Application

13860 - 2020 Roadway Expansion

14345 - Highway 41 and CSAH 10 Mobility and Access Improvement

Regional Solicitation - Roadways Including Multimodal Elements

Status:	Submitted
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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 41 and CSAH 10 Mobility and Access Improvement

Primary County where the Project is Located Carver

Cities or Townships where the Project is Located: Chaska

Jurisdictional Agency (If Different than the Applicant):

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

The intersection of CSAH 10 (Engler Blvd) and TH 41 (Chestnut St) requires expansion to a divided four-lane urban section. This includes roundabouts replacing the adjacent all-way stop controlled intersections of CSAH 10/Bavaria Rd and CSAH 10/Park Ridge Dr, to maintain traffic flow though this important corridor while balancing the mobility for residents.

CSAH 10, a minor arterial serving as one of three major highways running east-west through Carver County connecting Chaska and Waconia to TH 41 and US 212, clearly has large implications for regional mobility. TH 41 is a principal arterial connecting US 212, downtown Chaska, and the TH 41 Minnesota River into Shakopee and Scott County. Furthermore, this intersection is set in a diverse environment featuring residential, commercial and educational areas creating complications in serving the various traffic types efficiently and safely without impacting the environment.

The TH 41 and CSAH 10 intersection is a regionally important junction that has been operationally degrading for years and has had continuous expressed safety concerns from the public and stakeholders. This intersection is currently over capacity and requires expansion to serve existing and future traffic volumes to maintain the necessary level of mobility to serve the region. The CSAH 10 corridor is currently a two-lane rural section through the project area and is surrounded by homes, businesses, churches and schools. Two all-way stop controlled intersection create significant bottle necks during peak hours, and both intersection cause a concerning amount of crashes. Due to recent traffic growth, residents have issues accessing CSAH 10 from their side street stop-controlled neighborhoods, citing few safe gaps in

traffic during peak hours; so much so that residents avoid travel during peak hours if possible or take longer routes to avoid these delays.

To address the high pedestrian volumes generated by the nearby school campus and notable pedestrian crash history, a pedestrian underpass crossing the east leg of the intersection is proposed to connect the City network south of CSAH 10 to the regional trail running along the north side of CSAH 10.

(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.

Reconstruction of TH 41 with turn lane improvements and reconstruction of CSAH 10 to four-lane divided section with roundabouts at Bavaria Rd and Park Ridge Drive

Project Length (Miles)

to the nearest one-tenth of a mile

1.1

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

$9,049,600.00

Match Amount

$2,262,400.00

Minimum of 20% of project total

Project Total

$11,312,000.00

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

Carver County, City of Chaska

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:

2024

Select 2022 or 2023 for TDM projects only. For all other applications, select 2024 or 2025.

Additional Program Years:

2023

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

Project Information-Roadways

County, City, or Lead Agency	Carver County
Functional Class of Road	Principal Arterial, A-Minor Arterial Expander
Road System *TH, CSAH, MSAS, CO. RD., TWP. RD., CITY STREET*	TH, CSAH
Road/Route No. *i.e., 53 for CSAH 53*	41
Name of Road *Example; 1st ST., MAIN AVE*	Chestnut St., Engler Blvd.
Zip Code where Majority of Work is Being Performed	55318
(Approximate) Begin Construction Date	07/01/2023
(Approximate) End Construction Date	06/30/2024

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

From: **(Intersection or Address)**	TH 41, 500 ft N of CSAH 10; CSAH 10 300 ft W of Bavaria Road
To: **(Intersection or Address)** *DO NOT INCLUDE LEGAL DESCRIPTION*	TH 41, 250 ft S of White Oak Drive; CSAH 10, 300 ft E of Park Ridge Drive
Or At	
Miles of Sidewalk (nearest 0.1 miles)	0.2
Miles of Trail (nearest 0.1 miles)	1.1
Miles of Trail on the Regional Bicycle Transportation Network (nearest 0.1 miles)	1.1
Primary Types of Work *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.*	GRADE, AGG BASE, BIT SURF, SIDEWALK, SIGNALS, LIGHTING, GUARDRAIL, BIKE PATH, PED RAMPS, PED UNDERPASS, ROUNDABOUTS, URBAN DRAINAGE, STREETSCAPING

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

Strategies: B1) Regional transportation partners will incorporate safety and security considerations for all modes and users throughout the processes of planning, funding, construction, and operation (p. 2.20); B3) Regional transportation partners should monitor and routinely analyze safety and security data by mode and severity to identify priorities and progress (p. 2.21); B4) Regional transportation partners will support the state's vision of moving toward zero traffic fatalities and serious injuries, which includes supporting educational and enforcement programs to increase awareness of regional safety issues, shared responsibility, and safe behavior (p. 2.22); and B6) Regional transportation partners will use best practices to provide and improve facilities for safe walking and bicycling, since pedestrians and bicyclists are the most vulnerable users of the transportation system.

Goal: Access to Destinations (p. 62)

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

Strategies: C2) Local units of government should provide a system of interconnected arterial roads, street, bicycle facilities, and pedestrian facilities to meet local travel needs using Complete Streets principles (p. 2.25); C7) Regional transportation partners will manage and optimize the performance

of the Principal Arterial system as measured by person throughput (p. 2.31); C9) The Metropolitan Council will support investments in A-minor arterials that build, manage, or improve the system's ability to supplement the capacity of the Principal Arterial system and support access to the region?s job, activity, and industrial and manufacturing concentrations (p. 2.32); C15) Regional transportation partners should focus investments on completing Priority Regional Transportation Corridors and on improving the larger Regional Bicycle Transportation Network (p. 2.36), and C16) Regional transportation partners should fund projects that provide for bicycle and pedestrian travel across and around physical barriers and/or improve continuity between jurisdictions (p. 2.36).

Goal: Healthy Environment (p. 66)

Objectives: A) Reduce transportation-related air emissions.

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

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:

a. Carver County 2040 Comprehensive Plan (2018):
i. Reconstruction projects for segments of CSAH 10 from TH 212 to TH 41 and TH 41 to CSAH 61 are identified as 'Priority B' projects and are programmed in the County Improvement Plan with construction targeted for between 2024 and 2028.

ii. Intersection improvements for the CSAH 10 at TH 41 intersection are identified as a 'Priority B' project with construction targeted for between 2024 and 2028.

iii. County forecast models show the project area as congested if not improvements are made.

iv. CSAH 10 is identified as a Tier 2 TRBN alignment from CSAH 61 to TH 212 and from TH 212 to Waconia.

b. Highway 61 / Highway 41 Improvements Project (2018)

i. Two options were developed for pedestrian and bicycle crossings. The City of Chaska desired to enhance at-grade crossings through signal improvements in the short-term but to ultimately pursue the grade separated crossings of both Highway 41 (Chestnut Street) and Highway 10 (Engler Boulevard) in the future.

c. Carver County Roadway Safety Plan (2013)

i. This plan has a goal of reducing severe crashes in the county by documenting at-risk locations. The following lists locations along Highway 10 identified through that process and recommended actions.

1. The Highway 10 and Highway 41 intersection is a County nominated intersection planned for improvements including a flashing yellow arrow.

d. City of Chaska 2040 Draft Comprehensive Plan (2018-2019)

i. The Highway 10 corridor is identified as a Tier 2 Alignment on the RBTN.
ii. Chaska places priority on planning local on- and off-road bikeway networks to connect to the designated Tier 1 and Tier 2 alignments. Local trails in Chaska provide important connections to the Minnesota River Bluffs LRT Regional Trail and the Southwest Regional Trail.
e. City of Chaska Safe Routes to School Plan

i. This plan looked at the intersections of Highway 10 with Highway 41, Crest Drive, and Park Ridge Drive/Skyview Drive. Various recommendations were provided to enhance pedestrian safety for those accessing the school property. The following are recommendations per intersection:

1. Highway 41:
a. Reduce Speed limit

b. Introduce protected left-turn green arrow

c. Speed bump/raised intersection

2. Crest Drive:

a. Install sidewalk running along Highway 10
3. Park Ridge Drive/Skyview Drive:

a. Define crosswalk across Highway 10
b. Install speed limit sign at intersection

c. Lay new sidewalks and connect to existing network

Limit 2,800 characters, approximately 400 words

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

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

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

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

6.Applicants must not submit an application for the same project elements in more than one funding application category.

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

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

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

8.The project must comply with the Americans with Disabilities Act (ADA).

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

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

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

Date plan completed: 02/18/2014

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

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

Date self-evaluation completed:

Link to plan:

Upload plan or self-evaluation if there is no link

Upload as PDF

10.The project must be accessible and open to the general public.

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

11.The owner/operator of the facility must operate and maintain the project year-round for the useful life of the improvement, per FHWA direction established 8/27/2008 and updated 6/27/2017.

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

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

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

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

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

14.The project applicant must send written notification regarding the proposed project to all affected state and local units of government prior to submitting the application.

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

Roadways Including Multimodal Elements

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

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

Roadway Expansion and Reconstruction/Modernization and Spot Mobility projects only:

2.The project must be designed to meet 10-ton load limit standards.

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

Bridge Rehabilitation/Replacement and Strategic Capacity projects only:

3.Projects requiring a grade-separated crossing of a principal arterial freeway must be limited to the federal share of those project costs identified as local (non-MnDOT) cost responsibility using MnDOTs Cost Participation for Cooperative Construction Projects and Maintenance Responsibilities manual. In the case of a federally funded trunk highway project, the policy guidelines should be read as if the funded trunk highway route is under local jurisdiction.

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

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

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

Bridge Rehabilitation/Replacement projects only:

5.The length of the bridge must equal or exceed 20 feet.

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

6. The bridge must have a National Bridge Inventory Rating of 6 or less for rehabilitation projects and 4 or less for replacement projects.

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

Roadway Expansion, Reconstruction/Modernization, and Bridge Rehabilitation/Replacement projects only:

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

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

Requirements - Roadways Including Multimodal Elements

Specific Roadway Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Mobilization (approx. 5% of total cost)	$301,000.00
Removals (approx. 5% of total cost)	$648,100.00
Roadway (grading, borrow, etc.)	$790,200.00
Roadway (aggregates and paving)	$2,526,000.00
Subgrade Correction (muck)	$0.00
Storm Sewer	$845,000.00
Ponds	$845,000.00
Concrete Items (curb & gutter, sidewalks, median barriers)	$1,279,800.00
Traffic Control	$301,000.00
Striping	$90,500.00
Signing	$90,500.00
Lighting	$325,000.00
Turf - Erosion & Landscaping	$361,000.00
Bridge	$0.00
Retaining Walls	$561,300.00
Noise Wall (not calculated in cost effectiveness measure)	$0.00
Traffic Signals	$300,000.00
Wetland Mitigation	$0.00
Other Natural and Cultural Resource Protection	$0.00
RR Crossing	$0.00
Roadway Contingencies	$1,201,000.00
Other Roadway Elements	$0.00
Totals	**$10,465,400.00**

Specific Bicycle and Pedestrian Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Path/Trail Construction	$94,800.00

Sidewalk Construction	$0.00
On-Street Bicycle Facility Construction	$0.00
Right-of-Way	$0.00
Pedestrian Curb Ramps (ADA)	$0.00
Crossing Aids (e.g., Audible Pedestrian Signals, HAWK)	$35,000.00
Pedestrian-scale Lighting	$0.00
Streetscaping	$301,000.00
Wayfinding	$0.00
Bicycle and Pedestrian Contingencies	$0.00
Other Bicycle and Pedestrian Elements	$415,800.00
Totals	**$846,600.00**

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	$11,312,000.00

Construction Cost Total	$11,312,000.00
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:	31
Peak Hour Travel Speed:	19
Percentage Decrease in Travel Speed in Peak Hour compared to Free-Flow:	38.71%
Upload Level of Congestion map:	1589516873629_TH41_CSAH10_LvlCongestion.pdf

Congestion on adjacent Parallel Routes:

Adjacent Parallel Corridor	Pioneer Trail (CSAH 14)

Adjacent Parallel Corridor Start and End Points:

Start Point:	Bavaria Rd.
End Point:	Audubon Rd.
Free-Flow Travel Speed:	27

The Free-Flow Travel Speed is black number.

Peak Hour Travel Speed:	19

The Peak Hour Travel Speed is red number.

Percentage Decrease in Travel Speed in Peak Hour Compared to Free-Flow:	29.63%
Upload Level of Congestion Map:	1589516873629_TH41_CSAH10_LvlCongestion.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: 6435

Existing Manufacturing/Distribution-Related Employment within 1 Mile: 2449

Existing Post-Secondary Students within 1 Mile: 0

Upload Map 1589516979793_TH41_CSAH10_Economy.pdf

Please upload attachment in PDF form.

Measure C: Current Heavy Commercial Traffic

RESPONSE: Select one for your project, based on the Regional Truck Corridor Study:

Along Tier 1:

Miles: 0

(to the nearest 0.1 miles)

Along Tier 2:

Miles: 0

(to the nearest 0.1 miles)

Along Tier 3: Yes

Miles: 0.4

(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 TH 41 north of CSAH 10

Current AADT Volume 21100

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 1589517182091_TH41_CSAH10_Transit.pdf

Please upload attachment in PDF form.

Response: Current Daily Person Throughput

Average Annual Daily Transit Ridership	0
Current Daily Person Throughput	27430.0

Measure B: 2040 Forecast ADT

Use Metropolitan Council model to determine forecast (2040) ADT volume	No
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 model (Comprehensive Plan)
Forecast (2040) ADT volume	22000

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

*1.**Sub-measure**: Equity Population Engagement: A successful project is one that is the result of active engagement of low-income populations, people of color, persons with disabilities, youth and the elderly. Engagement should occur prior to and during a projects development, with the intent to provide direct benefits to, or solve, an expressed transportation issue, while also limiting and mitigating any negative impacts. Describe and map the location of any low-income populations, people of color, disabled populations, youth or the elderly within a ½ mile of the proposed project. Describe how these specific populations were engaged and provided outreach to, whether through community planning efforts, project needs identification, or during the project development process. Describe what engagement methods and tools were used and how the input is reflected in the projects purpose and need and design. Elements of quality engagement include: outreach and engagement to specific communities and populations that are likely to be directly impacted by the project; techniques to reach out to populations traditionally not involved in community engagement related to transportation projects; feedback from these populations identifying potential positive and negative elements of the proposed project through engagement, study recommendations, or plans that provide feedback from populations that may be impacted by the proposed project. If relevant, describe how NEPA or Title VI regulations will guide engagement activities.*

The project area includes and serves low-income, persons with disabilities, youth, and elderly populations. A cluster of low-income Hispanic population is located at the Brandondale Manufactured Home neighborhood a ¼ mile east of the project area with 430 existing households with the capacity to expand to 493 households. The project directly serves the Chaska Public School campus, which includes Chaska Middle School East, Chaska Middle School West, La Academia, Eastern Carver County Athletic Plaza, and the Chaska Community Center, with numerous programs for youth, persons with disabilities, and the elderly. La Academia is a two-way, dual language immersion school that combines Spanish and English-speaking students.

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 for the Crest Dr. and White Oak Dr. residents; and meetings with ISD 112 staff and survey of student's parents regarding transportation priorities for students.

Parents of students at the Chaska school campus were sent a survey regarding the project and how multimodal facilities could be improved for access to the school. 247 parents responded, with the majority indicating that the amount of traffic along the route is a major factor preventing students from walking and biking to school and that improved pedestrian facilities, specifically a pedestrian underpass, would change the environment to allow

children to walk or bike to school.

In person open houses were held on Aug. 21, 2019 and Dec. 19, 2019 with a virtual open house held in March-April 2020. To further reach youth populations and families with children, an interactive online survey and comment map was available with each round of engagement. Residents were notified of public open houses or neighborhood meetings via direct postcard mailing. The mailing list for each open house included over 4,000 addresses. Meeting information was also shared on social media including Facebook and Twitter and sent out via a project e-bulletin email with a project specific subscriber list of 234.

Feedback from target populations included primarily safety and access concerns, especially ped. safety. Specific ways the project was impacted by feedback is the pedestrian underpass, the open access at Crest Dr., and the sidewalk on the southside of CSAH 10 between TH 41 and Park Ridge Dr. The proposed improvements were presented to these groups and there is wide support for the project.

(Limit 2,800 characters; approximately 400 words)

*2.**Sub-measure**: Equity Population Benefits and Impacts: A successful project is one that has been designed to provide direct benefits to low-income populations, people of color, persons with disabilities, youth and the elderly. All projects must mitigate potential negative benefits as required under federal law. Projects that are designed to provide benefits go beyond the mitigation requirement to proactively provide transportation benefits and solve transportation issues experienced by Equity populations.*
a.Describe the projects benefits to low-income populations, people of color, children, people with disabilities, and the elderly. Benefits could relate to pedestrian and bicycle safety improvements; public health benefits; direct access improvements for residents or improved access to destinations such as jobs, school, health care or other; travel time improvements; gap closures; new transportation services or modal options, leveraging of other beneficial projects and investments; and/or community connection and cohesion improvements. Note that this is not an exhaustive list.

