

### Application

13862 - 2020 Roadway Spot Mobility		
14291 - Roundabout at Hennepin County 150 and 116		
Regional Solicitation - Roadways Including Multimodal Elements		
Status:	Submitted	
Submitted Date:	05/15/2020 12:56 PM	

### **Primary Contact**

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Department:				
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*	Rogers	Minnesota	a 55	5374
	City	State/Province	Po	stal Code/Zip
Phone:*	763-428-8580 Phone		203 Ext.	
Fax:	763-428-9261			
What Grant Programs are you most interested in?	Regional Solicitation - Roadways Including Multimodal Elements			

# **Organization Information**

Name:

Jurisdictional Agency (if different):

Organization Type:	City
Organization Website:	
Address:	22350 S DIAMOND LAKE RD

*	ROGERS	Minnesota	55374
	City	State/Province	Postal Code/Zip
County:	Hennepin		
Phone:*	763-428-8580		
		Ext.	
Fax:			
PeopleSoft Vendor Number	0000006587A3		

# **Project Information**

Project Name	CSAH 116 and CSAH 150 Roundabout
Primary County where the Project is Located	Hennepin
Cities or Townships where the Project is Located:	City of Rogers
Jurisdictional Agency (If Different than the Applicant):	Hennepin County

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

The City of Rogers is proposing a roundabout at the intersection of CSAH 116 (Territorial Road) and CSAH 150 (Main Street). The proposed three legged roundabout will include 6- to 10-foot wide shoulders along both project corridors and splitter and center islands that will provide areas of refuge for pedestrians and better manage vehicular traffic at the intersection.

The intersection improvement will also include a 10 foot wide multiuse trail along the east side of CSAH 150 and a striped pedestrian crossing across the east leg of CSAH 116. Six to 10-foot wide shoulders along both project corridors will help accommodate bicycle and pedestrian traffic along CSAH 116 and CSAH 150 while connecting to future pedestrian and bicycle networks.

CSAH 116 is an east-west A Minor Arterial route that carries 7,000 vehicles per day (vpd). CSAH 150, a north-south Major Collector roadway, carries 4,950 vpd. In the City's 2040 Comprehensive Plan, the City is expecting vpd to double on CSAH 116 and reach 14,000 vpd by 2040. The proposed roundabout will enhance safety, mobility, and accessibility for all roadway users as traffic volume increases drastically. An analysis of 2016-2018 crash data has indicated seven crashes during this period at CSAH 116/CSAH 150. The proposed project is expected to reduce crashes at this intersection by approximately 33 crashes over 20 years.

Non-motorists will also benefit from the intersection improvement. Identified as a Tier 2 Regional Bicycle Transportation Network (RBTN) corridor, CSAH 116 serves as key bicycle network connection. The 10-foot multiuse trail along the east side of CSAH 150 will help eliminate future bicycle and pedestrian network gaps while enhancing safety for non-motorists. The striped crossing across the east leg of CSAH 116 will also improve access and future trail connections for pedestrians and bicyclists.

(Limit 2,800 characters; approximately 400 words)	
TRANSPORTATION IMPROVEMENT PROGRAM (TIP) DESCRIPTION - will be used in TIP if the project is selected for funding. <u>See MnDOT's TIP description guidance.</u>	Roundabout at CSAH 116 and CSAH 150
Project Length (Miles)	0.3
to the nearest one-tenth of a mile	

### **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	\$1,245,120.00
Match Amount	\$311,280.00
Minimum of 20% of project total	
Project Total	\$1,556,400.00
For transit projects, the total cost for the application is total cost minus fare revenue	les.
Match Percentage	20.0%
Minimum of 20% Compute the match percentage by dividing the match amount by the project total	
Source of Match Funds	City of Rogers
A minimum of 20% of the total project cost must come from non-federal sources; a sources	additional match funds over the 20% minimum can come from other federal
Preferred Program Year	
Select one:	2025
Select 2022 or 2023 for TDM projects only. For all other applications, select 2024	or 2025.
Additional Program Years:	
Select all years that are feasible if funding in an earlier year becomes available.	

### **Project Information: Roadway Projects**

County, City, or Lead Agency	City of Rogers
Functional Class of Road	A Minor Arterial (CSAH 116) and Major Collector (CSAH 150)

Road System	CSAH
TH, CSAH, MSAS, CO. RD., TWP. RD., CITY STREET	
Road/Route No.	116
i.e., 53 for CSAH 53	
Name of Road	Territorial Road (CSAH 116) and Main Street (CSAH 150)
Example; 1st ST., MAIN AVE	
Zip Code where Majority of Work is Being Performed	55374
(Approximate) Begin Construction Date	05/01/2025
(Approximate) End Construction Date	11/01/2025
TERMINI:(Termini listed must be within 0.3 miles of any wo	rk)
From: (Intersection or Address)	
To: (Intersection or Address) DO NOT INCLUDE LEGAL DESCRIPTION	
Or At	Intersection of CSAH 116 and CSAH 150
Miles of Sidewalk (nearest 0.1 miles)	0
Miles of Trail (nearest 0.1 miles)	0.1
Miles of Trail on the Regional Bicycle Transportation Network (nearest 0.1 miles)	0.1
Primary Types of Work	GRADE, AGG BASE, BIT SURF, BIKE TRAIL, CURB, GUTTER, STORM SEWER, LIGHTING, SIGNALS
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 (2018), the 2040 Regional Parks Policy Plan (2018), and the 2040 Water Resources Policy Plan (2015).

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

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

B1-Regional transportation partners will incorporate safety and security considerations for all modes and users throughout the processes of planning, funding, construction, and operation.

B6-Regional transportation partners will use best practices to provide and improve facilities for safe walking and bicycling, since pedestrians and bicyclists are the most vulnerable users of the transportation system.

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

C9-The Metropolitan Council will support investments in A-minor arterials that build, manage, or improve the system's ability to supplement the capacity of the Principal Arterial system and support access to the region's job, activity and industrial and manufacturing concentrations.

C16-Regional transportation partners should fund projects that improve key regional bicycle barrier crossing locations, provide for pedestrian travel across barriers, and/or improve continuity of bicycle and pedestrian facilities between jurisdictions.

Limit 2,800 characters, approximately 400 words

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

-Northwest Hennepin County I-94 Sub-Area Transportation Study (attached)

List the applicable documents and pages:

-City of Rogers 2040 Comprehensive Plan identified CSAH 116/CSAH 150 as a high crash intersection (attached page 152 and Figure 9.10)

-City of Rogers Capital Improvement Program (attached)

Limit 2,800 characters, approximately 400 words

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

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

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

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

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

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

7. The requested funding amount must be more than or equal to the minimum award and less than or equal to the maximum award. The cost of preparing a project for funding authorization can be substantial. For that reason, minimum federal amounts apply. Other federal funds may be combined with the requested funds for projects exceeding the maximum award, but the source(s) must be identified in the application. Funding amounts by application category are listed below.

