Application

01967-2014 Roadway Expansion
01985 - CSAH 10 (Chaska) Expansion
Regional Solicitation - Roadways Including Multimodal Elements
Status: Submitted

| Original Submitted Date: | 12/01/2014 1:01 PM |
| :--- | :--- |
| Last Submitted Date. | $12 / 16 / 2014$ 2:58 PM |

## Primary Contact

| Name:* | Kate |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Salutation | First Name | Middle Name | Last Name |
| Title: | Transportation Manager |  |  |  |
| Department: | Public Works |  |  |  |
| Email: | kminer@co.carver.mn.us |  |  |  |
| Address: | 11360 Highway 212 |  |  |  |
|  | Suite 1 |  |  |  |
| * | Cologne | Minnesota |  | 55322 |
|  | City | State/Province |  | Postal Code/Zip |
| Phone:* | 952-466-5208 |  |  |  |
|  | Phone |  | Ext. |  |
| Fax: | 952-466-5 |  |  |  |
| What Grant Programs are you most interested in? | Regional Elements | ation - Roadways | s Includin | Multimodal |

## Organization Information

## Name:

CARVER COUNTY
Jurisdictional Agency (if different):

| Organization Type: | County Government |
| :--- | :---: |
| Organization Website: |  |
| Address: | PUBLIC WORKS |
|  | 11360 HWY $212 \mathrm{~W} \# 1$ |

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

County:
Carver

Phone:*

Fax:
PeopleSoft Vendor Number
0000026790A12

## Project Information

| Project Name | CSAH 10 (Chaska) Expansion |
| :--- | :--- |
| Primary County where the Project is Located | Carver |
| Jurisdictional Agency (If Different than the Applicant): |  |

Brief Project Description (Limit 2,800 characters; approximately 400 words)

The proposed project is an expansion of the CSAH 10 A Minor Arterial Expander corridor, located in eastern Carver County in Laketown Township and the City of Chaska. The project extends from the CSAH 10/CSAH 11 intersection for 0.72 miles east to the CSAH 10/Creek Road intersection, which is adjacent to the newly constructed TH 212 interregional freight and commuter corridor serving Minneapolis, St. Paul, and surrounding suburban communities (see attached Figure 1).

The project includes an expansion of an existing two-lane undivided roadway to a four-lane divided urban roadway with paved shoulders, curb, gutter, and stormwater treatment ponds. Replacement of a temporary signal at the CSAH 10/CSAH 11 will also be included, as well as construction of a paved, multiuse trail adjacent to the north side of the roadway that will extend east for 0.37 miles beyond the roadway expansion limits to connect into existing trails and sidewalks in the City of Chaska at Clover Ridge Drive.

Expanding the CSAH 10 corridor will fill a critical gap in this east-west commuter and freight corridor in eastern Carver County, which is constructed to State Aid standards on both sides of the project and includes a four-lane urban section immediately east of the project. Increased capacity on east-west roadway corridors is identified as a significant mobility need in the 2030 Carver County Transportation Plan, and expansion of this corridor is crucial to meet the forecasted growth of over 28,000 vehicles per day by 2030. Chaskas planned southwest growth area directly connected to the eastern terminus of the project and surrounding the TH 212 corridor will be crucial driver in the increasing demand for mobility along the corridor. The growth area will incorporate industrial and
commercial parks, neighborhood commercial nodes, and mixed-use residential development on 1,800 acres in the next 15 years.

Furthermore, construction of the CSAH 10 trail will make a crucial stride in meeting an identified need for cross-county bicycle and pedestrian linkages to the City of Chaska and future regional trails. An extension of the CSAH 10 Trail corridor to the west of the project area is also planned, and this eastern extension of the CSAH 10 Trail will connect directly to a robust network of existing trails and sidewalks throughout the City of Chaska.

Two future regional trail corridors, the SWLRT Connection Trail and the Twin Cities and Western Regional Trail, will also directly connect to the proposed CSAH 10 Trail corridor. These connections will immensely improve regional travel opportunities for Carver County trail users by extending connectivity to the areas vast system of regional and state trails, and will increase access to the planned southwest growth area in Chaska.

Include location, road name/functional class, type of improvement, etc.
Project Length (Miles)
0.89

Connection to Local Planning:
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 MnDOT 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.

Connection to Local Planning
Carver County 2030 Transportation Plan (page 7, Financial Plan) and Carver County 2030 Trail System Plan (page 14, Figure 4.5)

## Project Funding

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


Source of Match Funds
Preferred Program Year
Select one:
2019

## MnDOT State Aid Project Information: Roadway Projects

County, City, or Lead Agency
Functional Class of Road
Road System
TH, CSAH, MSAS, CO. RD., TWP. RD., CITY STREET
Name of Road
Example; 1st ST., MAIN AVE
Zip Code where Majority of Work is Being Performed
(Approximate) Begin Construction Date
(Approximate) End Construction Date
LOCATION
From:
(Intersection or Address)
Do not include legal description;
Include name of roadway if majority of facility
runs adjacent to a single corridor.
To:
(Intersection or Address)

Type of Work

Examples: grading, aggregate base, bituminous base, bituminous surface, sidewalk, signals, lighting, guardrail, bicycle path, ped ramps, bridge,
Park \& Ride, etc.)
Old Bridge/Culvert?
New Bridge/Culvert?
Structure is Over/Under
(Bridge or culvert name):

