2021 American Community Survey: 5-Year Data Sex by Age



**Poverty**

Percent Households Below Poverty Level

- 0 - 5%
- 5 - 10%

- Project Corridor
- 1/4 Mile Buffer

**Racialized Population**

Non-White Population

- 0 - 5%
- 5 - 10%
- 10 - 15%
- >15%

- Project Corridor
- 1/4 Mile Buffer

Source: 2021 American Community Survey: 5-Year Data Poverty Status in the Past 12 Months by Household Type by Age of Householder

Source: 2021 American Community Survey: 5-Year Data Hispanic or Latino Origin by Race

## Stakeholder Input (Phase 1)

As part of the issues and needs assessment, the project team facilitated an open house, online survey and interactive map, and developed a project website. The first open house occurred on May 23, 2023 from 5 to 6:30 p.m. at the Sartell Community Center. About 50 community members (residents and stakeholders) were present at the open house. In parallel, an online survey and interactive issue/opportunity map was available for the community to provide input outside of the open house for about a month; the project team received nearly 60 responses from the community. In addition, the project team met with representatives from the YMCA and St. Cloud Technical College to understand future plans and CSAH 1 corridor use and need. Key themes from this phase of engagement, included:



- Most use personal vehicles to travel on CSAH 1 today
- Over half of users would like to walk or bike more on the corridor
- Current safety was ranked as “Average” or “Poor”, and was noted in-person as a significant concern
- Multimodal facilities were ranked most often as “Average” or “Poor”, and overall desire is for increased and safer facilities
- Improving safety and reducing vehicle speeds were the most important factors for future visioning
- Minimizing Environmental Impacts and Improving Mobility were the second most important factors for future visioning

*A detailed summary of the first phase of engagement is provided in the Appendix.*



# ENGAGEMENT SUMMARY

The success of the CSAH 1 Corridor Study is highly dependent on integrating the community's voice in the process. Engagement will take place through a variety of strategies occurring throughout the study in three phases.

### ENGAGEMENT SCHEDULE

| PHASE 1           | PHASE 2          | PHASE 3          |
|-------------------|------------------|------------------|
| Goals & Visioning | Alternatives     | Recommendations  |
| May-June          | Late Summer 2023 | Fall/Winter 2023 |

### HOW DID WE CONNECT?

The project team facilitated an Open House, online survey and interactive map, and project website in the summer of 2023.

### WHO DID WE HEAR FROM?

About 100 community members connected with the project through the in-person open house, online survey, or conversations with project staff.

## WHAT DID WE HEAR?

### TOP PRIORITIES

Top priorities are **improving safety and minimizing property impacts**



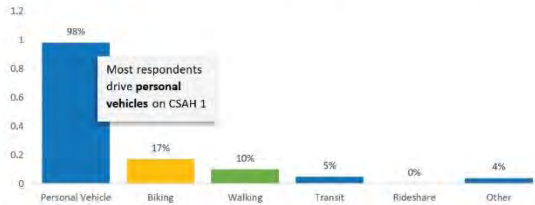
### PUBLIC COMMENT THEMES

Livability is challenging (kid safety, mailbox/driveway access, parking)

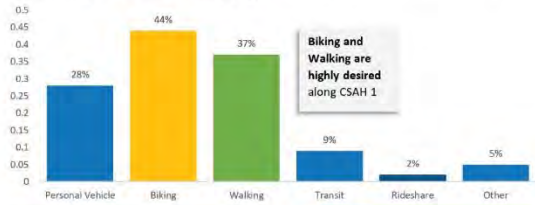
Lower the speed limit

Don't impact property owners

How do you typically travel along CSAH 1? (Select all that apply)



Are there travel modes that you would like to use more along CSAH 1? (Select all that apply)

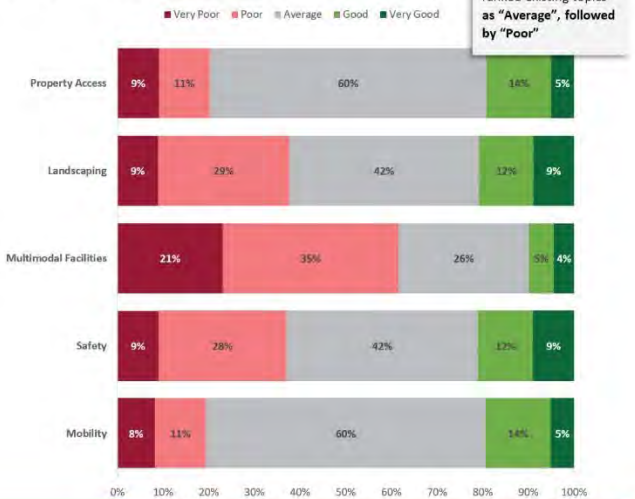


Close the bridge

Vehicles passing on the shoulder is a safety issue

Improve multimodal access (along and across)

On CSAH 1 today, how would you rank the following?



## Issues and Needs Summary

Based on the technical evaluation and stakeholder input, the following issues and needs were identified. These issues and needs were used as the basis to develop and evaluate potential infrastructure alternatives.

- Frequency and severity of crashes is significantly higher than similar corridors
- Motorists are excessively exceeding the 40-mph posted speed limit
- Traffic volumes are expected to increase by up to 25% by year 2050
- CSAH 1 / 9th Avenue intersection is expected to operate near/over capacity by year 2050
- Lack of multimodal facilities between CSAH 120 and 9th Avenue
- Pavement conditions are nearing the end of a typical maintenance cycle / lifespan
- Water / sewer utilities need replacement
- Protect the environment
- Limit property impacts
- City services / future annexation

## 4.0 Purpose and Need Statement

As part of future environmental processes, it is important to clearly define the purpose and need of the project. Therefore, the following statement was developed in collaboration with the project management team to help guide the project development process.

“The purpose of the CSAH 1 project is to remedy aging pavement and utility conditions, address existing safety and future mobility needs, and provide access and multimodal facilities that support the community needs.”

## 5.0 Alternative Development and Evaluation

Based on the issues and needs identified and the overall purpose of the project, a range of potential alternatives were identified and evaluated. An iterative process was conducted in collaboration with the project management team to identify preliminary alternatives for review. A range of alternatives were developed for areas of the corridor, including the overall corridor, typical cross-sections, study intersections, and the Sauk River bridge. These areas were reviewed individually, and then combined to develop the overall corridor vision presented later in this report. The following information provides an overview of each alternative, the associated evaluation, and the subsequent findings and recommendations.

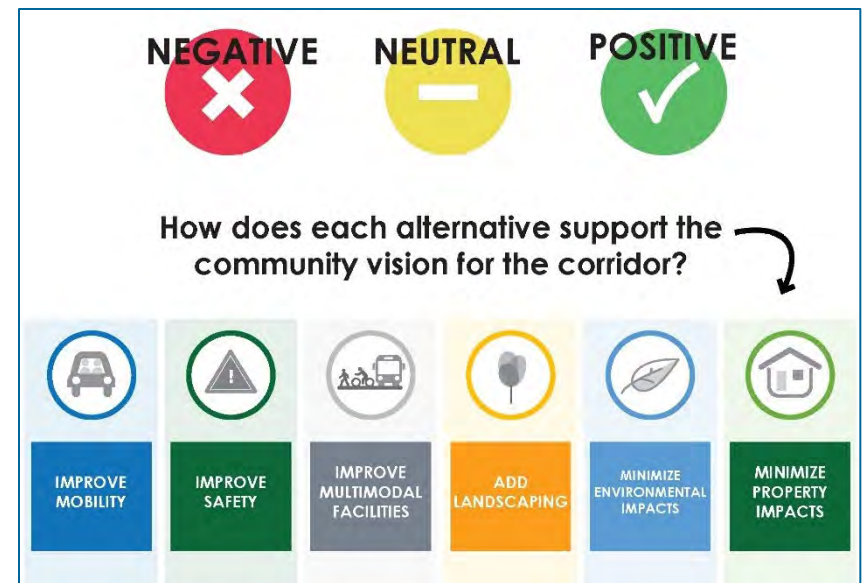
### Roadway Cross-Section Alternatives

The preliminary alternatives focused on four base options. Other alternatives were considered, such as several 4-lane configurations and a raised median sub-alternative, but were removed from further consideration based on discussion with the project management team due to incompatibility with area land use and/or adjacent roadway facilities.

- Alternative A: 2-Lane with Sidewalk and Trail
- Alternative B1: 3-Lane with Sidewalk and Trail
- Alternative B2: 3-Lane with Trail Only
- Alternative C: 5-Lane with Sidewalk and Trail

Note that since the roadway needs to be fully reconstructed, including utilities, replacing the roadway in its current form (i.e., a no-build condition) was not considered given design standards have changed and the desire to address the issues and needs identified. Reconstructing the roadway in its current configuration would not address the purpose and needs of the project.

The preliminary roadway cross-sections vary in overall roadway width from approximately 64' to up to 98', using state-aid design standards for travel lanes, shoulders, boulevards, and multimodal facilities. Some design flexibility is allowed, but the preliminary alternatives were developed and evaluated assuming more standard design criteria, such as 12' travel lanes. The preliminary alternatives were then evaluated based on their respective ability to address various community priorities, which were established as part of the first phase of the community engagement process.



### Alternative A 2-Lane with Sidewalk/Trail



### Alternative B1 3-Lane with Sidewalk/Trail



**NEGATIVE** **NEUTRAL** **POSITIVE**

How does each alternative support the community vision for the corridor?

| IMPROVE MOBILITY | IMPROVE SAFETY | IMPROVE MULTIMODAL FACILITIES | ADD LANDSCAPING | MINIMIZE ENVIRONMENTAL IMPACTS | MINIMIZE PROPERTY IMPACTS |
|------------------|----------------|-------------------------------|-----------------|--------------------------------|---------------------------|
|                  |                |                               |                 |                                |                           |
|                  |                |                               |                 |                                |                           |





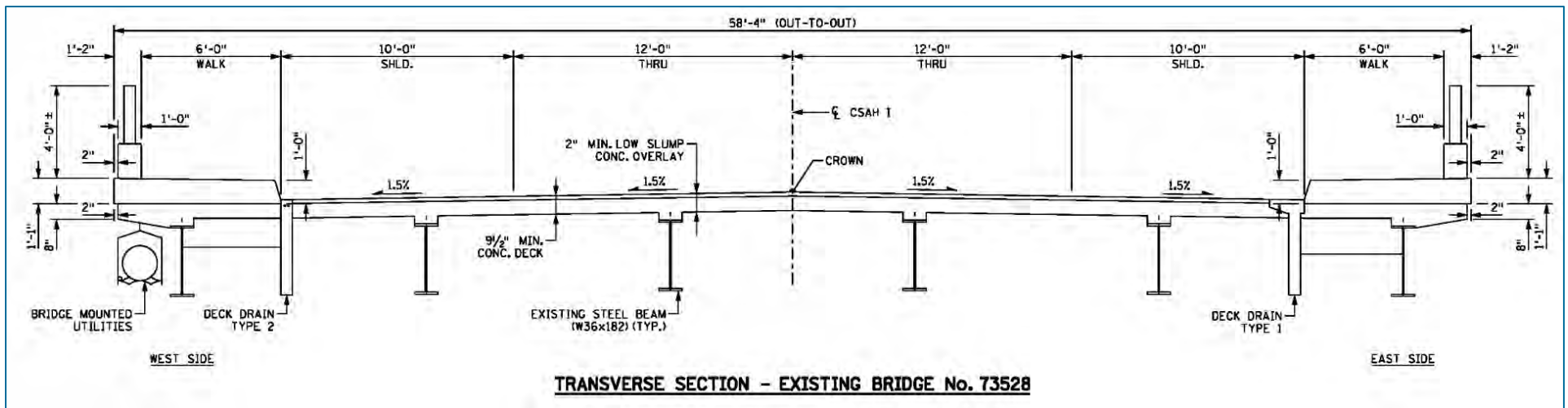
**NEGATIVE** **NEUTRAL** **POSITIVE**

How does each alternative support the community vision for the corridor?

| IMPROVE MOBILITY | IMPROVE SAFETY | IMPROVE MULTIMODAL FACILITIES | ADD LANDSCAPING | MINIMIZE ENVIRONMENTAL IMPACTS | MINIMIZE PROPERTY IMPACTS |
|------------------|----------------|-------------------------------|-----------------|--------------------------------|---------------------------|
|                  |                |                               |                 |                                |                           |
|                  |                |                               |                 |                                |                           |

## Bridge Cross-Section Alternatives

The Sauk River bridge is approximately 58' feet wide and as noted earlier, has approximately 30 years of design service remaining. Therefore, several bridge alternatives were developed in alignment with the roadway cross-section alternatives. However, given the width constraints, the 2-lane and 3-lane alternatives (i.e., Alternatives A, B1, and B2) were developed with the intent to preserve the existing structure; the 5-lane alternative (i.e., Alternative C) would require either bridge widening or a complete reconstruction. To be able to maintain the existing bridge structure while incorporating the various elements of each alternative (i.e., trail, sidewalk, shoulder, and travel lanes), slight modifications to the widths of each element were considered. The modifications were developed in collaboration with the project management team and are used as a basis for each alternative knowing that additional refinements are likely through further community engagement and design processes.



**Alternative A  
2-Lane with  
Sidewalk/Trail**



**Alternative B1  
3-Lane with  
Sidewalk/Trail**



**Alternative B2  
3-Lane with  
Trail Only**



**Alternative C  
5-Lane with  
Sidewalk/Trail**



## 9<sup>th</sup> Avenue Intersection Alternatives

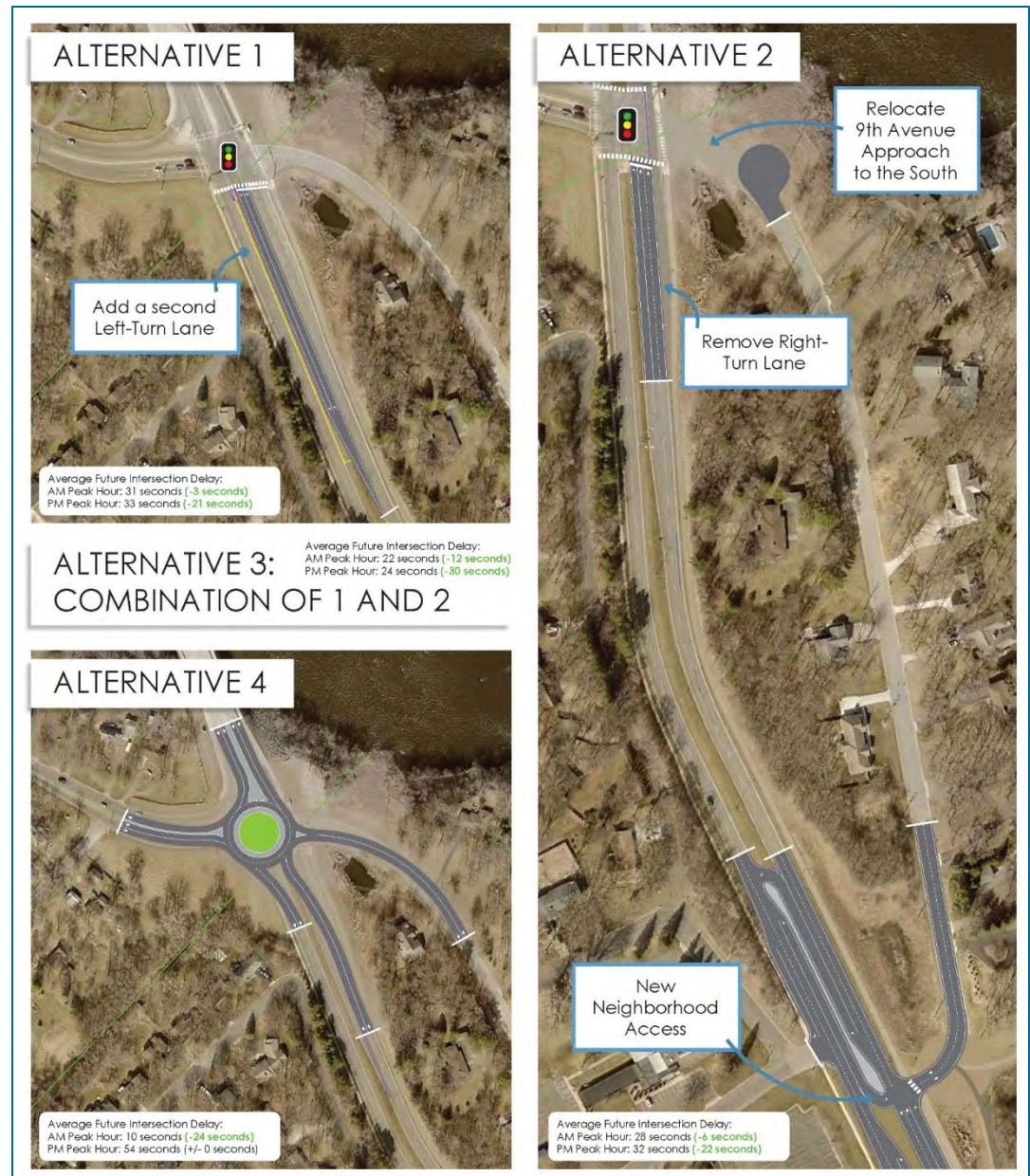
By the year 2050, the CSAH 1 and 9<sup>th</sup> Avenue intersection is expected to operate near the LOS D / LOS E threshold during the p.m. peak hour, and queues will extend beyond the existing turn lanes on several approaches during both the a.m. and p.m. peak periods. Therefore, intersection alternatives were developed to improve overall intersection operations and queuing.

Alternative 1 would provide a second northbound left-turn lane along 9<sup>th</sup> Avenue to CSAH 1. There are already two lanes along westbound CSAH 1, so the roadway would not need to be expanded beyond its current configuration to receive the dual left-turn lanes. Furthermore, the existing median along 9<sup>th</sup> Avenue is wide enough to accommodate the additional left-turn lane, while preserving the ability to maintain the median.

