Application

17072 - 2022 Roadway Expansion

17639 - Highway 10 Mobility and Access Corridor Improvement

Regional Solicitation - Roadways Including Multimodal Elements

Status:	Submitted
Submitted Date:	04/14/2022 11:22 AM

Primary Contact

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What Grant Programs are you most interested in?	Regional Solicitation - Roadways Including Multimodal Elements

Organization Information

Name:	CARVER COUNTY

Jurisdictional Agency (if different):

Organization Type: County Government

Organization Website:

Address: PUBLIC WORKS

11360 HWY 212 W #1

*	COLOGNE	Minnesota	55322-9133
	City	State/Province	Postal Code/Zip

County: Carver

Phone:* Ext.

Fax:

PeopleSoft Vendor Number 0000026790A12

Project Information

Project Name Highway 10 Mobility and Access Corridor Improvement

Primary County where the Project is Located Carver

Cities or Townships where the Project is Located: Laketown Township, Chaska

Jurisdictional Agency (If Different than the Applicant):

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

The Highway 10 Mobility and Access Corridor Improvement project will reconstruct Highway 10 between Chaska Creek and east of the Twin Cities Western Rail at-grade crossing. Proposed improvements include the expansion of Highway 10, and legs of Highway 11, from a two-lane undivided rural section to a four-lane divided urban section, and multi-use trail facilities throughout where none exist today. The intersection of Highway 10 and Creek Road will be reconstructed as a Reduced Conflict Intersection (RCI). The intersection of Highways 10 and 11 will be reconstructed with added turn lanes and include a new traffic signal and improved pedestrian facilities.

Highways 10 and 11 are classified as an A-Minor Arterial 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. Highway 11 is a vital north-south regional link between the cities of Victoria and Carver to Highway 10, Trunk Highway 5 and to US 212. Due to significant residential growth in these communities in recent years, this project need is identified in multiple planning documents and studies as a priority improvement to support local and regional mobility as development continues and the population of Carver County continues to grow. Creek Road, intersecting with the project near the east extents, serves as an alternate route to downtown Chaska and has seen notable industrial development in the last year, causing a significant increase in freight traffic.

This segment of Highway 10, and its intersection with Highway 11, are currently overcapacity and experiencing delays in the peak hours. Forecasted development and traffic growth, not only in the

immediate project area but also in the surrounding cities, will only exacerbate the operations and safety issues experienced today.

Proposed improvements will offer immediate relief for existing and long-term capacity concerns for regional growth. Proposed multimodal trail facilities will fill an existing gap in a Tier 2 RBTN alignment along Highway 10 and connect into an existing regional Tier 2 RBTN alignment along Highway 11. This will provide active transportation options for a quickly developing regional area and the adjacent future commercial growth parcels surrounding the Highway 10 and 11 intersection.

(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.

Highway expansion of CSAH 10 from Chaska Creek to east of TCWR Crossing in Carver County

Include both the CSAH/MSAS/TH references and their corresponding street names in the TIP Description (see Resources link on Regional Solicitation webpage for examples).

Project Length (Miles)

2.3

to the nearest one-tenth of a mile

Project Funding

Are you applying for competitive funds from another source(s) to implement this project?

No

If yes, please identify the source(s)

Federal Amount

$7,416,000.00

Match Amount

$1,854,000.00

Minimum of 20% of project total

Project Total

$9,270,000.00

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

County, City

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 one:

2026, 2027

Select 2024 or 2025 for TDM and Unique projects only. For all other applications, select 2026 or 2027.

Additional Program Years: 2025

Select all years that are feasible if funding in an earlier year becomes available.

Project Information-Roadways

County, City, or Lead Agency Carver

Functional Class of Road A-Minor Expander

Road System CSAH

TH, CSAH, MSAS, CO. RD., TWP. RD., CITY STREET

Road/Route No. 10

i.e., 53 for CSAH 53

Name of Road Engler Blvd

Example; 1st ST., MAIN AVE

Zip Code where Majority of Work is Being Performed 55318

(Approximate) Begin Construction Date 04/01/2026

(Approximate) End Construction Date 11/01/2026

TERMINI:(Termini listed must be within 0.3 miles of any work)

From:
(Intersection or Address) Creek Lane

To:
(Intersection or Address) 200 ft east of TCWR RR Xing of Highway 10

DO NOT INCLUDE LEGAL DESCRIPTION

Or At

Miles of Sidewalk (nearest 0.1 miles) 0

Miles of Trail (nearest 0.1 miles) 1.6

Miles of Trail on the Regional Bicycle Transportation Network (nearest 0.1 miles) 1.6

Primary Types of Work GRADE, AGG BASE, BIT SURF, SIGNALS, LIGHTING, BIKE PATH, PED RAMPS

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
(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) (p. 2.20); B3) (p. 2.21); B4) (p. 2.22); and B6).

Goal: Access to Destinations (p. 62)

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

Strategies: C1) (p. 2.24); C2) (p. 2.25); C9) (p. 2.32); C15) (p. 2.36), and C16) (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) (p. 2.38); and D4) (p. 2.40).

Goal: Healthy Environment (p. 66)

Objectives: A) Reduce transportation-related air emissions; C) Increase the availability and attractiveness of transit, bicycling, and walking to encourage healthy communities and active car-free lifestyles.

Strategies: E2) (p. 2.43); E6) (p. 2.46)

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) (p. 2.49); F3) (p. 2.50); and F7) (p. 2.53).

Limit 2,800 characters, approximately 400 words

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.

List the applicable documents and pages: Unique projects are exempt from this qualifying requirement because of their innovative nature.

Carver County 2040 Comprehensive Plan: pages 4.11, 4.12, 4.22,4.39-43.

Carver County 2013 Roadway Safety Plan: page 4-20.

City of Chaska 2040 Comprehensive Plan: pages 6-15, 6-30, 6-66.

City of Victoria 2040 Comprehensive Plan: pages 122, 124.

Highway 10 Corridor Study (2018-2020): pages 13-15, 56, 74-80.

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. Unique project costs are limited to those that are federally eligible.

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

5.Applicant is a public agency (e.g., county, city, tribal government, transit provider, etc.) or non-profit organization (TDM and Unique Projects applicants only). 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 in Table 1. For unique projects, the minimum award is $500,000 and the maximum award is the total amount available each funding cycle (approximately $4,000,000 for the 2022 funding cycle).
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): *$500,000 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 right of way/transportation. Yes

(TDM and Unique Project Applicants Only) The applicant is not a public agency subject to the self-evaluation requirements in Title II of the ADA.

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. Unique projects are exempt from this qualifying requirement.

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 Strategic Capacity 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. Yes

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. Yes

Bridge Rehabilitation/Replacement projects only:

5.The length of the bridge clear span must 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	Cost
Mobilization (approx. 5% of total cost)	$300,400.00
Removals (approx. 5% of total cost)	$496,500.00
Roadway (grading, borrow, etc.)	$3,429,200.00
Roadway (aggregates and paving)	$1,800,000.00
Subgrade Correction (muck)	$0.00
Storm Sewer	$132,500.00
Ponds	$132,500.00
Concrete Items (curb & gutter, sidewalks, median barriers)	$483,300.00
Traffic Control	$300,000.00
Striping	$91,000.00
Signing	$91,000.00
Lighting	$25,000.00
Turf - Erosion & Landscaping	$300,000.00
Bridge	$0.00
Retaining Walls	$0.00
Noise Wall (not calculated in cost effectiveness measure)	$0.00
Traffic Signals	$330,000.00
Wetland Mitigation	$0.00
Other Natural and Cultural Resource Protection	$0.00
RR Crossing	$0.00
Roadway Contingencies	$1,200,000.00
Other Roadway Elements	$0.00
Totals	**$9,111,400.00**

Specific Bicycle and Pedestrian Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Path/Trail Construction	$92,600.00
Sidewalk Construction	$0.00
On-Street Bicycle Facility Construction	$0.00
Right-of-Way	$0.00

Pedestrian Curb Ramps (ADA)	$6,000.00
Crossing Aids (e.g., Audible Pedestrian Signals, HAWK)	$0.00
Pedestrian-scale Lighting	$0.00
Streetscaping	$60,000.00
Wayfinding	$0.00
Bicycle and Pedestrian Contingencies	$0.00
Other Bicycle and Pedestrian Elements	$0.00
Totals	**$158,600.00**

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	$9,270,000.00
Construction Cost Total	$9,270,000.00
Transit Operating Cost Total	$0.00

Congestion within Project Area:

The measure will analyze the level of congestion within the project area. Council staff will provide travel speed data on the "Level of Congestion" map. The analysis will compare the peak hour travel speed within the project area to fee-flow conditions.

Free-Flow Travel Speed: 57

Peak Hour Travel Speed: 42

Percentage Decrease in Travel Speed in Peak Hour compared to Free-Flow: 26.32%

Upload Level of Congestion map: 1649738800303_CSAH10W_LvlofCongest.pdf

Congestion on adjacent Parallel Routes:

Adjacent Parallel Corridor CSAH 61

Adjacent Parallel Corridor Start and End Points:

Start Point: TH 41

End Point: Crosstown Blvd

Free-Flow Travel Speed: 36

The Free-Flow Travel Speed is black number.

Peak Hour Travel Speed: 25

The Peak Hour Travel Speed is red number.

Percentage Decrease in Travel Speed in Peak Hour Compared to Free-Flow: 30.56%

Upload Level of Congestion Map: 1649738800303_CSAH10W_LvlofCongest.pdf

Principal Arterial Intersection Conversion Study:

Proposed interchange or at-grade project that reduces delay at a High Priority Intersection:

(80 Points)

Proposed at-grade project that reduces delay at a Medium Priority Intersection:

(60 Points)

Proposed at-grade project that reduces delay at a Low Priority Intersection:

(50 Points)

Proposed interchange project that reduces delay at a Medium Priority Intersection:

(40 Points)

Proposed interchange project that reduces delay at a Low Priority Intersection:

(0 Points)

Not listed as a priority in the study: Yes

(0 Points)

Measure B: Project Location Relative to Jobs, Manufacturing, and Education

Existing Employment within 1 Mile: 166

Existing Manufacturing/Distribution-Related Employment within 1 Mile: 0

Existing Post-Secondary Students within 1 Mile: 0

Upload Map 1649738892561_CSAH10W_Economy.pdf

Please upload attachment in PDF form.

Measure C: Current Heavy Commercial Traffic

RESPONSE: Select one for your project, based on the updated 2021 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: Yes

Miles: 2.3

(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: Current Daily Person Throughput

Location CSAH 10, east of CSAH 11

Current AADT Volume 14100

Existing Transit Routes on the Project N/A

For New Roadways only, list transit routes that will likely be diverted to the new proposed roadway (if applicable).

Upload Transit Connections Map 1649738930805_CSAH10W_Transit.pdf

Please upload attachment in PDF form.

Response: Current Daily Person Throughput

Average Annual Daily Transit Ridership	0
Current Daily Person Throughput	18330.0

Measure B: 2040 Forecast ADT

Use Metropolitan Council model to determine forecast (2040) ADT volume

If checked, METC Staff will provide Forecast (2040) ADT volume

OR

Identify the approved county or city travel demand model to determine forecast (2040) ADT volume	Carver County 2040 Comprehensive Plan Model Figure 4.7
Forecast (2040) ADT volume	21000

Measure A: Engagement

i.Describe any Black, Indigenous, and People of Color populations, low-income populations, disabled populations, youth, or older adults within a ½ mile of the proposed project. Describe how these populations relate to regional context. Location of affordable housing will be addressed in Measure C.
ii.Describe how Black, Indigenous, and People of Color populations, low-income populations, persons with disabilities, youth, older adults, and residents in affordable housing were engaged, whether through community planning efforts, project needs identification, or during the project development process.
iii.Describe the progression of engagement activities in this project. A full response should answer these questions:

The project service area benefits low-income, persons with disabilities, youth and elderly, Hispanic, and underserved rural populations. A low-income, Hispanic population has 430 households in Brandondale Manufactured Home neighborhoods approximately 2 miles east of the project area. The project also connects to the Chaska Public School campus with two middle schools, La Academia, outdoor activity fields, and the Chaska Community Center with numerous programs for youth, persons with disabilities, and the elderly. Chaska Middle School East and West and La Academia have a student population (K-8) of approximately 1,800 students. La Academia is a dual immersion program for learners starting in kindergarten with a goal for students to become biliterate and bilingual (Spanish and English).

Response:

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-person open houses were held on August 21, 2019 and December 19, 2019 with a virtual open house held in March-April 2020. To reach youth populations and families with children, an interactive online survey and comment map was made available with each round of public outreach. Residents were notified of public open houses or neighborhood meetings via direct postcard mailing.