 Strategic Capacity (Roadway Expansion): \$1,000,000 to \$10,000,000

 Roadway Reconstruction/Modernization: \$1,000,000 to \$7,000,000

 Traffic Management Technologies (Roadway System Management): \$250,000 to \$3,500,000

 Spot Mobility and Safety: \$1,000,000 to \$3,500,000

 Bridges Rehabilitation/Replacement: \$1,000,000 to \$7,000,000

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

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

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

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

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

Date plan completed:

04/02/2020

Link to plan:

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

#### Date self-evaluation completed:

Link to plan:

Upload plan or self-evaluation if there is no link

Upload as PDF

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

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

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

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

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

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

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

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

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

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

### **Roadways Including Multimodal Elements**

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

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

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

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

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

#### Bridge Rehabilitation/Replacement and Strategic Capacity projects only:

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

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

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

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

#### Bridge Rehabilitation/Replacement projects only:

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

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

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

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

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

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

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

### **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)	\$113,000.00
Roadway (grading, borrow, etc.)	\$147,600.00
Roadway (aggregates and paving)	\$219,200.00
Subgrade Correction (muck)	\$58,500.00
Storm Sewer	\$160,000.00
Ponds	\$0.00
Concrete Items (curb & gutter, sidewalks, median barriers)	\$105,100.00
Traffic Control	\$100,000.00
Striping	\$6,000.00
Signing	\$18,000.00
Lighting	\$44,000.00
Turf - Erosion & Landscaping	\$95,700.00
Bridge	\$0.00
Retaining Walls	\$0.00

Noise Wall (not calculated in cost effectiveness measure)	\$0.00
Traffic Signals	\$0.00
Wetland Mitigation	\$0.00
Other Natural and Cultural Resource Protection	\$0.00
RR Crossing	\$0.00
Roadway Contingencies	\$311,300.00
Other Roadway Elements	\$0.00
Totals	\$1,478,400.00

# Specific Bicycle and Pedestrian Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Path/Trail Construction	\$78,000.00
Sidewalk Construction	\$0.00
On-Street Bicycle Facility Construction	\$0.00
Right-of-Way	\$0.00
Pedestrian Curb Ramps (ADA)	\$0.00
Crossing Aids (e.g., Audible Pedestrian Signals, HAWK)	\$0.00
Pedestrian-scale Lighting	\$0.00
Streetscaping	\$0.00
Wayfinding	\$0.00
Bicycle and Pedestrian Contingencies	\$0.00
Other Bicycle and Pedestrian Elements	\$0.00
Totals	\$78,000.00

# 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	\$1,556,400.00
Construction Cost Total	\$1,556,400.00
Transit Operating Cost Total	\$0.00

# Congestion within Project Area:

Free-Flow Travel Speed:	42
The free-flow travel speed is the black number	
Peak Hour Travel Speed:	30
The peak hour travel speed is the red number	
Percentage Decrease in Travel Speed in Peak Hour Compared to Free-Flow (calculation):	28.57%
Upload the "Level of Congestion" map:	1589317353244_Level of Cong.pdf

# Congestion on adjacent Parallel Routes:

Adjacent Parallel Corridor	Fletcher (CR 116)
Adjacent Parallel Corridor Start and End Points:	
Start Point:	Valley View Ter
End Point:	Territorial Road
Free-Flow Travel Speed:	46
The Free-Flow Travel Speed is black number.	
Peak Hour Travel Speed:	32
The Peak-Hour Travel Speed is red number.	
Percentage Decrease in Travel Speed in Peak Hour Compared to Free-Flow (calculation):	30.43%

### **Principal Arterial Intersection Conversion Study:**

Proposed at-grade project that reduces delay at a High Priority Intersection:	
(100 Points)	
Proposed at-grade project that reduces delay at a Medium Priority Intersection:	
(90 Points)	
Proposed at-grade project that reduces delay at a Low Priority Intersection:	
(80 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:	
(100 Points)	
Not listed as a CMSP priority location:	Yes
(0 Points)	

### **Measure C: Current Heavy Commercial Traffic**

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

Along Tier 1:	
Miles:	0
(to the nearest 0.1 miles)	
Along Tier 2:	
Miles:	0
(to the nearest 0.1 miles)	
Along Tier 3:	
Miles:	0
(to the nearest 0.1 miles)	
The project provides a direct and immediate connection (i.e., intersects) with either a Tier 1, Tier 2, or Tier 3 corridor:	
None of the tiers:	Yes

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

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

The proposed project is in an area that is below the regional average for population in poverty or populations of color, or includes children, people with disabilities, or the elderly. However, according to ACS 2013-2017 5-year estimates, the population within ½ mile of the proposed project is approximately eight percent minority, 37 percent younger than age 18, 11 percent age 65 and older, and seven percent with household income of \$25,000 or less (see Attachment A). As outlined in the 2040 Comprehensive Plan, the Community Vision for the City of Rogers is as follows:

-Rogers is a community of choice for living and learning with attainable housing for all persons, vibrant neighborhoods, and academically inclusive schools.

-Rogers is a community of equal economic opportunity with a creative workforce and diverse employment options, and linked transport systems that enable job mobility for workers close to home.

-Rogers is a community of quality environments with treasured places and distinct open spaces that enrich our heritage and life experiences and contribute to our physical health and shape our social connections.

It is one of the City's priorities to ensure that all members of its community will benefit from projects and developments.

#### Response:

2. **Sub-measure**: Equity Population Benefits and Impacts: A successful project is one that has been designed to provide direct benefits to lowincome populations, people of color, persons with disabilities, youth and the elderly. All projects must mitigate potential negative benefits as required under federal law. Projects that are designed to provide benefits go beyond the mitigation requirement to proactively provide transportation benefits and solve transportation issues experienced by Equity populations.

a.Describe the projects benefits to low-income populations, people of color, children, people with disabilities, and the elderly. Benefits could relate to pedestrian and bicycle safety improvements; public health benefits; direct access improvements for residents or improved access to destinations such as jobs, school, health care or other; travel time improvements; gap closures; new transportation services or modal options, leveraging of other beneficial projects and investments; and/or community connection and cohesion improvements. Note that this is not an exhaustive list.

While the proposed project is in an area that is below the regional average for the equity populations described above, According to ACS 2013-2017 5-year estimates, the population within one mile of the proposed project is approximately eight percent minority, 37 percent younger than age 18, 11 percent age 65 and older, and seven percent with household income of \$25,000 or less (see Attachment A).

Approximately 86 percent of residents of Rogers dependent on motorized vehicles to commute to work and nearly 51 percent of non-home-based workers aged 16 and over have a commute that lasts 30 minutes or longer (Minnesota Compass). With a large percentage of the City's population relying on motor vehicles to commute to work, school, and other key regional and local destinations, the proposed intersection improvements of a roundabout will reduce speeds at the intersection, address current sightline issues, and reduce the number of intersection crashes.

The project will benefit low income populations in the northwest Twin Cities suburbs by providing a safer and direct connection to Downtown Rogers, Crow Hassan Park Reserve, and the future Rush Creek Regional Trail extension that will connect to CR 116 (Fletcher Lane). CSAH 150 (Main Street) is also an important roadway that is frequently used by Rogers residents to head south and east from the many residential properties.

Crow Hassan Park Reserve, one of the reserves managed by Three Rivers Park District, is also accessible by CSAH 116. This is a popular regional destination that attracts a diverse group of people. Three Rivers Park District has a program called, "Parks For All People" to encourage and assist people who may have difficulty accessing programs

**Response:** 

and park amenities due to language and financial barriers. With advanced notice, Three Rivers Park District provides alternative forms of printouts and interpreters at programmed activities. The proposed roundabout will serve as a traffic calming measure to enhance safety and access to recreational centers and other key destinations.