Alternative 2 would eliminate the 6<sup>th</sup> Avenue approach opposite CSAH 1 and relocate the 6<sup>th</sup> Avenue access to the south near 18<sup>th</sup> Street. At the new connection across from 18<sup>th</sup> Street, which is currently a right-in/right-out, a reduced conflict U-turn (R-CUT) intersection would be constructed to facilitate a safe and efficient access. Full access at the realigned 6<sup>th</sup> Avenue is not recommended given the access spacing to Northway Drive.

Alternative 3 combines both Alternatives 1 and 2.

Alternative 4 converts the existing signalized intersection to a multilane roundabout.



The operations analysis of these alternatives illustrates that each alternative, except for the roundabout (i.e., Alternative 4), would improve operations as compared to the existing configuration. Alternatives 1 through 3 all provided relatively similar operations, with the primary differences related to queuing on various approaches. Therefore, other factors, such as lane continuity, implement-ability, construction cost, stakeholder feedback, and other factors need to be considered. Additional discussion regarding other factors is provided later in this report.

### Multimodal Alternatives

Several alternatives contemplate a trail and/or sidewalk along one or both sides of the roadway. The CSAH 1 study segment represents a multimodal gap between CSAH 120 and 9<sup>th</sup> Avenue. North of CSAH 120, there is a trail along the Mississippi River side of CSAH 1 and no multimodal facility along the other side. There is a trail along the south side of CSAH 120, but it ends at the roundabout; there is no multimodal facility on the north side of CSAH 120. There is sidewalk and trail along the west and east sides of 9<sup>th</sup> Avenue, respectively.

Based on the project management team and public engagement feedback, there is a desire, at a minimum, to have an off-street multimodal facility. Given the existing trail to the north, providing a trail facility throughout the CSAH 1 study corridor would provide continuity with adjacent facilities and improve multimodal access for area residents and businesses. Providing a trail along the Mississippi River side would be ideal from a continuity perspective, as well as better serving area residents, although there would be more driveway conflicts. There is no conclusive benefit to also providing a sidewalk along the south side of CSAH 1 relative to the additional right-of-way/property impacts that it may create. Further discussion regarding multimodal alternatives is provided later in this report.

| CSAH 1 / 9 <sup>th</sup> Avenue Intersection Alternative | 2050 Level of Service (Delay)  |              |             |
|--|--------------------------------|--------------|-------------|
|  | AM Peak Hour                   | PM Peak Hour |             |
| No Build   | C (34 sec)                     | D (54 sec)   |             |
| Alternative 1  | C (31 sec)                     | C (33 sec)   |             |
| Alternative 2  | C (28 sec)                     | C (32 sec)   |             |
| Alternative 3  | C (22 sec)                     | C (24 sec)   |             |
| Alternative 4  | B (10 sec)                     | F (54 sec)   |             |
| CSAH 1 / 9 <sup>th</sup> Avenue Intersection Alternative | 2050 AM / PM Peak Hour Queuing |              |             |
|  | EB                             | NB LT        | SB Thru     |
| No Build   | 265' / 330'                    | 410' / 700'  | 575' / 645' |
| Alternative 1  | 275' / 305'                    | 185' / 390'  | 510' / 315' |
| Alternative 2  | 230' / 300'                    | 280' / 615'  | 580' / 400' |
| Alternative 3  | 210' / 260'                    | 145' / 300'  | 410' / 255' |
| Alternative 4  | 100' / 65'                     | 50' / 975'   | 200' / 275' |

## On-Street Parking

During the first phase of community engagement, some stakeholders expressed a desire to maintain the ability to park on-street along the corridor, while others thought it was more hazardous. The shoulder is currently wide enough to permit on-street parking, which is occasionally used for residential visitors, yard-sales, etc. Therefore, further discussion and potential alternatives were contemplated to provide on-street parking. This included consideration of continuing to use the shoulder for on-street parking, developing dedicated off-street parking areas, or not allowing any on-street parking. The on-street parking option was carried forward for additional input as part of the preliminary corridor concept development process.

## Speed Reduction Strategies

A common concern expressed by the community was that vehicle speeds and the posted speed limit are too high. However, without changing the context of the roadway, studies have shown that changing the posted speed limit alone is not an effective strategy at achieving a reduction in vehicle speeds. Therefore, proven and pertinent speed reduction strategies were identified for consideration, including vertical/horizontal changes and dynamic driver feedback. These strategies were presented to the community to obtain their perspective to potentially implement these strategies along the corridor as part of the future project.

WE WANT TO HEAR FROM YOU!

### INTRODUCTION

Vehicle speeds were identified as one of the primary concerns during the first phase of engagement. To change the posted speed limit, a speed study needs to be conducted to determine the appropriate posted speed limit based on current vehicle patterns. Following public feedback, the county conducted a speed study on CSAH 1.


Below are potential speed reduction strategies that could be used on the roadway. Using your stickers, please **tell us which strategies you prefer** (and add comments or questions below if you have them!).

DISLIKE
NEUTRAL
LIKE


### RESULTS

The speed study determined that the current posted speed limit is valid (given current vehicle patterns along the roadway). Although the posted speed will not be reduced at this time, there are a variety of traffic calming strategies that can be integrated into the future CSAH 1 corridor. Shown to the right are potential speed calming strategies that could be used on the roadway.


#### BULB-OUT




#### CENTER ISLAND



#### REDUCE LANE WIDTHS



#### SPEED FEEDBACK SIGN



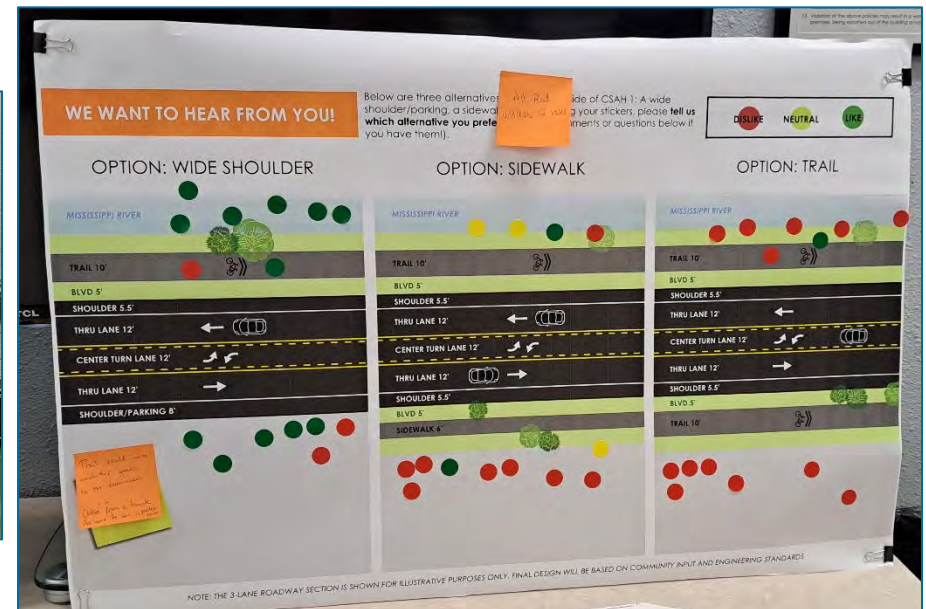
## Stakeholder Input (Phase 2)

As part of the alternative development and evaluation process, the project team facilitated an open house and online survey. The second open house occurred on October 10, 2023 from 5 to 7:00 p.m. at the Whitney Senior Center. About 40 community members (residents and stakeholders) were present at the open house, most of which were residents or business representatives with interests along the study corridor. Key themes from this phase of engagement, included:



- Multimodal facilities are desired, but need to limit maintenance and property impacts
- A three-lane roadway (i.e., a center left-turn lane) would help residents turning into driveways
- Speed and safety continue to be top concerns
- Driver speed feedback signs, smaller lane widths, and center islands are favored speed calming techniques
- Most dislike the five-lane with sidewalk and trail alternative

A detailed summary of the second phase of engagement is provided in the Appendix.



# PHASE 2 ENGAGEMENT SUMMARY

## ENGAGEMENT SCHEDULE

| PHASE 1           | PHASE 2          | PHASE 3          |
|-------------------|------------------|------------------|
| Goals & Visioning | Alternatives     | Recommendations  |
| May-June          | Late Summer 2023 | Fall/Winter 2023 |

## HOW DID WE CONNECT?

The project team facilitated an Open House and online survey in the fall of 2023.

## WHO DID WE HEAR FROM?

About 50 community members connected with the project through the in-person open house, online survey, or conversations with project staff.

## WHAT DID WE HEAR?

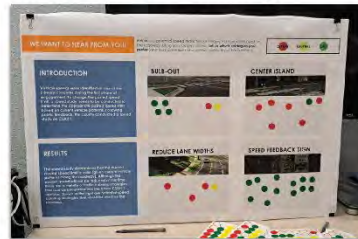
### INTERACTIVE ACTIVITIES

There was no consensus on preferred southern roadway alternatives



|         | Wide Shoulder | Sidewalk | Trail |
|---------|---------------|----------|-------|
| LIKE    | 12            | 2        | 1     |
| NEUTRAL | 0             | 3        | 0     |
| DISLIKE | 3             | 8        | 15    |

Speed feedback signs were the most favored traffic calming strategy



|         | Thru-Out | Center Island | Reduce Lane Widths | Speed Feedback Sign |
|---------|----------|---------------|--------------------|---------------------|
| LIKE    | 4        | 1             | 0                  | 15                  |
| NEUTRAL | 1        | 0             | 1                  | 0                   |
| DISLIKE | 1        | 6             | 3                  | 0                   |

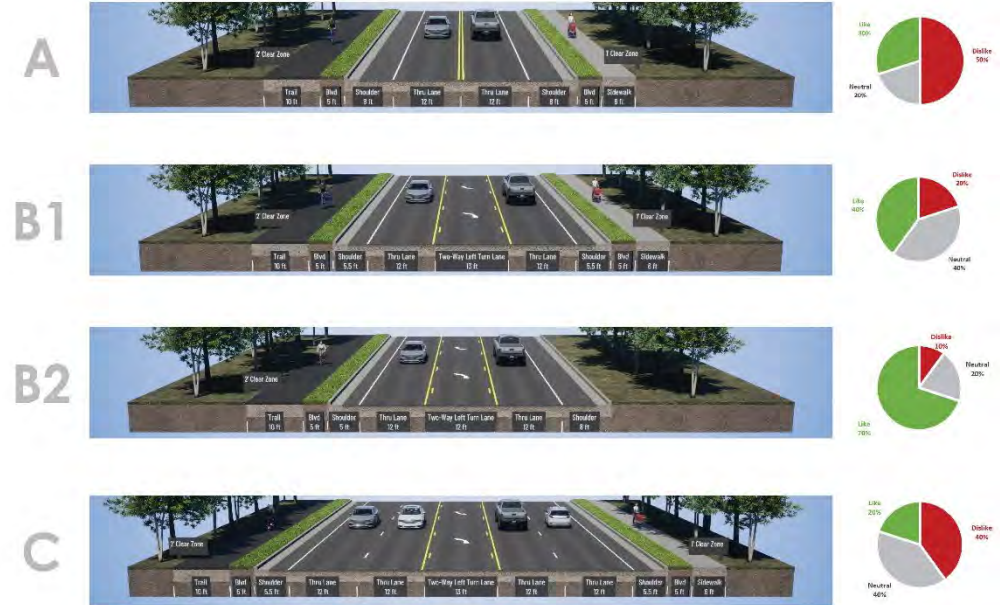
### PUBLIC COMMENTS

Improving safety is a top priority

Make sure this change works for upcoming decades

Slow cars down

Alternatives B1 and B2 were most liked of the four roadway alternatives





## 6.0 Locally Favored Alternative

Based on the technical evaluation and input from the community, Alternative B2 (i.e., a 3-lane facility with trail only) was identified as the locally favored alternative. However, as part of the second phase of community engagement, additional key elements and alternative refinements were incorporated. The resulting modifications, included:

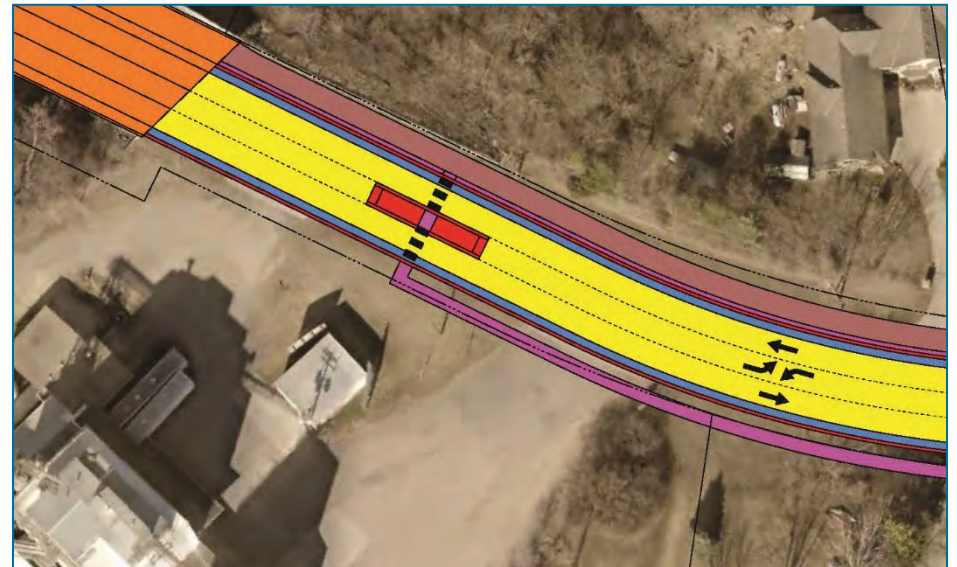
- Reducing the typical lane widths from 12' to 11'
- Reducing the typical shoulders from 8' to 5'
- Adding an alternative “constrained” cross-section; reducing the boulevard from a 5' grass section to a 2' paved section

These modifications help reduce the overall roadway cross-section from the original alternative by 6' to 9', depending on the section, which results in an overall roadway footprint of 57' to 60'. Although this represents an increase in overall roadway cross-section from the current condition, the roadway is estimated to fit within the existing right-of-way along the corridor, as well as be able to provide a consistent roadway section (i.e., travel lanes and shoulders) across the Sauk River bridge. Other key elements that should be incorporated and/or considered as part of the future design process include:

- Driver Speed Feedback Signage
- Periodic Center Medians or Pedestrian Crossing (Optional South Sidewalk Dependent)
- Periodic Bump-Ins for Parking



