

Application

10354 - 2018 Roadway Modernization 11002 - CSAH 10 (10th St) and CSAH 19 (Keats Ave) Roundabout Regional Solicitation - Roadways Including Multimodal Elements Status: Submitted Submitted Date: 07/13/2018 10:41 AM **Primary Contact Emily** Jorgensen Name:* Salutation First Name Middle Name Last Name Title: Planner **Department:** Email: emily.jorgensen@co.washington.mn.us Address: 11660 Myeron Rd 11660 Myeron Rd Stillwater 55082 Minnesota City State/Province Postal Code/Zip 651-430-4338 Phone:* Phone Ext. Fax: Regional Solicitation - Bicycle and Pedestrian Facilities What Grant Programs are you most interested in?

Organization Information

Name: WASHINGTON CTY

Jurisdictional Agency (if different):

Organization Type:						
Organization Website:						
Address:	PUBLIC WORKS					
	11660 MYERON RI)				
*	STILLWATER	Minnesota	55082			
	City	State/Province	Postal Code/Zip			
County:	Washington					
Phone:*	651-430-4325					
Thomas and the second s		Ext.				
Fax:						
PeopleSoft Vendor Number	0000028637A10					

Project Information

Project Name CSAH 10 (10th St) and CSAH 19 (Keats Ave) Roundabout

Lake Elmo

Primary County where the Project is Located Washington

Jurisdictional Agency (If Different than the Applicant):

Cities or Townships where the Project is Located:

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

The proposed project is a roundabout at the intersection of County State Aid Highway (CSAH) 19 (an A-Minor Expander) and CSAH 10 (an A-Minor Reliever) in Lake Elmo. The intersection is located at the entrance to Lake Elmo Park Reserve and is currently a four way stop. Many guests visit the park on evenings and weekends. As a result, congestion at the intersection is greater during off peak rather than peak hours.

Lake Elmo Park Reserve is an important asset and major destination for Washington County and the entire metropolitan area. The park is the most visited in Washington County which is an important distinction in a county known for its natural beauty and open spaces. Over 600,000 people visited the park annually. In addition, counts done in 2017 show that nearly 37% of park visitors traveled 11 miles or more to access the park. This includes over 17% who drove between 11 and 25 miles, approximately 10% who drove 26-50 miles, and nearly 10% who drove 50 miles or more to access the park.

Also noteworthy is the percentage of visitors accessing the park from areas with high populations of color or low-income. According to 2017 counts, 20% of park visitors came from East Metro zip codes with communities that contain large percentages of populations in poverty or of color. Such communities include the east side of Saint Paul and the city of Landfall. The county offers free admission to the park on Tuesdays throughout the year as well as free passes to families and veterans who qualify for community assistance in order to increase accessibility. Additionally, a 2017 report on special events revealed that the park has a large presence of minority families that routinely use the facilities to host family gatherings, often exceeding 300 guests.

As a result of the park?s importance to the county,

it remains critical for it to maintain an easily accessible, inviting, and safe entrance. The proposed roundabout would help accomplish all three of these goals. For vehicles the roundabout would help increase traffic flow and safety through traffic calming measures. In addition, pedestrians and bicyclists would benefit from sidewalk connections and pedestrian refuge islands to make crossing the busy intersection safer. Due to these positive impacts, Lake Elmo and metro residents as a whole would benefit from the construction of a roundabout at CSAH 19 and CSAH 10.

(Limit 2,800 characters; approximately 400 words)

TIP Description <u>Guidance</u> (will be used in TIP if the project is selected for funding)

Project Length (Miles)

to the nearest one-tenth of a mile

CSAH 19 AND CSAH 10, INTERST, CONSTRUCT ROUNDABOUT

0.4

Project Funding

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

No

If yes, please identify the source(s)

Federal Amount \$1,809,200.00

Match Amount \$452,300.00

Minimum of 20% of project total

Project Total \$2,261,500.00

Match Percentage 20.0%

Minimum of 20%

Compute the match percentage by dividing the match amount by the project total

Source of Match Funds County State Aid

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: 2022

Select 2020 or 2021 for TDM projects only. For all other applications, select 2022 or 2023.

Additional Program Years:

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

Project Information-Roadways

County, City, or Lead Agency Washington County

CSAH 19, A-Minor Expander

Functional Class of Road

CSAH 10, A-Minor Reliever

Road System CSAH

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

Road/Route No. 1910

i.e., 53 for CSAH 53

Name of Road Lake Elmo Ave, 10th St

Example; 1st ST., MAIN AVE

Zip Code where Majority of Work is Being Performed 55042

(Approximate) Begin Construction Date 06/01/2022
(Approximate) End Construction Date 09/30/2018

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

From

(Intersection or Address)

To:

(Intersection or Address)

DO NOT INCLUDE LEGAL DESCRIPTION

Or At Intersection of CSAH 10 and CSAH 19

Grade, Agg Base, Bit Base, Bit Surface, Concrete Surface,
Primary Types of Work
Sidewalk, Bike Path, Drainage, Signing, Striping, Curb and

Gutter, Ped Ramps, Crosswalks

Examples: GRADE, AGG BASE, BIT BASE, BIT SURF, SIDEWALK, CURB AND GUTTER,STORM SEWER, SIGNALS, LIGHTING, GUARDRAIL, BIKE PATH, PED RAMPS, BRIDGE, PARK AND RIDE, ETC.

BRIDGE/CULVERT PROJECTS (IF APPLICABLE)

Old Bridge/Culvert No.:

New Bridge/Culvert No.:

Structure is Over/Under (Bridge or culvert name):

Requirements - All Projects

All Projects

1. The project must be consistent with the goals and policies in these adopted regional plans: Thrive MSP 2040 (2014), the 2040 Transportation Policy Plan (2015), 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

2. The project must be consistent with the 2040 Transportation Policy Plan. Reference the 2040 Transportation Plan goals, objectives, and strategies that relate to the project.

List the goals, objectives, strategies, and associated pages: See attached "Local Planning Documents"

3. The project or the transportation problem/need that the project addresses must be in a local planning or programming document. Reference the name of the appropriate comprehensive plan, regional/statewide plan, capital improvement program, corridor study document [studies on trunk highway must be approved by the Minnesota Department of Transportation and the Metropolitan Council], or other official plan or program of the applicant agency [includes Safe Routes to School Plans] that the project is included in and/or a transportation problem/need that the project addresses.

List the applicable documents and pages:

See attached "Local Planning Documents"

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

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

5.Applicants that are not 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 Modernization and Spot Mobility: \$1,000,000 to \$7,000,000

Traffic Management Technologies (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 (ADA).

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

9.In order for a selected project to be included in the Transportation Improvement Program (TIP) and approved by USDOT, the public agency sponsor must either have, or be substantially working towards, completing a current Americans with Disabilities Act (ADA) self-evaluation or transition plan that covers the public right of way/transportation, as required under Title II of the ADA.

Yes

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

09/30/2015

Date plan adopted by governing body

The applicant is a public agency that employs 50 or more people and is currently working towards completing an ADA transition plan that covers the public rights of way/transportation.

Date process started

Date of anticipated plan completion/adoption

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

Date self-evaluation completed

The applicant is a public agency that employs fewer than 50 people and is working towards completing an ADA self-evaluation that covers the public rights of way/transportation.

Date process started

Date of anticipated plan completion/adoption

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

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

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

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

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

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

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

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

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

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

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

Roadways Including Multimodal Elements

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

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

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

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

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

Bridge Rehabilitation/Replacement 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.

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

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

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

Requirements - Roadways Including Multimodal Elements

Specific Roadway Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Mobilization (approx. 5% of total cost)	\$100,000.00
Removals (approx. 5% of total cost)	\$100,000.00
Roadway (grading, borrow, etc.)	\$385,000.00
Roadway (aggregates and paving)	\$966,500.00
Subgrade Correction (muck)	\$0.00
Storm Sewer	\$200,000.00
Ponds	\$0.00
Concrete Items (curb & gutter, sidewalks, median barriers)	\$90,000.00
Traffic Control	\$50,000.00
Striping	\$20,000.00
Signing	\$30,000.00
Lighting	\$80,000.00
Turf - Erosion & Landscaping	\$50,000.00
Bridge	\$0.00
Retaining Walls	\$50,000.00
Noise Wall (not calculated in cost effectiveness measure)	\$0.00
Traffic Signals	\$0.00
Wetland Mitigation	\$0.00
Other Natural and Cultural Resource Protection	\$0.00
RR Crossing	\$0.00

Totals	\$2,121,500.00
Other Roadway Elements	\$0.00
Roadway Contingencies	\$0.00

Specific Bicycle and Pedestrian Elements	Specific Bio	vcle and F	Pedestrian	Elements
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CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost	
Path/Trail Construction	\$50,000.00	
Sidewalk Construction	\$0.00	
On-Street Bicycle Facility Construction	\$0.00	
Right-of-Way	\$0.00	
Pedestrian Curb Ramps (ADA)	\$15,000.00	
Crossing Aids (e.g., Audible Pedestrian Signals, HAWK)	\$0.00	
Pedestrian-scale Lighting	\$0.00	
Streetscaping	\$75,000.00	
Wayfinding	\$0.00	
Bicycle and Pedestrian Contingencies	\$0.00	
Other Bicycle and Pedestrian Elements	\$0.00	
Totals	\$140,000.00	

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
Contingencies	\$0.00
Right-of-Way	\$0.00
Other Transit and TDM Elements	\$0.00
Totals	\$0.00

Transit Operating Costs

Number of Platform hours 0

Cost Per Platform hour (full loaded Cost) \$0.00

Subtotal \$0.00

Other Costs - Administration, Overhead, etc. \$0.00

Totals

Total Cost \$2,261,500.00

Construction Cost Total \$2,261,500.00

Transit Operating Cost Total \$0.00

Congestion on adjacent Parallel Routes:

Adjacent Parallel Corridor Intersection of CSAH 13 at CSAH 10

Adjacent Parallel Corridor Start and End Points:

Start Point: CSAH 13

End Point: CSAH 10

Free-Flow Travel Speed: 39

The Free-Flow Travel Speed is black number.