The project will serve low-income, children, and elderly populations most directly by improving safety and access to the Chaska Public School campus (Chaska Middle School East, Chaska Middle School West, La Academia, Eastern Carver County Athletic Plaza) and the Chaska Community Center. For example, improvements at the Park Ridge Dr. intersection will increase quality of life for elderly residents by providing safer access and community connection to the Chaska Community Center. Safety improvements include added multimodal facilities and the construction of a pedestrian underpass at the busy intersection of CSAH 10/TH 41 that will specifically allow more children to walk or bike to school. Intersection improvements throughout the corridor will include enhanced pedestrian crossings with pedestrian refuge and crosswalk improvements.

Response:

Traffic delay and congestion conditions will also improve along the corridor specifically at the CSAH 10/TH 41 intersection, improving reliability for commuters accessing US 212 and for those utilizing the SouthWest Transit East Creek Transit Station located less than a half mile north of the project area. In addition, delay and backups at the intersections throughout the corridor are major issues for residents in the area - including low income and Hispanic populations. For example, many are unable to get out of their neighborhoods onto the highway system. There is evidence that delays for residents and school buses to turn onto CSAH 10 from White Oak Dr. exceed 15 minutes during peak times. The proposed intersection improvements and highway expansion will mitigate these issues.

Downtown Chaska is an employment destination for much of the Hispanic/Latino population in the area including at the Brandondale Manufactured Home neighborhood (430 existing households).

Through improvements to the TH 41 corridor, this project will improve motorized and non-motorized access to this employment center and community destinations downtown. The project will also improve emissions and delay for environmental justice populations living in the corridor.

(Limit 2,800 characters; approximately 400 words)

b. Describe any negative impacts to low-income populations, people of color, children, people with disabilities, and the elderly created by the project, along with measures that will be taken to mitigate them. Negative impacts that are not adequately mitigated can result in a reduction in points.

Below is a list of negative impacts. Note that this is not an exhaustive list.

Increased difficulty in street crossing caused by increased roadway width, increased traffic speed, wider turning radii, or other elements that negatively impact pedestrian access.

Increased noise.

Decreased pedestrian access through sidewalk removal / narrowing, placement of barriers along the walking path, increase in auto-oriented curb cuts, etc.

Project elements that are detrimental to location-based air quality by increasing stop/start activity at intersections, creating vehicle idling areas, directing an increased number of vehicles to a particular point, etc.

Increased speed and/or cut-through traffic.

Removed or diminished safe bicycle access.

Inclusion of some other barrier to access to jobs and other destinations.

Displacement of residents and businesses.

Mitigation of temporary construction/implementation impacts such as dust; noise; reduced access for travelers and to businesses; disruption of utilities; and eliminated street crossings.

Other

Response:

The project does not have any known negative impacts to low-income populations, people of color, children, people with disabilities, or the elderly. Currently, the 2-lane rural highway with turn lanes and congestion is a barrier and safety issue for pedestrians trying to access the community center and for students wanting to bike or walk to school or activities. One of the main goals of this project is to address this safety issue. This project will expand a 2-lane rural highway to a 4-lane divided highway. The primary mitigation for pedestrian safety at the busy CSAH 10/TH 41 intersection is a pedestrian underpass under CSAH 10 connecting the south side of the corridor to the north side and the community destinations of the Chaska school campus and the Chaska Community Center. In addition, delay and back ups at the intersections throughout the corridor are major issues for residents in the area. For example, many are unable to get out of their neighborhoods, reporting 15 minute + delays to try and turn onto CSAH 10 from White Oak Dr. during peak times. The proposed intersection improvements and highway expansion will mitigate these issues and provide a more reliable transportation system for these populations.

To mitigate any potential negative impacts, the planning process has included specific and targeted outreach to property owners and stakeholders in the project area. For example, the project team met with Shepherd of the Hill Presbyterian Church, located at the southeast corner of the CSAH 10/TH 41 intersection, as part of project outreach. The church was concerned about property impacts from the pedestrian underpass but also supported the safety improvement for the community. After listening to their concerns, the pedestrian underpass concept was revised to be closer to TH 41 and limit impacts to the church's property. The project concept also

incorporates sensitivity to the church?s community art symbol (red chair symbolizing forgiveness) located on the northwest corner of their property near the highway intersection. This outreach and adjustments to the project concept show how the project team including the County, City, and MnDOT have worked to address any negative impacts to property owners and create community partnerships for a successful project.

(Limit 2,800 characters; approximately 400 words)

Select one:

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

Project is located in an Area of Concentrated Poverty where 50% or more of residents are people of color (ACP50):	
Project located in Area of Concentrated Poverty:	
Projects census tracts are above the regional average for population in poverty or population of color:	Yes
Project located in a census tract that is below the regional average for population in poverty or populations of color or includes children, people with disabilities, or the elderly:	

(up to 40% of maximum score)

Upload the "Socio-Economic Conditions" map used for this measure. The second map created for sub measure A1 can be uploaded on the Other Attachments Form, or can be combined with the "Socio-Economic Conditions" map into a single PDF and uploaded here.

Upload Map	1589517479924_TH41_CSAH10_SocioEconomic.pdf

Measure B: Part 1: Housing Performance Score

City	Segment Length (For stand-alone projects, enter population from Regional Economy map) within each City/Township	Segment Length/Total Project Length	Score	Housing Score Multiplied by Segment percent
Chaska	1.1	1.0	95.0	95.0

Total Project Length

Total Project Length	0

Project length entered on the Project Information - General form.

Housing Performance Score

Total Project Length (Miles) or Population	1.1
Total Housing Score	95.0

Affordable Housing Scoring

Part 2: Affordable Housing Access

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

Response:

There are 531 units of affordable housing served by the ½ mile buffer of the project area including a multi-family rental housing location (92 units), a scattered site rental property, 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. All units are existing with the exception of the approved Habitat for Humanity homes. Shepherd of the Hill Presbyterian Church located at the southeast corner of CSAH 10 and 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 households with the capacity to expand to 493 households and is located a quarter mile east of the project area. The project directly serves this neighborhood of affordable housing.

Additional 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. Key findings show that 82 of the 92 units in the Carver Ridge Townhomes are affordable at 60% of AMI. The 430 existing households located in the Brandondale neighborhood are generally affordable to those at less than 30% of AMI.
The proposed project will improve the transportation system for these residents by connecting the multimodal network and adding trails, sidewalks, and a pedestrian underpass of a busy intersection at CSAH 10/TH 41. These multimodal network improvements will improve the connection north to the SouthWest Transit East Creek Transit Station less than half a mile from the project area. The project will improve reliability and

congestion through the corridor for roadway users, decreasing delay and emissions for this environmental justice population.

(Limit 2,100 characters; approximately 300 words)

Upload map: 1589517743648_CR 10 Affordable housing.pdf

Measure A: Infrastructure Age

Year of Original Roadway Construction or Most Recent Reconstruction	Segment Length	Calculation	Calculation 2
1981.0	0.9	1782.9	1981.0
	1	**1783**	**1981**

Average Construction Year

Weighted Year 1981.0

Total Segment Length (Miles)

Total Segment Length 0.9

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

128.1	53.5	74.6	6426	6426	479379.6	479379.6	N/A-Please note that the Measures of Effectiveness report in Synchro was unable to report the operational delay of the AWSC and Roundabout conditions at the Bavaria Road intersection. An HCM 6th Edition AWSC and Roundabout Reports were used in place of this measure. HCM was also used for the AWSC and roundabout conditions at Park Ridge Drive for consistency.	158954629 0611_8_H wys 10_41 Impts_AM Peak_Sycn hro Reports.pdf
						479380		

Vehicle Delay Reduced

Total Peak Hour Delay Reduced	479379.6
Total Peak Hour Delay Reduced	479379.6

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):
11.2	10.4	0.8
11	**10**	**1**

Total

Total Emissions Reduced:	0.8
Upload Synchro Report	1589546476264_8_Hwys 10_41 Impts_AM Peak_Sycnhro Reports.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: *(Limit 700 Characters; approximately 100 words)*	CMF's used include the installation of a roundabout intersection at a stop-controlled intersection, and installing a median on a previously undivided roadway.
Rationale for Crash Modification Selected:	Replacing the existing AWSC intersections of Bavaria Rd and Park Ridge Dr with roundabout intersection eliminates the possibility for severe left turn and right angle collisions, the CMF selected factors this into a reduction for all crash types and severities. Similarly, implementing a divided section greatly reduces the potential for head on or sideswipe collisions, these reductions are taken into account for the CMF applied which reduces all CSAH 10 crashes.

(Limit 1400 Characters; approximately 200 words)

Project Benefit ($) from B/C Ratio:	$13,154,788.00
Total Fatal (K) Crashes:	1
Total Serious Injury (A) Crashes:	0
Total Non-Motorized Fatal and Serious Injury Crashes:	0
Total Crashes:	65
Total Fatal (K) Crashes Reduced by Project:	0
Total Serious Injury (A) Crashes Reduced by Project:	0
Total Non-Motorized Fatal and Serious Injury Crashes Reduced by Project:	0
Total Crashes Reduced by Project:	7
Worksheet Attachment	1589568427242_TH 41-10 Safety-BC_CMF_Crashdata.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: Multimodal Elements and Existing Connections

Response:

The proposed improvements feature numerous pedestrian-oriented safety improvements. Namely, the grade-separated pedestrian underpass traversing the east leg of the CSAH 10 at TH 41 intersection will eliminate pedestrian exposure to traffic at this busy intersection. A pedestrian underpass of the north leg of the same intersection is also planned and will integrate with the east underpass to eliminate the need for pedestrians to cross at-grade at this location. The signal system will also feature APS push buttons and countdown timers to maintain accessibility for all pedestrian traffic. The addition of center median islands will provide refuge areas of pedestrians crossing at local intersections where crossings are marked. The proposed roundabouts also increase pedestrian safety in the installation of splitter islands, allowing pedestrians to cross one direction of traffic at a time. Pedestal mounted RRFBs near the Bavaria Rd roundabout will provide a higher level of safety and visibility to pedestrians attempting to cross Highway 10. The nature of a roundabout intersection also calms traffic, therefore reducing speeds and allowing drivers more time to recognize pedestrians attempting to cross the roadway. The project includes continuation of trail facilities along the north side of CSAH 10 and introduces a sidewalk connection on the southside from TH 41 to Crest, which was identified as a gap for pedestrians traveling to the school campus.

(Limit 2,800 characters; approximately 400 words)

Measure A: Multimodal Elements and Existing Connections

Response:

The project adds a pedestrian underpass, trail and sidewalk connections along this regional trail corridor and intersection of two RBTN alignments. The project improves the pedestrian environment to allow children to walk and bike in and through the project area to connect to the Chaska Public School campus (Chaska Middle School East, Chaska Middle School West, La Academia, Eastern Carver County Athletic Plaza) and Chaska Community Center.

The addition of a pedestrian underpass at the intersection of TH 41 and CSAH 10 will allow a much needed safe crossing of a heavily traveled highway and make a connection of one RBTN corridor to another. This grade separated connection also to the MN River crossing at TH 41. The planned trail network extends east to CSAH 15, which will close the gap to the MN River Bluffs Regional Trail. The project maintains the connection to trails running north along Highway 41, which access a Southwest Transit East Creek Transit Station with three transit routes, less than half a mile north of the project area.

The project includes reconstruction and extension of existing bicycle and pedestrian facilities throughout the project corridor. The trail along the north side of CSAH 10, an RBTN Tier 2 alignment and a regional trail corridor, will be reconstructed in areas. The existing trail has several areas with challenging topography that cause discomfort for users due to making unsafe or busy crossings. The proposed trail will provide a clear, dedicated space that encourages multimodal travel. The project will also provide a new sidewalk connection on the southside of CSAH 10 east of TH 41 connecting the Crest Dr. and Skyview Dr. neighborhoods to the school and community center campuses.

Signal or roundabout controlled crossing of CSAH 10 are provided at multiple locations throughout the project area, connecting neighborhoods, businesses, parks and schools that are currently isolated and because of the busy highway. Existing connections and intersections are served by all-way stop or two-way stop intersections and an undivided highway. Proposed roundabouts create safer pedestrian crossings at existing all-way stop-controlled intersections by calming traffic speeds and allowing for two-stage crossings. Pedestal mounted RRFBs near the Bavaria Rd roundabout will provide a higher level of safety and visibility to pedestrians attempting to cross Highway 10. The addition of a median as part of the divided highway will also improve the at-grade pedestrian crossing experience at the major intersection of CSAH 10 and TH 41.

All pedestrian infrastructure will be upgraded to ADA compliant whereas almost none of the existing pedestrian infrastructure, including ramps, trails, walks, and signals, are ADA compliant.

(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)Layout (25 Percent of Points)

Layout should include proposed geometrics and existing and proposed right-of-way boundaries.

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

100%

Attach Layout 1589547680019_CSAH 10_TH 41_Layout-Letter.pdf

Please upload attachment in PDF form.

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

50%

Attach Layout

Please upload attachment in PDF form.

Layout has not been started

0%

Anticipated date or date of completion 05/06/2020

2)Review of Section 106 Historic Resources (15 Percent of Points)

No known historic properties eligible for or listed in the National Register of Historic Places are located in the project area, and 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

3)Right-of-Way (25 Percent of Points)

Right-of-way, permanent or temporary easements either not required or all have been acquired

100%

Right-of-way, permanent or temporary easements required, plat, legal descriptions, or official map complete

50%

Right-of-way, permanent or temporary easements required, parcels identified Yes

25%

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

0%

Anticipated date or date of acquisition 02/01/2023

4)Railroad Involvement (15 Percent of Points)

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

Anticipated date or date of executed Agreement

5) Public Involvement (20 percent of points)

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

Meeting with general public: 12/19/2019

Meeting with partner agencies: 05/06/2020

Targeted online/mail outreach: 04/14/2020

Number of respondents: 310

Meetings specific to this project with the general public and partner agencies have been used to help identify the project need.

100%

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

75%

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

50%

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

50%

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

25%

No outreach has led to the selection of this project.

0%

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

This project was developed as part of a full corridor study planning approach, Highway 10 Corridor Study, with project partners including MnDOT and the City of Chaska. The public engagement and outreach efforts included focus groups, online surveys and interactive comment tool, public open houses, specific outreach to target population groups, neighborhood meetings, and property owner meetings. Public meetings began in November 2018 with the most recent being an online open house in April-May 2020. Stakeholder outreach and neighborhood outreach included specific meetings with Chaska Police, Fire, Public Works, and Emergency Services, Chaska Vet, ISD 112, Laketown Township, The Lodge Senior Center, Brandondale manufactured home neighborhood, Valley Evangelical Free Church, Shepherd of the Hill Church, Crest Dr. neighborhood, and the White Oak neighborhood. In person open houses were held on August 21, 2019 (50+ participants) and December 19, 2019 (50+ participants) with a virtual open house held in March-April 2020 (60+ participants). In addition, approximately 70 online comments were submitted via the online interactive comment map.

All parents of students at the Chaska school campus, which includes Chaska Middle School East, Chaska Middle School West, and La Academia, were sent a survey regarding the project and how multimodal facilities could be improved for access to the school. 247 parents responding regarding the pedestrian environment and how the area can be improved to allow children to walk or bike to school.

Residents were notified of public open houses and general public or neighborhood meetings via direct postcard mailing. The mailing list for each open house included over 4,000 addresses. Meeting information was also shared on social media

including Facebook and Twitter and sent out via a project e-bulletin email with a project specific subscriber list of 234.

Partner agencies met at least monthly throughout the planning process with the most recent meeting on May 6, 2020 and regularly presented study information to elected officials at public meetings. The most recent presentation to the Chaska City Council was on May 4, 2020.