No
Carver County
"A" Minor Arterial Expander
CSAH

CSAH 10

55318
04/01/2019
06/01/2020

CSAH 10/CSAH 11 intersection

Immediately east of CSAH 10/Creek Road intersection
Grading, storm sewer, ponding, traffic control, striping, signals, bituminous bicycle path, ped ramps

No
Specific Roadway Elements
CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES
Cost
Mobilization (approx. 5\% of total cost) ..... \$500,000.00
Removals (approx. 5\% of total cost) ..... \$500,000.00
Roadway (grading, borrow, etc.) ..... \$1,600,000.00
Roadway (aggregates and paving) ..... $\$ 2,400,000.00$
Subgrade Correction (muck) ..... \$400,000.00
Storm Sewer ..... \$2,500,000.00
Ponds ..... \$150,000.00
Concrete Items (curb \& gutter, sidewalks, median barriers) ..... $\$ 700,000.00$
Traffic Control ..... \$100,000.00
Striping ..... \$50,000.00
Signing ..... \$50,000.00
Lighting ..... $\$ 0.00$
Turf - Erosion \& Landscaping ..... \$100,000.00
Bridge ..... $\$ 0.00$
Retaining Walls ..... $\$ 0.00$
Noise Wall ..... $\$ 0.00$
Traffic Signals ..... \$250,000.00
Wetland Mitigation ..... $\$ 0.00$
Other Natural and Cultural Resource Protection ..... $\$ 0.00$
RR Crossing ..... $\$ 0.00$
Roadway Contingencies ..... $\$ 0.00$
Other Roadway Elements ..... $\$ 0.00$
Totals ..... \$9,300,000.00
Specific Bicycle and Pedestrian Elements CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES CostPath/Trail Construction$\$ 120,000.00$
Sidewalk Construction ..... $\$ 0.00$
On-Street Bicycle Facility Construction ..... $\$ 0.00$
Right-of-Way ..... $\$ 0.00$
Pedestrian Curb Ramps (ADA) ..... \$8,000.00
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 ..... \$128,000.00
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 ..... $\$ 0.00$
Transit and TDM Contingencies ..... $\$ 0.00$
Other Transit and TDM Elements ..... $\$ 0.00$
Totals ..... $\$ 0.00$
Transit Operating Costs
OPERATING COSTS ..... Cost
Transit Operating Costs ..... $\$ 0.00$
Totals ..... $\$ 0.00$

## Totals

Total Cost
\$9,428,000.00
Construction Cost Total

Transit Operating Cost Total
\$9,428,000.00
$\$ 0.00$

## 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 2030 Transportation Policy Plan (amended 2013), the 2030 Regional Parks Policy Plan (amended 2013), and the 2030 Water Resources Management Policy Plan (2005).

Check the box to indicate that the project meets this requirement. Yes
2.Applicants that are not 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
3.Applicants must not submit an application for the same project in more than one funding sub-category.

Check the box to indicate that the project meets this requirement. Yes
4.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. Expansion, reconstruction/modernization, and bridges must be between $\$ 1,000,000$ and $\$ 7,000,000$. Roadway system management must be between \$250,000 and \$7,000,000.

Check the box to indicate that the project meets this requirement. Yes
5.The project must comply with the Americans with Disabilities Act

Check the box to indicate that the project meets this requirement. Yes
6. The project must be accessible and open to the general public.

Check the box to indicate that the project meets this requirement. Yes
7.The owner/operator of the facility must operate and maintain the project for the useful life of the improvement.

Check the box to indicate that the project meets this requirement. Yes
8. 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
9.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
10. The project applicant must send written notification regarding the proposed projected to all affected communities and other levels and units of government prior to submitting the application.

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

## Requirements - Roadways Including Multimodal Elements

Expansion and Reconstruction/Modernization Projects Only

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

Check the box to indicate that the project meets this requirement. Yes
2.Federal funds are available for roadway construction and reconstruction on new alignments or within existing right-of-way, including associated construction and excavation, bridges, or installation of traffic signals, signs, utilities, bikeway or walkway components and transit components.
The project must exclude costs for right-of-way, studies, preliminary engineering, design, or construction engineering. Noise barriers, drainage projects, fences, landscaping, etc., are not eligible for funding unless included as part of a larger project, which is otherwise eligible.

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

## Bridge Projects Only

3.The bridge project 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.
4.Bridges selected in previous Bridge Improvement and Replacement solicitations (1994 2011) are not eligible. A previously selected project is not eligible unless it has been withdrawn or sunset prior to the deadline for proposals in this solicitation.

Check the box to indicate that the project meets this requirement.
5.Projects requiring a grade-separated crossing of a Principal Arterial of freeway design 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.
6. 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 sub-categories. Rail-only bridges are ineligible for funding.

Check the box to indicate that the project meets this requirement.
7. The length of the bridge must equal or exceed 20 feet.

Check the box to indicate that the project meets this requirement.
8.Project limits for bridge projects are limited from abutment to abutment.

Check the box to indicate that the project meets this requirement.
9. The project must exclude costs for studies, preliminary engineering, design, construction engineering, and right-of-way.

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

## Bridge Replacement Projects Only

10. The bridge must have a sufficienty rating less than 50. Additionally, it must also be classified as structurally deficient or functionally obsolete.

Check the box to indicate that the project meets this requirement.
Bridge Rehabilitiation Projects Only
11.The bridge must have a sufficienty rating less than 80. Additionally, it must also be classified as structurally deficient or functionally obsolete.

