Application

04751-2016 Roadway Expansion
05224 - CSAH 19 (Woodbury Drive) Roadway Expansion
Regional Solicitation - Roadways Including Multimodal Elements

Status:
Submitted Date:
Submitted
07/13/2016 10:41 AM

## Primary Contact



## Organization Information

Name:

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

| Address: | PUBLIC WORKS |
| :--- | :--- |
|  | 11660 MYERON RD |


| * | STILLWATER | Minnesota | 55082 |
| :--- | :--- | :--- | :--- |
|  | City | State/Province | Postal Code/Zip |

County:
Washington

Phone:*
651-430-4325

## Fax:

PeopleSoft Vendor Number
0000028637 A 10

## Project Information

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

CSAH 19 (Woodbury Drive) Roadway Expansion
Washington

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

The proposed project includes multimodal safety and capacity improvements to County State Aid Highway (CSAH) 19 (Woodbury Drive) between I94 and Tamarack Drive in Woodbury. CSAH 19 is an A Minor Expander under Washington County jurisdiction.

CSAH 19 is currently congested due to its importance as an access point to l-94 and the density of commercial and residential land uses in the area. As development continues in Woodbury, congestion on CSAH 19 will increase.The CSAH 19 daily traffic volumes of 31,000 are approaching the maximum design capacity for a four-lane divided roadway. The project area is foretasted to exceed 50,000 ADT by 2030 and operate at a LOS F. Both the city and county identify expansion to six lanes in their long range plans to address capacity needs.

Proposed safety and capacity improvements are shown in Figure 1 and include:
1.I-94 to Tamarack Drive: Expand CSAH 19 from four to six lane divided roadway with shoulders 2.Hudson Road, Commerce Drive, Tamarack Drive: Construct right-turn lanes and dual left-turn lanes
3. Hudson Road: Construct eastbound right turn lane
4.New multi-use trail on west side of CSAH 19, from Hudson Road to Tamarack Drive
5.Relocate existing multi-use trail on the east side of CSAH 19

The proposed project will provide the following benefits:
1.Mobility: Expanding CSAH 19 from four to six lanes will address existing congestion and preserve mobility for the future. The CSAH 19-Hudson Road intersection is the second most congested intersection in Washington County. The project will provide additional lanes through this intersection to improve traffic operations at this location. 2.Vehicle safety: turn lanes will reduce conflicts between through and turning vehicles.
3.Pedestrian/bicycle safety: multi-use trail along west side of CSAH 19 will improve pedestrian/bicycle connectivity and reduce the need for pedestrians/bicyclists to cross CSAH 19 to access existing trail on the east side of CSAH 19.

Include location, road name/functional class, type of improvement, etc.
TIP Description Guidance (will be used in TIP if the project is
selected for funding)
Project Length (Miles)
CSAH 19 in Woodbury from I-94 to Tamarack Road, Expand to six lanes
0.7

## Project Funding

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

If yes, please identify the source(s)
Federal Amount \$3,997,456.00
Match Amount \$999,364.00
Minimum of $20 \%$ of project total
Project Total \$4,996,820.00
Match Percentage 20.0\%
Minimum of 20\%
Compute the match percentage by dividing the match amount by the project total
Source of Match Funds
Local
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:
2021
For TDM projects, select 2018 or 2019. For Roadway, Transit, or Trail/Pedestrian projects, select 2020 or 2021.
Additional Program Years:

## Project Information: Roadway Projects

| County, City, or Lead Agency | Washington County |
| :---: | :---: |
| Functional Class of Road | A-Minor Expander |
| Road System | CSAH |
| TH, CSAH, MSAS, CO. RD., TWP. RD., CITY STREET |  |
| Road/Route No. | 19 |
| i.e., 53 for CSAH 53 |  |
| Name of Road | Woodbury Drive |
| Example; 1st ST., MAIN AVE |  |
| Zip Code where Majority of Work is Being Performed | 55129 |
| (Approximate) Begin Construction Date | 03/02/2021 |
| (Approximate) End Construction Date | 11/30/2021 |
| TERMINI:(Termini listed must be within 0.3 miles of any work) |  |
| From: <br> (Intersection or Address) | I-94 |
| To: <br> (Intersection or Address) | Tamarack Drive |
| DO NOT INCLUDE LEGAL DESCRIPTION |  |
| Or At |  |

grading, aggregate base, bituminous base, bituminous surface,

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):
concrete, lighting, ped ramps, signal, bike path, curb and gutter, storm sewer

## Specific Roadway Elements

## CONSTRUCTION PROJECT ELEMENTS/COST <br> ESTIMATES

Removals (approx. 5\% of total cost) ..... \$177,900.00
Roadway (grading, borrow, etc.) ..... \$120,000.00
Roadway (aggregates and paving) ..... \$1,018,800.00
Subgrade Correction (muck) ..... $\$ 0.00$
Storm Sewer ..... \$592,200.00
Ponds ..... $\$ 0.00$
Concrete Items (curb \& gutter, sidewalks, median barriers) ..... \$447,300.00
Traffic Control ..... \$100,000.00
Striping ..... \$92,520.00
Signing ..... \$25,000.00
Lighting ..... \$30,000.00
Turf - Erosion \& Landscaping ..... \$181,200.00
Bridge ..... $\$ 0.00$
Retaining Walls ..... $\$ 0.00$
Noise Wall (do not include in cost effectiveness measure) ..... \$300,000.00
Traffic Signals ..... \$750,000.00
Wetland Mitigation ..... $\$ 0.00$
Other Natural and Cultural Resource Protection ..... $\$ 0.00$
RR Crossing ..... $\$ 0.00$
Roadway Contingencies ..... \$742,500.00
Other Roadway Elements ..... $\$ 0.00$
Totals ..... \$4,755,320.00
Specific Bicycle and Pedestrian Elements
CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES
Cost
Path/Trail Construction ..... $\$ 188,700.00$
Sidewalk Construction ..... $\$ 0.00$
On-Street Bicycle Facility Construction ..... $\$ 0.00$
Right-of-Way ..... $\$ 0.00$
Pedestrian Curb Ramps (ADA) ..... \$12,600.00
Crossing Aids (e.g., Audible Pedestrian Signals, HAWK) ..... $\$ 0.00$
Pedestrian-scale Lighting ..... $\$ 0.00$
Streetscaping ..... $\$ 0.00$
Wayfinding ..... $\$ 0.00$
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.) ..... $\$ 0.00$
Vehicles ..... $\$ 0.00$
Contingencies ..... $\$ 0.00$
Right-of-Way ..... $\$ 0.00$
Other Transit and TDM Elements ..... $\$ 0.00$
Totals ..... $\$ 0.00$
Transit Operating Costs