Measure A: Cost Effectiveness

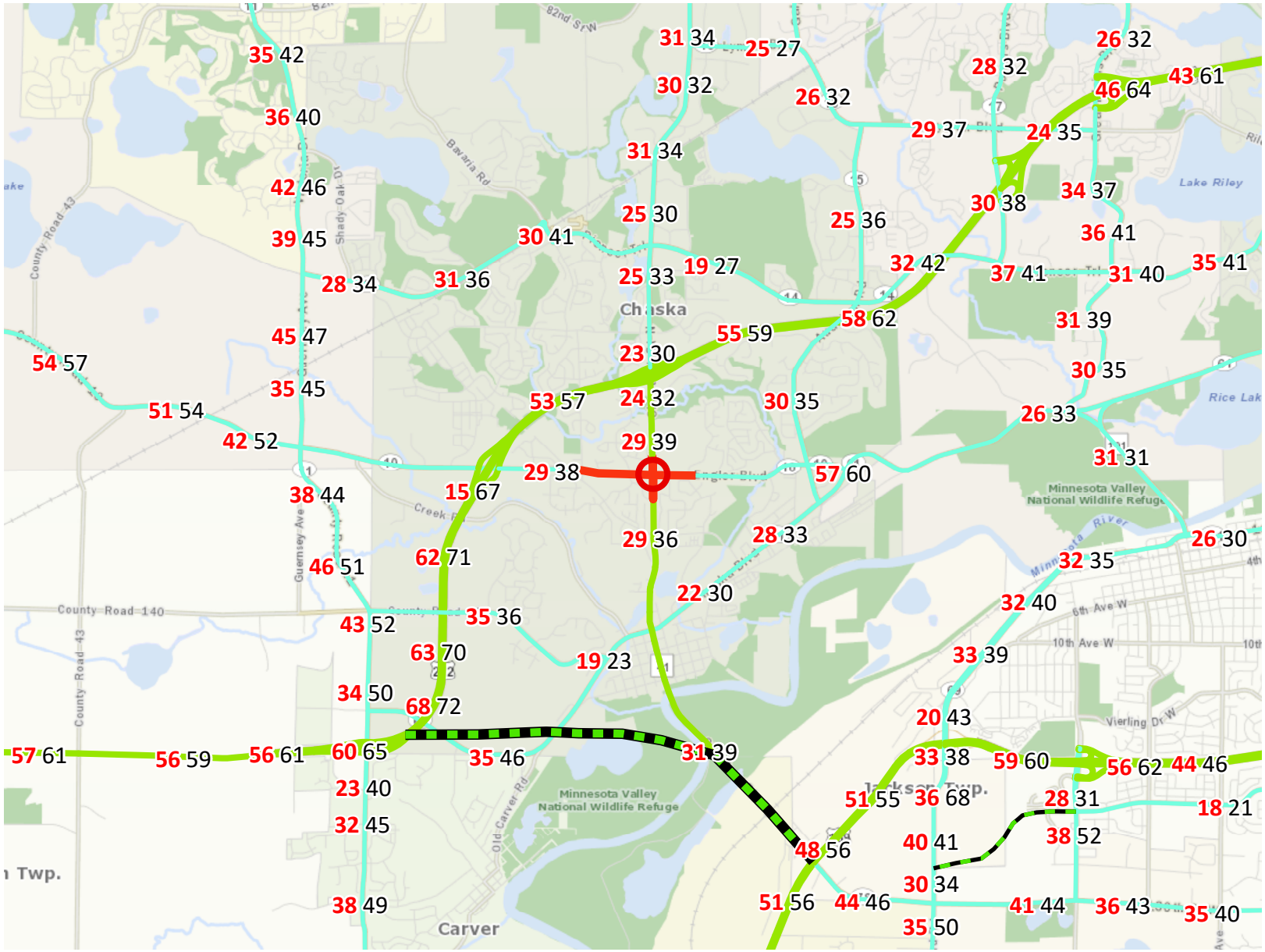
Total Project Cost (entered in Project Cost Form):	$11,312,000.00
Enter Amount of the Noise Walls:	$0.00
Total Project Cost subtract the amount of the noise walls:	$11,312,000.00
Enter amount of any outside, competitive funding:	$0.00
Attach documentation of award:	
Points Awarded in Previous Criteria	
Cost Effectiveness	$0.00

Other Attachments

File Name	Description	File Size
0_CSAH 10_TH 41_One Page Description.pdf	TH 41-CSAH 10 One Page Summary	1.1 MB
4a_CSAH 10_TH 41_Existing-Context.pdf	TH 41-CSAH 10 Existing Conditions and Context Maps	505 KB
4b_Existing Conditions_Streetview.pdf	TH 41-CSAH 10 Existing Conditions Photo	383 KB
5_CSAH 10_TH 41_Proposed.pdf	TH 41-CSAH 10 Project Layout	312 KB
Carver County letter for projects on TH5 TH41 TH212.pdf	TH 41-CSAH 10 MnDOT letter of support	588 KB
Letter of Support - Engler Improvements 5-5-2020.pdf	TH 41-CSAH 10 ISD 112 Letter of Support	351 KB
Valley Evan Free Church Letter to City.pdf	TH 41-CSAH 10 Valley Evangelical Free Church letter of support	125 KB

Level of Congestion

Roadway Expansion Project: CSAH 10 at TH 41 Improvements | Map ID: 1586864977035



Project Points — Principal Arterials — Principal Arterials Planned

Project — A Minor Arterials — A Minor Arterials Planned

0 0.5 1 2 3 4 Miles

Created: 4/14/2020
LandscapeRSA1

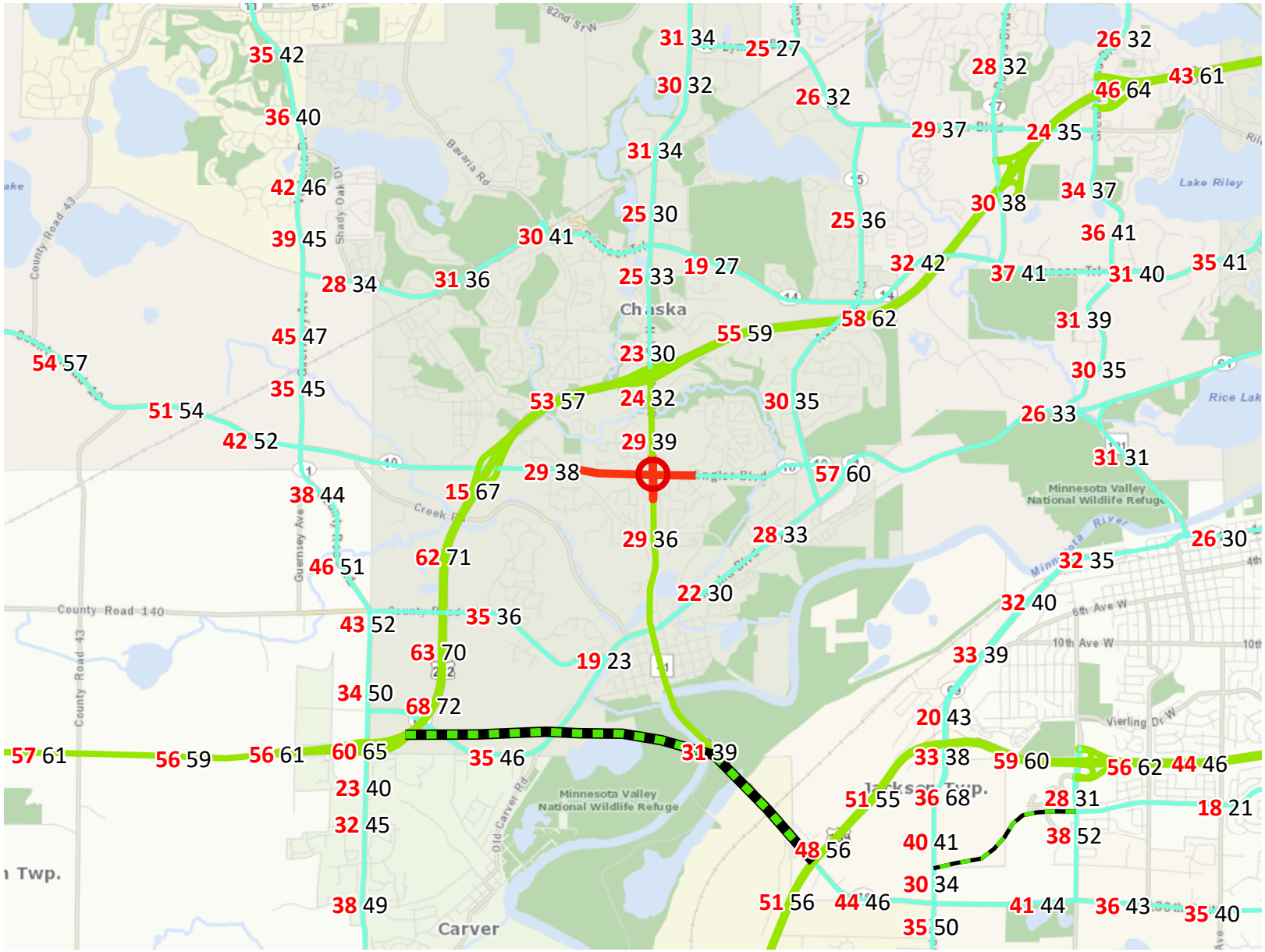
For complete disclaimer of accuracy, please visit
https://giswebsite.metc.state.mn.us/gissite/notice.aspx

METROPOLITAN COUNCIL

Zone Name	Day Type	Day Part	Free Flow Factor	min_speed	reference_speed
212 to Bavaria	1: Weekday (M-Th)	09: 7am (7am-8am)	0.752	30	37
Bavaria to TH41	1: Weekday (M-Th)	10: 8am (8am-9am)	0.535	19	31
Clover Ridge to 212	1: Weekday (M-Th)	19: 5pm (5pm-6pm)	0.774	31	37
CSAH 11 to Clover Ridge	1: Weekday (M-Th)	19: 5pm (5pm-6pm)	0.789	40	49
Park Ridge to Audubon	1: Weekday (M-Th)	17: 3pm (3pm-4pm)	0.686	24	33
TH 41 to Park Ridge	1: Weekday (M-Th)	18: 4pm (4pm-5pm)	0.633	19	28

Level of Congestion

Roadway Expansion Project: CSAH 10 at TH 41 Improvements | Map ID: 1586864977035



Project Points — Principal Arterials — Principal Arterials Planned

Project — A Minor Arterials — A Minor Arterials Planned

0 0.5 1 2 3 4 Miles

Created: 4/14/2020
LandscapeRSA1

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METROPOLITAN COUNCIL

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TH 41 to Park Ridge	1: Weekday (M-Th)	18: 4pm (4pm-5pm)	0.633	19	28

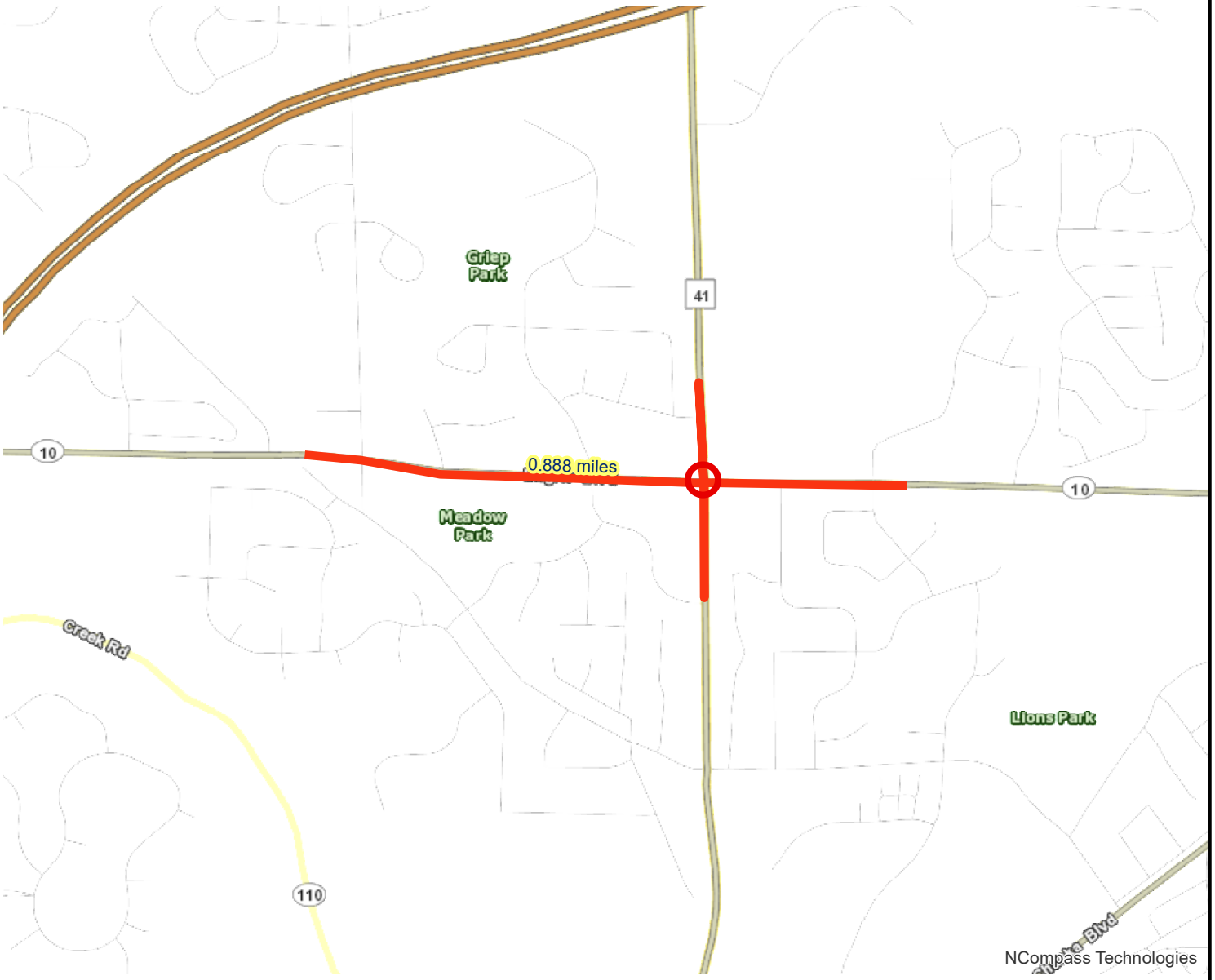
Regional Economy

Roadway Expansion Project: CSAH 10 at TH 41 Improvements | Map ID: 1586864977035

Results

WITHIN ONE MI of project:
Postsecondary Students: 0

Totals by City:
Chanhassen
Population: 2503
Employment: 1323
Mfg and Dist Employment: 264
Chaska
Population: 17378
Employment: 5112
Mfg and Dist Employment: 2185



Project Points
Project
Manfacturing/Distribution Centers
Job Concentration Centers

0 0.125 0.25 0.5 0.75 1 Miles

Created: 4/14/2020
LandscapeRSA5

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

METROPOLITAN COUNCIL

Transit Connections

Roadway Expansion Project: CSAH 10 at TH 41 Improvements | Map ID: 1586864977035

Results

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

**indicates Planned Alignments*

Transit Market areas: 9

Project Points — Transit Routes

Project

Project Area

0 0.35 0.7 1.4 2.1 2.8 Miles

Created: 4/14/2020
LandscapeRSA3

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

METROPOLITAN COUNCIL

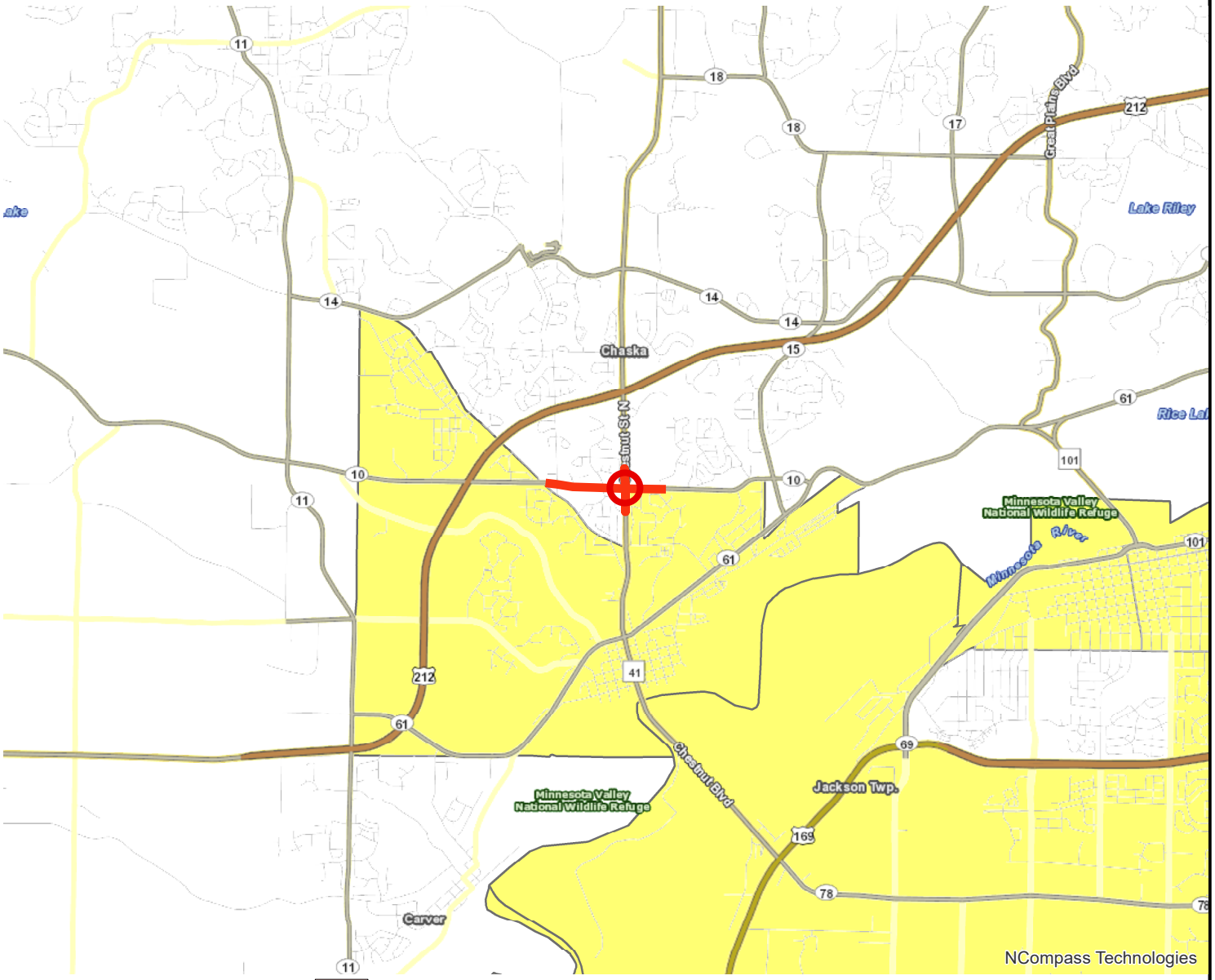
Socio-Economic Conditions

Roadway Expansion Project: CSAH 10 at TH 41 Improvements | Map ID: 1586864977035

Results

Project census tracts are above the regional average for population in poverty or population of color:
(0 to 18 Points)