The roundabout at CSAH 116 and CSAH 150 will also improve safety for those who depend on nonmotorized modes of transportation due to the elimination of the bypass lane and slower traffic speeds. Safer access to jobs, healthcare, recreational centers, and other resources for equity populations will be provided due to better traffic management.

(Limit 2,800 characters; approximately 400 words)

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

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

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

Increased noise.

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

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

Increased speed and/or cut-through traffic.

Removed or diminished safe bicycle access.

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

Displacement of residents and businesses.

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

Other

This project is not expected to create any negative externalities to disadvantaged populations or the general public. The proposed roundabout at CSAH 116 and CSAH 150 will enhance safety and reduce intersection crashes.

Project construction is expected to require additional right of way from adjacent properties. However, no businesses or residences will be displaced. The project will be designed to minimize property impacts as much as possible by installing a curb to keep a trail closer to the roadway. The City will work directly with property owners whose properties may potentially be impacted by the project. Owners will be compensated consistent with federal requirements. Property impacts are not expected to disproportionately affect disadvantaged populations.

Any temporary impacts resulting from construction, including increased levels of noise, dust, and traffic disruptions when transporting construction equipment and materials, will be mitigated. The City will require the contractor to utilize best management practices for dust, erosion, and traffic control and follow local ordinances to ensure all relevant noise regulations are met.

(Limit 2,800 characters; approximately 400 words)

#### Select one:

3.**Sub-measure: Bonus Points** Those projects that score at least 80% of the maximum total points available through sub-measures 1 and 2 will be awarded bonus points based on the geographic location of the project. These points will be assigned as follows, based on the highest-scoring geography the project contacts:

a.25 points to projects within an Area of Concentrated Poverty with 50% or more people of color

b.20 points to projects within an Area of Concentrated Poverty

c.15 points to projects within census tracts with the percent of population in poverty or population of color above the regional average percent d.10 points for all other areas

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

**Project located in Area of Concentrated Poverty:** 

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

#### **Response:**

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 )

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

**Upload Map** 

1589317376983\_SocioEco.pdf

### Measure B: Part 1: Housing Performance Score

City	Segment Length (For stand-alone projects, enter population from Regional Economy map) within each City/Township	Segment Length/Total Project Length	Score		Housing Score Multiplied by Segment percent	
Rogers	4282.0	1.0		20.0	20.0	
Total Project Total Project Leng Project length entered	<b>ct Length</b> I <b>th</b> I on the Project Information - Gene	O eral form.	.3			
Housing Pe	rformance Score					
Total Project Leng	th (Miles) or Population	4	282.0			
Total Housing Sco	pre	2	0.0			

### Affordable Housing Scoring

### Part 2: Affordable Housing Access

Reference Access to Affordable Housing Guidance located under Regional Solicitation Resources for information on how to respond to this measure and create the map.

If text box is not showing, click Edit or "Add" in top right of page.

There are no existing, planned, or under construction affordable housing developments within ½ mile of the proposed project.

Response:

Upload map:

Total Peak Hour Delay Per Vehicle Without The Project (Seconds/ Vehicle)	Total Peak Hour Delay Per Vehicle With The Project (Seconds/ Vehicle)	Total Peak Hour Delay Per Vehicle Reduced by Project (Seconds/ Vehicle)	Volume without the Project (Vehicles per hour)	Volume with the Project (Vehicles Per Hour):	Total Peak Hour Delay Reduced by the Project:	Total Peak Hour Delay Reduced by the Project:	EXPLANA TION of methodolo gy used to calculate railroad crossing delay, if applicable.	Synchro or HCM Reports
8.1	7.9	0.2	873	873	174.6	174.6 <b>175</b>	N/A	158922883 4997_CSA H 116 & CSAH 150 - Synchro Report.pdf
<b>Vehicle</b> Total Peak He Total Peak He	Delay Re our Delay Rec our Delay Rec	duced luced			174.6 174.6			

### Measure A: Congestion Reduction/Air Quality

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):	
1.31	1.98	-0.67	
1	2	-1	

### Total

Total	Emissions	Reduced:	

-0.67

**Upload Synchro Report** 

1589381030314\_CSAH 116 & CSAH 150 - Synchro Report.pdf

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

0

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		D

### **Total Parallel Roadway**

Emissions Reduced on Parallel Roadways

**Upload Synchro Report** 

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

### **New Roadway Portion:**

Cruise speed in miles per hour with the project:	0
Vehicle miles traveled with the project:	0
Total delay in hours with the project:	0
Total stops in vehicles per hour with the project:	0
Fuel consumption in gallons:	0
Total (CO, NOX, and VOC) Peak Hour Emissions Reduced or Produced on New Roadway (Kilograms):	0
EXPLANATION of methodology and assumptions used:(Limit 1,400 characters; approximately 200 words)	
Total (CO, NOX, and VOC) Peak Hour Emissions Reduced by the Project (Kilograms):	0.0

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

Cruise speed in miles per hour without the project:	0
Vehicle miles traveled without the project:	0
Total delay in hours without the project:	0
Total stops in vehicles per hour without the project:	0
Cruise speed in miles per hour with the project:	0
Vehicle miles traveled with the project:	0

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

### Measure A: Benefit of Crash Reduction

Crash Modification Factor Used:	Convert intersection with Minor-Road Stop Control to Modern Roundabout			
(Limit 700 Characters; approximately 100 words)				
Rationale for Crash Modification Selected:	The project includes removing the minor-approach stop control and converting the intersection into a single-lane roundabout.			
(Limit 1400 Characters; approximately 200 words)				
Project Benefit (\$) from B/C Ratio	\$1,097,017.00			
Total Fatal (K) Crashes:	0			
Total Serious Injury (A) Crashes:	0			
Total Non-Motorized Fatal and Serious Injury Crashes:	0			
Total Crashes:	7			
Total Fatal (K) Crashes Reduced by Project:	0			
Total Serious Injury (A) Crashes Reduced by Project:	0			
Total Non-Motorized Fatal and Serious Injury Crashes Reduced by Project:	0			
Total Crashes Reduced by Project:	33			
Worksheet Attachment	1589228890779_benefit_cost2020.pdf			
Upload Crash Modification Factors and B/C Worksheet in PDF form.				

Measure A: Multimodal Elements and Existing Connections

In the 2008 Northwest Hennepin County I-94 Sub-Area Transportation Study, the CSAH 116/CSAH 150 intersection recorded 32 incapacitating injury related crashes and 362 crashes with potential injuries between 2002 and 2006 (see Attachment C). More recent data from 2011 to 2015 (City of Rogers 2040 Comp Plan) and from 2016-2018 (safety analysis for this application) has shown 15 crashes and 7 crashes respectively at this intersection.

CSAH 116 has a posted speed limit of 50 mph and CSAH 150 has a posted speed limit of 45 mph. With no existing dedicated pedestrian or bicycle facilities, non-motorized users must currently travel using the shoulders of these two project corridors. Several components of the intersection improvement will help enhance pedestrian safety.

The proposed three-legged roundabout will include splitter and center islands that provide areas of refuge for pedestrians. Roundabouts are proven safety countermeasures that have been recognized by the Federal Highway Administration (FHWA). Implementation of roundabouts result in reduced vehicle speed and fewer conflict points. The pedestrian crossing with ADA compliant curb ramps will also provide safer access across the CSAH 116 corridor.