The mailing list contained over 4,000 addresses. Meeting information was shared on social media including Facebook and Twitter and sent out via a project e-bulletin email with a project subscriber list of over 200. To reach rural populations that will benefit with improved regional mobility, the project was presented and discussed at the Laketown Township board meeting three times, including at the annual resident meeting with approximately 40 rural residents participating. Proposed improvements were presented to these groups and wide support for the project was gathered. Feedback from target populations focused on existing congestion, safety, and access concerns.

The project was impacted by public feedback with a strong desire for a near-term spot-mobility improvement instead of waiting for the full corridor reconstruct because of obvious concerns for significant safety and mobility issues. All populations will be further engaged through final design and construction. But funds are needed now for immediate regional safety and mobility benefits to these populations.

(Limit 2,800 characters; approximately 400 words):

Measure B: Equity Population Benefits and Impacts

Describe the projects benefits to Black, Indigenous, and People of Color populations, low-income populations, children, people with disabilities, youth, and older adults. Benefits could relate to:
This is not an exhaustive list. A full response will support the benefits claimed, identify benefits specific to Equity populations residing or engaged in activities near the project area, identify benefits addressing a transportation issue affecting Equity populations specifically identified through engagement, and substantiate benefits with data.
Acknowledge and describe any negative project impacts to Black, Indigenous, and People of Color populations, low-income populations, children, people with disabilities, youth, and older adults. Describe measures to mitigate these impacts. Unidentified or unmitigated negative impacts may result in a reduction in points.
Below is a list of potential negative impacts. This is not an exhaustive list.

The project will improve a deficient corridor and regional intersections and provide mobility and access improvements through an investment serving long-term growth and multimodal travel demands for many years to come. Currently, the 2-lane rural highway section is a regional traffic congestion barrier and safety issue for pedestrians in the area. Both Highway 11 and 10 are key connections for surrounding communities for health, employment, and education access, and the project will provide a reliable, safer, and more efficient connection.

Response:

The project will benefit all populations, including identified environmental justice populations living in the area, with improved regional connectivity and access to US 212 which is a major throughout fare to the SouthWest Transit East Creek Transit Station and job centers in Chaska and beyond to Eden Prairie and into the metro urban core. Highway 10, east of the project area, also parallels the Chaska Public School campus and Community Center. 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.

Proposed multimodal trail facilities will fill an existing gap in a Tier 2 RBTN alignment along Highway 10 and connect into an existing regional Tier 2 RBTN alignment along Highway 11. This will provide active transportation options for existing disadvantaged populations and a quickly developing regional area and the adjacent future commercial growth parcels surrounding the Highway 10 and 11 intersection.

This project will not create negative impacts for the low-income populations, people of color, children, people with disabilities, or the elderly in Carver County. Instead, Highway 10 corridor improvements and intersection improvements at the Highway 10/11 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.

(Limit 2,800 characters; approximately 400 words):

Measure C: Affordable Housing Access

Describe any affordable housing developmentsexisting, under construction, or plannedwithin ½ mile of the proposed project. The applicant should note the number of existing subsidized units, which will be provided on the Socio-Economic Conditions map. Applicants can also describe other types of affordable housing (e.g., naturally-occurring affordable housing, manufactured housing) and under construction or planned affordable housing that is within a half mile of the project. If applicable, the applicant can provide self-generated PDF maps to support these additions. Applicants are encouraged to provide a self-generated PDF map describing how a project connects affordable housing residents to destinations (e.g., childcare, grocery stores, schools, places of worship).

Describe the projects benefits to current and future affordable housing residents within ½ mile of the project. Benefits must relate to affordable housing residents. Examples may include:

This is not an exhaustive list. Since residents of affordable housing are more likely not to own a private vehicle, higher points will be provided to roadway projects that include other multimodal access improvements. A full response will support the benefits claimed, identify benefits specific to residents of affordable housing, identify benefits addressing a transportation issue affecting residents of affordable housing specifically identified through engagement, and substantiate benefits with data.

Response:

There are 10 affordable housing units served by the ½ 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 ½ mile boundary. The project is located in a rural township guided for one 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 one mile northeast of the project area. Another significant area served by the project is located 2 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 twin-homes 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.

(Limit 2,800 characters; approximately 400 words):

Measure D: BONUS POINTS

Project is located in an Area of Concentrated Poverty:	
Projects census tracts are above the regional average for population in poverty or population of color (Regional Environmental Justice Area):	
Project located in a census tract that is below the regional average for population in poverty or populations of color (Regional Environmental Justice Area):	Yes
Upload the Socio-Economic Conditions map used for this measure.	1649953225924_CSAH10W_SocioEcon_combined.pdf

Measure A: Infrastructure Age

Year of Original Roadway Construction or Most Recent Reconstruction	Segment Length	Calculation	Calculation 2
2006.0	0.3	601.8	261.652
1999.0	1.1	2198.9	956.043
2012.0	0.3	603.6	262.435
1998.0	0.6	1198.8	521.217
	2	**4603**	**2001**

Average Construction Year

Weighted Year	2001.347

Total Segment Length (Miles)

Total Segment Length	2.3

Measure A: Congestion Reduction/Air Quality

Total Peak Hour Delay Per Vehicle Without The Project (Seconds/ Vehicle)	Total Peak Hour Delay Per Vehicle With The Project (Seconds/ Vehicle)	Total Peak Hour Delay Per Vehicle Reduced by Project (Seconds/ Vehicle)	Volume without the Project (Vehicles per hour)	Volume with the Project (Vehicles Per Hour):	Total Peak Hour Delay Reduced by the Project:	Total Peak Hour Delay Reduced by the Project:	EXPLANATION of methodology used to calculate railroad crossing delay, if applicable.	Synchro or HCM Reports
39.0	19.0	20.0	6337	6487	126740.0	129740.0	N/A	1649709313280_CSAH 10W_Existing-Proposed Conditions_AM Peak - Report-combined.pdf
						129740		

Vehicle Delay Reduced

Total Peak Hour Delay Reduced	126740.0
Total Peak Hour Delay Reduced	129740.0

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):
12.69	11.66	1.03
13	**12**	**1**

Total

Total Emissions Reduced:	1.03
Upload Synchro Report	1649709521199_CSAH 10W_Existing-Proposed Conditions_AM Peak - Report-combined.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 Produced on New Roadway (Kilograms):	0
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 Project (Kilograms):	0
EXPLANATION of methodology and assumptions used:(Limit 1,400 characters; approximately 200 words)	

Measure A: Benefit of Crash Reduction

Crash Modification Factor Used:

CMF's used in the crash reduction associated with intersection improvements include upgrading the typical sections within the project to a divided section and converting the Creek Road intersection from a sidestreet stop-control to an RCI (see attached).

(Limit 700 Characters; approximately 100 words)

Rationale for Crash Modification Selected:

The existing sections of Highways 10 and 11 are both undivided and many reported crashes can be associated with this condition. Implementing a divided section reduces opposing and head-on crashes and decreases conflict points at uncontrolled accesses. Restricting turning movements at Creek Road via an RCI not only reduces conflict points and the opportunity for dangerous left turn and angle crash types but provides much safer u-turn opportunities as only one direction of traffic is crossed at one time.

(Limit 1400 Characters; approximately 200 words)

Project Benefit ($) from B/C Ratio:	$8,768,187.00
Total Fatal (K) Crashes:	0
Total Serious Injury (A) Crashes:	1
Total Non-Motorized Fatal and Serious Injury Crashes:	0
Total Crashes:	22
Total Fatal (K) Crashes Reduced by Project:	0
Total Serious Injury (A) Crashes Reduced by Project:	1

Total Non-Motorized Fatal and Serious Injury Crashes Reduced by Project:	0
Total Crashes Reduced by Project:	3
Worksheet Attachment	1649821919732_CSAH10W_Safety packaged-updated.pdf

Please upload attachment in PDF form.

Roadway projects that include railroad grade-separation elements:

Current AADT volume:	0
Average daily trains:	0
Crash Risk Exposure eliminated:	0

Measure A: Pedestrian Safety

Determine if these measures do not apply to your project. *Does the project match either of the following descriptions?*
If either of the items are checked yes, then ***score for entire pedestrian safety measure is zero****. Applicant does not need to respond to the sub-measures and can proceed to the next section.*

Project is primarily a freeway (or transitioning to a freeway) and does not provide safe and comfortable pedestrian facilities and crossings.	No
Existing location lacks any pedestrian facilities (e.g., sidewalks, marked crossings, wide shoulders in rural contexts) and project does not add pedestrian elements (e.g., reconstruction of a roadway without sidewalks, that doesnt also add pedestrian crossings and sidewalk or sidepath on one or both sides).	No

SUB-MEASURE 1: Project-Based Pedestrian Safety Enhancements and Risk Elements
To receive maximum points in this category, pedestrian safety countermeasures selected for implementation in projects should be, to the greatest extent feasible, consistent with the countermeasure recommendations in the Regional Pedestrian Safety Action Plan and state and national best practices. Links to resources are provided on the Regional Solicitation Resources web page.
Please answer the following two questions with as much detail as possible based on the known attributes of the proposed design. If any aspect referenced in this section is not yet determined, describe the range of options being considered, to the greatest extent available. If there are project elements that may increase pedestrian risk, describe how these risks are being mitigated.
1. Describe how this project will address the safety needs of people crossing the street at signalized intersections, unsignalized intersections, midblock locations, and roundabouts.
Treatments and countermeasures should be well-matched to the roadways context (e.g., appropriate for the speed, volume, crossing distance, and other location attributes). Refer to the Regional Solicitation Resources web page for guidance links.

Response:

The project reconstructs the existing non-motorized network and adds over a mile of regional trail in an RTBN Tier 2 corridor. A dedicated and separated trail facility, as opposed to current use of the narrow roadway shoulder, will make drivers aware of pedestrian presence. A raised center median between each direction of travel will aid in managing speeds within a roadway expansion project.

The project is located in a rural township area and reconstructs the only existing pedestrian crossing of Highway 10 at Highway 11 for over a mile to the east in the City of Chaska and over 6.5 miles to the west in the City of Waconia. Proposed Highway 10 and 11 expansion and multimodal improvements will include improvements at the intersection of Highway 10 and 11. Such will include marked crossings of the Highway 10 at Highway 11 intersection where an improved traffic signal will include APS components such as countdown times, APS push buttons, ADA compliant pedestrian ramps and high visibility crosswalk blocks. The traffic signal will also include intersection lighting for increased visibility to pedestrians during nighttime hours. Furthermore, the reconstruction of Highways 10 and 11 will feature raised center medians which will have sufficient width to provide refuge to pedestrians crossing at the intersection. This implementation is consistent with County, MnDOT, NCHRP and FHWA guidance for high-speed, high-volume intersections. Highway 11 (north of Highway 10) is planned for a future linking trail connecting the Cities of Chaska, Victoria, Carver and Waconia. The design of the Highway 10/11 intersection will plan to accommodate the junction of these two regional trail facilities.

(Limit 2,800 characters; approximately 400 words)

Is the distance in between signalized intersections increasing (e.g., removing a signal)?

Select one: No

If yes, describe what measures are being used to fill the gap between protected crossing opportunities for pedestrians (e.g., adding High-Intensity Activated Crosswalk beacons to help motorists yield and help pedestrians find a suitable gap for crossing, turning signal into a roundabout to slow motorist speed, etc.).

Response:

(Limit 1,400 characters; approximately 200 words)

Will your design increase the crossing distance or crossing time across any leg of an intersection? (e.g., by adding turn or through lanes, widening lanes, using a multi-phase crossing, prohibiting crossing on any leg of an intersection, pedestrian bridge requiring length detour, etc.). This does not include any increases to crossing distances solely due to the addition of bike lanes (i.e., no other through or turn lanes being added or widened).

Select one: Yes

If yes,
How many intersections will likely be affected?

Response: 1

Describe what measures are being used to reduce exposure and delay for pedestrians (e.g., median crossing islands, curb bulb-outs, etc.)