| Number of Platform hours | 0 |
| :--- | :--- |
| Cost Per Platform hour (full loaded Cost) | $\$ 0.00$ |
| Substotal | $\$ 0.00$ |
| Other Costs - Administration, Overhead,etc. | $\$ 0.00$ |

## Totals

| Total Cost | $\$ 4,996,820.00$ |
| :--- | :--- |
| Construction Cost Total | $\$ 4,996,820.00$ |
| Transit Operating Cost Total | $\$ 0.00$ |

## 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 2040 Transportation Policy Plan, the 2040 Regional Parks Policy Plan (2015), and the 2040 Water Resources Policy Plan (2015).

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

# Goal B: Strategies B1, B3, B6 p2.7 <br> Goal C: Strategies C1, C2, C9, C15 p2.8-10 

List the goals, objectives, strategies, and associated pages:
Goal D: Strategies D3, D4 p2.11

Goal E: Strategies E4, E5, E7, p2.13

Goal F: Strategy F3, p2.14
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.

## See Connections to Local Planning attachment

List the applicable documents and pages:

Woodbury Transportation Plan p 9.32-35: LOS F in 2030, need for expansion to 6-lanes

## Washington County Transportation Plan p4-55, 475: Congestion in 2030, planned future expansion

4.The project must exclude costs for studies, preliminary engineering, design, or construction engineering. Right-of-way costs are only eligible as part of bicycle/pedestrian projects, 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 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.
Roadway Expansion: \$1,000,000 to \$7,000,000
Roadway Reconstruction/ Modernization: \$1,000,000 to \$7,000,000
Roadway System Management \$250,000 to \$7,000,000
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.

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

Check the box to indicate that the project meets this requirement. Yes
10.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
11.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
12.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
13.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 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 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.
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 sufficiency rating less than 80 for rehabilitation projects and less than 50 for replacement projects. Additionally, the bridge must also be classified as structurally deficient or functionally obsolete.

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

Requirements - Roadways Including Multimodal Elements

## Expander/Augmentor/Non-Freeway Principal Arterial

Select one:

Area

Project Length

Average Distance
Upload Map

Expander
2.483
0.684
3.6301

1466436111000_RoadwayAreaMap.pdf

## Reliever: Relieves a Principle Arterial that is a Freeway Facility

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

## Reliever: Relives a Principle Arterial that is a Non-Freeway Facility

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 |  |

```
11:00am-12:00pm 0
12:00pm-1:00pm 0
1:00pm-2:00pm 0
2:00pm-3:00pm 0
3:00pm - 4:00pm 0
4:00pm - 5:00pm 0
5:00pm -6:00pm 0
6:00pm-7:00pm 0
7:00pm-8:00pm 0
8:00pm-9:00pm 0
9:00pm - 10:00pm 0
10:00pm-11:00pm 0
11:00pm-12:00am 0
```


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

Existing Employment within 1 Mile:4869

Existing Manufacturing/Distribution-Related Employment within 1
Mile:
Existing Students: 0
Upload Map
1466436088156_RegEconomyMap.pdf

## Measure C: Current Heavy Commercial Traffic

| Location: | CSAH 19 South of Commerce Drive |
| :--- | :--- |
| Current daily heavy commercial traffic volume: | 1109 |
| Date heavy commercial count taken: | $6 / 21 / 16$ |

## Measure D: Freight Elements

Capacity improvements as part of the project will improve freight efficiency and safety. Expanding CSAH 19 to a six-lane roadway will reduce congestion and support efficient distribution to commercial land uses along CSAH 19. Paved shoulders and turn lanes will also support efficiency and safety for trucks on CSAH 19. CSAH 19 is and will continue to be a 10-ton roadway.

CSAH 19 connects two important freight routes in the east Metro: l-94 and US 10/61. The project will add capacity in the one congested location on CSAH 19, making it a viable route for trucks connecting between I-94, US 10/61, and the intermodal facilities along US 10-61.

## Measure A: Current Daily Person Throughput

| Location | CSAH 19 from Hudson Road to I-94 |
| :--- | :--- |
| Current AADT Volume | 31000 |
| Existing Transit Routes on the Project | N/A |

For New Roadways only, list transit routes that will be moved to the new roadway
Upload Transit Map
1466436352468_TransitConnectionsMap.pdf

## Response: Current Daily Person Throughput

| Average Annual Daily Transit Ridership | 0 |
| :--- | :--- |
| Current Daily Person Throughput | 4 |

## 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

## Measure A: Project Location and Impact to Disadvantaged Populations

Select one:
Project located in Area of Concentrated Poverty with 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:

Benefits to populations:
-Bike and ped improvements: Multi-use trail on the west side of CSAH 19 will provide safer and more convenient bicycle and pedestrian connections. People accessing commercial destinations on the west side of CSAH 19 will have a safe place to walk and bike and will not have to cross CSAH 19 to access the existing trail on the east side of CSAH 19. Low income people who rely on bicycling/walking will benefit from improved connections. Children, families, people with disabilities, and the elderly will also benefit from the trail.