Peak Hour Travel Speed: 33

The Peak-Hour Travel Speed is red number.

Percentage Decrease in Travel Speed in Peak Hour Compared to

Free-Flow (calculation):

15.38%

Upload the "Level of Congestion" map: 1531411532890_Congestion Map.pdf

Principal Arterial Intersection Conversion Study:

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

(65 Points)

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

(55 Points)

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

(45 Points)

Not listed as a priority in the study: Yes

(0 Points)

Congestion Management and Safety Plan IV:

Proposed at-grade project that reduces delay at a CMSP opportunity area:

(65 Points)

Not listed as a CMSP priority location:

(0 Points)

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

Existing Employment within 1 Mile: 903

Existing Manufacturing/Distribution-Related Employment within 1

Mile:

68

Yes

Existing Post-Secondary Students within 1 Mile: 0

Upload Map 1531411574171_Regional Economy Map.pdf

Please upload attachment in PDF form.

Measure C: Current Heavy Commercial Traffic

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

Along Tier 1:

Along Tier 2:

Along Tier 3:

The project provides a direct and immediate connection (i.e., intersects) with either a Tier 1, Tier 2, or Tier 3 corridor:

None of the tiers: Yes

Measure A: Current Daily Person Throughput

Location Intersection of CSAH 10 at CSAH 19

Current AADT Volume 8300
Existing Transit Routes on the Project N/A

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

Upload Transit Connections Map 1531411643718_Transit Connections Map.pdf

Please upload attachment in PDF form.

Response: Current Daily Person Throughput

Measure B: 2040 Forecast ADT

Use Metropolitan Council model to determine forecast (2040) ADT

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

OR

Washington County

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

CSAH 10: 13,800

CSAH 19: 16,500

Forecast (2040) ADT volume

16500

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

Select one:

Project located in Area of Concentrated Poverty with 50% or more of residents are people of color (ACP50):

(up to 100% of maximum score)

Project located in Area of Concentrated Poverty:

(up to 80% of maximum score)

Projects census tracts are above the regional average for population in poverty or population of color:

(up to 60% of maximum score)

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

(up to 40% of maximum score)

1.(0 to 3 points) A successful project is one that has actively engaged low-income populations, people of color, children, persons with disabilities, and the elderly during the project's development with the intent to limit negative impacts on them and, at the same time, provide the most benefits.

Describe how the project has encouraged or will engage the full cross-section of community in decision-making. Identify the communities to be engaged and where in the project development process engagement has occurred or will occur. Elements of quality engagement include: outreach to specific communities and populations that are likely to be directly impacted by the project; techniques to reach out to populations traditionally not involved in the community engagement related to transportation projects; residents or users identifying potential positive and negative elements of the project; and surveys, study recommendations, or plans that provide feedback from populations that may be impacted by the proposed project. If relevant, describe how NEPA or Title VI regulations will guide engagement activities.

Response:

The proposed roundabout at CSAH 19 and CSAH 10 is located at the only entrance to the Lake Elmo Regional Park Reserve in the City of Lake Elmo. The proposed roundabout will provide more efficient access to one of the Region?s most important recreational assets, with over 600,000 of visitors annually. To date, engagement efforts have been conducted in this area as part of the Central Greenway Regional Trail planning efforts. The proposed roundabout will be located along the Central Greenway Regional Trail alignment. The County hosted various engagement events like open houses, pop-up events, focus groups and online activities.

While the area immediately surrounding the roundabout does not have a high concentration of underrepresented populations, this project is critical as it ensures safe and efficient access to Lake Elmo Regional Park which actively looks to serve underrepresented populations. Regional parks are a low-cost recreational opportunity for low-income families. Active living choices are encouraged as the park is free to those who access the park using non-motorized transportation. Lake Elmo Regional Park offers many paved trails and ADA compliant facilities for people with disabilities and the elderly. There are ample programming opportunities throughout the year including children?s camps.

(Limit 1,400 characters; approximately 200 words)

2.(0 to 7 points) Describe the projects benefits to low-income populations, people of color, children, people with disabilities, and the elderly. Benefits could relate to safety; public health; access to destinations; travel time; gap closure; leveraging of other beneficial projects and investments; and/or community cohesion. Note that this is not an exhaustive list.

Response:

As the sole entrance for the public into Lake Elmo Park Reserve the intersection at CSAH 19 and CSAH 10 serves as an important access point. Approximately one mile east of the entrance to the park is the Cimarron residential community. This intersection experiences the most congestion during the off-peak hours like evenings and weekends. Cimarron, a manufactured home community, is a naturally occurring affordable housing community. The Cimarron community provides an affordable option for individuals and families. A proposed roundabout at the CSAH 19 and CSAH 10 intersection will construct sidewalks on all four corners. The trail created to the east of CSAH 19 on CSAH 10 will provide the future possibility of a trail extension between Cimarron and Lake Elmo Park Reserve. On a regional scale, the proposed roundabout lies a short distance from nearby areas of concentrated poverty. With convenient access to I-94 the park is readily accessible to communities such as Landfall and the east side of St. Paul. The roundabout will make park access by vehicle less troublesome for individuals and families in both communities.

Additionally, there are two schools, Oak Land Middle School and Skyview Community Elementary School, located along CSAH 10 within 2.5 miles of the project area. Proximity to schools and the rapidly developing commercial areas along CSAH 19, make these improvements critical. The creation of a roundabout at the intersection of CSAH 19 and CSAH 10 will improve traffic flow.

The implementation of a roundabout will also serve as a traffic calming measure to increase safety. Safety will also be increased for pedestrians through the creation of pedestrian refuge islands at the roundabout. Currently pedestrians wanting to enter Lake Elmo Park Reserve are forced to cross

north on a trail paralleling CSAH 19. A pedestrian refuge island will allow users to cross the intersection in two short crosswalk segments. This creates a safer environment for pedestrians and cyclists. These elements create healthy, active living options for community members who are using non-motorized transportation options to access the parks or nearby destinations.

(Limit 2,800 characters; approximately 400 words)

3.(-3 to 0 points) Describe any negative externalities created by the project along with measures that will be taken to mitigate them. Negative externalities can result in a reduction in points, but mitigation of externalities can offset reductions.

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

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

Increased noise.

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

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

Increased speed and/or cut-through traffic.

Removed or diminished safe bicycle access.

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

Displacement of residents and businesses.

Construction/implementation impacts such as dust; noise; reduced access for travelers and to businesses; disruption of utilities; and eliminated street crossings. These tend to be temporary.

Other

Response:

(Limit 2,800 characters; approximately 400 words)

Upload Map

No negative externalities are foreseen for the proposed roundabout project. Construction will be completed in stages so the intersection can remain open. The project will provide a number of benefits for Lake Elmo and surrounding communities.

Benefits include easier access to Lake Elmo Park Reserve, increased pedestrian safety, and easier access to area destinations.

1531411854765_Socio-Economic Conditions Map.pdf

Measure B: Affordable Housing

City	Segment Length (For stand-alone projects, enter population from Regional Economy map) within each City/Township	Segment Length/Total Project Length	Score	Housing Score Multiplied by Segment percent
Lake Elmo	2633.0	1.0	21.0	21.0

Total Project Length

Total Project Length (as entered in the "Project Information" form) 0.4

Affordable Housing Scoring

Total Project Length (Miles) or Population 2633.0

Total Housing Score 21.0

Affordable Housing Scoring

Measure A: Year of Roadway Construction

Year of Original Roadway Construction

Segment Length or Most Recent Reconstruction 1986 0.4 794.4 1986.0 0 794 1986

Calculation

Calculation 2

Total Project Length

Total Project Length (as entered in "Project Information" form) 0.4

Average Construction Year

Weighted Year 1986 **Total Segment Length**

0.4

Measure B: Geometric, Structural, or Infrastructure Improvements

Improved roadway to better accommodate freight movements: Yes

Removing the four-way stop will improve freight by Response:

providing consistent non-stop movement through

the intersection.

(Limit 700 characters; approximately 100 words)

Improved clear zones or sight lines:

Response:

(Limit 700 characters; approximately 100 words)

Improved roadway geometrics: Yes

Adding geometric curvature will slow traffic

Response: naturally reducing the risk of a side-swipe accident

caused by a driver missing the four-way stop.

(Limit 700 characters; approximately 100 words)

Access management enhancements:

Response:

(Limit 700 characters; approximately 100 words)

Vertical/horizontal alignment improvements:

Response:

Response:

(Limit 700 characters; approximately 100 words)

Improved stormwater mitigation: Yes

Stormwater current runs untreated into Goose

Lake, this project will allow for stormwater

enhancements where appropriate

(Limit 700 characters; approximately 100 words)

Signals/lighting upgrades:

Response:

(Limit 700 characters; approximately 100 words)

Other Improvements Yes Pedestrian Safety ? Roundabouts will improve pedestrian safety at this entrance to the Lake Elmo Park Reserve

Pedestrian Accessibility? This project will add trail to all sides of the roundabout to improve access to the Lake Elmo Park Reserve

Response:

Injury Accidents? Roundabout, by way of geometric design, reduce vehicle speeds and have been proven to reduce injury accidents

Environmental? Research shows that traffic flow improves following conversion of traditional intersections to roundabouts. Less idling, in turn, reduces vehicle emissions and fuel consumption.