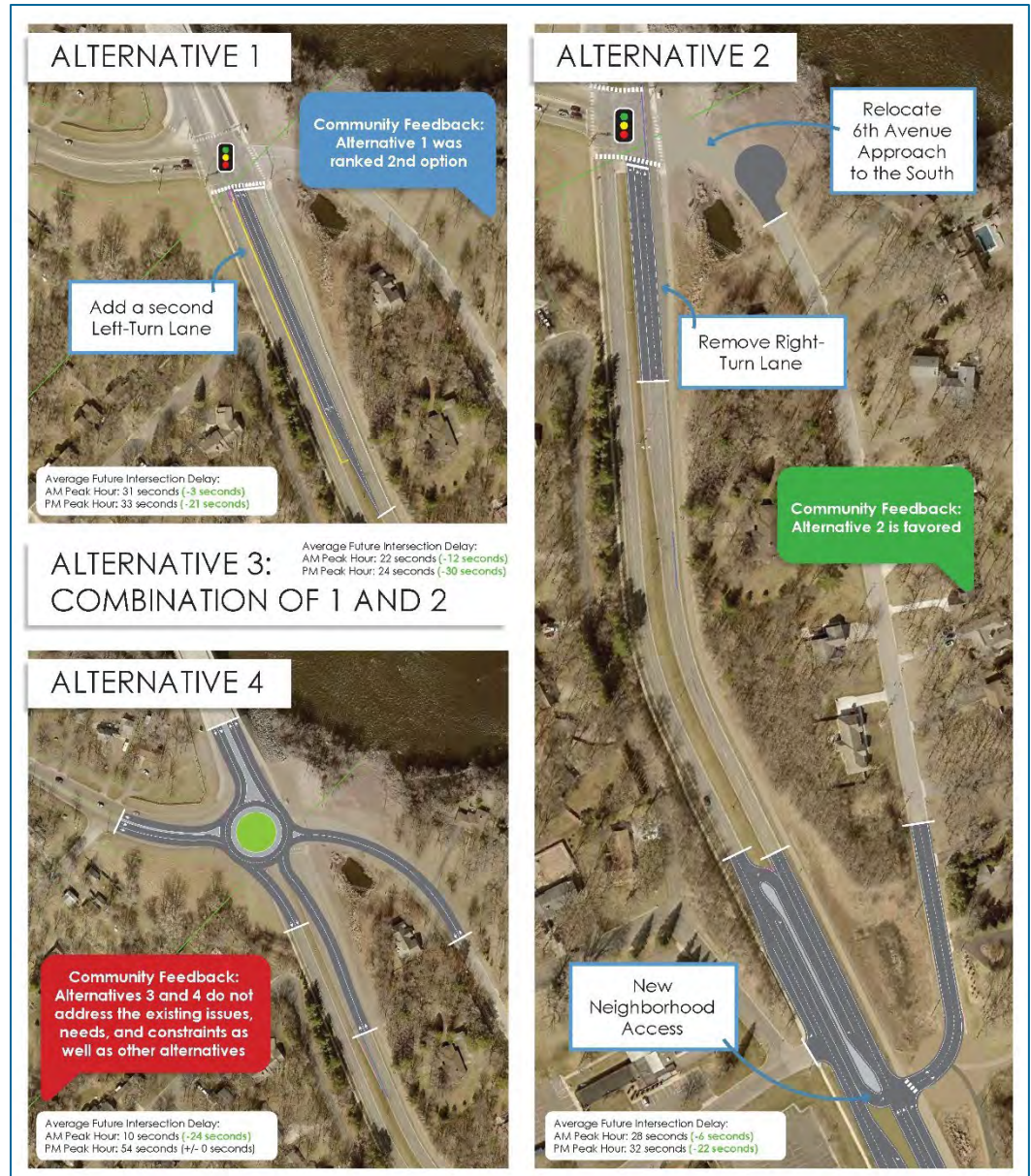


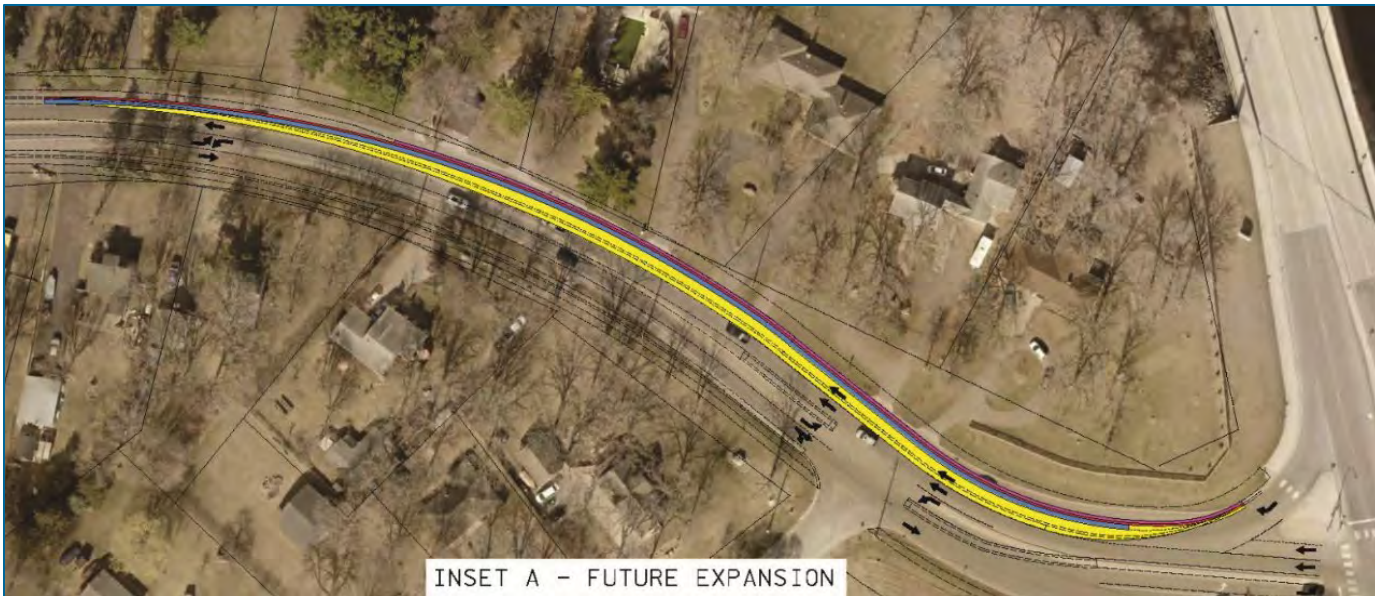


## 9th Avenue Intersection Alternatives

Based on the technical evaluation, the need for improvements at the CSAH 1 and 9th Avenue intersection is dependent on future area growth and may not be needed for 10+ years. However, further coordination with Saint Cloud and area stakeholders, particularly residents along 6th Avenue should occur to review potential alternatives ahead of the future CSAH 1 reconstruction. This will help determine if any modifications at 9th Avenue should be incorporated as part of the future CSAH 1 project.

Community input as part of the second phase of engagement indicated a preference for intersection Alternative 2, which would relocate the 6th Avenue approach to the south along 9th Avenue. By moving the 6th Avenue approach, the operational efficiency of the CSAH 1 and 9th Avenue intersection is significantly improved. In addition, the need for 2 westbound lanes along CSAH 1 (near 9th Avenue) would not be needed and the overall roadway footprint along CSAH 1 could be reduced. However, there is still the potential that Alternative 1 could eventually be needed or implemented. Thus, the locally favored alternative layout along CSAH 1 near 9th Avenue was designed to potentially accommodate Alternative 1 without having to move the proposed trail. Example concepts of the base and potential future CSAH 1 configuration are shown on the following page.





## Optional On-Street Parking

As noted earlier, the need or desire for on-street parking was inconclusive. Therefore, optional on-street parking bump-ins were identified to illustrate how on-street parking could be provided in the context of the rest of the corridor. The strategic bump-ins would allow the corridor cross-section to be maintained, providing a consistent corridor for the entire length. Further coordination as part of the future design development process should occur to finalize if and where any on-street parking should be incorporated.



## Other Considerations

Throughout the study process, other key elements that should be considered further as part of the future design development process, include:

- Speed Limit Changes: the future corridor design speed should be discussed and a follow-up speed study should be conducted after reconstruction.
- USPS Coordination: several residents expressed safety concerns and difficulty in having to cross the street to get to their mailboxes; additional USPS coordination should occur to determine mailbox relocation options.
- Access Management: the design process should look for opportunities to modify, restrict, or close access along the corridor, particularly for parcels with more than one access along the corridor to reduce potential conflicts; the western Heim Milling access is also a potential candidate.
- Lighting: the addition of street lighting should be considered to improve visibility and reduce the potential for run-off-road type crashes
- Transit: there is a transit route the currently uses the CSAH 1 corridor; transit stops should be reviewed in collaboration with St. Cloud Metro Bus to determine potential opportunities to improve or enhance services and/or facilities along the corridor.

### Stakeholder Input (Phase 3)

The project team facilitated a final open house to present the study findings and recommendations, including the overall concept layout of the locally favored alternative. The third open house occurred on December 11, 2023 from 5 to 6:30 p.m. at the Sartell Community Center. About 40 community members (residents and stakeholders) were present at the open house, most of which were residents or business representatives with interests along the study corridor. Key themes from this phase of engagement, included:



- Minimize property and tree impacts (including the historical property)
- Like the reduced lane widths to slow speeds
- Limited desire for the sidewalk along the south side of the corridor (the trail is sufficient)
- Minimal support for the optional on-street parking
- Eliminate the channelized right-turn lane from 9<sup>th</sup> Avenue to CSAH 1
- Happy to see the westbound merge eliminated
- Keep the periodic medians / refuge islands and add more, if possible
- Consider a crosswalk at 321<sup>st</sup> Street
- Is a noise study needed?
- Consider having the CSAH 120 trail crossing away from the roundabout

This feedback will help area agencies guide and refine the overall project as the process moves towards design development.



## 7.0 Financial Considerations

### Cost Estimates

A preliminary construction estimate was developed for the locally favored alternative, as well as the 9<sup>th</sup> Avenue intersection alternatives. The cost estimates include key elements such as pavement, grading, drainage, utilities, erosion control, bridge rehabilitation, signal modifications, lighting, and signing/stripping. The cost estimates also include percentage estimates for mobilization, traffic control, temporary pavement, design engineering, construction administration, and additional contingency. An estimate for right-of-way and/or temporary easement was also included.

The preliminary cost for the CSAH 1 project is estimated to range from approximately \$11M to \$13M. The preliminary cost estimate for the 9<sup>th</sup> Avenue intersection is estimated to range from approximately \$500,000 to \$4M, depending on the alternative. Note that Alternative 2, which is the favored intersection alternative, is estimated to be approximately \$1.5M, but may not be needed for 10+ years. All cost estimates are based on year 2022 bid price information. *Detailed cost estimates are provided in the Appendix.*

### Funding

The County does not currently have funding identified in their five-year CIP for this project. The following information provides potential funding sources to consider for the CSAH 1 corridor. All of these can be implemented by the County Board of Commissioners or City Council, at their discretion. Cost-sharing, as needed, and coordination between agencies will also need to occur as the project moves forward. Additionally, the County could consider working with their district Area Transportation Partnerships (ATP) to identify potential funding sources.

| Funding Source   | Repayment Required | Match Required | Probability of Securing | Max Request |
|--|--------------------|----------------|-------------------------|-------------|
| Surface Transportation Program (STP)                                   | No                 | 20%            | High                    | N/A         |
| Highway Safety Improvement Program (HSIP)                              | No                 | Yes            | Medium                  | \$500K      |
| Local Road Improvement Program (LRIP)                                  | No                 | Yes            | High                    | \$1.5 M     |
| State Aid Funds <sup>1</sup>   | No                 | No             | High                    | N/A         |
| County Wheelage Tax  | No                 | No             | High                    | N/A         |
| Local Option Sales Tax   | No                 | No             | High                    | N/A         |
| Infrastructure Investment and Jobs Act (IIJA) Funding (RAISE or INFRA) | No                 | Yes            | Very Low                | Varies      |



## 8.0 Environmental Risks

A high-level review of the CSAH 1 corridor has been completed to identify potential environmental considerations for future stages of project development. The potential risks and next steps listed represent the current understanding of the project and regulations in place at this time. At the time that the project proceeds to preliminary and final design, the project should be reviewed based on applicable rules and regulations in place at that time. Note that the environmental review process is typically initiated when funding has been programmed or identified for a project.

| Issue/Topic                        | Potential Risks  | Next Steps  |
|------------------------------------|--|---|
| <b>Environmental Documentation</b> | <ul style="list-style-type: none"> <li>Project likely does not exceed threshold for mandatory EAW under Minnesota Rules 4410.</li> </ul>   | <ul style="list-style-type: none"> <li>Likely Class II action (Categorical Exclusion) under NEPA if Federal-aid funding.</li> <li>EAW, if required, must be completed before permits/approvals issued; verify when project is programmed.</li> </ul>  |
| <b>State Protected Species</b>     | <ul style="list-style-type: none"> <li>Butternut (<i>Juglans cineria</i>), state-listed endangered plant, has been recorded near project area.</li> <li>Blunt sedge (<i>Carex obtusata</i>), a state-listed species of special concern, was documented in 2021 on both sides of the road north of the Sauk River along the proposed project route.</li> <li>Black sandshell (<i>Ligumia recta</i>), a state-listed mussel of special concern, found nearby in both the Sauk and Mississippi Rivers.</li> </ul> | <ul style="list-style-type: none"> <li>A qualified surveyor is required to conduct a botanical survey of any trees that will be removed.</li> <li>As much as possible, operate within the maintained road r/w.</li> <li>If possible, conduct work under frozen ground conditions.</li> <li>Use effective erosion prevention / sediment control measures.</li> </ul> <p><i>See DNR Natural Heritage Inventory (NHI) review letter dated July 5, 2023 for all avoidance/minimization measures.</i></p>  |
| <b>Federal Protected Species</b>   | <ul style="list-style-type: none"> <li>The proposed project is in a township known to have northern long eared bat (NLEB) hibernaculum (a cave, mine or other features in which NLEBs have been documented to overwinter).</li> <li>The U.S. Fish and Wildlife Service (USFWS) may regulate tree removal within ¼ mile of a known hibernaculum entrance.</li> </ul>  | <ul style="list-style-type: none"> <li>If the project receives federal funding, a review of potential impacts to federally-listed threatened and endangered species pursuant to Section 7 of the Endangered Species Act will be required. The MnDOT Office of Environmental Stewardship conducts reviews of potential effects to federally-listed threatened and endangered species.</li> <li>The project is not currently located in a high potential zone where the rusty patched bumble bee (RPBB) is likely to be present. However, the USFWS is continuously updating mapped high potential zone areas. When the project proceeds to final design the project will need to be re-evaluated for impacts to the RPBB.</li> </ul> |

|  |  |  |
|--|--|--|
| <b>Cultural Resources</b>                | <ul style="list-style-type: none"> <li>• Arnold Francis House – listed on National Register of Historic Places (NRHP). Located at 32268 Co. Rd. 1 LeSauk Township.</li> <li>• Potential for archaeological resources.</li> </ul>   | <ul style="list-style-type: none"> <li>• To advance the project, a historical/archaeological review request should be submitted to MnDOT CRU to obtain a determination of the potential effects of the project on historical, archaeological and cultural resources.</li> <li>• Architectural history survey may be required for standing structures along corridor.</li> <li>• May require archaeology surveys.</li> </ul>  |
| <b>Stormwater Management</b>             | <ul style="list-style-type: none"> <li>• Project will result in an increase in impervious surface.</li> </ul>  | <ul style="list-style-type: none"> <li>• Consider locations for stormwater basins and potential impacts</li> </ul>   |
| <b>Section 4(f) Resources</b>            | <ul style="list-style-type: none"> <li>• Section 4(f) applies if Federal-aid funding through FHWA. Section 4(f) resources include the Heims Mill Public Water Access Site and the Arnold Francis House</li> </ul>  | <ul style="list-style-type: none"> <li>• Use of Section 4(f) properties would be coordinated with the Official with Jurisdiction (OWJ). Section 4(f) documentation path TBD in coordination with MnDOT and FHWA.</li> </ul>  |
| <b>Contaminated Materials/Properties</b> | <ul style="list-style-type: none"> <li>• There are five hazardous waste sites located near the project area; two stormwater sites, a petroleum leak site, a hazardous waste site, and an industrial stormwater site based on a review Minnesota Pollution Control Agency (MPCA) on-line database.</li> </ul> | <ul style="list-style-type: none"> <li>• Recommend preparation of a Phase I Environmental Site Assessment (ESA), which is required for any liability protections from MPCA.</li> <li>• Complete Phase II drilling investigations where warranted based on findings from the Phase I ESA.</li> <li>• Impacts from contaminated properties would be mitigated by modifying the project design where warranted and/or managing contaminated materials during construction.</li> </ul> |



## 9.0 Next Steps

The findings of this study are expected to serve as the basis for moving the project closer to construction. Although construction is not expected to occur for approximately 5 to 10 years, there are several steps that will need to be completed in advance of that timeframe, including:

- Identify the favored Funding Strategy
- Continue the Annexation Process with LeSauk Township and other agencies.
- Consider a follow-up meeting with residents or additional study for the 6<sup>th</sup> Avenue changes considered as part of this study.
- Begin preliminary design at least 2 years in advance of the expected project funding to allow sufficient design details, environmental review, and additional community input.
  - Note that as part of the future design development process, additional refinements to the locally favored alternatives will likely occur once additional information is obtained (i.e., topographic survey, defined right-of-way, utility infrastructure needs, etc.).



## 10.0 Appendix



# CSAH 1 Corridor Study SEE Scan

# SEE Scan

---

## Social

### Environmental Justice Screening

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-income Populations, dated February 11, 1994, directed " each federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States... The proposed project has federal funding and federal permit requirements and is considered a federal project for purposes of compliance with the Executive Order."

FHWA Order 6640.23A FHWA Actions to Address Environmental Justice in Minority Populations and Low-Income Populations establishes policies and procedures for the Federal Highway Administration (FHWA) to use in complying with Executive Order 12898. FHWA issued Order 6640.23A on June 14, 2012.

#### *Minority Populations*

Minority is defined in the DOT Order on Environmental Justice (Order 5610.2(a)) as including "Black or African American, Hispanic, Asian American, American Indian/Alaskan Native and Native Hawaiian or Pacific Islander." Minority Population means any readily identifiable groups of minority persons who live in geographic proximity, and if circumstances warrant, geographically dispersed/transient persons (such as migrant workers or Native Americans) who will be similarly affected by a proposed DOT program, policy or activity.

Minority populations were identified from the 2017-2021 American Community Survey (ACS) at the Census Block Group level. A minority community is generally defined as a community in which the minority population is either 10 percentage points above the county average, or at least 50 percent of the total geographic unit. Minority populations were determined by comparing the percentage of the minority population for each Census Block Group in the study area to that of Stearns County.

The minority population within Stearns County is approximately 8.2 percent of the total population. The minority populations within the three census block groups range from 1.0 percent to 16.2 percent of the total population, which is similar to the overall county and city populations. Therefore, no minority populations have been identified that would be adversely impacted by the alternatives.

#### *Low-Income Populations*

Low-income population is defined in the DOT Order as meaning "any readily identifiable group of low-income persons who live in geographic proximity, and, if circumstances warrant, geographically dispersed/transient persons (such as migrant workers or Native Americans) who will be similarly affected by a proposed DOT program, policy or activity.

Low-income populations were identified using income data for households collected from the 2017-2021 American Community Survey (ACS) at the Census Block Group level. For the purposes of this analysis, a low-income community is defined as a community in which the low-income population is either 10 percentage points above the county average, or at least 50 percent of the total geographic unit. The Federal

Highway Administration (FHWA) defines “low-income” geographies where the median household income is at or below the Department of Health and Human Services (HHS) poverty guidelines. Poverty thresholds are updated each year by the Census Bureau and vary based on family size and composition. The 2021 poverty threshold for a family of four with two children was \$26,500.

The percentage of households below the poverty threshold in Stearns County is approximately 12.8 percent. The three census block groups within or near the alternatives are comparable to these percentages - the percentages of households below the poverty thresholds range from 3.7 percent to 12.9 percent of the total population. Therefore, no low-income populations have been identified that would be adversely impacted by the alternatives.

### **Historic and Cultural Resources**

The Minnesota Department of Transportation’s (MnDOT) Office of Environmental Stewardship Cultural Resources Unit (CRU) is responsible for reviewing FHWA projects for potential impacts to historic properties pursuant to Section 106 of the National Historic Preservation Act of 1966. For the purposes of this screening process, desktop resources were reviewed, including the Minnesota Historical Society list of National Register properties and MnDOT CRU geographic information systems (GIS) data, to identify potential impacts to historical and cultural resources.

Based on this review, the Francis Arnold House is near the alternative. The house was listed on the National Register of Historic Places in 1994 and is located at 32368 County Road 1, LeSauk Township, near the alternatives. To advance the project, a Historical/Archaeological Review Request should be submitted to MnDOT CRU to obtain formal determination of the potential effects of the project on historical properties.

### **Potential 6(f) Properties**

The Land and Water Conservation Fund Act of 1965 was enacted to plan, acquire, and develop land and water outdoor recreation facilities. Section 6(f) of the Act requires that land receiving federal funding be used solely for outdoor recreation in perpetuity. The Minnesota Department of Natural Resources identifies “Various Sauk River Access Sites” listed as 6(f) properties. It is unclear if Heims Mill Canoe Access is one of these sites. The DNR should be contacted to clarify which access sites are listed as 6(f) properties.