Response (Limit 2,800 characters; approximately 400 words)
-Traffic operations: While the project is not located in an area of above average or concentrated poverty, CSAH 19 serves a regional transportation purpose. Traffic operations and safety improvements will benefit low income populations who use CSAH 19 and live in surrounding areas with above regional average concentrations of race/poverty, such as the eastern part of Woodbury, Maplewood, Landfall, and Oakdale.

Negative impacts: The project is not expected to negatively impact low income populations, people of color, children, people with disabilities, or the elderly due to limited right of way impacts and project design.

The response should address the benefits, impacts, and mitigation for the populations affected by the project.
Upload Map
1466436415031_Socio-EconMap.pdf

## Measure B: Affordable Housing

City/Township
Segment Length in Miles (Population)
Woodbury

## Total Project Length

Total Project Length (Total Population)
0.7

Affordable Housing Scoring - To Be Completed By Metropolitan Council Staff

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

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

| Total Project Length (Miles) | 0.7 |  |
| :--- | :--- | :--- |
| Total Housing Score | 0 |  |
| Measure A: Infrastructure Age |  |  |
| Year of Original <br> Roadway Construction <br> or Most Recent <br> Reconstruction <br> 1983.0 | Segment Length | Calculation | | Calculation 2 |
| :---: |
|  |

## Average Construction Year

Weighted Year
1983.0

## Total Segment Length (Miles)

Total Segment Length

## Measure A: Vehicle Delay Reduction

| Total Peak | Total Peak | Total Peak |  | EXPLANATIO |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Total Peak | N of |  |
|  |  |  |  | methodology |  |
| Hour Delay | Hour Delay | Hour Delay | Volume |  | Hour Delay | methodology |  |
| Per Vehicle Without The | With The | Per Vehicle | Hour) | the Project <br> (Seconds) | calculate | HCM Reports |
| Without The Project | Project | Reduced by Project | Hour) |  | railroad crossing |  |
| Project |  | Project |  |  | delay, if applicable: |  |
|  | 14.0 | 6.0 | 3038.0 | 18228.0 | CSAH 19 and <br> Tamarack Drive | 14683355112 |
|  |  |  |  |  |  | 96_CSAH 19 |
| 20.0 |  |  |  |  |  | Synchro |
|  |  |  |  |  |  | Reports.pdf |
| 16.0 | 13.0 | 3.0 | 3046.0 | 9138.0 | CSAH 19 and <br> Commerce <br> Drive | 14683355501 |
|  |  |  |  |  |  | 72_CSAH 19 |
|  |  |  |  |  |  | Synchro |
|  |  |  |  |  |  | Reports.pdf |
| 22.0 | 21.0 | 1.0 | 4670.0 | 4670.0 |  | 14683356121 |
|  |  |  |  |  | CSAH 19 and | 80_CSAH 19 |
|  |  |  |  |  | Hudson Drive | Synchro |
|  |  |  |  |  |  | Reports.pdf |

## Total Delay

Total Peak Hour Delay Reduced

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

| Total (CO, NOX, and VOC) Peak | Total (CO, NOX, and VOC) Peak | Total (CO, NOX, and VOC) Peak |  | Total (CO, NOX, and VOC) Peak |
| :---: | :---: | :---: | :---: | :---: |
| Hour Emissions | Hour Emissions | Hour Emissions | Volume (Vehicles | Hour Emissions |
| Per Vehicle | Per Vehicle with | Reduced Per | Per Hour | Reduced by the |
| without the Project | the Project | Vehicle by the |  | Project |
| (Kilograms): | (Kilograms): | Project |  | (Kilograms): |
|  |  | (Kilograms): |  | (Kilograms): |
| 20.06 | 18.77 | 1.29 | 3778.0 | 4873.62 |
| 20 | 19 |  | 3778 | 4874 |

## Total

## 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, | Total (CO, NOX, |
| :---: | :---: |
| and VOC) Peak | and VOC) Peak |
| Hour Emissions | Hour Emissions |
| Per Vehicle | Per Vehicle with |
| without the Project | the Project |
| (Kilograms): | (Kilograms): |

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

|  | Total (CO, NOX, <br> and VOC) Peak |
| :---: | :---: |
| Volume (Vehicles | Hour Emissions <br> Per Hour): |
| Reduced by the <br> Project <br> (Kilograms): |  |
| 0 | 0 |

## Total Parallel Roadways

Emissions Reduced on Parallel Roadways
0
Upload Synchro Report
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: ..... 0Total (CO, NOX, and VOC) Peak Hour Emissions Reduced orProduced on New Roadway (Kilograms):EXPLANATION of methodology and assumptions used:(Limit1,400 characters; approximately 200 words)
Total (CO, NOX, and VOC) Peak Hour Emissions Reduced by the Project (Kilograms):

## 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:
Total delay in hours without the project:
Total stops in vehicles per hour without the project:
Cruise speed in miles per hour with the project:

0

| Vehicle miles traveled with the project: | 0 |
| :--- | :--- |
| Total delay in hours with the project: | 0 |
| Total stops in vehicles per hour with the project: | 0 |
| Fuel consumption in gallons (F1) | 0 |
| Fuel consumption in gallons (F2) | 0 |
| Fuel consumption in gallons (F3) | 0 |
| Total (CO, NOX, and VOC) Peak Hour Emissions Reduced by the | 0 |
| Project (Kilograms): |  |
| EXPLANATION of methodology and assumptions used:(Limit |  |
| 1,400 characters; approximately 200 words) |  |