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

## Other Attachments

| File Name | Description | File Size |
| :--- | :--- | :---: |
| 1985 Carver Co HSIP.pdf | HSIP | 149 KB |
| Chaska Letter of Support.pdf | Letter of Support from City of Chaska | 146 KB |
| Figure1_CSAH10_Expansion_Chaska.p <br> df | Figure 1 (SRF) | 666 KB |
| RdwayAreaDef.pdf | Roadway Area Definition | 1.2 MB |
| RegionalEcon.pdf | Regional Economy | 1.0 MB |
| SocioEcon.pdf | Socio Economic | 1.0 MB |
| TransitCon.pdf | Transit Connections | 1.0 MB |

## Reliever: Freeway Facility or

Facility being relieved
Number of hours per day volume exceeds capacity (based on the Congestion Report)

## Reliever: Non-Freeway Facility or

Facility being relieved
Number of hours per day volume exceeds capacity (based on the table below)

## Non-Freeway Facility Volume/Capacity Table

| Hour | NB/EB Volume | SB/WB Volume | Capacity | Volume exceeds capacity |
| :---: | :---: | :---: | :---: | :---: |
| 12:00am-1:00am |  |  | 0 |  |
| 1:00am-2:00am |  |  | 0 |  |
| 2:00am-3:00am |  |  | 0 |  |
| 3:00am-4:00am |  |  | 0 |  |
| 4:00am-5:00am |  |  | 0 |  |
| 5:00am-6:00am |  |  | 0 |  |
| 6:00am-7:00am |  |  | 0 |  |
| 7:00am-8:00am |  |  | 0 |  |
| 8:00am-9:00am |  |  | 0 |  |
| 9:00am-10:00am |  |  | 0 |  |
| 10:00am-11:00am |  |  | 0 |  |


| $11: 00 \mathrm{am}-12: 00 \mathrm{pm}$ | 0 |
| :--- | :--- |
| $12: 00 \mathrm{pm}-1: 00 \mathrm{pm}$ | 0 |
| $1: 00 \mathrm{pm}-2: 00 \mathrm{pm}$ | 0 |
| $2: 00 \mathrm{pm}-3: 00 \mathrm{pm}$ | 0 |
| $3: 00 \mathrm{pm}-4: 00 \mathrm{pm}$ | 0 |
| $4: 00 \mathrm{pm}-5: 00 \mathrm{pm}$ | 0 |
| $5: 00 \mathrm{pm}-6: 00 \mathrm{pm}$ | 0 |
| $6: 00 \mathrm{pm}-7: 00 \mathrm{pm}$ | 0 |
| $7: 00 \mathrm{pm}-8: 00 \mathrm{pm}$ | 0 |
| 8:00pm - 9:00pm | 0 |
| $9: 00 \mathrm{pm}-10: 00 \mathrm{pm}$ | 0 |
| $10: 00 \mathrm{pm}-11: 00 \mathrm{pm}$ | 0 |
| $11: 00 \mathrm{pm}-12: 00 \mathrm{am}$ | 0 |

## Expander/Augmentor/Non-Freeway Principal Arterial

| Select one: | Expander |
| :--- | :--- |
| Area | 2.286 |
| Project Length | 0.681 |
| Average Distance | 3.3568 |
| Upload Map | RoadwayAreaDefinition.pdf |

## Measure B: Current Heavy Commercial Traffic

| Location | CSAH 10 West of TH 212 |
| :--- | :--- |
| Current daily heavy commercial traffic volume | 1120.0 |

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

Select all that apply
Direct connection to or within a mile of a Job Concentration
Direct connection to or within a mile of a
Manufacturing/Distribution Location
Direct connection to or within a mile of an Educational Institution
Project provides a direct connection to or within a mile of an existing local activity center identified in an adopted county or Yes city plan

County or City Plan Reference (Limit 700 characters; approximately 100 words)

The project provides a direct connection to the Chaska southwest growth area, identified in the City of Chaskas Comprehensive Plan (2013). This growth area was initially identified as an opportunity site in the Metropolitan Councils 2003 Twin Cities Smart Growth study, and includes planned business parks, light industrial, and mixed-use walkable neighborhoods. Additionally, the project provides a direct connection to the TH 212 interregional corridor, the West Creek Corporate Center, and increases connectivity to multiple nearby community and educational facilities, including Chaska Middle School, Clover Ridge Elementary School, and Chaska Community Park. RegionalEconomy.pdf

## Measure A: Current Daily Person Throughput

| Location | East of CSAH 10/CSAH 11 intersection |
| :--- | :--- |
| Current AADT Volume | 11600.0 |
| Existing Transit Routes on the Project | N/A |

## Response: Current Daily Person Throughput

| Average Annual Daily Transit Ridership | 0 |
| :--- | :--- |
| Current Daily Person Throughput | 15080.0 |

## Measure B: $\mathbf{2 0 3 0}$ Forecast ADT

Use Metropolitan Council model to determine forecast (2030) ADT
volume
METC Staff - Forecast (2030) ADT volume 0
OR
Approved county or city travel demand model to determine forecast (2030) ADT volume

Select one:
Project located in Racially Concentrated Area of Poverty
Project located in Concentrated Area of 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 includes children, people with disabilities, or the elderly.

Yes

The CSAH 10 expansion will improve travel times and economic efficiencies for commuter and freight travel on the corridor, both of which support the health and growth of eastern Carver Countys local economy and provide opportunities for job growth and stability for low-income households (6\%) and minority populations (13\%) living near the project. The projects direct connection to TH 212 will also enable efficient connections to job concentrations and manufacturing centers in and near Minneapolis and St. Paul for these disadvantaged population groups.

