Application

13862-2020 Roadway Spot Mobility
14346 - Highway 11 Intersection Improvement Project
Regional Solicitation - Roadways Including Multimodal Elements
Status: Submitted
Submitted Date:
05/15/2020 3:15 PM

## Primary Contact



## Organization Information

Name:

Jurisdictional Agency (if different):
Organization Type: County Government
Organization Website:
Address:
PUBLIC WORKS
11360 HWY 212 W \#1

| $*$ | COLOGNE | Minnesota | Stase/Province |
| :--- | :--- | :--- | :--- |

Phone:*
Ext.

Fax:

PeopleSoft Vendor Number
0000026790A12

## Project Information

Project Name
Primary County where the Project is Located
Cities or Townships where the Project is Located:
Jurisdictional Agency (If Different than the Applicant):

Highway 11 Intersection Improvement Project
Carver
Laketown Township

Brief Project Description (Include location, road name/functional class, type of improvement, etc.)

The Highway 11 Intersection Improvement project will reconstruct the intersection of Highway 11 and 10 in Carver County . Proposed improvements include the expansion of Highway 11 to a four-lane divided section, and the addition of a second eastbound lane on Highway 10 through the project intersection area.

Highway 11, an A-Minor arterial, links the cities of Victoria and Carver to Highway 10 and to US 212. Highway 10, an A-Minor Arterial, serves as a major corridor connecting the cities of Chaska, Victoria, Waconia and Carver, as well as providing access to US 212. Highway 10 is also one of only three major thoroughfares running east-west through Carver County. Due to the large amounts of residential growth in Victoria and Carver in recent years, this intersection serves as an existing and future important hub for local and regional mobility as large amounts of growth are projected to continue in the area in the coming years.

This intersection is over capacity during the peak hours with existing volumes and is currently controlled by a wood pole signal system which was installed in 2013 in response to several severe injury vehicle crashes occurring at the intersection. Since the signal's installation, severe crashes have been reduced, but the growth in area traffic volumes is creating notable operational concerns. Although the signal system serves the intersection well during non-peak hours, the existing geometry of the intersection has met its capacity during the peak hours of the day with queues as long as a quarter mile occurring daily and unacceptable delays for users attempting to access Highway 10 from Highway 11. The issues at the intersection have been noted by county residents and policy makers and this is a high-priority project for the County.

> This project will offer immediate relief in added capacity through the intersection with the installation of additional eastbound and westbound through lanes and extended turn lanes on Highway 10. Highway 11 will be reconstructed to a four-lane divided urban section with dual southbound left turn lanes. The project will connect to an existing multiuse trail, provide improved intersection crossing environment for pedestrians, and proactively accommodate the planned regional trail facility and other future pedestrian facilities planned with future development by limiting future impacts to the intersection. The proposed improvements are expected to efficiently and safely serve the greater area for years to come and accommodate future development in the immediate area.
(Limit 2,800 characters; approximately 400 words)
TRANSPORTATION IMPROVEMENT PROGRAM (TIP) DESCRIPTION - will be used in TIP if the project is selected for funding. See MnDOT's TIP description guidance.

Project Length (Miles)
Reconstruction of CSAH 11 and CSAH 10 Intersection in Carver County
1.0
to the nearest one-tenth of a mile

## Project Funding

Are you applying for competitive funds from another source(s) to No
implement this project?
If yes, please identify the source(s)
Federal Amount \$2,937,600.00
Match Amount \$734,400.00
Minimum of $20 \%$ of project total
Project Total \$3,672,000.00
For transit projects, the total cost for the application is total cost minus fare revenues.
Match Percentage 20.0\%
Minimum of 20\%
Compute the match percentage by dividing the match amount by the project total
Source of Match Funds
A minimum of $20 \%$ of the total project cost must come from non-federal sources; additional match funds over the $20 \%$ minimum can come from other federal sources

Preferred Program Year

Select 2022 or 2023 for TDM projects only. For all other applications, select 2024 or 2025 .
Additional Program Years:
2022, 2023
Select all years that are feasible if funding in an earlier year becomes available.

## Project Information: Roadway Projects

| County, City, or Lead Agency | Carver County |
| :---: | :---: |
| Functional Class of Road | A-Minor Arterial Connector |
| Road System | CSAH |
| TH, CSAH, MSAS, CO. RD., TWP. RD., CITY STREET |  |
| Road/Route No. | 11 |
| i.e., 53 for CSAH 53 |  |
| Name of Road | Victoria Blvd/Jonathan Carver Pkwy. |
| Example; 1st ST., MAIN AVE |  |
| Zip Code where Majority of Work is Being Performed | 55318 |
| (Approximate) Begin Construction Date | 05/01/2024 |
| (Approximate) End Construction Date | 09/30/2024 |
| TERMINI:(Termini listed must be within 0.3 miles of any work) |  |
| From: <br> (Intersection or Address) | $800 \mathrm{ft} \mathrm{S} \mathrm{of} \mathrm{Guernsey} \mathrm{Ave}$, |
| To: <br> (Intersection or Address) | 1,200 ft N of CSAH 10, 1,600 ft E of CSAH 11 |
| DO NOT INCLUDE LEGAL DESCRIPTION |  |
| Or At |  |
| Miles of Sidewalk (nearest 0.1 miles) | 0 |
| Miles of Trail (nearest 0.1 miles) | 0.2 |
| Miles of Trail on the Regional Bicycle Transportation Network (nearest 0.1 miles) | 0.2 |
| Primary Types of Work | Grading, Agg Base, Bituminous Surface, Signals, Bike Path |
| Examples: GRADE, AGG BASE, BIT BASE, BIT SURF, SIDEWALK, CURB AND GUTTER,STORM SEWER, SIGNALS, LIGHTING, GUARDRAIL, BIKE PATH, PED RAMPS, BRIDGE, PARK AND RIDE, ETC. |  |
| BRIDGE/CULVERT PROJECTS (IF APPLICABLE) |  |
| Old Bridge/Culvert No.: |  |
| New Bridge/Culvert No.: |  |
| Structure is Over/Under <br> (Bridge or culvert name): |  |

## Requirements - All Projects

## All Projects

1.The project must be consistent with the goals and policies in these adopted regional plans: Thrive MSP 2040 (2014), the 2040 Transportation Policy Plan (2018), the 2040 Regional Parks Policy Plan (2018), and the 2040 Water Resources Policy Plan (2015).

Check the box to indicate that the project meets this requirement. Yes
2. The project must be consistent with the 2040 Transportation Policy Plan. Reference the 2040 Transportation Plan goals, objectives, and strategies that relate to the project.

Briefly list the goals, objectives, strategies, and associated pages:

The project aligns with the 2040 Transportation Policy Plan by prioritizing the following goals and strategies:

Goal: Safety and Security (p. 60)

Objective: A) Reduce crashes and improve safety and security for all modes of passenger travel and freight transport (p. 60)

Strategies: B1) Regional transportation partners will incorporate safety and security considerations for all modes and users throughout the processes of planning, funding, construction, and operation (p. 2.20); and B3) Regional transportation partners should monitor and routinely analyze safety and security data by mode and severity to identify priorities and progress (p. 2.21).

Goal: Access to Destinations (p. 62)

Objectives: B) Increase travel time reliability and predictability for travel on highway and transit systems.

Strategies: C9) The Metropolitan Council will support investments in A-minor arterials that build, manage, or improve the system's ability to supplement the capacity of the Principal Arterial system and support access to the region's job, activity, and industrial and manufacturing concentrations (p. 2.32); and C15) Regional transportation partners should focus investments on completing Priority Regional Transportation Corridors and on improving the larger Regional Bicycle Transportation Network (p. 2.36).

Goal: Competitive Economy (p. 64)

Objective: B.) Invest in a multimodal transportation system to attract and retain businesses and
residents (p. 64)

Strategies: D2) The Metropolitan Council will coordinate with other agencies planning and pursuing transportation investments that strengthen connections to other regions in Minnesota and the Upper Midwest, the nation, and world including intercity bus and passenger rail, highway corridors, air service, and freight infrastructure (p. 2.38).

Goal: Healthy Environment (p. 66)

Objectives: A) Reduce transportation-related air emissions.

Strategies: E2) The Metropolitan Council and MnDOT will consider reductions in transportationrelated emissions of air pollutants and greenhouse gases when prioritizing transportation investments (p. 2.43).

Goal: Leveraging Transportation Investment to Guide Land Use (p. 70)

Objectives: B) Maintain adequate highway, riverfront, and rail-accessible land to meet existing and future demand for freight movement; C) Encourage local land use design that integrates highways, streets, transit, walking, and bicycling.