(Limit 700 characters; approximately 100 words)

Measure A: Congestion Reduction/Air Quality

Total Peak Hour Delay Per Vehicle Without The Project (Seconds/Veh icle)	Total Peak Hour Delay Per Vehicle With The Project (Seconds/Veh icle)	Total Peak Hour Delay Per Vehicle Reduced by Project (Seconds/Veh icle)	Volume (Vehicles per hour)	Total Peak Hour Delay Reduced by the Project:	N of methodology used to calculate railroad crossing delay, if applicable.	Synchro or HCM Reports
53.8	9.9	43.9	1152	50572.8		15314123493 75_Keats & 10th Avenue - HCM 2010 Report.pdf

Vehicle Delay Reduced

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 Hour Emissions
without the Project
(Kilograms):

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

1.68

0.61

1

1.07 **1**

2

Total

Total Emissions Reduced:

1.07

Upload Synchro Report

1531412705765_Keats & 10th Avenue_Emissions -

Report.pdf

Please upload attachment in PDF form. (Save Form, then click 'Edit' in top right to upload file.)

Measure B: Roadway projects that are constructing new roadway segments, but do not include railroad grade-separation elements (for Roadway Expansion applications only):

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

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

0

0

0

Total Parallel Roadway

Emissions Reduced on Parallel Roadways

0

0

Upload Synchro Report

Please upload attachment in PDF form. (Save Form, then click 'Edit' in top right to upload file.)

New Roadway Portion:

Cruise speed in miles per hour with the project:

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:

Total (CO, NOX, and VOC) Peak Hour Emissions Reduced or Produced on New Roadway (Kilograms):

0

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

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

0.0

Measure B:Roadway projects that include railroad grade-separation elements

Cruise speed in miles per hour without the project:	0
Vehicle miles traveled without the project:	0
Total delay in hours without the project:	0
Total stops in vehicles per hour without the project:	0
Cruise speed in miles per hour with the project:	0
Vehicle miles traveled with the project:	0
Total delay in hours with the project:	0
Total stops in vehicles per hour with the project:	0
Fuel consumption in gallons (F1)	0
Fuel consumption in gallons (F2)	0
Fuel consumption in gallons (F3)	0
Total (CO, NOX, and VOC) Peak Hour Emissions Reduced by the Project (Kilograms):	0
EXPLANATION of methodology and assumptions used:(Limit 1,400 characters; approximately 200 words)	

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

Crash Modification Factor Used:

1.063 and 0.367

(Limit 700 Characters; approximately 100 words)

CMF of 1.063 was applied to all property damage only crashes and a CMF of 0.37 was applied to all K,A,B,C crashes. The 1.063 assumes an increase in property damage only crashes will occur with the installation of a roundabout. This CMF was consistent with CMF ID 4926 and is consistent with roundabout crash research.

Rationale for Crash Modification Selected:

A CMF of 0.37 was applied to all K,A,B,C crashes, which assumes injury related crashes will decrease with the installation of a roundabout. This CMF was consistent with CMF ID 4927 and is consistent with roundabout crash research.

Both CMF factors are rated as 4 stars. The above CMFs were selected based on the conversion of the current all-way stop intersection to a multi-lane roundabout.

(Limit 1400 Characters; approximately 200 words)

Project Benefit (\$) from B/C Ratio \$4,497,388.00

Worksheet Attachment 1531412797968_Keats_&_10th_CrashSummary.pdf

Please upload attachment in PDF form.

Roadway projects that include railroad grade-separation elements:

Current AADT volume: 0

Average daily trains: 0

Crash Risk Exposure eliminated: 0

Measure A: Multimodal Elements and Existing Connections

Response:

The intersection of CSAH 19 and CSAH 10 experiences the most congestion during the offpeak hours. Weekends and evening hours are often the busiest for the Lake Elmo Regional Park Reserve, year-round. With over 600,000 annual visitors, this intersection can present a barrier and hostile environment for non-motorized and multimodal transportation. The proposed roundabout also benefits pedestrians and cyclists as it includes trail facilities on each leg of the intersection and pedestrian crossings. These amenities will allow non-motorized transportation to safely and efficiently navigate the intersection. This project takes place at the intersection of the two Tier 2 alignments on the Metropolitan Council?s Regional Bicycle Transportation Network (RBTN). CSAH 10 is a critical east-west corridor for central Washington County. CSAH 19 allows users to safely cross over I-94 and access Woodbury and Cottage Grove via an off-road facility, the Central Greenway Regional Trail. Destinations beyond Lake Elmo Regional Park Reserve include multiple schools and rapidly developing commercial areas within 3 miles of the project area.

These roundabout improvements will also provide benefits to area transit. The Guardian Angels Catholic Church Park-and-Ride in the City of Oakdale is located about 2.5 miles away from the project area and offers express service to downtown Minneapolis. This park-and-ride has a capacity of 415 vehicles and was 81% utilized in 2017 according to the Metropolitan Council?s 2017 Park-and-Ride Report. The roundabout improvements will increase travel safety and time in accessing the park-and-ride for both vehicular and non-motorized traffic. Additionally, a park-and-ride has been proposed in the City of Lake Elmo on the north side of I-94, west of Manning Avenue. The proposed park-and-ride site is about 3 miles away from the proposed roundabout location. If this plan moves forward the roundabout improvements will

provide safety and efficiency benefits to this parkand-ride as well.

(Limit 2,800 characters; approximately 400 words)

Transit Projects Not Requiring Construction

If the applicant is completing a transit application that is operations only, check the box and do not complete the remainder of the form. These projects will receive full points for the Risk Assessment.

Park-and-Ride and other transit construction projects require completion of the Risk Assessment below.

Check Here if Your Transit Project Does Not Require Construction

Measure A: Risk Assessment - Construction Projects

1)Layout (30 Percent of Points)

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

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

100%

Attach Layout

1531414201625_Exhibit_11x17-071118_B.pdf

Please upload attachment in PDF form.

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

50%

Attach Layout

Please upload attachment in PDF form.

Layout has not been started

0%

Anticipated date or date of completion

2)Review of Section 106 Historic Resources (20 Percent of Points)

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

100%

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

Yes

100%

Historic/archeological property impacted; determination of no adverse effect anticipated

80%

Historic/archeological property impacted; determination of adverse effect anticipated

40%

Unsure if there are any historic/archaeological properties in the project area.

0%

Project is located on an identified historic bridge

3)Right-of-Way (30 Percent of Points)

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

Yes

100%

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

50%

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

25%

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

0%

Anticipated date or date of acquisition

4)Railroad Involvement (20 Percent of Points)

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

Yes

100%

Signature Page

Please upload attachment in PDF form.

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

50%

Railroad Right-of-Way Agreement required; negotiations have not begun.

0%

Anticipated date or date of executed Agreement

Measure A: Cost Effectiveness

Total Project Cost (entered in Project Cost Form): \$2,261,500.00

Enter Amount of the Noise Walls: \$0.00

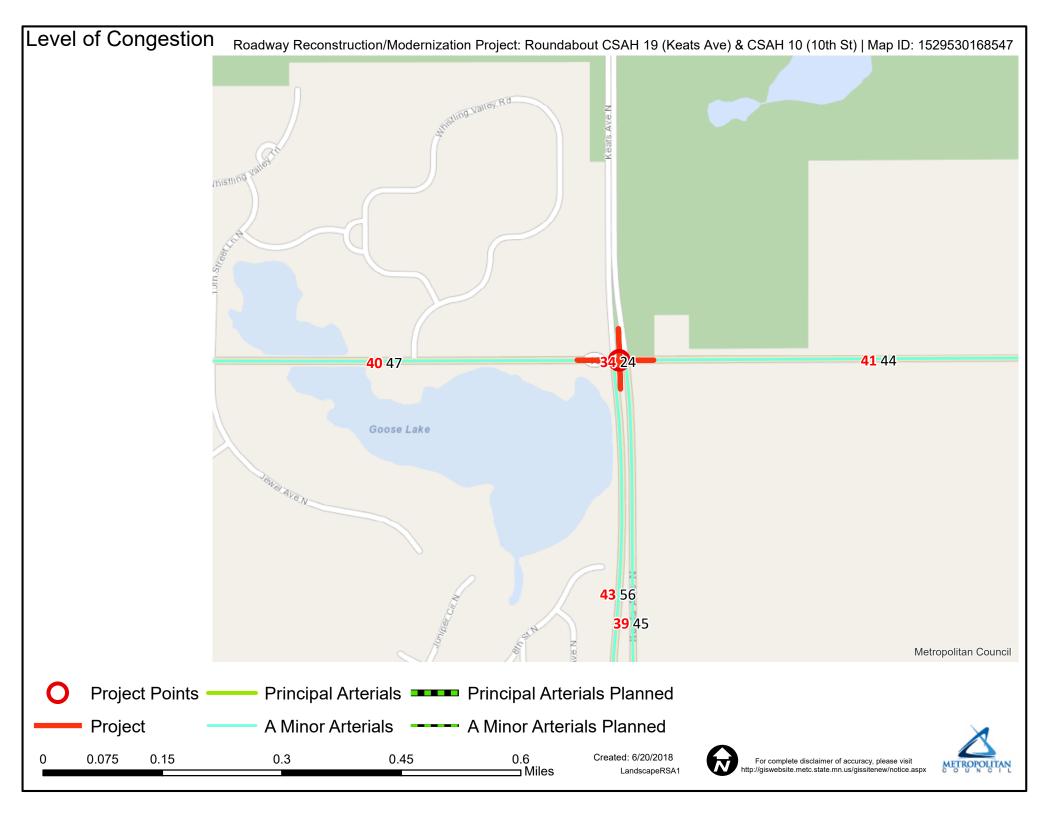
Total Project Cost subtract the amount of the noise walls: \$2,261,500.00