### **Land Use**

There are a variety of land uses immediately adjacent to CSAH 1 within the study area. Most land along the study corridor is residential, with other areas zoned as commercial or industrial. 36 of the 45 adjacent properties are residential, three of which are land only. Seven parcels are owned by Stearns County: six are near the Sauk Rapids Regional Bridge, and one is north of Sauk River used as a canoe access point. There are two parcels classified as commercial or industrial. One is a business operating out of a residential building and the other is an industrial building south of the Sauk River.

### **Disability**

Between 12 and 16 percent of residents of the census tracts surrounding CSAH 1 have a disability which is close to the County average of 10.8 percent. The census tract across the Mississippi River in Sauk Rapids has 24 percent of residents with a disability. People with disabilities may have different transportation needs than people without disabilities. Some may be more likely to drive while many may not be able or prefer not to drive.

## Older Adults

The census tracts near CSAH 1 have similar percentages of people over 65 years old as the county (14.7%). The census tract that surrounds most of CSAH 1 has 19.2 percent of residents being older adults, while the other two immediately adjacent tracts have 13.5 and 13.6 percent of residents being 65 or older. As people age, their transportation needs may shift to driving less often or at different times of the day.

## Vehicle Availability

Most households near CSAH 1 have at least one vehicle available to them. The census tracts immediately adjacent range from 1 to 10 percent of households not having a vehicle available. Minnesota on average has 6.5% of households without access to a vehicle. People who don't have access to a vehicle tend to walk or ride a bicycle to reach their destinations. Sidewalks are important to reduce crash risk for vulnerable road users.

## Environmental

### Water Resources

CSAH 1 is south of the Mississippi River and runs parallel to it for about 0.8 miles. The road crosses over the mouth of the Sauk River where freshwater forested wetlands exist along the banks of the river. There is also a small freshwater pond near the southern end of CSAH 1 near the intersection with 9th Ave N. The only section of CSAH 1 within the 100-year flood plain is where the bridge crosses over the Sauk River.

Both the Mississippi River and Sauk River are designated public waters and are the only public waters in the study area.

The project will need to be in compliance with the National Pollutant Discharge Elimination System (NPDES) and other water quality requirements. Best management practices (BMPs) (e.g., stormwater holding ponds and filtration ponds) may be required to minimize stormwater runoff impacts and protect nearby water resources. BMPs and mitigation measures would be determined during final design of a preferred alternative and erosion control BMPs would be identified through the development of a Stormwater Pollution Prevention Plan (SWPPP). These plans will need to be in place prior to construction to protect nearby water resources.

### Wetlands

Wetland resources are regulated at the federal level by the U.S. Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act. At the state level, public waters are regulated by the Minnesota DNR and wetlands are protected under the Wetland Conservation Act (WCA). These laws require "sequencing": consideration of avoidance first, then identification of minimization measures, and finally mitigation for any potential unavoidable impacts. Current regulations require impacts to wetlands within this area of the state be replaced at a minimum ratio of 2:1.

Once an alternative has been selected, it is recommended that a Level 2 Wetland Delineation be completed to confirm the location of wetland resources, potential impacts, and permitting requirements. If there will be impacts to a natural wetland, permitting and mitigation will be required. Adjustments to an alternative alignment can be made during final design to further reduce wetland impacts where appropriate.

There are freshwater forested wetlands immediately south of CSAH 1 near the mouth of Sauk River.



## Contaminated Properties or Materials

The Minnesota Pollution Control Agency (MPCA) and Minnesota Department of Agriculture's (MDA) *What's in My Neighborhood?* interactive mapping tools were reviewed for potential environmental hazards and agricultural chemical contamination sites within the project area. There are four hazardous waste sites located near the project area. Two of the sites are related to stormwater. The site on the north end of the road is inactive and was related to stormwater at a construction site. On the south end of the road is a municipal separate storm sewer system drain. Another site on the southern end of CSAH 1 is where there was a petroleum leak at former gas station site near the intersection of CSAH 1 and 9<sup>th</sup> Ave N. The last potentially contaminated site is at Hiem Mill. There may be harmful pollutants from stormwater contacting industrial equipment. There was also registered hazardous waste on the site from 1985.

It is not anticipated that the project would impact these sites. Prior to construction, a Phase I Environmental Site Assessment (ESA) is recommended to evaluate the potential for encountering contamination during construction.

## Soils

Soil types can play a significant role in construction costs. For example, wet soils can be more challenging to excavate and stabilize. Therefore, NRCS soils data was screened to determine the feasibility of each alternative. Based on the available data sets, CSAH 1 goes through areas of 100 percent hydric soil near the Sauk River. This area is near where wetlands have been identified and it is assumed the water table is close to the surface in portions of the project area. In addition to wet soils, there are also potential erosion hazards between the Sauk River and 321<sup>st</sup> Street.

Overall, each alternative will require fill during construction. Cost estimates are provided in the cost analysis screening section. A detailed geotechnical analysis should be completed during the design to determine mitigation measures and impacts.

## Federal Threatened and Endangered Species Screening

If the project receives federal funding, the proponent will be required to complete a review of potential impacts to federally-listed threatened and endangered species pursuant to Section 7 of the Endangered Species Act (ESA) of 1973. The MnDOT Office of Environmental Stewardship (OES) conducts reviews of potential effects to federally-listed threatened and endangered species.

For planning purposes, a preliminary assessment for federally-listed threatened and endangered species was performed. This review was based on current federally-listed species and will need to be re-evaluated at the time that a future NEPA or state-level environmental review process is conducted. Based on a review of the current USFWS listed threatened and endangered species, one threatened species, the northern long-eared bat (*Myotis septentrionalis*), within Stearns County is subject to protection pursuant to the ESA.

Based on a list of all township sections containing known northern long-eared bat roost trees and/or hibernacula prepared by the Minnesota DNR (dated June 7, 2021), CSAH 1 is located in a township known to have Northern Long Eared Bat (NLEB) hibernaculum (a cave, mine or other features in which NLEBs have been documented to overwinter). The U.S. Fish and Wildlife Service (USFWS) may regulate tree removal within ¼ mile of a known hibernaculum entrance.

Effective March 21, 2017, the rusty patched bumble bee (*Bombus affinis*) was listed as endangered under the ESA. Based on current mapping published by the USFWS, the project is not located in a high potential zone where the rusty patched bumble bee is likely to be present. The USFWS is continuously updating mapped

high potential zone areas. At the time that the project is proceeding to final design and construction, the project will need to be re-evaluated based on the regulations and guidance in place.

### State Threatened and Endangered Species Screening

The proposed project is subject to state laws protecting threatened and endangered species. This includes Minnesota's Endangered and Threatened Species Statutes, which protect species at risk of extinction. Species of Special Concern within Minnesota are not threatened or endangered, but are either extremely uncommon in Minnesota, or have unique habitat requirements that require special monitoring. Species defined as "watchlist species" are tracked but have no legal protection status in Minnesota.

The Minnesota DNR Natural Heritage Information System (NHIS) and other available data sets were used to inventory any rare plants, animals, native plant communities, or other rare features in the area. It is important to note these data sets are not based on an exhaustive inventory of the state. The lack of data for any geographic area shall not be construed to mean that no significant features are present.

Review of the NHIS database indicates that there is one State endangered species in vicinity of the proposed project, the butternut tree (*Juglans cinerea*). There are also two State-Listed Species of Special Concern within the vicinity of the project, blunt sedge (*Carex obtusata*) and the black sandshell (*Ligumia recta*).

Butternut (*Juglans cinerea*), a state-listed endangered plant, has been documented near the project area. Most populations of this species in Minnesota are located in mature, mesic hardwood forests. This species is very susceptible to a lethal fungal disease called butternut canker (*Sirococcus clavigignenti-juglandacearum*). Nearly all of Minnesota's butternut populations are dead or dying from the fungus, triggering its protected status within the state. Minnesota's Endangered Species Statute (*Minnesota Statutes*, section 84.0895) and associated Rules (*Minnesota Rules*, part 6212.1800 to 6212.2300 and 6134) prohibit the take of endangered or threatened plants or animals, including their parts or seeds, without a permit. As this species has been documented in the vicinity of the proposed project, a qualified surveyor is required to conduct a botanical survey of any trees proposed project will be removed. The purpose of the surveys would be to delineate the current location of butternut trees so that avoidance measures can be implemented or, if needed, to inform the permit to take process. Surveys must be conducted by a qualified surveyor on the attached list and follow the standards contained in the Minnesota DNR's Rare Species Survey Process and Rare Plant Guidance. Since butternut bark is distinctive, a survey can be completed at any time of the year. Also, as this species is highly susceptible to the butternut canker fungal disease, it is imperative to inspect and clean all equipment prior to bringing it to the site to prevent spread of invasive species.

Blunt sedge (*Carex obtusata*), a state-listed species of special concern, was documented in 2021 on both sides of the road north of the Sauk River along the proposed project route. This species was found in a degraded native sand prairie and savanna. The Minnesota DNR recommends minimizing or avoiding impacts to suitable habitat as feasible. Actions to minimize disturbance may include, but are not limited to, the following recommendations:

- As much as possible, operate within the maintained road right-of-way;
- If possible, conduct the work under frozen ground conditions;
- Use effective erosion prevention and sediment control measures;
- Inspect and clean all equipment prior to bringing it to the site to prevent the introduction and spread of invasive species;
- Revegetate disturbed soil with native species suitable to the local habitat as soon after construction as possible; and

- Use only weed-free mulches, topsoils, and seed mixes. Of particular concern are birdsfoot trefoil (*Lotus corniculatus*) and crown vetch (*Coronilla varia*), two invasive species that are sold commercially and are problematic in prairies and disturbed open areas.

Black sandshell (*Ligumia recta*), a state-listed mussel of special concern, has been found nearby in both the Sauk and Mississippi Rivers. Mussels are particularly vulnerable to deterioration in water quality, especially increased siltation. As such, it is important effective erosion prevention and sediment control practices be implemented and maintained throughout the duration of the project.

### Ecologically Significant Areas

The study area is adjacent to a Minnesota DNR Minnesota Biological Survey (MBS) Site of Biodiversity Significance, Heim's Mill. The Heim's Mill site has been determined to be *Below* the minimum biodiversity threshold for statewide significance. This site, however, may have conservation value at the local level as habitat for native plants and animals, corridors for animal movements, buffers surrounding higher quality natural areas, or as areas with high potential for restoration of native habitat.



# Phase 1 Engagement Summary

June 2023

# Phase 1 Engagement Summary

## How did we connect?

**The project team facilitated an Open House, online survey and interactive map, and project website in the summer of 2023.**

**Open House:** May 23, 2023, from 5:00 – 6:30 p.m. at the Sartell Community Center

**Online Survey and Interactive Map:** Live from May-September

**Project Website:** Live in May, open throughout project

## Who did we hear from?

**About 100 community members connected with the project through the in-person open house, online survey, or conversations with project staff.**

**Open House:** ~50 community members (residents and stakeholders)

**Online Survey and Interactive Map:** 57 responses (most live along the corridor and use it daily)

## What did we hear?

- Most use personal vehicles to travel on CSAH 1 today
- Over half of users would like to walk or bike more on the corridor
- Current safety was ranked as “Average” or “Poor”, and was noted in-person as a significant concern
- Multimodal facilities were ranked most often as “Average” or “Poor”, and overall desire is for increased and safer facilities
- Improving safety and reducing vehicle speeds were the most important factors for future visioning
- Minimizing Environmental Impacts and Improving Mobility were the second most important factors for future visioning



# Engagement Plan Overview

The success of the CSAH 1 Corridor Study is highly dependent on integrating the community’s voice in the process. Engagement will take place through a variety of strategies occurring throughout the study in three phases:

| PHASE 1           | PHASE 2          | PHASE 3          |
|-------------------|------------------|------------------|
| Goals & Visioning | Alternatives     | Recommendations  |
| May-June          | Late Summer 2023 | Fall/Winter 2023 |

The remainder of this document outlines the engagement that occurred in Phase 1: Goals & Visioning.

## Goals

Phase 1 focused on Goals & Visioning for the CSAH 1 Corridor Study. During this phase, the community and stakeholders were introduced to the project, identified issues and opportunities, and discussed their vision and priorities for the corridor.

## Strategies

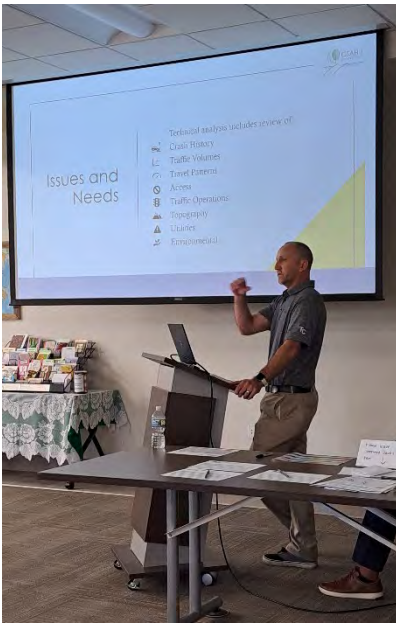
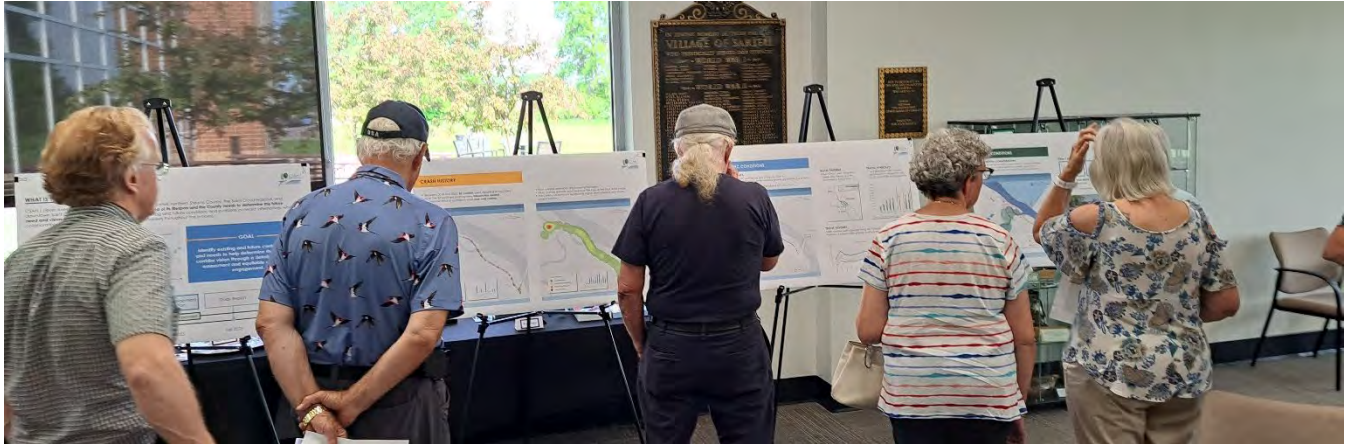
Phase 1 included a public open house, a focus group, and online promotion.

### Open House #1

The first Open House occurred on May 23, 2023, from 5:00 – 6:30 p.m. at the Sartell Community Center. **Approximately 40 community members attended the engagement event**, along with key project staff. The primary goals of this event were to introduce the study, the project team, and ask for feedback on high-level visioning. To achieve this, the team utilized:

| PROJECT OVERVIEW PRESENTATION   | PRIORITIZATION EXERCISE  | EXISTING CONDITION BOARDS  |
|---|--|--|
| <p>The meeting included a brief presentation by key project staff to highlight the overall goals of the CSAH 1 Corridor Study.</p> <p><a href="#">Click here to view the presentation</a></p> | <p>Community members were asked to rank their priorities for the corridor utilizing a marble exercise.</p> <p>See summary below for more details</p> | <p>A variety of existing condition information was presented, including safety, environmental conditions, and access.</p> <p><a href="#">Click here to view the boards</a></p> |

Open House Photos



*Prioritization Exercise*

To understand how various priorities ranked for community members, they were asked to complete a marble prioritization exercise. Using marbles, each attendee was asked to “spend” marbles in areas they prioritized. **The top priorities (by a significant margin) are improving safety and minimizing property impacts.**

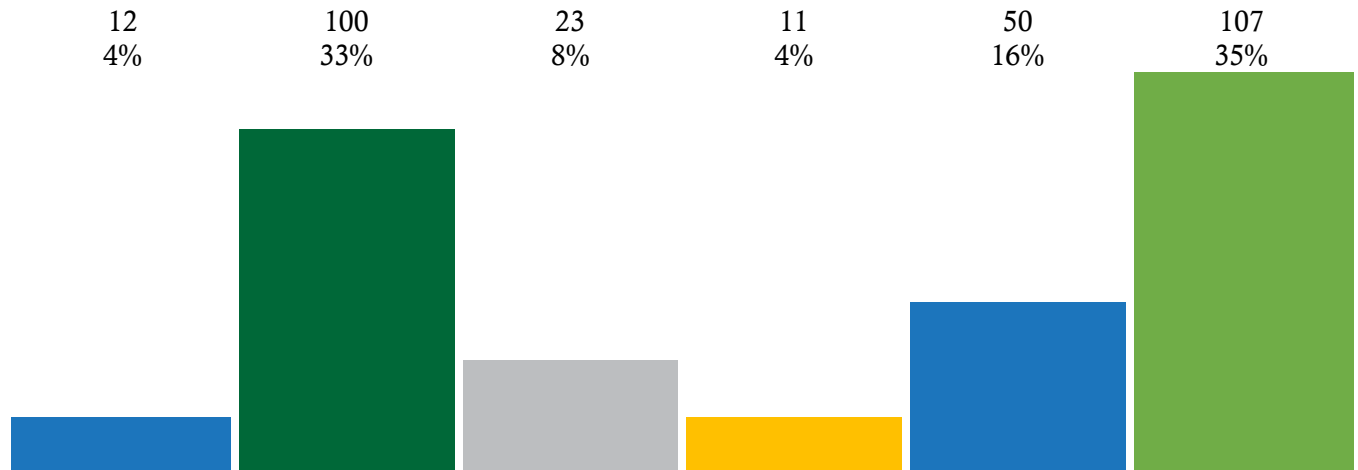


**WHAT ARE YOUR PRIORITIES FOR THE CORRIDOR?**

Using your marbles, how would you prioritize the following?  
You can spend the marbles however you would like - all in one jar or spread out.