Strategies: F2) Local governments should plan for increased density and a diversification of uses in job concentrations, nodes along corridors, and local centers to maximize the effectiveness of the transportation system (p. 2.49); F3) governments will plan, build, operate, maintain, and rebuild an adequate system of interconnected hwys and local roads (p. 2.50).
3.The project or the transportation problem/need that the project addresses must be in a local planning or programming document. Reference the name of the appropriate comprehensive plan, regional/statewide plan, capital improvement program, corridor study document [studies on trunk highway must be approved by the Minnesota Department of Transportation and the Metropolitan Council], or other official plan or program of the applicant agency [includes Safe Routes to School Plans] that the project is included in and/or a transportation problem/need that the project addresses.
a.Carver County 2040 Comprehensive Plan (2018): i.A reconstruction of CSAH 10 from Clover Ridge Drive to CSAH is identified and programmed in the CIP with construction between 2018 and 2023.
ii.A reconstruction of CSAH 10 from CSAH 11 to CSAH 43 is identified and programmed in the CIP with construction targeted between 2029 and 2033.
iii.CSAH 10 is identified as a Tier 2 RBTN alignment from TH 212 to Waconia.
iv.Highway 10 connects TH 7, TH 5, and TH 212 (a Tier 1 Freight Corridor) connecting to freight generators in Waconia and Chaska.
b.Carver County Roadway Safety Plan (2013)
i.This plan has a goal of reducing severe crashes in the county by documenting at-risk locations and identified Highway 10/11 intersection as a priority.
List the applicable documents and pages:
1.The Highway 10 and Highway 11 intersection was recently signalized and no projects are assigned.
c.City of Chaska 2030 Comprehensive Plan (2008)
i. The expansion of Highway 10 to four lanes from the western Chaska city limits to Highway 11 is identified
ii.Highway 11 from TH 212 to Highway 18 is anticipated to be expanded to four lanes.
iii.Capacity issues are identified on Highway 10 (Engler Boulevard) from the western Chaska city limits to TH 212.
d.City of Chaska 2040 Draft Comprehensive Plan (2018-2019)
i.The Highway 10 corridor is identified as a Tier 2

Alignment on the RBTN. Creek Road is identified as a Tier 2 Corridor.
ii.The plan identifies future off-street trails on Highway 10, Highway 11, Creek Road, Clover Ridge Drive south of Highway 10, on the TCWR rail line running SW to NE.
iii.Chaska places priority on planning local on- and off-road bikeway networks to connect to the designated Tier 1 and Tier 2 alignments. Local trails in Chaska provide important connections to the Minnesota River Bluffs LRT Regional Trail and the Southwest Regional Trail. e.City of Victoria 2040 Comprehensive Plan (20182019)
i.Highway 10 (Engler Boulevard) from Highway 11 (Jonathon Carver Parkway) to West Chaska Creek is assumed to be expanded to a 4-lane divided arterial by 2040 which is consistent with the Carver County Plan and the Met Council's TPP.
f.Highway 10 Corridor Study (2018-2020)
i. The study found that the CSAH 10/11 intersection is currently operating at an overall LOS D, and several movements are suffering unacceptable delays during the peak hours.

Limit 2,800 characters, approximately 400 words
4. The project must exclude costs for studies, preliminary engineering, design, or construction engineering. Right-of-way costs are only eligible as part of transit stations/stops, transit terminals, park-and-ride facilities, or pool-and-ride lots. Noise barriers, drainage projects, fences, landscaping, etc., are not eligible for funding as a standalone project, but can be included as part of the larger submitted project, which is otherwise eligible.

Check the box to indicate that the project meets this requirement. Yes
5.Applicants that are not State Aid cities or counties in the seven-county metro area with populations over 5,000 must contact the MnDOT Metro State Aid Office prior to submitting their application to determine if a public agency sponsor is required.

Check the box to indicate that the project meets this requirement. Yes
6.Applicants must not submit an application for the same project elements in more than one funding application category.

Check the box to indicate that the project meets this requirement. Yes
7.The requested funding amount must be more than or equal to the minimum award and less than or equal to the maximum award. The cost of preparing a project for funding authorization can be substantial. For that reason, minimum federal amounts apply. Other federal funds may be combined with the requested funds for projects exceeding the maximum award, but the source(s) must be identified in the application. Funding amounts by application category are listed below.
Strategic Capacity (Roadway Expansion): \$1,000,000 to \$10,000,000
Roadway Reconstruction/Modernization: \$1,000,000 to \$7,000,000
Traffic Management Technologies (Roadway System Management): \$250,000 to \$3,500,000
Spot Mobility and Safety: \$1,000,000 to \$3,500,000
Bridges Rehabilitation/Replacement: \$1,000,000 to \$7,000,000
Check the box to indicate that the project meets this requirement. Yes
8. The project must comply with the Americans with Disabilities Act (ADA).

Check the box to indicate that the project meets this requirement. Yes
9.In order for a selected project to be included in the Transportation Improvement Program (TIP) and approved by USDOT, the public agency sponsor must either have a current Americans with Disabilities Act (ADA) self-evaluation or transition plan that covers the public right of way/transportation, as required under Title II of the ADA. The plan must be completed by the local agency before the Regional Solicitation application deadline. For the 2022 Regional Solicitation funding cycle, this requirement may include that the plan is updated within the past five years.

The applicant is a public agency that employs 50 or more people and has a completed ADA transition plan that covers the public Yes right of way/transportation.

Date plan completed: 02/18/2014

Link to plan:
https://www.co.carver.mn.us/home/showdocument? id=1164

The applicant is a public agency that employs fewer than 50
people and has a completed ADA self-evaluation that covers the public right of way/transportation.

Date self-evaluation completed:
Link to plan:
Upload plan or self-evaluation if there is no link
Upload as PDF
10. The project must be accessible and open to the general public.

Check the box to indicate that the project meets this requirement. Yes
11.The owner/operator of the facility must operate and maintain the project year-round for the useful life of the improvement, per FHWA direction established 8/27/2008 and updated 6/27/2017.

Check the box to indicate that the project meets this requirement. Yes
12. The project must represent a permanent improvement with independent utility. The term independent utility means the project provides benefits described in the application by itself and does not depend on any construction elements of the project being funded from other sources outside the regional solicitation, excluding the required non-federal match. Projects that include traffic management or transit operating funds as part of a construction project are exempt from this policy.

Check the box to indicate that the project meets this requirement. Yes
13. The project must not be a temporary construction project. A temporary construction project is defined as work that must be replaced within five years and is ineligible for funding. The project must also not be staged construction where the project will be replaced as part of future stages. Staged construction is eligible for funding as long as future stages build on, rather than replace, previous work.

Check the box to indicate that the project meets this requirement. Yes
14. The project applicant must send written notification regarding the proposed project to all affected state and local units of government prior to submitting the application.

Check the box to indicate that the project meets this requirement. Yes

## Roadways Including Multimodal Elements

1.All roadway and bridge projects must be identified as a principal arterial (non-freeway facilities only) or A-minor arterial as shown on the latest TAB approved roadway functional classification map.

Check the box to indicate that the project meets this requirement. Yes
Roadway Expansion and Reconstruction/Modernization and Spot Mobility projects only:
2. The project must be designed to meet 10-ton load limit standards.

Check the box to indicate that the project meets this requirement. Yes
Bridge Rehabilitation/Replacement and Strategic Capacity projects only:
3.Projects requiring a grade-separated crossing of a principal arterial freeway must be limited to the federal share of those project costs identified as local (non-MnDOT) cost responsibility using MnDOTs Cost Participation for Cooperative Construction Projects and Maintenance Responsibilities manual. In the case of a federally funded trunk highway project, the policy guidelines should be read as if the funded trunk highway route is under local jurisdiction.

Check the box to indicate that the project meets this requirement.
4. The bridge must carry vehicular traffic. Bridges can carry traffic from multiple modes. However, bridges that are exclusively for bicycle or pedestrian traffic must apply under one of the Bicycle and Pedestrian Facilities application categories. Rail-only bridges are ineligible for funding.

Check the box to indicate that the project meets this requirement.
Bridge Rehabilitation/Replacement projects only:
5.The length of the bridge must equal or exceed 20 feet

Check the box to indicate that the project meets this requirement.
6. The bridge must have a National Bridge Inventory Rating of 6 or less for rehabilitation projects and 4 or less for replacement projects.

Check the box to indicate that the project meets this requirement.
Roadway Expansion, Reconstruction/Modernization, and Bridge Rehabilitation/Replacement projects only:
7. All roadway projects that involve the construction of a new/expanded interchange or new interchange ramps must have approval by the Metropolitan Council/MnDOT Interchange Planning Review Committee prior to application submittal. Please contact Michael Corbett at MnDOT ( Michael.J.Corbett@state.mn.us or 651-234-7793) to determine whether your project needs to go through this process as described in Appendix F of the 2040 Transportation Policy Plan.

Check the box to indicate that the project meets this requirement. Yes

Requirements - Roadways Including Multimodal Elements

## Specific Roadway Elements

## CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES

Removals (approx. 5\% of total cost) ..... \$194,800.00
Roadway (grading, borrow, etc.) ..... \$251,000.00
Roadway (aggregates and paving) ..... \$1,217,000.00
Subgrade Correction (muck) ..... $\$ 0.00$
Storm Sewer ..... $\$ 450,000.00$
Ponds ..... $\$ 0.00$
Concrete Items (curb \& gutter, sidewalks, median barriers) ..... \$385,900.00
Traffic Control ..... \$122,600.00
Striping ..... \$39,300.00
Signing ..... \$39,300.00
Lighting ..... $\$ 0.00$
Turf - Erosion \& Landscaping ..... \$156,100.00
Bridge ..... $\$ 0.00$
Retaining Walls ..... $\$ 0.00$
Noise Wall (not calculated in cost effectiveness measure) ..... $\$ 0.00$
Traffic Signals ..... \$250,000.00
Wetland Mitigation ..... $\$ 0.00$
Other Natural and Cultural Resource Protection ..... $\$ 0.00$
RR Crossing ..... $\$ 0.00$
Roadway Contingencies ..... $\$ 414,200.00$
Other Roadway Elements ..... $\$ 0.00$
Totals ..... \$3,653,700.00
Specific Bicycle and Pedestrian Elements
CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES
Cost
Path/Trail Construction ..... \$13,800.00
Sidewalk Construction ..... $\$ 0.00$
On-Street Bicycle Facility Construction ..... $\$ 0.00$
Right-of-Way ..... $\$ 0.00$
Pedestrian Curb Ramps (ADA) ..... \$4,500.00
Crossing Aids (e.g., Audible Pedestrian Signals, HAWK) ..... $\$ 0.00$
Pedestrian-scale Lighting ..... $\$ 0.00$
Streetscaping ..... $\$ 0.00$
Wayfinding ..... $\$ 0.00$
Bicycle and Pedestrian Contingencies ..... $\$ 0.00$
Other Bicycle and Pedestrian Elements ..... $\$ 0.00$
Totals ..... \$18,300.00
Specific Transit and TDM Elements
CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES Cost
Fixed Guideway Elements ..... $\$ 0.00$
Stations, Stops, and Terminals ..... $\$ 0.00$
Support Facilities ..... $\$ 0.00$Transit Systems (e.g. communications, signals, controls,fare collection, etc.)$\$ 0.00$
Vehicles ..... $\$ 0.00$
Contingencies ..... $\$ 0.00$
Right-of-Way ..... $\$ 0.00$
Other Transit and TDM Elements ..... $\$ 0.00$
Totals ..... $\$ 0.00$
Transit Operating Costs
Number of Platform hours ..... 0
Cost Per Platform hour (full loaded Cost) ..... $\$ 0.00$
Subtotal ..... $\$ 0.00$
Other Costs - Administration, Overhead,etc. ..... $\$ 0.00$
Totals

| Total Cost | $\$ 3,672,000.00$ |
| :--- | :--- |
| Construction Cost Total | $\$ 3,672,000.00$ |
| Transit Operating Cost Total | $\$ 0.00$ |