Response:

Project improvements of a divided urban section to Highway 11 will provide pedestrian refuge via the raised center island and subtract the distance of crossing rural ditches. Highway 10 will also be divided and provide a pedestrian refuge crossing point compared to the existing condition of crossing a high speed rural highway with free flow traffic at 57 mph and no pedestrian crossing infrastructure. Implementation of a new signal system at Highway 10/11 will include APS components, APS push buttons, ADA compliant pedestrian ramps and high visibility crosswalk blocks to improve the intersection crossing substantially over existing conditions even with increased overall crossing distance. Intersection radii will be balanced between truck turning movements and pedestrian exposure to traffic and be improved for pedestrians. The one leg of the project with an existing trail currently empties onto the roadway shoulder abruptly. This will be remedied by implementing pedestrian crossing signalization at the Highway 10/11 intersection. Currently pedestrians along Highway 10 are forced to use the roadway shoulder along the high-speed corridor with limited sight distance due to vertical and horizontal curves. The pedestrian safety and amenities will be greatly improved with this project compared to the existing rural section without pedestrian facilities.

(Limit 1,400 characters; approximately 200 words)

If grade separated pedestrian crossings are being added and increasing crossing time, describe any features that are included that will reduce the detour required of pedestrians and make the separated crossing a more appealing option (e.g., shallow tunnel that doesnt require much elevation change instead of pedestrian bridge with numerous switchbacks).

Response:

(Limit 1,400 characters; approximately 200 words)

If mid-block crossings are restricted or blocked, explain why this is necessary and how pedestrian crossing needs and safety are supported in other ways (e.g., nearest protected or enhanced crossing opportunity).

Response:

Mid-block crossings are not restricted or blocked; however, no mid-block crossings exist or are accommodated because there are currently no land uses to serve where a mid-block crossing may be desired. Pedestrian facilities will be implemented on one side of Highway 11 and Highway 10 to serve the existing and near-term development and are being implemented as the City of Victoria annexes and develops land north of the intersection. The area east of Highway 11 is designated as Chaska's green-belt and development is not expected in the 20-year Comprehensive Plan horizon. For this reason, pedestrian facilities are not needed to serve mid-block crossings from west to east across Highway 11 or to serve access to and from destinations on all sides of the project as might be required in urban areas, as it is currently a rural township area. Further, poor sightlines due to vertical and horizontal curvature further from the intersection create for unsafe and uncomfortable mid-block crossings that will detour users from wanting to cross mid-block within the project area. The new signal system at Highway 10 and 11 will include APS components such as countdown times, APS push buttons, ADA compliant pedestrian ramps and high visibility crosswalk blocks making the dedicated intersection crossings much more convenient for users.

(Limit 1,400 characters; approximately 200 words)

2. Describe how motorist speed will be managed in the project design, both for through traffic and turning movements. *Describe any project-related factors that may affect speed directly or indirectly, even if speed is not the intended outcome (e.g., wider lanes and turning radii to facilitate freight movements, adding turn lanes to alleviate peak hour congestion, etc.). Note any strategies or treatments being considered that are intended to help motorists drive slower (e.g., visual narrowing, narrow lanes, truck aprons to mitigate wide turning radii, etc.) or protect pedestrians if increasing motorist speed (e.g., buffers or other separation from moving vehicles, crossing treatments appropriate for higher speed roadways, etc.).*

Response:

The proposed project adds thru lanes; however, the existing corridor is a high speed rural highway with a posted speed limit of 55 mph and free flow traffic of 57 mph. The addition of the raised center median through the Highway 10/11 intersection area on Highway 10 and throughout on Highway 11, as well as a fully urban Highway 11 section will provide a counter to the existing conditions and added lanes by highlighting this as a pedestrian crossing area. For example, drivers naturally travel at lower speeds in urban sections where curb and gutter is present. Pedestrian crossings at Highway 10/11 will be marked, signalized, and use high visibility markings and signing to make drivers aware of their presence in the project area and to allow for dedicated pedestrian crossing movements compared to no existing pedestrian infrastructure.

(Limit 2,800 characters; approximately 400 words)

If known, what are the existing and proposed design, operation, and posted speeds? Is this an increase or decrease from existing conditions?

Response:

Existing posted speeds on CSAH 10 and 11 are 55 mph. Design speeds will likely maintain 55 mph.

(Limit 1,400 characters; approximately 200 words)

SUB-MEASURE 2: Existing Location-Based Pedestrian Safety Risk Factors

These factors are based on based on trends and patterns observed in pedestrian crash analysis done for the Regional Pedestrian Safety Action Plan. Check off how many of the following factors are present. Applicants receive more points if more risk factors are present.

Existing road configuration is a One-way, 3+ through lanes or	
Existing road configuration is a Two-way, 4+ through lanes	
Existing road has a design speed, posted speed limit, or speed study/data showing 85th percentile travel speeds in excess of 30 MPH or more	Yes
Existing road has AADT of greater than 15,000 vehicles per day	
List the AADT	

SUB-MEASURE 3: Existing Location-Based Pedestrian Safety Exposure Factors

These factors are based on based on trends and patterns observed in pedestrian crash analysis done for the Regional Pedestrian Safety Action Plan. Check off how many of the following existing location exposure factors are present. Applicants receive more points if more risk factors are present.

Existing road has transit running on or across it with 1+ transit stops in the project area (If flag-stop route with no fixed stops, then 1+ locations in the project area where roadside stops are allowed. Do not count portions of transit routes with no stops, such as non-stop freeway sections of express or limited-stop routes. If service was temporarily reduced for the pandemic but is expected to return to 2019 levels, consider 2019 service for this item.)

Existing road has high-frequency transit running on or across it and 1+ high-frequency stops in the project area (high-frequency defined as service at least every 15 minutes from 6am to 7pm weekdays and 9am to 6pm Saturdays. If service frequency was temporarily reduced for the pandemic but is expected to return to 2019 levels, consider 2019 frequency for this item.)

Existing road is within 500 of 1+ shopping, dining, or entertainment destinations (e.g., grocery store, restaurant)

Yes

If checked, please describe:

The project will serve the existing Chaska Creek commercial and office development area just east of the project in the City of Chaska. This includes data center offices, shopping/grocery store, and medical offices.
The northwest quadrant of the Highway 11 and 10 intersection contains a parcel of land bounded by both highways and the TCWR tracks. This parcel is targeted for major development and annexation into the City of Victoria in the next 5 years. Expected land uses include commercial, light industrial, and medium-density residential. The site is anticipated to generate thousands of daily vehicle and pedestrian trips. The proposed improvements take this planned development into account and are expected to be able to adequately serve the additional traffic.

(Limit 1,400 characters; approximately 200 words)

Existing road is within 500 of other known pedestrian generators (e.g., school, civic/community center, senior housing, multifamily housing, regulatorily-designated affordable housing)

Yes

If checked, please describe:

Westbrook Community Church is located on the southwest quadrant of the CSAH 10 and 11 intersection. The church opened in 2021 and has plans for future expansion as area development increases. The Sri Saibaba Mandir Prayer Center is adjacent to the project and will also be served by the project. The northwest quadrant of the intersection is planned for heavy commercial, industrial, and high-density residential land use in the next 5 years. In addition, a regional trail along the Highway 11, connecting south to the City of Carver, generates a lot of trail users.

(Limit 1,400 characters; approximately 200 words)

Measure A: Multimodal Elements and Existing Connections

The existing Highway 10 corridor is a high speed rural highway with free flow traffic travelling at 57 mph and no dedicated pedestrian or bicycle infrastructure. A multi-use trail will be installed along the Highway 10 corridor to mitigate the existing condition. This segment is a RBTN Tier 2 Alignment connecting the Cities of Waconia and Chaska and connects to a Tier 2 Alignment along Highway 11 connecting south to the City of Carver. This project will also connect to a multi-use trail along Highway 11 to the City of Victoria

Improvements at the Highway 11 and 10 intersection will address needs for a major junction of the regional trail network. The intersection will be upgraded with a new signal system to include APS components such as countdown times, APS push buttons, ADA compliant ped. ramps and high visibility crosswalk blocks making the dedicated intersection crossings safer for users.

Response:

A multi-use trail is present along the east side of Highway 10/11 intersection south leg along Highway 11. This trail empties onto the eastern shoulder of the northern leg and terminates. All multi-use trails reinstalled with the project will be ADA compliant and an accessible pedestrian signal system will be installed at the intersection. The project will improve this crossing and prepare the intersection and corridor for expansion of pedestrian facilities to serve near-term development.

The project is located in a rural township area where wide shoulders on County roads serve as the only facility for multimodal users. In addition to the addition of a multi-use trail, the addition of thru-lanes, a divided highway, and wider shoulders will better accommodate on-road bicyclists and pedestrians compared to the minimal aggregate shoulder existing within the project area.

The project is located in a Township and outside of the Transit Taxing District, however, 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 on-demand 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.

(Limit 2,800 characters; approximately 400 words)

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.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. The focus of this section is on the opportunity for public input as opposed to the quality of input. NOTE: A written response is required and failure to respond will result in zero points.

Multiple types of targeted outreach efforts (such as meetings or online/mail outreach) specific to this project with the general public and partner agencies have been used to help identify the project need.

Yes

100%

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

50%

At least online/mail outreach effort specific to this project with the general public 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%

Describe the type(s) of outreach selected for this project (i.e., online or in-person meetings, surveys, demonstration projects), the method(s) used to announce outreach opportunities, and how many people participated. Include any public website links to outreach opportunities.

Response:

Agency coordination and public involvement were key components to the successful development of the Highway 10 Corridor Study. The study kicked off in late September 2018 and concluded with County Board and City Council resolutions of support in February and March 2021.Three public open houses occurred during the project. The first occurred on August 21, 2019, in the early phases of the study, to introduce the project and solicit input on issues, needs, and opportunities along the corridor. The second open house was held on December 19, 2019 to solicit input on a range of improvement options under consideration for Highway 10. The third open house occurred online from April 20th through May 6th due to restrictions on public gathering during the COVID-19 pandemic. Open house materials were posted online along with a survey to solicit input on all corridor improvement recommendations and proposed implementation. To reach rural populations that will benefit with improved regional mobility, the project was presented and discussed at the Laketown Township board meeting three times, including at the annual resident meeting with approximately 40 rural residents participating. Proposed improvements were presented to these groups and wide support for the project was gathered. Feedback from target populations focused on existing congestion, safety, and access concerns. Public feedback showed a strong desire for the expansion project as a long-term fix and heavily supported improvements at the Highway 11/10 intersection. To the public this project will address obvious concerns for significant safety and mobility issues. Engagement successfully solidified the needs of the area and provided support of the chosen vision.

The mailing area for open houses included over 2,400 properties covering a broad area of potential

stakeholders surrounding the highway. A project website and Facebook page were maintained by Carver County Public Works throughout the duration of the project. Notices and meeting materials were posted on these media for review and comment by all as another means of communicating study progress and upcoming meetings to the public. An online comment map was also used to collect community input on issues during key periods in the study process. Participants were able to see input provided by others and provide responses to comments.

Project website: https://www.co.carver.mn.us/departments/public-works/projects-studies/highway-10-study-victoria-chaska-area

(Limit 2,800 characters; approximately 400 words)

2.Layout (25 Percent of Points)

Layout includes proposed geometrics and existing and proposed right-of-way boundaries. A basic layout should include a base map (north arrow; scale; legend; city and/or county limits; existing ROW, labeled; existing signals;* and bridge numbers*) and design data (proposed alignments; bike and/or roadway lane widths; shoulder width;* proposed signals;* and proposed ROW). An aerial photograph with a line showing the projects termini does not suffice and will be awarded zero points. *If applicable*

Layout approved by the applicant and all impacted jurisdictions (i.e., cities/counties/MnDOT. If a MnDOT trunk highway is impacted, approval by MnDOT must have occurred to receive full points. A PDF of the layout must be attached along with letters from each jurisdiction to receive points. *100%*	Yes
A layout does not apply (signal replacement/signal timing, stand-alone streetscaping, minor intersection improvements). Applicants that are not certain whether a layout is required should contact Colleen Brown at MnDOT Metro State Aid colleen.brown@state.mn.us. *100%*	
For projects where MnDOT trunk highways are impacted and a MnDOT Staff Approved layout is required. Layout approved by the applicant and all impacted local jurisdictions (i.e., cities/counties), and layout review and approval by MnDOT is pending. A PDF of the layout must be attached along with letters from each jurisdiction to receive points. *75%*	
Layout completed but not approved by all jurisdictions. A PDF of the layout must be attached to receive points.	

50%

Layout has been started but is not complete. A PDF of the layout must be attached to receive points.

25%

Layout has not been started

0%

Attach Layout 1649738502301_Layout for upload_Hwy 10 Mobility.pdf

Please upload attachment in PDF form.

Additional Attachments 1649738502294_Carver Co Layout Letter_Hwy10Mobility.pdf

Please upload attachment in PDF form.