Tracts within half-mile:
90800 90900 91000



Points
Lines
Area of Concentrated Povertry > 50% residents of color
Area of Concentrated Poverty
Above reg'l avg conc of race/poverty

0 0.5 1 2 3 4 Miles

Created: 4/14/2020
LandscapeRSA2

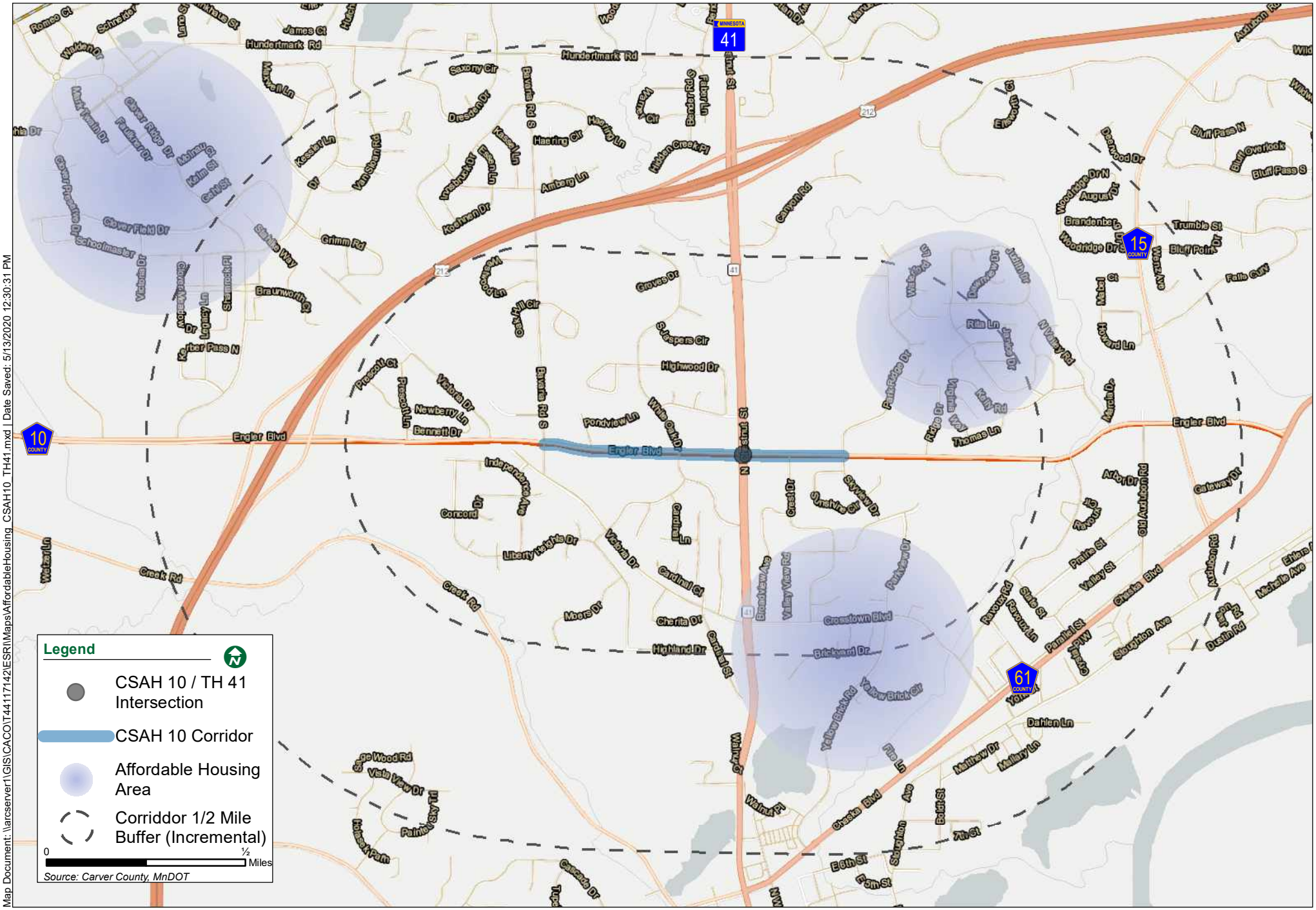
For complete disclaimer of accuracy, please visit
http://giswebsite.metc.state.mn.us/gissite/notice.aspx

METROPOLITAN COUNCIL

Affordable Housing
County Road 10/Highway 41

Name	Location	Stage	Total units	Affordable at 100% AMI	Affordable at 80% AMI	Affordable at 60% AMI	Affordable at 50% AMI	Affordable at 30% AMI	Bedrooms	Funding restrictions	Vouchers accepted?	Fair Housing plan?
Multi-family rental housing												
Carver Ridge Townhomes	340 Crosstown Blvd	Existing	92			82			5 - 1 bedroom 77 - 2 bedroom	LIHTC		Unknown
Scattered site rentals												
Scattered site public housing	XXXX Broadview Avenue	Existing							5 bedrooms	Public housing	No	CDA's plan
Owner-Occupied housing												
Brandondale Manufactured Housing	County Road 10/Brandon Blvd	Existing (430)	493	Units are various sizes but genenerally affordable those at less than 30% AMI					Various sizes	No	N/A	
Habitat for Humanity	County Road 10/Hwy 41	Approved	8		8				All are 4-bedroom	Units will sell to CLT to remain permanently affordable	N/A	CDA and Habitat have fair housing plans

We also know that there are Housing Choice Vouchers being accepted by private landlords throughout this area as well. The total number however is unknown.



10: Bavaria Rd & CSAH 10

Direction	All
Future Volume (vph)	1303
Total Delay / Veh (s/v)	0
CO Emissions (kg)	1.63
NOx Emissions (kg)	0.32
VOC Emissions (kg)	0.38

11: White Oak Dr & CSAH 10

Direction	All
Future Volume (vph)	1142
Total Delay / Veh (s/v)	7
CO Emissions (kg)	1.02
NOx Emissions (kg)	0.20
VOC Emissions (kg)	0.24

12: TH 41 & CSAH 10

Direction	All
Future Volume (vph)	2252
Total Delay / Veh (s/v)	37
CO Emissions (kg)	3.66
NOx Emissions (kg)	0.71
VOC Emissions (kg)	0.85

13: Crest Dr/School Access & CSAH 10

Direction	All
Future Volume (vph)	832
Total Delay / Veh (s/v)	2
CO Emissions (kg)	0.35
NOx Emissions (kg)	0.07
VOC Emissions (kg)	0.08

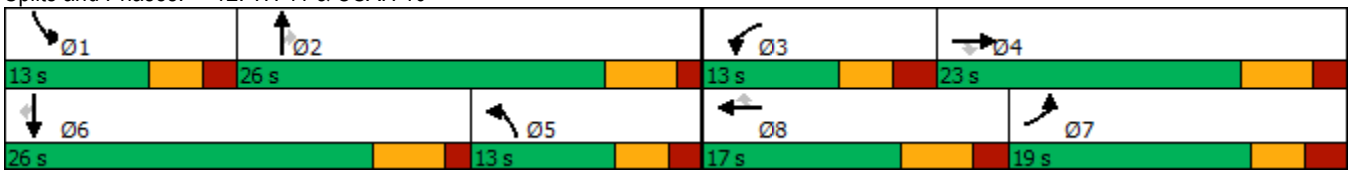
14: Park Ridge Dr & CSAH 10

Direction	All
Future Volume (vph)	897
Total Delay / Veh (s/v)	16
CO Emissions (kg)	1.18
NOx Emissions (kg)	0.23
VOC Emissions (kg)	0.27

Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBT	WBL	EBT	NBL	SBT	EBL	WBT
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	None	None	None	Max	None	None
Maximum Split (s)	13	26	13	23	13	26	19	17
Maximum Split (%)	17.3%	34.7%	17.3%	30.7%	17.3%	34.7%	25.3%	22.7%
Minimum Split (s)	13	21	13	13	13	21	13	13
Yellow Time (s)	3	4	3	4	3	4	3	4
All-Red Time (s)	2	1.5	2.5	2	2	1.5	2.5	2
Minimum Initial (s)	7	15	7	7	7	15	7	7
Vehicle Extension (s)	3	5.5	3	4	4	5.5	3	4.5
Minimum Gap (s)	3	5.5	3	4	4	5.5	3	4.5
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)								
Flash Dont Walk (s)								
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	13	39	52	26	0	56	39
End Time (s)	13	39	52	0	39	26	0	56
Yield/Force Off (s)	8	33.5	46.5	69	34	20.5	69.5	50
Yield/Force Off 170(s)	8	33.5	46.5	69	34	20.5	69.5	50
Local Start Time (s)	0	13	39	52	26	0	56	39
Local Yield (s)	8	33.5	46.5	69	34	20.5	69.5	50
Local Yield 170(s)	8	33.5	46.5	69	34	20.5	69.5	50

Intersection Summary	
Cycle Length	75
Control Type	Actuated-Uncoordinated
Natural Cycle	75

Splits and Phases: 12: TH 41 & CSAH 10



Intersection	
Intersection Delay, s/veh	65.6
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	110	383	81	5	178	100	95	45	21	141	92	52
Future Vol, veh/h	110	383	81	5	178	100	95	45	21	141	92	52
Peak Hour Factor	0.63	0.86	0.70	0.63	0.93	0.68	0.66	0.70	0.66	0.72	0.68	0.68
Heavy Vehicles, %	3	4	1	3	4	2	3	2	5	2	2	2
Mvmt Flow	175	445	116	8	191	147	144	64	32	196	135	76
Number of Lanes	1	1	1	1	1	1	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	3	3
HCM Control Delay	76.8	21.9	27.9	104.7
HCM LOS	F	C	D	F

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	68%	0%	100%	0%	0%	100%	0%	0%	49%
Vol Thru, %	32%	0%	0%	100%	0%	0%	100%	0%	32%
Vol Right, %	0%	100%	0%	0%	100%	0%	0%	100%	18%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	140	21	110	383	81	5	178	100	285
LT Vol	95	0	110	0	0	5	0	0	141
Through Vol	45	0	0	383	0	0	178	0	92
RT Vol	0	21	0	0	81	0	0	100	52
Lane Flow Rate	208	32	175	445	116	8	191	147	408
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.612	0.084	0.464	1.123	0.268	0.023	0.531	0.376	1.088
Departure Headway (Hd)	11.193	10.086	10.083	9.573	8.78	11.233	10.718	9.937	9.891
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	325	357	360	383	412	321	339	365	371
Service Time	8.893	7.786	7.783	7.273	6.48	8.933	8.418	7.637	7.591
HCM Lane V/C Ratio	0.64	0.09	0.486	1.162	0.282	0.025	0.563	0.403	1.1
HCM Control Delay	30.1	13.7	21.2	114.8	14.7	14.2	24.9	18.5	104.7
HCM Lane LOS	D	B	C	F	B	B	C	C	F
HCM 95th-tile Q	3.8	0.3	2.4	15.8	1.1	0.1	3	1.7	14.4

Intersection	
Intersection Delay, s/veh	16.5
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	171	301	9	3	175	46	21	23	19	38	8	84
Future Vol, veh/h	171	301	9	3	175	46	21	23	19	38	8	84
Peak Hour Factor	0.69	0.75	0.75	0.50	0.80	0.77	0.90	0.60	0.38	0.66	0.60	0.62
Heavy Vehicles, %	5	3	0	0	3	9	1	7	2	10	3	5
Mvmt Flow	248	401	12	6	219	60	23	38	50	58	13	135
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	18.9	15.3	11.5	13
HCM LOS	C	C	B	B

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	33%	100%	0%	100%	0%	29%
Vol Thru, %	37%	0%	97%	0%	79%	6%
Vol Right, %	30%	0%	3%	0%	21%	65%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	63	171	310	3	221	130
LT Vol	21	171	0	3	0	38
Through Vol	23	0	301	0	175	8
RT Vol	19	0	9	0	46	84
Lane Flow Rate	112	248	413	6	278	206
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.207	0.454	0.692	0.012	0.496	0.363
Departure Headway (Hd)	6.665	6.594	6.03	7.025	6.418	6.33
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	534	545	595	506	557	563
Service Time	4.764	4.363	3.8	4.811	4.204	4.413
HCM Lane V/C Ratio	0.21	0.455	0.694	0.012	0.499	0.366
HCM Control Delay	11.5	14.8	21.4	9.9	15.4	13
HCM Lane LOS	B	B	C	A	C	B
HCM 95th-tile Q	0.8	2.3	5.4	0	2.7	1.6

10: Bavaria Rd & CSAH 10

Direction	All
Future Volume (vph)	1303
Total Delay / Veh (s/v)	0
CO Emissions (kg)	1.63
NOx Emissions (kg)	0.32
VOC Emissions (kg)	0.38

11: White Oak Dr & CSAH 10

Direction	All
Future Volume (vph)	1142
Total Delay / Veh (s/v)	9
CO Emissions (kg)	1.04
NOx Emissions (kg)	0.20
VOC Emissions (kg)	0.24

12: TH 41 & CSAH 10

Direction	All
Future Volume (vph)	2252
Total Delay / Veh (s/v)	28
CO Emissions (kg)	3.32
NOx Emissions (kg)	0.65
VOC Emissions (kg)	0.77

13: Crest Dr/School Access & CSAH 10

Direction	All
Future Volume (vph)	832
Total Delay / Veh (s/v)	1
CO Emissions (kg)	0.34
NOx Emissions (kg)	0.07
VOC Emissions (kg)	0.08

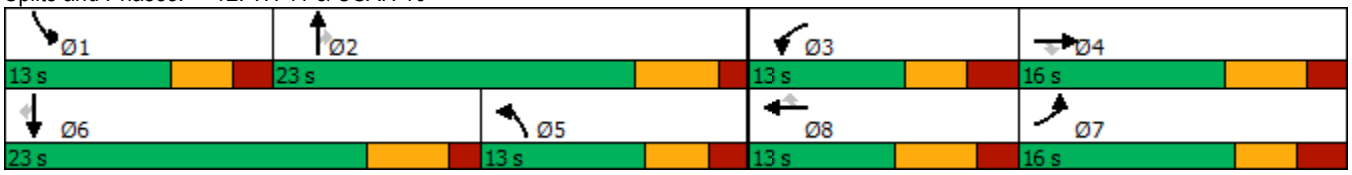
14: Park Ridge Dr & CSAH 10

Direction	All
Future Volume (vph)	897
Total Delay / Veh (s/v)	0
CO Emissions (kg)	0.98
NOx Emissions (kg)	0.19
VOC Emissions (kg)	0.23

Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBT	WBL	EBT	NBL	SBT	EBL	WBT
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	None	None	None	Max	None	None
Maximum Split (s)	13	23	13	16	13	23	16	13
Maximum Split (%)	20.0%	35.4%	20.0%	24.6%	20.0%	35.4%	24.6%	20.0%
Minimum Split (s)	13	21	13	13	13	21	13	13
Yellow Time (s)	3	4	3	4	3	4	3	4
All-Red Time (s)	2	1.5	2.5	2	2	1.5	2.5	2
Minimum Initial (s)	7	15	7	7	7	15	7	7
Vehicle Extension (s)	3	5.5	3	4	4	5.5	3	4.5
Minimum Gap (s)	3	5.5	3	4	4	5.5	3	4.5
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)								
Flash Dont Walk (s)								
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	13	36	49	23	0	49	36
End Time (s)	13	36	49	0	36	23	0	49
Yield/Force Off (s)	8	30.5	43.5	59	31	17.5	59.5	43
Yield/Force Off 170(s)	8	30.5	43.5	59	31	17.5	59.5	43
Local Start Time (s)	0	13	36	49	23	0	49	36
Local Yield (s)	8	30.5	43.5	59	31	17.5	59.5	43
Local Yield 170(s)	8	30.5	43.5	59	31	17.5	59.5	43

Intersection Summary	
Cycle Length	65
Control Type	Actuated-Uncoordinated
Natural Cycle	65

Splits and Phases: 12: TH 41 & CSAH 10



Intersection	
Intersection Delay, s/veh	7.6
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	2	2	1	1
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	736	346	240	407
Demand Flow Rate, veh/h	760	357	247	416
Vehicles Circulating, veh/h	346	393	843	355
Vehicles Exiting, veh/h	425	697	263	395
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	7.6	5.5	10.1	7.8
Approach LOS	A	A	B	A

Lane	Left	Right	Left	Right	Left	Left
Designated Moves	LT	TR	LT	TR	LTR	LTR
Assumed Moves	LT	TR	LT	TR	LTR	LTR
RT Channelized						
Lane Util	0.470	0.530	0.471	0.529	1.000	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.328
Entry Flow, veh/h	357	403	168	189	247	416
Cap Entry Lane, veh/h	982	1058	940	1017	694	1050
Entry HV Adj Factor	0.969	0.968	0.969	0.971	0.971	0.979
Flow Entry, veh/h	346	390	163	184	240	407
Cap Entry, veh/h	952	1025	911	988	673	1028
V/C Ratio	0.364	0.381	0.179	0.186	0.356	0.396
Control Delay, s/veh	7.7	7.6	5.7	5.4	10.1	7.8
LOS	A	A	A	A	B	A
95th %tile Queue, veh	2	2	1	1	2	2