The multiuse trail facility included in the proposed project will increase livability around the project area and improve access, local and regional connectivity, transportation choice, and recreational opportunities for all populations living in proximity to the project, including the elderly ( $8 \%$ ) and children (31\%), which are above county averages. The project also integrates ADA intersection improvements, which will enable safe travel for these population groups, as well as individuals with disabilities (6\%), traveling across the corridor.

Finally, right-of-way acquisition will not result in displacement or full takings from property owners. Project construction will incorporate proper noise, dust, and traffic mitigation and will not negatively impact the aforementioned disadvantaged populations present in the project area.

## Measure B: Affordable Housing

City/Township
Laketown Township
Segment Length (Miles)
$\begin{array}{ll}\text { City of Chaska } & 0.2\end{array}$
1

Total Project Length
Total Project Length
0.89

Affordable Housing Scoring - To Be Completed By Metropolitan Council Staff

| City/Township | Segment | Total Length | Score | Segment | Housing Score <br> Length (Miles) |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | (Miles) |  | Length/Total | Multiplied by |  |
| Segment |  |  |  |  |  |

$\begin{array}{llll}0 & 0 & 0 & 0\end{array}$

## Affordable Housing Scoring - To Be Completed By Metropolitan Council Staff

Total Project Length (Miles)
0.72

Total Housing Score
0

## Measure A: Year of Roadway Construction

Year of Original

| Roadway Construction | Roadway Segment |  |  |
| :---: | :---: | :---: | :---: |
| or Most Recent | Length (Miles) | Calculation | Calculation 2 |

Reconstruction
1999.0
0.72
1439.28
1999.0

1
1439
1999

## Average Construction Year

## Total Segment Length (Miles)

Total Segment Length
0.72

## Measure A: Cost Effectiveness of Vehicle Delay Reduction

Total Project Cost from Cost Sheet
Total Peak Hour Vehicle Delay Without The Project
Total Peak Hour Vehicle Delay With The Project
Total Peak Hour Vehicle Delay Reduced by Project
Cost Effectiveness
Synchro or HCM Reports
\$9,428,000.00
45875.0
22022.0
23853.0
\$395.25
CSAH10Expansion_SynchroAnalysisResults.pdf

## Measure B: Cost Effectiveness of Emissions Reduction

Total Project Cost from Cost Sheet
Total Peak Hour Kilograms Reduced by Project
Cost Effectiveness
Synchro or HCM Reports
\$9,428,000.00
0.55
\$17,141,818.18
CSAH10Expansion_SynchroAnalysisResults.pdf

## Measure A: Benefit/Cost of Crash Reduction

Project Benefit/Cost Ratio
0.49

Worksheet Attachment

## Measure A: Transit Connections

Existing Routes Directly Connected to the Project
N/A
Planned Transitways directly connected to the project (alignment and mode determined and identified in the 2030 TPP)

Upload Map
TransitConnections.pdf

## Response

Met Council Staff Data Entry Only
Route Ridership
0
Transitway Ridership

## Measure B: Bicycle and Pedestrian Connections

Several planned multiuse trails directly connect to the CSAH 10 roadway expansion and trail (see attached Figure 1). First, an extension of the CSAH 10 Trail corridor to the west of the project area is planned and identified in the 2030 Carver County Trails System Plan. Within the Trails System Plan, this full corridor is identified as a significant bicycle link for safe and efficient travel throughout Carver County. The proposed CSAH 10 will connect directly to a robust network of existing trails and sidewalks throughout the City of Chaska at Clover Ridge Drive.

Finally, two future regional trail corridors will directly connect to the CSAH 10 Trail corridor: the SWLRT Connection Trail and the Twin Cities and Western Regional Trail. These connections will immensely improve regional travel opportunities for Carver County trail users by extending connectivity to the areas vast system of regional and state trails, including the Minnesota River Bluffs LRT Trail, which connects eastern Chaska to the City of Hopkins. Furthermore, the SWLRT Connection Trail will increase access to the planned southwest growth area in the City of Chaska for commuters traveling to the future commercial office parks and mixed-use commercial developments. Residents of the mixed-use residential development in the growth area will also benefit from access to these regional trails west of Chaska.

## Measure C: Multimodal Facilities

Response (Limit 1,400 characters; approximately 200 words)

The proposed CSAH 10 expansion project includes the construction of a paved multiuse trail, located in the right-of-way immediately north of the roadway. To fill a regional gap, the trail will extend east of the roadway expansion termini for 0.37 miles to connect into existing trails and sidewalks at Clover Ridge Drive in the City of Chaska. The trail will be available to bicyclists, pedestrians, and other nonmotorized recreational users. 2030 forecasted volumes on the CSAH 10 corridor ( 40,000 ADT), which will serve as a critical thoroughfare for travel into and out of the planned southwest growth area of Chaska, preclude the safe operation of on-road bicycle facilities. A separate roadway and trail facility is optimal for all users to avoid collisions between modes and protect the safety of nonmotorized travelers and drivers. This separated multiuse facility is also supported by the Carver County Trail System Plan.

There is no existing transit service on the CSAH 10 (Engler Boulevard) corridor. However, SouthWest Transit provides express bus service to Minneapolis, St. Paul, the University of Minnesota, and the Mall of America via routes 695, 698, and 699 at the Clover Fields Park and Ride facility and the East Creek Transit Station. Both transit facilities are located in developed areas of Chaska immediately east of the proposed project.