3.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 project is not located on an identified historic bridge Yes

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

4.Right-of-Way (25 Percent of Points)

Right-of-way, permanent or temporary easements, and MnDOT agreement/limited-use permit either not required or all have been acquired

100%

Right-of-way, permanent or temporary easements, and/or MnDOT agreement/limited-use permit required - plat, legal descriptions, or official map complete

50%

Right-of-way, permanent or temporary easements, and/or MnDOT agreement/limited-use permit required - parcels identified Yes

25%

Right-of-way, permanent or temporary easements, and/or MnDOT agreement/limited-use permit required - parcels not all identified

0%

5.Railroad Involvement (15 Percent of Points)

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

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%

Measure A: Cost Effectiveness

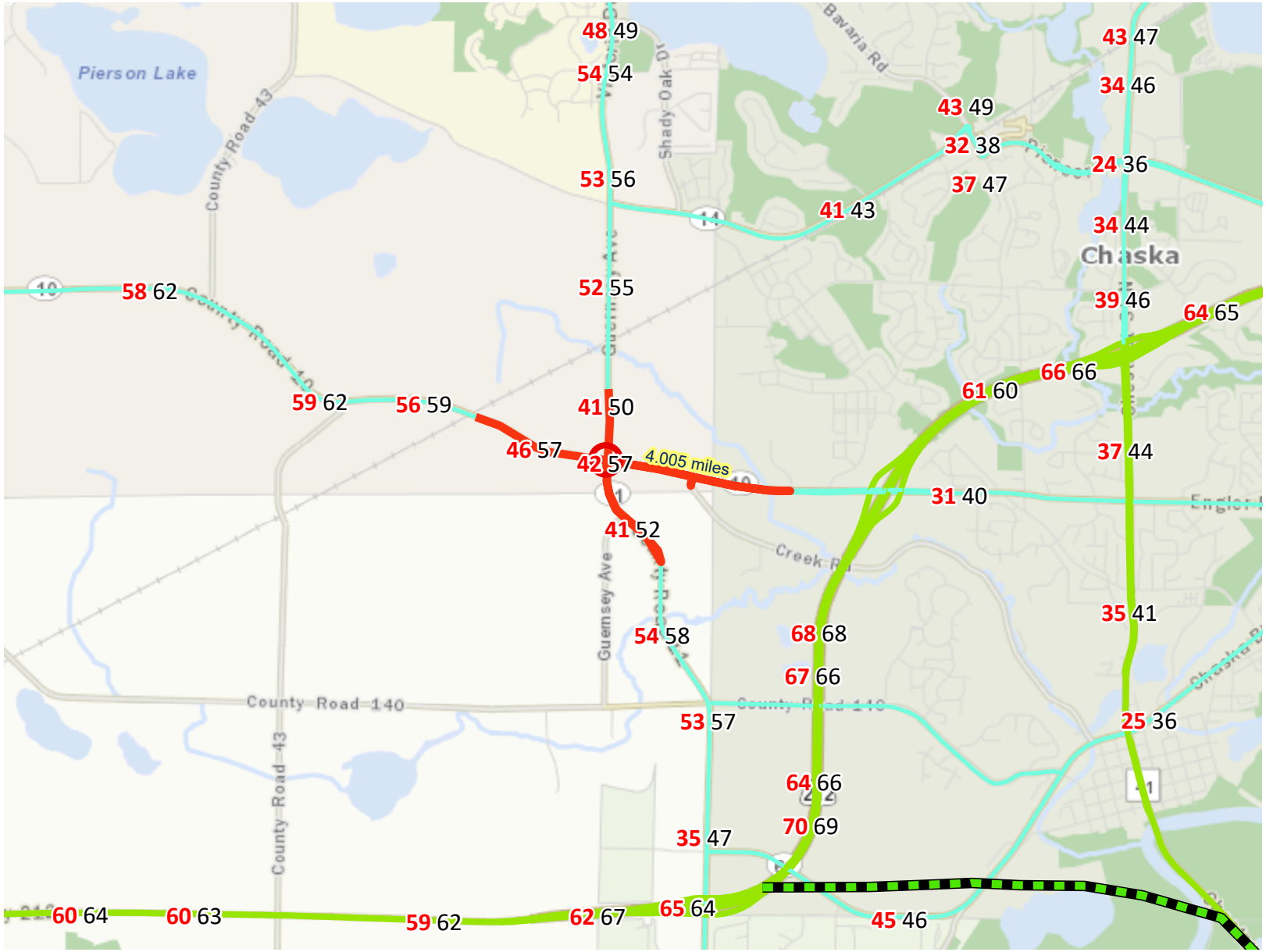
Total Project Cost (entered in Project Cost Form):	$9,270,000.00
Enter Amount of the Noise Walls:	$0.00
Total Project Cost subtract the amount of the noise walls:	$9,270,000.00
Enter amount of any outside, competitive funding:	$0.00
Attach documentation of award:	
Points Awarded in Previous Criteria	
Cost Effectiveness	$0.00

Other Attachments

File Name	Description	File Size
001_CSAH 10_West_Proposed.pdf	Proposed Project - Highway 10 Mobility	264 KB
002_CSAH 10_West_Existing.pdf	Existing Conditions Aerial - Highway 10 Mobility	201 KB
003_CSAH 10W Existing Photos.pdf	Existing Conditions Photos - Highway 10 Mobility	363 KB
Carver County Resolution 23-22 - signed.pdf	Carver County Resolution - Highway 10 Mobility	368 KB
Chaska LOS-CSAH 10-Expansion_Pages from 20220405111140359.pdf	Chaska Letter of Support - Highway 10 Mobility	500 KB
Laketown Township Support Letters for Grant Funding.pdf	Laketown Township Letter of Support - Highway 10 Mobility	58 KB
One Page Description Highway 10 Expansion Project.pdf	Project Summary - Highway 10 Mobility	340 KB

Level of Congestion

Strategic Capacity Project: Highway 10 Mobility Project | Map ID: 1646796199759



Project Points
Project
Principal Arterials
A Minor Arterials
Principal Arterials Planned
A Minor Arterials Planned

0 0.45 0.9 1.8 2.7 3.6 Miles

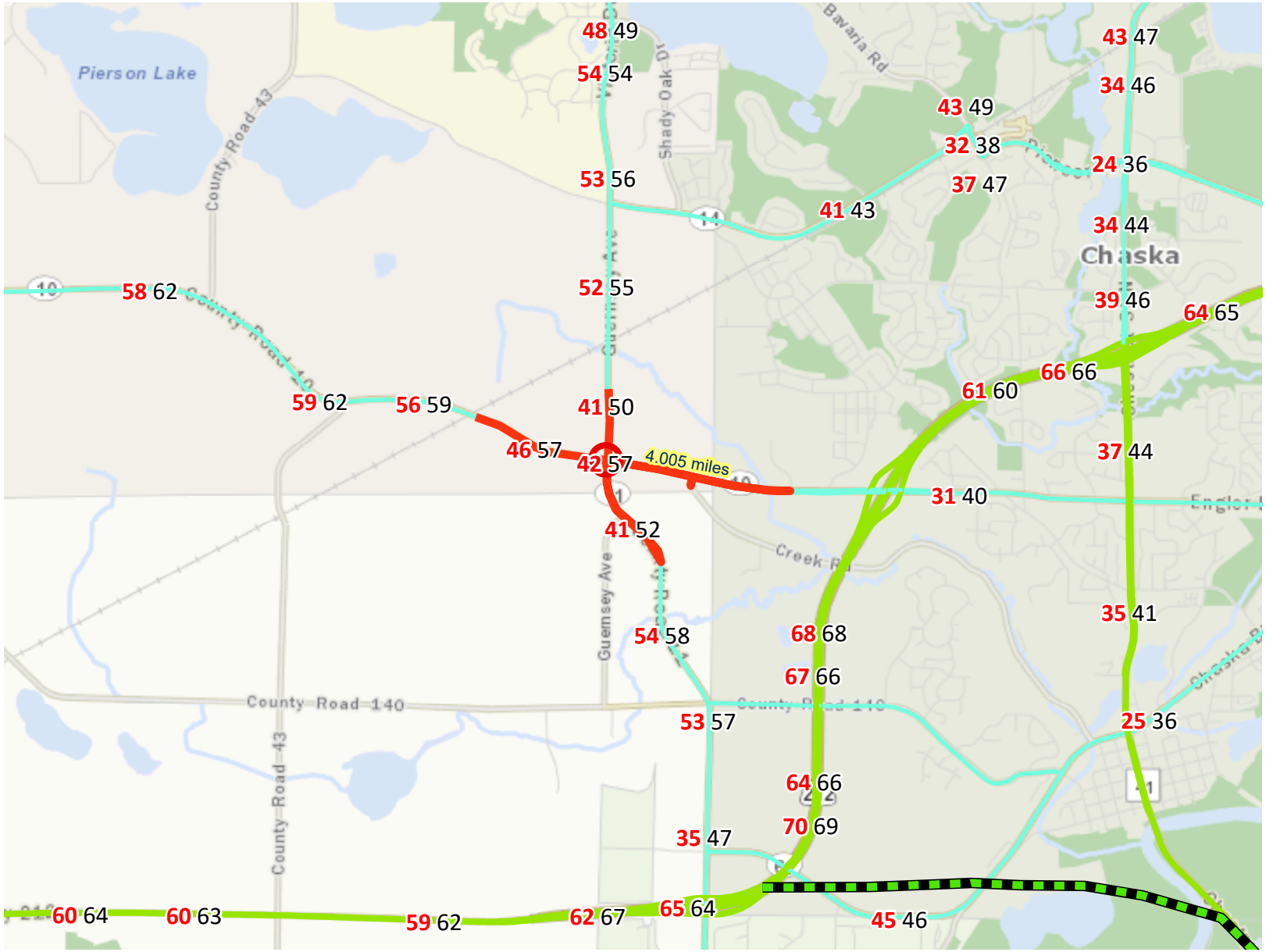
Created: 3/8/2022
LandscapeRSA1

For complete disclaimer of accuracy, please visit https://giswebsite.metc.state.mn.us/gissite/notice.aspx

METROPOLITAN COUNCIL

Level of Congestion

Strategic Capacity Project: Highway 10 Mobility Project | Map ID: 1646796199759



Project Points
Project
Principal Arterials
A Minor Arterials
Principal Arterials Planned
A Minor Arterials Planned

0 0.45 0.9 1.8 2.7 3.6 Miles

Created: 3/8/2022
LandscapeRSA1

For complete disclaimer of accuracy, please visit https://giswebsite.metc.state.mn.us/gissite/notice.aspx