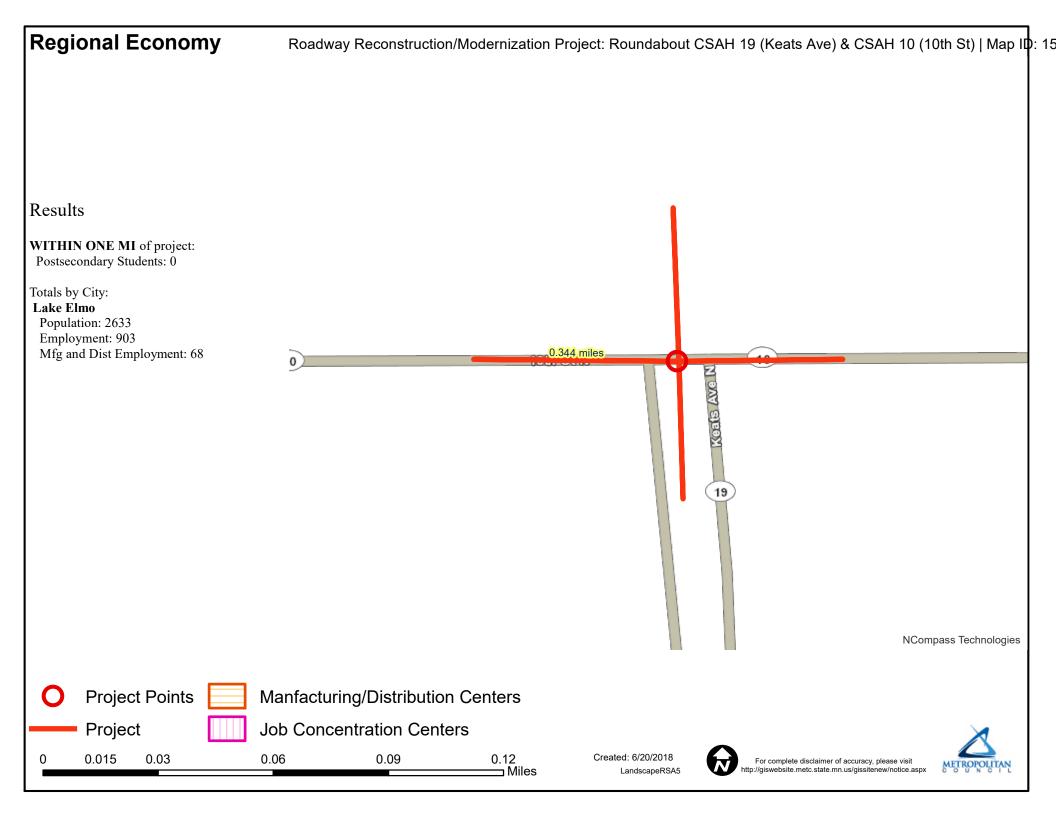
Points Awarded in Previous Criteria

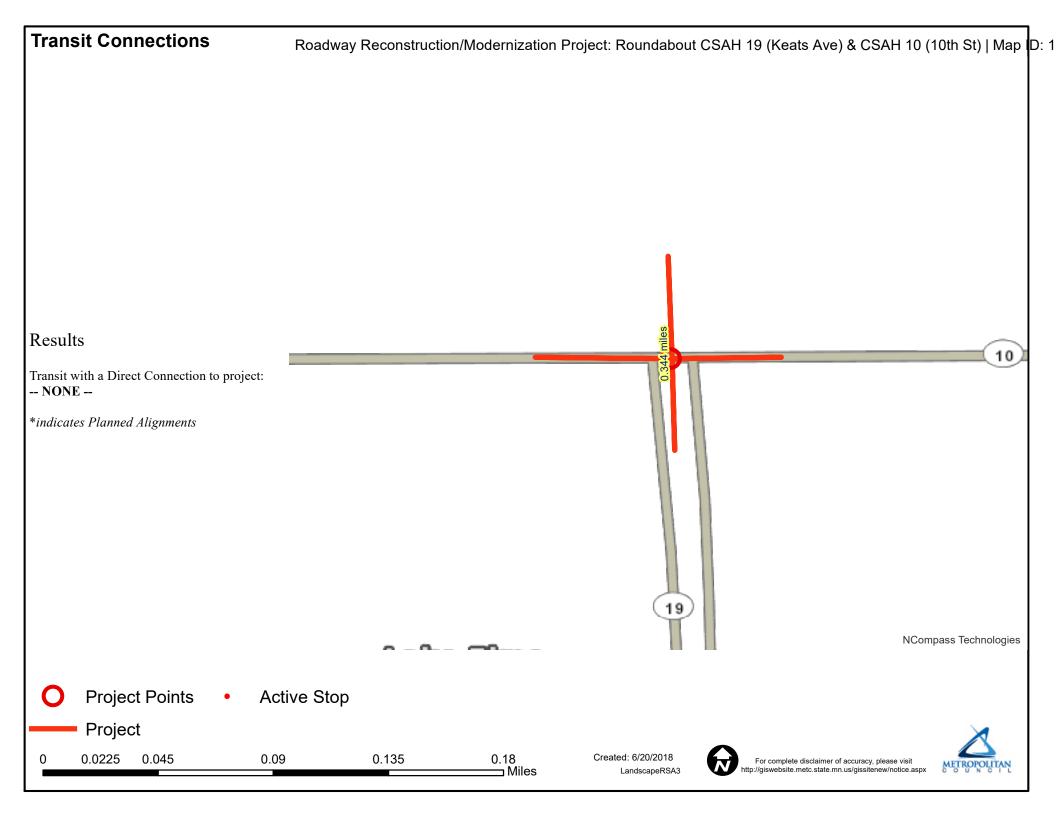
Cost Effectiveness \$0.00

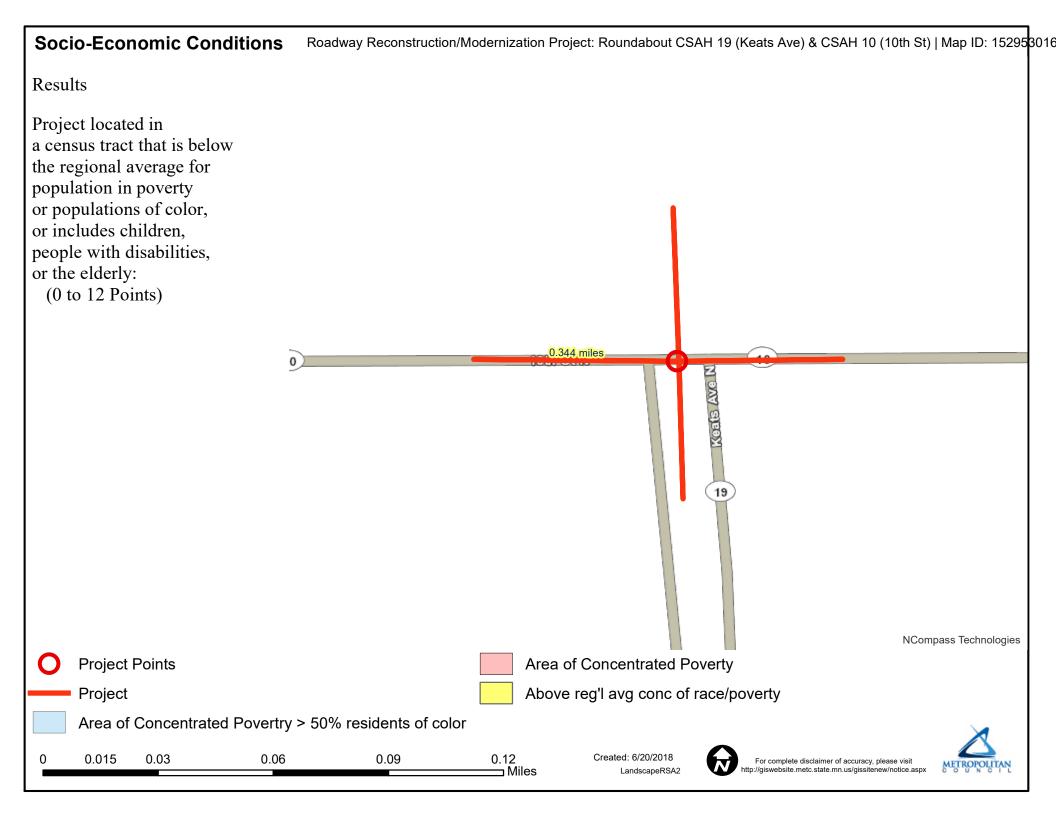
Other Attachments

File Name	Description	File Size
2018-062 Regional Solicitation.pdf	Washington County Board of Commissioners Resolution	28 KB
CSAH 19 CSAH 10 Project Summary.pdf	CSAH 19 CSAH 10 Project Summary	224 KB
CSAH 19 CSAH 10 Roundabout 2.pdf	Roundabout photo 2	483 KB
CSAH 19 CSAH 10 Roundabout Local Planning Docs.pdf	Compliance with Planning Documents	476 KB
CSAH 19 CSAH 10 Roundabout Project Photo.pdf	Roundabout photo 1	579 KB
Exhibit_11x17-071118_B.pdf	CSAH 10 at CSAH 19 Roundabout, Design	260 KB
Keats & 10th Avenue - HCM 2010 Report.pdf	HCM Report	34 KB
Keats & 10th Avenue_2018 Build Fuel Consumption- Report.pdf	2018 Build Fuel Consumption Report	3 KB
Keats & 10th Avenue_Emissions - Report.pdf	Emissions Report	3 KB
Keats_&_10th_CrashSummary.pdf	Crash Summary	59 KB
Lake Elmo LOS.pdf	City of Lake Elmo Letter of Support	46 KB
OPC_7_10_2018.pdf	PRELIMINARLY ENGINEERS OPINION OF PROBABLE COST	35 KB
TAB Costs.pdf	CSAH 10 at CSAH 19 Roundaabout, TAB Eligible Costs	291 KB