**Results**





### Comment Cards

Attendees were also invited to provide feedback through written comment cards. Below are the six submitted comments:

Please don't take my yard. Septic and well setbacks, not interested in city sewer and water. Lower speed limit. Who pays for this? Will taxes go up?

1. It is unlikely that any modification to the present roadway will improve safety. People will continue to speed, follow too closely, and pass on the shoulder. Increased traffic volume will only exacerbate existing problems.
2. There are 30+ landowners whose properties could be affected, and the same number of potential eminent domain proceedings.
3. The following proposal would positively impact safety, and minimize adverse effects on landowners:
  - a. With no change necessary to existing roadway, dead-end the road just south of Heim's Mill. Sauk River Bridge would be unaffected and traffic into and out of Heim's mill would be unimpeded to and from the north of the bridge.
  - b. Construct a new roadway from Northway Drive, west of Whitney Ctr. To Co. Rd. 120, north of Sauk River Park. A "shoofly" could follow the old N-S airport runway with minimal effect on facilities at Whitney. New bridge would cross Sauk River, traverse Sauk River Pk. And intersect w/County 120. No more than 2 or 3 landowners (partly or all public property) would be affected. Pedestrian and bicycle access across new road could be provided by bridge and/or underpass.
4. The overwhelming majority of traffic traversing Co. Rd. 1 between 9<sup>th</sup> Ave. No. and CR 120 is other than local traffic with alternate routes either available now or, with judicious planning and construction, if necessary, available in the future.

I would be happy to elaborate, especially concerning #4.

Speed limit is a huge safety issue! Two mailboxes since the increase. As a community bicyclist – the design of the intersection from roundabout north of 321<sup>st</sup> to 9<sup>th</sup> Ave. is atrocious! No need for 4 lanes or 2 lanes with a middle turn lane. This would just be an incentive for more speed and traffic. As for pedestrian and bicycle safety, painted bike lane in the shoulder – with room for a pedestrian on the right would give the driver of vehicles some idea that the shoulder is designated for something besides passing. I feel safer riding bicycle in the Twin Cities with much more, and many times faster traffic with the designated bike lanes, than in this corridor (or the area in general).

Options:

1. 3 lanes – to allow for a dedicated turn lane in the middle
2. New road and bridge through Sauk Regional Park and Whitney Park connecting to Northway Drive. Will improve access to hospital and divert traffic.
3. New hospital on land across from CentraCare Plaza. This will improve access to hospital for emergencies.

Average speed is not reasonable measure. Cars are either backed up and creeping or speeding

It seems poor stewardship of tax payer funds to change one of the only not pot-hole laden roads in StC and structurally sound bridge to cut 5 mins of travel time for a minority of drivers who HAVE an alternate 4 lane road ONE exit down (Midsota building), whilst knowingly endangering the lives of every single person who lives on that road and causing how many millions in damage to properties. Its 0.9 miles guys. This is not the hill we want to die on, nor should this be the focus so much as lowering the speed limit.

### *Verbal Comments*

Following the project presentation, project staff were available for questions and discussion. Below is a summary of questions/comments received during this time:

#### **Comment/Question**

Can you define lifespan (of the road)?

There is a fear of biking on this road right now (many near misses). The shoulder on the right side approaching the roundabout disappears (however extending this would require encroaching on private property)

Wal-Mart and other developments are primary sources of traffic. Will St. Cloud hospital relocate? Will emergency vehicles utilize this corridor?

The speed limit was raised to 40 MPH after new developments – is it required?

Did a speed study consider curves along the bridge?

Too dangerous for kids to get on/off the bus along the corridor

Safety issues will likely continue

Could we dead end south of Heim Milling then create a new roadway?

Could we redesignate this as a non-CR? Add speed bumps?

There are alternate routes for people that exist already, lots of people use this as a shortcut because of the 40 MPH speed limit

Lower speeds will lead to less shortcut traffic and increased multimodal use

City of Sartell did not attend this meeting which leads to frustration from the community

There is property on the historic register that cannot be encroached upon

There are disabled drivers on this corridor, could we add crosswalk or lower speed limit?

Who makes the final decision?

Do we need to consider smaller developments that may impact volumes?

Barely any homes along this corridor have city services

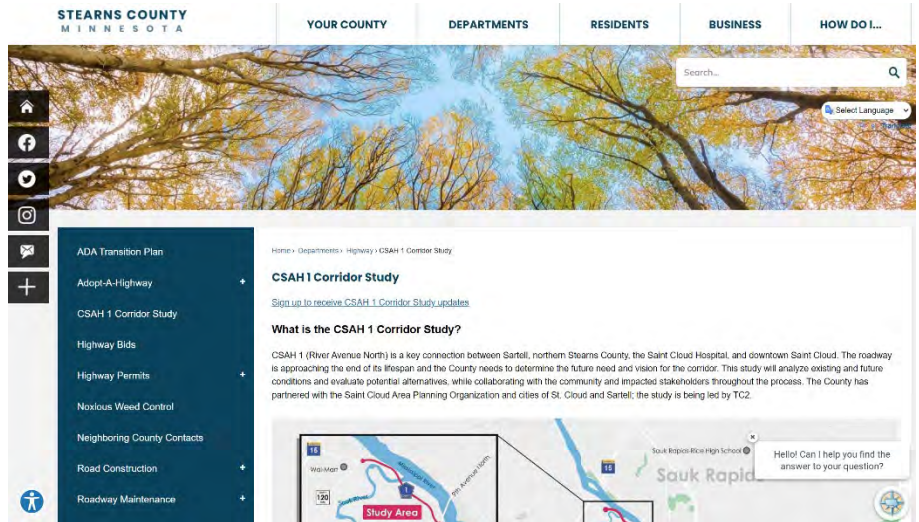
Can we attend APO meetings?

## Online Promotion

Community members could also engage with the study through online opportunities. This included a project website, online survey, and interactive wikimap. These online engagement opportunities ensure that those who cannot attend in-person events are able to express feedback.

### *Project Website*

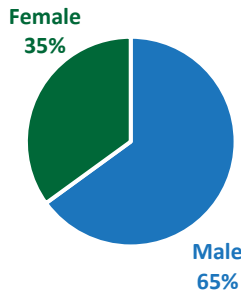
The project website includes information on the study, relevant documents (such as existing condition reports or engagement summaries) and links to engagement opportunities. During Phase 1, the website included links to the online survey and wikimap as well as an invitation to attend the first Open House.



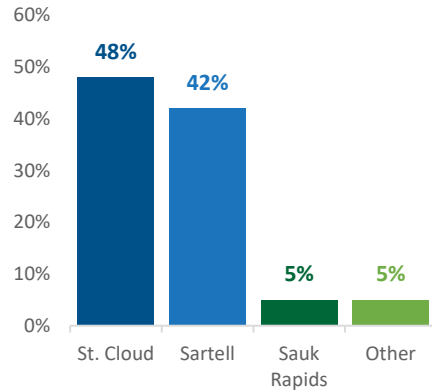
*Online Survey*

A total of 57 survey responses were collected during the first phase of engagement. Below is a summary of demographic information (self-identified by respondents):

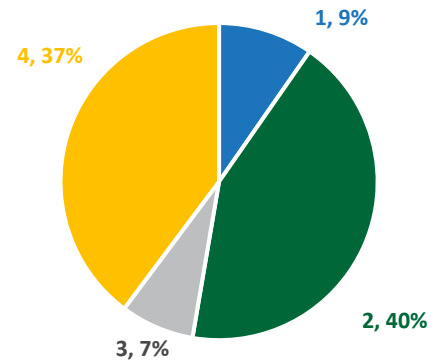
**Gender**



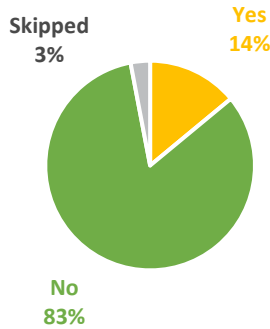
**Residence**



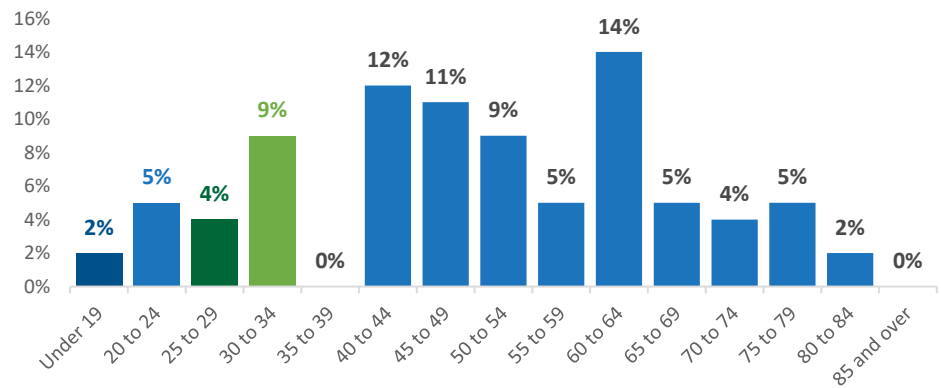
**People in Household**



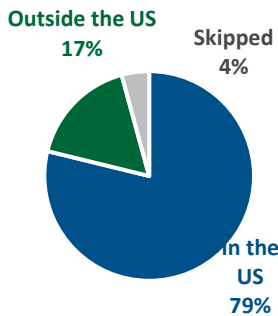
**Disability**



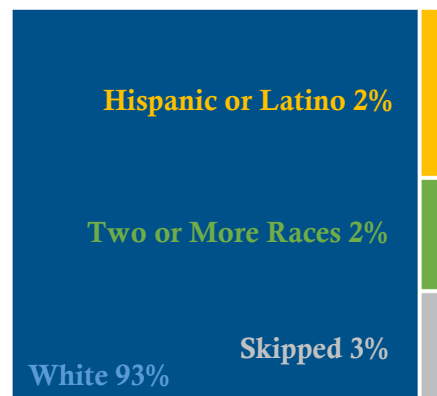
**Age**



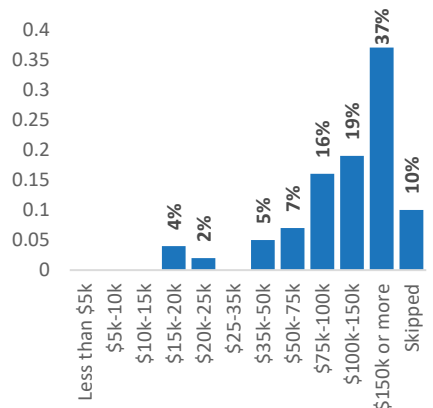
**Place of Birth**



**Ethnicity**

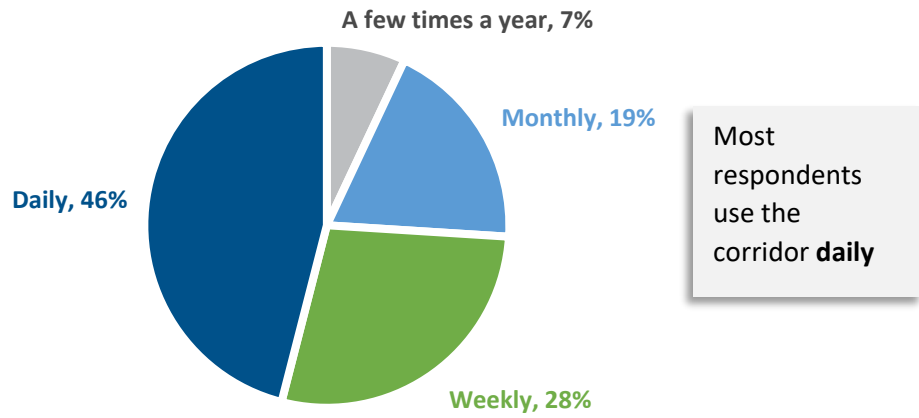


**Income**

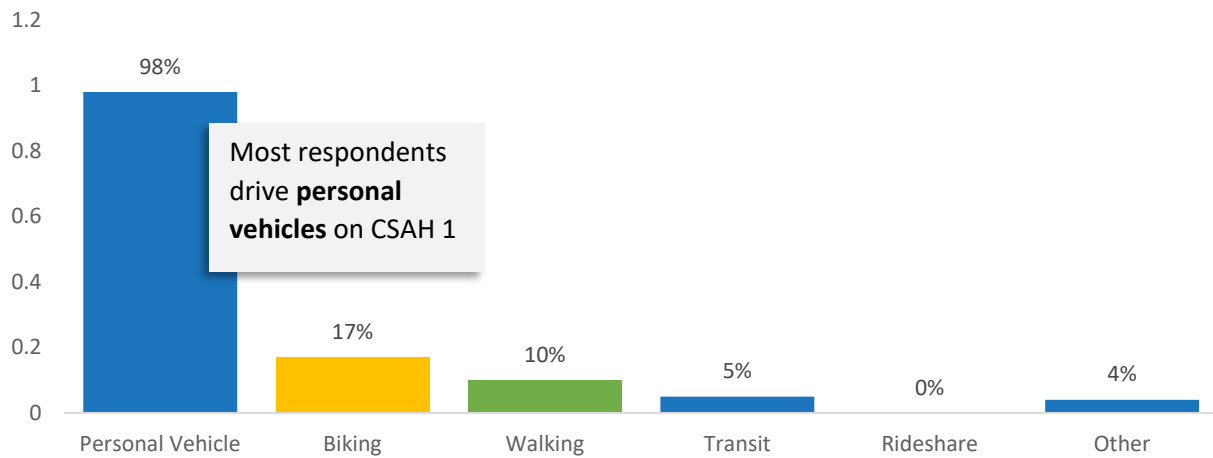


The following questions related to the existing use and future vision for the CSAH 1 Corridor:

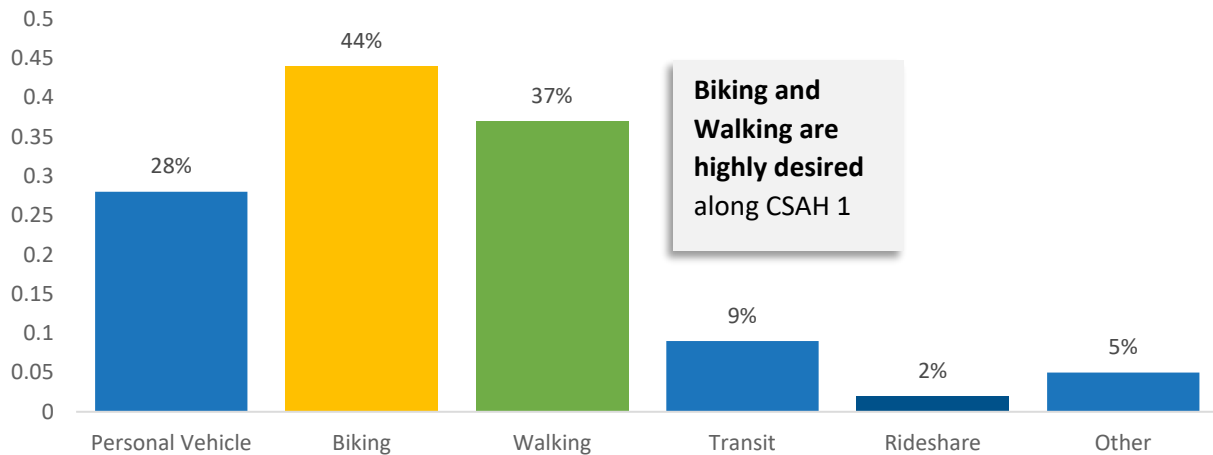
### How often do you use CSAH 1?