METROPOLITAN COUNCIL

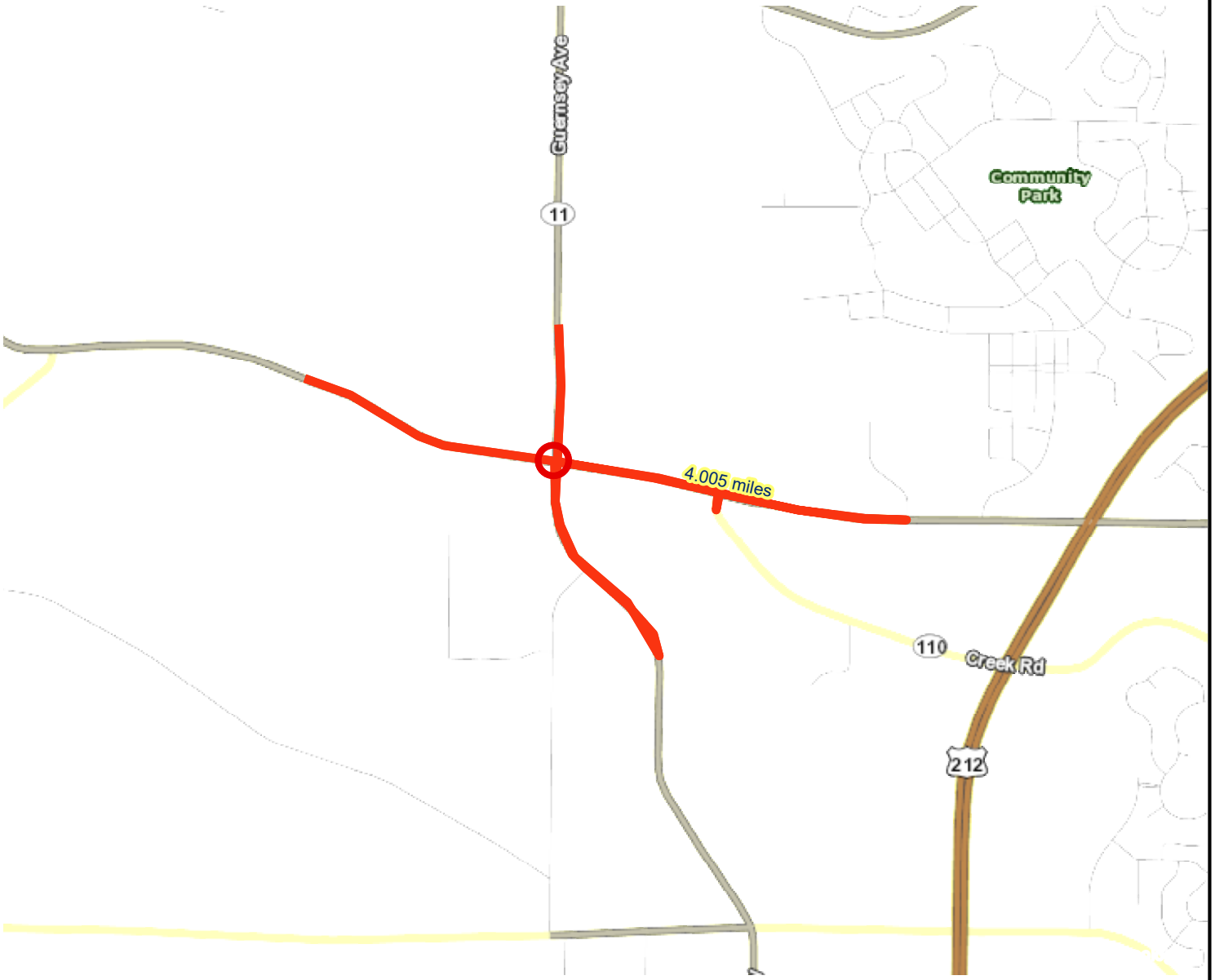
Regional Economy

Strategic Capacity Project: Highway 10 Mobility Project | Map ID: 1646796199759

Results

WITHIN ONE MI of project:
Postsecondary Students: 0

Totals by City:
Chaska
Population: 2941
Employment: 158
Mfg and Dist Employment: 0
Dahlgren Twp.
Population: 78
Employment: null
Mfg and Dist Employment: null
Laketown Twp.
Population: 57
Employment: 8
Mfg and Dist Employment: 0



Project Points
Project
Manfacturing/Distribution Centers
Job Concentration Centers

0 0.225 0.45 0.9 1.35 1.8 Miles

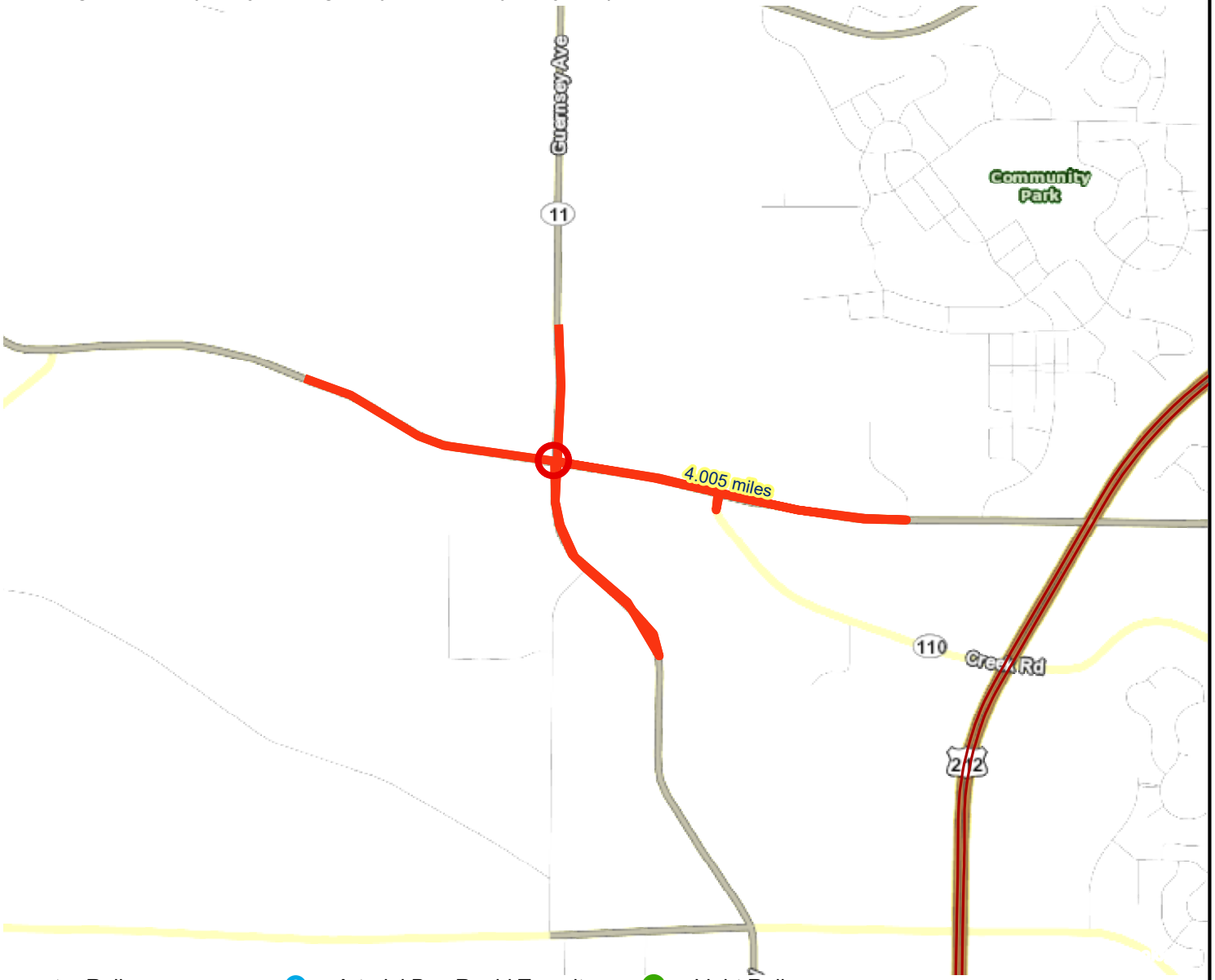
Created: 3/8/2022
LandscapeRSA5

For complete disclaimer of accuracy, please visit
http://giswebsite.metc.state.mn.us/gissitenew/notice.aspx

METROPOLITAN COUNCIL

Transit Connections

Strategic Capacity Project: Highway 10 Mobility Project | Map ID: 1646796199759



Results

Transit with a Direct Connection to project:
-- NONE --

**indicates Planned Alignments*

Transit Market areas: 5

Project Points
Project
Project Area
Arterial Bus Rapid Transit
Commuter Rail
Dedicated Bus Rapid Transit
Highway Bus Rapid Transit
Light Rail
Arterial Bus Rapid Transit
Commuter Rail
Dedicated Bus Rapid Transit
Highway Bus Rapid Transit
Light Rail
Transit Routes

0 0.225 0.45 0.9 1.35 1.8 Miles

Created: 3/8/2022
LandscapeRSA3

METROPOLITAN COUNCIL

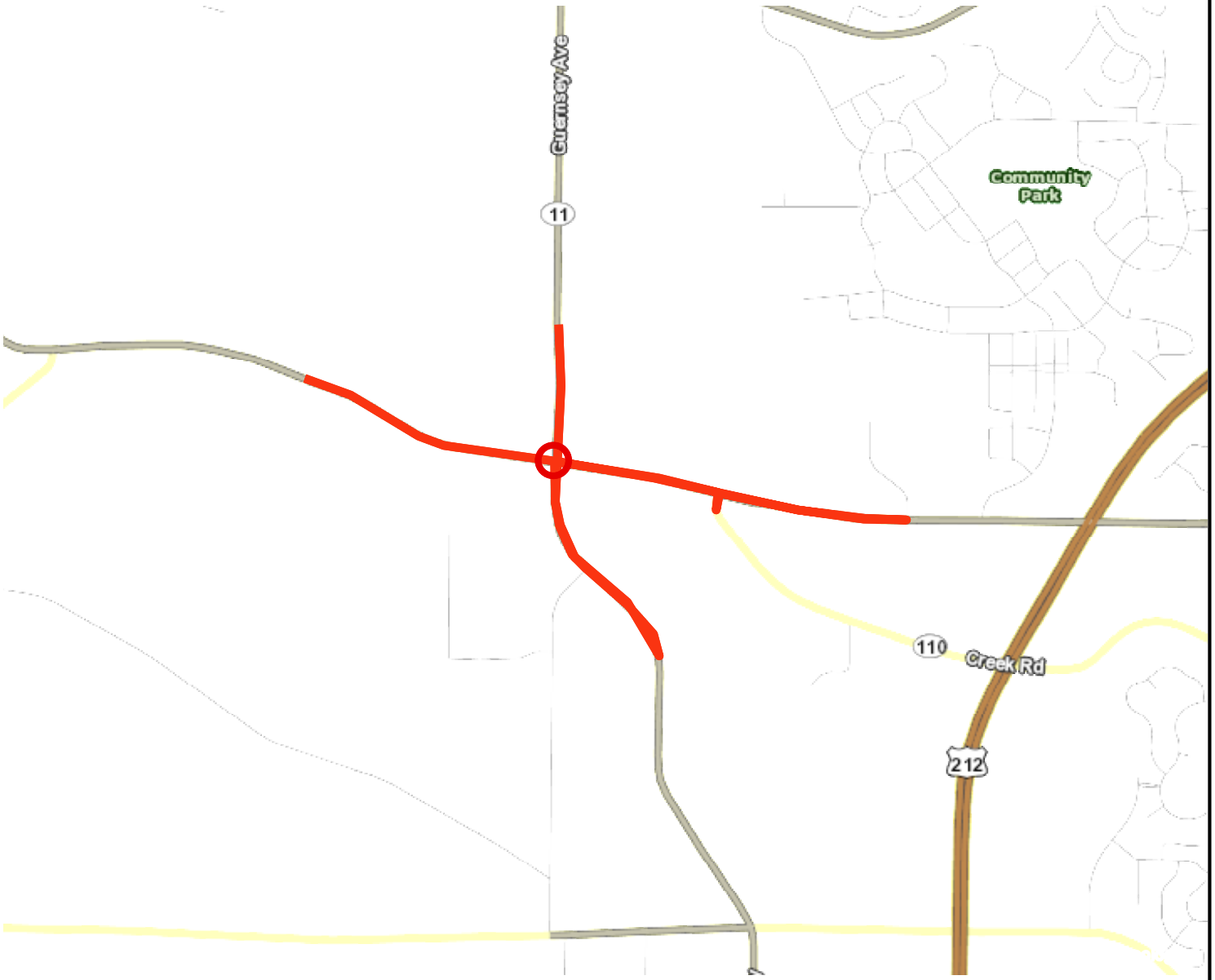
Socio-Economic Conditions

Strategic Capacity Project: Highway 10 Mobility Project | Map ID: 1646796199759

Results

Total of publicly subsidized rental housing units in census tracts within 1/2 mile: 626

Project located in census tracts that are BELOW the regional average for population in poverty or population of color.