## Congestion within Project Area:

Free-Flow Travel Speed: 38
The free-flow travel speed is the black number
Peak Hour Travel Speed:

Percentage Decrease in Travel Speed in Peak Hour Compared to Free-Flow (calculation):

Upload the "Level of Congestion" map:
23.68\%

1589483864626_6_CSAH11 Intersection_CongestionMap.pdf

## Congestion on adjacent Parallel Routes:

Adjacent Parallel Corridor US 212

Adjacent Parallel Corridor Start and End Points:
Start Point: West of CSAH 11

End Point:
CSAH 11
Free-Flow Travel Speed:
67
The Free-Flow Travel Speed is black number.
Peak Hour Travel Speed: 15

The Peak-Hour Travel Speed is red number.
Percentage Decrease in Travel Speed in Peak Hour Compared to Free-Flow (calculation):

Upload the "Level of Congestion" map:
1589483864626_6_CSAH11 Intersection_CongestionMap.pdf

## Principal Arterial Intersection Conversion Study:

Proposed at-grade project that reduces delay at a High Priority Intersection:
(100 Points)
Proposed at-grade project that reduces delay at a Medium Priority Intersection:
(90 Points)
Proposed at-grade project that reduces delay at a Low Priority Intersection:
(80 Points)
Not listed as a priority in the study:
(0 Points)

## Congestion Management and Safety Plan IV:

Proposed at-grade project that reduces delay at a CMSP opportunity area:
(100 Points)
Not listed as a CMSP priority location:
Yes
(0 Points)

## Measure C: Current Heavy Commercial Traffic

RESPONSE: Select one for your project, based on the Regional Truck Corridor Study:
Along Tier 1:
Miles:
0
(to the nearest 0.1 miles)
Along Tier 2:
Miles:
0
(to the nearest 0.1 miles)
Along Tier 3:
Miles:
(to the nearest 0.1 miles)
The project provides a direct and immediate connection (i.e., intersects) with either a Tier 1, Tier 2, or Tier 3 corridor:

None of the tiers:

## Measure A: Connection to disadvantaged populations and projects benefits, impacts, and mitigation

1.Sub-measure: Equity Population Engagement: A successful project is one that is the result of active engagement of low-income populations, people of color, persons with disabilities, youth and the elderly. Engagement should occur prior to and during a projects development, with the intent to provide direct benefits to, or solve, an expressed transportation issue, while also limiting and mitigating any negative impacts. Describe and map the location of any low-income populations, people of color, disabled populations, youth or the elderly within a $1 / 2$ mile of the proposed project. Describe how these specific populations were engaged and provided outreach to, whether through community planning efforts, project needs identification, or during the project development process. Describe what engagement methods and tools were used and how the input is reflected in the projects purpose and need and design. Elements of quality engagement include: outreach and engagement to specific communities and populations that are likely to be directly impacted by the project; techniques to reach out to populations traditionally not involved in community engagement related to transportation projects; feedback from these populations identifying potential positive and negative elements of the proposed project through engagement, study recommendations, or plans that provide feedback from populations that may be impacted by the proposed project. If relevant, describe how NEPA or Title VI regulations will guide engagement activities.

Response:
The project service area includes and serves lowincome populations, persons with disabilities, youth and elderly populations, Hispanic population, as well as rural residents typically underserved by transportation investments. A cluster of low-income, Hispanic population is located at the Brandondale Manufactured Home neighborhood approximately 2.5 miles east of the project area with 430 households. The project also connects to the Chaska Public School campus with two middle schools, La Academia, and activity fields and the Chaska Community Center with numerous programs for youth, persons with disabilities, and the elderly. La Academia is a two-way, dual language immersion school that combines Spanish and English-speaking students.

These populations were engaged through the Highway 10 Corridor Study, a robust planning process with a focus on community engagement. Specific outreach to target populations included a pop-up meeting at the Chaska Community Center Lodge Senior Center on March 5, 2020; outreach to the Brandondale Manufactured Home neighborhood and translation of meeting invitations and materials into Spanish; neighborhood meetings; meetings with ISD 112 staff and survey of student's parents regarding transportation priorities for students.

In addition, in person open houses were held on August 21, 2019 and December 19, 2019 with a virtual open house held in March-April 2020. To further reach youth populations and families with children, an interactive online survey and comment map was made available with each round of public outreach. To be as inclusive as possible, residents were notified of public open houses or neighborhood meetings via direct postcard mailing. The mailing list for each open house included over 4,000 addresses. Meeting information was also
shared on social media including Facebook and Twitter and sent out via a project e-bulletin email with a project specific subscriber list of 234 . To reach out to rural populations, the project was presented and discussed at the Laketown Township board meeting three times including during the annual resident meeting with approximately 40 rural residents participating. The proposed improvements were presented to these groups and there is wide support for the project.

Feedback from target populations focused on existing congestion, safety, and access concerns. Specific ways the project was impacted by feedback was to move forward with a near-term project due to major existing issues instead of waiting until the full corridor vision can be realized through development or other major expansion project in order to provide benefits to these populations as soon as possible.
(Limit 2,800 characters; approximately 400 words)
2.Sub-measure: Equity Population Benefits and Impacts: A successful project is one that has been designed to provide direct benefits to lowincome populations, people of color, persons with disabilities, youth and the elderly. All projects must mitigate potential negative benefits as required under federal law. Projects that are designed to provide benefits go beyond the mitigation requirement to proactively provide transportation benefits and solve transportation issues experienced by Equity populations.
a.Describe the projects benefits to low-income populations, people of color, children, people with disabilities, and the elderly. Benefits could relate to pedestrian and bicycle safety improvements; public health benefits; direct access improvements for residents or improved access to destinations such as jobs, school, health care or other; travel time improvements; gap closures; new transportation services or modal options, leveraging of other beneficial projects and investments; and/or community connection and cohesion improvements. Note that this is not an exhaustive list.

Response:
The project will serve low-income, children, and elderly populations most directly by improving the connection and access to US 212 for access to jobs and to the Chaska Public School campus and the Chaska Community Center. Intersection improvements at the Highway 11/10 intersection will decrease travel times through the corridor and increase travel time reliability, this also means a decrease in transportation cost and increases in quality of life. This key intersection improvement will also provide improved and reliable connection to the SouthWest Transit East Creek Transit Station in Chaska where riders connect to jobs throughout the region.

Safety improvements including an enhanced pedestrian environment and an upgraded ADA compliant intersection including the amenities of pedestrian crossings/crosswalk improvements and pedestrian median refuge will serve all users.

Downtown Chaska is an employment destination for much of the Hispanic/Latino population in the area. Through improvements to the Highway 10 corridor, this project will improve motorized and non-motorized access to this employment center and community destinations downtown. The project will also improve emissions and delay for environmental justice populations living in the corridor.
b. Describe any negative impacts to low-income populations, people of color, children, people with disabilities, and the elderly created by the project, along with measures that will be taken to mitigate them. Negative impacts that are not adequately mitigated can result in a reduction in points.
Below is a list of negative impacts. Note that this is not an exhaustive list.
Increased difficulty in street crossing caused by increased roadway width, increased traffic speed, wider turning radii, or other elements that negatively impact pedestrian access.

Increased noise.
Decreased pedestrian access through sidewalk removal / narrowing, placement of barriers along the walking path, increase in auto-oriented curb cuts, etc.
Project elements that are detrimental to location-based air quality by increasing stop/start activity at intersections, creating vehicle idling areas, directing an increased number of vehicles to a particular point, etc.
Increased speed and/or cut-through traffic.
Removed or diminished safe bicycle access.
Inclusion of some other barrier to access to jobs and other destinations.
Displacement of residents and businesses.
Mitigation of temporary construction/implementation impacts such as dust; noise; reduced access for travelers and to businesses; disruption of utilities; and eliminated street crossings.
Other

Response:
This project does not create negative impacts for the low-income populations, people of color, children, people with disabilities, or the elderly in Carver County. The project will improve a deficient intersection and provide mobility and access improvements through a low-cost, high-benefit improvement. Currently, the 2-lane rural highway intersection with turn lanes and a wood pole signal system is a congestion barrier and safety issue for pedestrians in the area. The Highway 11/10 intersection is a key connection for these communities for health, employment, and education opportunities, and the project will provide a reliable, safer, and more efficient connection.

Pedestrian crossings will become safer due to ADA accessibility improvements, crosswalks, and reduced conflict points with traffic through the installation of pedestrian median refuges. Populations with disabilities will be able to cross the roadway without obstacle, using accessible ramps and crossings. Wider shoulders will also greatly improve the pedestrian and bicycle environment in this rural area.

