Application

13861-2020 Roadway Modernization
14051-CSAH 30 Rural Connection Project from TH 25 to CSAH 10
Regional Solicitation - Roadways Including Multimodal Elements

Status: Submitted
Submitted Date: 05/15/2020 1:17 PM

## Primary Contact

| Name:* | Angie |  |  | Stenson |
| :---: | :---: | :---: | :---: | :---: |
|  | Salutation | First Name | Middle Name | Last Name |
| Title: | Sr. Transportation Planner |  |  |  |
| Department: | Public Works Division |  |  |  |
| Email: | astenson@co.carver.mn.us |  |  |  |
| Address: | 11360 Highway 212 |  |  |  |
|  | Suite 1 |  |  |  |
| * | Cologne | Minnesota |  | 55322 |
|  | City | State/Province |  | Postal Code/Zip |
| Phone:* | 952-466-5273 |  |  |  |
|  | Phone | Ext. |  |  |
| Fax: | 952-466-5223 |  |  |  |
| What Grant Programs are you most interested in? | Regional Elements | ation - Roadways | s Includi | Multimodal |

## Organization Information

Name:

Jurisdictional Agency (if different):
Organization Type: County Government
Organization Website:

Address: | PUBLIC WORKS |  |
| :--- | :--- |
|  | $11360 \mathrm{HWY} 212 \mathrm{~W} \# 1$ |

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

Phone:*
Ext.

Fax:

PeopleSoft Vendor Number
0000026790A12

## Project Information

| Project Name | CSAH 30 Rural Connection Modernization from TH 25 to |
| :--- | :--- |
| CSAH 10 |  |
| Primary County where the Project is Located | Carver |
| Cities or Townships where the Project is Located: | Waconia Township, City of Mayer |
| Jurisdictional Agency (If Different than the Applicant): |  |

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

The proposed project includes the reconstruction and modernization of County State Aid Highway (CSAH) 30 from Trunk Highway (TH) 25 (Ash Avenue S) to CSAH 10 in Carver County. CSAH 30 is currently a two-lane A-Minor Connector rural highway with 12 -foot lanes and two-foot gravel shoulders. The improvements will upgrade CSAH 30 to state aid standards and includes a full depth reclamation of the 12-foot travel lanes and shoulder widening to eight-foot shoulders. The extra shoulder width and flattened in-slopes will improve safety for motorists, bicyclists, heavy commercial vehicles, farming equipment, and provide a safe emergency stopping area for vehicles.

The project is located primarily within Waconia Township, and is the primary east-west highway connection between the standalone communities of Mayer and Waconia. The project is significant to this rural area because it provides access to major north-south minor arterials (TH 25 and CSAH 10), which link to the regional transportation network. TH 25 and CSAH 10 are two continuous northsouth routes in rural Carver County that provides access to TH 5 (Minor Arterial), US 212 (Principal Arterial), and TH 7 (Principal Arterial). Mayer and Waconia rely on these connections heavily.

CSAH 30 is a crucial link in the regional transportation network serving Mayer, Waconia, and the surrounding rural township area. This area is growing, and there is a defined need to upgrade CSAH 30 to meet state aid standards

TRANSPORTATION IMPROVEMENT PROGRAM (TIP)
DESCRIPTION - will be used in TIP if the project is selected for funding. See MnDOT's TIP description guidance.

Project Length (Miles)

Reconstruction of CSAH 30 from TH 25 to CSAH 10 including shoulder widening
3.9

## Project Funding

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

If yes, please identify the source(s)
Federal Amount $\$ 2,562,400.00$

Match Amount \$640,600.00
Minimum of $20 \%$ of project total
Project Total \$3,203,000.00
For transit projects, the total cost for the application is total cost minus fare revenues.
Match Percentage
20.0\%

Minimum of 20\%
Compute the match percentage by dividing the match amount by the project total
Source of Match Funds
County
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:
2022, 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 | A-Minor Arterial Connector |
| Road System | CSAH |
| TH, CSAH, MSAS, CO. RD., TWP. RD., CITY STREET |  |
| Road/Route No. | 30 |
| i.e., 53 for CSAH 53 |  |
| Name of Road | 70 th St |
| Example; 1st ST., MAIN AVE | 55387 |
| Zip Code where Majority of Work is Being Performed | $06 / 01 / 2024$ |
| (Approximate) Begin Construction Date | $09 / 30 / 2024$ |
| (Approximate) End Construction Date | TH 25 |
| TERMINI:(Termini listed must be within 0.3 miles of any work) |  |
| From: |  |

To:
(Intersection or Address)
DO NOT INCLUDE LEGAL DESCRIPTION
Or At
Miles of Sidewalk (nearest 0.1 miles) 0
Miles of Trail (nearest 0.1 miles)
Miles of Trail on the Regional Bicycle Transportation Network (nearest 0.1 miles)

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.
BRIDGE/CULVERT PROJECTS (IF APPLICABLE)
Old Bridge/Culvert No.:
New Bridge/Culvert No.:
Structure is Over/Under
(Bridge or culvert name):

CSAH 10

0

0

Grade, Agg Base, Bit base, Bit surface, striping, lighting

## 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.

These are the primary goals, objective, and strategies from the 2040 TPP supported by the proposed project:
Goal A - Transportation System Stewardship; Objective - Efficiently preserve and maintain the regional transportation system in a state of good repair; Strategy A1, A2 (page 2.6)

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

> Goal B-Safety and Security; Objective - Reduce crash rates and improve safety and security for all modes of passenger travel and freight transport; Strategy B1, B3, B6 (page 2.7)

Goal D - Competitive Economy; Objective - Support the region's economic competitiveness through the efficient movement of freight; Strategy D1 (page 2.11)

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:

The project is identified as a County Road Rehabilitation project in the adopted Carver County 20-year Transportation Tax Implementation Plan for eligibility to utilize sales tax funding and to provide funding equity to rural areas. The project is identified in the County's Road and Bridge Construction Plan for construction in 2025.

CSAH 30 corridor is listed in the Carver County Roadway Safety Plan. CSAH 30 is ranked in the rural segment prioritization category for road departure in Appendix D (page 148 of full document). The corridor is also identified in the edge risk assessment as risky (worst rating) for shoulder width and clear zone on page 147 of the full CRSP document.
4.The project must exclude costs for studies, preliminary engineering, design, or construction engineering. Right-of-way costs are only eligible as part of transit stations/stops, transit terminals, park-and-ride facilities, or pool-and-ride lots. Noise barriers, drainage projects, fences, landscaping, etc., are not eligible for funding as a standalone project, but can be included as part of the larger submitted project, which is otherwise eligible.

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

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

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

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

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

Date plan completed: 02/18/2014

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

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

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

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

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

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

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

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

## Roadways Including Multimodal Elements

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

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

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

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

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

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

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

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

## Requirements - Roadways Including Multimodal Elements

## Specific Roadway Elements

## CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES <br> Cost

\$185,000.00
Mobilization (approx. 5\% of total cost)
\$31,000.00
Removals (approx. 5\% of total cost) \$637,000.00
Roadway (grading, borrow, etc.)
Roadway (aggregates and paving) \$1,566,000.00
Subgrade Correction (muck) \$0.00
Storm Sewer \$310,000.00
Ponds \$0.00
Concrete Items (curb \& gutter, sidewalks, median barriers) \$0.00
Traffic Control
\$31,000.00
Striping
\$11,000.00
Signing
$\$ 0.00$
Lighting
\$16,000.00
Turf - Erosion \& Landscaping \$106,000.00
Bridge \$0.00
Retaining Walls \$0.00
Noise Wall (not calculated in cost effectiveness measure) \$0.00
Traffic Signals \$0.00
Wetland Mitigation \$0.00
Other Natural and Cultural Resource Protection \$0.00
RR Crossing \$0.00
Roadway Contingencies \$310,000.00
Other Roadway Elements \$0.00
Totals
\$3,203,000.00
Specific Bicycle and Pedestrian Elements
ESTIMATES ..... Cost
Path/Trail Construction ..... $\$ 0.00$
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) ..... $\$ 0.00$
Pedestrian-scale Lighting ..... $\$ 0.00$
Streetscaping ..... $\$ 0.00$
Wayfinding ..... $\$ 0.00$
Bicycle and Pedestrian Contingencies ..... $\$ 0.00$
Other Bicycle and Pedestrian Elements ..... $\$ 0.00$
Totals ..... $\$ 0.00$
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.)
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 ..... $\$ 0.00$

## Totals

| Total Cost | $\$ 3,203,000.00$ |
| :--- | :--- |
| Construction Cost Total | $\$ 3,203,000.00$ |
| Transit Operating Cost Total | $\$ 0.00$ |

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

Existing Employment within 1 Mile:
113
Existing Manufacturing/Distribution-Related Employment within 1 Mile:

Existing Post-Secondary Students within 1 Mile:
Upload Map

```42
```

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:
Miles:
0
(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: Yes