The multiuse trail component of the intersection improvement also supports the City's continuous effort to eliminate trail and sidewalk gaps. In addition to the proposed multiuse trail, shoulder widths ranging from six to ten feet will be included as part of the intersection improvement. The proposed trail and the paved shoulders will provide sufficient space to walk and bike while separating non-motorized users from high speed vehicles.

**Response:** 

The roundabout improvements at CSAH 116 and CSAH 150 will also better align vehicular traffic, eliminate an existing bypass lane and require nonmotorized users to travel through the roundabout at slower speeds compared to the existing intersection design. This will provide an overall safer environment for pedestrians.

(Limit 2,800 characters; approximately 400 words)

**Measure A: Multimodal Elements and Existing Connections** 

The trail connection achieved through the proposed trail alignment will allow non-motorized users to safely access more local and regional destinations while on dedicated pedestrian and/or bicycle facilities.

Currently, there are no dedicated pedestrian or bicycle facilities along CSAH 116. CSAH 150 only has existing trail facilities north of Elm Parkway. Construction of a 10 foot wide multiuse trail along the east side of CSAH 150 will enhance connectivity, mobility, and safety for non-motorized users traveling along both project corridors. The multiuse trail will also connect to CSAH 116, a RBTN Tier 1 corridor, and the Hennepin County Bikeway.

The proposed multiuse trail will also serve as an important trail connection, enhancing connectivity and helping prevent gaps in the City's trail network. The City has planned a continuous north-south trail route that will allow non-motorized users to directly access the Rush Creek Regional Trail extension from Downtown Rogers (see Attachment B and Attachment D). A large percentage of this future north-south trail route will be along CSAH 150. The proposed trail will connect to the City's existing sidewalk network and planned local bikeway at Elm Parkway.

CSAH 150 (Main Street) is an important corridor that provides access to several key local destinations in the City of Rogers: Rogers Elementary STEM Magnet School, Lions Central Park, and Downtown Rogers. The proposed trail along the east side of CSAH 150 will connect to a network of existing sidewalks in a residential area of the City. By enhancing connectivity and providing a safer environment, pedestrians and bicyclists will have better access to community centers, recreational centers, local businesses, etc.

Response:

The proposed roundabout and the trail element of the project will also continue to support the City's continuous efforts to create more community connections and promote healthy living, building an environment that promotes the safety and wellbeing of its community members. All components of the multiuse trail will be ADA compliant.

The project is located in Transit Market Area V as identified in Metropolitan Council's 2040 Transportation Policy Plan (see Attachment E). Transit Market Area V is generally rural and agricultural. With low-density development in the area, TPP notes that Transit Market Area V is not suitable for regular transit services. However, diala-ride service is still available.

(Limit 2,800 characters; approximately 400 words)

### **Transit Projects Not Requiring Construction**

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

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

Check Here if Your Transit Project Does Not Require Construction

### Measure A: Risk Assessment - Construction Projects

#### 1)Layout (25 Percent of Points)

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

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

#### 100%

#### **Attach Layout**

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.

1589408262915\_Layout.pdf

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 (15 Percent of Points)

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

#### 100%

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

#### 100%

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

#### 80%

Historic/archeological property impacted; determination of adverse effect anticipated

#### 40%

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

#### 0%

Project is located on an identified historic bridge

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

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

#### 100%

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

#### 50%

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

Yes

#### 25%

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

#### 0%

Anticipated date or date of acquisition

4)Railroad Involvement (15 Percent of Points)

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

100%

#### **Signature Page**

Please upload attachment in PDF form.

Railroad Right-of-Way Agreement required; negotiations have

begun

50%

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

0%

Anticipated date or date of executed Agreement

#### 5) Public Involvement (20 percent of points)

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

Meeting with general public:

Meeting with partner agencies:

Targeted online/mail outreach:

Number of respondents:

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

100%

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

75%

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

50%

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

50%

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

25%

No outreach has led to the selection of this project.

0%

General public involvement discussing the proposed project was completed as part of the City's 2040 Comprehensive Plan process, however COVID-19 has delayed project specific meetings. The City has been coordinating with Hennepin County, a partnering agency. Hennepin County's letter of support for the project can be found as an attachment at the end of the application.

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

Future public engagement related to the project may include sending mailers to residents and businesses in and near the project area, providing project information and seeking comments online, and holding in-person or virtual public meetings to discuss project details and gather public input.

### **Measure A: Cost Effectiveness**

Total Project Cost (entered in Project Cost Form):	\$1,556,400.00
Enter Amount of the Noise Walls:	\$0.00
Total Project Cost subtract the amount of the noise walls:	\$1,556,400.00
Enter amount of any outside, competitive funding:	\$0.00
Attach documentation of award:	
Points Awarded in Previous Criteria	
Cost Effectiveness	\$0.00

### **Other Attachments**

File Name	Description	File Size
2020 Transportation CIP Final - City of Rogers.pdf	2020 Transportation CIP Final - City of Rogers	76 KB
AttachmentA_ACS 2017 Report.pdf	ACS 2017 Demographics Report	1.5 MB
AttachmentB_BikePedFacilities.pdf	Existing and planned bike/ped facilities	1.9 MB
AttachmentC_NWHennepinCountyStudy. pdf	NW Hennepin County Study Map Insert	201 KB
AttachmentD_Three Rivers Park District Map_8.5x11.pdf	Three Rivers Park District Regional Trails Map	1.2 MB
AttachmentE_MetCouncil_TPP Transit Section.pdf	Met Council TPP Transit Service Area	394 KB
City Resolution Cover Letter.pdf	City of Rogers Resolution Cover Letter	159 KB
City Resolution.pdf	City of Rogers Resolution of Support	383 KB
Cost _11x8.pdf	Cost Estimate	304 KB
Crash_Detail_Report _Short_Form_20200421.pdf	Crash Detail Report	235 KB
CSAH 116 and CSAH 150 Delay, Emissions, and Safety Memo.pdf	Delay, Emissions and Safety Technical Memorandum	91 KB
CSAH 116-CSAH 150 existing conditions.pdf	Existing Conditions Photo	438 KB
Figure1_ProjectLocation.pdf	Figure 1 - Project Location Map	837 KB
Figure2_ProjectAerial.pdf	Figure 2 - Project Location Aerial Map	2.2 MB
Hennepin County Letter of Support.pdf	Hennepin County Letter of Support	98 KB
Rogers Transportation Plan Excerpts.pdf	Rogers Transportation Plan Excerpts	11.2 MB
Roundabout at CSAH 116 & CSAH 150 One-page Summary.pdf	One Page Project Summary	174 KB







# **Existing AM Synchro**

HCM 6th TWSC 3: CSAH 116 & CSAH 150

Intersection						
Int Delay, s/veh	8.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	5	•	•	1	Y	
Traffic Vol, veh/h	48	473	31	53	235	16
Future Vol, veh/h	48	473	31	53	235	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	180	-	-	340	0	-
Veh in Median Storage,	# -	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	52	514	34	58	255	17