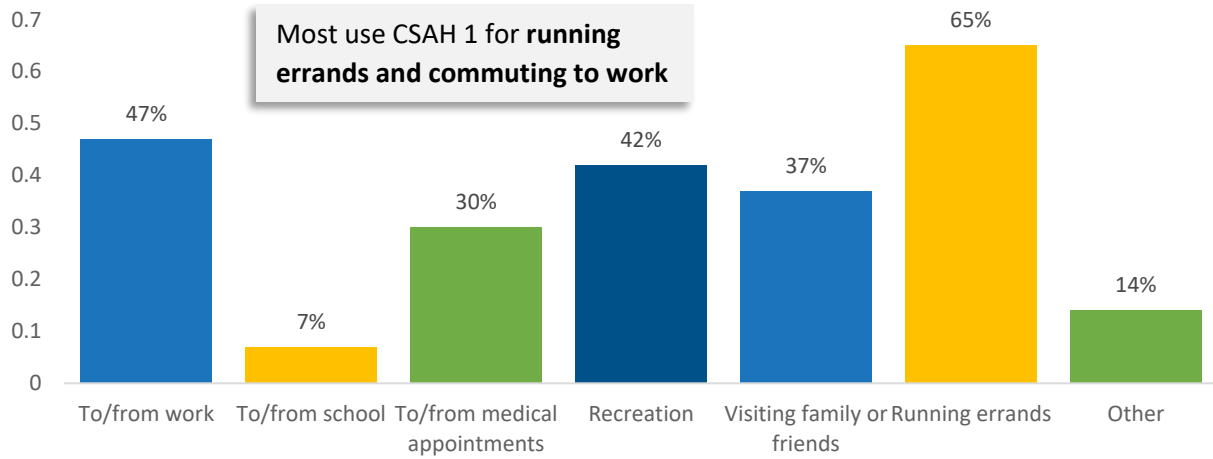
### How often do you typically travel along CSAH 1? (Select all that apply)



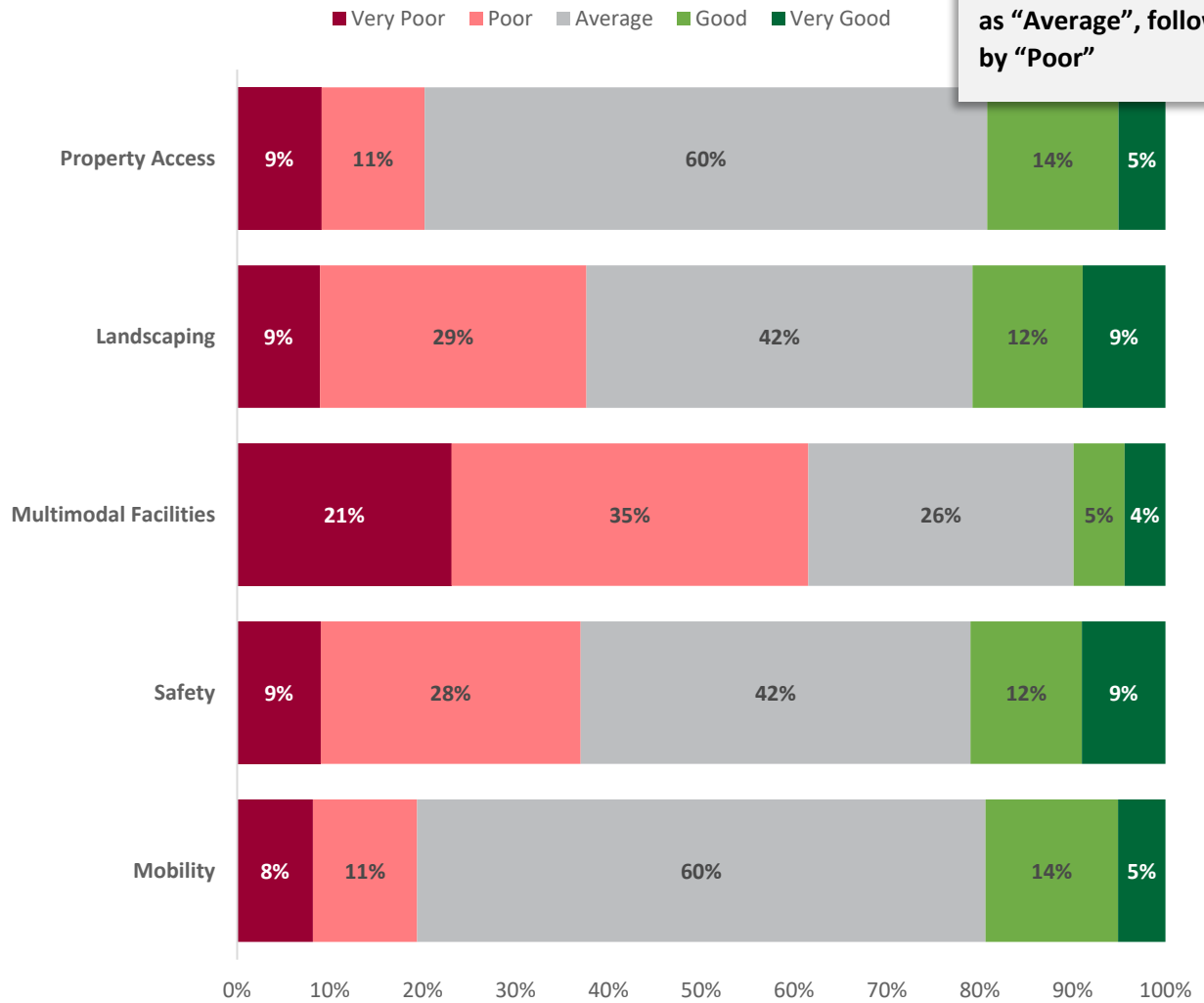
### Are there travel modes that you would like to use more along CSAH 1? (Select all that apply)



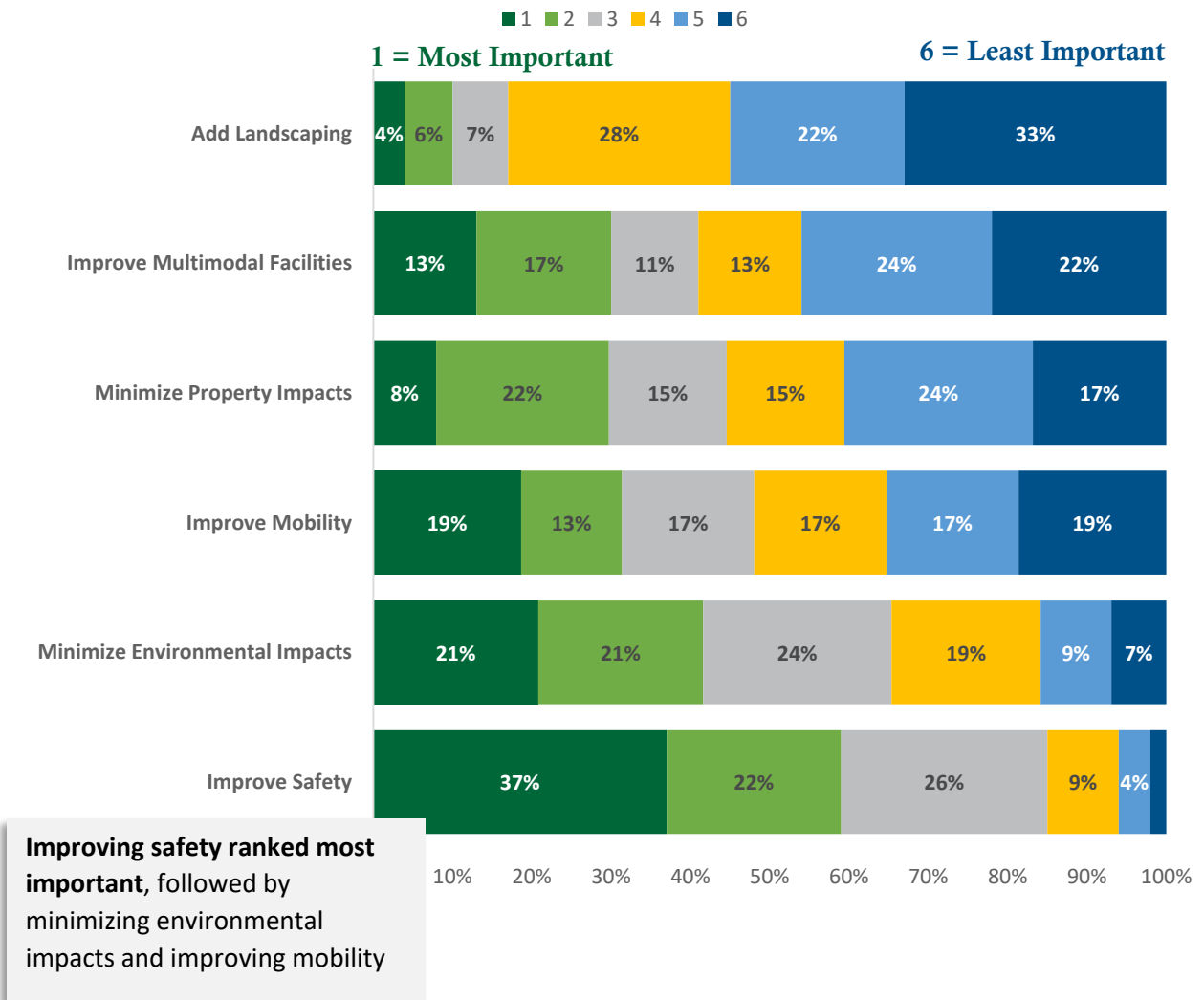
Why do you typically use the corridor? (Select all that apply)



On CSAH 1 today, how would you rank the following?



As we draft the future vision for the corridor, how would you prioritize the following?

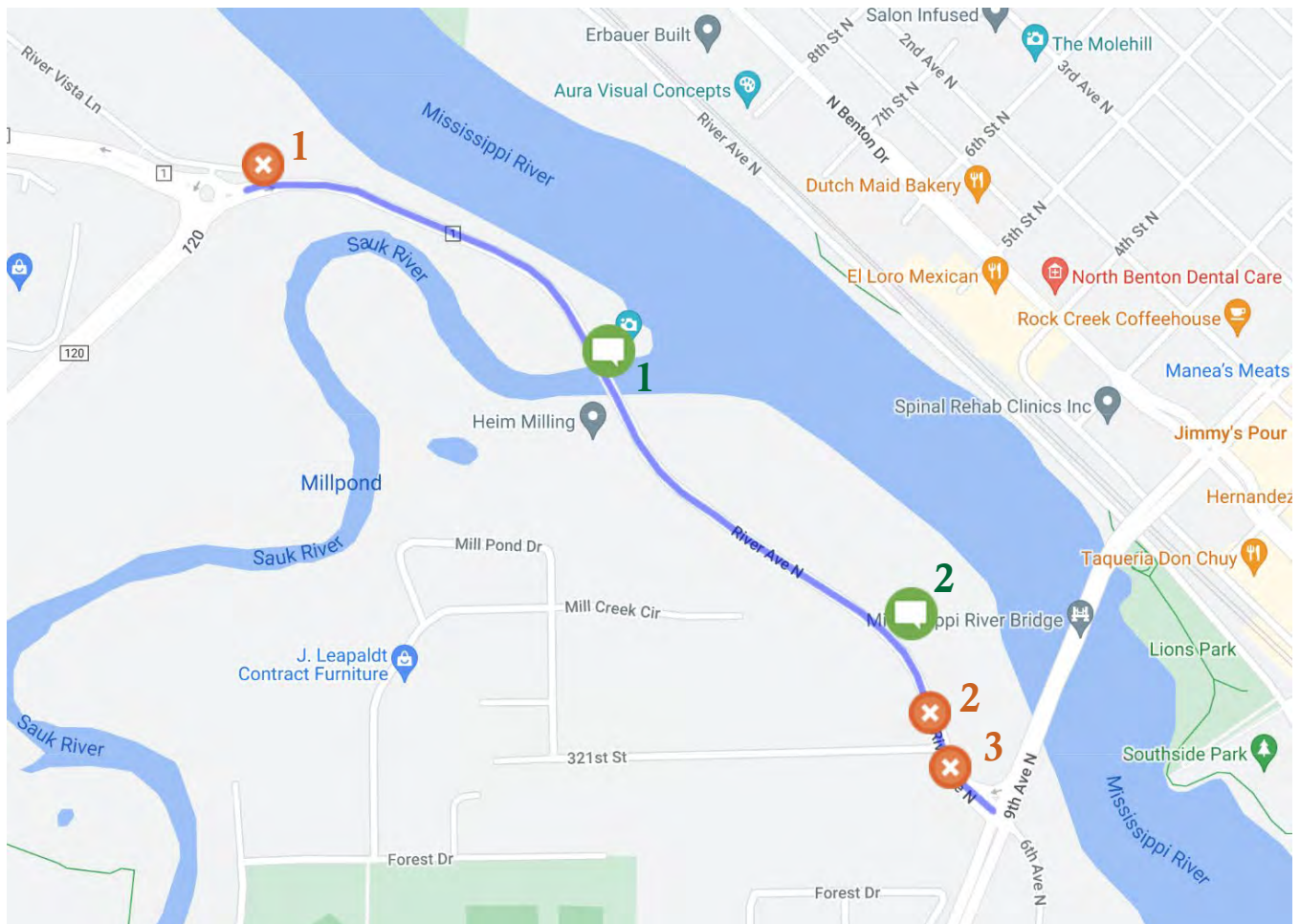


In a few words, how would you describe your vision for CSAH 1?



## Wikimap

Community members were asked to identify areas of issue or opportunity on an interactive online map. [Click here to view the map](#), or view the summary below:



### Opportunities

1. Add sidewalk?
2. Make biking more safe along this stretch – separated more from traffic?

### Issues

1. Traffic sometimes backs up here
2. Right hand turns on to 321st St is dangerous as designed. Following cars make the assumption that you are just slowing "too early" for 9th Ave and will tailgate you. This means you have to carry too much speed to turn on to 321 or risk getting rear ended. The thing is - I understand the behavior. It's hard to see that there's a turn before 9th Ave.
3. Lack of a sidewalk here





# Phase 2 Engagement Summary

October 2023

# Phase 2 Engagement Summary

## How did we connect?

The project team facilitated an **Open House, online survey, and project website in the fall of 2023.**

**Open House:** October 10, 2023, from 5:00 – 7:00 p.m. at the Whitney Senior Center

**Online Survey:** Live September and October

**Project Website:** Live in May 2023, open throughout project

## Who did we hear from?

**About 50 community members connected with the project through the in-person open house, online survey, or conversations with project staff.**

**Open House:** ~40 community members (residents and stakeholders)

**Online Survey:** 10 responses

## What did we hear?

- Multimodal facilities are desired, but need to limit maintenance and property impacts
- A three-lane roadway would help residents turning into driveways
- Speed and safety are top concerns
- Speed feedback signs, smaller lane widths, and center islands are preferred speed calming techniques
- Most dislike the five-lane with sidewalk and trail option



# Engagement Plan Overview

The success of the CSAH 1 Corridor Study is highly dependent on integrating the community’s voice in the process. Engagement will take place through a variety of strategies occurring throughout the study in three phases:

| PHASE 1           | PHASE 2          | PHASE 3          |
|-------------------|------------------|------------------|
| Goals & Visioning | Alternatives     | Recommendations  |
| May-June          | Late Summer 2023 | Fall/Winter 2023 |

The remainder of this document outlines the engagement that occurred in Phase 2: Alternatives.

## Goals

Phase 2 focused on drafting and reviewing roadway alternatives for the CSAH 1 Corridor. This included alternatives for the roadway section (number of lanes, multimodal facilities, etc.), bridge configuration, and intersection alternatives.

## Strategies

Phase 2 included a public open house, online survey, and project website.

### Open House #2

The second Open House occurred on October 10, 2023, from 5:00 – 7:00 p.m. at the Whitney Senior Center. **Approximately 40 community members attended the engagement event**, along with key project staff. The primary goals of this event were to present alternatives, gather feedback, and discuss preferences. To achieve this, the team utilized:

| PROJECT OVERVIEW PRESENTATION   | ALTERNATIVE EXERCISES   | ALTERNATIVE BOARDS  |
|---|---|---|
| <p>The meeting included a presentation by key project staff to highlight the overall goals of the CSAH 1 Corridor Study.</p> <p><a href="#">Click here to view the presentation</a></p> | <p>Community members were asked to rank roadway, bridge, and intersection alternatives utilizing dot exercises.</p> <p>See summary below for more details</p> | <p>Roadway, bridge, and intersection alternatives were presented through aerial images, roadway sections, and example photographs.</p> <p><a href="#">Click here to view the boards</a></p> |