## Measure A: Current Daily Person Throughput

## Location

Current AADT Volume
Existing Transit Routes on the Project

CSAH 30 west of CSAH 10
2750
N/A

# Response: Current Daily Person Throughput 

| Average Annual Daily Transit Ridership | 0 |
| :--- | :--- |
| Current Daily Person Throughput | 3575.0 |

## Measure B: 2040 Forecast ADT

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

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

## OR

Identify the approved county or city travel demand model to determine forecast (2040) ADT volume

Forecast (2040) ADT volume
2040 Carver County model
3600

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

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

The project serves Waconia Township?s elderly, rural population: 26.5\% of Waconia Township residents are over age 60 (ACS 5-Yr Est.) compared to $14.8 \%$ of the County?s total population and $15.7 \%$ of the Minneapolis-St. Paul MSA (2010 Census). The project corridor is a direct connection to the City of Waconia, which is home to regional medical services, and will improve access to medical facilities for elderly populations. The project corridor connects to Watertown Township, located 1 mile north of the project corridor, which is designated as a Township above the regional average for concentrated poverty. The proposed improvement on CSAH 30 will also serve children by providing a direct connection to six area schools and bus routes serving over 3,700 students. The project will benefit Watertown and Waconia Township residents and area schools by widening the shoulders and modernizing the roadway to state standards.

Response:
Carver County reached out to Waconia Township officials regarding the project and determined the best approach for resident engagement was via a direct mailing to residents in the project area. Residents were mailed project information and invited to attend the township board meeting to provide input. Multiple residents attended and gave feedback at the township board meeting about the future project. A common concern was intersection safety at CSAH 30/Goose Lake Dr./Polk Ave. In response, the County took a closer look at safety analysis and the proposed vertical and horizontal curve.

Residents were also engaged as part of the County's 2040 Comprehensive Plan through specific outreach to the Township. Feedback from residents for the Comp Plan focused on the Township's Community Designation of Agricultural and this project as a vital link in the farm-to-market
highway system. In addition, the project is identified as a County Road Rehab project in the adopted Carver County 20-year Transportation Tax Implementation Plan as part of the goal to provide funding equity to rural populations. This is an adopted plan that underwent public review and comment. Feedback was incorporated to provide rural equity by utilizing sales tax funding on rural rehab projects such as this one.
(Limit 2,800 characters; approximately 400 words)
2.Sub-measure: Equity Population Benefits and Impacts: A successful project is one that has been designed to provide direct benefits to lowincome populations, people of color, persons with disabilities, youth and the elderly. All projects must mitigate potential negative benefits as required under federal law. Projects that are designed to provide benefits go beyond the mitigation requirement to proactively provide transportation benefits and solve transportation issues experienced by Equity populations.
a.Describe the projects benefits to low-income populations, people of color, children, people with disabilities, and the elderly. Benefits could relate to pedestrian and bicycle safety improvements; public health benefits; direct access improvements for residents or improved access to destinations such as jobs, school, health care or other; travel time improvements; gap closures; new transportation services or modal options, leveraging of other beneficial projects and investments; and/or community connection and cohesion improvements. Note that this is not an exhaustive list.

The project provides access to medical facilities and critical services for Waconia Township's elderly, rural population. $26.5 \%$ of Waconia Township residents are over age 60 compared to $14.8 \%$ of Carver County's total population (ACS 5Yr Est.) and $15.7 \%$ of the Minneapolis-St. Paul MSA (2010 Census). The project corridor is a direct connection to the City of Waconia, which is home to a regional medical services facility, Ridgeview Medical Center. The project will improve access to this medical facility for elderly populations with a wider shoulder that complies with state standards.

The project corridor connects to Watertown Township, located 1 mile north of the project corridor, which is designated as a Township above the regional average for concentrated poverty. The project will benefit Watertown Township residents by widening the shoulders and modernizing the roadway to state standards.

The proposed improvement on CSAH 30 will serve children by providing a direct connection to six area schools and bus routes serving over 3,700 students. The school district is expecting to grow to 6,000 students by 2030. Improving the roadway surface and widening the shoulder will better serve the students living along the corridor and school buses using the corridor to connect between rural communities.

Rural County Roads are often used for bicycle and pedestrian travel. Widening the shoulder from 2 ft to 8 ft will provide a much improved facility for bicyclists and pedestrians.
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:


#### Abstract

Negative externalities or negative project impacts are not expected or planned to be created by this project. It is a non-controversial roadway reconstruction project to modernize the roadway to state standards including shoulder widening. The County has taken preliminary steps to mitigate any potential externalities by engaging Waconia Township officials as well as the City of Mayer and City of Waconia. As part of these outreach efforts, residents along the project corridor were mailed project information and provided a venue for project discussion at the Township meeting.


> The City of Mayer and City of Waconia also approved letters of support for the project, which is a key connection between these two communities. Outreach and coordination with the Township, cities, and residents will continue throughout project development.

(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 highestscoring geography the project contacts:
a. 25 points to projects within an Area of Concentrated Poverty with 50\% or more people of color
b. 20 points to projects within an Area of Concentrated Poverty
c. 15 points to projects within census tracts with the percent of population in poverty or population of color above the regional average percent
d. 10 points for all other areas

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

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

Upload Map
1589469677229_CSAH 30_Socio-Economic Conditions.pdf

## Measure B: Part 1: Housing Performance Score

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

## Total Project Length

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

## Housing Performance Score

Total Project Length (Miles) or Population3.9

Total Housing Score
3.9

## Affordable Housing Scoring

## Part 2: Affordable Housing Access

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

There are 190 units of affordable housing served by the project area including 5 multi-family rental housing locations (175 units), 5 scattered site rental properties, and 10 owner-occupied Community Land Trust properties. All units are existing. 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. The majority of the units have rent based on 30\% of income with a variety of number of bedrooms within the sample.

The proposed project will improve the transportation system for these residents by bringing the roadway up to state aid standards and providing a reliable rural minor arterial connection between standalone communities. The added shoulder width, intersection improvements including a right turn lane, and improved pavement condition will create a safer transportation environment for all users relying on this rural connecting corridor.

All of the affordable housing locations are within 2 miles of the project location, which is consistent with usage for this rural Minor Arterial and with the approved Functional Classification System Criteria for Minor Arterials in Rural areas (vs. Urban Service areas) listed in Appendix D of the TPP. This is the only roadway connecting the City of Mayer to Waconia and critical regional services including medical services. The next closest east-west minor arterial is TH 5-4 miles to the south and TH 7, a principal arterial, located 2 miles north of the corridor. The scorer is strongly encouraged to consider the 2 mile buffer area instead of using the urban focused distance of $1 / 2$ mile for evaluation, which is not relevant in the rural area context and not consistent with functional class spacing in the TPP

## Measure A: Year of Roadway Construction

Year of Original
Roadway Construction or Most Recent Reconstruction

Calculation 2

## Total Project Length

Total Project Length (as entered in "Project Information" form)

## Average Construction Year

Weighted Year

## Total Segment Length (Miles)

Total Segment Length

## Measure B: Geometric, Structural, or Infrastructure Improvements

Improved roadway to better accommodate freight movements:
Yes
The proposed CSAH 30 reconstruction and modernization project improvements will accommodate heavy freight vehicles and agricultural equipment weighing over 10-tons.
Response: CSAH 30 is currently posted as a ten-ton route. The reconstruction of CSAH 30 will maintain this designation. Widening the shoulder to the state aid standard of 8 feet will better accommodate freight movement along the corridor.
(Limit 700 characters; approximately 100 words)
Improved clear zones or sight lines:
Yes

The crash rate along the corridor is over 2 times higher than the State average based on 10-yr crash data. Many of these crashes are lane departure crashes. The existing 2 ft shoulders do not provide an adequate area for motorists who cross the lane line to regain control of the vehicle safely.
Response:

The proposed shoulder widening of CSAH 30 from 2 ft to 8 ft will provide a clear zone for operators to regain control of their vehicle. The extra shoulder width will also provide a safe emergency stopping area for vehicles.
(Limit 700 characters; approximately 100 words)
Improved roadway geometrics:

Response:
(Limit 700 characters; approximately 100 words)
Access management enhancements:

Response:

Yes
The proposed project will address the roadway geometrics associated with the curve at the intersection of CSAH 30/Goose Lake Dr/Polk Ave. and upgrade geometry to a 55 mph design speed. The project will also include an upgraded shoulder width from 2 to 8 ft . A northbound right turn lane will also be added at the TH 25/CSAH 30 intersection.