Major/Minor	Major1	Ν	/lajor2		Minor2		
Conflicting Flow All	92	0	-	0	652	34	
Stage 1	-	-	-	-	34	-	
Stage 2	-	-	-	-	618	-	
Critical Hdwy	4.12	-	-	-	6.42	6.22	
Critical Hdwy Stg 1	-	-	-	-	5.42	-	
Critical Hdwy Stg 2	-	-	-	-	5.42	-	
Follow-up Hdwy	2.218	-	-	-	3.518	3.318	
Pot Cap-1 Maneuver	1503	-	-	-	433	1039	
Stage 1	-	-	-	-	988	-	
Stage 2	-	-	-	-	538	-	
Platoon blocked, %		-	-	-			
Mov Cap-1 Maneuver	1503	-	-	-	418	1039	
Mov Cap-2 Maneuver	-	-	-	-	418	-	
Stage 1	-	-	-	-	953	-	
Stage 2	-	-	-	-	538	-	
Approach	EB		WB		SB		
HCM Control Delay, s	0.7		0		26.2		
HCM LOS					D		
Minor Lane/Major Mvn	nt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)		1503	-	-	-	435	
HCM Lane V/C Ratio		0.035	-	-	-	0.627	
HCM Control Delay (s	)	7.5	-	-	-	26.2	
HCM Lane LOS		A	-	-	-	D	
HCM 95th %tile Q(veh	ı)	0.1	-	-	-	4.2	

### **Network Totals**

Number of Intersections	1	
Control Delay / Veh (s/v)	8	
Queue Delay / Veh (s/v)	0	
Total Delay / Veh (s/v)	8	
Total Delay (hr)	2	
Stops / Veh	0.38	
Stops (#)	322	
Average Speed (mph)	34	
Total Travel Time (hr)	7	
Distance Traveled (mi)	223	
Fuel Consumed (gal)	13	
Fuel Economy (mpg)	17.0	
CO Emissions (kg)	0.92	
NOx Emissions (kg)	0.18	
VOC Emissions (kg)	0.21	
Unserved Vehicles (#)	0	
Vehicles in dilemma zone (#)	0	
Performance Index	2.8	

### 3: CSAH 116 & CSAH 150

Direction	EB	WB	SB	All	
Future Volume (vph)	521	84	250	855	
Control Delay / Veh (s/v)	1	0	26	8	
Queue Delay / Veh (s/v)	0	0	0	0	
Total Delay / Veh (s/v)	1	0	26	8	
Total Delay (hr)	0	0	2	2	
Stops / Veh	0.14	0.00	1.00	0.38	
Stops (#)	72	0	250	322	
Average Speed (mph)	48	50	19	34	
Total Travel Time (hr)	3	1	3	7	
Distance Traveled (mi)	138	27	58	223	
Fuel Consumed (gal)	6	1	6	13	
Fuel Economy (mpg)	23.8	NA	9.0	17.0	
CO Emissions (kg)	0.41	0.06	0.45	0.92	
NOx Emissions (kg)	0.08	0.01	0.09	0.18	
VOC Emissions (kg)	0.09	0.01	0.10	0.21	
Unserved Vehicles (#)	0	0	0	0	
Vehicles in dilemma zone (#)	0	0	0	0	
# **Build AM Synchro**

#### Lanes, Volumes, Timings 3: CSAH 116 & CSAH 150

04/20/2020

	٦	-	-	•	1	-
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		<del>ا</del>	¢Î		¥	
Traffic Volume (vph)	48	473	31	53	235	16
Future Volume (vph)	48	473	31	53	235	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180			340	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.915		0.992	
Flt Protected		0.995			0.955	
Satd. Flow (prot)	0	1853	1704	0	1765	0
Flt Permitted		0.995			0.955	
Satd. Flow (perm)	0	1853	1704	0	1765	0
Link Speed (mph)		50	50		45	
Link Distance (ft)		1402	1693		1218	
Travel Time (s)		19.1	23.1		18.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	52	514	34	58	255	17
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	566	92	0	272	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0	0	12	5
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Yield	Yield	-	Yield	•
Intersection Summary						
Area Type:	Other					
Control Type: Roundabout						
Intersection Capacity Utiliza	tion 54.9%			IC	U Level o	of Service /

Intersection Capacity Utiliza Analysis Period (min) 15

Intersection				
Intersection Delay, s/veh	7.9			
Intersection LOS	А			
Approach	EB	WB	SB	
Entry Lanes	1	1	1	
Conflicting Circle Lanes	1	1	1	
Adj Approach Flow, veh/h	566	92	272	
Demand Flow Rate, veh/h	577	94	277	
Vehicles Circulating, veh/h	260	53	35	
Vehicles Exiting, veh/h	52	784	112	
Ped Vol Crossing Leg, #/h	0	0	0	
Ped Cap Adj	1.000	1.000	1.000	
Approach Delay, s/veh	10.3	3.4	4.5	
Approach LOS	В	А	А	
Lane	Left	Left	Left	
Designated Moves	LT	TR	LR	
Assumed Moves	LT	TR	LR	
RT Channelized				
Lane Util	1.000	1.000	1.000	
Follow-Up Headway, s	2.609	2.609	2.609	
Critical Headway, s	4.976	4.976	4.976	
Entry Flow, veh/h	577	94	277	
Cap Entry Lane, veh/h	1058	1307	1331	
Entry HV Adj Factor	0.980	0.982	0.982	
Flow Entry, veh/h	566	92	272	
Cap Entry, veh/h	1038	1284	1307	
V/C Ratio	0.545	0.072	0.208	
Control Delay, s/veh	10.3	3.4	4.5	
LOS	В	А	А	
95th %tile Queue, veh	3	0	1	

#### **Network Totals**

1
0
0
0
0
1.00
856
49
5
223
20
11.2
1.39
0.27
0.32
0
0
2.4

#### 3: CSAH 116 & CSAH 150

Direction	EB	WB	SB	All	
Future Volume (vph)	521	85	250	856	
Control Delay / Veh (s/v)	0	0	0	0	
Queue Delay / Veh (s/v)	0	0	0	0	
Total Delay / Veh (s/v)	0	0	0	0	
Total Delay (hr)	0	0	0	0	
Stops / Veh	1.00	1.00	1.00	1.00	
Stops (#)	521	85	250	856	
Average Speed (mph)	50	50	45	49	
Total Travel Time (hr)	3	1	1	5	
Distance Traveled (mi)	138	27	58	223	
Fuel Consumed (gal)	13	2	5	20	
Fuel Economy (mpg)	11.0	12.3	11.3	11.2	
CO Emissions (kg)	0.88	0.16	0.36	1.39	
NOx Emissions (kg)	0.17	0.03	0.07	0.27	
VOC Emissions (kg)	0.20	0.04	0.08	0.32	
Unserved Vehicles (#)	0	0	0	0	
Vehicles in dilemma zone (#)	0	0	0	0	

# **Existing AM Synchro**

HCM 6th TWSC 3: CSAH 116 & CSAH 150

Intersection						
Int Delay, s/veh	8.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	5	•	•	1	Y	
Traffic Vol, veh/h	48	473	31	53	235	16
Future Vol, veh/h	48	473	31	53	235	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	180	-	-	340	0	-
Veh in Median Storage,	# -	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	52	514	34	58	255	17