Intersection	
Intersection Delay, s/veh	53.8
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		र्स	7		र्स	7	ň	†	7		414	
Traffic Vol, veh/h	33	490	381	85	127	15	189	24	143	13	31	21
Future Vol, veh/h	33	490	381	85	127	15	189	24	143	13	31	21
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	36	533	414	92	138	16	205	26	155	14	34	23
Number of Lanes	0	1	1	0	1	1	1	1	1	0	2	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	2			2			2			3		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	2			3			2			2		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	3			2			2			2		
HCM Control Delay	79.2			21.5			17.4			13.3		
HCM LOS	F			С			С			В		

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2	
Vol Left, %	100%	0%	0%	6%	0%	40%	0%	46%	0%	
Vol Thru, %	0%	100%	0%	94%	0%	60%	0%	54%	42%	
Vol Right, %	0%	0%	100%	0%	100%	0%	100%	0%	58%	
Sign Control	Stop	Stop								
Traffic Vol by Lane	189	24	143	523	381	212	15	29	37	
LT Vol	189	0	0	33	0	85	0	13	0	
Through Vol	0	24	0	490	0	127	0	16	16	
RT Vol	0	0	143	0	381	0	15	0	21	
Lane Flow Rate	205	26	155	568	414	230	16	31	40	
Geometry Grp	8	8	8	8	8	8	8	8	8	
Degree of Util (X)	0.496	0.059	0.323	1.158	0.759	0.555	0.035	0.082	0.098	
Departure Headway (Hd)	9.098	8.584	7.864	7.336	6.594	8.928	8.006	10.001	9.342	
Convergence, Y/N	Yes	Yes								
Cap	399	420	460	500	551	406	450	360	386	
Service Time	6.798	6.284	5.564	5.051	4.309	6.628	5.706	7.701	7.042	
HCM Lane V/C Ratio	0.514	0.062	0.337	1.136	0.751	0.567	0.036	0.086	0.104	
HCM Control Delay	20.4	11.8	14.3	117	27.2	22.2	11	13.6	13.1	
HCM Lane LOS	С	В	В	F	D	С	В	В	В	
HCM 95th-tile Q	2.7	0.2	1.4	20.2	6.7	3.3	0.1	0.3	0.3	

06/07/2018 Baseline Synchro 9 Report Page 1

1: Keats Avenue & 10th Avenue

Direction	All	
Future Volume (vph)	1552	
CO Emissions (kg)	1.18	
NOx Emissions (kg)	0.23	
VOC Emissions (kg)	0.27	

06/07/2018 Baseline Synchro 9 Report Page 1



Crash Type Summary

Report Version 1.0 March 2010

Analysis Years 2013, 2014, 2015

Crash Summary:	Number of Vehicles			
		1	2	3+
K - Fatal	0	0	0	0
A - Incapacitating	0	0	0	0
B - Non-Incapacitating	2	0	2	0
C - Possible	4	0	3	1
N - Property Damage	2	0	2	0
X - Not Reported	0	0	0	0
Miscoded	0	0	0	0
Total	8	0	7	1

Surface Condition Summary:	
01 - Dry	5
02 - Wet	2
03 - Snow	1
04 - Slush	0
05 - Ice/Packed Snow	0
Other	0
Unknown/Not Specified	0
Miscoded	0
Total	8

Diagram Summary:		
02 - Sideswipe - Same Dir	0	
03 - Left Turn	0	
04 - Ran Off Road - Left Side	0	
05 - Right Angle	6	
06 - Right Turn	0	
07 - Ran Off Road - Right Side	0	
08 - Head On	0	
09 - Sideswipe - Opposing Dir	0	
Other	2	
Unknown/Not Stated	0	
Miscoded	0	
Total	8	

Intersection Relation Summary:	
01 - Not at Intersection	0
02 - T Intersection	0
03 - Y Intersection	0
04 - 4 Legged Intersection	8
05 - 5 or more Leg Intersection	0
06 - Roundabout/Traffic Circle	0
07 - Intersection Related	0
08 - Alley or Driveway	0
09 - School Crossing	0
10 - RR Crossing	0
11 - Recreational Crossing	0
20 -22 - Interchange	0
Other	0
Unknown/Not Stated	0
Miscoded	0
Total	8

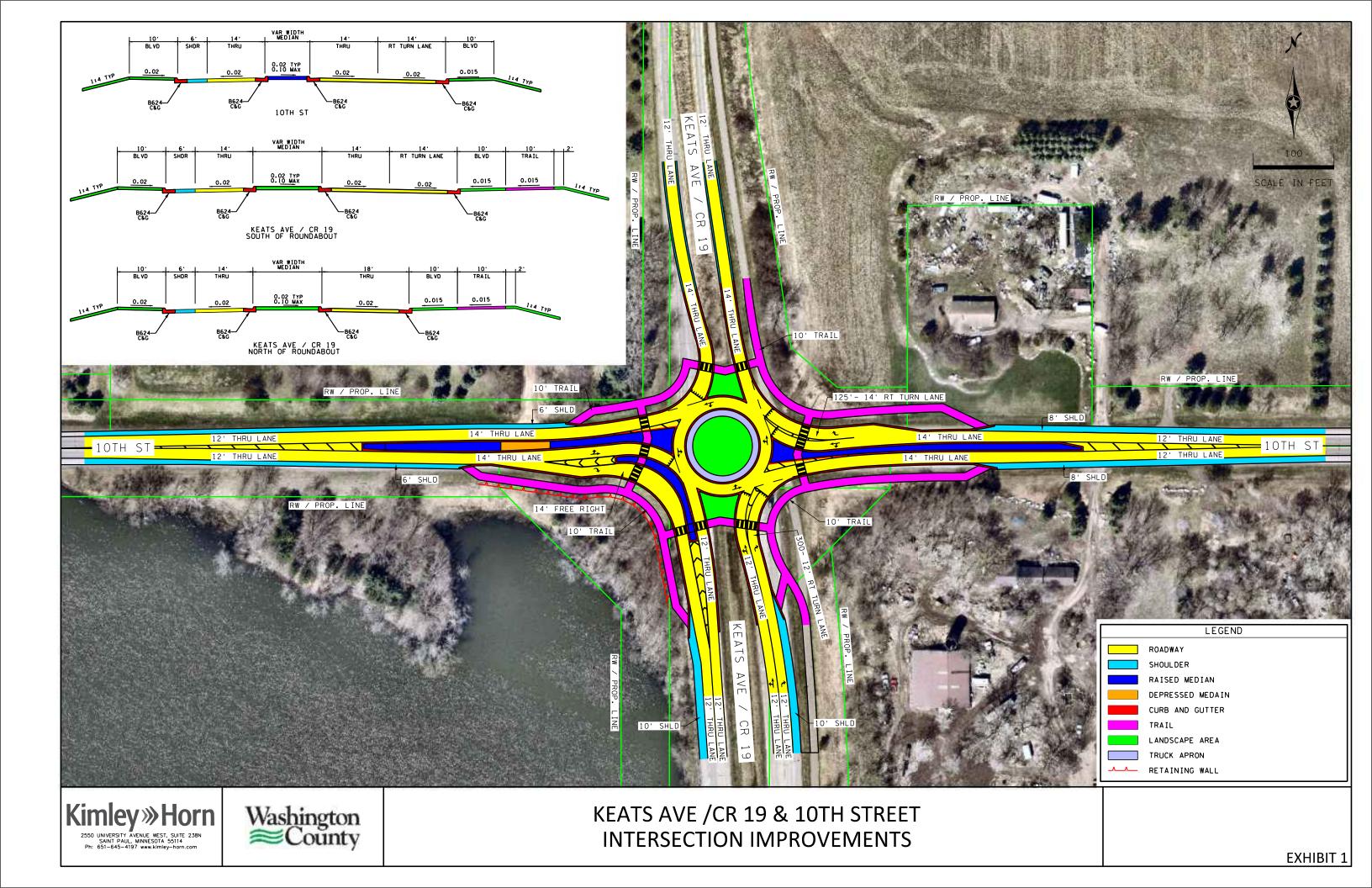
Accident Type Summary	
01 - Motor Vehicle in Transport	8
02 - Parked Vehicle	0
03-04 - Road Equipment	0
05 - Train	0
06 - Bike	0
07 - Pedestrian	0
08-09 - Deer/Animal	0
10-14 - Other/Unknown Collision	0
21-42 - Fixed Object	0
51 - Overturn	0
52-65 - Other Non-Collision	0
Other	0
Unknown/Not Stated	0
Miscoded	0
Total	8

Light Condition Summary:	
01 - Daylight	6
02 - Before Sunrise	0
03 - After Sunset	0
04 - Dark (Street Lights On)	2
05 - Dark (Street Lights Off)	0
06 - Dark (No Street Lights)	0
07 - Dark (Unknown Lighting)	0
Other	0
Unknown/Not Stated	0
Miscoded	0
Total	8

Selection Filter:

WORK AREA: COUNTY_CODE('82') - FILTER: CRASH_YEAR('2013','2014','2015'),
INTERSECTION_RELATION_CODE('02','03','04','05','06','07','08','09','10','11','20','21','22') - SPATIAL FILTER APPLIED

Analyst:	Notes:
Brandon Bourdon	



BOARD OF COUNTY COMMISSIONERS WASHINGTON COUNTY, MINNESOTA

DATE	June 19, 20)18	DEPARTMENT	Public Works
MOTIO BY COI	N MMISSIONER	Karwoski	SECONDED BY COMMISSIONER	Weik