Select one:
3.Sub-measure: Bonus Points Those projects that score at least $80 \%$ of the maximum total points available through sub-measures 1 and 2 will be awarded bonus points based on the geographic location of the project. These points will be assigned as follows, based on the highestscoring geography the project contacts:
a. 25 points to projects within an Area of Concentrated Poverty with 50\% or more people of color
b. 20 points to projects within an Area of Concentrated Poverty
c. 15 points to projects within census tracts with the percent of population in poverty or population of color above the regional average percent
d. 10 points for all other areas

Project is located in an Area of Concentrated Poverty where 50\%
or more of residents are people of color (ACP50):
Project located in Area of Concentrated Poverty:
Projects census tracts are above the regional average for population in poverty or population of color:

Project located in a census tract that is below the regional
average for population in poverty or populations of color or Yes includes children, people with disabilities, or the elderly:
(up to $40 \%$ of maximum score )
Upload the "Socio-Economic Conditions" map used for this measure. The second map created for sub measure A1 can be uploaded on the Other Attachments Form, or can be combined with the "Socio-Economic Conditions" map into a single PDF and uploaded here.

Upload Map
1589484270686_7_CSAH11 Intersection_Socioeconomic Map.pdf

## Measure B: Part 1: Housing Performance Score

|  | Segment Length <br> (For stand-alone <br> projects, enter <br> population from <br> Regional Economy <br> map) within each <br> City/Township | Segment <br> Length/Total <br> Project Length | Score |
| :---: | :---: | :---: | :---: | | Housing Score |
| :---: |
| Multiplied by |
| Segment percent |

## Total Project Length

Total Project Length
Project length entered on the Project Information - General form.

## Housing Performance Score

Total Project Length (Miles) or Population 1.0
Total Housing Score

## Affordable Housing Scoring

## Part 2: Affordable Housing Access

Reference Access to Affordable Housing Guidance located under Regional Solicitation Resources for information on how to respond to this measure and create the map.
If text box is not showing, click Edit or "Add" in top right of page.

There are 10 units of affordable housing directly served by the $1 / 2$ mile buffer of the project area, all of which are owner-occupied Community Land Trust properties. The County can also confirm there are Housing Choice Vouchers being accepted by private landlords throughout this area. Affordability details for each location including number of units, number of bedrooms per unit, level of affordability, funding restrictions, voucher status, and fair housing plan status are listed in the attached documentation.

Also of note is affordable housing served by this project but outside the urban-focused $1 / 2$ mile boundary. The project is located in a rural township guided for 1 building eligibility per 40 acres, so a larger buffer area to define affordable housing served by the project would be consistent with Appendix D of the TPP. A cluster of affordable housing is located about 1 mile northeast of the project area. Another significant area served by the project is located 2-2.5 miles east of the project area and includes owner-occupied properties located in the Brandondale Manufactured Home neighborhood and approved Habitat for Humanity housing (8 units) at the southeast corner of the CSAH 10/TH 41 intersection. Shepherd of the Hill Presbyterian Church located at the southeast corner of CSAH 10/TH 41 intersection recently completed the final plat approval process with the City of Chaska for 8 new lots on the southeast corner of their property that will become twinhomes for Habitat for Humanity. The Brandondale Manufacture Home neighborhood has 430 existing units and is located 2.5 miles east of the project area. With space for up to 493 households, the Brandondale neighborhood is generally affordable to those at less than $30 \%$ of AMI.

The project will improve the transportation system
for these residents by improving reliability and delay, enhancing pedestrian amenities, and better connecting to schools, parks, transit station, and jobs in the community and region. The project will decrease delay and emissions in the corridor for this environmental justice population.

## Measure A: Congestion Reduction/Air Quality

| Total Peak |  |  |
| :---: | :---: | :---: |
| Hour | Total Peak | Total Peak |
| Delay Per | Hour | Hour |
| Vehicle | Delay Per | Delay Per |
| Without | Vehicle | Vehicle |
| The | With The | Reduced |
| Project | Project | by Project |
| (Seconds/ | Seconds/ | (Seconds/ |
| Vehicle) |  | Vehicle) |

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## Vehicle Delay Reduced

Measure B:Roadway projects that do not include new roadway segments or railroad grade-separation elements

```
Total (CO, NOX, and VOC)
    Peak Hour Emissions without the Project (Kilograms):
```

Total (CO, NOX, and VOC)
Peak Hour Emissions with the Project (Kilograms):

Total (CO, NOX, and VOC)
Peak Hour Emissions
Reduced by the Project
(Kilograms):

## Total

| Total Emissions Reduced: | 1.05 |
| :--- | :--- |
| Upload Synchro Report | 1589493103317 _8_Synchro Reports_CSAH 11_AM Peak.pdf |

Please upload attachment in PDF form. (Save Form, then click 'Edit' in top right to upload file.)

Measure B: Roadway projects that are constructing new roadway segments, but do not include railroad grade-separation elements (for Roadway Expansion applications only):

Total (CO, NOX, and VOC)
Peak Hour Emissions without the Project (Kilograms):

Total (CO, NOX, and VOC)
Peak Hour Emissions with the Project (Kilograms):

Total (CO, NOX, and VOC)
Peak Hour Emissions
Reduced by the Project (Kilograms):

0

0

0

## Total Parallel Roadway

Emissions Reduced on Parallel Roadways
0
Upload Synchro Report
Please upload attachment in PDF form. (Save Form, then click 'Edit' in top right to upload file.)

## New Roadway Portion:

Cruise speed in miles per hour with the project: 0
Vehicle miles traveled with the project: 0
Total delay in hours with the project: 0
Total stops in vehicles per hour with the project: 0
Fuel consumption in gallons: 0
Total (CO, NOX, and VOC) Peak Hour Emissions Reduced or 0
Produced on New Roadway (Kilograms):
EXPLANATION of methodology and assumptions used:(Limit
1,400 characters; approximately 200 words)
Total (CO, NOX, and VOC) Peak Hour Emissions Reduced by the Project (Kilograms):
0.0

Measure B:Roadway projects that include railroad grade-separation elements

| Cruise speed in miles per hour without the project: | 0 |
| :--- | :--- |
| Vehicle miles traveled without the project: | 0 |
| Total delay in hours without the project: | 0 |
| Total stops in vehicles per hour without the project: | 0 |
| Cruise speed in miles per hour with the project: | 0 |
| Vehicle miles traveled with the project: | 0 |
| Total delay in hours with the project: | 0 |
| Total stops in vehicles per hour with the project: | 0 |
| Fuel consumption in gallons (F1) | 0 |
| Fuel consumption in gallons (F2) | 0 |
| Fuel consumption in gallons (F3) | 0 |
| Total (CO, NOX, and VOC) Peak Hour Emissions Reduced by the | 0 |
| Project (Kilograms): |  |
| EXPLANATION of methodology and assumptions used:(Limit |  |
| 1,400 characters; approximately 200 words) |  |

## Measure A: Benefit of Crash Reduction

Crash Modification Factor Used:
(Limit 700 Characters; approximately 100 words)

Rationale for Crash Modification Selected:
CMF's used in the crash reduction associated with intersection improvements include upgrading the typical sections at the intersection to a divided section.

The project intersection has historically been a location with concerning safety issues. The intersection was sidestreet stop controlled up to 2013 when the County implemented a temporary wood pole signal system to provide a higher degree of safety for sidestreet movements. The signal system has largely corrected the crash issues, but this system was not meant to be a permanent countermeasure. While the temporary signal that is currently in place has been provided the desired safety benefit for over 5 years, the remaining crash issues can be associated with the 2-lane undivided rural section currently in place. Dividing this high speed, high volume roadway is expected to provide reductions in all crash types.

| Project Benefit (\$) from B/C Ratio | $\$ 1,072,024.00$ |
| :--- | :--- |
| Total Fatal (K) Crashes: | 0 |
| Total Serious Injury (A) Crashes: | 0 |
| Total Non-Motorized Fatal and Serious Injury Crashes: | 0 |
| Total Crashes: | 19 |
| Total Fatal (K) Crashes Reduced by Project: | 0 |
| Total Serious Injury (A) Crashes Reduced by Project: | 0 |
| Total Non-Motorized Fatal and Serious Injury Crashes Reduced by | 0 |
| Project: | 1 |
| Total Crashes Reduced by Project: | $1589493453527 \_9 \_$Safety-BC-CMF-Crash.pdf |
| Worksheet Attachment |  |

## Measure A: Multimodal Elements and Existing Connections

The improvements to the intersection will include marked pedestrian crossings of two legs on the intersection. ADA compliant pedestrian ramps will be accompanied by APS push buttons and countdown timers to best guide pedestrians across this busy corridor. While the intersection is currently served by one existing trail on the south leg of the intersection, pedestrian facilities, including a regional trail along CSAH 10 are planned with future improvements as the area develops. Implementing best-practice pedestrian facilities at the intersection as part of this project will minimize the need for impacts to the roadway as pedestrian facilities are built out and the area's planned developments begin to generate pedestrian traffic. Wider shoulders are also included as part of this rural project, which will provide an improved pedestrian and bicyclist environment at the intersection.

As an intersection improvement project, the major focus of multimodal components is to improve the crossing and pedestrian connection across the CSAH 11/10 intersection. The proposed project will incorporate the existing multi-use trail on the east side of CSAH 11 and add an ADA compliant, accessible pedestrian signal system at the busy CSAH 11/10 intersection. The project will also improve on-road facilities in this rural area, and set up the intersection to accommodate future expansion of the bicycle and pedestrian system as the area develops.

The project is located in a rural township area where wide shoulders on County roads serve as a connection for multimodal users. The addition of thru-lanes and/or wider shoulders to the intersection area on all legs will better accommodate on-road bicyclists and pedestrians compared to the minimal aggregate shoulder within the project area.

The project includes the RBTN Tier 2 alignment and regional trail corridor along CSAH 10. The trail along CSAH 11 from the intersection south is also an RBTN Tier 2 Alignment. The intersection improvement will better serve the existing trail system and be set up to incorporate multimodal improvements as the area develops. This area is within the future City of Victoria and City of Chaska, and both cities and the County plan to build the trail network with development. Preparing the intersection for the forecasted multi-modal traffic associated with future development in the nearterm will promote development and minimize impacts to the roadway with future pedestrian-scale projects.