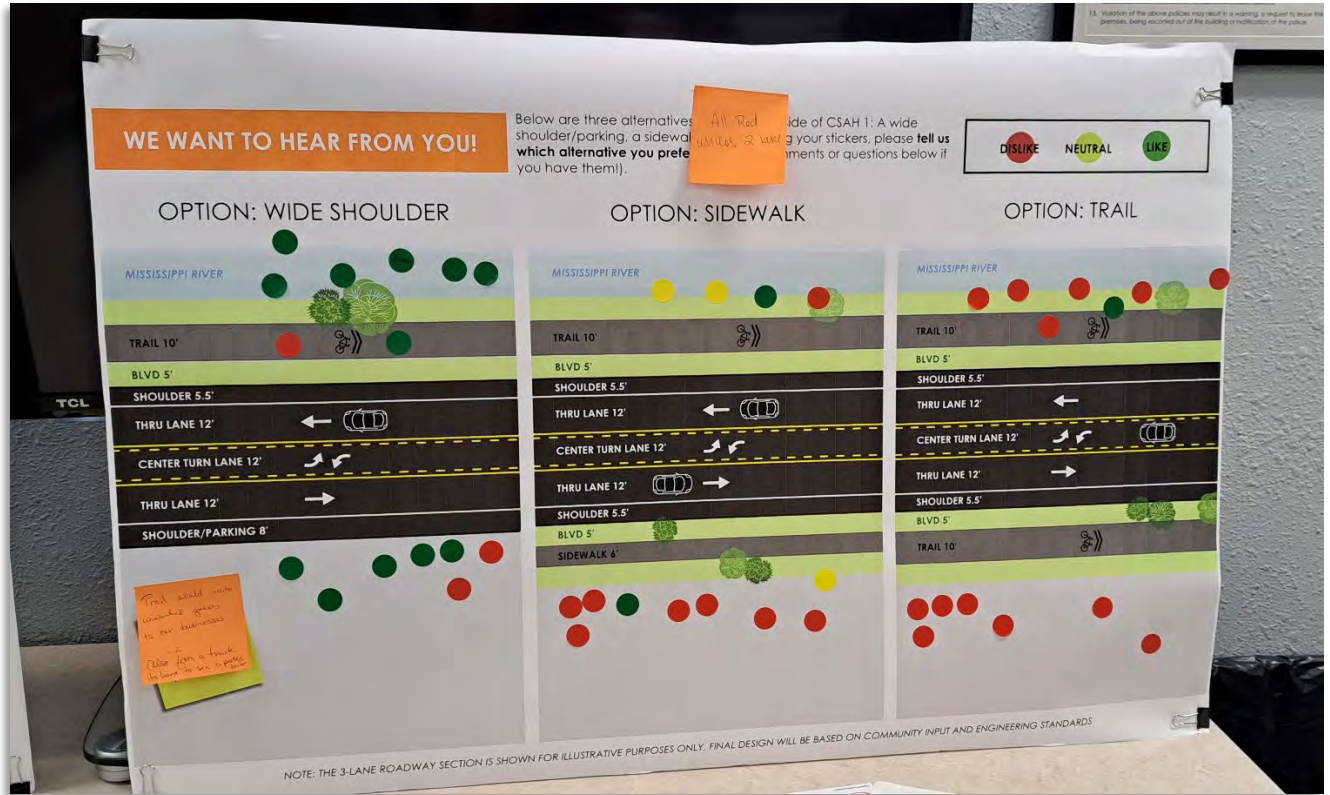
Open House Photos



*Prioritization Exercises*

Southern Roadway Alternatives

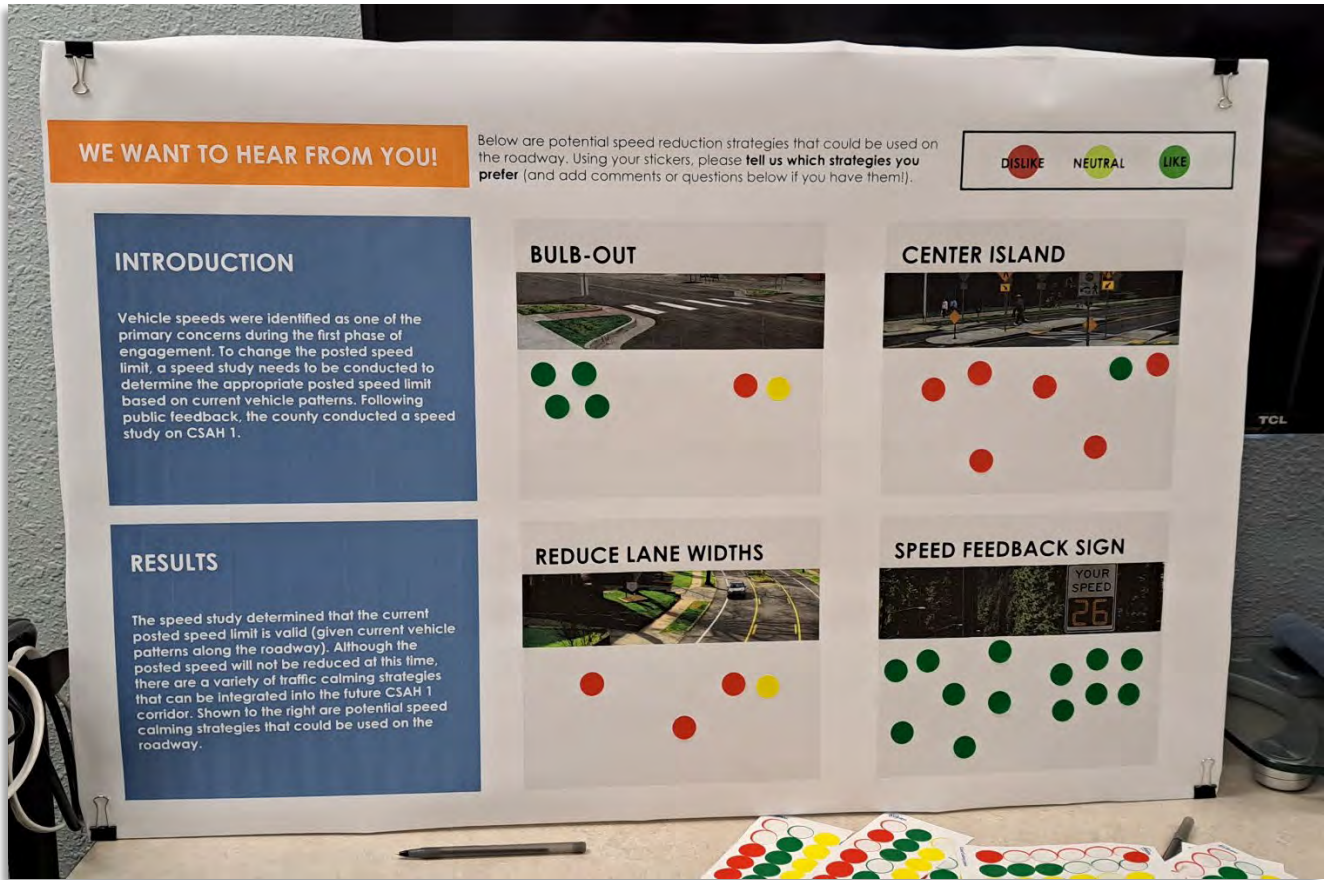
To understand what community members wanted to see along the south side of CSAH 1, they were asked to rank their preferences in a dot activity. Attendees could mark “dislike”, “neutral”, or “like” using colored stickers on various alternatives. **Most attendees preferred the “Wide Shoulder” option, with most disliking a trail on the southern side of CSAH 1.**



|         | Wide Shoulder | Sidewalk | Trail |
|---------|---------------|----------|-------|
| LIKE    | 12            | 2        | 1     |
| NEUTRAL | 0             | 3        | 0     |
| DISLIKE | 3             | 8        | 13    |

## Speed Reduction Strategies

A high-level summary of the speed study conducted on CSAH 1 was presented, alongside various speed reduction strategies. **Most open house attendees preferred speed feedback signs, with most disliking a center island.**



|         | Bulb-Out | Center Island | Reduce Lane Widths | Speed Feedback Sign |
|---------|----------|---------------|--------------------|---------------------|
| LIKE    | 4        | 1             | 0                  | 13                  |
| NEUTRAL | 1        | 0             | 1                  | 0                   |
| DISLIKE | 1        | 6             | 3                  | 0                   |

### *Comment Cards*

Attendees were also invited to provide feedback through written comment cards. Below are the submitted comments:

Alt. B1 or C seem to be the best alternatives to me, which will have longevity. We've lived there 60 years and would like to have a roadway design which will take the area safely into the future.

[Comment card included a sketch of the 9<sup>th</sup> Avenue Intersection and CSAH 1, emphasizing the poor sight lines when turning off 9<sup>th</sup> Avenue around the corner lot]

### *Verbal Comments*

Following the project presentation, project staff were available for questions and discussion. Below is a summary of questions/comments received during this time:

#### **Comment/Question**

Would sidewalk clearing be the resident's responsibility?

Is there a no-change option?

Concern over right-of-way takings, some properties were taken through eminent domain previously.

Those who park on-street are concerned about being hit

Environmental concerns about runoff into the Mississippi River

Traffic often rides curb line near Heim Milling, impacts those trying to leave their residence

General agreement that an "urban" feel is not desired

Speed reduction is desired

Frequent rear-end concerns when right-turning into driveways

A potential center turn-lane could ease right-turn congestion, but may be used as an illegal passing lane

What is the pedestrian/bicycle demand?

Having multimodal facilities on only one side is a pedestrian/bicycle safety concern when crossing

Safety concerns when crossing road to get mail

Consider contaminated soil if building on old gas station lot

Remove crest when coming onto CSAH 1 from 9<sup>th</sup> Avenue

How do we find easement/ROW impacts from this project?

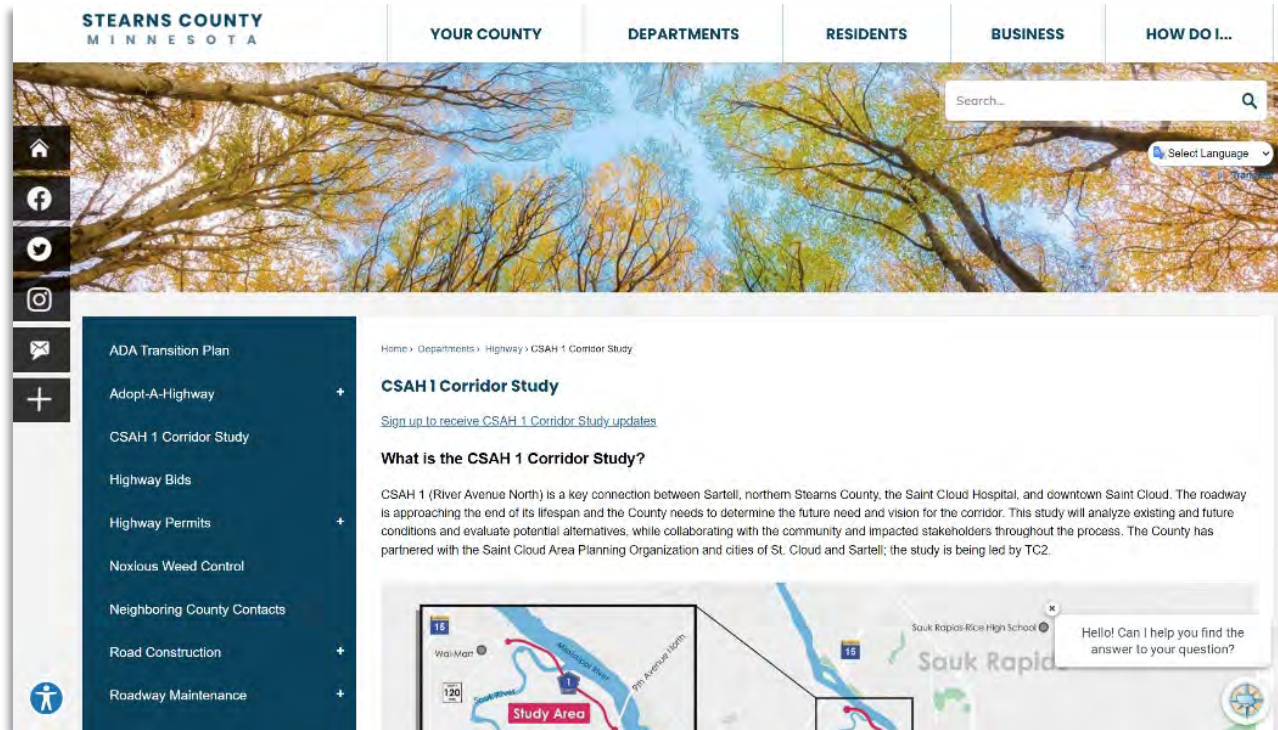
Shrubs make sightlines difficult

## Online Promotion

Community members could also engage with the study through online opportunities. This included a project website and online survey. These online engagement opportunities ensure that those who cannot attend in-person events are able to express feedback.

### *Project Website*

The project website includes information on the study, relevant documents (such as existing condition reports or engagement summaries) and links to engagement opportunities. During Phase 2, the website included links to the online survey as well as an invitation to attend the second Open House.

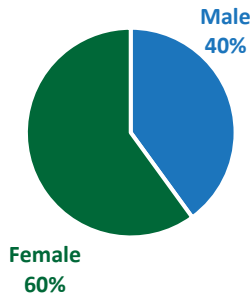




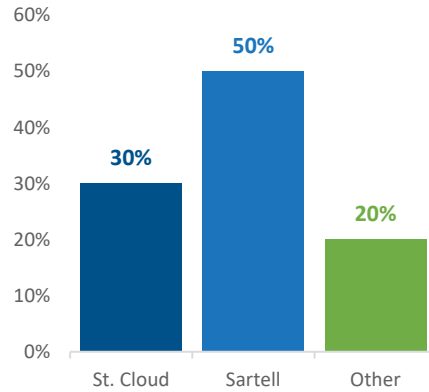
*Online Survey*

A total of 10 survey responses were collected during the first phase of engagement. Below is a summary of demographic information (self-identified by respondents):

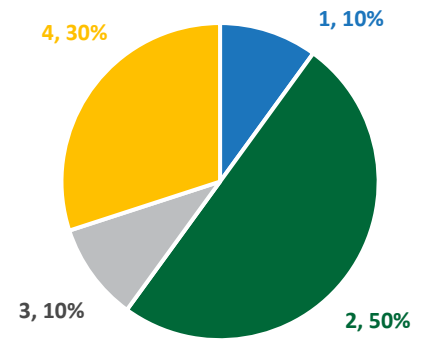
**Gender**



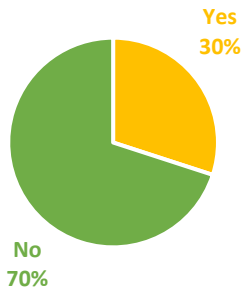
**Residence**



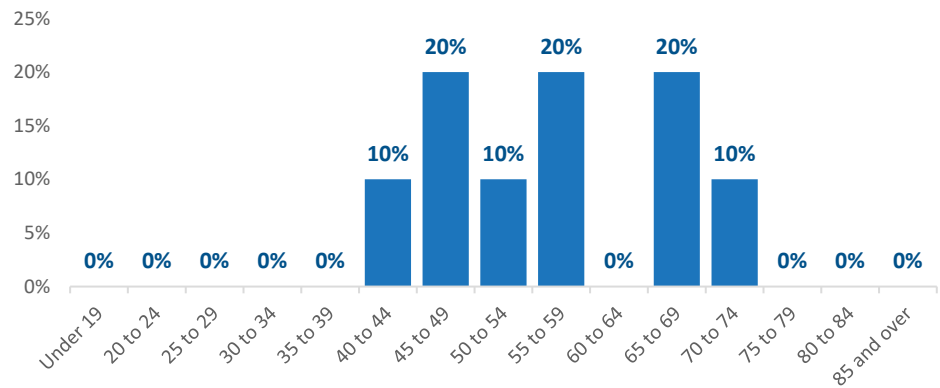
**People in Household**



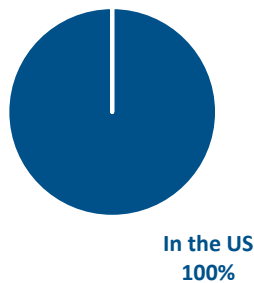
**Disability**



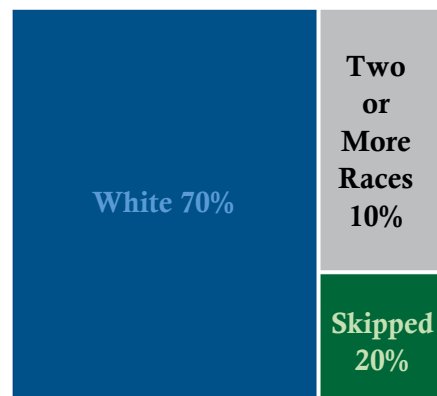
**Age**



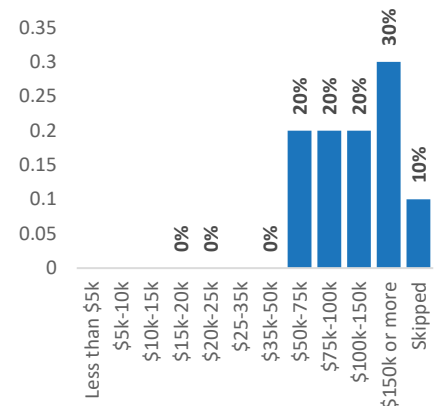
**Place of Birth**



**Ethnicity**



**Income**



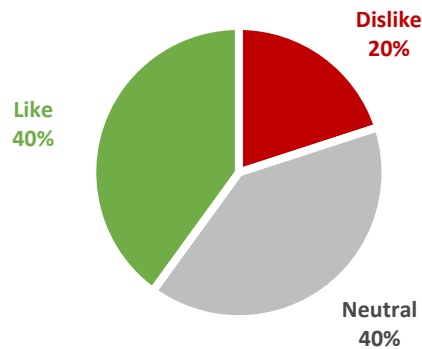
The following questions related to the CSAH 1 Corridor Alternatives:

How would you rate Alternative A: 2 Lane with Sidewalk and Trail?



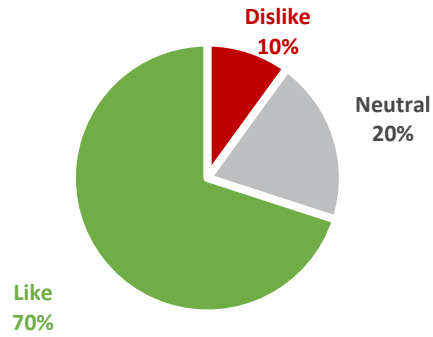
Most respondents **dislike** Alternative A

How would you rate Alternative B1: 3 Lane with Sidewalk and Trail?



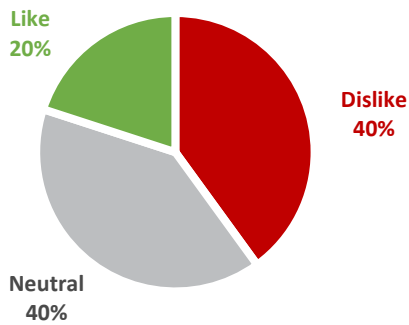
Most respondents are **neutral or like** Alternative B1

How would you rate Alternative B2: 3 Lane with Trail Only?



Most respondents like Alternative B2

How would you rate Alternative C: 5 Lane with Sidewalk and Trail?



Most respondents dislike or are neutral about Alternative C

Please share any comments or questions you have about the roadway alternatives:

The four lane with center turn lane may encourage more speeding. Also, this configuration makes it unsafe to cross as a pedestrian. Design to encourage a safe speed by all vehicles.

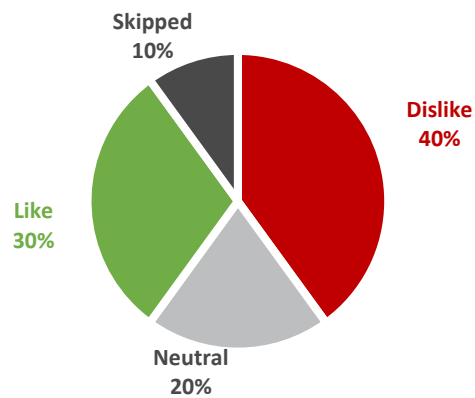
Something needs to be done to improve driving along this highway that connects St. Cloud to the rest of the world. People can't decide to live along a county highway and then try to change it to a residential street

B2 seems to give the most safety improvements with the least impact to the environment and neighbors.

Alt C: Is good for traffic and consistent with design of the NW existing segment, less the sidewalk. Alt C: Not so good as it causes a pinch point by residential dwellings, thus requiring approximately three relocations. It may also cause geometry issues with CR 120 and round-a-bout. Alt C: Speed may become a larger issue. Would be of concern for postal delivery. Quieting traffic: All Alternates - consider narrowing lanes and widening outside shoulders and use of extra wide lane lines. MNDOT has used this to quiet traffic speed on TH 24 northerly of Annandale. Consider working with postmaster to install bump out lane for accessing neighborhood mailbox gangs. High concerns with speed and mail access. Pathway should have higher consideration than the sidewalk if one as to go. Pedestrian crossing points should have warning light consideration at logical/periodic points along the corridor. Pathways need to have logical extensions throughout the connecting systems.

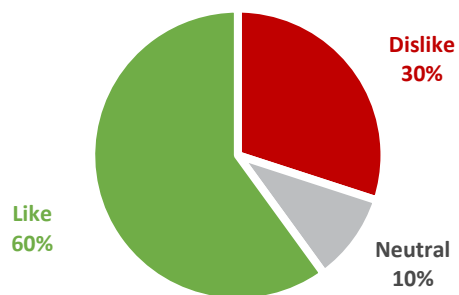
The following questions related to the CSAH 1 Bridge Alternatives.