## Yes

The County Comprehensive Plan identifies this roadway for $1 / 2$ mile spacing of full intersections and $1 / 4$ mile spacing of secondary intersections. The 3.9 mile corridor contains one full access, 4-way intersection (Goose Lake Dr./Polk Ave.) and four full, 3-way T-intersections (Shimmcor St., Quartz Ave., Rutz Lake Rd., and 78th St.). This falls within the County's access management guidance. In addition, the existing and planned land use along the corridor is Agricultural, with 1 dwelling per 40 acres and many of the parcels are identified as Enrolled Agricultural Preserves. No changes to driveways are planned as part of the project because of low existing and planned densities.

Response:
(Limit 700 characters; approximately 100 words)
Improved stormwater mitigation:

Response:
(Limit 700 characters; approximately 100 words)
Signals/lighting upgrades:

Response:
(Limit 700 characters; approximately 100 words)
Other Improvements

Response:

Yes
The roadway will follow the existing alignment, which does not have major vertical or horizontal alignment issues. The horizontal radius for the curve was reviewed and is an approximately 4 degree curve, which meets standards for a 55 mph design speed. Vertical curve was reviewed and is expected to meet standards as well. The project will improve the existing alignment roadway width by widening the existing shoulder to 8 feet from the existing 2 feet.

Yes
The project will meet Carver County WMO requirements including the incorporation of BMPs such as enhanced infiltration techniques. In addition, the proposed project will apply the appropriate stormwater mitigation measures for a rural two-lane roadway.

Yes
The proposed project will include the appropriate lighting at county road intersections. Upgraded and enhanced LED lighting will be installed at the two highway intersections on the project corridor of TH 25/CSAH 30 and CSAH 10/CSAH 30. Signals are not part of this project.

Yes
The project corridor does not currently meet state aid standards. This roadway modernization project will update the highway to meet state aid standards, with the major improvement being reconstruction of existing pavement and shoulder widening from 2 feet to 8 feet.

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

EXPLANA
TION of


158947077
9912_CSA
H 30
Synchro
Existing-
Improved
Report.pdf

## Vehicle Delay Reduced

Total Peak Hour Delay Reduced
Total Peak Hour Delay Reduced
1583.0
1583.0

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

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

| 1.44 | 1.44 |
| ---: | ---: |
| $\mathbf{1}$ | $\mathbf{1}$ |

Total (CO, NOX, and VOC) Peak Hour Emissions with the Project (Kilograms):
1.44

1

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

0
0

## Total

Total Emissions Reduced:

Upload Synchro Report

0

1589470918122_CSAH 30 Synchro Existing-Improved Report.pdf

# 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)<br>Peak Hour Emissions without the Project (Kilograms):

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

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

## Total Parallel Roadway

Emissions Reduced on Parallel Roadways
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:
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):

EXPLANATION of methodology and assumptions used:(Limit 1,400 characters; approximately 200 words)

Measure A: Roadway Projects that do not Include Railroad Grade-Separation Elements

A dual CMF was used for the CSAH 30/TH 25 Intersection.

Improvements include constructing a right-turn lane and adding lighting. Specific documentation is attached.
CMF1=install right-turn lane

CMF2=Install lighting

Dual $\mathrm{CMF}=(\mathrm{CMF} 1)^{*}(\mathrm{CMF} 2)$

Rear End (AII): (.35)*(.53) = . 19

Angle (PDO): $(.73)^{\star}(.53)=.39$

Crash Modification Factor Used:

The proposed project includes constructing 8 ft paved shoulders, adding right-turn lanes and lighting at intersections. Therefore CMFs that captured the significant safety benefits of these improvements were utilized. CMFs were vetted by quality and area type - Rural.

| Project Benefit (\$) from B/C Ratio | $\$ 5,017,475.00$ |
| :--- | :--- |
| Total Fatal (K) Crashes: | 0 |
| Total Serious Injury (A) Crashes: | 1 |
| Total Non-Motorized Fatal and Serious Injury Crashes: | 0 |
| Total Crashes: | 12 |
| Total Fatal (K) Crashes Reduced by Project: | 0 |
| Total Serious Injury (A) Crashes Reduced by Project: | 1 |
| Total Non-Motorized Fatal and Serious Injury Crashes Reduced by <br> Project: | 0 |
| Total Crashes Reduced by Project: | 5 |
| Worksheet Attachment | 1589471114570 _CSAH 30 Crash Analysis B-C_Crash |

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

Rural County Roads are often used for bicycle and pedestrian travel as the only connection from point A to B . Widening the shoulder from 2 ft to 8 ft and paving a portion of it will provide a safer facility for bicyclists and pedestrians using the roadway. A countermeasure for upgrading an unpaved or nonexistent shoulder to composite shoulder in a rural area was referenced for all types of crashes and will provide a safety benefit for the corridor.

At each intersection within the project area, ADA compliant ramp and crossings will be implemented. Students who live along CSAH 30 are picked up by school bus on the roadway. Current road conditions require students to wait on the narrow shoulder. With the proposed improvements, the shoulder width will be expanded meaning students can safely wait with additional separation from passing vehicles.

Intersection lighting is being added along CSAH 30. According to FHWA PEDSAFE program, adding lighting at crosswalks and enhanced signing and marking is a proven pedestrian safety countermeasure. Per MnDOT's Best Practices for Pedestrian/Bicycle Safety, adding crosswalk lighting has a 33 to 44 percent reduction in all crash types.

## Measure A: Multimodal Elements and Existing Connections

In rural areas, wide shoulders on county roads are often used by residents for bicycling and walking transportation as the only connection from point $A$ to B. This roadway, for example, is the primary and most direct connection between the City of Mayer and the City of Waconia. The existing roadway has 2 ft shoulders ( 1 ft paved, 1 ft aggregate). This modernization project will expand the shoulder width to 8 ft , providing a safer and more comfortable facility for bicycle and pedestrian usage.

CSAH 30 also provides a direct connection to the parallel Dakota Rail Regional Trail, designated as an existing Regional Trail open to the public in Met Council's THRIVE Parks Policy Plan. The paved Dakota Rail Regional Trail extends 13.5 miles through Carver County from the county line (roughly 2 miles west of New Germany) to the east county line on the northeast side of Lake Waconia. The trail is part of the larger 44-mile, three county regional trail. If the RBTN included rural areas and facilities connecting rural communities and cities for analysis, this significant Regional Trail would be a Tier 1 Alignment. The trail can be accessed from Quartz Lane and Goose Lake Dr. from CSAH 30. Residents of Waconia Township and the City of Waconia are likely to use CSAH 30 to access the Dakota Rail Regional Trail.

In addition, the existing pavement is at the end of its useful life and this reconstruction project will improve the pavement condition and pavement markings to better serve on-road bicyclist needs.

The project is located in a rural area of the county and region and is served by SmartLink Transit. SmartLink operates dial-a-ride transit service for the general public. This transit service serves the rural residents along the project corridor and
provides a transit connection for residents to connect anywhere in the 7-county metro area. The modernization of CSAH 30 to include wider shoulders will allow SmartLink buses to better access rural households.

# 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 Yes along with letters from each jurisdiction to receive points.

100\%
Attach Layout 1589471785393_CSAH 30_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
06/28/2018
2)Review of Section 106 Historic Resources (15 Percent of Points)

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

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

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
11/01/2023
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:
06/25/2018
Meeting with partner agencies:
06/25/2018
Targeted online/mail outreach:
Number of respondents:
Meetings specific to this project with the general public and partner agencies have been used to help identify the project 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\%

Carver County reached out to Waconia Township officials regarding the project and determined the best approach for resident engagement was via a direct mailing to residents in the project area. Residents were mailed project information and invited to attend the township board meeting to provide input. Multiple residents attended and gave feedback at the township board meeting about the future project. A common concern was intersection safety at CSAH 30/Goose Lake Dr./Polk Ave. In response, the County took a closer look at safety analysis and the proposed vertical and horizontal curve.

Residents were also engaged as part of the County's 2040 Comprehensive Plan through specific outreach to the Township. Feedback from residents for the Comp Plan focused on the Township's Community Designation of Agricultural and this project as a vital link in the farm-to-market highway system. In addition, the project is identified as a County Road Rehab project in the adopted Carver County 20-year Transportation Tax Implementation Plan as part of the goal to provide funding equity to rural populations. This is an adopted plan that underwent public review and comment. Feedback was incorporated to provide rural equity by utilizing sales tax funding on rural rehab projects such as this one.

The City of Mayer and City of Waconia also approved letters of support for the project, which is a key connection between these two communities. Outreach and coordination with the Township, cities, and residents will continue throughout project development.