# Transit Projects Not Requiring Construction 

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

## Measure A: Risk Assessment

1)Project Scope (5 Percent of Points)

Meetings or contacts with stakeholders have occurred
100\%
Stakeholders have been identified Yes
40\%
Stakeholders have not been identified or contacted
0\%
2)Layout or Preliminary Plan (5 Percent of Points)

Layout or Preliminary Plan completed Yes
100\%
Layout or Preliminary Plan started
50\%
Layout or Preliminary Plan has not been started
0\%
Anticipated date or date of completion
11/01/2014
3)Environmental Documentation (10 Percent of Points)

EIS
EA
PM
Yes
Document Status:

Document approved (include copy of signed cover sheet)
100\%

Document submitted to State Aid for review

Document in progress; environmental impacts identified
50\%
Document not started
Yes
$0 \%$
Anticipated date or date of completion/approval
10/01/2018
4)Review of Section 106 Historic Resources (15 Percent of Points)

No known potential for archaeological resources, no historic resources known to be eligible for/listed on the National Register of Historic Places located in the project area, and project is not located on an identified historic bridge

100\%
Historic/archeological review under way; determination of no
historic properties affected or no adverse effect anticipated
80\%

Historic/archaeological review under way; determination of adverse effect anticipated

40\%
Unknown impacts to historic/archaeological resources
Yes
0\%
Anticipated date or date of completion of historic/archeological review:

Project is located on an identified historic bridge
5)Review of Section 4f/6f Resources (15 Percent of Points)
(4f is publicly owned parks, recreation areas, historic sites, wildlife or waterfowl refuges; $6 f$ is outdoor recreation lands where Land and Water Conservation Funds were used for planning, acquisition, or development of the property)

No Section 4f/6f resources located in the project area
100\%
Project is an independent bikeway/walkway project covered by the bikeway/walkway Negative Declaration statement; letter of support received

100\%
Section 4 f resources present within the project area, but no known adverse effects

80\%
Adverse effects (land conversion) to Section 4f/6f resources likely

30\%
Unknown impacts to Section 4f/6f resources in the project area
$0 \%$
6)Right-of-Way (15 Percent of Points)

Right-of-way or easements not required
$100 \%$

Right-of-way or easements has/have been acquired
100\%
Right-of-way or easements required, offers made
75\%
Right-of-way or easements required, appraisals made
50\%

Right-of-way or easements required, parcels identified
Yes
25\%
Right-of-way or easements required, parcels not identified
0\%
Right-of-way or easements identification has not been completed
0\%

Anticipated date or date of acquisition
7)Railroad Involvement (25 Percent of Points)

No railroad involvement on project
Yes
100\%
Railroad Right-of-Way Agreement is executed (include signature page)

Railroad Right-of-Way Agreement required; Agreement has been initiated 60\%

Railroad Right-of-Way Agreement required; negotiations have begun

40\%
Railroad Right-of-Way Agreement required; negotiations not begun

0\%
Anticipated date or date of executed Agreement
8)Construction Documents/Plan (10 Percent of Points)

Construction plans completed/approved (include signed title sheet)

100\%
Construction plans submitted to State Aid for review
75\%
Construction plans in progress; at least 30\% completion
50\%
Construction plans have not been started
0\%
Anticipated date or date of completion
9)Letting

Anticipated Letting Date
$100 \%$

Yes

10/01/2017

02/01/2019


CSAH 10 - created on 10-31-2014 by imsd1jac
Crash data is managed by the Mn/DOT Office of Traffic, Safety, and Operations.

| SYS | NUM | REF_POINT | GIS_ROUTE | GIS_TM | RD_DIR | ELEM | RELY | INV | R_U |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 04 | 10000010 | 019+00.301 | 0410000010 | 19.301 | z | - | 1 | z | R |
| 04 | 10000010 | 019+00.301 | 0410000010 | 19.301 | z |  | 1 | 2 | R |
| 04 | 10000010 | 019+00.301 | 0410000010 | 19.301 | z |  | 1 | 2 | R |
| 04 | 10000010 | 019+00.301 | 0410000010 | 19.301 | Z |  | 1 | 2 | R |
| 04 | 10000010 | 019+00.301 | 0410000010 | 19.301 | z |  | 1 | 2 | R |
| 04 | 10000010 | 019+00.501 | 0410000010 | 19.501 | z |  | 2 | 2 | R |
| 04 | 10000010 | 019+00.551 | 0410000010 | 19.551 | Z |  | 2 | 2 | R |
| 04 | 10000010 | 019+00.651 | 0410000010 | 19.651 | Z |  | 2 | 2 | R |
| 04 | 10000010 | 019+00.751 | 0410000010 | 19.751 | Z |  | 1 | 2 | R |
| 04 | 10000010 | 019+00.751 | 0410000010 | 19.751 | Z |  | 1 | 2 | R |
| 04 | 10000010 | 019+00.801 | 0410000010 | 19.801 | z |  | 3 | 2 | R |
| 04 | 10000010 | 019+00.860 | 0410000010 | 19.860 | Z |  | 1 | 3 | U |