How would you rate Bridge Alternative A: 2 Lane with Sidewalk and Trail?



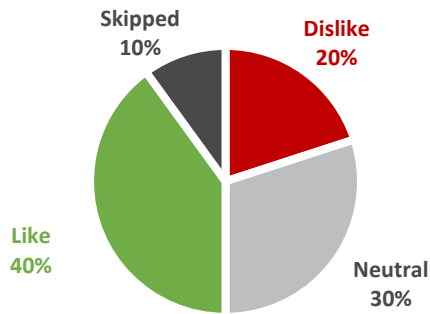
Most respondents **dislike** Bridge Alternative A

How would you rate Bridge Alternative B1: 3 Lane with Sidewalk and Trail?



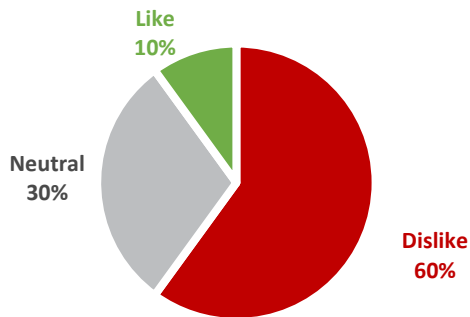
Most respondents **like** Bridge Alternative B1

How would you rate Bridge Alternative B2: 3 Lane with Trail Only?



Most respondents like or are neutral about Bridge Alternative B2

How would you rate Bridge Alternative C: 5 Lane with Sidewalk and Trail?



Most respondents dislike Bridge Alternative C

Please share any comments or questions you have about the bridge alternatives:

See previous comments that may carryover.

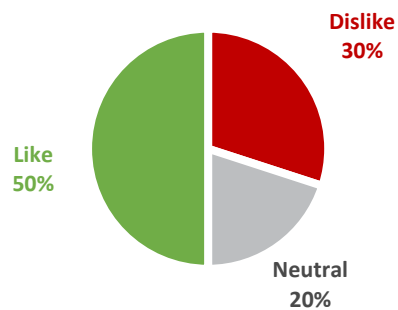
same comment - 4 lane with center turn lane encourages speed and is not safe for pedestrians.

Safety! Is bigger always better? No!

One side with a trail and three lanes should do enough.

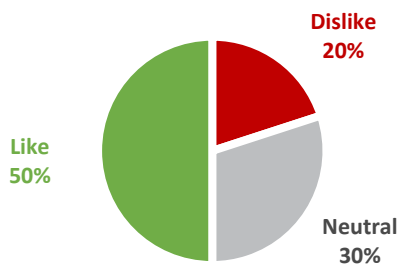
The following questions related to the CSAH 1 and 9<sup>th</sup> Avenue Intersection Alternatives.

How would you rate Intersection Alternative 1: Adding a second left-turn lane?



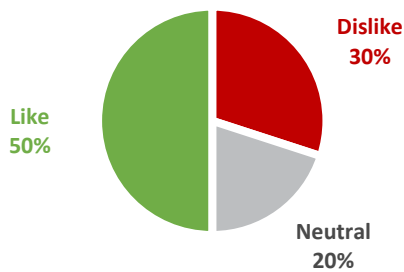
Most respondents like Intersection Alternative 1

How would you rate Intersection Alternative 2: Relocating neighborhood access?



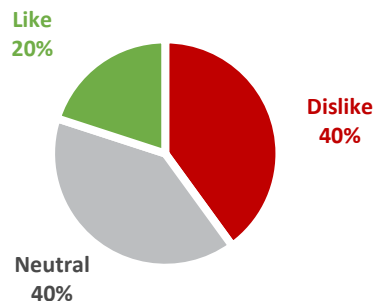
Most respondents like Intersection Alternative 2

How would you rate Intersection Alternative 3: Combination of Alts 1 and 2?



Most respondents like Intersection Alternative 3

How would you rate Intersection Alternative 4: Roundabout?



Most respondents are neutral or dislike Intersection Alternative 4



**Please share any comments or questions you have about the 9<sup>th</sup> Avenue alternatives:**

Sometimes it is nice to have signals instead of roundabouts to build in gaps in the traffic platoons downstream from the intersection. Especially during peak hours.

NOT A ROUNDABOUT! Too heavy of traffic.

If a round about is put in there are going to be backs into st cloud and sauk rapids. And if there are 2 left turn lanes then that will cause a huge back up on the bridge from sauk rapids.

Alt 4 seems best overall. Switching residential access back to the south would seem to cause safety issues while waiting for safe gap in southbound.

The following question related to alternatives for the southern side of CSAH 1.

How would you rank these alternatives? Top/Option 1 being most preferred

OPTION: WIDE SHOULDER

OPTION: SIDEWALK

OPTION: TRAIL



The trail option was most preferred (highest average score based on weighted ranking)

|                  | Rank 1 | Rank 2 | Rank 3 | Average Score |
|------------------|--------|--------|--------|---------------|
| TRAIL            | 5      | 2      | 3      | 2.2           |
| SHOULDER/PARKING | 3      | 3      | 4      | 1.9           |
| SIDEWALK         | 2      | 5      | 3      | 1.9           |

Please share any comments or questions you have about the shoulder/parking, sidewalk, or trail options:

Your click and drag doesnt work

Trail should definitely capitalize on the river views.

Parking on busy roadway should not be promoted.

It would be nice to have trail on both sides to hookup with existing trails.

The following question related to speed reduction strategies

Which speed reduction strategies would you prefer?

Speed feedback signs were most preferred



|                     | Rank 1 | Rank 2 | Rank 3 | Rank 4 | Average Score |
|---------------------|--------|--------|--------|--------|---------------|
| BULB-OUT            | 2      | 1      | 0      | 6      | 1.89          |
| CENTER ISLAND       | 0      | 3      | 6      | 0      | 2.33          |
| REDUCE LANE WIDTHS  | 2      | 4      | 2      | 1      | 2.78          |
| SPEED FEEDBACK SIGN | 5      | 1      | 1      | 2      | 3.00          |

Please share any comments or questions you have about the speed reduction strategies:

Thanks for asking

Please consider snow removal and storage for winter for both public road maintenance and the residents who live along here.



**Stearns County - CSAH 1 Improvements**

Concept Cost Estimate (based upon 2022 bid price information)  
Prepared By: SRF Consulting Group, Inc., December 2023

| ITEM DESCRIPTION  | UNIT     | UNIT PRICE  | CSAH 1        |                     | 9th - Alt A   |                  | 9th - Alt B   |                    | 9th - Alt C   |                    | 9th - Alt D   |                    |
|---|----------|-------------|---------------|---------------------|---------------|------------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|
|   |          |             | EST. QUANTITY | EST. AMOUNT         | EST. QUANTITY | EST. AMOUNT      | EST. QUANTITY | EST. AMOUNT        | EST. QUANTITY | EST. AMOUNT        | EST. QUANTITY | EST. AMOUNT        |
| <b>PAVING AND GRADING COSTS</b>                                     |          |             |               |                     |               |                  |               |                    |               |                    |               |                    |
| GrP 1 2106 Excavation - common & subgrade (11/21/31/41/51/61/91/10) | cu. vd.  | \$25.40     | 11,830        | \$300,482           | 1,780         | \$45,212         | 1,825         | \$46,355           | 3,610         | \$91,694           | 7,860         | \$199,644          |
| GrP 2 2106 Aggregate Base Class 5 (6/10)                            | cu. vd.  | \$12.00     | 7,980         | \$95,760            | 560           | \$6,720          | 1,170         | \$14,040           | 1,730         | \$20,760           | 2,720         | \$32,640           |
| GrP 3 2106 Granular Subgrade (CV) (5)                               | cu. vd.  | \$16.00     | 15,040        | \$240,640           | 1,220         | \$19,520         | 655           | \$10,480           | 1,670         | \$26,720           | 5,150         | \$82,400           |
| GrP 4 Mainline Pavement (11/7/8/11)                                 | Tons     | \$88.00     | 9,910         | \$872,080           | 700           | \$61,600         | 1,590         | \$139,920          | 2,265         | \$201,080          | 2,640         | \$232,320          |
| GrP 5 Mainline Shoulder Pavement (21/7/8/12)                        | Tons     | \$77.00     | 2,070         | \$159,390           |               |                  |               |                    |               |                    |               |                    |
| GrP 6 Driveway Pavement (13)  | sq. vd.  | \$25.00     | 1,200         | \$30,000            |               |                  |               |                    |               |                    |               |                    |
| GrP 7 Concrete Walk / Trail / Median (4)                            | sq. vd.  | \$82.00     | 2,090         | \$171,380           | 480           | \$39,360         | 365           | \$29,930           | 365           | \$29,930           | 1,155         | \$94,710           |
| GrP 8 Bituminous Walk / Trail (3)                                   | sq. vd.  | \$15.00     | 4,430         | \$66,450            |               |                  |               |                    |               |                    |               |                    |
| GrP 9 ADA Pedestrian Curb Ramp                                      | each     | \$4300.00   | 14            | \$60,200            |               |                  | 4             | \$17,200           | 4             | \$17,200           | 8             | \$34,400           |
| GrP 10 Concrete Curb and Gutter (10)                                | lin. ft. | \$27.00     | 8,680         | \$234,360           | 1,070         | \$28,890         | 2,745         | \$74,115           | 3,815         | \$103,005          | 5,135         | \$138,645          |
| GrP 11 Pavement Edge Drains   | lin. ft. | \$12.00     | 8,680         | \$104,160           | 1,070         | \$12,840         | 2,745         | \$32,940           | 3,815         | \$45,780           | 5,135         | \$61,620           |
| GrP 12 Removals - Pavement (11/2)                                   | sq. vd.  | \$15.00     | 21,210        | \$318,150           | 865           | \$12,975         | 4,560         | \$68,400           | 5,420         | \$81,300           | 11,690        | \$175,350          |
| <b>SUBTOTAL PAVING AND GRADING COSTS:</b>                           |          |             |               | <b>\$2,301,052</b>  |               | <b>\$227,117</b> |               | <b>\$433,380</b>   |               | <b>\$620,669</b>   |               | <b>\$1,051,729</b> |
| <b>DRAINAGE, UTILITIES AND EROSION CONTROL</b>                      |          |             |               |                     |               |                  |               |                    |               |                    |               |                    |
| Dr 1 Local Utilities - Sanitary Sewers                              | lin. ft. | \$250       | 3620          | \$905,000           |               |                  |               |                    |               |                    |               |                    |
| Dr 2 Local Utilities - Watermains                                   | lin. ft. | \$200       | 3620          | \$724,000           |               |                  |               |                    |               |                    |               |                    |
| Dr 3 Water Quality Ponds  | I.s.     | \$150,000   | 1             | \$150,000           |               |                  |               |                    |               |                    |               |                    |
| Dr 4 Drainage - urban   | 25%      |             |               | \$576,000           |               | \$57,000         |               | \$109,000          |               | \$156,000          |               | \$263,000          |
| Dr 5 Turf Establishment & Erosion Control                           | 10%      |             |               | \$231,000           |               | \$23,000         |               | \$44,000           |               | \$63,000           |               | \$106,000          |
| Dr 6 Landscaping  | 2%       |             |               | \$50,000            |               | \$5,000          |               | \$9,000            |               | \$13,000           |               | \$22,000           |
| <b>SUBTOTAL DRAINAGE, UTILITIES AND EROSION CONTROL</b>             |          |             |               | <b>\$2,633,000</b>  |               | <b>\$85,000</b>  |               | <b>\$162,000</b>   |               | <b>\$232,000</b>   |               | <b>\$391,000</b>   |
| <b>BRIDGE COSTS</b>   |          |             |               |                     |               |                  |               |                    |               |                    |               |                    |
| Br 1 Bridge Rehab - CSAH 1 Over Sauk River                          | I.s.     | \$900,000   | 1             | \$900,000           |               |                  |               |                    |               |                    |               |                    |
| <b>SUBTOTAL BRIDGE COSTS:</b>                                       |          |             |               | <b>\$900,000</b>    |               |                  |               |                    |               |                    |               |                    |
| <b>SIGNAL AND LIGHTING COSTS</b>                                    |          |             |               |                     |               |                  |               |                    |               |                    |               |                    |
| SCL 1 Signals Revision  | each     | \$150,000   | 0.5           | \$75,000            | 0.5           | \$75,000         | 0.5           | \$75,000           | 1             | \$150,000          | 1             | \$150,000          |
| SCL 2 Mainline Lighting (permanent)                                 | mile     | \$390,000   | 0.74          | \$288,600           |               | \$75,000         | 0.40          | \$156,000          | 0.60          | \$234,000          | 0.97          | \$378,300          |
| <b>SUBTOTAL SIGNAL AND LIGHTING COSTS:</b>                          |          |             |               | <b>\$363,600</b>    |               | <b>\$75,000</b>  |               | <b>\$231,000</b>   |               | <b>\$384,000</b>   |               | <b>\$528,300</b>   |
| <b>SIGNING &amp; STRIPING COSTS</b>                                 |          |             |               |                     |               |                  |               |                    |               |                    |               |                    |
| SCN 1 Mainline Signing (C&D)  | mile     | \$45,000    | 0.74          | \$33,300            | 0.2           | \$9,000          | 0.4           | \$18,000           | 0.6           | \$27,000           | 1.0           | \$43,650           |
| SCN 2 Mainline Striping   | mile     | \$5,000     | 0.74          | \$3,700             | 0.2           | \$1,000          | 0.4           | \$2,000            | 0.6           | \$3,000            | 1.0           | \$4,850            |
| <b>SUBTOTAL SIGNING &amp; STRIPING COSTS:</b>                       |          |             |               | <b>\$37,000</b>     |               | <b>\$10,000</b>  |               | <b>\$20,000</b>    |               | <b>\$30,000</b>    |               | <b>\$48,500</b>    |
| <b>SUBTOTAL CONSTRUCTION COSTS:</b>                                 |          |             |               | <b>\$6,234,652</b>  |               | <b>\$397,117</b> |               | <b>\$846,380</b>   |               | <b>\$1,266,669</b> |               | <b>\$2,019,529</b> |
| <b>MISCELLANEOUS COSTS</b>  |          |             |               |                     |               |                  |               |                    |               |                    |               |                    |
| M 1 Mobilization  | 8%       |             |               | \$499,000           |               | \$32,000         |               | \$68,000           |               | \$102,000          |               | \$162,000          |
| M 2 Non Quantified Minor Items                                      | 10%      |             |               | \$624,000           |               | \$40,000         |               | \$85,000           |               | \$127,000          |               | \$202,000          |
| M 3 Temporary Pavement & Drainage                                   | 5%       |             |               | \$312,000           |               | \$20,000         |               | \$43,000           |               | \$64,000           |               | \$101,000          |
| M 4 Traffic Control   | 3%       |             |               | \$188,000           |               | \$12,000         |               | \$26,000           |               | \$39,000           |               | \$61,000           |
| <b>SUBTOTAL MISCELLANEOUS COSTS:</b>                                |          |             |               | <b>\$1,623,000</b>  |               | <b>\$104,000</b> |               | <b>\$222,000</b>   |               | <b>\$332,000</b>   |               | <b>\$526,000</b>   |
| <b>ESTIMATED TOTAL CONSTRUCTION COSTS without Contingency:</b>      |          |             |               | <b>\$7,857,652</b>  |               | <b>\$501,117</b> |               | <b>\$1,068,380</b> |               | <b>\$1,598,669</b> |               | <b>\$2,545,529</b> |
| 1 Contingency   | 25%      |             |               | \$1,965,000         |               | \$126,000        |               | \$268,000          |               | \$400,000          |               | \$637,000          |
| <b>ESTIMATED TOTAL CONSTRUCTION COSTS PLUS CONTINGENCY:</b>         |          |             |               | <b>\$9,822,652</b>  |               | <b>\$627,117</b> |               | <b>\$1,336,380</b> |               | <b>\$1,998,669</b> |               | <b>\$3,182,529</b> |
| <b>OTHER PROJECT COSTS:</b>   |          |             |               |                     |               |                  |               |                    |               |                    |               |                    |
| <b>R/W ACQUISITIONS</b>   |          |             |               |                     |               |                  |               |                    |               |                    |               |                    |
| DESIGN ENG. & CONSTRUCTION ADMIN.                                   | Lump Sum | \$1,000,000 | 1             | \$1,000,000         |               |                  | 0.1           | \$100,000          | 0.1           | \$100,000          |               | \$478,000          |
| <b>SUBTOTAL OTHER PROJECT COSTS</b>                                 |          |             |               | <b>\$2,474,000</b>  |               | <b>\$95,000</b>  |               | <b>\$301,000</b>   |               | <b>\$400,000</b>   |               | <b>\$478,000</b>   |
| <b>TOTAL PROJECT COST</b>   |          |             |               | <b>\$12,296,652</b> |               | <b>\$722,117</b> |               | <b>\$1,637,380</b> |               | <b>\$2,398,669</b> |               | <b>\$3,660,529</b> |

- NOTE: (1) Assumed three 12ft lanes for bit surface area used for mainline pavement and pavement removals  
(2) Assumed 5.5 ft wide for shoulder  
(3) Assumed 10ft wide for bit trail on the North side of road  
(4) Assumed 6ft wide for concrete walk on the South side of road  
(5) Assumed 24in for Select Granular Section  
(6) Assumed 11in Aggregate Base Class 5 Section  
(7) Assumed 7in Thick Pavement Section  
(8) Used 145 Pounds Per Foot Cubed for Tonnage Conversion  
(9) Used 4in as Typical Aggregate Class 5 and Common Excavation Under Walk and T1  
(10) Assumed B412 for Curb Typical for Area Calculations  
(11) Used Type SP 9.5 Wearing Course Mix (3,B) for Mainline Paving  
(12) Used Type SP 12.5 Wearing Course Mix (3,C) for Shoulder Paving  
(13) Used 20ft by 20ft for Driveway Areas