Intersection	
Intersection Delay, s/veh	7.9
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	661	285	111	206
Demand Flow Rate, veh/h	685	297	115	219
Vehicles Circulating, veh/h	83	324	737	255
Vehicles Exiting, veh/h	391	528	31	366
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	9.0	6.9	7.8	5.6
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	685	297	115	219
Cap Entry Lane, veh/h	1268	992	651	1064
Entry HV Adj Factor	0.965	0.961	0.968	0.939
Flow Entry, veh/h	661	285	111	206
Cap Entry, veh/h	1223	953	630	999
V/C Ratio	0.540	0.300	0.177	0.206
Control Delay, s/veh	9.0	6.9	7.8	5.6
LOS	A	A	A	A
95th %tile Queue, veh	3	1	1	1

10: Bavaria Rd & CSAH 10

Direction	All
Future Volume (vph)	1303
Total Delay / Veh (s/v)	0
CO Emissions (kg)	1.63
NOx Emissions (kg)	0.32
VOC Emissions (kg)	0.38

11: White Oak Dr & CSAH 10

Direction	All
Future Volume (vph)	1142
Total Delay / Veh (s/v)	7
CO Emissions (kg)	1.02
NOx Emissions (kg)	0.20
VOC Emissions (kg)	0.24

12: TH 41 & CSAH 10

Direction	All
Future Volume (vph)	2252
Total Delay / Veh (s/v)	37
CO Emissions (kg)	3.66
NOx Emissions (kg)	0.71
VOC Emissions (kg)	0.85

13: Crest Dr/School Access & CSAH 10

Direction	All
Future Volume (vph)	832
Total Delay / Veh (s/v)	2
CO Emissions (kg)	0.35
NOx Emissions (kg)	0.07
VOC Emissions (kg)	0.08

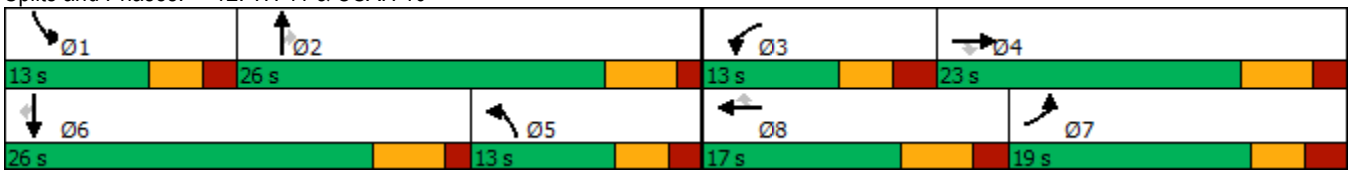
14: Park Ridge Dr & CSAH 10

Direction	All
Future Volume (vph)	897
Total Delay / Veh (s/v)	16
CO Emissions (kg)	1.18
NOx Emissions (kg)	0.23
VOC Emissions (kg)	0.27

Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBT	WBL	EBT	NBL	SBT	EBL	WBT
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	None	None	None	Max	None	None
Maximum Split (s)	13	26	13	23	13	26	19	17
Maximum Split (%)	17.3%	34.7%	17.3%	30.7%	17.3%	34.7%	25.3%	22.7%
Minimum Split (s)	13	21	13	13	13	21	13	13
Yellow Time (s)	3	4	3	4	3	4	3	4
All-Red Time (s)	2	1.5	2.5	2	2	1.5	2.5	2
Minimum Initial (s)	7	15	7	7	7	15	7	7
Vehicle Extension (s)	3	5.5	3	4	4	5.5	3	4.5
Minimum Gap (s)	3	5.5	3	4	4	5.5	3	4.5
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)								
Flash Dont Walk (s)								
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	13	39	52	26	0	56	39
End Time (s)	13	39	52	0	39	26	0	56
Yield/Force Off (s)	8	33.5	46.5	69	34	20.5	69.5	50
Yield/Force Off 170(s)	8	33.5	46.5	69	34	20.5	69.5	50
Local Start Time (s)	0	13	39	52	26	0	56	39
Local Yield (s)	8	33.5	46.5	69	34	20.5	69.5	50
Local Yield 170(s)	8	33.5	46.5	69	34	20.5	69.5	50

Intersection Summary	
Cycle Length	75
Control Type	Actuated-Uncoordinated
Natural Cycle	75

Splits and Phases: 12: TH 41 & CSAH 10



Intersection	
Intersection Delay, s/veh	65.6
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	110	383	81	5	178	100	95	45	21	141	92	52
Future Vol, veh/h	110	383	81	5	178	100	95	45	21	141	92	52
Peak Hour Factor	0.63	0.86	0.70	0.63	0.93	0.68	0.66	0.70	0.66	0.72	0.68	0.68
Heavy Vehicles, %	3	4	1	3	4	2	3	2	5	2	2	2
Mvmt Flow	175	445	116	8	191	147	144	64	32	196	135	76
Number of Lanes	1	1	1	1	1	1	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	3	3
HCM Control Delay	76.8	21.9	27.9	104.7
HCM LOS	F	C	D	F

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	68%	0%	100%	0%	0%	100%	0%	0%	49%
Vol Thru, %	32%	0%	0%	100%	0%	0%	100%	0%	32%
Vol Right, %	0%	100%	0%	0%	100%	0%	0%	100%	18%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	140	21	110	383	81	5	178	100	285
LT Vol	95	0	110	0	0	5	0	0	141
Through Vol	45	0	0	383	0	0	178	0	92
RT Vol	0	21	0	0	81	0	0	100	52
Lane Flow Rate	208	32	175	445	116	8	191	147	408
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.612	0.084	0.464	1.123	0.268	0.023	0.531	0.376	1.088
Departure Headway (Hd)	11.193	10.086	10.083	9.573	8.78	11.233	10.718	9.937	9.891
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	325	357	360	383	412	321	339	365	371
Service Time	8.893	7.786	7.783	7.273	6.48	8.933	8.418	7.637	7.591
HCM Lane V/C Ratio	0.64	0.09	0.486	1.162	0.282	0.025	0.563	0.403	1.1
HCM Control Delay	30.1	13.7	21.2	114.8	14.7	14.2	24.9	18.5	104.7
HCM Lane LOS	D	B	C	F	B	B	C	C	F
HCM 95th-tile Q	3.8	0.3	2.4	15.8	1.1	0.1	3	1.7	14.4

Intersection	
Intersection Delay, s/veh	16.5
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	171	301	9	3	175	46	21	23	19	38	8	84
Future Vol, veh/h	171	301	9	3	175	46	21	23	19	38	8	84
Peak Hour Factor	0.69	0.75	0.75	0.50	0.80	0.77	0.90	0.60	0.38	0.66	0.60	0.62
Heavy Vehicles, %	5	3	0	0	3	9	1	7	2	10	3	5
Mvmt Flow	248	401	12	6	219	60	23	38	50	58	13	135
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	18.9	15.3	11.5	13
HCM LOS	C	C	B	B

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	33%	100%	0%	100%	0%	29%
Vol Thru, %	37%	0%	97%	0%	79%	6%
Vol Right, %	30%	0%	3%	0%	21%	65%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	63	171	310	3	221	130
LT Vol	21	171	0	3	0	38
Through Vol	23	0	301	0	175	8
RT Vol	19	0	9	0	46	84
Lane Flow Rate	112	248	413	6	278	206
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.207	0.454	0.692	0.012	0.496	0.363
Departure Headway (Hd)	6.665	6.594	6.03	7.025	6.418	6.33
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	534	545	595	506	557	563
Service Time	4.764	4.363	3.8	4.811	4.204	4.413
HCM Lane V/C Ratio	0.21	0.455	0.694	0.012	0.499	0.366
HCM Control Delay	11.5	14.8	21.4	9.9	15.4	13
HCM Lane LOS	B	B	C	A	C	B
HCM 95th-tile Q	0.8	2.3	5.4	0	2.7	1.6

10: Bavaria Rd & CSAH 10

Direction	All
Future Volume (vph)	1303
Total Delay / Veh (s/v)	0
CO Emissions (kg)	1.63
NOx Emissions (kg)	0.32
VOC Emissions (kg)	0.38

11: White Oak Dr & CSAH 10

Direction	All
Future Volume (vph)	1142
Total Delay / Veh (s/v)	9
CO Emissions (kg)	1.04
NOx Emissions (kg)	0.20
VOC Emissions (kg)	0.24

12: TH 41 & CSAH 10

Direction	All
Future Volume (vph)	2252
Total Delay / Veh (s/v)	28
CO Emissions (kg)	3.32
NOx Emissions (kg)	0.65
VOC Emissions (kg)	0.77

13: Crest Dr/School Access & CSAH 10

Direction	All
Future Volume (vph)	832
Total Delay / Veh (s/v)	1
CO Emissions (kg)	0.34
NOx Emissions (kg)	0.07
VOC Emissions (kg)	0.08

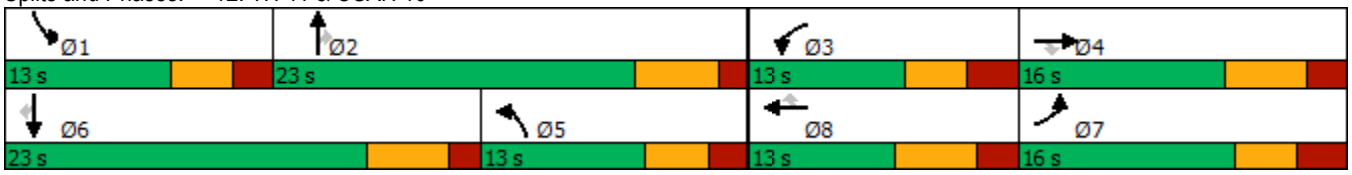
14: Park Ridge Dr & CSAH 10

Direction	All
Future Volume (vph)	897
Total Delay / Veh (s/v)	0
CO Emissions (kg)	0.98
NOx Emissions (kg)	0.19
VOC Emissions (kg)	0.23

Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBT	WBL	EBT	NBL	SBT	EBL	WBT
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	None	None	None	Max	None	None
Maximum Split (s)	13	23	13	16	13	23	16	13
Maximum Split (%)	20.0%	35.4%	20.0%	24.6%	20.0%	35.4%	24.6%	20.0%
Minimum Split (s)	13	21	13	13	13	21	13	13
Yellow Time (s)	3	4	3	4	3	4	3	4
All-Red Time (s)	2	1.5	2.5	2	2	1.5	2.5	2
Minimum Initial (s)	7	15	7	7	7	15	7	7
Vehicle Extension (s)	3	5.5	3	4	4	5.5	3	4.5
Minimum Gap (s)	3	5.5	3	4	4	5.5	3	4.5
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)								
Flash Dont Walk (s)								
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	13	36	49	23	0	49	36
End Time (s)	13	36	49	0	36	23	0	49
Yield/Force Off (s)	8	30.5	43.5	59	31	17.5	59.5	43
Yield/Force Off 170(s)	8	30.5	43.5	59	31	17.5	59.5	43
Local Start Time (s)	0	13	36	49	23	0	49	36
Local Yield (s)	8	30.5	43.5	59	31	17.5	59.5	43
Local Yield 170(s)	8	30.5	43.5	59	31	17.5	59.5	43

Intersection Summary	
Cycle Length	65
Control Type	Actuated-Uncoordinated
Natural Cycle	65

Splits and Phases: 12: TH 41 & CSAH 10



Intersection	
Intersection Delay, s/veh	7.6
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	2	2	1	1
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	736	346	240	407
Demand Flow Rate, veh/h	760	357	247	416
Vehicles Circulating, veh/h	346	393	843	355
Vehicles Exiting, veh/h	425	697	263	395
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	7.6	5.5	10.1	7.8
Approach LOS	A	A	B	A

Lane	Left	Right	Left	Right	Left	Left
Designated Moves	LT	TR	LT	TR	LTR	LTR
Assumed Moves	LT	TR	LT	TR	LTR	LTR
RT Channelized						
Lane Util	0.470	0.530	0.471	0.529	1.000	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.328
Entry Flow, veh/h	357	403	168	189	247	416
Cap Entry Lane, veh/h	982	1058	940	1017	694	1050
Entry HV Adj Factor	0.969	0.968	0.969	0.971	0.971	0.979
Flow Entry, veh/h	346	390	163	184	240	407
Cap Entry, veh/h	952	1025	911	988	673	1028
V/C Ratio	0.364	0.381	0.179	0.186	0.356	0.396
Control Delay, s/veh	7.7	7.6	5.7	5.4	10.1	7.8
LOS	A	A	A	A	B	A
95th %tile Queue, veh	2	2	1	1	2	2

Intersection	
Intersection Delay, s/veh	7.9
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	661	285	111	206
Demand Flow Rate, veh/h	685	297	115	219
Vehicles Circulating, veh/h	83	324	737	255
Vehicles Exiting, veh/h	391	528	31	366
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	9.0	6.9	7.8	5.6
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	685	297	115	219
Cap Entry Lane, veh/h	1268	992	651	1064
Entry HV Adj Factor	0.965	0.961	0.968	0.939
Flow Entry, veh/h	661	285	111	206
Cap Entry, veh/h	1223	953	630	999
V/C Ratio	0.540	0.300	0.177	0.206
Control Delay, s/veh	9.0	6.9	7.8	5.6
LOS	A	A	A	A
95th %tile Queue, veh	3	1	1	1

Traffic Safety Benefit-Cost Calculation

Highway Safety Improvement Program (HSIP) Reactive Project

DEPARTMENT OF TRANSPORTATION

A. Roadway Description

Route	TH 41, CSAH 10	**District**	Metro	**County**	Carver
Begin RP	Bavaria Rd, 500' N of CS	**End RP**	Park Ridge Dr, White Oa	**Miles**	1.100
Location	TH 41 from White Oak Dr to 500' North of CSAH 10, CSAH 10 from Bavaria Dr to Park Ridge Dr				

B. Project Description

Proposed Work	Expansion of CSAH 10 to 4-lane divided section, roundabouts at Bavaria & Park Ridge, TH 41 tu		
Project Cost*	$11,312,000	**Installation Year**	2025
Project Service Life	20 years	**Traffic Growth Factor**	2.0%

** exclude Right of Way from Project Cost*

C. Crash Modification Factor

0.54	**Fatal (K) Crashes**	**Reference**	ID 4933
0.54	**Serious Injury (A) Crashes**		
0.54	**Moderate Injury (B) Crashes**	**Crash Type**	Fatal + Injury
0.54	**Possible Injury (C) Crashes**		
	Property Damage Only Crashes		www.CMFclearinghouse.org

D. Crash Modification Factor (optional second CMF)

0.34	**Fatal (K) Crashes**	**Reference**	ID 7566
0.34	**Serious Injury (A) Crashes**		
0.34	**Moderate Injury (B) Crashes**	**Crash Type**	All (Median)
0.34	**Possible Injury (C) Crashes**		
0.34	**Property Damage Only Crashes**		www.CMFclearinghouse.org

E. Crash Data

Begin Date	1/1/2016	**End Date**	12/31/2018	3 years
Data Source	MnDOT			

Crash Severity	**Fatal + Injury**	**All (Median)**
K crashes		
A crashes		
B crashes	4	6
C crashes	3	5
PDO crashes	7	13

F. Benefit-Cost Calculation

$13,154,788	**Benefit (present value)**	**B/C Ratio = 1.17**
$11,312,000	**Cost**	

Proposed project expected to reduce 7 crashes annually, 0 of which involving fatality or serious injury.

F. Analysis Assumptions

Crash Severity	Crash Cost
K crashes	$1,360,000
A crashes	$680,000
B crashes	$210,000
C crashes	$110,000
PDO crashes	$12,000

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

Real Discount Rate	1.2%
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	0.00	0.00	$0
B crashes	5.78	1.93	$404,460
C crashes	4.66	1.55	$170,977
PDO crashes	8.57	2.86	$34,268
			$609,705

H. Amortized Benefit

Year	Crash Benefits	Present Value
2025	$609,705	$609,705
2026	$621,899	$614,524
2027	$634,337	$619,382
2028	$647,023	$624,279
2029	$659,964	$629,214
2030	$673,163	$634,188
2031	$686,626	$639,201
2032	$700,359	$644,254
2033	$714,366	$649,347
2034	$728,654	$654,480
2035	$743,227	$659,654
2036	$758,091	$664,869
2037	$773,253	$670,124
2038	$788,718	$675,422
2039	$804,492	$680,761
2040	$820,582	$686,143
2041	$836,994	$691,567
2042	$853,734	$697,034
2043	$870,808	$702,544
2044	$888,225	$708,097
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 = $13,154,788

CMF / CRF Details

CMF ID: 4933

Convert all-way, stop-controlled intersection to roundabout

Description:

Prior Condition: The intersection was operating under AWSC control.