## Measure A: Benefit of Crash Reduction

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

Rationale for Crash Modification Selected:
(Limit 1400 Characters; approximately 200 words)
Project Benefit (\$) from B/C Ratio:

Worksheet Attachment

CMF ID: 7929
Increase from 4 lanes to 6 lanes

The crash modification factor is for widening a roadway from four to six lanes. The crash modification factor is based on a study of widening urban roadways. This modification factor matches the proposed project, as the project would widen an urban roadway from four to six lanes.
1.3

1468334974695_CSAH 19 benefit-cost-worksheetaug2015.xlsx

## 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

Bicycle and pedestrian elements of project: The project will preserve the existing multi-use trail on the east side of CSAH 19. This trail is part of the Central Greenway Regional Trail. When fully developed, the regional trail will connect Big Marine Park Reserve, Lake Elmo Park Reserve, and Cottage Grove Ravine Regional Park. The project, and the Central Greenway Regional Trail, are part of a Tier 2 RBTN corridor. Additional information about the regional trail is included in the attachments.

The project will also construct new trail along the west side of CSAH 19, between Hudson Road and Tamarack Road. Currently, people must go out of their way to cross CSAH 19 to access the trail on the east side of the road, even if their origin and/or destination is on the west side. This results in additional travel time and potential conflicts between pedestrians/bicyclists and vehicles. There are many businesses on the west side of CSAH 19 that are destinations for people living and working in the area. A trail on the west side of CSAH 19 will make it easier and safer for people to access these commercial destinations on foot/bike.

Bicycle and pedestrian connections -- existing:
-Central Greenway Regional Trail: existing segment between Valley Creek Rd and Lake Elmo Park Reserve
-Trails along Hudson and Tamarack Road: access to residential and commercial nodes
-Trail around Margraf Lake: recreational
-Sidewalk along Commerce Dr: access to commercial nodes
-Sidewalk along Markgrafs Lake Dr: access to

Bicycle and pedestrian connections: planned:
-Central Greenway Regional Trail: extension south of Valley Creek Rd to Cottage Grove Ravine Regional Park,extension north to Lake Elmo Park Reserve.

There is no transit service in the project area.

## Transit Projects Not Requiring Construction

If the applicant is completing a transit or TDM 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

1)Project Scope (5 Percent of Points)

Meetings or contacts with stakeholders have occurred
Yes
100\%
Stakeholders have been identified
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
06/30/2016
3)Environmental Documentation (5 Percent of Points)

EIS

## Document Status:

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

75\%

Document in progress; environmental impacts identified; review request letters sent

50\%
Document not started Yes
0\%
Anticipated date or date of completion/approval
12/02/2019

## 4)Review of Section 106 Historic Resources (10 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\%
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\%
Unsure if there are any historic/archaeological resources in the project area

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 (10 Percent of Points)

4(f) Does the project impacts any public parks, public wildlife refuges,
public golf courses, wild \& scenic rivers or public private historic properties?
6 (f) Does the project impact any public parks, public wildlife refuges,
public golf courses, wild \& scenic rivers or historic property that
was purchased or improved with federal funds?
No Section 4f/6f resources located in the project area
Yes
100\%
No impact to $4 f$ property. The project is an independent
bikeway/walkway project covered by the bikeway/walkway Negative Declaration statement; letter of support received

Section 4 resources present within the project area, but no known adverse effects

80\%
Project impacts to Section 4f/6f resources likely
coordination/documentation has begun
50\%
Project impacts to Section 4f/6f resources likely
coordination/documentation has not begun
$30 \%$
Unsure if there are any impacts to Section 4f/6f resources in the project area

0\%
6)Right-of-Way (15 Percent of Points)

Right-of-way, permanent or temporary easements not required
100\%
Right-of-way, permanent or temporary easements has/have been acquired

100\%
Right-of-way, permanent or temporary easements required, offers made

75\%
Right-of-way, permanent or temporary easements required, appraisals made

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

Yes

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

0\%
Right-of-way, permanent or temporary 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)Interchange Approval (15 Percent of Points)*
*Please contact Karen Scheffing at MnDOT (Karen.Scheffing@state.mn.us or 651-234-7784)
to determine if your project needs to go through the Metropolitan Council/MnDOT Highway Interchange Request Committee.

Project does not involve construction of a new/expanded
interchange or new interchange ramps

Yes

100\%
Interchange project has been approved by the Metropolitan Council/MnDOT Highway Interchange Request Committee

## 100\%

Interchange project has not been approved by the Metropolitan Council/MnDOT Highway Interchange Request Committee 0\%
9)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 Yes

0\%
Anticipated date or date of completion
06/03/2020
10)Letting

Anticipated Letting Date
04/01/2021

## Measure A: Cost Effectiveness

\$4,996,820.00
\$300,000.00
\$4,696,820.00

Points Awarded in Previous Criteria

## Other Attachments

| File Name | Description | File Size |
| :--- | :--- | :--- |
| 2016-071_Regional Solicitation <br> Resolution FINAL.pdf | Resolution of support - Washington <br> County | 30 KB |
| Central Greenway Regional Trail <br> Information.pdf | Central Greenway Regional Trail <br> information | 680 KB |
| CSAH 19 - Connections to Local <br> Planning.pdf | Connections to Local Planning | 3.9 MB |
| CSAH 19 Concept Layout.pdf | CSAH 19 Concept Layout | 1.1 MB |
| Four to six lanes_CMF.pdf | Crash modification factors for expanding <br> roadway from four to six lanes | 91 KB |
| Woodbury_LoS_Signed.pdf | Letter of Support - Woodbury | 324 KB |



Regional Economy Roadway Expansion Project: CSAH 19 Expansion | Map ID: 1465851524702