Major/Minor	Major1	Ν	/lajor2		Minor2		
Conflicting Flow All	92	0	-	0	652	34	
Stage 1	-	-	-	-	34	-	
Stage 2	-	-	-	-	618	-	
Critical Hdwy	4.12	-	-	-	6.42	6.22	
Critical Hdwy Stg 1	-	-	-	-	5.42	-	
Critical Hdwy Stg 2	-	-	-	-	5.42	-	
Follow-up Hdwy	2.218	-	-	-	3.518	3.318	
Pot Cap-1 Maneuver	1503	-	-	-	433	1039	
Stage 1	-	-	-	-	988	-	
Stage 2	-	-	-	-	538	-	
Platoon blocked, %		-	-	-			
Mov Cap-1 Maneuver	1503	-	-	-	418	1039	
Mov Cap-2 Maneuver	-	-	-	-	418	-	
Stage 1	-	-	-	-	953	-	
Stage 2	-	-	-	-	538	-	
Approach	EB		WB		SB		
HCM Control Delay, s	0.7		0		26.2		
HCM LOS					D		
Minor Lane/Major Mvn	nt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)		1503	-	-	-	435	
HCM Lane V/C Ratio		0.035	-	-	-	0.627	
HCM Control Delay (s	)	7.5	-	-	-	26.2	
HCM Lane LOS		A	-	-	-	D	
HCM 95th %tile Q(veh	ı)	0.1	-	-	-	4.2	

#### **Network Totals**

Number of Intersections	1	
Control Delay / Veh (s/v)	8	
Queue Delay / Veh (s/v)	0	
Total Delay / Veh (s/v)	8	
Total Delay (hr)	2	
Stops / Veh	0.38	
Stops (#)	322	
Average Speed (mph)	34	
Total Travel Time (hr)	7	
Distance Traveled (mi)	223	
Fuel Consumed (gal)	13	
Fuel Economy (mpg)	17.0	
CO Emissions (kg)	0.92	
NOx Emissions (kg)	0.18	
VOC Emissions (kg)	0.21	
Unserved Vehicles (#)	0	
Vehicles in dilemma zone (#)	0	
Performance Index	2.8	

#### 3: CSAH 116 & CSAH 150

Direction	EB	WB	SB	All	
Future Volume (vph)	521	84	250	855	
Control Delay / Veh (s/v)	1	0	26	8	
Queue Delay / Veh (s/v)	0	0	0	0	
Total Delay / Veh (s/v)	1	0	26	8	
Total Delay (hr)	0	0	2	2	
Stops / Veh	0.14	0.00	1.00	0.38	
Stops (#)	72	0	250	322	
Average Speed (mph)	48	50	19	34	
Total Travel Time (hr)	3	1	3	7	
Distance Traveled (mi)	138	27	58	223	
Fuel Consumed (gal)	6	1	6	13	
Fuel Economy (mpg)	23.8	NA	9.0	17.0	
CO Emissions (kg)	0.41	0.06	0.45	0.92	
NOx Emissions (kg)	0.08	0.01	0.09	0.18	
VOC Emissions (kg)	0.09	0.01	0.10	0.21	
Unserved Vehicles (#)	0	0	0	0	
Vehicles in dilemma zone (#)	0	0	0	0	

# **Build AM Synchro**

#### Lanes, Volumes, Timings 3: CSAH 116 & CSAH 150

04/20/2020

	٦	-	-	•	1	-
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		<del>ا</del>	¢Î		¥	
Traffic Volume (vph)	48	473	31	53	235	16
Future Volume (vph)	48	473	31	53	235	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180			340	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.915		0.992	
Flt Protected		0.995			0.955	
Satd. Flow (prot)	0	1853	1704	0	1765	0
Flt Permitted		0.995			0.955	
Satd. Flow (perm)	0	1853	1704	0	1765	0
Link Speed (mph)		50	50		45	
Link Distance (ft)		1402	1693		1218	
Travel Time (s)		19.1	23.1		18.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	52	514	34	58	255	17
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	566	92	0	272	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0	0	12	5
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Yield	Yield	-	Yield	•
Intersection Summary						
Area Type:	Other					
Control Type: Roundabout						
Intersection Capacity Utiliza	tion 54.9%			IC	U Level o	of Service /

Intersection Capacity Utiliza Analysis Period (min) 15

Intersection				
Intersection Delay, s/veh	7.9			
Intersection LOS	А			
Approach	EB	WB	SB	
Entry Lanes	1	1	1	
Conflicting Circle Lanes	1	1	1	
Adj Approach Flow, veh/h	566	92	272	
Demand Flow Rate, veh/h	577	94	277	
Vehicles Circulating, veh/h	260	53	35	
Vehicles Exiting, veh/h	52	784	112	
Ped Vol Crossing Leg, #/h	0	0	0	
Ped Cap Adj	1.000	1.000	1.000	
Approach Delay, s/veh	10.3	3.4	4.5	
Approach LOS	В	А	A	
Lane	Left	Left	Left	
Designated Moves	LT	TR	LR	
Assumed Moves	LT	TR	LR	
RT Channelized				
Lane Util	1.000	1.000	1.000	
Follow-Up Headway, s	2.609	2.609	2.609	
Critical Headway, s	4.976	4.976	4.976	
Entry Flow, veh/h	577	94	277	
Cap Entry Lane, veh/h	1058	1307	1331	
Entry HV Adj Factor	0.980	0.982	0.982	
Flow Entry, veh/h	566	92	272	
Cap Entry, veh/h	1038	1284	1307	
V/C Ratio	0.545	0.072	0.208	
Control Delay, s/veh	10.3	3.4	4.5	
LOS	В	А	А	
95th %tile Queue, veh	3	0	1	

#### **Network Totals**

1
0
0
0
0
1.00
856
49
5
223
20
11.2
1.39
0.27
0.32
0
0
2.4

#### 3: CSAH 116 & CSAH 150

Direction	EB	WB	SB	All	
Future Volume (vph)	521	85	250	856	
Control Delay / Veh (s/v)	0	0	0	0	
Queue Delay / Veh (s/v)	0	0	0	0	
Total Delay / Veh (s/v)	0	0	0	0	
Total Delay (hr)	0	0	0	0	
Stops / Veh	1.00	1.00	1.00	1.00	
Stops (#)	521	85	250	856	
Average Speed (mph)	50	50	45	49	
Total Travel Time (hr)	3	1	1	5	
Distance Traveled (mi)	138	27	58	223	
Fuel Consumed (gal)	13	2	5	20	
Fuel Economy (mpg)	11.0	12.3	11.3	11.2	
CO Emissions (kg)	0.88	0.16	0.36	1.39	
NOx Emissions (kg)	0.17	0.03	0.07	0.27	
VOC Emissions (kg)	0.20	0.04	0.08	0.32	
Unserved Vehicles (#)	0	0	0	0	
Vehicles in dilemma zone (#)	0	0	0	0	