Category: Intersection geometry

Study: *Evaluation of Roundabout Safety*, Qin et al., 2013

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

Crash Modification Factor (CMF)	
Value:	0.544
Adjusted Standard Error:	
Unadjusted Standard Error:	0.196

Crash Reduction Factor (CRF)	
Value:	45.6 *(This value indicates a **decrease** in crashes)*
Adjusted Standard Error:	
Unadjusted Standard Error:	19.6

Applicability

Crash Type:	All
Crash Severity:	K (fatal),A (serious injury),B (minor injury),C (possible injury)
Roadway Types:	Not specified
Number of Lanes:	2,4
Road Division Type:	All
Speed Limit:	
Area Type:	All
Traffic Volume:	
Time of Day:	All

If countermeasure is intersection-based

Intersection Type:	Roadway/roadway (not interchange related)
Intersection Geometry:	3-leg,4-leg
Traffic Control:	Stop-controlled
Major Road Traffic Volume:	4100 (total entering) to 48100 (total entering) Annual Average Daily Traffic (AADT)
Minor Road Traffic Volume:	

Development Details

Date Range of Data Used:	1994 to 2010
Municipality:	Statewide
State:	WI
Country:	USA

Type of Methodology Used:	Before/after using empirical Bayes or full Bayes
Sample Size Used:	Crashes
Before Sample Size Used:	22 Crashes
After Sample Size Used:	12 Crashes

Other Details

Included in Highway Safety Manual?	No
Date Added to Clearinghouse:	Aug-01-2013
Comments:	- Study included three-year before and after crash data for each site.- Reported traffic volume is total entering volume.

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

CMF / CRF Details

CMF ID: 7566

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:	0.341
Adjusted Standard Error:	
Unadjusted Standard Error:	0.091

Crash Reduction Factor (CRF)	
Value:	65.88 *(This value indicates a **decrease** in crashes)*

Adjusted Standard Error:	
Unadjusted Standard Error:	9.05

Applicability

Crash Type:	All
Crash Severity:	All
Roadway Types:	Not specified
Number of Lanes:	2
Road Division Type:	Undivided
Speed Limit:	
Area Type:	Urban
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

CSAH 10 and TH 41 Improvements
2016-2018 Crashes

CSAH 11 and CSAH 10 (2016 -2018)

objectid	Incident ID	Date and Time	Crash Severity	Number Killed	Number of Vehicles	Officer Narrative	Manner of Collision
1783191	357276	6/17/2016, 9:30 AM	Possible Injury Crash	0	2	Vehicle #1 was traveling eastbound on Engler Blvd approaching the intersection of	Front to Rear
1784038	405348	12/17/2016, 5:40 PM	Property Damage Only Crash	0	2	Vehicle #2 was traveling north on Bavaria Road crossing through the intersection o	Angle
1855619	387171	10/17/2016, 9:30 AM	Possible Injury Crash	0	2	Vehicle 1 (V1), a full size school bus (driver was only occupant), was EB on Engler B	Angle
1861766	354608	6/6/2016, 3:00 AM	Minor Injury Crash	0	1	On 06.06.2016 at approximately 0258 hours we observed a white Grand Prix GT turning SB on MNTH 41 from	
2159844	317049	1/5/2016, 5:50 PM	Possible Injury Crash	0	2	Both vehicles were stopped at the intersection of Bavaria Rd and Engler Blvd.	Front to Front
2264380	371120	8/12/2016, 8:05 PM	Possible Injury Crash	0	2	Both vehicles traveling EB on Engler Blvd. V2 stops for stop sign at the intersection	Front to Rear
2454033	398190	11/26/2016, 10:53 PM	Property Damage Only Crash	0	2	Vehicle number two was stopped at a stop sign facing WB on Engler Blvd. getting r	Front to Rear
2476319	321886	1/20/2016, 4:17 PM	Property Damage Only Crash	0	2	Veh 1 traveling east on ENgler Blvd failed to stop for the stop sign and crashed into	Angle
2556476	390491	10/29/2016, 8:40 PM	Minor Injury Crash	0	2	Vehicle #2 was SB Bavaria, and stopped at the 4-way stop intersection with Engler.	Front to Rear
1843070	447173	4/23/2017, 8:55 PM	Property Damage Only Crash	0	2	Both vehicles were at the intersection of Bavaria Road and Engler Blvd. Veh 1 stop	Angle
2045804	487868	7/19/2017, 7:00 AM	Property Damage Only Crash	0	2	Driver of vehicle #1 was making a left hand turn onto Engler Blvd from White Oak D	Angle
2265114	521357	12/3/2017, 10:20 AM	Minor Injury Crash	0	3	Vehicle #1 was traveling eastbound on Engler Blvd just before the crash. Driver #1	Front to Rear
2336520	453651	5/19/2017, 7:30 PM	Property Damage Only Crash	0	2	Driver #1 was westbound Engler and was going to turn left to go southbound on W	Front to Front
2474152	418199	1/25/2017, 8:40 AM	Property Damage Only Crash	0	2	Vehicle #1 was stopped for stop sign at Engler Blvd/Bavaria Rd. Vehicle #1 was trav	Front to Rear
2477891	511890	10/27/2017, 10:58 AM	Property Damage Only Crash	0	2	Vehicle #1 (V#1)was WB on Engler Boulevard having entered the Bavaria Road inte	Angle
2528912	503468	9/23/2017, 6:41 PM	Minor Injury Crash	0	2	Unit 1 was traveling east on Engler Blvd approaching the intersection with Bavaria	Angle
2165411	668669	12/15/2018, 7:16 PM	Minor Injury Crash	0	2	Driver of vehicle #1 stated she was southbound on Bavaria Rd at the intersection	Other
2239960	539276	1/22/2018, 4:15 PM	Possible Injury Crash	0	1	Driver of the snowmobile was approaching the intersection of Bavaria Rd. and Engl	Front to Rear
2268994	660259	11/15/2018, 9:30 AM	Minor Injury Crash	0	2	Vehicle #1 was traveling westbound on Engler Blvd just before the crash occurred.	Angle
2291677	588903	4/6/2018, 5:41 AM	Property Damage Only Crash	0	2	Vehicle #1 was traveling WB on Engler Boulevard passing through the White Oak D	Angle
2583255	570045	2/28/2018, 3:56 PM	Property Damage Only Crash	0	2	Vehicle #1 was heading southbound when the driver observed vehicle #2 in front o	Sideswipe - Same Direction
2530467	380814	9/21/2016, 8:05 PM	Property Damage Only Crash	0	2	Vehicle #1 traveling S/B on Park Ridge Dr. Vehicle #2 traveling W/B on Engler Blvd.	Angle
2422984	419875	1/31/2017, 8:50 PM	Property Damage Only Crash	0	3	All three vehicles traveling south on Park Ridge Dr. were unable to stop due to	Sideswipe - Same Direction
2423687	452820	5/17/2017, 11:45 AM	Property Damage Only Crash	0	2	Driver of vehicle number one had stopped at the listed intersection for the stop	Angle
1796865	365078	6/17/2016, 11:46 AM	Possible Injury Crash	0	2	Unit 1 in the center lane to go south on 41 from Engler stopped in traffic. The	Front to Rear
1822713	343972	4/20/2016, 2:30 PM	Possible Injury Crash	0	2	The vehicles were traveling southbound on MNTH 41 near Engler Blvd. The	Front to Rear
1829293	322280	1/21/2016, 5:48 PM	Property Damage Only Crash	0	2	The vehicles were traveling southbound on MNTH 41 in the through lane. The	Front to Rear
1848881	377790	9/9/2016, 7:50 AM	Property Damage Only Crash	0	2	Driver #1 stated he had just left the intersection area of White Oak Drive and	Front to Rear
1874997	395729	11/17/2016, 1:00 PM	Possible Injury Crash	0	1	V1 was exiting car wash at the Holiday Gas Station. Driver stated that vehicle had	
2074309	383725	10/3/2016, 12:20 PM	Property Damage Only Crash	0	2	Both vehicles were slowing as they drove around the right side of a crash that just	Front to Rear
2161359	370169	8/9/2016, 12:39 PM	Property Damage Only Crash	0	2	The vehicles were stopped in traffic, due to the back-up at the stop light ahead,	Front to Rear
2427379	371992	8/16/2016, 5:20 PM	Property Damage Only Crash	0	2	Driver #1 was southbound MN 41, approaching stopped traffic in heavy rain.	Front to Rear
2502932	355679	6/10/2016, 3:10 PM	Property Damage Only Crash	0	2	Vehicle 1 was turning left from NB 41 to WB Engler Blvd. Vehicle 2 was SB on	Angle
2502946	356520	6/13/2016, 8:33 AM	Property Damage Only Crash	0	2	- CRASH OCCURRED IN INTERSECTION OF SB 41 AND EB CR 10. VEH 1 SB 41 IN	Angle
2530396	382960	9/24/2016, 1:22 PM	Minor Injury Crash	0	3	The vehicles were traveling southbound on MNTH 41 near Engler Blvd. The Jeep	Front to Rear
1817341	522280	12/5/2017, 6:30 PM	Property Damage Only Crash	0	2	Vehicle 2 was traveling north on Hwy 41 and was stopped in the turn lane to turn	Front to Rear
1823668	508287	10/10/2017, 4:33 PM	Property Damage Only Crash	0	1	MN LIC 116RHE Driven by Molly Margaret Upton DOB 6-29-98 was traveling in the	
1862601	503390	9/23/2017, 12:00 PM	Minor Injury Crash	0	4	Vehicle 1 was EB on Engler Blvd approaching MNTH 41. Vehicles 2, 3, and 4 were	Front to Rear
1881855	432566	3/31/2017, 5:20 PM	Property Damage Only Crash	0	2	Both cars were EB 10 approaching 41 in heavy traffic. Traffic was stopped for the	Front to Rear
1901448	492496	8/8/2017, 12:23 PM	Property Damage Only Crash	0	2	Vehicle #1 was traveling northbound while looking at his cell phone mapping	Angle
1906951	470192	6/15/2017, 2:10 PM	Possible Injury Crash	0	3	Driver 3 was NB 41 past CSAH 10 and had to slow for traffic due to a stalled	Front to Rear
2023010	513335	10/31/2017, 11:15 AM	Property Damage Only Crash	0	2	Unit 2 traveling south on highway 41 through lane. Unit 1 traveling in right lane	Sideswipe - Same Direction
2158782	455166	5/27/2017, 3:35 AM	Property Damage Only Crash	0	2	V1 was WB on Engler Blvd and attempted to continue WB through the	Angle
2187669	528009	12/22/2017, 5:42 PM	Possible Injury Crash	0	2	BOTH VEHICLES TRAVELING S/B ON HWY 41 APPROACHING ENGLER BLVD. V2	Front to Rear
2362464	472978	6/27/2017, 7:45 PM	Property Damage Only Crash	0	2	Vehicle #1 was traveling E/B on Engler Blvd, stopped at a red light before turning	Front to Rear
2412675	508167	10/12/2017, 10:38 AM	Property Damage Only Crash	0	2	The vehicles were traveling southbound on MNTH 41, just north of Engler Blvd.	Sideswipe - Same Direction
2475937	492559	8/8/2017, 3:30 PM	Possible Injury Crash	0	2	Drivers of vehicle's #1 & #2 stated that a 3rd vehicle cut in front of vehicle #1	Front to Rear
2480590	492274	8/7/2017, 1:45 PM	Possible Injury Crash	0	1	S/B MNTH 41 AT ENGLER. MOTORCYCLE SOUTH ON MNTH 41 APPROACHING	
2501264	452104	5/13/2017, 8:05 PM	Property Damage Only Crash	0	2	Both units were on Engler Blvd facing east to turn to north MNTH 41. Driver of	Front to Rear
2501280	452088	5/14/2017, 12:40 PM	Property Damage Only Crash	0	3	Vehicles #2 and 3 2 were stopped for a red light at the intersection. driver in	Front to Rear
2554778	515311	11/8/2017, 9:50 AM	Property Damage Only Crash	0	2	Driver #1 was at a complete stop waiting for the light to turn green when vehicle	Sideswipe - Same Direction
2577661	449049	4/30/2017, 4:03 PM	Property Damage Only Crash	0	3	S/B MNTH 41, CHASKA, MN. V/3 WAS SOUTH 41, STOPPED AT THE RED LIGHT.	Front to Rear
1784789	565366	2/12/2018, 8:10 AM	Possible Injury Crash	0	2	Vehicle #2 started then stopped from the stop sign on the service entry road of	Front to Rear
1824285	637025	9/23/2018, 11:10 AM	Minor Injury Crash	0	2	Vehicle #2 was stopped behind another vehicle waiting for a red light at the	Front to Rear
1882653	604060	6/13/2018, 3:10 PM	Property Damage Only Crash	0	2	Bother vehicles were traveling northbound on MNTH 41 approaching the	Sideswipe - Same Direction
2026157	623993	7/28/2018, 4:41 PM	Property Damage Only Crash	0	1	-THE DAMAGE TO PROPERTY OCCURRED ON HWY 41 AT THE CITY OF CHASKA	
2049546	580622	3/2/2018, 7:30 PM	Property Damage Only Crash	0	2	Vehicle #2 was stopped for the red light at the intersection of 41 and 61 facing	Front to Rear
2100157	607377	6/28/2018, 12:55 PM	Property Damage Only Crash	0	3	Three vehicle property damage crash. All three vehicles were stopped at the red	Front to Rear

CSAH 10 and TH 41 Improvements
2016-2018 Crashes

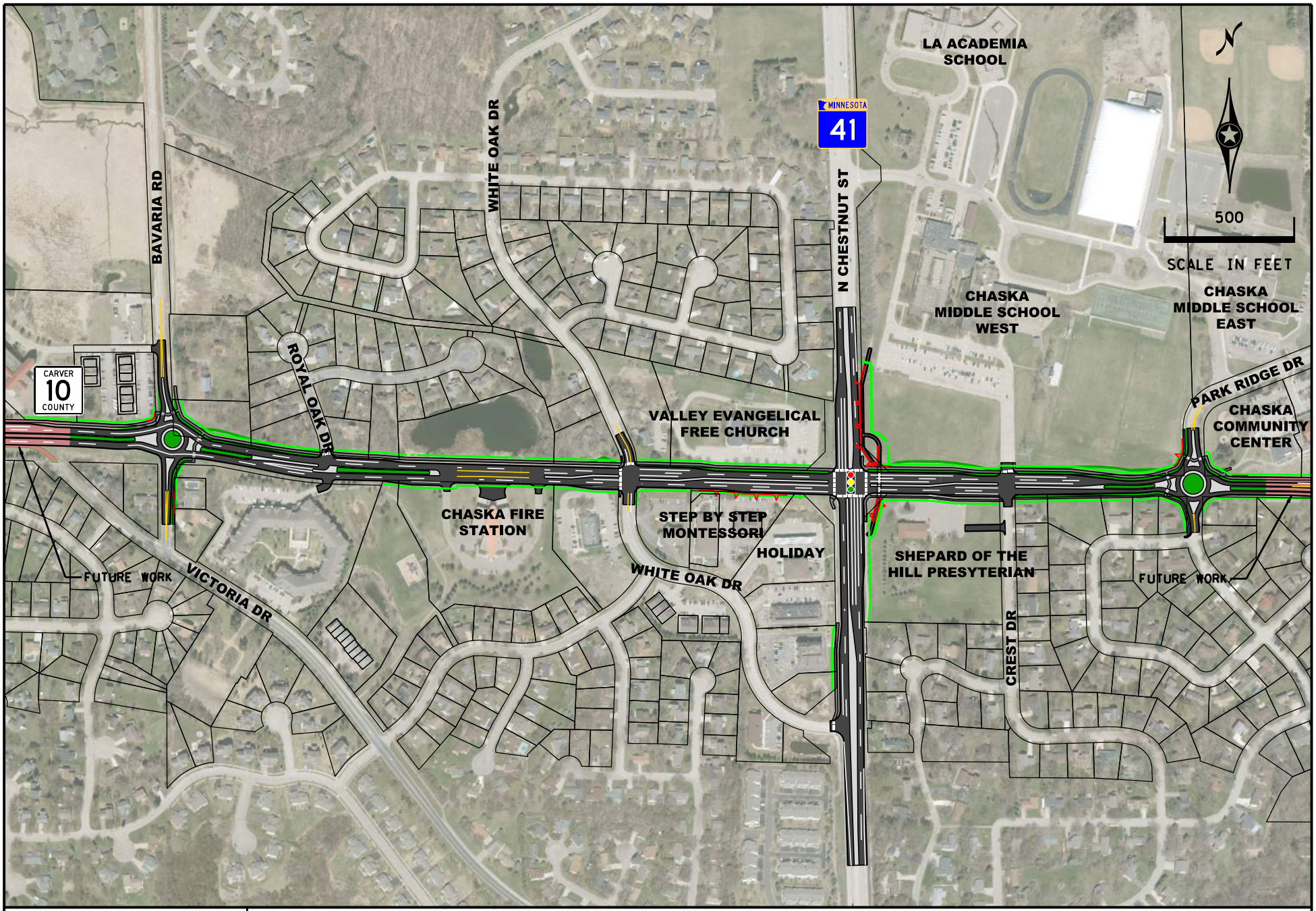
objectid	Incident ID	Date and Time	Crash Severity	Number Killed	Number of Vehicles	Officer Narrative	Manner of Collision
2136841	586663	3/29/2018, 7:33 AM	Possible Injury Crash	0	2	V1 WAS ON ENGLER TRAVELING EB. D1 STATED HE WAS MOMENTARILY	Sideswipe - Opposing
2216211	598102	5/18/2018, 3:00 PM	Property Damage Only Crash	0	2	Vehicle #1 abruptly move from the eastbound driving lane into the right hand	Sideswipe - Same Direction
2241565	595896	5/8/2018, 8:28 AM	Property Damage Only Crash	0	2	Vehicle number one was backing out of a parking space at 145 Engler Blvd. Vehicle	
2291388	542225	2/1/2018, 11:15 AM	Minor Injury Crash	0	4	V4, V3, V2 WERE STOPPED IN THE LANE WAITING AT THE LIGHT. V1 CAME UP	Front to Rear
2343494	665475	12/3/2018, 5:34 PM	Property Damage Only Crash	0	2	S/B MNTH 41 AT ENGLER, CHASKA. TRAFFIC IN THE AREA WAS STOPPED FOR THE	Front to Rear
2482162	653635	10/13/2018, 3:05 AM	Fatal Crash	2	1	UNIT ONE WAS TRAVELING SOUTH ON MNTH 41 WHEN FOR REASONS UNKNOWN	
2507560	670661	12/20/2018, 5:06 PM	Possible Injury Crash	0	3	ALL THREE VEHICLES IN LEFT LANE S/B HY 41 APPROACHING ENGLER BLVD.	Front to Rear