The CSAH 10 RBTN Tier 2 alignment and regional trail corridor will connect from the City of Waconia
to the City of Chaska and continue into Hennepin County when complete. The trail's crossing of CSAH 11 will be a major junction of the trail network and two RBTN alignments, and it is vital that a safe and accessible junction is provided. A multi-use trail following the CSAH 11 corridor from CSAH 10 north to Victoria is also planned as the trail is currently being built south from Victoria with development.

SouthWest Transit provides on-demand transit service, SouthWest Prime, to the cities along the project corridor and utilizes the intersection for connecting trips. This transit service allows residents to use transit in a cost-effective ondemand system. Improvements to this intersection and the bicycle and pedestrian system will provide better access to SouthWest Prime transit service. Improvement to congestion at this intersection will improve access to the SouthWest Transit East Creek Station east of the project area.

# Transit Projects Not Requiring Construction 

If the applicant is completing a transit application that is operations only, check the box and do not complete the remainder of the form. These projects will receive full points for the Risk Assessment.
Park-and-Ride and other transit construction projects require completion of the Risk Assessment below.
Check Here if Your Transit Project Does Not Require Construction

## Measure A: Risk Assessment - Construction Projects

1)Layout (25 Percent of Points)

Layout should include proposed geometrics and existing and proposed right-of-way boundaries.
Layout approved by the applicant and all impacted jurisdictions (i.e., cities/counties that the project goes through or agencies that maintain the roadway(s)). A PDF of the layout must be attached along with letters from each jurisdiction to receive points.

100\%
Attach Layout
1589495027703_CSAH 10_CSAH 11 layout-letter.pdf

Please upload attachment in PDF form.
Layout completed but not approved by all jurisdictions. A PDF of the layout must be attached to receive points.

50\%
Attach Layout
Please upload attachment in PDF form.
Layout has not been started
0\%
Anticipated date or date of completion
2)Review of Section 106 Historic Resources (15 Percent of Points)

No known historic properties eligible for or listed in the National Register of Historic Places are located in the project area, and Yes project is not located on an identified historic bridge

100\%
There are historical/archeological properties present but determination of no historic properties affected is anticipated.

100\%
Historic/archeological property impacted; determination of no adverse effect anticipated

80\%
Historic/archeological property impacted; determination of adverse effect anticipated

40\%
Unsure if there are any historic/archaeological properties in the project area.

0\%
Project is located on an identified historic bridge
3)Right-of-Way (25 Percent of Points)

Right-of-way, permanent or temporary easements either not required or all have been acquired
$100 \%$
Right-of-way, permanent or temporary easements required, plat, legal descriptions, or official map complete

50\%
Right-of-way, permanent or temporary easements required, parcels identified

25\%
Right-of-way, permanent or temporary easements required, parcels not all identified

0\%
Anticipated date or date of acquisition
4)Railroad Involvement (15 Percent of Points)

No railroad involvement on project or railroad Right-of-Way agreement is executed (include signature page, if applicable)

100\%

## Signature Page

Please upload attachment in PDF form.
Railroad Right-of-Way Agreement required; negotiations have begun

50\%
Railroad Right-of-Way Agreement required; negotiations have not begun.

0\%
Anticipated date or date of executed Agreement
5) Public Involvement (20 percent of points)

Projects that have been through a public process with residents and other interested public entities are more likely than others to be successful. The project applicant must indicate that events and/or targeted outreach (e.g., surveys and other web-based input) were held to help identify the transportation problem, how the potential solution was selected instead of other options, and the public involvement completed to date on the project. List Dates of most recent meetings and outreach specific to this project:

Meeting with general public:
Meeting with partner agencies:
Targeted online/mail outreach:
Number of respondents:
Meetings specific to this project with the general public and partner agencies have been used to help identify the project Yes need.

100\%
Targeted outreach to this project with the general public and partner agencies have been used to help identify the project need.

75\%
At least one meeting specific to this project with the general public has been used to help identify the project need.

50\%
At least one meeting specific to this project with key partner agencies has been used to help identify the project need.

50\%
No meeting or outreach specific to this project was conducted, but the project was identified through meetings and/or outreach related to a larger planning effort.

25\%
No outreach has led to the selection of this project.
0\%

This project was developed as part of a full corridor study planning approach, Highway 10 Corridor Study, with project partners including MnDOT, Laketown Township, City of Waconia, City of Victoria, and City of Chaska. The public engagement and outreach efforts included focus groups, online surveys and interactive comment tool, public open houses, specific outreach to target population groups, neighborhood meetings, and property owner meetings. Public meetings began in November 2018 with the most recent being an online open house in April-May 2020.

Stakeholder outreach and neighborhood outreach included meetings with school districts, emergency services, area churches, Laketown Township board meetings, and City of Victoria board workshop. Engagement was also completed with Chaska residents at The Lodge Senior Center, Brandondale manufactured home neighborhood, Crest Dr.
Response (Limit 2,800 characters; approximately 400 words): neighborhood, and the White Oak neighborhood due to their proximity to and use of the intersection.

In person open houses were held on August 21, 2019 (50+ participants) and December 19, 2019 (50+ participants) with a virtual open house held in March-April 2020 (60+ participants). In addition, approximately 70 online comments were submitted via the online interactive comment map. Residents were notified of public open houses and general public or neighborhood meetings via direct postcard mailing. The mailing list for each open house included over 4,000 addresses. Meeting information was also shared on social media including Facebook and Twitter and sent out via a project e-bulletin email with a project specific subscriber list of 234.

Partner agencies met at least monthly throughout the planning process with the most recent meeting
on May 6, 2020 and regularly presented study information to elected officials at public meetings. The project was specifically discussed with the Laketown Township board and residents at three meetings (January 13, 2020; March 10, 2020; April 27, 2020) including the Annual Township meeting with approximately 40 rural township residents.

## Measure A: Cost Effectiveness

| Total Project Cost (entered in Project Cost Form): | $\$ 3,672,000.00$ |
| :--- | :--- |
| Enter Amount of the Noise Walls: | $\$ 0.00$ |
| Total Project Cost subtract the amount of the noise walls: | $\$ 3,672,000.00$ |
| Enter amount of any outside, competitive funding: | $\$ 0.00$ |
| Attach documentation of award: |  |
| Points Awarded in Previous Criteria | $\$ 0.00$ |

## Other Attachments

| File Name | Description | File Size |
| :--- | :--- | :--- |
| 4_Existing Conditions_CSAH 10_CSAH <br> 11.pdf | CSAH 11 Intersection Existing <br> Conditions | 181 KB |
| 5_Proposed Conditions_CSAH <br> 10_CSAH 11.pdf | CSAH 11 Intersection Proposed <br> Improvements | 197 KB |
| CSAH 10_11 Existing Conditions <br> Streetview.pdf | CSAH 11 Intersection Existing <br> Conditions picture |  |
| CSAH 10_11_One Page Summary.pdf | CSAH 11 Intersection One Page <br> Summary | 217 KB |
| Letter of Support - Cty 10 \& 11.pdf | Laketown Township letter of support | 49 KB |




Project located in
a census tract that is below the regional average for population in poverty or populations of color, or includes children, people with disabilities, or the elderly:
(0 to 12 Points)
Tracts within half-mile: 904019040291000

Points
Area of Concentrated Povertry > 50\% residents of color $\square$

## Area of Concentrated Poverty

 Above reg'l avg conc of race/povertyFor complete disclaimer of accuracy, please visit
For complete disclaimer of accuracy, please visit
http://giswebsite.metc.state.mn.us/gissite/notice.aspx

## Affordable Housing

 County Road 10 County Road 11| Name | Location | Stage | Total units | Affordable at 100\% AMI | Affordable at $80 \%$ AMI | Affordable at 60\% AMI | Affordable at 50\% AMI | Affordable at 30\% AMI | Bedrooms | Funding restrictions | Vouchers accepted? | Fair Housing plan? |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Owner-Occupied |  |  |  |  |  |  |  |  |  |  |  |  |
| Community Land Trust property | XXX Faulkner Drive | Existing | 1 |  | 1 |  |  |  |  | CLT | N/A | CDA's plan |
| Community Land Trust property | XXX Faulkner Drive | Existing | 1 |  | 1 |  |  |  |  | CLT | N/A | CDA's plan |
| Community Land Trust property | XXX Faulkner Drive | Existing | 1 |  | 1 |  |  |  |  | CLT | N/A | CDA's plan |
| Community Land Trust property | XXX Hundertmark Rd | Existing | 1 |  | 1 |  |  |  |  | CLT | N/A | CDA's plan |
| Community Land Trust property | XXX Faulkner Drive | Existing | 1 |  | 1 |  |  |  |  | CLT | N/A | CDA's plan |
| Community Land Trust property | XXX Hundertmark Rd | Existing | 1 |  | 1 |  |  |  |  | CLT | N/A | CDA's plan |
| Community Land Trust property | XXX Hundertmark Rd | Existing | 1 |  | 1 |  |  |  |  | CLT | N/A | CDA's plan |
| Community Land Trust property | XXX Clover Ridge Drive | Existing | 1 |  | 1 |  |  |  |  | CLT | N/A | CDA's plan |
| Community Land Trust property | XXX Clover Ridge Drive | Existing | 1 |  | 1 |  |  |  |  | CLT | N/A | CDA's plan |
| Community Land Trust property | XXX Clover Ridge Drive | Existing | 1 |  | 1 |  |  |  |  | CLT | N/A | CDA's plan |