#### **Traffic Safety Benefit-Cost Calculation**

Highway Safety Improvement Program (HSIP) Reactive Project

#### **DEPARTMENT OF** TRANSPORTATION

A Roadway	Description				
Route CS	AH 116 & 150	District Metro	County	Hennepin	
Begin RP		End RP	Miles		
Location CS	AH 116 & CSAH 150				_
					_
B. Project De	escription				
Proposed Wo	rk Conversion f	rom Minor-Approach	Stop to Single-lane Rour	ndabout	
Project Cost*	\$1,556,400		Installation Year	2024	
Project Servio	e Life 20 years		Traffic Growth Factor	3.7%	
* exclude Righ	nt of Way from Project C	ost			
C. Crash Mod	lification Factor				
0.29 Fat	tal (K) Crashes	Reference	Convert Intersection	with Minor-Road Stop Contro	ol to
0.29 Ser	rious Injury (A) Crashes		Мос	dern Roundabout	
0.29 Mo	oderate Injury (B) Crasł	nes Crash Type	e All in Rural Setting		
0.29 <b>Po</b>	ssible Injury (C) Crashe	s			
0.29 Pro	operty Damage Only Cr	ashes		www.CMFclearinghouse	e.org
D Crash Mod	dification Eactor (a	ntional second CM	E)		
Eat	tal (K) Crashes	Reference	')		
Se	rious Iniury (A) Crashes				
Mc	oderate Iniury (B) Crast	nes Crash Type	2		
Po	ssible Iniury (C) Crashe	s			_
Pro	operty Damage Only Cr	ashes		www.CMFclearinghouse	e.org
					0
E. Crash Data	1	_			
Begin Date	1/1/2016	End Date	<u>12/31/201</u>	8 31	years
Data Source	MnCMAT 2				
	Crash Severity	All in Rural Setting	< option	ial 2nd CMF >	
	K crashes	0			
	A crashes	0			
	B crashes	0			
	C crashes	1			
	PDO crashes	6			
F. Benefit-Co	st Calculation				
\$1,0	097,017	Benefit (present value)		Datio - 0 74	
\$1,5	56,400	Cost	B/C	nduu = 0./1	
	Proposed p	oject expected to redu	ce 2 crashes annually, 0 of w	hich involving fatality or serious	injury.

# F. Analysis Assumptions

Crash Severity	Crash Cost		
K crashes	\$1,360,000	Link: mndot.gov/	planning/program/appendix_a.html
A crashes	\$680,000		
B crashes	\$210,000	Real Discount Rate	1.2%
C crashes	\$110,000	Traffic Growth Rate	3.7%
PDO crashes	\$12,000	Project Service Life	20 years
	Crash Severity K crashes A crashes B crashes C crashes PDO crashes	Crash SeverityCrash CostK crashes\$1,360,000A crashes\$680,000B crashes\$210,000C crashes\$110,000PDO crashes\$12,000	Crash SeverityCrash CostK crashes\$1,360,000A crashes\$680,000B crashes\$210,000C crashes\$110,000C crashes\$112,000PDO crashes\$12,000

# G. Annual Benefit

Crash Severity	<b>Crash Reduction</b>	Annual Reduction	Annual Benefit
K crashes	0.00	0.00	\$O
A crashes	0.00	0.00	\$0
B crashes	0.00	0.00	\$0
C crashes	0.71	0.24	\$26,033
PDO crashes	4.26	1.42	\$17,040
		·	\$43,073

#### H. Amortized Benefit

<u>Year</u>	Crash Benefits	Present Value	
2024	\$43,073	\$43,073	Total = \$1,097,017
2025	\$44,667	\$44,137	
2026	\$46,320	\$45,228	
2027	\$48,034	\$46,345	
2028	\$49,811	\$47,490	
2029	\$51,654	\$48,663	
2030	\$53,565	\$49,865	
2031	\$55,547	\$51,097	
2032	\$57,602	\$52,359	
2033	\$59,733	\$53,653	
2034	\$61,944	\$54,978	
2035	\$64,235	\$56,336	
2036	\$66,612	\$57,728	
2037	\$69,077	\$59,154	
2038	\$71,633	\$60,616	
2039	\$74,283	\$62,113	
2040	\$77,032	\$63,647	
2041	\$79,882	\$65,220	
2042	\$82,837	\$66,831	
2043	\$85,902	\$68,482	
0	\$O	\$0	
0	\$0	\$0	
0	\$0	\$0	
0	\$0	\$0	
0	\$O	\$O	