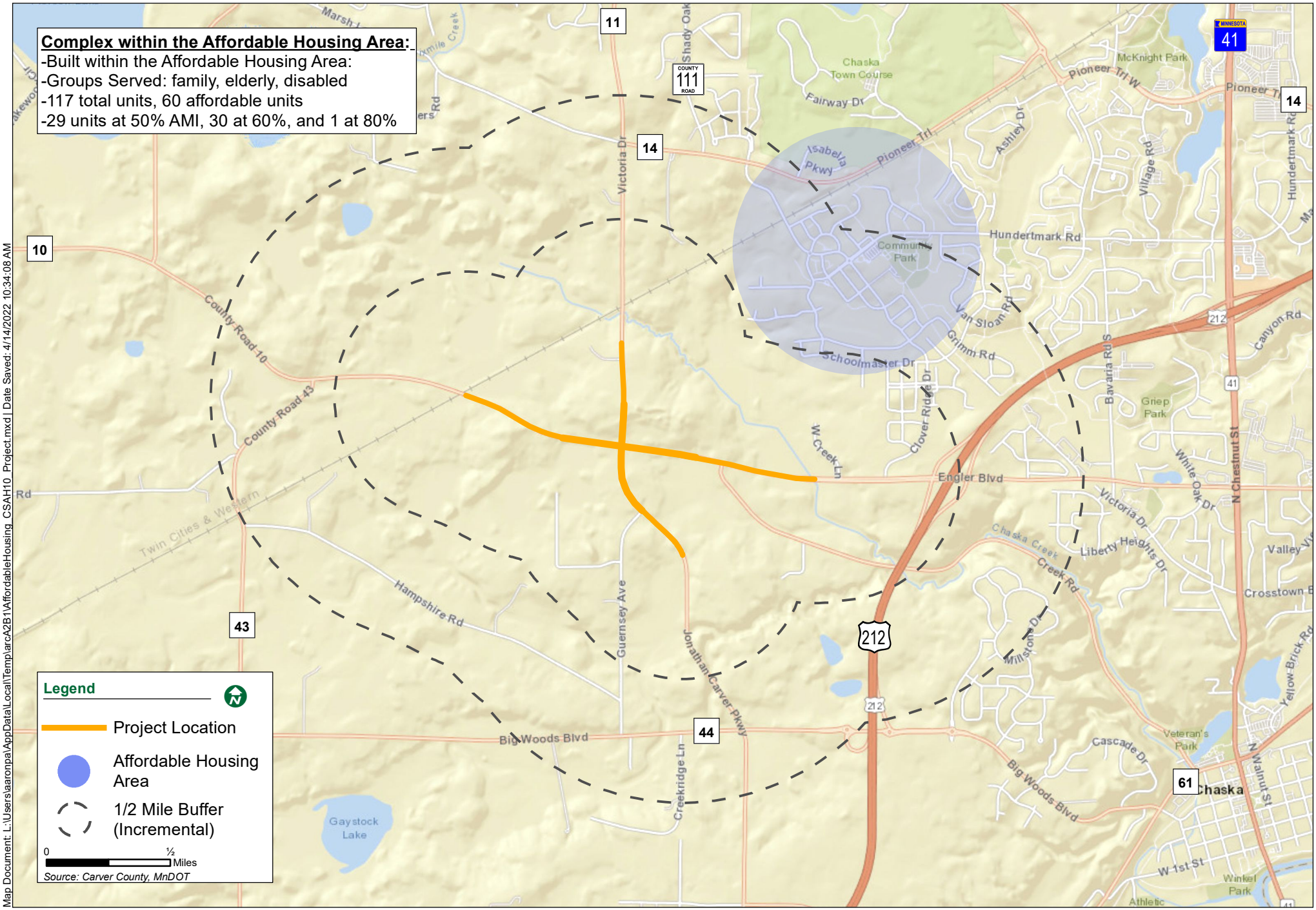
Points
Area of Concentrated Poverty
Lines

0 0.225 0.45 0.9 1.35 1.8 Miles

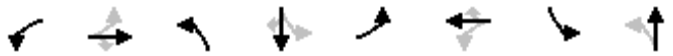
Created: 3/8/2022
LandscapeRSA2

For complete disclaimer of accuracy, please visit http://giswebsite.metc.state.mn.us/gissite/notice.aspx

METROPOLITAN COUNCIL



Map Document: L:\Users\aaronpa\AppData\Local\Temp\arcA2B1\AffordableHousing_CSAH10_Project.mxd | Date Saved: 4/14/2022 10:34:08 AM



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)	12.7	61.3	13	28	12.7	61.3	13	28
Maximum Split (%)	11.0%	53.3%	11.3%	24.3%	11.0%	53.3%	11.3%	24.3%
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	12.7	74	87	0	12.7	74	87
End Time (s)	12.7	74	87	0	12.7	74	87	0
Yield/Force Off (s)	7	67	81	108	7	67	81	108
Yield/Force Off 170(s)	7	67	81	108	7	67	81	94
Local Start Time (s)	102.3	0	61.3	74.3	102.3	0	61.3	74.3
Local Yield (s)	109.3	54.3	68.3	95.3	109.3	54.3	68.3	95.3
Local Yield 170(s)	109.3	54.3	68.3	95.3	109.3	54.3	68.3	81.3

Intersection Summary	
Cycle Length	115
Control Type	Actuated-Uncoordinated
Natural Cycle	115

Splits and Phases: 3: CSAH 11 & CSAH 10

3: CSAH 11 & CSAH 10

Direction	All
Future Volume (vph)	1932
Total Delay / Veh (s/v)	35
CO Emissions (kg)	6.55
NOx Emissions (kg)	1.27
VOC Emissions (kg)	1.52

4: Creek Rd & CSAH 10

Direction	All
Future Volume (vph)	1525
Total Delay / Veh (s/v)	4
CO Emissions (kg)	0.74
NOx Emissions (kg)	0.14
VOC Emissions (kg)	0.17

6: CSAH 10

Direction	All
Future Volume (vph)	1510
Total Delay / Veh (s/v)	0
CO Emissions (kg)	0.85
NOx Emissions (kg)	0.16
VOC Emissions (kg)	0.20

43: CSAH 10

Direction	All
Future Volume (vph)	1370
Total Delay / Veh (s/v)	0
CO Emissions (kg)	0.76
NOx Emissions (kg)	0.15
VOC Emissions (kg)	0.18

Network Totals

Number of Intersections	4
Total Delay / Veh (s/v)	12
CO Emissions (kg)	8.90
NOx Emissions (kg)	1.73
VOC Emissions (kg)	2.06
Performance Index	24.5

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)	12.7	31.3	13	28	12.7	31.3	13	28
Maximum Split (%)	14.9%	36.8%	15.3%	32.9%	14.9%	36.8%	15.3%	32.9%
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	12.7	44	57	0	12.7	44	57
End Time (s)	12.7	44	57	0	12.7	44	57	0
Yield/Force Off (s)	7	37	51	78	7	37	51	78
Yield/Force Off 170(s)	7	37	51	78	7	37	51	64
Local Start Time (s)	72.3	0	31.3	44.3	72.3	0	31.3	44.3
Local Yield (s)	79.3	24.3	38.3	65.3	79.3	24.3	38.3	65.3
Local Yield 170(s)	79.3	24.3	38.3	65.3	79.3	24.3	38.3	51.3

Intersection Summary	
Cycle Length	85
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 (s/v)	18
CO Emissions (kg)	5.88
NOx Emissions (kg)	1.14
VOC Emissions (kg)	1.36

4: Creek Rd & CSAH 10

Direction	All
Future Volume (vph)	1603
Total Delay / Veh (s/v)	1
CO Emissions (kg)	0.69
NOx Emissions (kg)	0.13
VOC Emissions (kg)	0.16

6: CSAH 10

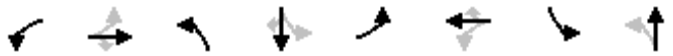
Direction	All
Future Volume (vph)	1510
Total Delay / Veh (s/v)	0
CO Emissions (kg)	0.84
NOx Emissions (kg)	0.16
VOC Emissions (kg)	0.19

43: CSAH 10

Direction	All
Future Volume (vph)	1442
Total Delay / Veh (s/v)	0
CO Emissions (kg)	0.78
NOx Emissions (kg)	0.15
VOC Emissions (kg)	0.18

Network Totals

Number of Intersections	4
Total Delay / Veh (s/v)	5
CO Emissions (kg)	8.20
NOx Emissions (kg)	1.59
VOC Emissions (kg)	1.90
Performance Index	13.4



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)	12.7	61.3	13	28	12.7	61.3	13	28
Maximum Split (%)	11.0%	53.3%	11.3%	24.3%	11.0%	53.3%	11.3%	24.3%
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	12.7	74	87	0	12.7	74	87
End Time (s)	12.7	74	87	0	12.7	74	87	0
Yield/Force Off (s)	7	67	81	108	7	67	81	108
Yield/Force Off 170(s)	7	67	81	108	7	67	81	94
Local Start Time (s)	102.3	0	61.3	74.3	102.3	0	61.3	74.3
Local Yield (s)	109.3	54.3	68.3	95.3	109.3	54.3	68.3	95.3
Local Yield 170(s)	109.3	54.3	68.3	95.3	109.3	54.3	68.3	81.3

Intersection Summary	
Cycle Length	115
Control Type	Actuated-Uncoordinated
Natural Cycle	115

Splits and Phases: 3: CSAH 11 & CSAH 10

3: CSAH 11 & CSAH 10

Direction	All
Future Volume (vph)	1932
Total Delay / Veh (s/v)	35
CO Emissions (kg)	6.55
NOx Emissions (kg)	1.27
VOC Emissions (kg)	1.52

4: Creek Rd & CSAH 10

Direction	All
Future Volume (vph)	1525
Total Delay / Veh (s/v)	4
CO Emissions (kg)	0.74
NOx Emissions (kg)	0.14
VOC Emissions (kg)	0.17

6: CSAH 10

Direction	All
Future Volume (vph)	1510
Total Delay / Veh (s/v)	0
CO Emissions (kg)	0.85
NOx Emissions (kg)	0.16
VOC Emissions (kg)	0.20

43: CSAH 10

Direction	All
Future Volume (vph)	1370
Total Delay / Veh (s/v)	0
CO Emissions (kg)	0.76
NOx Emissions (kg)	0.15
VOC Emissions (kg)	0.18

Network Totals

Number of Intersections	4
Total Delay / Veh (s/v)	12
CO Emissions (kg)	8.90
NOx Emissions (kg)	1.73
VOC Emissions (kg)	2.06
Performance Index	24.5

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)	12.7	31.3	13	28	12.7	31.3	13	28
Maximum Split (%)	14.9%	36.8%	15.3%	32.9%	14.9%	36.8%	15.3%	32.9%
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	12.7	44	57	0	12.7	44	57
End Time (s)	12.7	44	57	0	12.7	44	57	0
Yield/Force Off (s)	7	37	51	78	7	37	51	78
Yield/Force Off 170(s)	7	37	51	78	7	37	51	64
Local Start Time (s)	72.3	0	31.3	44.3	72.3	0	31.3	44.3
Local Yield (s)	79.3	24.3	38.3	65.3	79.3	24.3	38.3	65.3
Local Yield 170(s)	79.3	24.3	38.3	65.3	79.3	24.3	38.3	51.3

Intersection Summary	
Cycle Length	85
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 (s/v)	18
CO Emissions (kg)	5.88
NOx Emissions (kg)	1.14
VOC Emissions (kg)	1.36

4: Creek Rd & CSAH 10

Direction	All
Future Volume (vph)	1603
Total Delay / Veh (s/v)	1
CO Emissions (kg)	0.69
NOx Emissions (kg)	0.13
VOC Emissions (kg)	0.16

6: CSAH 10

Direction	All
Future Volume (vph)	1510
Total Delay / Veh (s/v)	0
CO Emissions (kg)	0.84
NOx Emissions (kg)	0.16
VOC Emissions (kg)	0.19

43: CSAH 10

Direction	All
Future Volume (vph)	1442
Total Delay / Veh (s/v)	0
CO Emissions (kg)	0.78
NOx Emissions (kg)	0.15
VOC Emissions (kg)	0.18

Network Totals

Number of Intersections	4
Total Delay / Veh (s/v)	5
CO Emissions (kg)	8.20
NOx Emissions (kg)	1.59
VOC Emissions (kg)	1.90
Performance Index	13.4

Traffic Safety Benefit-Cost Calculation

Highway Safety Improvement Program (HSIP) Reactive Project

DEPARTMENT OF TRANSPORTATION

A. Roadway Description

Route	CSAH 10/11	**District**	Metro	**County**	Carver
Begin RP		**End RP**		**Miles**	2.250
Location	CSAH 10 (Engler Blvd) between Creek Ln and RR Tracks				

B. Project Description

Proposed Work	Expansion of CSAH 10 at CSAH 11 to 4-lane divided section, turn lane additions/extensions on all legs, signal improvements, RCUT at Creek Rd		
Project Cost*	$9,270,000	**Installation Year**	2026
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**		
0.71	**Moderate Injury (B) Crashes**	**Crash Type**	All (2-lane to 4-lane divided)
0.71	**Possible Injury (C) Crashes**		
0.71	**Property Damage Only Crashes**		www.CMFclearinghouse.org

D. Crash Modification Factor (optional second CMF)

0.42	**Fatal (K) Crashes**	**Reference**	ID 10384
0.42	**Serious Injury (A) Crashes**		
0.42	**Moderate Injury (B) Crashes**	**Crash Type**	All (RCUT)
0.42	**Possible Injury (C) Crashes**		
0.42	**Property Damage Only Crashes**		www.CMFclearinghouse.org

E. Crash Data

Begin Date	1/1/2019	**End Date**	12/31/2021	3 years
Data Source	MnDOT			

Crash Severity	All (2-lane to 4-lane divided)	All (RCUT)
K crashes	0	
A crashes	1	1
B crashes	4	
C crashes	5	
PDO crashes	12	3

F. Benefit-Cost Calculation

$8,768,187	**Benefit (present value)**	**B/C Ratio = 0.95**
$9,270,000	**Cost**	

Proposed project expected to reduce 3 crashes annually, 1 of which involving fatality or serious injury.