## Measure A: Cost Effectiveness

| Enter Amount of the Noise Walls: | $\$ 0.00$ |
| :--- | :--- |
| Total Project Cost subtract the amount of the noise walls: | $\$ 3,203,000.00$ |
| Enter amount of any outside, competitive funding: | $\$ 0.00$ |
| Attach documentation of award: |  |
| Points Awarded in Previous Criteria | $\$ 0.00$ |

## Other Attachments

File Name
CarverCo_CSAH
30Reconstruct_Summary2020.pdf
CarverCo_CSAH
30_Reconstruct_Photo.pdf

CSAH 30 Layout.pdf
CSAH 30 Support Letter_Waconia.pdf

LOS_Mayer_CSAH30.pdf

Description
CSAH 30 Rural Connection 1-page
Summary
CSAH 30 Rural Connection existing
conditions photo
CSAH 30 Rural Connection Concept and Layout

City of Waconia letter of support for CSAH 30 Rural Connection Project

City of Mayer letter of support for CSAH
30 Rural Connection Project

File Size
1.2 MB

171 KB

587 KB

150 KB

337 KB

Regional Economy
Roadway Reconstruction/Modernization Project: CSAH 30 Rural Connection Reconstruction | Map ID: 15886243267



Project Points $\square$ Manfacturing/Distribution Centers
Project $\square$ Job Concentration Centers

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



## Affordable Housing

## County Road 30 Corridor




- Multi-family rental housing
- Scattered site rental properties (exact location private)
- Owner-occupied housing (exact location private)


## CSAH 30 Reconstruction

Affordable Housing


## 2: CSAH 10 \& CSAH 30

| Direction | All |
| :--- | ---: |
| Future Volume $(\mathrm{vph})$ | 962 |
| Total Delay / Veh $(\mathrm{s} / \mathrm{v})$ | 3 |
| CO Emissions $(\mathrm{kg})$ | 0.62 |
| NOx Emissions $(\mathrm{kg})$ | 0.12 |
| VOC Emissions $(\mathrm{kg})$ | 0.14 |

## 7: TH 25 \& CSAH 30

| Direction | All |
| :--- | ---: |
| Future Volume $(\mathrm{vph})$ | 621 |
| Total Delay / Veh $(\mathrm{s} / \mathrm{v})$ | 5 |
| CO Emissions $(\mathrm{kg})$ | 0.39 |
| NOx Emissions $(\mathrm{kg})$ | 0.08 |
| VOC Emissions $(\mathrm{kg})$ | 0.09 |

## 2: CSAH 10 \& CSAH 30

| Direction | All |
| :--- | ---: |
| Future Volume (vph) | 962 |
| Total Delay / Veh (s/v) | 3 |
| CO Emissions $(\mathrm{kg})$ | 0.62 |
| NOx Emissions $(\mathrm{kg})$ | 0.12 |
| VOC Emissions $(\mathrm{kg})$ | 0.14 |

7: TH 25 \& CSAH 30

| Direction | All |
| :--- | ---: |
| Future Volume $(\mathrm{vph})$ | 621 |
| Total Delay / Veh $(\mathrm{s} / \mathrm{v})$ | 6 |
| CO Emissions $(\mathrm{kg})$ | 0.39 |
| NOx Emissions $(\mathrm{kg})$ | 0.08 |
| VOC Emissions $(\mathrm{kg})$ | 0.09 |

## 2: CSAH 10 \& CSAH 30

| Direction | All |
| :--- | ---: |
| Future Volume $(\mathrm{vph})$ | 962 |
| Total Delay / Veh $(\mathrm{s} / \mathrm{v})$ | 3 |
| CO Emissions $(\mathrm{kg})$ | 0.62 |
| NOx Emissions $(\mathrm{kg})$ | 0.12 |
| VOC Emissions $(\mathrm{kg})$ | 0.14 |

## 7: TH 25 \& CSAH 30

| Direction | All |
| :--- | ---: |
| Future Volume $(\mathrm{vph})$ | 621 |
| Total Delay / Veh $(\mathrm{s} / \mathrm{v})$ | 5 |
| CO Emissions $(\mathrm{kg})$ | 0.39 |
| NOx Emissions $(\mathrm{kg})$ | 0.08 |
| VOC Emissions $(\mathrm{kg})$ | 0.09 |

## 2: CSAH 10 \& CSAH 30

| Direction | All |
| :--- | ---: |
| Future Volume (vph) | 962 |
| Total Delay / Veh (s/v) | 3 |
| CO Emissions $(\mathrm{kg})$ | 0.62 |
| NOx Emissions $(\mathrm{kg})$ | 0.12 |
| VOC Emissions $(\mathrm{kg})$ | 0.14 |

7: TH 25 \& CSAH 30

| Direction | All |
| :--- | ---: |
| Future Volume $(\mathrm{vph})$ | 621 |
| Total Delay / Veh $(\mathrm{s} / \mathrm{v})$ | 6 |
| CO Emissions $(\mathrm{kg})$ | 0.39 |
| NOx Emissions $(\mathrm{kg})$ | 0.08 |
| VOC Emissions $(\mathrm{kg})$ | 0.09 |

CSAH 30 Benefit Cost
Total Benefit-Cost Calculation

| $\$ 5,017,475$ | Benefit (present value) | B/C Ratio $=\mathbf{1 . 5 7}$ |
| :--- | :--- | :--- |
| $\$ 3,203,000$ | Cost |  |

Benefit (Present Value) Summary
$\$ 289,031$ TH 25 Intersection
$\$ 4,728,444$ Segment between TH 25 and CSAH 10

Traffic Safety Benefit-Cost Calculation
Highway Safety Improvement Program (HSIP) Reactive Project

DEPARTMENT OF TRANSPORTATION

## A. Roadway Description

| Route | CSAH 30 | District | County | Carver |
| :---: | :---: | :---: | :---: | :---: |
| Begin RP |  | End RP | Miles |  |
| Location | CSAH 30 and TH 25 |  |  |  |

## B. Project Description

| Proposed WorkProject Cost* | Construct right-turn lane and install intersection lighting |  |  |
| :---: | :---: | :---: | :---: |
|  | \$3,203,000 | Installation Year | 2024 |
| Project Service Life | 20 years | Traffic Growth Factor | 3.0\% |
| * exclude Right of Way from Project Cost |  |  |  |

## C. Crash Modification Factor

$\begin{array}{|llll|}\hline 0.19 & \text { Fatal (K) Crashes } & \text { Reference } \begin{array}{l}\text { Crash Clearinghouse } \\$\cline { 1 - 1 } 0.19\end{array} \& Serious Injury (A) Crashes\end{array}$)$
D. Crash Modification Factor (optional second CMF)

| 0.39 | Fatal (K) Crashes | Reference Crash Clearinghouse |  |
| :--- | :--- | :--- | :--- |
| 0.39 | Serious Injury (A) Crashes |  |  |
| 0.39 | Moderate Injury (B) Crashes | Crash Type All |  |
| 0.39 | Possible Injury (C) Crashes |  |  |
| 0.39 | Property Damage Only Crashes |  | www.CMFclearinghouse.org |


F. Analysis Assumptions

| Crash Severity | Crash Cost |  |  |  |
| :--- | :---: | :---: | :---: | :--- |
| K crashes | $\$ 1,360,000$ | Link: |  |  |
| A crashes | $\$ 680,000$ |  |  |  |
| B crashes | $\$ 210,000$ | Real Discount Rate | $1.2 \%$ |  |
| C crashes | $\$ 110,000$ | Traffic Growth Rate | $3.0 \%$ |  |
| PDO crashes | $\$ 12,000$ | Project Service Life | 20 years |  |

G. Annual Benefit

| Crash Severity | Crash Reduction | Annual Reduction | Annual Benefit |
| :--- | :---: | :---: | :---: |
| K crashes | 0.00 | 0.00 | $\$ 0$ |
| A crashes | 0.00 | 0.00 | $\$ 0$ |
| B crashes | 0.00 | 0.00 | $\$ 0$ |
| C crashes | 0.00 | 0.00 | $\$ 0$ |
| PDO crashes | 3.04 | 1.01 | $\$ 12,160$ |


| H. Amortized Benefit |  |  |  |
| :---: | :---: | :---: | :---: |
| Year | Crash Benefits | Present Value |  |
| 2024 | \$12,160 | \$12,160 | Total $=$ \$289,031 |
| 2025 | \$12,525 | \$12,376 |  |
| 2026 | \$12,901 | \$12,596 |  |
| 2027 | \$13,288 | \$12,820 |  |
| 2028 | \$13,686 | \$13,048 |  |
| 2029 | \$14,097 | \$13,281 |  |
| 2030 | \$14,520 | \$13,517 |  |
| 2031 | \$14,955 | \$13,757 |  |
| 2032 | \$15,404 | \$14,002 |  |
| 2033 | \$15,866 | \$14,251 |  |
| 2034 | \$16,342 | \$14,504 |  |
| 2035 | \$16,832 | \$14,762 |  |
| 2036 | \$17,337 | \$15,025 |  |
| 2037 | \$17,857 | \$15,292 |  |
| 2038 | \$18,393 | \$15,564 |  |
| 2039 | \$18,945 | \$15,841 |  |
| 2040 | \$19,513 | \$16,123 |  |
| 2041 | \$20,099 | \$16,410 |  |
| 2042 | \$20,702 | \$16,701 |  |
| 2043 | \$21,323 | \$16,999 |  |
| 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 |  |