Results
WITHIN ONE MI of project:
Totals by City:
Lake Elmo
Population: 1558
Employment: 824
Mfg and Dist Employment: 38
Woodbury
Population: 14326
Employment: 4045
Mfg and Dist Employment: 203

Postsecondary Students:
0


Project Points $\square$ Project Area $\square$ Manfacturing/Distribution Centers
Project
O PostSecondary Education Centers $\square$ Job Concentration Centers

For complete disclaimer of accuracy, please visit
For complete disclaimer of accuracy, please vist
htp://giswebsite.metc.state.mn.us/gissitenew/notice.asp




## 3: CSAH 19 \& Tamarack Rd

| Direction | All |
| :--- | ---: |
| Future Volume $(\mathrm{vph})$ | 3038 |
| Total Delay / Veh (s/v) | 20 |
| CO Emissions $(\mathrm{kg})$ | 4.01 |
| NOx Emissions $(\mathrm{kg})$ | 0.78 |
| VOC Emissions $(\mathrm{kg})$ | 0.93 |

6: CSAH 19 \& Commerce Dr

| Direction | All |
| :--- | ---: |
| Future Volume (vph) | 3046 |
| Total Delay / Veh (s/v) | 16 |
| CO Emissions $(\mathrm{kg})$ | 3.88 |
| NOX Emissions $(\mathrm{kg})$ | 0.75 |
| VOC Emissions $(\mathrm{kg})$ | 0.90 |

## 9: CSAH 19 \& Hudson Rd

| Direction | All |
| :--- | ---: |
| Future Volume (vph) | 4670 |
| Total Delay / Veh (s/v) | 22 |
| CO Emissions $(\mathrm{kg})$ | 6.18 |
| NOx Emissions $(\mathrm{kg})$ | 1.20 |
| VOC Emissions $(\mathrm{kg})$ | 1.43 |

## 3: CSAH 19 \& Tamarack Rd

| Direction | All |
| :--- | ---: |
| Future Volume $(\mathrm{vph})$ | 3038 |
| Total Delay / Veh (s/v) | 14 |
| CO Emissions $(\mathrm{kg})$ | 3.59 |
| NOx Emissions $(\mathrm{kg})$ | 0.70 |
| VOC Emissions $(\mathrm{kg})$ | 0.83 |

6: CSAH 19 \& Commerce Dr

|  |  |
| :--- | ---: |
| Direction | All |
| Future Volume $(\mathrm{vph})$ | 3046 |
| Total Delay / Veh (s/v) | 13 |
| CO Emissions kg$)$ | 3.62 |
| NOx Emissions $(\mathrm{kg})$ | 0.70 |
| VOC Emissions $(\mathrm{kg})$ | 0.84 |

## 9: CSAH 19 \& Hudson Rd

| Direction | All |
| :--- | ---: |
| Future Volume (vph) | 4670 |
| Total Delay / Veh (s/v) | 21 |
| CO Emissions $(\mathrm{kg})$ | 5.95 |
| NOx Emissions $(\mathrm{kg})$ | 1.16 |
| VOC Emissions $(\mathrm{kg})$ | 1.38 |

## 3: CSAH 19 \& Tamarack Rd

| Direction | All |
| :--- | ---: |
| Future Volume $(\mathrm{vph})$ | 3038 |
| Total Delay / Veh (s/v) | 20 |
| CO Emissions $(\mathrm{kg})$ | 4.01 |
| NOx Emissions $(\mathrm{kg})$ | 0.78 |
| VOC Emissions $(\mathrm{kg})$ | 0.93 |

6: CSAH 19 \& Commerce Dr

| Direction | All |
| :--- | ---: |
| Future Volume (vph) | 3046 |
| Total Delay / Veh (s/v) | 16 |
| CO Emissions $(\mathrm{kg})$ | 3.88 |
| NOX Emissions $(\mathrm{kg})$ | 0.75 |
| VOC Emissions $(\mathrm{kg})$ | 0.90 |

## 9: CSAH 19 \& Hudson Rd

| Direction | All |
| :--- | ---: |
| Future Volume (vph) | 4670 |
| Total Delay / Veh (s/v) | 22 |
| CO Emissions $(\mathrm{kg})$ | 6.18 |
| NOx Emissions $(\mathrm{kg})$ | 1.20 |
| VOC Emissions $(\mathrm{kg})$ | 1.43 |

## 3: CSAH 19 \& Tamarack Rd

| Direction | All |
| :--- | ---: |
| Future Volume $(\mathrm{vph})$ | 3038 |
| Total Delay / Veh (s/v) | 14 |
| CO Emissions $(\mathrm{kg})$ | 3.59 |
| NOx Emissions $(\mathrm{kg})$ | 0.70 |
| VOC Emissions $(\mathrm{kg})$ | 0.83 |

6: CSAH 19 \& Commerce Dr

|  |  |
| :--- | ---: |
| Direction | All |
| Future Volume $(\mathrm{vph})$ | 3046 |
| Total Delay / Veh (s/v) | 13 |
| CO Emissions kg$)$ | 3.62 |
| NOx Emissions $(\mathrm{kg})$ | 0.70 |
| VOC Emissions $(\mathrm{kg})$ | 0.84 |

## 9: CSAH 19 \& Hudson Rd

| Direction | All |
| :--- | ---: |
| Future Volume (vph) | 4670 |
| Total Delay / Veh (s/v) | 21 |
| CO Emissions $(\mathrm{kg})$ | 5.95 |
| NOx Emissions $(\mathrm{kg})$ | 1.16 |
| VOC Emissions $(\mathrm{kg})$ | 1.38 |