VEH \#1 CROSSING OVER CO RD 10 TO GO NORTH BOUND ONTO CO RD 11. DRIVER OF VEH. \#1 SAID HE DID NOT S DRIVER OF VEHICLE \# 1 STATED THAT SHE WAS SOUTHBOUND STOPPED AT CO RD 11 AND CO RD 10 . DRIVER \# 1 S UNIT 1 WAS TRAVELING WEST BOUND ON CO RD 10. THE DRIVER STARTED SLIDDING OFF THE RD INTO THE SOUTH VEH \#1 WAS EB ON CO RD 10. VEH \#2 WAS NB ON CO RD 11. DRIVER \#1 STATED HE HAD A GREEN LIGHT, AND RE VEHICLE \#2 WAS STOPPED AT THE INTERSECTION OF COUNTY ROAD 10 AND COUNTY ROAD 11 WAITING FOR TRAFFIC VEH \#1 WAS WB ON CO RD 10, APPROACHING CO RD 11. A DEER CAME FROM THE NORTH DITCH AND ATTEMPTED TO DRIVER OF VEH. \#1 STATED SHE WAS EASTBOUND ON COUNTY ROAD 10 HEADING INTO CHASKA. SHE STATED SHE WA DRIVER OF VEH. \#1 STATED SHE WAS SB ON COUNTY ROAD 10 AND BEGAN TO LOSE CONTROL OF THE REAR OF HER VEHICLE \#1 WAS NORTHBOUND ON CREEK ROAD. VEHICLE \#2 WAS SOUTHBOUND ON CREEK ROAD. DRIVER OF VEHILC the driver of vehicle 1 Stated she was headed westbound on co. rd. 10 When she approached a vehicle DRIVER \# 1 STATED THAT HE WAS EASTBOUND ON CO RD 10 AT ABOUT 50 MPH. DRIVER \# 1 SAID THAT HE MAY HA VEHICLE IN FRONT OF UNIT \#1 STARTED TO BRAKE CONSEQUENTLY \#1 BEGAN TO BRAKE AS WELL. UNIT \#2 WAS TR

| CITY | DOW | MONTH | DAY | YEAR | TIME | SEV |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0000 | 7-Sat | 5 | 28 | 2011 | 0945 | E |
| 0000 | 4-Wed | 8 | 10 | 2011 | 1743 | B |
| 0000 | 2-Mon | 2 | 20 | 2012 | 2002 | B |
| 0000 | 4-Wed | 3 | 13 | 2013 | 1030 | A |
| 0000 | 6-Fri | 4 | 12 | 2013 | 1740 | N |
| 0000 | 5-Thu | 9 | 29 | 2011 | 0224 | N |
| 0000 | 5-Thu | 1 | 3 | 2013 | 0853 | C |
| 0000 | 3-Tue | 1 | 15 | 2013 | 0854 | N |
| 0000 | 3-Tue | 7 | 24 | 2012 | 1227 | C |
| 0000 | 1-Sun | 3 | 17 | 2013 | 2008 | N |
| 0000 | 3-Tue | 7 | 3 | 2012 | 1911 | C |
| 0645 | 2-Mon | 12 | 30 | 2013 | 2212 | C |


|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | PERSON1 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NUM_KILLED | NUM_VEH | JUNC | SL | TYPE | DIAG | LOC1 | TCD | LIT | WTHR1 | WTHR2 | SURF | CHAR | DESGN | ACC_NUM | VTYPE | DIR | ACT |
| $\theta$ | 1 | 4 | 30 | 6 | 98 | 1 | 4 | 1 | 1 | $\theta$ | 90 | 1 | 8 | 111480118 | 3 | 1 | 57 |
| 0 | 2 | 2 | 55 | 90 | 90 | 1 | 4 | 1 | 1 | 1 | 1 | 1 | 8 | 112260003 | 3 | 5 | 5 |
| 0 | 1 | 1 | 55 | 25 | 4 | 2 | 98 | 4 | 4 | 7 | 5 | 2 | 8 | 120510098 | 1 | 7 | 1 |
| 0 | 2 | 4 | 55 | 1 | 5 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 8 | 130730197 | 32 | 1 | 1 |
| 0 | 2 | 4 | 55 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 8 | 131030031 | 1 | 7 | 1 |
| 0 | 1 | 1 | 55 | 8 | 90 | 1 | 98 | 6 | 1 | 0 | 1 | 1 | 8 | 112730052 | 1 | 7 | 1 |
| 0 | 1 | 1 | 55 | 30 | 7 | 90 | 98 | 1 | 4 | 2 | 3 | 1 | 8 | 130030061 | 3 | 3 | 1 |
| 0 | 1 | 1 | 55 | 30 | 4 | 1 | 98 | 1 | 1 | 0 | 90 | 5 | 8 | 130150034 | 1 | 5 | 1 |
| 0 | 2 | 1 | 55 | 1 | 8 | 1 | 98 | 1 | 2 | 0 | 2 | 5 | 8 | 122060138 | 1 | 1 | 1 |
| 0 | 1 | 2 | 55 | 26 | 90 | 8 | 4 | 4 | 2 | 0 | 1 | 2 | 8 | 130760152 | 3 | 7 | 1 |
| 0 | 3 | 1 | 55 | 1 | 4 | 1 | 98 | 1 | 1 | 1 | 1 | 1 | 8 | 121850223 | 2 | 7 | 1 |
| 0 | 2 | 1 | 55 | 1 | 1 | 1 | 98 | 6 | 2 | 0 | 3 | 1 | 8 | 133640425 | 2 | 7 | 10 |

- Countermeasure: Instaltraised median


0.5644 All \begin{tabular}{c}
Fatal, Serious <br>
injury

 