Highway 10 Corridor Study


3: CSAH 11 \& CSAH 10

| Direction | All |
| :--- | ---: |
| Future Volume (vph) | 1932 |
| Total Delay $/$ Veh $(\mathrm{s} / \mathrm{v})$ | 43 |
| CO Emissions $(\mathrm{kg})$ | 5.41 |
| NOx Emissions $(\mathrm{kg})$ | 1.05 |
| VOC Emissions $(\mathrm{kg})$ | 1.25 |



Splits and Phases: 3: CSAH 11 \& CSAH 10


3: CSAH 11 \& CSAH 10

| Direction | All |
| :--- | ---: |
| Future Volume (vph) | 1932 |
| Total Delay /Veh $(\mathrm{s} / \mathrm{v})$ | 20 |
| CO Emissions $(\mathrm{kg})$ | 4.67 |
| NOx Emissions $(\mathrm{kg})$ | 0.91 |
| VOC Emissions $(\mathrm{kg})$ | 1.08 |


|  | 7 | $\rightarrow$ | 4 | 1 | 4 | $4$ | ( | 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Movement | WBL | EBTL | NBL | SBTL | EBL | WBTL | SBL | NBTL |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes |  | Yes |  | Yes |  | Yes |  |
| Recall Mode | None | None | None | None | None | None | None | None |
| Maximum Split (s) | 13 | 62 | 15 | 30 | 14 | 61 | 15 | 30 |
| Maximum Split (\%) | 10.8\% | 51.7\% | 12.5\% | 25.0\% | 11.7\% | 50.8\% | 12.5\% | 25.0\% |
| Minimum Split (s) | 12.7 | 27 | 13 | 17 | 12.7 | 27 | 13 | 28 |
| Yellow Time (s) | 3 | 5.5 | 3 | 5.5 | 3 | 5.5 | 3 | 5.5 |
| All-Red Time (s) | 2.7 | 1.5 | 3 | 1.5 | 2.7 | 1.5 | 3 | 1.5 |
| Minimum Initial (s) | 7 | 20 | 7 | 10 | 7 | 20 | 7 | 10 |
| Vehicle Extension (s) | 3 | 6 | 3 | 6 | 3 | 6 | 3 | 6 |
| Minimum Gap (s) | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) |  |  |  |  |  |  |  | 7 |
| Flash Dont Walk (s) |  |  |  |  |  |  |  | 14 |
| Dual Entry | No | Yes | No | Yes | No | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 0 | 13 | 75 | 90 | 0 | 14 | 75 | 90 |
| End Time (s) | 13 | 75 | 90 | 0 | 14 | 75 | 90 | 0 |
| Yield/Force Off (s) | 7.3 | 68 | 84 | 113 | 8.3 | 68 | 84 | 113 |
| Yield/Force Off 170(s) | 7.3 | 68 | 84 | 113 | 8.3 | 68 | 84 | 99 |
| Local Start Time (s) | 107 | 0 | 62 | 77 | 107 | 1 | 62 | 77 |
| Local Yield (s) | 114.3 | 55 | 71 | 100 | 115.3 | 55 | 71 | 100 |
| Local Yield 170(s) | 114.3 | 55 | 71 | 100 | 115.3 | 55 | 71 | 86 |
| Intersection Summary |  |  |  |  |  |  |  |  |
| Cycle Length |  |  | 120 |  |  |  |  |  |
| Control Type | Actuated-Uncoordinated |  |  |  |  |  |  |  |
| Natural Cycle |  |  | 85 |  |  |  |  |  |

Splits and Phases: 3: CSAH 11 \& CSAH 10


3: CSAH 11 \& CSAH 10

| Direction | All |
| :--- | ---: |
| Future Volume (vph) | 1932 |
| Total Delay $/$ Veh $(\mathrm{s} / \mathrm{v})$ | 43 |
| CO Emissions $(\mathrm{kg})$ | 5.41 |
| NOx Emissions $(\mathrm{kg})$ | 1.05 |
| VOC Emissions $(\mathrm{kg})$ | 1.25 |



Splits and Phases: 3: CSAH 11 \& CSAH 10


3: CSAH 11 \& CSAH 10

| Direction | All |
| :--- | ---: |
| Future Volume (vph) | 1932 |
| Total Delay /Veh $(\mathrm{s} / \mathrm{v})$ | 20 |
| CO Emissions $(\mathrm{kg})$ | 4.67 |
| NOx Emissions $(\mathrm{kg})$ | 0.91 |
| VOC Emissions $(\mathrm{kg})$ | 1.08 |


|  | 7 | $\rightarrow$ | 4 | 1 | 4 | $4$ | ( | 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Phase Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Movement | WBL | EBTL | NBL | SBTL | EBL | WBTL | SBL | NBTL |
| Lead/Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lead | Lag |
| Lead-Lag Optimize | Yes |  | Yes |  | Yes |  | Yes |  |
| Recall Mode | None | None | None | None | None | None | None | None |
| Maximum Split (s) | 13 | 62 | 15 | 30 | 14 | 61 | 15 | 30 |
| Maximum Split (\%) | 10.8\% | 51.7\% | 12.5\% | 25.0\% | 11.7\% | 50.8\% | 12.5\% | 25.0\% |
| Minimum Split (s) | 12.7 | 27 | 13 | 17 | 12.7 | 27 | 13 | 28 |
| Yellow Time (s) | 3 | 5.5 | 3 | 5.5 | 3 | 5.5 | 3 | 5.5 |
| All-Red Time (s) | 2.7 | 1.5 | 3 | 1.5 | 2.7 | 1.5 | 3 | 1.5 |
| Minimum Initial (s) | 7 | 20 | 7 | 10 | 7 | 20 | 7 | 10 |
| Vehicle Extension (s) | 3 | 6 | 3 | 6 | 3 | 6 | 3 | 6 |
| Minimum Gap (s) | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk Time (s) |  |  |  |  |  |  |  | 7 |
| Flash Dont Walk (s) |  |  |  |  |  |  |  | 14 |
| Dual Entry | No | Yes | No | Yes | No | Yes | No | Yes |
| Inhibit Max | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Start Time (s) | 0 | 13 | 75 | 90 | 0 | 14 | 75 | 90 |
| End Time (s) | 13 | 75 | 90 | 0 | 14 | 75 | 90 | 0 |
| Yield/Force Off (s) | 7.3 | 68 | 84 | 113 | 8.3 | 68 | 84 | 113 |
| Yield/Force Off 170(s) | 7.3 | 68 | 84 | 113 | 8.3 | 68 | 84 | 99 |
| Local Start Time (s) | 107 | 0 | 62 | 77 | 107 | 1 | 62 | 77 |
| Local Yield (s) | 114.3 | 55 | 71 | 100 | 115.3 | 55 | 71 | 100 |
| Local Yield 170(s) | 114.3 | 55 | 71 | 100 | 115.3 | 55 | 71 | 86 |
| Intersection Summary |  |  |  |  |  |  |  |  |
| Cycle Length |  |  | 120 |  |  |  |  |  |
| Control Type | Actuated-Uncoordinated |  |  |  |  |  |  |  |
| Natural Cycle |  |  | 85 |  |  |  |  |  |

Splits and Phases: 3: CSAH 11 \& CSAH 10


## Traffic Safety Benefit-Cost Calculation

Highway Safety Improvement Program (HSIP) Reactive Project

## A. Roadway Description

| Route | CSAH 10/11 | District | Metro | County | Carver |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Begin RP | 1/4 mile from intersect | End RP |  | Miles | 1.250 |
| Location | CSAH 10 (Engler Blvd) at CSAH 11 (Victoria Dr/Jonathan Carver Pkwy) |  |  |  |  |

## B. Project Description

| Proposed Work | Expansion of CSAH 10 to 4-lane divided section, turn lane additions/extensions on all legs, sig |  |  |
| :---: | :---: | :---: | :---: |
| Project Cost* | \$3,672,000 | Installation Year | 2025 |
| Project Service Life | 20 years | Traffic Growth Factor | 2.0\% |
| * exclude Right of Way from Project Cost |  |  |  |

## C. Crash Modification Factor

| 0.71 | Fatal (K) Crashes | Reference ID 7569 |  |
| :---: | :---: | :---: | :---: |
| 0.71 | Serious Injury (A) Crashes | Crash Type All (2-lane to 4-lane divided) |  |
| 0.71 | Moderate Injury (B) Crashes |  |  |
| 0.71 | Possible Injury (C) Crashes |  |  |
| 0.71 | Property Damage Only Crashes |  | www.CMFclearinghouse.org |

D. Crash Modification Factor (optional second CMF)

| Fatal (K) Crashes | Reference |  |
| :---: | :---: | :---: |
| Serious Injury (A) Crashes |  |  |
| Moderate Injury (B) Crashes | Crash Type |  |
| Possible Injury (C) Crashes |  |  |
| Property Damage Only Crashes |  | www.CMFclearinghouse.org |


| E. Crash Data |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Begin Date <br> Data Source | 1/1/201 | End Date | 12/31/2018 | 3 years |
|  | MnDOT |  |  |  |
|  | Crash Severity | All (2-lane to 4-lane divided) <optiona |  |  |
|  | K crashes | 0 |  |  |
|  | A crashes | 0 |  |  |
|  | B crashes | 1 |  |  |
|  | C crashes | 2 |  |  |
|  | PDO crashes | 7 |  |  |
| F. Benefit-Cost Calculation |  |  |  |  |
| \$1,072,024 |  | Benefit (present value) | B/C Ratio $=0.30$ |  |
| \$3,672,000 |  | Cost |  |  |
| Proposed project expected to reduce 1 crashes annually, o of which involving fatality or serious injury. |  |  |  |  |

F. Analysis Assumptions

| Crash Severity |  | Crash Cost |  |  |
| :--- | ---: | :--- | :--- | :--- |
| K crashes | $\$ 1,360,000$ | Link: mndot.gov/planning/program/appendix_a.html |  |  |
| A crashes | $\$ 680,000$ |  |  |  |
| B crashes | $\$ 210,000$ | Real Discount Rate | $1.2 \%$ |  |
| C crashes | $\$ 110,000$ | Traffic Growth Rate | $2.0 \%$ |  |
| PDO crashes | $\$ 12,000$ | Project Service Life | 20 years |  |