Unit1 Vehicle Type	Unit1 Direction	Unit1 Factor1	Unit1 Vehicle Maneuver	Unit2 Vehicle Type	Unit2 Direction
Sport Utility Vehicle	Eastbound	Operated Motor Vehicle in Careless, Negligent, or Erratic Manner	Moving Forward	Passenger Van (Seats Installed Behind Driver)	Eastbound
Pickup	Westbound	Other Contributing Action	Moving Forward	Passenger Car	Northbound
School Bus	Eastbound	No Clear Contributing Action	Moving Forward	Passenger Car	Southbound
Passenger Car	Eastbound	Operated Motor Vehicle in Reckless or Aggressive Manner	Moving Forward		
Passenger Car	Northbound	No Clear Contributing Action	Turning Left	Sport Utility Vehicle	Southbound
Passenger Car	Eastbound	Driver Distracted	Moving Forward	Passenger Car	Eastbound
Pickup	Westbound	Following Too Closely	Moving Forward	Passenger Car	Westbound
Medium / Heavy Trucks (More than 10,000lbs)	Eastbound	Ran Stop Sign	Moving Forward	Sport Utility Vehicle	Northbound
Sport Utility Vehicle	Southbound	Operated Motor Vehicle in Careless, Negligent, or Erratic Manner	Moving Forward	Passenger Car	Southbound
Passenger Car	Eastbound	Failure to Yield Right-of-Way	Turning Left	Sport Utility Vehicle	Westbound
Passenger Car	Northbound	No Clear Contributing Action	Turning Left	Passenger Car	Southbound
Passenger Van (Seats Installed Behind Driver)	Eastbound	Driver Distracted	Moving Forward	Passenger Car	Eastbound
Passenger Car	Southbound	Improper Turn/Merge	Turning Left	Sport Utility Vehicle	Southbound
Passenger Car	Eastbound	No Clear Contributing Action	Vehicle Stopped or Stalled in Roadway	Sport Utility Vehicle	Eastbound
Pickup	Westbound	Unknown	Moving Forward	Medium / Heavy Trucks (More than 10,000lbs)	Northbound
Passenger Car	Eastbound	Driver Distracted	Moving Forward	Sport Utility Vehicle	Northbound
Passenger Car	Southbound	No Clear Contributing Action	Moving Forward	Passenger Car	Eastbound
	Southbound		Moving Forward	Snowmobile	Eastbound
Passenger Car	Southbound	Driver Distracted	Turning Left	Passenger Car	Southbound
Sport Utility Vehicle	Westbound	No Clear Contributing Action	Moving Forward	Sport Utility Vehicle	Southbound
Passenger Car	Southbound	No Clear Contributing Action	Moving Forward	Passenger Car	Southbound
Passenger Car	Southbound	Failure to Yield Right-of-Way	Moving Forward	Passenger Car	Southbound
Passenger Car	Southbound	No Clear Contributing Action	Vehicle Stopped or Stalled in Roadway	Passenger Car	Southbound
Passenger Car	Eastbound	No Clear Contributing Action	Moving Forward	Passenger Car	Eastbound
Sport Utility Vehicle	Southbound	No Clear Contributing Action	Vehicle Stopped or Stalled in Roadway	Sport Utility Vehicle	Southbound
Sport Utility Vehicle	Southbound	No Clear Contributing Action	Vehicle Stopped or Stalled in Roadway	Passenger Car	Southbound
Passenger Car	Southbound	No Clear Contributing Action	Vehicle Stopped or Stalled in Roadway	Passenger Car	Southbound
Passenger Car	Eastbound	Operated Motor Vehicle in Careless, Negligent, or Erratic Manner	Moving Forward	Pickup	Eastbound
Passenger Car	Westbound	Other Contributing Action	Moving Forward		
Sport Utility Vehicle	Southbound	Driver Distracted	Vehicle Stopped or Stalled in Roadway	Sport Utility Vehicle	Southbound
Passenger Car	Southbound	No Clear Contributing Action	Vehicle Stopped or Stalled in Roadway	Passenger Car	Southbound
Passenger Car	Southbound	No Clear Contributing Action	Moving Forward	Passenger Car	Southbound
Passenger Car	Northbound	No Clear Contributing Action	Turning Left	Passenger Car	Southbound
Medium / Heavy Trucks (More than 10,000lbs)	Southbound	No Clear Contributing Action	Moving Forward	Passenger Car	Eastbound
Sport Utility Vehicle	Southbound	No Clear Contributing Action	Vehicle Stopped or Stalled in Roadway	Sport Utility Vehicle	Southbound
Passenger Car	Northbound	Operated Motor Vehicle in Careless, Negligent, or Erratic Manner	Moving Forward	Pickup	Northbound
Passenger Car	Southbound	No Clear Contributing Action	y (Due to Wind, Slippery Surface, Motor Vehicle, Object, Non-Motorist in Roadway, etc.)		
Pickup	Eastbound	Other Contributing Action	Moving Forward	Sport Utility Vehicle	Eastbound
Pickup	Eastbound	Following Too Closely	Moving Forward	Passenger Car	Eastbound
Pickup	Northbound	Failure to Yield Right-of-Way	Moving Forward	Passenger Car	Eastbound
Passenger Car	Northbound	Following Too Closely	Moving Forward	Pickup	Northbound
Sport Utility Vehicle	Southbound	Disregard Other Traffic Signs	Changing Lanes	Medium / Heavy Trucks (More than 10,000lbs)	Southbound
Pickup	Westbound	Other Contributing Action	Moving Forward	Passenger Car	Northbound
Passenger Car	Southbound	Driver Distracted	Moving Forward	Sport Utility Vehicle	Southbound
Sport Utility Vehicle	Eastbound	No Clear Contributing Action	Turning Right	Passenger Car	Eastbound
Pickup	Southbound	Failure to Yield Right-of-Way	Changing Lanes	Passenger Van (Seats Installed Behind Driver)	Southbound
Sport Utility Vehicle	Southbound	Unknown	Moving Forward	Pickup	Southbound
Motorcycle	Southbound	Other Contributing Action	Moving Forward		
Passenger Car	Eastbound	Operated Motor Vehicle in Careless, Negligent, or Erratic Manner	Moving Forward	Sport Utility Vehicle	Eastbound
Passenger Car	Eastbound	Driver Distracted	Slowing	Sport Utility Vehicle	Eastbound
Medium / Heavy Trucks (More than 10,000lbs)	Southbound	No Clear Contributing Action	Vehicle Stopped or Stalled in Roadway	Transit Bus	Southbound
Passenger Car	Southbound	Following Too Closely	Moving Forward	Pickup	Southbound
School Bus	Westbound	No Clear Contributing Action	Turning Right	Passenger Car	Westbound
Sport Utility Vehicle	Eastbound	Operated Motor Vehicle in Careless, Negligent, or Erratic Manner	Moving Forward	Sport Utility Vehicle	Eastbound
Passenger Car	Northbound	Other Contributing Action	Moving Forward	Sport Utility Vehicle	Northbound
Other Bus	Northbound	Other Contributing Action	Moving Forward		
Passenger Car	Eastbound	Other Contributing Action	Moving Forward	Passenger Car	Eastbound
Passenger Van (Seats Installed Behind Driver)	Eastbound	Unknown	Moving Forward	Sport Utility Vehicle	Eastbound

Unit1 Vehicle Type	Unit1 Direction	Unit1 Factor1	Unit1 Vehicle Maneuver	Unit2 Vehicle Type	Unit2 Direction
Sport Utility Vehicle	Eastbound	Ran Red Light	Moving Forward	Sport Utility Vehicle	Northbound
Passenger Car	Eastbound	Disregard Other Road Markings	Changing Lanes	Motorcycle	Eastbound
Passenger Car	Not on Roadway	Over-correcting / Over Steering	Backing	Sport Utility Vehicle	Not on Roadway
Passenger Car	Southbound	Operated Motor Vehicle in Careless, Negligent, or Erratic Manner	Moving Forward	Passenger Car	Southbound
Passenger Car	Southbound	Failure to Yield Right-of-Way	Moving Forward	Sport Utility Vehicle	Southbound
Passenger Car	Southbound	Unknown	Moving Forward		
Pickup	Southbound	Other Contributing Action	Moving Forward	Passenger Van (Seats Installed Behind Driver)	Southbound

Unit2 Factor1	Unit2 Vehicle Maneuver	Unit3 Vehicle Type	Unit3 Direction	Unit3 Factor1	Unit3 Vehicle Maneuver
No Clear Contributing Action	Vehicle Stopped or Stalled in Roadway				
No Clear Contributing Action	Moving Forward				
Failure to Yield Right-of-Way	Moving Forward				
No Clear Contributing Action	Moving Forward				
No Clear Contributing Action	Moving Forward				
No Clear Contributing Action	Vehicle Stopped or Stalled in Roadway				
No Clear Contributing Action	Turning Left				
No Clear Contributing Action	Moving Forward				
No Clear Contributing Action	Turning Left				
No Clear Contributing Action	Turning Left				
No Clear Contributing Action	Slowing	Passenger Car	Eastbound	No Clear Contributing Action	Slowing
No Clear Contributing Action	Moving Forward				
ed Due to Wind, Slippery Surface, Motor Vehicle, Object, Non-Motoris	Moving Forward				
No Clear Contributing Action	Moving Forward				
No Clear Contributing Action	Moving Forward				
No Clear Contributing Action	Moving Forward				
No Clear Contributing Action	Moving Forward				
No Clear Contributing Action	Moving Forward				
Failure to Yield Right-of-Way	Turning Left				
No Clear Contributing Action	Moving Forward				
No Clear Contributing Action	Moving Forward				
ed Due to Wind, Slippery Surface, Motor Vehicle, Object, Non-Motoris	Moving Forward	Passenger Car	Southbound	ppery Surface, Motor Vehicle, C	Moving Forward
Ran Stop Sign	Moving Forward				
Other Contributing Action	Moving Forward				
Driver Distracted	Moving Forward				
Following Too Closely	Moving Forward				
No Clear Contributing Action	Vehicle Stopped or Stalled in Roadway				
Disabled Vehicle Related (Working on, Pushing, Leaving/Approaching					
ed Due to Wind, Slippery Surface, Motor Vehicle, Object, Non-Motoris	adway (Due to Wind, Slippery Surface, Motor Vehicle, Object, Non-Motorist in Roadway, etc.)				
Following Too Closely	Moving Forward				
No Clear Contributing Action	Vehicle Stopped or Stalled in Roadway				
Ran Red Light	Moving Forward				
Failure to Yield Right-of-Way	Turning Right				
No Clear Contributing Action	Vehicle Stopped or Stalled in Roadway	Passenger Van (Seats Installed Behind Driver)	Southbound	Following Too Closely	Moving Forward
No Clear Contributing Action	Vehicle Stopped or Stalled in Roadway				
No Clear Contributing Action	Vehicle Stopped or Stalled in Roadway	Passenger Car	Eastbound	No Clear Contributing Action	Vehicle Stopped or Stalled in Roadway
No Clear Contributing Action	Vehicle Stopped or Stalled in Roadway				
No Clear Contributing Action	Moving Forward				
Other Contributing Action	Moving Forward	Passenger Car	Northbound	No Clear Contributing Action	Slowing
No Clear Contributing Action	Moving Forward				
No Clear Contributing Action	Moving Forward				
No Clear Contributing Action	Slowing				
Following Too Closely	Turning Right				
No Clear Contributing Action	Moving Forward				
No Clear Contributing Action	Moving Forward				
No Clear Contributing Action	Moving Forward				
No Clear Contributing Action	Vehicle Stopped or Stalled in Roadway	Passenger Car	Eastbound	No Clear Contributing Action	Vehicle Stopped or Stalled in Roadway
Improper Turn/Merge	Moving Forward				
No Clear Contributing Action	Slowing	Passenger Car	Southbound	No Clear Contributing Action	Vehicle Stopped or Stalled in Roadway
No Clear Contributing Action	Vehicle Stopped or Stalled in Roadway				
No Clear Contributing Action	Vehicle Stopped or Stalled in Roadway				
No Clear Contributing Action	Moving Forward				
No Clear Contributing Action	Vehicle Stopped or Stalled in Roadway				
No Clear Contributing Action	Vehicle Stopped or Stalled in Roadway	Passenger Car	Eastbound	No Clear Contributing Action	Vehicle Stopped or Stalled in Roadway

Unit2 Factor1	Unit2 Vehicle Maneuver	Unit3 Vehicle Type	Unit3 Direction	Unit3 Factor1	Unit3 Vehicle Maneuver
No Clear Contributing Action	Moving Forward				
No Clear Contributing Action	Moving Forward				
No Clear Contributing Action	Parked or Entering or Leaving a Parked Position				
No Clear Contributing Action	Vehicle Stopped or Stalled in Roadway	Sport Utility Vehicle	Southbound	No Clear Contributing Action	Vehicle Stopped or Stalled in Roadway
No Clear Contributing Action	Moving Forward				
No Clear Contributing Action	Slowing	Passenger Van (Seats Installed Behind Driver)	Southbound	No Clear Contributing Action	Slowing



BOLTON & MENK

PROPOSED CONDITIONS

HIGHWAY 10 & 41 IMPROVEMENTS PROJECT

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

May 8, 2020

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

SUBJECT: Highway 41 and CSAH 10 Improvement Expansion 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 41 and CSAH 10 Improvement Expansion Project between Bavaria Rd. and Park Ridge Dr. The project has undergone substantial study and coordination with project partners. The County led and partnered on the development of the layout with MnDOT and the City of Chaska through the Highway 10 Corridor Study planning process and is aware of the details specified in the application attachment.

As a roadway owner, MnDOT also provided the required letter of support for the project. We expect the City of Chaska to also submit a letter of support for the project, as we have been in ongoing and recent communication and coordination with the staff and City Council.

The County is committed to working with MnDOT and the City of Chaska to complete the final layout approval engineering process for the Highway 41 and CSAH 10 Improvement Expansion Project in the coming months.