Schultz <br>
et al., <br>
2011
\end{tabular}

0.29 All All Urban | Schultz |
| :---: |
| et al., |
| 2008 |

0.45 Angle All Urban | Schultz |
| :---: |
| et al., |
| 2008 |

|  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 0.86 | 14 | AllYanmaz- <br> Tuzel <br> and |
| Ozbay, |  |  |
| 2010 |  |  |


| Countermeasure(s) | Crash <br> Type | Crash <br> Severity | Area Type | Road Type | Daily Traffic Volume (veh/day) | Ref | Effectiveness |  |  |  | Study Type |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | Crash Reduction Factor / Function | Std <br> Error | Range |  |  |
|  |  |  |  |  |  |  |  |  | Low | High |  |
| Increase number of lanes | All | All |  |  | <5,000/lane | 15 | 20 |  |  |  |  |
|  | All | All |  |  | >5,000/lane | 15 | 31 |  |  |  |  |
|  | All | All |  |  |  | 15 | 10 |  |  |  |  |
|  | All | All |  |  |  | 15 | 20 |  |  |  |  |
|  | All | All |  |  |  | 15 | 22 |  |  |  |  |
|  | All | All |  |  |  | 15 | 25 |  |  |  |  |
|  | All | All |  |  |  | 15 | 25 |  |  |  |  |
|  | All | All |  |  |  | 15 | 25 |  |  |  |  |
|  | All | Fatal |  |  |  | 15 | 39 |  |  |  |  |
|  | All | Injury |  |  |  | 15 | 23 |  |  |  |  |
|  | All | PDO |  |  |  | 15 | 27 |  |  |  |  |
|  | Head-on | All |  |  | <5,000/lane | 15 | 38 |  |  |  |  |
|  | Head-on | All |  |  | >5,000/lane | 15 | 44 |  |  |  |  |
|  | Head-on | All |  |  |  | 15 | 53 |  |  |  |  |
|  | Head-on | All |  |  |  | 15 | 53 |  |  |  |  |
|  | Head-on | PDO |  |  |  | 15 | 50 |  |  |  |  |
|  | Left-turn | All |  |  |  | 15 | 71 |  |  |  |  |
|  | Left-turn | PDO |  |  |  | 15 | 67 |  |  |  |  |
|  | ROR | All |  |  |  | 15 | 44 |  |  |  |  |
|  | ROR | All |  |  |  | 15 | 26 |  |  |  |  |
|  | ROR | All |  |  |  | 15 | 44 |  |  |  |  |
|  | ROR | All |  |  |  | 15 | 44 |  |  |  |  |
|  | ROR | PDO |  |  |  | 15 | 50 |  |  |  |  |
|  | Overturn | All |  |  | <5,000/lane | 15 | 42 |  |  |  |  |
|  | Overturn | All |  |  | >5,000/lane | 15 | 52 |  |  |  |  |
|  | Rear-end | All |  |  | <5,000/lane | 15 | 42 |  |  |  |  |
|  | Rear-end | All |  |  | >5,000/lane | 15 | 52 |  |  |  |  |
|  | Rear-end | All |  |  |  | 15 | 32 |  |  |  |  |
|  | Rear-end | All |  |  |  | 15 | 32 |  |  |  |  |
|  | Rear-end | All |  |  |  | 15 | 40 |  |  |  |  |
|  | Rear-end | All |  |  |  | 15 | 53 |  |  |  |  |
|  | Rear-end | PDO |  |  |  | 15 | 53 |  |  |  |  |


| Countermeasure(s) | Crash <br> Type | Crash Severity | Area Type | Road Type | Daily Traffic Volume (veh/day) | Ref | Effectiveness |  |  |  | Study Type |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | Crash Reduction Factor / Function | Std <br> Error | Range |  |  |
|  |  |  |  |  |  |  |  |  | Low | High |  |
| Increase number of lanes (cont'd) | Rightangle | All |  |  | <5,000/lane | 15 | 35 |  |  |  |  |
|  | Rightangle | All |  |  | >5,000/lane | 15 |  |  |  |  |  |
|  | Rightangle | All |  |  |  | 15 | 15 |  |  |  |  |
|  | Rightangle | PDO |  |  |  | 15 | 46 |  |  |  |  |
|  | Sideswipe | All |  |  | <5,000/lane | 15 | 38 |  |  |  |  |
|  | Sideswipe | All |  |  | >5,000/lane | 15 | 44 |  |  |  |  |
|  | Sideswipe | All |  |  |  | 15 | 30 |  |  |  |  |
|  | Sideswipe | All |  |  |  | 15 | 30 |  |  |  |  |
|  | Sideswipe | All |  |  |  | 15 | 35 |  |  |  |  |
|  | Sideswipe | PDO |  |  |  | 15 | 64 |  |  |  |  |
| Increase vertical grade by 1\% | All | All | Rural | 2-lane |  | 23 | -1.6P; P=percent grade | solut | value |  |  |
| Install acceleration/ deceleration lanes | All | All |  |  |  | 15 | 26 |  |  |  |  |
|  | All | All | All | All |  | 1 | 10 |  |  |  |  |
|  | All | All |  |  |  | 15 | 10 |  |  |  |  |
|  | All | All |  |  |  | 15 | 10 |  |  |  |  |
|  | All | All |  |  |  | 15 | 10 |  |  |  |  |
|  | All | All |  |  |  | 15 | 25 |  |  |  |  |
|  | All | All |  |  |  | 15 | 75 |  |  |  |  |
|  | Rear-end | All |  |  |  | 15 | 75 |  |  |  |  |
|  | Sideswipe | All |  |  |  | 15 | 75 |  |  |  |  |
| Install channelized lane | All | All |  |  |  | 15 | 67 |  |  |  |  |
|  | All | PDO |  |  |  | 15 | 62 |  |  |  |  |
|  | Rear-end | All |  |  |  | 15 | 93 |  |  |  |  |
| Install climbing lane (where large difference between car and truck speed) | All | Fatal/ Injury | Rural | 2-lane |  | 38 | 33 |  |  |  |  |

Dual CRF for CSAH 10 between CSAH 11 and West Creek Rd

Improvements include a 2 lane to 4 lane conversion and installing a median. The intersection of CSAH 11/CSAH 10 adds a NBR, creates a dual EBL and SBL, and switches to protected only phasing to EBL and SBL. Determined that the two factors below give best result for $B / C$.