G. Annual Benefit

| Crash Severity | Crash Reduction | Annual Reduction | Annual Benefit |
| :--- | :---: | :---: | :---: |
| K crashes | 0.00 | 0.00 | $\$ 0$ |
| A crashes | 0.00 | 0.00 | $\$ 0$ |
| B crashes | 0.29 | 0.10 | $\$ 20,300$ |
| C crashes | 0.58 | 0.19 | $\$ 21,267$ |
| PDO crashes | 2.03 | 0.68 | $\$ 8,120$ |


| H. Amortized Benefit |  |  |  |
| :---: | :---: | :---: | :---: |
| Year | Crash Benefits | Present Value |  |
| 2025 | \$49,687 | \$49,687 | Total = \$1,072,024 |
| 2026 | \$50,680 | \$50,079 |  |
| 2027 | \$51,694 | \$50,475 |  |
| 2028 | \$52,728 | \$50,874 |  |
| 2029 | \$53,782 | \$51,277 |  |
| 2030 | \$54,858 | \$51,682 |  |
| 2031 | \$55,955 | \$52,090 |  |
| 2032 | \$57,074 | \$52,502 |  |
| 2033 | \$58,216 | \$52,917 |  |
| 2034 | \$59,380 | \$53,336 |  |
| 2035 | \$60,568 | \$53,757 |  |
| 2036 | \$61,779 | \$54,182 |  |
| 2037 | \$63,015 | \$54,610 |  |
| 2038 | \$64,275 | \$55,042 |  |
| 2039 | \$65,561 | \$55,477 |  |
| 2040 | \$66,872 | \$55,916 |  |
| 2041 | \$68,209 | \$56,358 |  |
| 2042 | \$69,573 | \$56,803 |  |
| 2043 | \$70,965 | \$57,252 |  |
| 2044 | \$72,384 | \$57,705 |  |
| 0 | \$0 | \$0 |  |
| 0 | \$0 | \$0 |  |
| 0 | \$0 | \$0 |  |
| 0 | \$0 | \$0 |  |
| 0 | \$0 | \$0 |  |
| 0 | \$0 | \$0 |  |
| 0 | \$0 | \$0 |  |
| 0 | \$0 | \$0 |  |
| 0 | \$0 | \$0 |  |
| 0 | \$0 | \$0 |  |
| 0 | \$0 | \$0 |  |

## CMF / CRF Details

CMF ID: 7569

Convert 2 lane roadway to 4 lane divided roadway
Description: Conversion of urban and rural two-lane roadways to four-lane divided roadways

## Prior Condition: 2 lane roadway

## Category: Roadway

Study: Evaluation of the Safety Effectiveness of the Conversion of Two-Lane Roadways to Four-Lane Divided Roadways: Bayesian vs. Empirical Bayes, Ahmed et al., 2015

| Crash Modification Factor (CMF) |  |
| :---: | :--- |
| Value: | 0.712 |
| Adjusted Standard Error: |  |
| Unadjusted Standard Error: | 0.076 |

Crash Reduction Factor (CRF)

Value:
28.79 (This value indicates a decrease in crashes)

| Adjusted Standard Error: |  |
| :---: | :---: |
| Unadjusted Standard Error: | 7.65 |
| Applicability |  |
| Crash Type: | All |
| Crash Severity: | All |
| Roadway Types: | Not specified |
| Number of Lanes: | 2 |
| Road Division Type: | Undivided |
| Speed Limit: |  |
| Area Type: | Rural |
| Traffic Volume: |  |
| Time of Day: | All |
| If countermeasure is intersection-based |  |
| Intersection Type: |  |
| Intersection Geometry: |  |
| Traffic Control: |  |
| Major Road Traffic Volume: |  |
| Minor Road Traffic Volume: |  |


| Development Details |  |
| :---: | :---: |
| Date Range of Data Used: | 2002 to 2012 |
| Municipality: |  |


| State: | FL |  |
| :---: | :--- | :--- |
| Country: | USA |  |
| Type of Methodology Used: | Before/after using empirical Bayes or full Bayes |  |
| Sample Size Used: |  |  |
|  |  |  |

## Other Details

| Included in Highway Safety |
| ---: | :--- |
| Manual? |$\quad$ No

This site is funded by the U.S. Department of Transportation Federal Highway Administration and maintained by the University of North Carolina Highway Safety Research Center

The information contained in the Crash Modification Factors (CMF) Clearinghouse is disseminated under the sponsorship of the U.S. Department of Transportation in the interest of information exchange. The U.S. Government assumes no liability for the use of the information contained in the CMF Clearinghouse. The information contained in the CMF Clearinghouse does not constitute a standard, specification, or regulation, nor is it a substitute for sound engineering judgment.

CSAH 11 and CSAH 10 (2016-2018)

| objectid | Incident ID | Date and Time | Crash Severity | Number Killed | Number of Vehicles | Officer Narrative | Manner of Collision |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1874597 | 341112 | 4/8/2016, 5:00 PM | Property Damage Only Crash | 0 | 2 | Unit 2 was sitting at the stop light of CR 10 and CR 11 when Unit 1 rear ended it. Dr | Front to Rear |
| 1881527 | 384705 | 10/6/2016, 5:50 PM | Property Damage Only Crash | 0 | 2 | Units 1 \& 2 were travelling eastbound on CSAH 10 . Unit 2 was braking for the stop I | Front to Rear |
| 1952984 | 384027 | 10/4/2016, 7:15 AM | Property Damage Only Crash | 0 | 2 | The driver of vehicle 2 said she was stopped in the eastbound lane of Co Rd 10 whe | Front to Rear |
| 2047948 | 358297 | 6/21/2016, 4:50 PM | Property Damage Only Crash | 0 | 2 | Unit 2 was sitting at a stop light on CSAH 11 and CSAH 10 facing South. Unit 1 was | Front to Rear |
| 2072791 | 327971 | 2/10/2016, 12:05 PM | Property Damage Only Crash | 0 | 2 | V1 and V2 were westbound CR 10 at CR11. Both vehicles were stopped at red light | Front to Rear |
| 2160322 | 334962 | 3/9/2016, 8:30 PM | Property Damage Only Crash | 0 | 1 | Vehicle \#2 is a Chaska Fire department vehicle. Vehicle \#2 was parked blocking traffic | from entering turn lane |
| 2411435 | 334664 | 3/9/2016, 7:57 PM | Possible Injury Crash | 0 | 2 | Vehicle 1 was north on Guernsey Ave making a left turn onto Co Rd 10. Vehicle 1 had | a flashing yellow and |
| 1972694 | 414881 | 1/13/2017, 1:55 PM | Property Damage Only Crash | 0 | 2 | Vehicle \#2 was stopped for a red light on N/B CSAH 11 at CSAH 10 in Laketown Tov\| | Front to Rear |
| 1973159 | 508897 | 10/15/2017, 10:50 AM | Possible Injury Crash | 0 | 2 | Unit 1 was stopped in the left turn of southbound Co Rd 11, waiting on a red light t | Front to Front |
| 1979632 | 499618 | 9/6/2017, 5:30 PM | Property Damage Only Crash | 0 | 2 | Unit 1 was facing northbound at the intersection of County Road 11 and County Ro | Front to Front |
| 2163918 | 510584 | 10/22/2017, 11:46 AM | Property Damage Only Crash | 0 | 2 | Unit \#2 was traveling westbound on County Rd 10. Unit \#2 came to a stop at the in | Front to Rear |
| 2213656 | 524831 | 12/13/2017, 5:10 PM | Property Damage Only Crash | 0 | 2 | Mason was travelling South on Co Rd 11 and was approaching the intersection with | Front to Front |
| 2287871 | 458239 | 6/8/2017, 6:05 PM | Minor Injury Crash | 0 | 3 | Units 2 and 3 were stopped at the stop light of CR 10 and CR 11 facing SB on CR 11. | Angle |
| 2290621 | 503538 | 9/23/2017, 3:40 PM | Property Damage Only Crash | 0 | 2 | Unit \#2 was stopped in the westbound lane of CR 10, at the intersection of CR 11. | Front to Rear |
| 1850162 | 627022 | 8/11/2018, 1:40 PM | Property Damage Only Crash | 0 | 2 | Unit 1 and 2 were both driving WB on Co Rd 10. Unit 1 was behind Unit 2. Unit 2 | Front to Rear |
| 1863402 | 660661 | 11/16/2018, 2:50 PM | Property Damage Only Crash | 0 | 2 | Vehicle \#1 was in the turn lane on County Road 11 to turn left and go west on Cour | Front to Rear |
| 1941480 | 663997 | 11/29/2018, 1:47 PM | Possible Injury Crash | 0 | 2 | The driver of the Honda reported that she was west on CR 10 and had a green | Angle |
| 2113522 | 630807 | 8/28/2018, 6:55 AM | Minor Injury Crash | 0 | 2 | Unit 1 was driving SB on Co Rd 11, in the left turn lane to drive EB on Co Rd 10/ | Angle |
| 2214366 | 541985 | 1/31/2018, 2:25 PM | Property Damage Only Crash | 0 | 1 | D1 was NB on CR 11 from the area of Carver Elementary School. D1's blood sugar |  |