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); and

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 for 2022 and 2023; and

WHEREAS, Washington County is an eligible project sponsor for Regional Solicitation funds; and

WHEREAS, Washington County is proposing to submit grant applications for the following projects to the Metropolitan Council as part of the 2018 Regional Solicitation:

- 1. Trail segment implementation of the Central Greenway Regional Trail along County State Aid Highway (CSAH) 19 (Woodbury Drive) between 80th Street and the entrance of Cottage Grove Ravine Regional Park and the segment along CSAH 19 at Dale Road extending 3000 feet south in the City of Cottage Grove; and
- 2. Trail improvements and ADA compliant enhancement along CSAH 12 (75th Street North) from CSAH 29 (Hilton Trail) to CSAH 15 (Manning Avenue) existing trails in the Cities of Grant and Mahtomedi; and
- 3. Trail implementation along CSAH 38 from the pedestrian bridge crossing TH (Trunk Highway) 61 to the Wakota Bridge in the City of Newport; and
- 4. Construction of a roundabout at CSAH 19 (Keats Avenue) and CSAH 10 (10th Street) in the City of Lake Elmo; and
- 5. Construction of the roadway lanes of the Helmo-Bielenberg bridge over I-94 in collaboration with the Gold Line Bus Rapid Transit (BRT) guideway in the Cities of Oakdale and Woodbury; and

WHEREAS, the projects will be of mutual benefit to Metropolitan Council, Washington County, and the Cities of Cottage Grove, Grant, Mahtomedi, Oakdale, Lake Elmo and Woodbury; and

WHEREAS, Washington County is committed to providing the county share of the costs if the projects are selected as part of the 2018 Regional Solicitation; and

WHEREAS, Washington County is committed to completing the project, if selected, and funding is provided as part of the 2018 Regional Solicitation;

NOW, THEREFORE, BE IT RESOLVED, that Washington County is requesting funding from the federal government through the Metropolitan Council's 2018 Regional Solicitation and the county is committed to completing the projects identified above and providing the county share of funding.

ATTEST: Muly O'El		YES	NC
COUNTY ADMINISTRATOR Sary Knew COUNTY BOARD CHAIR	MIRON KARWOSKI KRIESEL LAVOLD WEIK	X X X X X	

Project Summary: CSAH 19 at CSAH 10 roundabout project in the City of Lake Elmo

This is application is a request for \$1,809,200 in funding to construct a roundabout at the intersection of CSAH 19 (Lake Elmo Avenue) at CSAH 10 (10th Street) in the City of Lake Elmo.

The proposed project is a roundabout at the intersection of County State Aid Highway (CSAH) 19 (an A-Minor Expander) and CSAH 10 (an A-Minor Reliever) in Lake Elmo. The intersection is located at the entrance to Lake Elmo Park Reserve and is currently a four way stop. Many guests visit the park on evenings and weekends. As a result, congestion at the intersection is greater during off peak rather than peak hours.

Lake Elmo Park Reserve is an important asset and major destination for Washington County and the entire metropolitan area. The park is the most visited in Washington County which is an important distinction in a county known for its natural beauty and open spaces. Over 600,000 people visited the park annually. In addition, counts done in 2017 show that nearly 37% of park visitors traveled 11 miles or more to access the park. This includes over 17% who drove between 11 and 25 miles, approximately 10% who drove 26-50 miles, and nearly 10% who drove 50 miles or more to access the park.

Also noteworthy is the percentage of visitors accessing the park from areas with high populations of color or low-income. According to 2017 counts, 20% of park visitors came from East Metro zip codes with communities that contain large percentages of populations in poverty or of color. Such communities include the east side of Saint Paul and the city of Landfall. The county offers free admission to the park on Tuesdays throughout the year as well as free passes to families and veterans who qualify for community assistance in order to increase accessibility. Additionally, a 2017 report on special events revealed that the park has a large presence of minority families that routinely use the facilities to host family gatherings, often exceeding 300 guests.

As a result of the park's importance to the county, it remains critical for it to maintain an easily accessible, inviting, and safe entrance. The proposed roundabout would help accomplish all three of these goals. For vehicles the roundabout would help increase traffic flow and safety through traffic calming measures. In addition, pedestrians and bicyclists would benefit from sidewalk connections and pedestrian refuge islands to make crossing the busy intersection safer. Due to these positive impacts, Lake Elmo and metro residents as a whole would benefit from the construction of a roundabout at CSAH 19 and CSAH 10.



998 Keats Ave N

CSAH 19 CSAH 10 Roundabout



Image capture: Aug 2017 © 2018 Google

Lake Elmo, Minnesota

Google, Inc.

Street View - Aug 2017



Metropolitan Council's 2040 Transportation Policy Plan

Goal: Transportation System Stewardship, pg 58

Sustainable investments in the transportation system are protected by strategically preserving, maintaining, and operating system assets.

Objectives: A. Efficiently preserve and maintain the regional transportation system in a state of good repair.

B. Operate the regional transportation system to efficiently and cost-effectively connect people and freight to destinations.

Strategies:

• Regional transportation partners will place the highest priority for transportation investments on strategically preserving, maintaining, and operating the transportation system.

Goal: Safety and Security, pg 60

The regional transportation system is safe and secure for all users.

Objectives: A. Reduce crashes and improve safety and security for all modes of passenger travel and freight transport.

Strategies:

- Regional transportation partners will incorporate safety and security considerations for all modes and users throughout the processes of planning, funding, construction, operation.
- Regional transportation partners will use best practices to provide and improve facilities for safe walking and bicycling, since pedestrians and bicyclists are the most vulnerable users of the transportation system.

Goal: Healthy Environment, pg 66

The regional transportation system advances equity and contributes to communities' livability and sustainability while protecting the natural, cultural, and developed environments.

Objectives: A. Reduce transportation-related air emissions.

- B. Reduce impacts of transportation construction, operations, and use on the natural, cultural, and developed environments.
- C. Increase the availability and attractiveness of transit, bicycling, and walking to encourage healthy communities and active car-free lifestyles.
- D. Provide a transportation system that promotes community cohesion and connectivity for people of all ages and abilities, particularly for historically under represented populations.

Strategies:

- Regional transportation partners will plan and implement a transportation system that considers
 the needs of all potential users, including children, senior citizens, and persons with disabilities,
 and that promotes active lifestyles and cohesive communities. A special emphasis should be
 placed on promoting the environmental and health benefits of alternatives to single-occupancy
 vehicle travel.
- Transportation partners will protect, enhance and mitigate impacts on the cultural and built environments when planning, constructing, and operating transportation systems.
- Regional transportation partners will use a variety of communication methods and eliminate barriers to foster public engagement in transportation planning that will include special efforts to engage members of historically underrepresented communities, including communities of color, low-income communities, and those with disabilities to ensure that their concerns and issues are considered in regional and local transportation decision making.
- Regional transportation partners will avoid, minimize and mitigate disproportionately high and adverse impacts of transportation projects to the region's historically underrepresented communities, including communities of color, low-income communities, and those with disabilities.

Washington County 2040 Comprehensive Plan (draft)

Goal: Plan, build, and maintain an interconnected and accessible transportation system that considers all users and modes of travel. Pg 3-8

Policies:

- Pursue federal, state, regional, and local funding opportunities to preserve, maintain, expand, and modernize the transportation network.
- Plan, build, and maintain roadways to accommodate existing and future traffic growth.

Strategies:

- Integrate non-motorized accommodations into the design of roadway and transit facilities to increase access to destinations.
- Balance existing and planned land uses with county goals through transportation planning.
- Identify gaps in trail network and prioritize investments to improve non-motorized access to destinations

Goal: Improve safety and efficient for all users. Pg 3-10

Policies:

- Support ongoing safety review process that promotes both proactive and reactive treatments to reduce crashes.
- Use traffic management techniques to improve operations, safety, and useful life of the roadways.

Strategies:

- Develop roadway crossings and trail facilities within county roadway corridors to promote safety for all users.
- Promote access from local roadways to develop and implement corridor-specific access management plans for county roadways to minimize access points on county roadways.
- Coordinate with partners to improve safety and usability of county roadways when developing safe, effective, and implementable strategies in key locations like near schools and at nonmotorized crossings.

City of Lake Elmo 2040 Draft Comprehensive Plan 2040

Goal: Maintain and Enhance connections of all residents to the natural resources and open space amenities throughout the community. $Pg\ 6$

Strategies

- a. Create an interconnected network of open spaces and trails that provide connections between urbanizing and rural areas of the community.
- b. Continue to support open space developments in the rural residential areas that protect important natural resources and provide connections to public parks, open spaces and trails.
- c. Encourage development in the urbanizing areas to create their development plans using a natural resources plan that considers an interconnected network of public parks, natural resources, open spaces and trails.

Goal: Provide improved infrastructure, including sewer, water, and facilities, to serve new residents in the developing areas of the community. Pg. 16

Strategies:

- a. Create a staging plan that correlates to contiguous infrastructure improvements to ensure a more cost-effective delivery of services.
- b. Support development consistent with the Future Land Use Plan and Transportation Plan so that infrastructure is appropriately sized and planned for based on anticipated development patterns.

Goal: Maintain the level of city services to existing neighborhoods and plan through appropriate capital expenditures for necessary improvements.

Strategies:

- a. Work with neighborhood associations and liaisons to plan for any needed improvements and incorporate such improvements, where applicable, within the City 's capital improvement plan.
- b. Sustain development patterns consistent with the Future Land Use Plan to ensure appropriate designed and planned infrastructure.