Dual CMF for CSAH 30/TH 25 Intersection

Improvements include Constructing a right-turn lane and adding lighting

CMF1=install right-turn lane CMF2=Install lighting

Dual CMF= $(C M F 1)^{*}(C M F 2)$

Rear End (All): (.35)*(.53) $=.19$
Angle (PDO): $(.73) *(.53)=.39$

| Countermeasure(s) | Crash Type | Crash Severity | Area Type | Config | Control | Major Minor <br> Daily Traffic  <br> Volume (veh/day)  |  | Ref | Obs | Effectiveness |  |  |  | Study Type |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | Crash Reduction <br> Factor / Function |  | Std | Range |  |  |
|  |  |  |  |  |  |  |  | Error |  | Low | High |  |
| Prohibit right-turn-onred (cont'd) | All | All | Urban/ Suburban |  | Signal |  |  |  | 62 |  | 100(1-(0.984)^n); n=number of signalized intersection appraoches where RTOR is prohibited |  |  |  | Expert Panel |
|  | Rightangle | All |  |  | Signal |  |  | 15 |  | 30 |  |  |  | Cross-section |
|  | Sideswipe | All |  |  | Signal |  |  | 15 |  | 20 |  |  |  | Cross-section |
| Prohibit turns | All turns | All | All |  |  |  |  | 1 |  | 45 |  | 40 | 90 |  |
| Restrict parking near intersections (to offstreet) | All | All |  |  |  |  |  | 28 |  | 49 |  | 8 | 90 |  |
|  | Ped | All |  |  |  |  |  | 15 |  | 30 |  |  |  |  |
| Vary speed | All | All | Rural |  |  |  |  | 6 |  | 100(1-EXP(0.019(V-55))); V=majorroad speed limit (or design speed) (mph) <br> 100(1-EXP(0.005(V-40))); V=majorroad speed limit (or design speed) (mph) |  |  |  |  |
|  | All | All | Urban |  |  |  |  | 6 |  |  |  |  |  |  |
| LIGHTING |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Improve lighting at intersection | Ped | Fatal |  |  |  |  |  | 5 |  | 78 | 87 |  |  |  |
|  | Ped | Injury |  |  |  |  |  | 5 |  | 42 | 18 |  |  |  |
| Install lighting | All | All |  |  | Signal |  |  | 51 |  | 30 |  |  |  |  |
|  | All | Fatal/Injury |  |  | Signal |  |  | 51 |  | 17 |  |  |  |  |
|  | Night | All |  |  | Signal |  |  | 51 |  | 50 |  |  |  |  |
|  | All | All |  |  | No Signal |  |  | 28 |  | 47 ) |  |  |  |  |
|  | All | All |  |  |  |  |  | 62 |  | 4 |  |  |  | Meta Analysis/ Expert Panel |
|  | All | Injury |  |  |  |  |  | 62 |  | 6 |  |  |  | Meta Analysis/ Expert Panel |
|  | Night | All |  |  |  |  |  | 62 |  | 21 |  |  |  | Meta Analysis/ Expert Panel |
|  | Night | Injury |  |  |  |  |  | 62 |  | 29 |  |  |  | Meta Analysis/ Expert Panel |

Desktop Reference for Crash Reduction Factors
Intersection Crashes

| Countermeasure(s) | Crash <br> Type | Crash Severity | Area Type | Config | Control | Major Minor <br> Daily Traffic  <br> Volume (veh/day)  |  | Ref | Obs | Effectiveness |  |  |  | Study Type |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | Crash Reduction <br> Factor / Function |  | Std <br> Error | Range |  |  |
|  |  |  |  |  |  |  |  | Low |  |  | High |  |
| RIGHT-TURN COUNTERMEASURES |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Increase length of right-turn lane | All | Fatal/Injury | All | All | All |  |  |  | 58 |  | 15 |  |  |  |  |
| ( Install right-turn lane | All | All | All | $\begin{gathered} \hline \text { 4-Leg } \\ \text { (1 app) } \end{gathered}$ | Signal | $\begin{aligned} & \hline 4,200- \\ & 55,100 \\ & \hline \end{aligned}$ | $\begin{gathered} 100- \\ 26,000 \end{gathered}$ | 22 |  | 4 | 2 |  |  | EB Before- After |
|  | All | All | All | $\begin{gathered} \hline \text { 4-Leg } \\ (1 \mathrm{app}) \end{gathered}$ | Stop | $\begin{aligned} & \hline 1,100- \\ & 40,600 \end{aligned}$ | $\begin{gathered} 25- \\ 11,800 \end{gathered}$ | 22 |  | 14 | 5 |  |  | EB Before- <br> After |
|  | All | All | All | $\begin{gathered} 4-\mathrm{Leg} \\ (2 \mathrm{app}) \end{gathered}$ | Signal | $\begin{aligned} & 4,200- \\ & 55,100 \end{aligned}$ | $\begin{gathered} 100- \\ 26,000 \end{gathered}$ | 22 |  | 8 | 3 |  |  | EB BeforeAfter |
|  | All | All | All | $\begin{gathered} \hline \text { 4-Leg } \\ (2 \mathrm{app}) \\ \hline \end{gathered}$ | Stop | $\begin{aligned} & 1,100- \\ & 40,600 \end{aligned}$ | $\begin{gathered} 25- \\ 11,800 \end{gathered}$ | 22 |  | 26 | 7 |  |  | EB BeforeAfter |
|  | All | All | All | All | All |  |  | 58 |  | 35 |  |  |  |  |
|  | All | All | All |  |  |  |  | 1 |  | 25 |  |  |  |  |
|  | All | All | Rural | $\begin{gathered} \text { 4-Leg } \\ (1 \mathrm{app}) \end{gathered}$ | No signal |  |  | 28 |  | 14 |  |  |  |  |
|  | All | All | Rural | $\begin{gathered} \hline \text { 4-Leg } \\ (1 \mathrm{app}) \end{gathered}$ | No signal |  |  | 28 |  | $21$ |  | 14 | 27 |  |
|  | All | All |  | All | No signal |  |  | 28 |  | 27 |  | 24 | 30 |  |
|  | All | All |  |  |  |  |  | 15 |  | 25 |  |  |  |  |
|  | All | All |  |  |  |  |  | 15 |  | 25 |  |  |  | Cross-section |
|  | All | All |  |  |  |  |  | 15 |  | 25 |  |  |  | Simple Before-After |
|  | All | All |  |  |  |  |  | 15 |  | 25 |  |  |  | Simple Before-After |
|  | All | Fatal/Injury | All | $\begin{gathered} \hline \text { 4-Leg } \\ (1 \mathrm{app}) \end{gathered}$ | Signal | $\begin{aligned} & 4,200- \\ & 55,100 \end{aligned}$ | $\begin{gathered} 100- \\ 26,000 \end{gathered}$ | 22 |  | 9 | 3 |  |  | EB BeforeAfter |
|  | All | Fatal/Injury | All | $\begin{gathered} 4-\mathrm{Leg} \\ (1 \mathrm{app}) \end{gathered}$ | Stop | $\begin{aligned} & 1,100- \\ & 40,600 \end{aligned}$ | $\begin{gathered} 25- \\ 11,800 \end{gathered}$ | 22 |  | 23 | 7 |  |  | EB BeforeAfter |
|  | All | Fatal/Injury | All | All | No signal |  |  | 58 |  | 35 |  |  |  |  |
|  | All | Fatal/Injury | All | All | Signal |  |  | 58 |  | 35 |  |  |  |  |
|  | All | Fatal/Injury | All | All |  |  |  | 51 |  | 40 |  |  |  |  |
|  | All | Fatal/Injury | Rural | All | All |  |  | 58 |  | (35) |  |  |  |  |
|  | All | Fatal/Injury | Urban | All | All |  |  | 58 |  | 30 |  |  |  |  |
|  | Rear-end | All |  |  |  |  |  | 15 |  | $65$ |  |  |  | Simple Before-After |

Desktop Reference for Crash Reduction Factors
Intersection Crashes

| Countermeasure(s) | Crash Type | Crash Severity | Area Type | Config | Control | Major Minor <br> Daily Traffic  <br> Volume (veh/day)  | Ref | Obs | Effectiveness |  |  |  | Study Type |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  | Crash Reduction Factor / Function | Std Error | Range |  |  |
|  |  |  |  |  |  |  |  |  |  |  | Low | High |  |
| Install right-turn lane (cont'd) | Rightangle | All |  |  |  |  | 15 |  | 50 |  |  |  | Simple Before-After |
|  | Right-turn | All |  |  |  |  | 15 |  | 53 |  |  |  |  |
|  | Right-turn | All |  |  |  |  | 15 |  | 56 |  |  |  | Simple Before-After |
|  | Right-turn | All |  |  |  |  | 15 |  | 50 |  |  |  | Cross-section |
|  | Sideswipe | All |  |  |  |  | 15 |  | 20 |  |  |  | Simple Before-After |
| Install right-turn lane (painted separation) | All | Fatal/Injury | All | All | All |  | 58 |  | 30 |  |  |  |  |
| Install right-turn lane (physical channelization) | All | Fatal/Injury | All | All | All |  | 58 |  | 35 |  |  |  |  |