F. Analysis Assumptions

Crash Severity	Crash Cost
K crashes	$1,500,000
A crashes	$750,000
B crashes	$230,000
C crashes	$120,000
PDO crashes	$13,000

Link: mndot.gov/planning/program/appendix_a.html

Real Discount Rate	0.7%
Traffic Growth Rate	2.0%
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	0.87	0.29	$217,500
B crashes	1.16	0.39	$88,933
C crashes	1.45	0.48	$58,000
PDO crashes	5.22	1.74	$22,620
			$387,053

H. Amortized Benefit

Year	Crash Benefits	Present Value
2026	$387,053	$387,053
2027	$394,794	$392,050
2028	$402,690	$397,111
2029	$410,744	$402,238
2030	$418,959	$407,431
2031	$427,338	$412,690
2032	$435,885	$418,018
2033	$444,603	$423,414
2034	$453,495	$428,881
2035	$462,565	$434,417
2036	$471,816	$440,025
2037	$481,252	$445,706
2038	$490,877	$451,460
2039	$500,695	$457,288
2040	$510,709	$463,192
2041	$520,923	$469,171
2042	$531,341	$475,228
2043	$541,968	$481,363
2044	$552,807	$487,577
2045	$563,864	$493,872
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

Total = $8,768,187

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

Star Quality Rating:	★★★★☆ [View score details]

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?	No
Date Added to Clearinghouse:	Nov-01-2015
Comments:	

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

CRASH MODIFICATION FACTORS CLEARINGHOUSE

CMF / CRF Details

CMF ID: 10384

Convert intersection to restricted crossing U-turn (RCUT) intersection

Description: The RCUT, also referred to as the superstreet intersection or J-turn intersection. The conversion is for either signalized or stop-controlled.

Prior Condition: Both signalized and stop-controlled intersections

Category: Intersection geometry

Study: *Investigating Safety Impact of Center Line Rumble Strips, Lane Conversion, Roundabout and J-Turn Features on Louisiana Highways*, Sun and Rahman, 2019

Star Quality Rating:	★★★★☆ [View score details]

Crash Modification Factor (CMF)	
Value:	0.42
Adjusted Standard Error:	
Unadjusted Standard Error:	0.163

Crash Reduction Factor (CRF)	
Value:	58 *(This value indicates a **decrease** in crashes)*
Adjusted Standard Error:	

Unadjusted Standard Error:	16.3

Applicability

Crash Type:	All
Crash Severity:	All
Roadway Types:	Not specified
Number of Lanes:	4-6
Road Division Type:	Divided by Median
Speed Limit:	>=55mph
Area Type:	All
Traffic Volume:	
Time of Day:	Not specified

If countermeasure is intersection-based

Intersection Type:	Roadway/roadway (not interchange related)
Intersection Geometry:	No values chosen.
Traffic Control:	
Major Road Traffic Volume:	59833 to 59833 Annual Average Daily Traffic (AADT)
Minor Road Traffic Volume:	

Development Details

Date Range of Data Used:	2008 to 2016
Municipality:	
State:	LA

Country:	USA
Type of Methodology Used:	2
Sample Size Used:	

Other Details

Included in Highway Safety Manual?	No
Date Added to Clearinghouse:	Jun-01-2020
Comments:	CMF partial RCUT with 2 minor streets. Crashes for RCUT section (including U-turns). SPF used for this analysis came from the 2010 HSM

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

Crash Case Listing
CSAH 10W Expansion

Report Version 1.0
February 2020

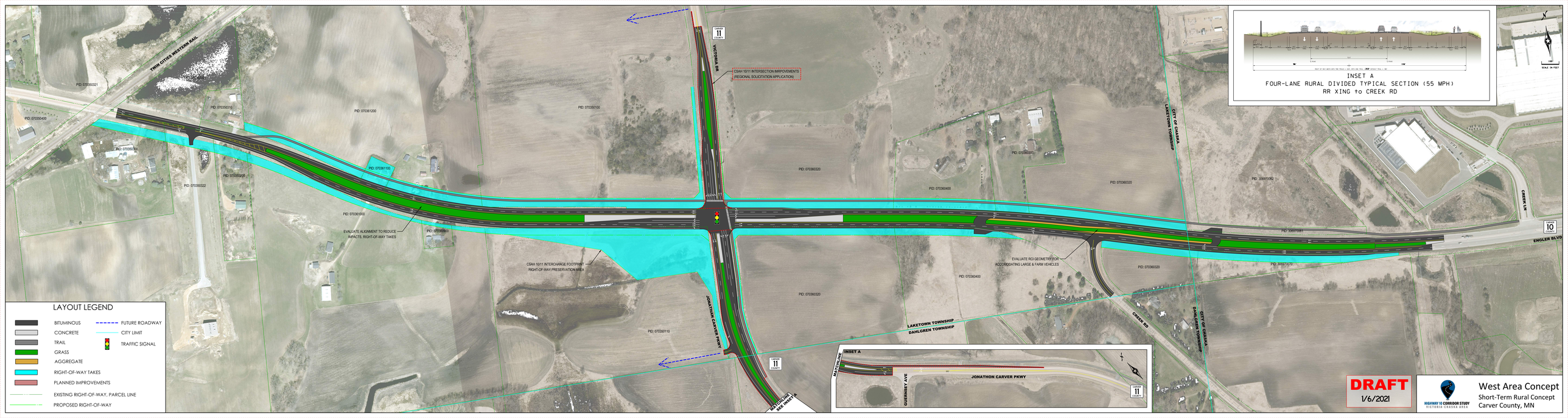
Route System	Route Number	Measure	Co	City	Incident Number	Date	Time	Day of Week	Basic Type	Num Veh	Sev
04-CSAH	10	19.907	10		00847515	10/20/20	1220	TUE	Head On	2	C
04-CSAH	10	20.089	10		00743087	08/27/19	0738	TUE	Rear End	2	C
04-CSAH	10	20.157	10		00980862	12/16/21	0715	THU	SVROR	1	N
04-CSAH	10	20.169	10		00842739	09/25/20	1004	FRI	Rear End	2	N
04-CSAH	10	20.195	10		00968213	10/21/21	0700	THU	Rear End	2	N
04-CSAH	10	20.196	10		00776605	01/02/20	0745	THU	Rear End	2	N
04-CSAH	10	20.199	10		00766341	11/29/19	1923	FRI	Rear End	2	B
04-CSAH	10	20.201	10		00745089	09/05/19	1936	THU	Angle	2	B
04-CSAH	10	20.202	10		00758604	10/31/19	1858	THU	Left Turn	2	B
04-CSAH	10	20.202	10		00983738	12/27/21	1320	MON	Rear End	2	C
04-CSAH	10	20.203	10		00772898	12/18/19	1655	WED	Rear End	2	N
04-CSAH	10	20.430	10		00976836	12/01/21	2024	WED	Other	1	N
04-CSAH	10	20.463	10		00730042	06/28/19	1230	FRI	Rear End	2	N
04-CSAH	10	20.471	10		00774916	12/28/19	0825	SAT	SVROR	1	N
04-CSAH	10	20.614	10		00929635	07/21/21	1831	WED	Angle	2	A
04-CSAH	10	20.669	10		00973071	11/12/21	1920	FRI	Other	1	N
04-CSAH	10	20.760	10	Chaska	00895792	03/15/21	1400	MON	SSS	2	N
04-CSAH	10	20.986	10	Chaska	00677819	01/22/19	0605	TUE	Other	1	N
04-CSAH	10	21.027	10	Chaska	00976406	11/30/21	0630	TUE	Other	1	N
04-CSAH	11	8.661	10		00811573	05/25/20	1409	MON	Head On	2	C
04-CSAH	11	8.664	10		00813774	06/10/20	1158	WED	Angle	2	C
04-CSAH	11	8.665	10		00940022	09/08/21	1732	WED	Other	2	B
04-CSAH	11	8.709	10		00729993	06/28/19	1021	FRI	Angle	2	N
08-TWNS	509	0.003	10		00868883	12/19/20	0558	SAT	SVROR	1	N
08-TWNS	509	0.004	10		00751844	10/03/19	0755	THU	Angle	2	N

Selection Filter:

WORK AREA: County('659455') - FILTER: Year('2019','2020','2021') - SPATIAL FILTER APPLIED

Analyst: Jacob Bongard

Notes:


TWIN CITIES WESTERN RAIL
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PID: 070350400
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PID: 070350305
PID: 070350309
PID: 070350322
PID: 070361200
PID: 070361100
PID: 070361600
PID: 070360600
EVALUATE ALIGNMENT TO REDUCE IMPACTS, RIGHT-OF-WAY TAKES
CSAH 10/11 INTERCHANGE FOOTPRINT RIGHT-OF-WAY PRESERVATION AREA
CSAH 11 COUNTY
VICTORIA DR
CSAH 10/11 INTERSECTION IMPROVEMENTS (REGIONAL SOLICITATION APPLICATION)
PID: 070350100
PID: 070360320
PID: 070360400
PID: 070360370
JONATHON CARVER PKWY
PID: 070350110
LAKETOWN TOWNSHIP
DAHLGREN TOWNSHIP
CITY OF CHASKA
EVALUATE ROI GEOMETRY FOR ACCOMODATING LARGE & FARM VEHICLES
PID: 206970082
PID: 206970081
PID: 206973070
CREEK LN
CREEK RD
CSAH 10 COUNTY
ENGLER BLVD
INSET A
FOUR-LANE RURAL DIVIDED TYPICAL SECTION (55 MPH)
RR XING to CREEK RD
SCALE IN FEET
LAYOUT LEGEND
BITUMINOUS
CONCRETE
TRAIL
GRASS
AGGREGATE
RIGHT-OF-WAY TAKES
PLANNED IMPROVEMENTS
EXISTING RIGHT-OF-WAY, PARCEL LINE
PROPOSED RIGHT-OF-WAY
FUTURE ROADWAY
CITY LIMIT
TRAFFIC SIGNAL
INSET A
JONATHON CARVER PKWY
GUERNSEY AVE
CSAH 11 COUNTY
DRAFT
1/6/2021
HIGHWAY 10 CORRIDOR STUDY
VICTORIA CHASKA AREA
West Area Concept
Short-Term Rural Concept
Carver County, MN

Carver County
Public Works
11360 Highway 212, Suite 1
Cologne, MN 55322

April 11, 2022

Elaine Koutsoukos
TAB Coordinator
METROPOLITAN COUNCIL
390 Robert St. N
St. Paul, MN 55101

SUBJECT: Highway 10 Mobility and Access Project Risk Assessment Layout Approval Letter

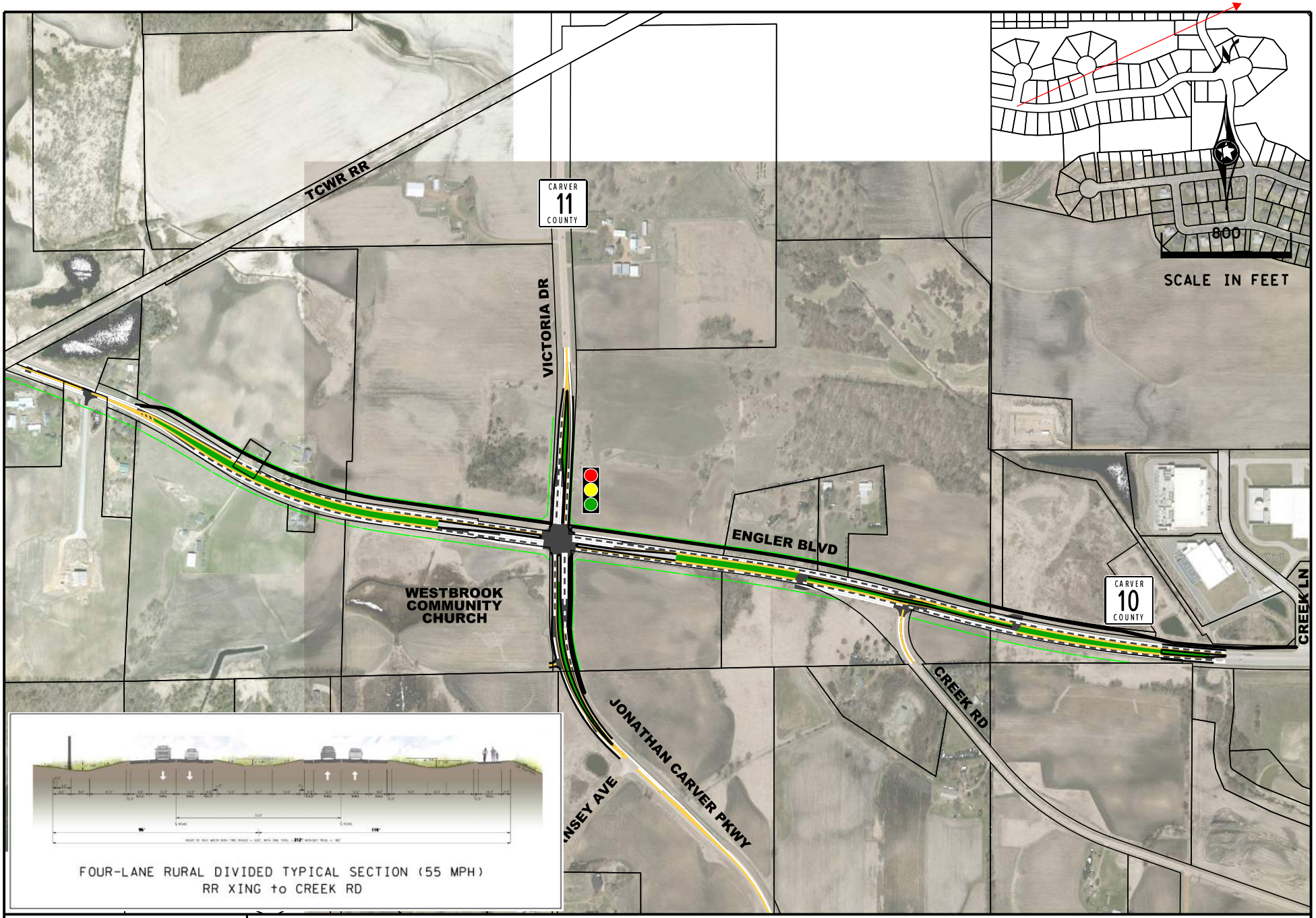
Dear Ms. Koutsoukos:

This letter is to confirm the County's agreement with and approval to date of the attached layout for the Highway 10 Mobility and Access Project. 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.

The City of Chaska and Laketown Township provided letters of support for the project. The County is committed to working with project partners to complete the final layout approval engineering process for the Highway 10 Mobility and Access Project in the coming months.

Sincerely,

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



FOUR-LANE RURAL DIVIDED TYPICAL SECTION (55 MPH)
RR XING to CREEK RD

BOLTON & MENK

PROPOSED CONDITIONS

HIGHWAY 10 EXPANSION PROJECT - CREEK LN TO RR TRACKS

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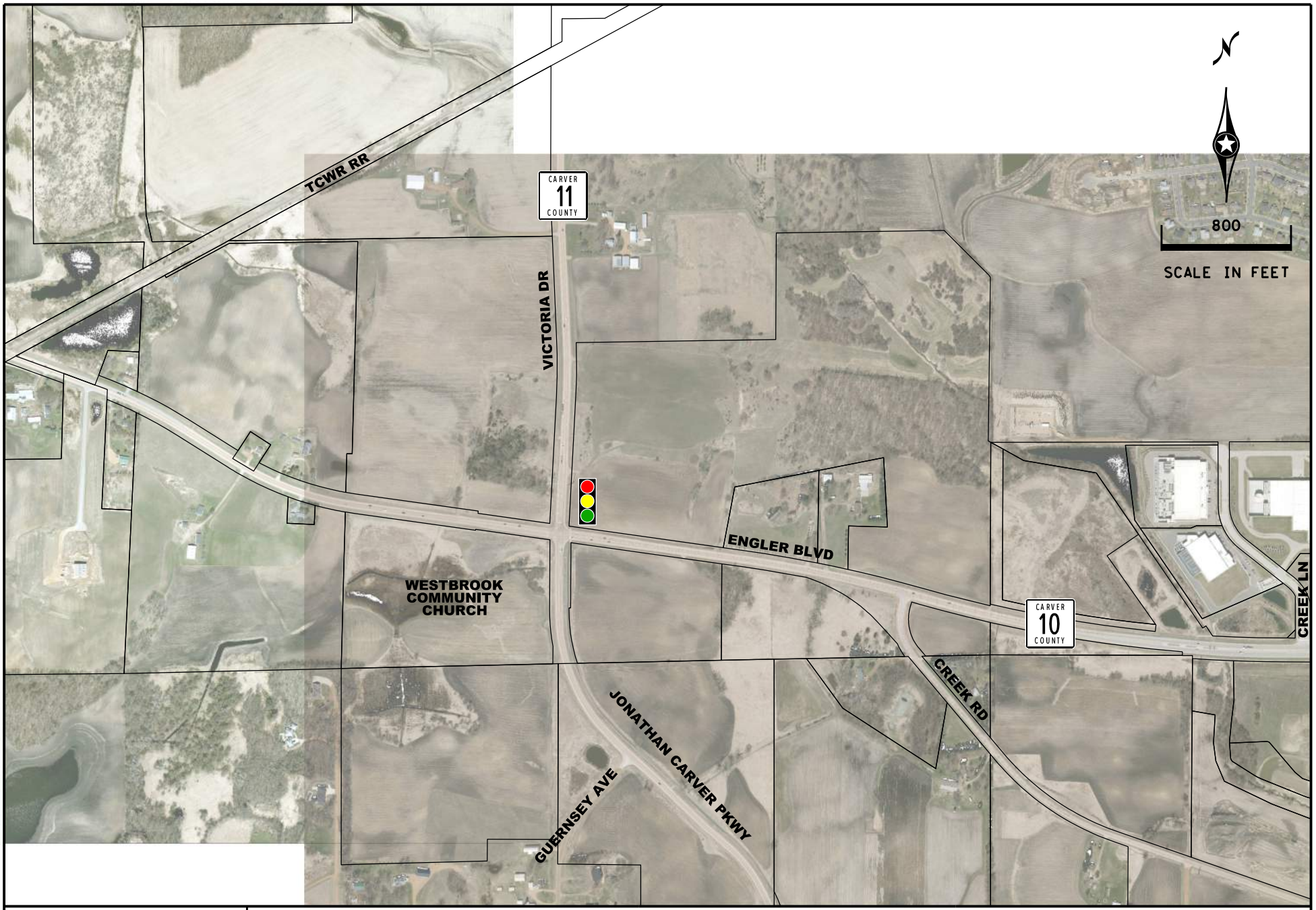

BOLTON & MENK

EXISTING CONDITIONS

HIGHWAY 10 EXPANSION PROJECT - CREEK LN TO RR TRACKS

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CSAH 10 at CSAH 11 Intersection Existing Conditions – Looking west

Photo courtesy of Google

CSAH 10 at CSAH 11 Intersection Existing Conditions – Looking north

CSAH 10 at Creek Road Intersection Existing Conditions – Looking east

Photo courtesy of Google

CITY OF CHASKA
ONE CITY HALL PLAZA / CHASKA MN 55318-1962

April 5, 2022

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

Dear Mr. Robjent,

The City of Chaska is pleased to support Carver County's application for the Highway 10 Mobility and Access Corridor Improvement under the Roadway Strategic Capacity category of the Metropolitan Council's 2022 Regional Solicitation for federal transportation funding.

The proposed project will reconstruct and expand County State Aid Highway (CSAH) 10 from west of CSAH 11 to W Creek Ln. with intersection safety and mobility improvements and bicycle and pedestrian improvements throughout the corridor. The project will provide substantial safety and capacity benefits by expanding the existing 2-lane rural highway section to a 4-lane section, implementing access management strategies, and constructing a regional trail facility to serve the bicycle and pedestrian users along the corridor.

The City of Chaska partnered with Carver County, the Minnesota Department of Transportation (MnDOT), and the City of Victoria, on the Highway 10 Corridor Study to identify coordinated roadway improvements to address significant existing transportation mobility, safety, and access issues on the CSAH 10 (Engler Blvd.) corridor through Chaska. The Highway 10 Corridor Study included a robust technical analysis, concept development, concept evaluation, and a diversified and broad public engagement strategy to identify and build consensus for short and long-term roadway concepts and recommendations. The proposed project is consistent with the study, which was adopted by the City and County in 2021.

The City of Chaska supports the County's application for the Highway 10 Mobility and Access Corridor Improvement to the Metropolitan Council's 2022 Regional Solicitation funding program and acknowledges potential City cost-share in the project.

Sincerely,

Mark Windschitl, Mayor
City of Chaska

Township of Laketown
9530 Laketown Road
Chaska, MN 55318
Phone: 952-442-5278
Laketowntownship@gmail.com

March 28 2022

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 Highway 10 Mobility and Access Corridor Improvement under the Roadway Strategic Capacity category of the Metropolitan Council's 2022 Regional Solicitation for federal transportation funding.

The proposed project will reconstruct and expand County State Aid Highway (CSAH) 10 from west of CSAH 11 to W Creek Ln. with intersection safety and mobility improvements and bicycle and pedestrian improvements throughout the corridor. The project will provide substantial safety and capacity benefits by expanding the existing 2-lane rural highway section to a 4-lane section, implementing access management strategies, and constructing a regional trail facility to serve the bicycle and pedestrian users along the corridor.

Laketown Township participated on the Carver County-led Highway 10 Corridor Study to identify coordinated roadway improvements to address significant existing transportation mobility, safety, and access issues on the CSAH 10 (Engler Blvd.) corridor through the Township. The Highway 10 Corridor Study included a robust technical analysis, concept development, concept evaluation, and a diversified and broad public engagement strategy to identify and build consensus for short and long-term roadway concepts and recommendations. The proposed project is consistent with the study, which was adopted by the County in 2021.

Laketown Township supports the County's application for the Highway 10 Mobility and Access Corridor Improvement to the Metropolitan Council's 2022 Regional Solicitation funding program.

Sincerely,

Signature
Pete Parris
Chairman

Highway 10 Mobility & Access Project
Carver County

Primary Contact:
Angie Stenson
Sr. Transportation Planner
612.360.7422
astenson@co.carver.mn.us

Application Category:
Roadways including Multimodal Elements – **Strategic Capacity**

Corridor Fast Facts:

- 2040 growth scenarios show 40,000 veh/day on Highway 10
- Project adds over 1.5 miles of regional trail
- Improvements increase average arterial travel speeds by 5 mph significantly reducing congestion during peak periods

Funding Information:
Requested Award Amount: $7,416,000
Local Match: $1,854,000
Project Total: $9,270,000

Match $ Sources:

- Carver County
- City of Chaska
- City of Victoria

2022 *Award* → 2024-25 *Design* → 2026-27 *Construction*

Project Description

The Highway 10 Mobility and Access project will reconstruct Highway 10 between Chaska Creek and stopping just east of the Twin Cities Western Rail at-grade crossing. Proposed improvements include the expansion of Highway 10, and legs of Highway 11, from a two-lane undivided rural section to a four-lane divided urban section, and multi-use trail facilities throughout where none exist today. The intersection of Highway 10 and Creek Road will be reconstructed as a Reduced Conflict Intersection (RCI). The intersection of Highways 10 and 11 will be reconstructed with added turn lanes and include a new traffic signal and improved pedestrian facilities.

Highways 10 and 11 are classified as an A-Minor Arterial 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. Highway 11 is a vital north-south regional link between the cities of Victoria and Carver to Highway 10, Trunk Highway 5 and to US 212. Due to significant residential growth in these communities in recent years, this project need is identified in multiple planning documents and studies as a priority improvement to support local and regional mobility as development continues and the population of Carver County continues to grow. Creek Road, intersecting with the project near the east extents, serves as an alternate route to downtown Chaska and has seen notable industrial development in the last year, causing a significant increase in freight traffic.

Project Benefits

This segment of Highway 10, and its intersection with Highway 11, are currently overcapacity and experiencing delays in the peak hours. Forecasted development and traffic growth, not only in the immediate project area but also in the surrounding cities, will only exacerbate the operations and safety issues experienced today.

Proposed improvements will offer immediate relief for existing and long-term capacity concerns for regional growth. Proposed multimodal trail facilities will fill an existing gap in a Tier 2 RBTN alignment along Highway 10 and connect into an existing regional Tier 2 RBTN alignment along Highway 11. This will providing active transportation options for a quickly developing regional area and the adjacent future commercial growth parcels surrounding the Highway 10 and 11 intersection.

Part of a Bigger Picture

The Highway 10 Corridor Study identified this segment as the crucial area for near-term improvements to move the increasing traffic volumes through the region. The expansion is identified as a key improvement in multiple planning documents and is the first step in the ultimate vision of Highway 10 become the premier east-west multi-modal artery in Carver County responding to increased development pressure throughout the area.