CR1=Increase Number of Lanes
CR2=Install a raised median
$C R=1-(1-C R 1) *(1-C R 2)$
Other Crashes: CR=1 - (1-.31)*(1-.39) = . 58
Run off Road/Head On/Sideswipe: CR=1 - (1-.44)*(1-.39) = . 65
Right Angle: CR=1 - (1-.45)* $(1-.39)=.66$
Left-Turn: CR=1 - (1-.71)* $(1-.39)=.82$
Rear End: CR=1 $-(1-.52)^{*}(1-.39)=.71$


December 1, 2014
Ms. Elaine Koutsoukos, TAB Coordinator
Metropolitan Council
390 North Robert Street
Saint Paul, MN 55101

SUBJECT: APPLICATION FOR REGIONAL SOLICITATION FUNDS FOR CSAH 10 EXPANSION
Dear Ms. Koutsoukos,
The City of Chaska has been notified that Carver County is submitting an application for regional solicitation funding for the proposed CSAH 10 expansion between CSAH 11 and Creek Road, which travels through the City of Chaska. The proposed project will expand existing roadway and include a multiuse trail to improve bicycle and pedestrian safety, provide additional capacity, and correct existing safety issues. The project will also fill a critical gap in this east-west commuter and freight corridor, which is constructed to State Aid standards on both sides of the project.

The project is supported in local and Carver County planning documents, and is significant to the Minneapolis/St. Paul Metropolitan region. Therefore, we strongly support funding to be granted to help this important project move forward.

The City of Chaska supports this funding application and acknowledges Carver County's cost share policy. The city is willing to provide a portion of the local match funds for this project if Carver County is successful in securing regional solicitation funding from the Metropolitan Council. If you should have any questions, feel free to contact our City Engineer, Bill Monk, at 952-227-7525 or bmonk@chaskamn.com.

Sincerely,


Matt Podhradsky
City Administrator
MP/sp


## Project Limits

Figure 1
CSAH 10 Expansion
Carver County Regional Solicitation Roadway Expansion Application

## Roadway Area Definition

## Results

Project Length: 0.681 miles
Project Area: 2.286 sq mi


Project
Project Area

Regional Economy Roadway Expansion Project: CSAH 10 Expansion | Map ID: 1419885185019

Results
Project NOT IN area of Job Concentration.
Project NOT IN to area of
Manufacturing and Distribution.
Project NOT CONNECTED to area of Education Institutions.


## Project

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



Transit Connections Roadway Expansion Project: CSAH 10 Expansion | Map ID: 1419885185019


## Roadway Area Definition



Project
Project Area

Principal Arterials

- Principal Arterials Planned

A Minor Arterials - - A Minor Arterials Planned


Socio－Economic Conditions Roadway Expansion Project：CSAH 10 Expansion－Carver County｜Map ID： 1415204713614 Results

Project IN area of above average concentration of race or poverty．


Project
Racially concentrated area of poverty $\square$ Above reg＇l avg conc of race／poverty
Project Area $\square$ Concentrated area of poverty

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

3: CSAH 11 \& CSAH 10

| Direction | All |
| :--- | ---: |
| Volume (vph) | 1835 |
| Total Delay / Veh (s/v) | 25 |
| CO Emissions $(\mathrm{kg})$ | 1.86 |
| NOx Emissions $(\mathrm{kg})$ | 0.36 |
| VOC Emissions $(\mathrm{kg})$ | 0.43 |

## 3: CSAH 11 \& CSAH 10

| Direction | All |
| :--- | ---: |
| Volume (vph) | 1835 |
| Total Delay / Veh (s/v) | 12 |
| CO Emissions $(\mathrm{kg})$ | 1.45 |
| NOx Emissions $(\mathrm{kg})$ | 0.28 |
| VOC Emissions $(\mathrm{kg})$ | 0.34 |

3: CSAH 11 \& CSAH 10

| Direction | All |
| :--- | ---: |
| Volume (vph) | 1835 |
| Total Delay / Veh (s/v) | 25 |
| CO Emissions $(\mathrm{kg})$ | 1.86 |
| NOx Emissions $(\mathrm{kg})$ | 0.36 |
| VOC Emissions $(\mathrm{kg})$ | 0.43 |

## 3: CSAH 11 \& CSAH 10

| Direction | All |
| :--- | ---: |
| Volume (vph) | 1835 |
| Total Delay / Veh (s/v) | 12 |
| CO Emissions $(\mathrm{kg})$ | 1.45 |
| NOx Emissions $(\mathrm{kg})$ | 0.28 |
| VOC Emissions $(\mathrm{kg})$ | 0.34 |

Transit Connections Roadway Expansion Project: CSAH 10 Expansion - Carver County | Map ID: 1415204713614

Results
Transit with a Direct Connection to project: -- NONE --
*indicates Planned Alignments


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