## 3: CSAH 19 \& Tamarack Rd

| Direction | All |
| :--- | ---: |
| Future Volume $(\mathrm{vph})$ | 3038 |
| Total Delay / Veh (s/v) | 20 |
| CO Emissions $(\mathrm{kg})$ | 4.01 |
| NOx Emissions $(\mathrm{kg})$ | 0.78 |
| VOC Emissions $(\mathrm{kg})$ | 0.93 |

6: CSAH 19 \& Commerce Dr

| Direction | All |
| :--- | ---: |
| Future Volume (vph) | 3046 |
| Total Delay / Veh (s/v) | 16 |
| CO Emissions $(\mathrm{kg})$ | 3.88 |
| NOX Emissions $(\mathrm{kg})$ | 0.75 |
| VOC Emissions $(\mathrm{kg})$ | 0.90 |

## 9: CSAH 19 \& Hudson Rd

| Direction | All |
| :--- | ---: |
| Future Volume (vph) | 4670 |
| Total Delay / Veh (s/v) | 22 |
| CO Emissions $(\mathrm{kg})$ | 6.18 |
| NOx Emissions $(\mathrm{kg})$ | 1.20 |
| VOC Emissions $(\mathrm{kg})$ | 1.43 |

## 3: CSAH 19 \& Tamarack Rd

| Direction | All |
| :--- | ---: |
| Future Volume $(\mathrm{vph})$ | 3038 |
| Total Delay / Veh (s/v) | 14 |
| CO Emissions $(\mathrm{kg})$ | 3.59 |
| NOx Emissions $(\mathrm{kg})$ | 0.70 |
| VOC Emissions $(\mathrm{kg})$ | 0.83 |

6: CSAH 19 \& Commerce Dr

|  |  |
| :--- | ---: |
| Direction | All |
| Future Volume $(\mathrm{vph})$ | 3046 |
| Total Delay / Veh (s/v) | 13 |
| CO Emissions kg$)$ | 3.62 |
| NOx Emissions $(\mathrm{kg})$ | 0.70 |
| VOC Emissions $(\mathrm{kg})$ | 0.84 |

## 9: CSAH 19 \& Hudson Rd

| Direction | All |
| :--- | ---: |
| Future Volume (vph) | 4670 |
| Total Delay / Veh (s/v) | 21 |
| CO Emissions $(\mathrm{kg})$ | 5.95 |
| NOx Emissions $(\mathrm{kg})$ | 1.16 |
| VOC Emissions $(\mathrm{kg})$ | 1.38 |

## 3: CSAH 19 \& Tamarack Rd

| Direction | All |
| :--- | ---: |
| Future Volume $(\mathrm{vph})$ | 3038 |
| Total Delay / Veh (s/v) | 20 |
| CO Emissions $(\mathrm{kg})$ | 4.01 |
| NOx Emissions $(\mathrm{kg})$ | 0.78 |
| VOC Emissions $(\mathrm{kg})$ | 0.93 |

6: CSAH 19 \& Commerce Dr

| Direction | All |
| :--- | ---: |
| Future Volume (vph) | 3046 |
| Total Delay / Veh (s/v) | 16 |
| CO Emissions $(\mathrm{kg})$ | 3.88 |
| NOX Emissions $(\mathrm{kg})$ | 0.75 |
| VOC Emissions $(\mathrm{kg})$ | 0.90 |

## 9: CSAH 19 \& Hudson Rd

| Direction | All |
| :--- | ---: |
| Future Volume (vph) | 4670 |
| Total Delay / Veh (s/v) | 22 |
| CO Emissions $(\mathrm{kg})$ | 6.18 |
| NOx Emissions $(\mathrm{kg})$ | 1.20 |
| VOC Emissions $(\mathrm{kg})$ | 1.43 |

## 3: CSAH 19 \& Tamarack Rd

| Direction | All |
| :--- | ---: |
| Future Volume $(\mathrm{vph})$ | 3038 |
| Total Delay / Veh (s/v) | 14 |
| CO Emissions $(\mathrm{kg})$ | 3.59 |
| NOx Emissions $(\mathrm{kg})$ | 0.70 |
| VOC Emissions $(\mathrm{kg})$ | 0.83 |

6: CSAH 19 \& Commerce Dr

|  |  |
| :--- | ---: |
| Direction | All |
| Future Volume $(\mathrm{vph})$ | 3046 |
| Total Delay / Veh (s/v) | 13 |
| CO Emissions kg$)$ | 3.62 |
| NOx Emissions $(\mathrm{kg})$ | 0.70 |
| VOC Emissions $(\mathrm{kg})$ | 0.84 |

## 9: CSAH 19 \& Hudson Rd

| Direction | All |
| :--- | ---: |
| Future Volume (vph) | 4670 |
| Total Delay / Veh (s/v) | 21 |
| CO Emissions $(\mathrm{kg})$ | 5.95 |
| NOx Emissions $(\mathrm{kg})$ | 1.16 |
| VOC Emissions $(\mathrm{kg})$ | 1.38 |

DATE March 24, 2016
MOTION
by COMMISSIONER Miron
department Public Works
SECONDED BY
COMMISSIONER
Bigham

## RESOLUTION AUTHORIZING SUBMITTAL OF APPLICATIONS TO THE METROPOLITAN COUNCIL FOR FUNDING UNDER THE METROPLITAN COUNCIL REGIONAL SOLICITATION

WHEREAS, the Regional Solicitation process started with the passage of the Intermodal Surface Transportation Efficiency Act (ISTEA) in 1991; and

WHEREAS, as authorized by the most recent federal surface transportation funding act, FAST ACT, projects will be selected for funding as part of three federal programs: Surface Transportation Program (STP), Congestion Mitigation and Air Quality Improvement (CMAQ) Program, and Transportation Alternatives Program (TAP).