## Traffic Safety Benefit-Cost Calculation

Highway Safety Improvement Program (HSIP) Reactive Project

DEPARTMENT OF TRANSPORTATION

## A. Roadway Description

| Route <br> Begin RP <br> Location | CSAH 30 | District | County | Carver |
| :---: | :---: | :---: | :---: | :---: |
|  |  | End RP | Miles |  |
|  | CSAH 30 | CSAH 10 |  |  |

## B. Project Description

| Proposed Work <br> Project Cost* | Widen shoulder and Improve Pavement Friction |  |  |
| :---: | :---: | :---: | :---: |
|  | \$3,203,000 | Installation Year | 2024 |
| Project Service Life | 20 years | Traffic Growth Factor | 3.0\% |
| * exclude Right of Way from Project Cost |  |  |  |

## C. Crash Modification Factor

$\begin{array}{|llll|}\hline 0.23 & \text { Fatal (K) Crashes } & \text { Reference } \begin{array}{l}\text { Crash Clearinghouse } \\$\cline { 1 - 1 } <br> \hline 0.23\end{array} \& Serious Injury (A) Crashes\end{array}$)$
D. Crash Modification Factor (optional second CMF)

| 0.26 | Fatal (K) Crashes | Reference |  |
| :--- | :--- | :--- | :--- |
| 0.26 | Crash Clearinghouse |  |  |
| 0.26 | Morious Injury (A) Crashes |  |  |
| 0.26 | Possible Injury (B) Crashes (C) Crashes | Crash Type |  |
| 0.26 | Rear End |  |  |
| Property Damage Only Crashes |  |  |  |


F. Analysis Assumptions

Crash Severity

| 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 $\quad 1.2 \%$
Traffic Growth Rate 3.0\%
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 | 0.77 | 0.26 | $\$ 174,533$ |
| B crashes | 0.00 | 0.00 | $\$ 0$ |
| C crashes | 0.00 | 0.00 | $\$ 0$ |
| PDO crashes | 6.10 | 2.03 | $\$ 24,400$ |

\$198,933

| H. Amortized Benefit |  |  |  |
| :---: | :---: | :---: | :---: |
| Year | Crash Benefits | Present Value |  |
| 2024 | \$198,933 | \$198,933 | Total $=\$ 4,728,444$ |
| 2025 | \$204,901 | \$202,472 |  |
| 2026 | \$211,048 | \$206,073 |  |
| 2027 | \$217,380 | \$209,738 |  |
| 2028 | \$223,901 | \$213,469 |  |
| 2029 | \$230,618 | \$217,266 |  |
| 2030 | \$237,537 | \$221,130 |  |
| 2031 | \$244,663 | \$225,063 |  |
| 2032 | \$252,003 | \$229,066 |  |
| 2033 | \$259,563 | \$233,141 |  |
| 2034 | \$267,350 | \$237,287 |  |
| 2035 | \$275,370 | \$241,508 |  |
| 2036 | \$283,631 | \$245,804 |  |
| 2037 | \$292,140 | \$250,176 |  |
| 2038 | \$300,905 | \$254,625 |  |
| 2039 | \$309,932 | \$259,154 |  |
| 2040 | \$319,230 | \$263,764 |  |
| 2041 | \$328,806 | \$268,455 |  |
| 2042 | \$338,671 | \$273,230 |  |
| 2043 | \$348,831 | \$278,090 |  |
| 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 |  |

Dual CMF for CSAH 30 from CSAH 10 to TH 25

Improvements include reconstructing the roadway and adding a paved shoulder

CMF1=Increase pavement friction CMF2=Install a paved shoulder
$\mathrm{CMF}=\mathrm{CMF}$ 1*CMF2

ROR, Head On (PDO and Injury): .59*.39=. 23
Rear End (PDO): .30*. $86=.26$

- Countermeasure: Improve pavement friction (increase skid resistance)

| CMF | CRF(\%) Quality | Crash <br> Type | Crash <br> Severity | Area <br> Type | Reference | All | All | Lyon and <br> Persaud, <br> 2008 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0.799 | 20.1 | All | All |  |  |  |  |  |

0.667 All All Allan | Lyon |
| :---: |
| and |
| Persaud, |
| 2008 |

0.81918 .1 All All All | Lyon |
| :---: |
| and |
| Persaud, |
| 2008 |

- 


All
Lyon
and
Persaud, 2008
-

| 1.271 | - |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 27.1 | All | All | Lyon <br> and |
| Persaud, |  |  |  |
| 2008 |  |  |  |

- 

0.426 Wet road All All | Lyon |
| :---: |
| and |
| Persaud, |
| 2008 |

0.37262 .8 Wet road All All | Lyon |
| :---: |
| and |
| Persaud, |

0.575

Rear end,Wet road
All
Lyon
and
Persaud,
2008

| 0.59 | 41 |  | All | All | All | Lyon and Persaud, 2008 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |



0.36163 .9 Wet road All All | Lyon |
| :---: |
| and |
| Persaud, |
| 2008 |



0.943 Rear end All All | Lyon |
| :---: |
| and |
| Persaud, |
| 2008 |

0.50449 .6 Rear end All Allation | Lyon |
| :---: |
| and |
| Persaud, |
| 2008 |




|  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 0.898 | Angle | AllLyon <br> and <br> Persaud, <br> 2008 |

- 



0.4753 Angle,Wet road All All | Lyon |
| :---: |
| and |
| Persaud, |
| 2008 |

|  |  |
| :---: | :---: | :---: | :---: |
| 0.828 | Angle,Wet road All AllanLyon <br> and <br> Persaud, <br> 2008 |

- Countermeasure: Upgrade unpaved or non-existent shoulders to composite shoulders


CSAH 30 (9th Avenue) @ MNTH 25 (Ash Avenue) 2009-2018

| objectid | Incident ID Date and T Year |  | Hour |  | Crash Seve N | Number Ki |  |  | Officer Na |  | County | City | Township |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2032259 | 10623498 9/6/2010,: | 2010 |  |  | Property D | $\theta$ | $\theta$ |  | Driver of |  | Earver |  | Waconia |
| 2307730 | 10622956 8/15/2010, | 2010 |  |  | Property D | $\theta$ | $\theta$ |  | Unit 2 hea |  | Carver |  | Waconia |
| 2255353 | 10703279 9/7/2011,-: | 2011 |  |  | Possible Inj |  | $\theta$ |  | Both | A | Garver | Aayer |  |
| 2438885 | 10938938 11/20/201 | 2014 |  |  | Property D |  | $\theta$ |  | V\#1 stoppe |  | Carver | Mayer |  |
| 1951883 | 11019033 5/2/2015,! | 2015 |  |  | Minor Injur |  | $\theta$ |  | Unit \#1 | A | Garver | Aayer |  |
| 1829384 | 334990 3/10/2016, | 2016 |  |  | Property D |  | 0 |  | Unit 2 stop |  | CARVER |  | Waconia |
| 1862766 | 522472 12/6/2017, | 2017 |  | 7 | Property D |  | 0 |  | Driver of | M | CARVER | Mayer |  |
| 2262571 | 509855 10/18/201 | 2017 |  | 17 | Property D |  | 0 |  | Driver of | M | CARVER |  | Waconia |
| 2336628 | 453114 5/17/2017, | 2017 |  |  | Property D |  | 0 |  | Driver of | M | CARVER | Mayer |  |
| 2658027 | 740656 8/15/2019, | 2019 |  | 14 | Ainor Injury | Crash |  |  | The crash | occt | Garver | Aayer |  |

Route Type Route ID Route Mea Roadway N Divided Roi Intersectio Manner of Collision First Harmf Relative Tri Lighting Co Road Circuıroad_circuı