Sincerely,

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

Highway 10 & Highway 41 Improvements

Applicant, Location, & Route: Carver County, Highway 10 from Bavaria Rd. to Park Ridge Dr. and Highway 41 from White Oak Dr. to 500' north of Hwy 10 in the City of Chaska

Application Category:
Roadways including Multimodal Elements – **Roadway Expansion**

Funding Information:
Requested Award Amount: $9,049,600
Local Match: $2,262,400
Project Total: $11,312,000

Match $ Sources:

- Carver County
- City of Chaska
- MnDOT

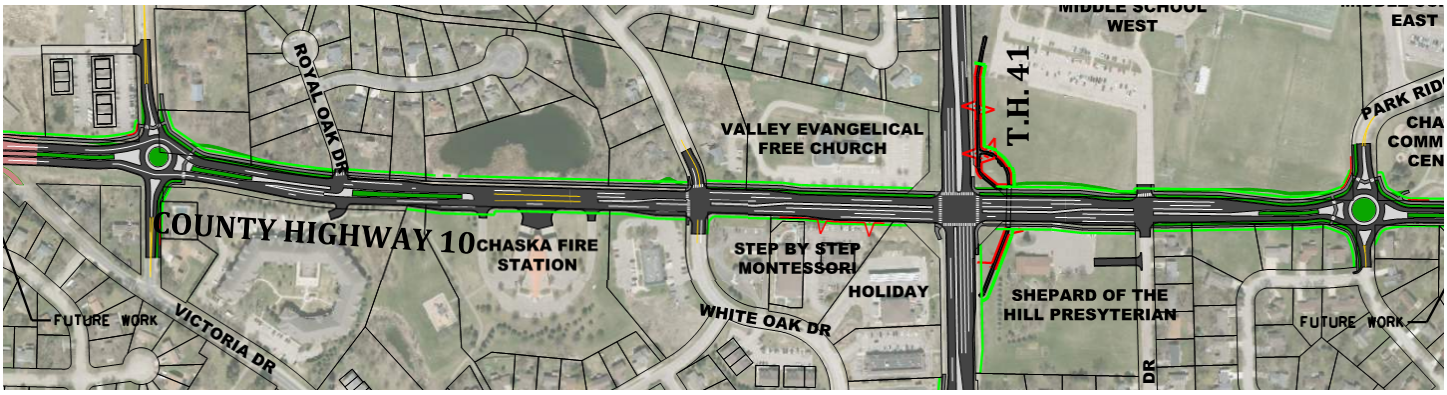
Project Description

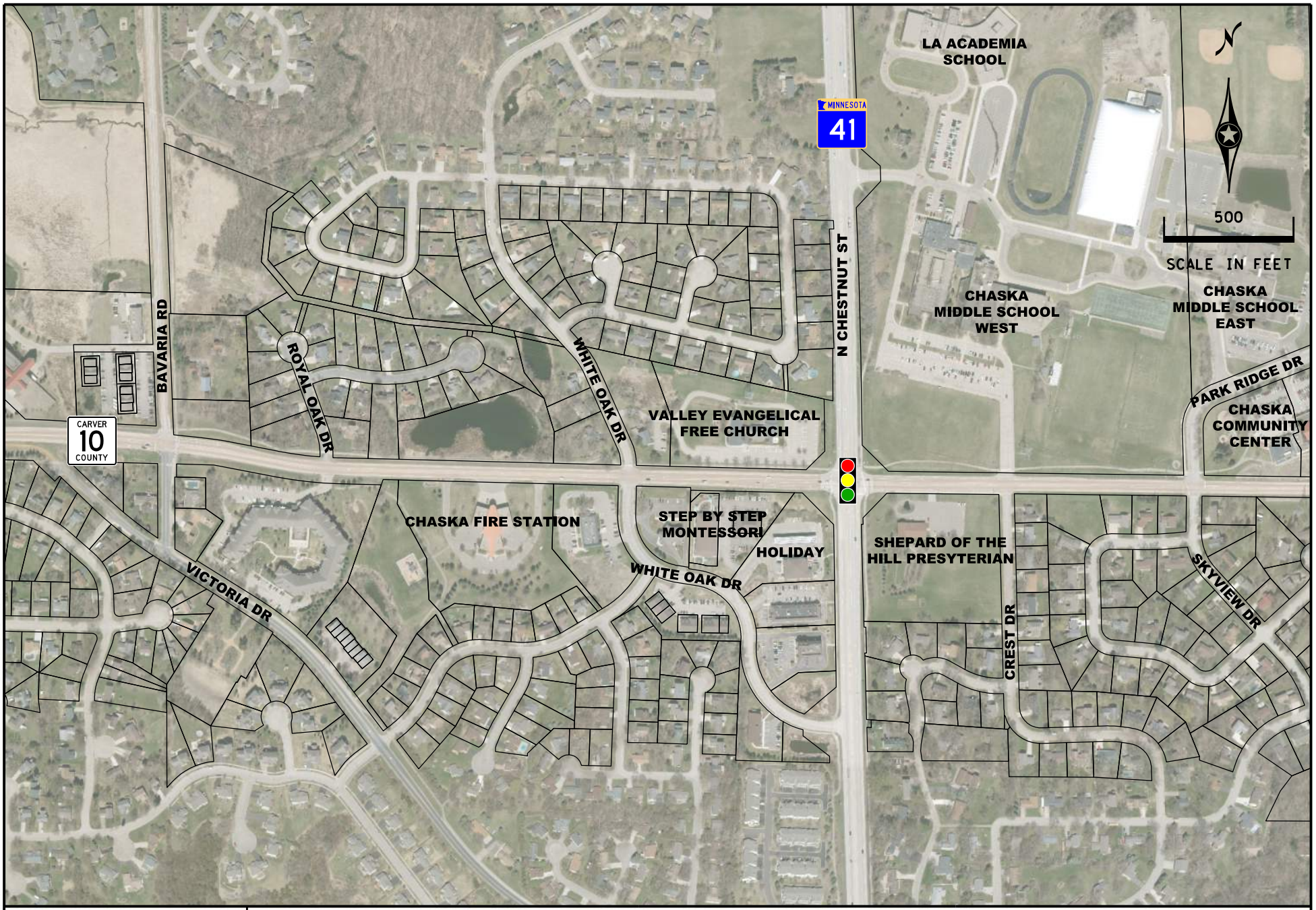
This project at Highway 10 (Engler Boulevard) and Highway 41 (Chestnut Street) proposes the expansion of Highway 10 to a four-lane divided section and installs roundabouts at the intersections of Bavaria Road and Park Ridge Drive. Highway 41 will be widened at the Highway 10 intersection with the addition of a second southbound thru turn lane, dual northbound turn lanes, and a lengthened northbound right turn lane. Reconstruction of Highway 41 will be limited to areas of need for turn lane construction. Pedestrian improvements include a pedestrian underpass crossing Highway 10 east of Highway 41, and a traffic signal at the White Oak Drive intersection which provides dedicated movements to approaching pedestrian and vehicle movements onto and across Highway 10.

The project area, north of Downtown Chaska, features the intersection of two important regional corridors in Highways 10 and 41. The intersection of these arteries is a notable traffic issue in terms of operations and safety. High vehicle volumes, passenger and freight, as well as frequent pedestrian traffic generated by the three adjacent public-school buildings and Chaska Community Center often overwhelm the intersection. Furthermore, the storage of several turn lanes is exceeded or blocked by through traffic at this intersection during the peak hours. On Highway 10, two all-way stop-controlled intersection at Bavaria Road and Park Ridge Drive create bottlenecks which block neighborhood accesses during the peak hours. Regardless of Highway 10 queues, the existing two-lane section does not provide many safe gaps in traffic for side streets to make movements onto and across the highway leaving residents and business owners frustrated; some residents have reported taking longer alternate routes to and from their homes to avoid problematic movements. Similarly, historical crash issues along the corridor creates pedestrian and bicyclist discomfort in traveling along or crossing the corridor. Traffic volumes on Highway 10 are forecasted to double in the next 20 years making it clear that additional capacity is needed to carry the traffic.

Project Benefits

The Highway 10 & Highway 41 Improvements project provides immediate operational benefits for existing traffic patterns and will provide the needed capacity to serve the forecasted 2040 traffic growth. The Highway 10 corridor is designated as a RBTN Tier 2 corridor, proposed improvements to the sidewalk and trail connections, including the installation of a grade separated crossing east of Highway 41 and traffic signal at the White Oak Drive crossing will better facilitate pedestrian mobility and safety to nearby schools, businesses, and neighborhoods. Roundabout intersections on each end of the project will also provide improved two-stage crossings of each intersection leg while eliminating problematic queues currently seen at these intersections. **The proposed improvements will increase corridor safety, address congestion and operational issues, and provide safe pedestrian/bicycle crossings of Highway 10 and 41.**





BOLTON & MENK

EXISTING CONDITIONS

HIGHWAY 10 & 41 IMPROVEMENTS PROJECT

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BOLTON & MENK

PROJECT AREA CONTEXT MAP

HIGHWAY 10 & 41 IMPROVEMENTS PROJECT

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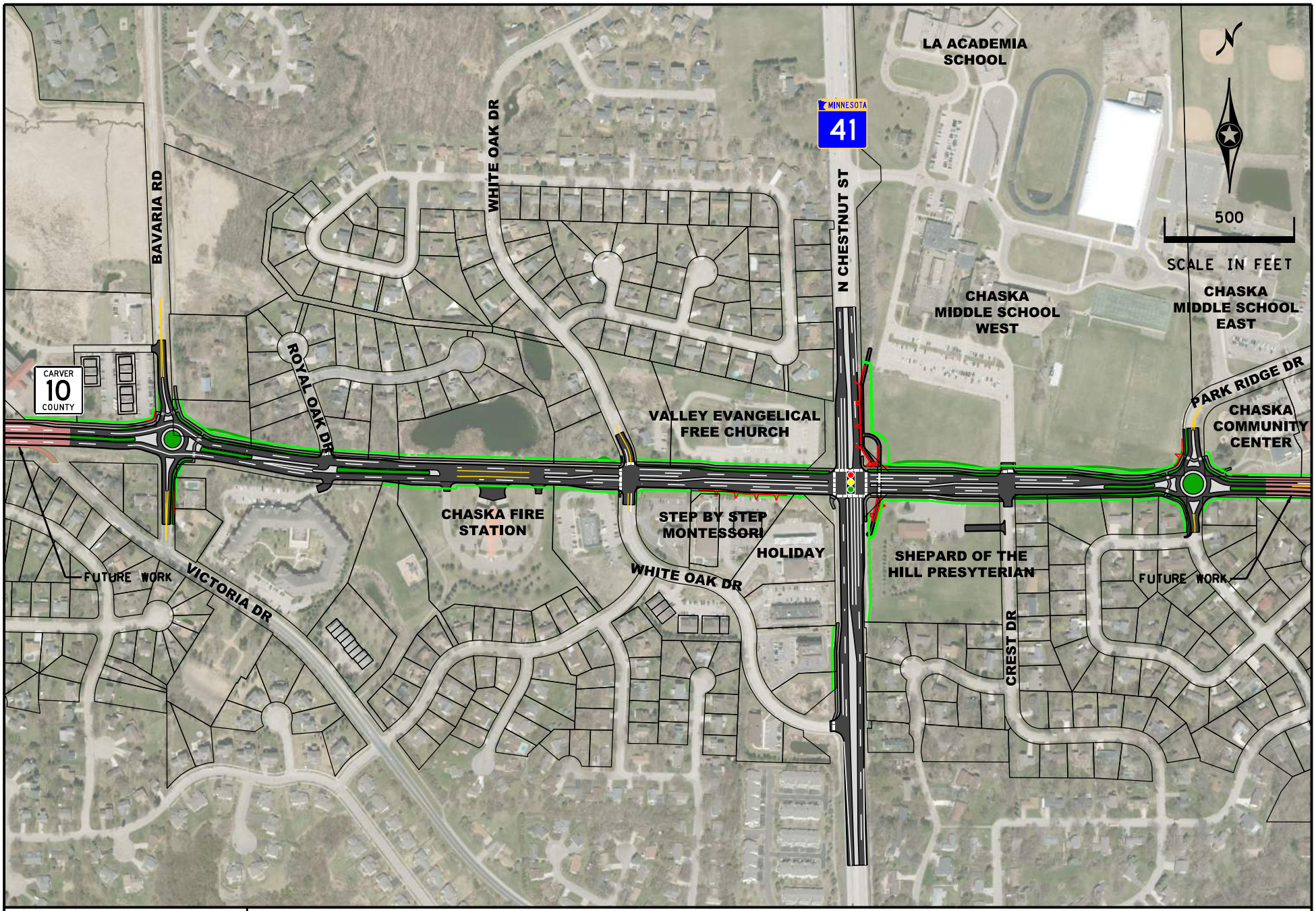
CSAH 10 at Park Ridge Drive – Existing all-way stop intersection

CSAH 10 at TH 41 – Existing signalized intersection

CSAH 10 near Chaska Fire Station – looking west

CSAH 10 at Bavaria Rd – Existing all-way stop intersection

Photo courtesy of Google Streetview



BOLTON & MENK

PROPOSED CONDITIONS

HIGHWAY 10 & 41 IMPROVEMENTS PROJECT

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DEPARTMENT OF TRANSPORTATION

MnDOT Metro District
1500 West County Road B-2
Roseville, MN 55113

May 12, 2020

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

Re: MnDOT Letter for Carver County
Metropolitan Council/Transportation Advisory Board 2020 Regional Solicitation Funding Request for Carver County proposed projects on the TH system

Dear Lyndon Robjent,

This letter documents MnDOT Metro District's recognition for Carver County to pursue funding for the Metropolitan Council/Transportation Advisory Board's (TAB) 2020 Regional Solicitation for the following projects:

- TH 212 Expansion from CSAH 51 to CSAH 36 W. Project to expand the existing rural two-lane undivided highway to a four-lane divided expressway and implement Reduced Conflict Intersections and wider shoulders.
- TH 212/CSAH 51 Intersection Spot Mobility. An improvement to add a Reduced Conflict Intersection at this location with a 4-lane divided facility on TH 212 through the intersection area.
- TH 5 Expansion from CSAH 13 to Minnewashta Pkwy. Project expands TH 5 to a 4-lane divided facility between CSAH 13 (Rolling Acres Rd.) and Minnewashta Pkwy, including intersection improvements at CSAH 13 and at Minnewashta Pkwy.
- CSAH 10 Expansion from Bavaria Rd. to Park Ridge Dr. , which Includes the TH 41 Intersection. Expansion of CSAH 10/Engler Blvd. to a 4-lane divided highway between Bavaria Rd. and Park Ridge Dr. including improvements at these intersections. The TH 41/CSAH 10 intersection (traffic signal) will be expanded as part of this project.

As proposed, these projects impact MnDOT right-of-way on TH5, TH 41, and TH 212. As the agency with jurisdiction over these highways, MnDOT will allow Carver County to seek improvements proposed. If funded, details of any future maintenance agreement with Carver County will need to be determined during project development to define how the improvements will be maintained for the projects' useful life.

There is no funding from MnDOT currently planned or programmed for these projects. Due to expected loss of future state and federal transportation revenues as a result of the COVID-19 pandemic, there is

likely to be significant disruptions to the current MnDOT construction program that will surface in the next year. MnDOT does not anticipate partnering on local projects beyond current agreements.

In addition, at this time the Metro District does not anticipate any significant discretionary funding in state fiscal years 2024 or 2025 that could fund project construction, nor do we have the resources to assist with MnDOT services such as the design or construction engineering of the projects. If projects receives funding, continue to work with MnDOT Area staff to coordinate project development and to periodically review needs and opportunities for cooperation.

MnDOT Metro District looks forward to continued cooperation with Carver County as these projects move forward and as we work together to improve safety and travel options within the Metro Area.

If you have questions or require additional information at this time, please reach out to Mark Lindeberg, South Area Manager, at mark.lindeberg@state.mn.us or 651-234-7729.

Sincerely,

Michael Barnes

Digitally signed by Michael Barnes
Date: 2020.05.12 16:46:43 -05'00'

Michael Barnes, PE
Metro District Engineer

CC: Mark Lindeberg, Metro District South Area Manager
Molly McCartney, Metro Program Director
Dan Erickson, Metro State Aid Engineer

Eastern Carver County Schools

Exceptional, personalized learning

Clint Christopher
Superintendent

District Education Center
11 Peavey Road
Chaska, MN 55318
952.556.6100
www.district112.org

May 5, 2020

Lyndon Colebrook-Robjent
Carver County Division Director / County Engineer
11360 Highway 212, Suite 1
Cologne, MN 55322
RE: Support for CSAH 10 / MN 41 Area Improvements

Dear Mr. Colebrook-Robjent,

Carver County is actively developing vehicle and pedestrian safety improvements at the intersection of CSAH 10 (Engler Boulevard) and MN 41 (Chestnut Street), and along CSAH 10 from Bavaria Road to Park Ridge Drive. This area is of noted concern, given high traffic volumes, proximity to local schools, businesses and homes, and the regional importance of both corridors for City and County residents.

The Eastern Carver County School District supports the County's efforts to address geometric issues, congestion, safety concerns. The project directly serves three of our school facilities, as well as many athletic and community education facilities. Currently, highways are significant barriers inhibiting the ability for students to safely walk and bike to school. The proposed improvements in the area will greatly improve access to our campus for students, parents and educators via car, bus, and walking or biking. These improvements will balance pedestrian and traffic needs now and with regional growth expected within the County in the coming years. The School District also supports the County's efforts to pursue funding through various federal and state transportation programs, including the Regional Solicitation Program.

The Eastern Carver County School District appreciates the County's efforts and those of all project partners to address the challenges in the CSAH 10 and MN 41 area. We look forward to continued partnerships to address safety, access, and mobility concerns to our school facilities.

Sincerely,

Clint Christopher
Superintendent
Eastern Carver County Schools

VALLEY
EVANGELICAL FREE CHURCH

May 6, 2020

Lyndon Colebrook-Robjent
Carver County Division Director / County Engineer
11360 Highway 212, Suite 1
Cologne, MN 55322

RE: Support for CSAH 10 / MN 41 Area Improvements

Dear Mr. Colebrook-Robjent,

Valley Evangelical Free Church is aware that Carver County is actively developing pedestrian and traffic safety improvements surrounding the intersection of CSAH 10 (Engler Boulevard) and MN 41 (Chestnut Street), and along CSAH 10 from Bavaria Road to Park Ridge Drive. There is a lot of demand in the project area with the close proximity to churches, several schools, businesses and homes. High traffic volumes and unsafe pedestrian facilities are a major safety concern.

This safety improvement project will be a benefit to the Valley Evangelical Free Church for members and visitors driving, walking, and biking to our facility. Safe facilities should also allow youth to walk and bike to our church and the surrounding school facilities.

Valley Evangelical Free Church supports the County's efforts to pursue funding through various federal and state transportation programs to implement these necessary community improvements. We appreciate the opportunity to provide support for County, and project partners efforts, to address the challenges in the CSAH 10 and MN 41 area. We look forward to realizing the benefits once this project is built

Sincerely,

Michael Sindelar
Senior Pastor
Valley Evangelical Free Church