| Unit1 Vehicle Type | Unit1 Direction | Unit1 Factor1 | Unit1 Vehicle Maneuver | Unit2 Vehicle Type | Unit2 Direction |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Passenger Car | Eastbound | Operated Motor Vehicle in Careless, Negligent, or Erratic Manner | Moving Forward | Sport Utility Vehicle | Eastbound |
| Passenger Car | Eastbound | Following Too Closely | Moving Forward | Sport Utility Vehicle | Eastbound |
| Passenger Car | Eastbound | Driver Speeding | Moving Forward | Sport Utility Vehicle | Eastbound |
| Passenger Van (Seats Installed Behind Driver) | Southbound | No Clear Contributing Action | Moving Forward | Motorcycle | Southbound |
| Passenger Van (Seats Installed Behind Driver) | Westbound | Driver Distracted | Moving Forward | Medium / Heavy Trucks (More than 10,000lbs) | Westbound |
| Passenger Car | Eastbound | Operated Motor Vehicle in Careless, Negligent, or Erratic Manner | Moving Forward | Pickup | Unknown |
| Passenger Car | Northbound | Improper Turn/Merge | Turning Left | Passenger Car | Southbound |
| Medium / Heavy Trucks (More than 10,000lbs) | Northbound | Operated Motor Vehicle in Careless, Negligent, or Erratic Manner | Vehicle Stopped or Stalled in Roadway | Sport Utility Vehicle | Northbound |
| Passenger Car | Southbound | No Clear Contributing Action | Vehicle Stopped or Stalled in Roadway | Pickup | Southbound |
| Sport Utility Vehicle | Northbound | Failure to Yield Right-of-Way | Turning Left | Pickup | Northbound |
| Passenger Car | Westbound | Driver Distracted | Moving Forward | Passenger Car | Westbound |
| Passenger Car | Southbound | No Clear Contributing Action | Moving Forward | Passenger Car | Westbound |
| Passenger Van (Seats Installed Behind Driver) | Westbound | Driver Distracted | Turning Right | Pickup | Westbound |
| Passenger Car | Westbound | Following Too Closely | Moving Forward | Passenger Car | Westbound |
| Passenger Car | Westbound | Driver Distracted | Moving Forward | Sport Utility Vehicle | Westbound |
| Passenger Car | Northbound | No Clear Contributing Action | Vehicle Stopped or Stalled in Roadway | Medium / Heavy Trucks (More than 10,000lbs) | Northbound |
| Sport Utility Vehicle | Westbound | Unknown | Moving Forward | Passenger Van (Seats Installed Behind Driver) | Southbound |
| Sport Utility Vehicle | Southbound | No Clear Contributing Action | Turning Left | Sport Utility Vehicle | Southbound |
| Sport Utility Vehicle | Northbound | Other Contributing Action | Moving Forward |  |  |


| Unit2 Factor1 | Unit2 Vehicle Maneuver | Unit3 Vehicle Type | Unit3 Direction | Unit3 Factor1 | Unit3 Vehicle Maneuver |
| :---: | :---: | :---: | :---: | :---: | :---: |
| No Clear Contributing Action | Vehicle Stopped or Stalled in Roadway |  |  |  |  |
| No Clear Contributing Action | Slowing |  |  |  |  |
| No Clear Contributing Action | Vehicle Stopped or Stalled in Roadway |  |  |  |  |
| No Clear Contributing Action | Slowing |  |  |  |  |
| No Clear Contributing Action | Moving Forward |  |  |  |  |
| No Clear Contributing Action | Parked or Entering or Leaving a Parked Position |  |  |  |  |
| No Clear Contributing Action | Moving Forward |  |  |  |  |
| No Clear Contributing Action | Vehicle Stopped or Stalled in Roadway |  |  |  |  |
| Operated Motor Vehicle in Careless, Negligent, or Erratic Manner | Turning Left |  |  |  |  |
| Disregard Other Traffic Signs | Moving Forward |  |  |  |  |
| No Clear Contributing Action | Slowing |  |  |  |  |
| Failure to Yield Right-of-Way | Turning Left |  |  |  |  |
| No Clear Contributing Action | Vehicle Stopped or Stalled in Roadway | Passenger Van (Seats Installed Behind Driver) | Westbound | No Clear Contributing Action | Vehicle Stopped or Stalled in Roadway |
| No Clear Contributing Action | Vehicle Stopped or Stalled in Roadway |  |  |  |  |
| No Clear Contributing Action | Vehicle Stopped or Stalled in Roadway |  |  |  |  |
| Following Too Closely | Moving Forward |  |  |  |  |
| Unknown | Moving Forward |  |  |  |  |
| No Clear Contributing Action | Moving Forward |  |  |  |  |
|  |  |  |  |  |  |


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May 12, 2020
Elaine Koutsoukos
TAB Coordinator
Metropolitan Council
390 Robert St. N
St. Paul, MN 55101
SUBJECT: CSAH 11 Intersection Improvement Project Risk Assessment Layout Approval Letter
Dear Ms. Koutsoukos:
This letter is to confirm the County's agreement with and approval to date of the attached layout for the Highway 11 Intersection Improvement Project (at CSAH 10). The project has undergone substantial study and coordination with project partners. The County led and partnered on the development of the layout with Laketown Township, the City of Victoria, and the City of Chaska through the Highway 10 Corridor Study planning process and is aware of the details specified in the application attachment.

Although not required, Laketown Township provided a letter of support for the project. We expect the City of Chaska and City of Victoria to also submit letters of support for the project, although the project is currently located outside of both cities.

The County is committed to working with project partners to complete the final layout approval engineering process for the Highway 11 Intersection Improvement Project in the coming months.

Sincerely,


Lyndon Robjent, P.E.
Public Works Director/County Engineer

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CSAH 10 at CSAH 11 Intersection Existing Conditions - CSAH 10, looking west


CSAH 10 at CSAH 11 Intersection Existing Conditions - CSAH 11, looking north


## Highway 11 Intersection Improvements Project

## Carver County

Applicant, Location, \& Route: Carver County, Highway 11 1/4 miles north and south of Highway 10, Highway 10 1000' east and west of Highway 11, on the City of Victoria and City of Chaska border


Application
Category:
Roadways including Multimodal Elements - Spot Mobility
 Funding Information:
Requested Award Amount: \$2,937,600
Local Match: \$734,400
Project Total: \$3,672,000

Match \$ Sources:

- Carver County


## Part of a Bigger Picture

Studies conducted on the Highway 11 and 10 corridors have identified the Highway 11 and 10 intersection as the crucial location for needed near-term improvements to move the growing traffic through the area and improve safety. The proposed improvements at the Highway 11 and 10 intersection fits the vision for the corridor and will guide the coming corridor improvements and development.

## Project Description

This project at the intersection of Highway 11 (Jonathan Carver Parkway/Victoria Drive) and Highway 10 (Engler Boulevard) installs a permanent signal system accompanied with geometric expansions on all four legs of the intersection. Geometric improvement includes the expansion of Highway 11 to a four-lane divided urban section with dual left-turn lanes on the north leg. The project also includes construction of a second eastbound lane through the intersection and adding capacity to Highway 10 turn lanes.

The Highway 11 at Highway 10 intersection on the border of the Cities of Victoria and Chaska is a presents significant crash and congestion issues for the community, impacting the movement of goods and people throughout the region. This important intersection serves as a primary hub between the cities of Chaska, Waconia, Victoria and Carver, directly serving approximately $50 \%$ of the County population. The intersection is located centrally between all four of these cities in a rural area that is expected to experience a significant amount of development within the next 20 years. The intersection is a priority project for both cities, the County, and residents. Operational issues create vehicle queues up to a quarter mile long in multiple directions during both peak hours; these queues are particularly problematic in the eastbound direction, as maximum queues are beginning to encroach on an at-grade railroad crossing. Similarly, users face unacceptable delays when making turns onto Highway 10 from Highway 11 during the peak hours. The intersection is currently served by a temporary wood pole signal system that was implemented in 2013 to address safety concerns with the two-way stop control at the intersection. Since its installation, reductions in severe injury crashes have been observed; however, the need for a permanent system with fully ADA compliant facilities is a priority.

## Project Benefits

The proposed improvements provide an immediate operational benefit for existing traffic patterns but are also expected to provide the needed capacity to serve the planned developments in the area. The project will upgrade Highway 11 in the intersection area to the ultimate vision for the corridor of a four-lane urban highway. Furthermore, the intersection will connect to an existing multiuse trail and improve the pedestrian crossing environment. The enhanced pedestrian facilities included in this project will be needed when area development occurs. The proposed improvements will increase corridor safety, address congestion and operational issues, and provide safe pedestrian/bicycle crossings of Highways 11 and 10.


# TOWNSHIP OF LAKETOWN 

9530 Laketown Road<br>Chaska, MN 55318<br>Phone 952-442-5278<br>laketowntownship@gmail.com

April 27, 2020
Lyndon Robjent, P.E.
Public Works Director, County Engineer
Carver County Public Works
11360 Highway 212, Suite 1, Cologne, MN 55322

Dear Mr. Robjent,
Laketown Township is pleased to support Carver County's application for the CSAH 10/CSAH 11 Intersection Improvement under the Roadway Spot Mobility and Safety category of the Metropolitan Council's 2020 Regional Solicitation for federal transportation funding.

CSAH 10 (Engler Blvd.) is a critical east-west mobility corridor for the County's regional transportation network connecting the Cities of Waconia and Victoria to the City of Chaska and US Highway 212. The intersection of CSAH 10 (Engler Blvd.) and CSAH 11 (Victoria Dr./Jonathan Carver Pkwy.) currently experiences major congestion and safety issues. The intersection design lacks the through-put and turn lanes to operate at an acceptable level of service for everyday traffic and has a wood-pole signal system that was installed as a shortterm mitigation strategy for severe crashes. The proposed improvements include reconstruction and widening of the intersection including additional through lanes and turn lanes and a permanent traffic signal system. The project will also include bicycle and pedestrian accommodations at the intersection and accommodate the planned regional trail along the north side of CSAH 10 (Engler Blvd.).

The proposed projects are endorsed by Laketown Township and we are supportive of the County's application to the Metropolitan Council's 2020 Regional Solicitation funding program.

Sincerely,


Michael Klingelhutz
Chairman