WHEREAS, pursuant to the Regional Solicitation and the regulations promulgated there under, eligible project sponsors wishing to receive federal grants for a project shall submit an application first with the appropriate metropolitan planning organization (MPO) for review and inclusion in the MPO's Transportation Improvement Program (TIP); and

WHEREAS, the Metropolitan Council and the Transportation Advisory Board (TAB) act as the MPO for the seven county Twin Cities region and have released the Regional Solicitation for federal transportation funds; and

WHEREAS, the Metropolitan Council provides staffing to the TAB and facilitates the Regional Solicitation process; and

WHEREAS, Washington County is an eligible project sponsor for Regional Solicitation funds; and
WHEREAS, Washington County is proposing to submit grant applications to Metropolitan Council as part of the 2016 Regional Solicitation for the following projects:

1. Roadway Expansion: Interchange at CSAH 15 (Manning Avenue) and Trunk Highway (TH) 36.
2. Roadway Expansion: CSAH 19 (Woodbury Drive), Six Lanes from I-94 to Tamarack Road.
3. Roadway Reconstruction and Modernization: CSAH 12 (Stillwater Road) from Wildwood Road to CSAH 9 (Jamaca Avenue).
4. Multi-Use Trails and Bikeways: CSAH 5 (Stonebridge Trail) Connection to the Browns Creek Section of the Gateway State Trail.
5. Traffic Management System Signal Technology Upgrades (County wide)

WHEREAS, Washington County is committed to funding the $20 \%$ local match;
NOW, THEREFORE BE IT RESOLVED that the Washington County Board of Commissioners authorizes submittal of the applications listed above for funding under the 2016 Regional Solicitation.

ATTEST:

YES
NO
COUNTY ADMINISTRATOR

MIRON KRIESEL WEIK BIGHAM
$\frac{\underline{X}}{\frac{X}{X}} \quad=$

## Central Greenway Regional Trail

## The Central Greenway Regional Trail Master Plan was adopted by the Washington

 County Board on June 28, 2016
## Development Concept

When fully developed, the Central Greenway Regional Trail will provide residents of Washington County with direct access to a regional trail that connects three premier regional park facilities: Big Marine Park Reserve, Lake Elmo Park Reserve and Cottage Grove Ravine Regional Park. In addition, the regional trail will provide a separated, off -road facility for recreation and transportation purposes that will connect with adjacent local trails and other recreation amenities, such as Eagle Valley Golf Course and a future city park along the west side of Keats Avenue in Cottage Grove.

It is anticipated that the regional trail will be implemented in stages, with the construction of various stages driven by available funding and local factors, such as timing of adjacent roadway improvements, and public desire to expand the
regional trail system. Until the corridor is fully developed, gaps in the regional trail will exist. However, the ultimate trail geometry will consist of a 10 -foot-wide (minimum) paved surface, separate from any adjacent roadway, so that trail users will not share the roadway with motorized vehicles.


Typical Trail Section


Central Greenway Regional Trail Service Area

that will be most affected by increased traffic levels are the interstate freeways and Manning Avenue (TH 95), both under State jurisdiction. The majority of County and City roadways are projected to operate at acceptable levels in 2030 although traffic levels will continue to increase.

Figure 9-13 summarizes the volume-to-capacity LOS evaluation of roadways in Woodbury assuming projected 2030 traffic levels. All roadway segments identified as LOS E or F will require improvements except as noted.

## 2030 Future Roadway Capacity Improvement Needs

Based on the roadway segment capacity deficiency analysis the roadway improvements identified in Table 9-7 will be required to meet projected 2030 traffic volumes and maintain LOS D conditions at a minimum. These improvements are depicted graphically on Figure 9-14.

Also depicted in Table 9-7 are areas to monitor volumes and operations:

- Radio Drive between Tamarack Road and Valley Creek Road
- Woodbury Drive between $1 / 2$ mile south of Bailey Road and Dale Road

Since projected volumes for these areas are only slightly over the LOS E threshold capacity, improvements are not recommended. However these segments will be monitored for potential future action.

With the exception of Hudson Road, all roadways projected to require capacity improvements are under the jurisdiction of government agencies other than the City. The City will coordinate with Mn/DOT and Washington County to advance and facilitate necessary improvements.

The LOS deficiency and needs analysis performed for this 2030 transportation planning process is for roadway segments, and it is based purely on volume-to-capacity ratios. A related but different type of LOS analysis is done for intersections, but this analysis is beyond the scope of a long-range transportation plan. Thus, the roadway improvements addressed in the full Transportation Plan and summarized in this chapter identify a general need to add lanes on various roadway segments.

More localized improvement needs, such as safety-related improvements, intersection expansion projects and/ or the construction/modification of high volume commercial access locations will need to be further studied as conditions dictate. The City will continue to require site- and area-specific traffic studies to better deter-