Road Circuiroad_circuı Relative Int Traffic Con Weather Pı Weather St Surface Coı Work Zone Work Zone Work Zone Workers Pr Unit1 Type Unit1 Vehic

| Intersectior STPSN-NOT Gloudy |  | Dry | Z NOT APPLH NOT APPLH Not Applici Motor Veh VAN OR M |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Four-Way 4 STPSN-NOT Cloudy |  | Dry | $z$ NOT APPLH NOT APPLH Not Applicable (Not in VANOR MI |  |  |
| Intersection Not Appliciclear | Clear | Dry | $Z$ NOT APPLH NOT APPLH Not Applici Motor Veh Passenger |  |  |
| Four-Way 1 STPSGN-At Clear |  | Dry | Z NOT APPLH NOT APPLH Not Applici Motor Veh Passenger |  |  |
| Four-Way 4 STPSN-NOTClear |  | Dry | Z NOT APPLH NOT APPLH Not Applici Motor Veh Motoreycle |  |  |
| Four-Way I Stop Sign Clear |  | Dry | 2 | NOT APPLICABLE | Motor Veh Sport Utilit |
| h, Intersectio Stop Sign Clear |  | Ice/Frost | 2 | NOT APPLICABLE | Motor Veh Pickup |
| Intersectios Stop Sign Clear |  | Dry | 2 | NOT APPLICABLE | Motor Veh Sport Utilit |
| Four-Way I Stop Sign Cloudy |  | Dry | 2 | NOT APPLICABLE | Motor Veh Passenger |
| Four-Way + Stop-Sign Clear |  | Dry | z | NOT APPLICABLE | Motor Veh Sport Utilit |

Unit1 Direc Unit1 Factc Unit1 Factc Unit1 Most Unit1 Vehic Unit1 Traff Unit1 Postє Unit1 Horiz Unit1 Road Unit1 Nonr Unit1 Injur Unit1 Physi Unit1 Age

| Southbound Motor Veh Overtaking Z-LANES 1- | 55 Straight | Level | Ao-Appare Apparently | 33 |
| :---: | :---: | :---: | :---: | :---: |
| Westbounc Failure to Yield Right-o Motor Vehicle In Trans Z-LANES 1 - | 55 Straight | Level | PED FAIL YI No Appare Apparently | 17 |
| Northboun Inattentive Failure to C Motor Veh Moving For Z-LANES 1 - | 30 Straight | Level | No-Appare Apparently | 17 |
| Northboun No Clear Contributing, OTHER CO1 Moving For Z-LANES 1 - | 55 Straight | Level | No-Appare Apparently | 49 |
| Southboun No-Clear Contributing, EMBANKA Overtaking Z-LANES 1- | 40 Straight | Level | Suspected Apparently | 20 |
| Westbounc No Clear Contributing ، Motor Veh Vehicle Sto Two-Way, I | 55 Straight | Level | No Appareı Apparently | 25 |
| Southboun Following Too Closely Motor Veh Moving Foı Two-Way, I | 55 Straight | Level | No Appareı Apparently | 16 |
| Westbounc Following Too Closely Motor Veh Moving Foı Two-Way, I | 55 Straight | Level | No Appareı Apparently | 24 |
| Southboun Following Too Closely Motor Veh Slowing Two-Way, I | 55 Straight | Level | No Appare Apparently | 17 |
| Westbounc Failure to Yield Right-o Motor Veh Moving For Two-Way, | 55 Straight | tevel | No-Appare Apparently | 6 |

Unit1 Sex Unit2 Type Unit2 Vehic Unit2 Direc Unit2 Factc Unit2 Factc Unit2 Most Unit2 Vehic Unit2 Nonr Unit2 Injur Unit2 Physi Unit2 Age Unit2 Sex

| Female | Motor Veh Passenger SOUTHEASF Motor Veh Jurning Left | No-Appare Apparently | 39 Alale |
| :---: | :---: | :---: | :---: |
| Male | Motor Veh Passenger 1 Southboun No-lear Contributing, Motor Veh Moving Forward | No-Appare Apparently | 19 Female |
| Male | Motor Veh Sport Utilit Northboun No-lear Cf No-Clear Cf Motor Veh Jurning Left | Possible Inj Apparently | 59 Female |
| Male | Motor Veh Passenger Westbount Failure to Yield Right-o OTHER COI VEH STRTNG N TRC | No Appare Apparently | 32 Male |
| Male |  |  |  |
| Female | Motor Veh Passenger (Westbounc No Clear Contributing Motor Veh Turning Right | No AppareıApparently | 49 Male |
| Male | Motor Veh Cargo Van Southboun No Clear Contributing , Motor Veh Moving Forward | No AppareıApparently | 25 Male |
| Male | Motor Veh Passenger I Westbounc No Clear Contributing , Motor Veh Vehicle Stopped or Sta | No Appare Apparently | 55 Female |
| Male | Motor Veh Passenger I Southboun No Clear Contributing , Motor Veh Turning Left | No AppareıApparently | 25 Male |
| Female | Motor Veh Sport Utilit Northboun No-lear Contributing, Motor Veh Moving Forward | Suspected Apparently | 31 Female |

Unit3 Type Unit3 Vehic Unit3 Direc Unit3 Factc Unit3 Factc Unit3 Most Unit3 Vehic Unit3 Nonr Unit3 Injur Unit3 Physi Unit3 Age Unit3 Sex Unit4 Type

Unit4 Vehic Unit4 Direc Unit4 Factc Unit4 Factc Unit4 Most Unit4 Vehic Unit4 Nonr Unit4 Injur Unit4 Physi Unit4 Age Unit4 Sex interchangı otst_inters

| city_sectiolutmx |  | utmy | y |  |
| :--- | ---: | ---: | ---: | ---: |
| ANN25@Mi | 429851 | 4969706 | 429851 | 4969706 |
| AN25@Mi | 429851 | 4969706 | 429851 | 4969706 |
| AN25@Mi | 429851 | 4969728 | 429851 | 4969728 |
| HDCSAH30 | 429851 | 4969706 | 429851 | 4969706 |
| HDCSAH36 | 429851 | 4969706 | 429851 | 4969706 |
| VDCSAH 30 | 429852.9 | 4969707 | 429852.9 | 4969707 |
| MN25@Mi | 429848.7 | 4969734 | 429848.7 | 4969734 |
| VDCSAH 30 | 429864.3 | 4969705 | 429864.3 | 4969705 |
| MN25@Mi | 429847.6 | 4969731 | 429847.6 | 4969731 |

CSAH 30 from MNTH 25 to CSAH 10 (2009-2018)

| objectid | Incident ID Date and |  | Crash Sev |  | Officer | anner of Collisio | First Harmf Relative Tri Lighting Co |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1881437 | 371014 8/12/2016, | 2016 | Property D. | 0 | 1 Driver of |  | Ditch On Roadsic Daylight |
| 1926603 | 331478 2/24/2016, | 2016 | Property D | 0 | 2 Driver \# | Front to Rear | Motor Veh On Roadwã Daylight |
| 2286907 | 405042 12/16/2011 | 2016 | Property D | 0 | 0 Deputies |  | Other - Fixt On Roadsic Dark (Stree |
| 2502809 | 351328 5/24/2016, | 2016 | Property D | 0 | 1 Driver was driving straight ahead or Standing Tr Off Roadw: Daylight |  |  |
| 1914757 | 522823 12/7/2017, | 2017 | Property D | 0 | 2 Driver of | Front to Rear | Motor Veh On Roadwe Daylight |
| 2023700 | 581655 3/6/2018, | 2018 | Property D | 0 | 1 Unit 1 slid off road to the right and : Fence, Not On Roadsic Daylight |  |  |
| 2136756 | 538783 1/20/2018, | 2018 | Serious Injı | 0 | 2 Vehicle | Front to Front | Motor Veh On Roadwé Dark (No St |
| 2369258 | 661593 11/18/201: | 2018 | Property D | 0 | 1 While | nding to a distur | ( Roadway S On Roadsic Dark (Unkn |
| 2430361 | 664247 11/28/201: | 2018 | Property D | 0 | 1 Vehicle | was traveling westbo | , Fence, Not Outside of Daylight |

Road Circuıroad_circuı Road Circu road_circuı Relative Int Traffic Con Weather PıWeather StSurface Coı Work Zone Work Zone Work Zone Workers Pr

| None | T Intersecti Stop Sign | Cloudy | Dry | 2 | NOT APPLICABLE |
| :---: | :---: | :---: | :---: | :---: | :---: |
| None | T Intersecti Stop Sign | Clear | Dry | 2 | NOT APPLICABLE |
| Road Surface Condition (wet, icy, snow, slush, | T Intersecti Stop Sign | Snow | Snow | 2 | NOT APPLICABLE |
| None | Not at Inte No Contro | Clear | Dry | 2 | NOT APPLICABLE |
| Road Surface Condition (wet, icy, snow, slush, | Not at Inte Stop Sign | Clear | Ice/Frost | 2 | NOT APPLICABLE |
| Road Surface Condition (wet, icy, snow, slush, | Not at Inte No Contro | Clear | Snow | 2 | NOT APPLICABLE |
| None | Four-Way I No Contro | Clear | Dry | 2 | NOT APPLICABLE |
| None | T Intersecti Stop Sign |  | Dry | 2 | NOT APPLICABLE |
| Road Surface Condition (wet, icy, snow, slush, | Not at Inte No Contro | Snow | Snow | 2 | NOT APPLICABLE |