Goal: Explore opportunities to improve bikeways, pedestrian ways, and transit connections throughout the community with particular attention to urbanizing areas.

Strategies:

- a. Endorse the regional bicycle transportation network plan as identified by the Metropolitan Council, and identify potential connections to complete the network during development review consistent with this Comprehensive Plan.
- b. Support the integration of trails and bikeways as part of any major arterial or collector roadway improvement plans.

Google Maps

Keats Ave N

CSAH 19 CSAH 10 Roundabout



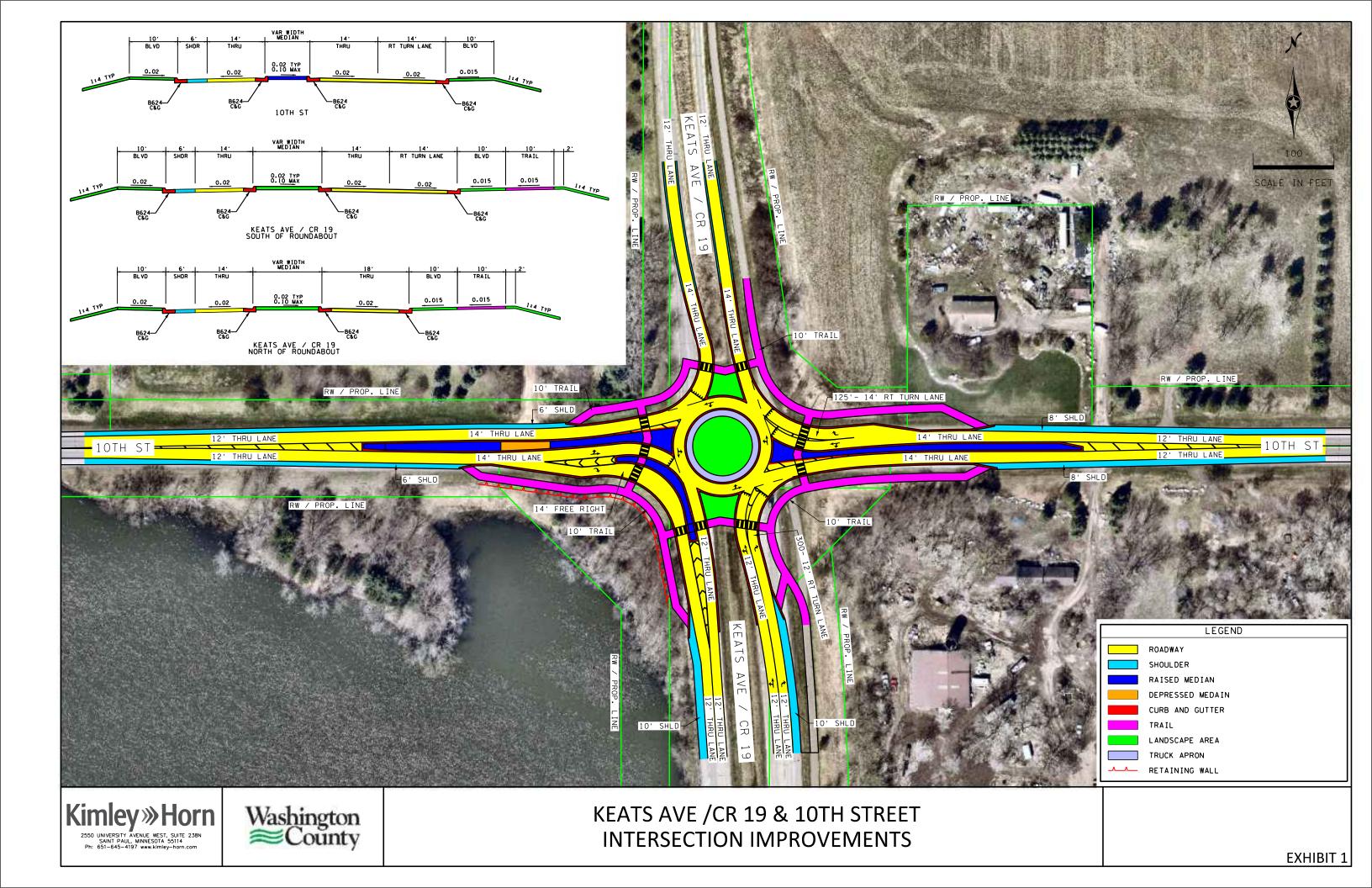
Image capture: Jul 2016 © 2018 Google

Lake Elmo, Minnesota

Google, Inc.

Street View - Jul 2016





Intersection	
Intersection Delay, s/veh	53.8
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		र्स	7		र्स	7	ň	†	7		414	
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Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	36	533	414	92	138	16	205	26	155	14	34	23
Number of Lanes	0	1	1	0	1	1	1	1	1	0	2	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
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Conflicting Approach Left	SB			NB			EB			WB		
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Conflicting Lanes Right	3			2			2			2		
HCM Control Delay	79.2			21.5			17.4			13.3		
HCM LOS	F			С			С			В		

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2	
Vol Left, %	100%	0%	0%	6%	0%	40%	0%	46%	0%	
Vol Thru, %	0%	100%	0%	94%	0%	60%	0%	54%	42%	
Vol Right, %	0%	0%	100%	0%	100%	0%	100%	0%	58%	
Sign Control	Stop	Stop								
Traffic Vol by Lane	189	24	143	523	381	212	15	29	37	
LT Vol	189	0	0	33	0	85	0	13	0	
Through Vol	0	24	0	490	0	127	0	16	16	
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Degree of Util (X)	0.496	0.059	0.323	1.158	0.759	0.555	0.035	0.082	0.098	
Departure Headway (Hd)	9.098	8.584	7.864	7.336	6.594	8.928	8.006	10.001	9.342	
Convergence, Y/N	Yes	Yes								
Cap	399	420	460	500	551	406	450	360	386	
Service Time	6.798	6.284	5.564	5.051	4.309	6.628	5.706	7.701	7.042	
HCM Lane V/C Ratio	0.514	0.062	0.337	1.136	0.751	0.567	0.036	0.086	0.104	
HCM Control Delay	20.4	11.8	14.3	117	27.2	22.2	11	13.6	13.1	
HCM Lane LOS	С	В	В	F	D	С	В	В	В	
HCM 95th-tile Q	2.7	0.2	1.4	20.2	6.7	3.3	0.1	0.3	0.3	

06/07/2018 Baseline Synchro 9 Report Page 1

Baseline 06/27/2018

1: Keats Avenue & 10th Avenue Performance by approach

Approach	EB	WB	NB	SB	All
Fuel Used (gal)	3.5	0.9	1.4	0.3	6.1

Total Network Performance

Fuel Used (gal) 17.2

1: Keats Avenue & 10th Avenue

Direction	All	
Future Volume (vph)	1552	
CO Emissions (kg)	1.18	
NOx Emissions (kg)	0.23	
VOC Emissions (kg)	0.27	

06/07/2018 Baseline Synchro 9 Report Page 1



Crash Type Summary

Report Version 1.0 March 2010

Analysis Years 2013, 2014, 2015

Crash Summary:	Number of Vehicles			
		1	2	3+
K - Fatal	0	0	0	0
A - Incapacitating	0	0	0	0
B - Non-Incapacitating	2	0	2	0
C - Possible	4	0	3	1
N - Property Damage	2	0	2	0
X - Not Reported	0	0	0	0
Miscoded	0	0	0	0
Total	8	0	7	1

Surface Condition Summary:	Surface Condition Summary:		
01 - Dry	5		
02 - Wet	2		
03 - Snow	1		
04 - Slush	0		
05 - Ice/Packed Snow	0		
Other	0		
Unknown/Not Specified	0		
Miscoded	0		
Total	8		

Diagram Summary:				
02 - Sideswipe - Same Dir	0			
03 - Left Turn	0			
04 - Ran Off Road - Left Side	0			
05 - Right Angle	6			
06 - Right Turn	0			
07 - Ran Off Road - Right Side	0			
08 - Head On	0			
09 - Sideswipe - Opposing Dir	0			
Other	2			
Unknown/Not Stated	0			
Miscoded	0			
Total	8			

Intersection Relation Summary:	
01 - Not at Intersection	0
02 - T Intersection	0
03 - Y Intersection	0
04 - 4 Legged Intersection	8
05 - 5 or more Leg Intersection	0
06 - Roundabout/Traffic Circle	0
07 - Intersection Related	0
08 - Alley or Driveway	0
09 - School Crossing	0
10 - RR Crossing	0
11 - Recreational Crossing	0
20 -22 - Interchange	0
Other	0
Unknown/Not Stated	0
Miscoded	0
Total	8

Accident Type Summary	
01 - Motor Vehicle in Transport	8
02 - Parked Vehicle	0
03-04 - Road Equipment	0
05 - Train	0
06 - Bike	0
07 - Pedestrian	0
08-09 - Deer/Animal	0
10-14 - Other/Unknown Collision	0
21-42 - Fixed Object	0
51 - Overturn	0
52-65 - Other Non-Collision	0
Other	0
Unknown/Not Stated	0
Miscoded	0
Total	8

Light Condition Summary:	
01 - Daylight	6
02 - Before Sunrise	0
03 - After Sunset	0
04 - Dark (Street Lights On)	2
05 - Dark (Street Lights Off)	0
06 - Dark (No Street Lights)	0
07 - Dark (Unknown Lighting)	0
Other	0
Unknown/Not Stated	0
Miscoded	0
Total	8

Selection Filter:

WORK AREA: COUNTY_CODE('82') - FILTER: CRASH_YEAR('2013','2014','2015'),
INTERSECTION_RELATION_CODE('02','03','04','05','06','07','08','09','10','11','20','21','22') - SPATIAL FILTER APPLIED

Analyst:	Notes:
Brandon Bourdon	



June 25, 2018

Wayne Sandberg County Engineer Washington County Public Works 11660 Myeron Road Stillwater, MN 55082

RE: Support for Washington County's Application for the proposed roundabout on County State Aid Highway (CSAH) 19 and CSAH 10 in the 2018 Regional Solicitation Program.