Table 9-7: Future Roadway Segment Capacity Improvement Needs

| Project | Primary Agency | Coordinating Agency | Location |  | Length (miles) | Activity | Estimated Cost ${ }^{2}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | From | To |  |  |  |  |
| 1. 1-94 | Mn/DOT | Washington County | I-494 | Manning | 4.7 | Widen to 8-Lanes | \$ | 18,700,000 |
| 2. 1-494 | Mn/DOT | Washington County | West of City | I-94 | 5.3 | Widen to 6-Lanes | \$ | 21,000,000 |
| 3. Manning Avenue | Mn/DOT | Washington County | 1-94 | Hudson Road | 0.2 | Widen to 6-Lanes | \$ | 1,320,000 |
| 4. Manning Avenue | Mn/DOT | Washington County | Hudson Road | Valley Creek Road | 1.8 | Widen to 4-Lanes | \$ | 8,840,000 |
| 5. Woodbury Drive | Washington County | City of Woodbury | 1-94 | Tamarack Road | 0.7 | Widen to 6-Lanes | \$ | 3,300,000 |
| 6. Bailey Road ${ }^{1}$ | Washington County | City of Woodbury | Radio Drive | Settlers Ridge Pkwy | 3.0 | Widen to 4-Lanes | \$ | 15,000,000 |
| 7. Hudson Road | City of Woodbury | Washington County | Lakeview Drive | Manning | 1.6 | Widen to 4-Lanes | \$ | 8,300,000 |
| ${ }^{1}$ Based strictly on Figure 9-18 information (2030 Congestion Levels), the segment between Pioneer Drive and Woodbury Drive would not need to be upgraded from 2-lane. However it may not be desirable to have this segment be 2-lane between two other segments (Radio/Pioneer and Woodbury/Settlers Ridge) requiring expansion to 4-lane. |  |  |  |  |  |  |  |  |
| ${ }^{2}$ Cost Estimate assumptions (2008): |  |  |  |  |  |  |  |  |
| Right-of-Way is not included in the estimated cost of the improvement. |  |  |  |  |  |  |  |  |
| Expansion of freeway from 6 to 8 lanes, or from 4 to 6 lanes is $\$ 750$ per lineal foot. |  |  |  |  |  |  |  |  |
| Expansion of arterial from 4 to 6 lanes is $\$ 1,100$ per lineal foot, which includes traffic signals at $1 / 4$ mile spacing. |  |  |  |  |  |  |  |  |
| Expansion of arterial from 2 to 4 lanes is $\$ 950$ per lineal foot, which includes traffic signals at $1 / 4$ mile spacing. |  |  |  |  |  |  |  |  |
| SOURCE: WSB \& Associates, Inc. |  |  |  |  |  |  |  |  |
| K:101696-06iAdminiDocsiReportsiTables[MAY Woodbury Tables. . 1 IS]Future Improvements |  |  |  |  |  |  |  |  |

## Legend

- Not In Traffic Model
-_ Under Capacity (LOS A-C)
——Approaching Capacity (LOS D)
At Capacity (LOS E)
Over Capacity (LOS F)
——Committed Improvements



## Transportation Plan City of Woodbury

 Model and WSB \& Associates, Inc.\& Associates, Inc. Congestion Levels - 2030 Land Use Plan


Figure 4-17

Future 2030 Congestion

Volume/Capacity Ratio

0.85-1.00 (Approaching Capacity)
$1.01+($ Over Capacity $)$


Tran sportation/Transportation Plan
Washington County 2030 Comprehensive Plan
Prepared By: Washington County GIS Support Unit, IT Department Data Source: The Lawrence Group - 2007, Washington County IT, Met Council, MnDOT




## CMF / CRF Details

## CMF ID: 7929

## Increase from 4 lanes to 6 lanes

## Description:

## Prior Condition: 4 lane roadway

## Category: Roadway

Study: Assessment of safety effects for widening urban roadways in developing crash modification functions using nonlinearizing link functions, Park et al., 2015

| Star Quality Rating: <br> [View score details] |  |
| :---: | :---: |
|  | Crash Modification Factor (CMF) |
| Value: | 0.761 |
| Adjusted Standard Error: |  |
| Unadjusted Standard Error: | 0.088 |
|  | Crash Reduction Factor (CRF) |
| Value: | 23.9 (This value indicates a decrease in crashes) |
| Adjusted Standard Error: |  |
| Unadjusted Standard Error: | 8.8 |
| Applicability |  |
| Crash Type: | All |
| Crash Severity: | Fatal,Serious injury, Minor injury |
| Roadway Types: | Not specified |
| Number of Lanes: |  |
| Road Division Type: |  |
| Speed Limit: | 40-60 |


| Area Type: | Urban |
| :---: | :---: |
| Traffic Volume: | Minimum of 20500 to Maximum of 60683 Annual Average Daily Traffic (AADT) |
| Time of Day: |  |
| If countermeasure is intersection-based |  |
| Intersection Type: |  |
| Intersection Geometry: |  |
| Traffic Control: |  |
| Major Road Traffic Volume: |  |
| Minor Road Traffic Volume: |  |
| Development Details |  |
| Date Range of Data Used: | 2003 to 2012 |
| Municipality: |  |
| State: | FL |
| Country: |  |
| Type of Methodology Used: | Before/after using empirical Bayes or full Bayes |
| Sample Size Used: |  |

## Other Details

Included in Highway Safety Manual? No

Date Added to Clearinghouse: Mar-08-2016

## Comments:

[View the Full Study Details]

## Export PDF

Export this detail page as a PDF file

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

For more information, contact Karen Scurry, FHWA Office of Safety Programs 609-637-4207

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

June 17, 2016

Jan Lucke<br>Transit and Planning Manager<br>Washington County Public Works<br>$1494962^{\text {nd }} S t$. N.<br>Stillwater, MN 55082

## RE: Letter of Support for the CSAH 19 Roadway Expansion 2016 Regional Solicitation Application

Dear Ms. Lucke,
The City of Woodbury extends its support for the Regional Solicitation federal funding application for the proposed roadway expansion of County State Aid Highway (CSAH) 19 (Woodbury Drive) from I-94 to Tamarack Road. This proposed project would expand the roadway from four to six lanes to gain capacity and improve traffic operations in this congested corridor.

The City is aware Washington County is applying for funding through the Regional Solicitation for the expansion of CSAH 19 (Woodbury Drive). The local match is expected to be funded from a combination of local and county sources. This is among the busiest and most congested corridors in the Washington County system. The details of these improvements will be developed in collaboration with the City of Woodbury and other local stakeholders. Woodbury is in full support these efforts and is prepared to actively participate to help make this a successful project.