Unit1 Type Unit1 Vehic Unit1 Direc Unit1 Factc Unit1 Factc Unit1 Most Unit1 Vehic Unit1 Traff Unit1 Postє Unit1 Horiz Unit1 Road Unit1 Nonr Unit1 Injur

| Motor Veh Passenger ( Westbounc Unknown | Ditch | Moving For Two-Way, I | 55 Straight | Level | No Appareı |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Motor Veh Sport Utilit Eastbound Following Too Closely | Motor Veh | Moving For Two-Way, I | 55 Straight | Level | No Appareı |
| Hit-And-Ru Sport Utilit Eastbound Ran Off Road | Other - Fi | Moving For Two-Way, I | 50 Straight | Level | No Appareı |
| Motor Veh Passenger I Westbounc Ran Off Road | Standing | Moving For Two-Way, I | 55 Straight | Sag (Bottom) | No Appareı |
| Motor Veh Passenger 'Eastbound Following Too Closely | Motor Veh | Moving For Two-Way, N | ed Straight | Level | No Appareı |
| Motor Veh Passenger 'Westbounc Swerved or Avoided | Fence (Nor | Moving For Two-Way, I | 55 Straight | Level | No Appareı |
| Motor Veh Pickup Westbounc Failed to Kı Operated I | Motor Veh | Moving For Two-Way, I | 55 Straight | Level | Suspected |
| Motor Veh Passenger I Eastbound Ran Off Road | Roadway S | Moving For Two-Way, I | 55 Straight | Level | No Appareı |
| Motor Veh Sport Utilit Westbounc Swerved or Avoided D | Fence (Nor | Slowing Two-Way, I | 55 Curve Left | Downhill | No Appareı |

Unit1 Physi Unit1 Age Unit1 Sex Unit2 Type Unit2 Vehic Unit2 Direc Unit2 Factc Unit2 Factc Unit2 Most Unit2 Vehic Unit2 Nonr Unit2 Injur Unit2 Physi Apparently 16 Male
Apparently 16 Female Unknown Apparently Apparently Apparently Has Been [ Has Been D Apparently 46 Female
19 Male
31 Male
Motor Veh Pickup Eastbound Operated Motor Vehic Motor Veh Moving Forward
45 Female
36 Male
41 Male
64 Female

Unit2 Age Unit2 Sex Unit3 Type Unit3 Vehic Unit3 Direc Unit3 Factc Unit3 Factc Unit3 Most Unit3 Vehic Unit3 Nonr Unit3 Injur Unit3 Physi Unit3 Age 41 Female

39 Male

57 Female

Unit3 Sex Unit4 Type Unit4 Vehic Unit4 Direc Unit4 Factc Unit4 Factc Unit4 Most Unit4 Vehic Unit4 Nonr Unit4 Injur Unit4 Physi Unit4 Age Unit4 Sex
interchangıotst_inters city_sectiolutmx utmy x y
CSAH 30 AND RUTZ LA 432132.64969681432132 .64969681
$\begin{array}{lllllll}\text { CSAH } 10 & 435408.3 & 4967937 & 435408.3 & 4967937\end{array}$
432763.54969672432763 .54969672
$435342.54967985 \quad 435342.54967985$
$\begin{array}{lllll}433648.3 & 4969619 & 433648.3 & 4969619\end{array}$
$432182.74969667 \quad 432182.74969667$
$\begin{array}{llllll}\text { CSAH } 10 & 435387 & 4967966 & 435387 & 4967966\end{array}$
433212.24969660433212 .24969660


SRIF csAh 30Improvenents
Consulting Group, Inc. CSAH 30 from TH 25 to CSAH 10

May 8, 2020
Elaine Koutsoukos
TAB Coordinator
Metropolitan Council
390 Robert St. N
St. Paul, MN 55101
SUBJECT: CSAH 30 Rural Connection Modernization Project Risk Assessment Layout Approval Letter

Dear Ms. Koutsoukos:
This letter is to confirm the County's agreement and approval to date with the attached layout for the CSAH 30 Rural Connection Modernization Project between TH 25 and CSAH 10. The County led development of the layout and is aware of the details specified in the application attachment, which upgrades the roadway cross section to state aid standards.

Although not required, the County consulted with Waconia Township via a direct mailing to residents along the proposed project and a presentation to the Township Board. The City of Mayer and the City of Waconia, located on the western and eastern ends of the project corridor, respectively, provided letters of support for the project.

As demonstrated in the proposed project layout, the County is committed to this rural reconstruction project in order to modernize CSAH 30 from TH 25 to CSAH 10 to state aid standards.

Sincerely,


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

# CSAH 30 Rural Connection Modernization from TH 25 to csAH 10 

## Project Information

Project Location:
Waconia Township, Carver County; connecting the City of Mayer \& the City of Waconia

Federal Funding Request:
\$2,562,400
Total Project Cost:
\$3,203,000

## Project Benefits

Modernization and Safety

- Upgrade to State Aid standards
- Widen shoulders from 2 ft . to 8 ft .
- Upgrade lighting
- Add right turn lane

Multimodal

- Connect to Regional Trail
- Widen shoulders for multimodal uses


## Project Description

The proposed project includes the reconstruction and modernization of CSAH 30 (70th Street) from TH 25 (Ash Avenue South) to CSAH 10 in Carver County. CSAH 30 is currently a two-lane A-Minor Connector rural highway with 12 -foot lanes and 2 -foot shoulders. The improvements will upgrade CSAH 30 to state aid standards, which includes a full depth reclamation of the 12 -foot travel lanes and shoulder widening to 8 -foot shoulders. Lighting will also be upgraded at key intersections. The extra shoulder width and flattened in-slopes will improve safety for motorists, bicyclists, heavy commercial vehicles, and farming equipment, and provide a safe emergency stopping area for vehicles.



## Regional Significance

CSAH 30 is a major east west connector in Carver County that links the standalone communities of Mayer and Waconia. The City of Waconia is located on the eastern edge of the project area and is growing rapidly. CSAH 30's rural significance is related to its access to major north-south A Minor Connectors (TH 25 and CSAH 10), which link to the regional transportation network. TH 25 and CSAH 10 serve as two of the continuous north-south routes in rural Carver County that provide access to TH 5 (A Minor Connector), US 212 (Principal Arterial), and TH 7 (Principal Arterial).

## Contact Information

Lyndon Robjent, P.E.
Public Works Director/County Engineer
Carver County Public Works
11360 Highway 212, Suite 1
Cologne, MN 55322
Phone: 952-466-5200



SRIF csAh 30Improvenents
Consulting Group, Inc. CSAH 30 from TH 25 to CSAH 10

## City of Waconia

May 4, 2020
Lyndon Robjent, P.E.
Public Works Director, County Engineer
Carver County Public Works
11360 Highway 212, Suite 1, Cologne, MN 55322
Dear Mr. Robjent,
The City of Waconia pleased to support Carver County's application for CSAH 30 Reconstruction from TH 25 to CSAH 10 under the Roadway Reconstruction and Modernization category of Metropolitan Council's 2020 Regional Solicitation for federal transportation funding.

CSAH 30 is a crucial link to the regional transportation network from a rural perspective connecting the cities of Mayer and Waconia. Currently, the highway is a two-lane rural road with 12 ft . lanes and two ft . gravel shoulders. The improvements include a reconstruction of CSAH 30 to State-Aid standards including a wider shoulder. The additional shoulder width will improve safety for motorists, heavy commercial vehicles, and farming equipment as well as provide a safe emergency stopping area for vehicles.

The City of Waconia supports the County's application to the Metropolitan Council's 2020 Regional Solicitation funding program.

Sincerely,

## Susan Mutasits

Susan MH Arntz
City Administrator

Fire Station 26 Maple Street South Waconia, MN 55387 952-442-2316

Safari Island Community Center 1600 Community Drive
Waconia, MN 55387
952-442-0695

Ice Arena 1250 Oak Avenue
Waconia, MN 55387
952-442-RINK (7465)

April 9, 2020
Lyndon Robjent, P.E.
Public Works Director, County Engineer
Carver County Public Works
11360 Highway 212, Suite 1, Cologne, MN 55322
Dear Mr. Robjent,
The City of Mayer is pleased to support Carver County's application for CSAH 30 Reconstruction from TH 25 to CSAH 10 under the Roadway Reconstruction and Modernization category of Metropolitan Council's 2020 Regional Solicitation for federal transportation funding.

CSAH 30 is a crucial link to the regional transportation network from a rural perspective connecting the cities of Mayer and Waconia. Currently, the highway is a two-lane rural road with 12 ft . lanes and two ft . gravel shoulders. The improvements include a reconstruction of CSAH 30 to State-Aid standards including a wider shoulder. The additional shoulder width will improve safety for motorists, bicyclists, heavy commercial vehicles, and farming equipment as well as provide a safe emergency stopping area for vehicles.

The proposed project is endorsed by the City of Mayer, and we are supportive of the County's application to the Metropolitan Council's 2020 Regional Solicitation funding program.

Sincerely,


Margaret McCallum
City Administrator
City of Mayer