Dear Mr. Sandberg,

The purpose of this letter is to express the City of Lake Elmo's support for Washington County's 2018 solicitation for federal funds for the proposed roundabout at the intersection of CSAH 19 and CSAH 10 through the Metropolitan Council's Regional Solicitation program.

The proposed roundabout project will improve traffic flow along CSAH 19 and CSAH 10. Traffic flow at this intersection remains critical due to its role as the sole public entrance into Lake Elmo Park Reserve. The park attracts a diverse population of 519,900 visitors annually¹. Many of these visitors come during off peak hours on evenings and weekends. This is evidenced by the slowdown in traffic from 34 miles per hour (mph) during peak hours to 24 mph during off peak hours. The proposed roundabout will promote vehicle efficiency moving through the intersection.

Additionally, medians will be constructed on all four approaches, which will provide refuge for pedestrians. Pedestrians will no longer be forced to cross the entire roadway but rather two short crosswalk segments. This will make pedestrians more visible to vehicles entering or exiting the roundabout and as a result increase pedestrian safety.

The City of Lake Elmo will continue to support Washington County's efforts to improve the County road network as identified with the Lake Elmo 2040 Comprehensive Plan update and Washington County's 2040 Comprehensive Plan.

Thank you for your consideration. If you have any questions, please contact me at x or at x

Sincerely,

Kristina Handt

Administrator, City of Lake Elmo

¹"Annual Use Estimate of the Regional Parks System: Based On A Four-Year Average of Visit Data from 2013 Through 2016. For 2016," *Metropolitan Council*, Accessed June, 2018, pg.12, https://metrocouncil.org/Parks/Publications-And-Resources/PARK-USE-REPORTS/2016-Annual-Use-Estimate-of-the-Regional-Parks-Sys.aspx.

PRELIMINARLY ENGINEERS OPINION OF PROBABLE COST

7/11/2018

PROJECT: KEATS AVE - 10TH ST ROUNDABOUT

OWNER: WASHINGTON COUNTY





			-		
ITEM NO.	ITEM DESCRIPTION	UNIT	TOTAL ESTIMATED QUANTITY	UNIT COST	TOTAL COST
2021.501	MOBILIZATION	LUMP SUM	1	\$ 70,000.00	\$ 70,000.00
2021.001	INOBIEIZ/(TIOI)	LOWI COW		Ψ 10,000.00	Ψ 10,000.00
2031.502	FIELD OFFICE TYPE D	EACH	1	\$ 20,000.00	\$ 20,000,00
2031.502	FIELD OFFICE I THE D	EACH	1	\$ 20,000.00	\$ 20,000.00
	REMOVE BITUMINOUS PAVEMENT	SQ YD	13000	\$ 5.00	\$ 65,000.00
2104.518	REMOVE BITUMINOUS WALK	SQ FT	2000	\$ 0.50	\$ 1,000.00
2106.507	EXCAVATION - COMMON	CU YD	10000	\$ 10.00	\$ 100,000.00
2106.507	SELECT GRANULAR EMBANKMENT (CV)	CU YD	8000	\$ 15.00	\$ 120,000.00
2106.507	COMMON EMBANKMENT (CV)	CU YD	10000	\$ 12.00	\$ 120,000.00
2100.507	COMMON EMBANKMENT (CV)	COTD	10000	р 12.00	\$ 120,000.00
0011 -0-	1.00DE0.4TE D.05 (0) 0 0 1.00 0	6111			
2211.507	AGGREGATE BASE (CV) CLASS 6	CU YD	5000	\$ 22.00	\$ 110,000.00
2301.504	CONCRETE PAVEMENT 8.5"	SQ YD	9800	\$ 75.00	\$ 735,000.00
2360.509	TYPE SP 12.5 NON WEAR COURSE MIX (4,B)	TON	700	\$ 65.00	\$ 45,500.00
2411.618	PREFABRICATED MODULAR BLOCK WALL	SQ FT	1000	\$ 50.00	\$ 50,000.00
2521.518	4" CONCRETE WALK	SQ FT	5000	\$ 5.00	\$ 25,000.00
2521.518	3" BITUMINOUS WALK	SQ FT	10000	\$ 1.50	\$ 15,000.00
2321.316	3 BITUMINOUS WALK	SQFI	10000	φ 1.50	\$ 15,000.00
2531.503	CONCRETE CURB & GUTTER DESIGN B424	LIN FT	4000	\$ 20.00	\$ 80,000.00
	LIGHTING SYSTEM	LUMP SUM	1	\$ 80,000.00	\$ 80,000.00
	LIGHTING GTGTEIM	LOWI COW		Ψ 00,000.00	Ψ 00,000.00
	DRAINAGE	LUMP SUM	1	\$ 200,000.00	\$ 200,000.00
	DRAINAGE	LUIVIP SUIVI	1	\$ 200,000.00	\$ 200,000.00
	TDAFFIO CONTROL	LI INAD OLINA		A 50.000.00	A 50.000.00
	TRAFFIC CONTROL	LUMP SUM	1	\$ 50,000.00	\$ 50,000.00
	SIGNING / STRIPING	LUMP SUM	1	\$ 50,000.00	\$ 50,000.00
	EROSION CONTROL	LUMP SUM	1	\$ 50,000.00	\$ 50,000.00
				+ ,	, co,ccc.
		+			
	LANDCCADING	LLIMD OUR		f 75.000.00	¢ 75.000.00
	LANDSCAPING	LUMP SUM	1	\$ 75,000.00	\$ 75,000.00
		1			
	TEMPORARY BYPASS DURING CONSTRUCTION	LUMP SUM	1	\$ 200,000.00	\$ 200,000.00

SUB TOTAL \$ 2,261,500.00

TOTAL \$ 2,261,500.00

Estimate of TAB-Eligible Project Costs

Fill out the scoping sheet below and provide the estimate of TAB-eligible costs for the project. Applicants are not required to fill out each row of the cost estimate. The list of project elements is meant to provide a framework to think about the types of costs that may be incurred from the project. The total cost should match the total cost reported for the project on the first page of this application. Costs for specific elements are solely used to help applicants come up with a more accurate total cost; adjustments to these specific costs are expected as the project is more fully developed. Per TAB direction, the project must exclude costs for studies, preliminary engineering, design, or construction engineering. Right-of-way costs are only eligible as part of transit stations/stops, transit terminals, park-and-ride facilities, or pool-and-ride lots. Noise barriers, drainage projects, fences, landscaping, etc., are not eligible for funding as a standalone project, but can be included as part of the larger submitted project, which is otherwise eligible.

Please use 2018 cost estimates for all project elements including transit vehicle and operating costs.

It is important that applicants accurately break out costs for the project's various multimodal elements. These costs will be used, in part, to help determine the score for the Multimodal Facilities scoring criterion. If no dollar amount is placed in the cost estimate form below, then it will be assumed that no multimodal elements are included with the project.

TAB-ELIGIBLE COI	NSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	
Check all that	ITEM	COST
apply		
Specific Roadway	Elements	
	Mobilization (approx. 5% of total cost)	\$100,000
\boxtimes	Removals (approx. 5% of total cost)	\$100,000
	Roadway (grading, borrow, etc.)	\$385,000
\boxtimes	Roadway (aggregates and paving)	\$966,500
	Subgrade Correction (muck)	\$
	Storm Sewer	\$200,000
	Ponds	\$
	Concrete Items (curb & gutter, sidewalks, median barriers)	\$90,000
	Traffic Control	\$50,000
	Striping	\$20,000
\boxtimes	Signing	\$30,000
\boxtimes	Lighting	\$80,000
\boxtimes	Turf - Erosion & Landscaping	\$50,000
	Bridge	\$
	Retaining Walls	\$50,000
	Noise Wall (do not include in cost effectiveness measure)	\$
	Traffic Signals	\$
	Wetland Mitigation	\$
	Other Natural and Cultural Resource Protection	\$

	Railroad Crossing	\$
	Roadway Contingencies	\$
	Other Roadway Elements	\$
Specific Bicycle	e and Pedestrian Elements	
	Path/Trail Construction	\$50,000
	Sidewalk Construction	\$
	On-Street Bicycle Facility Construction	\$
	Pedestrian Curb Ramps (ADA)	\$15,000
	Crossing Aids (e.g., Audible Pedestrian Signals, HAWK)	\$
	Pedestrian-Scale Lighting	\$
	Streetscaping	\$75,000
	Wayfinding	\$
	Bicycle and Pedestrian Contingencies	\$
	Other Bicycle and Pedestrian Elements	\$
Specific Transi	t and TDM Elements	
	Fixed Guideway Elements	\$
	Stations, Stops, and Terminals	\$
	Support Facilities	\$
	Transit Systems (e.g. communications, signals, controls,	\$
	fare collection, etc.)	
	Vehicles	\$
	Contingencies	\$
	Right-of-Way	\$
	Other Transit and TDM Elements	\$
TOTAL TAB-ELI	GIBLE CONSTRUCTION COSTS	\$
		<u> </u>
Transit Operat	ing Costs	
	Number of platform hours	
	Cost per platform hour (fully loaded costs)	\$
	Subtotal	\$
	Other Costs – Administration, Overhead, etc.	\$
	Total Transit Operating Costs	\$
	TDM Operating Costs	\$
TOTAL TAB-ELI	\$	
TOTAL TAB-ELI	\$2,261,500	
	1	