ROGE

VSB

THREE-LEGGED ROUNDABOUT

City of Rogers, Hennepin County, Minnesota

10         Tatal         Formul Sub         Conty         Material         Mater	Jers FMP Document - Transportation Capita	- Transportation Capita	ansportation Capita	oortation Capita	tion Capita	I pita		mprove		ojects -	- Inters	section	Focus	Funding					
International         Internat		Project	Year	Other Indirect Costs	ROW	Engineering	Construction	Total	Federal / State	County	MSA	Assessment	Franchise Fees	Developer	TIF 1	Other City Funds	Area Wide Assessments (402 unallocated)	Fund 402 Allocated Funds	Total Funding Sources
International         Internat	- R	2019 2019	00.00			001 0004	000 737 74	006 686 83			0010004	0001000	ACOF 0.00			000 0019		000 014	000 000 F4
	- 1	SUD COULT DIGITION LANG TU.	RL NZ			\$230,400	006,161,1\$	000,200,14			\$508,/50	\$204,000	nnn'enet			000/221.\$		\$42,000	\$1,382,300
Math         Math <th< td=""><td>- <b>1</b>1</td><td>2020</td><td></td><td>\$</td><td>*</td><td>\$230,400</td><td>\$1,151,900</td><td>\$1,382,300</td><td>\$0</td><td>\$0</td><td>\$508,750</td><td>\$204,000</td><td>\$505,000</td><td>\$(</td><td>\$0</td><td>\$122,550</td><td>\$0</td><td>\$42,000</td><td>\$1,382,300</td></th<>	- <b>1</b> 1	2020		\$	*	\$230,400	\$1,151,900	\$1,382,300	\$0	\$0	\$508,750	\$204,000	\$505,000	\$(	\$0	\$122,550	\$0	\$42,000	\$1,382,300
Matrix         Matrix<	_	2020	0000			4000 000	41 100 000	64 000 000		4 100 000	0000000						4000 000		
Orientes         Display         <	-	wements		¢5.000		000'027¢	\$1,100,000 \$410,680	\$1,320,000			000'0264	\$310,000				¢102 380	nnninez¢	¢75 773	000,020,16 6.488.4.63
With contract (inclusion)         Disc (inclusion) <thdisc (inc<="" td=""><td>- 2</td><td>OW Accuration</td><td>0202</td><td>00°00</td><td>\$300.000</td><td>111110</td><td></td><td>\$300.000</td><td></td><td></td><td></td><td>00010100</td><td></td><td></td><td>\$300 000</td><td>000'301 A</td><td></td><td>011/010</td><td>\$300 000</td></thdisc>	- 2	OW Accuration	0202	00°00	\$300.000	111110		\$300.000				00010100			\$300 000	000'301 A		011/010	\$300 000
Mutucher (Mather (Matha (Mather (Matha (Mather (Mather (Mather (Mather (Mather (Mather		for Transportation	2020		\$500.000			\$500,000					-		\$500.000				\$500.000
Image: sector		ST/ MEMORIAL DR REALIGNMENT	2020	30	\$50,000	\$108,000	\$600,000	\$758,000			\$250,000				\$258,000		\$250,000		\$758,000
Instant         20         9.00         2000 <t< td=""><td>_</td><td>Lane</td><td>2020</td><td></td><td></td><td>\$150,000</td><td>\$750,000</td><td>\$900,000</td><td></td><td></td><td></td><td>\$900,000</td><td></td><td></td><td></td><td></td><td></td><td></td><td>\$900,000</td></t<>	_	Lane	2020			\$150,000	\$750,000	\$900,000				\$900,000							\$900,000
Instruction         100         10000         10000         1000         1000	- No. 1	Sebeau	2020			\$120,000	\$600,000	\$720,000				\$720,000							\$720,000
	- 11 m	SUME COMPLETED IN TO POSE FREE INSTRUCT	2020	00'04	CRED DOD	\$300,000	\$2,282,000 \$5,742,680	\$7 573 153	03	\$500,000	\$1 170 000	\$1 030 000	\$500,000	9	\$330,000	\$1,287,000	\$500.000	£75 773	\$2,587,000
Image: function         Display is a space state sta	11	2021														a contract i de	00010004		
International         Internat	17	erchange	2021	50	50	\$3,360,000	\$38,640,000	\$42,000,000	\$33,000,000	\$7,500,000							\$1,500,000		\$42,000,000
The state of	0	HASE I (1 <sup>td</sup> two lanes)	2021	000'6\$		\$1,300,000	\$6,500,000	\$7,809,000	\$0	\$6,925,000	\$384,000						\$500,000		\$7,809,000
333         333 <td></td> <td>xtension to 129th Avenue</td> <td>2021</td> <td>50</td> <td>1 \$350,000</td> <td>\$540,000</td> <td>\$2,700,000</td> <td>\$3,590,000</td> <td></td> <td></td> <td>\$1,375,000</td> <td>\$500,000</td> <td></td> <td></td> <td>\$500,000</td> <td>\$320,000</td> <td>\$895,000</td> <td></td> <td>\$3,590,000</td>		xtension to 129th Avenue	2021	50	1 \$350,000	\$540,000	\$2,700,000	\$3,590,000			\$1,375,000	\$500,000			\$500,000	\$320,000	\$895,000		\$3,590,000
311         311 <td></td> <td></td> <td></td> <td>100'6\$</td> <td>3350,000</td> <td>1 \$5,200,000</td> <td>\$47,840,000</td> <td>\$53,399,000</td> <td>\$33,000,000</td> <td>\$14,425,000</td> <td>\$1,759,000</td> <td>\$500,000</td> <td>80</td> <td>20</td> <td>\$500,000</td> <td>\$320,000</td> <td>\$2,895,000</td> <td>0\$</td> <td>\$53,399,000</td>				100'6\$	3350,000	1 \$5,200,000	\$47,840,000	\$53,399,000	\$33,000,000	\$14,425,000	\$1,759,000	\$500,000	80	20	\$500,000	\$320,000	\$2,895,000	0\$	\$53,399,000
Total interaction         200         87,000 <th< td=""><td></td><td>2022</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>		2022																	
and functioned         200         540.00         54	-	r Road Intersection Improvements	2021		\$250,000	\$240,000	\$1,200,000	\$1,690,000	\$750,000	\$250,000							\$690,000		\$1,690,000
1         0	-	rade Phase 2 (Arthur Street to Oakwood Drive) on/ CSAH 13 & 144 Intersection	2020	\$6,40	\$100,000	5390,000 5820,000	\$1,950,000	\$2,446,400		\$4.428.000	\$1,250,000		\$250,000			\$446,400	\$500,000	\$800 420	\$2,446,400 \$5 270 000
1/1         1/1 <td></td> <td></td> <td></td> <td>\$6,400</td> <td>\$700,000</td> <td>1 \$1,450,000</td> <td>\$7,250,000</td> <td>\$9,406,400</td> <td>\$750,000</td> <td>\$4,678,000</td> <td>\$1,491,571</td> <td>\$0</td> <td>\$250,000</td> <td>\$0</td> <td>\$0</td> <td>\$446,400</td> <td>\$1,190,000</td> <td>\$600,429</td> <td>\$9,406,400</td>				\$6,400	\$700,000	1 \$1,450,000	\$7,250,000	\$9,406,400	\$750,000	\$4,678,000	\$1,491,571	\$0	\$250,000	\$0	\$0	\$446,400	\$1,190,000	\$600,429	\$9,406,400
1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.	- 11 M	2023																	
Rute (Fragment)         201         51,0000         \$1,0000         \$2,0000	C. *	<ol> <li>/ Territorial Rd. (CSAH 116) Intersection</li> </ol>	2023	34	1 \$50,000	\$163,750	\$720,500	\$934,250	\$720,500								\$166,160	\$47,590	\$934,250
India the leftene (pare)         ZIG         ST 100         ST 1000         ST 10000         ST 1000         ST 1000 <td>~</td> <td>from Edgewater Development to 129th Ave</td> <td>2019</td> <td></td> <td></td> <td></td> <td>\$1,900,000</td> <td>\$1,900,000</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>\$1,900,000</td> <td></td> <td></td> <td></td> <td></td> <td>\$1,900,000</td>	~	from Edgewater Development to 129th Ave	2019				\$1,900,000	\$1,900,000						\$1,900,000					\$1,900,000
1014         10144         1014         1014 <t< td=""><td>-</td><td>Relates to Fletcher Bypass)</td><td>2023</td><td>Х¢</td><td>3 \$125,000</td><td>3775,000</td><td>\$3,100,000</td><td>\$4,000,000</td><td>\$2,500,000</td><td>\$600,000</td><td></td><td></td><td></td><td></td><td></td><td></td><td>\$900,000</td><td></td><td>\$4,000,000</td></t<>	-	Relates to Fletcher Bypass)	2023	Х¢	3 \$125,000	3775,000	\$3,100,000	\$4,000,000	\$2,500,000	\$600,000							\$900,000		\$4,000,000
antion (234) if it Proper D130pi (234) if it Pr		2004	_	*	100'e/1¢	102/32/R&	000'07/'ct	\$0,834,250	\$5,220,500	000'000\$	0¢	0\$	*	100,008,14	0¢	94	U01,000,1\$	\$47,590	\$0,834,250
· Team mer Constration         2000         51000000         5100000         5100000 <td></td> <td>mansion (CSAH 81 to Rovers Dr) Starte 1</td> <td>A CINC</td> <td>\$50.00C</td> <td>6500 000</td> <td>\$1 500 000</td> <td>\$7 500 000</td> <td>\$9 KED DOD</td> <td>\$4 000 000</td> <td>\$2 500 000</td> <td>\$50.000</td> <td></td> <td></td> <td></td> <td></td> <td>\$100000</td> <td>\$2 000 000</td> <td></td> <td><b>60 660 000</b></td>		mansion (CSAH 81 to Rovers Dr) Starte 1	A CINC	\$50.00C	6500 000	\$1 500 000	\$7 500 000	\$9 KED DOD	\$4 000 000	\$2 500 000	\$50.000					\$100000	\$2 000 000		<b>60 660 000</b>
200 Interface         2010 Int		r - 129th Ave in CSAH 116	2023	00000	000000		\$1 900 000	\$1.900.000						\$1 900 000			0001000114		\$1900,000
103         103         573/10         511/40/10 <td>- 17</td> <td>203 Intersection Alignment</td> <td>2024</td> <td>36</td> <td>\$250,000</td> <td>\$240,000</td> <td>\$1,200,000</td> <td>\$1,690,000</td> <td></td> <td>\$1,440,000</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>\$250,000</td> <td></td> <td>\$1,690,000</td>	- 17	203 Intersection Alignment	2024	36	\$250,000	\$240,000	\$1,200,000	\$1,690,000		\$1,440,000							\$250,000		\$1,690,000
305         305 <td></td> <td></td> <td></td> <td>\$50,000</td> <td>1 \$750,00C</td> <td>1 \$1,740,000</td> <td>\$10,600,000</td> <td>\$13,140,000</td> <td>\$4,000,000</td> <td>\$3,940,000</td> <td>\$50,000</td> <td>\$0</td> <td>\$0</td> <td>\$1,900,000</td> <td>\$0</td> <td>\$1,000,000</td> <td>\$2,250,000</td> <td>\$0</td> <td>\$13,140,000</td>				\$50,000	1 \$750,00C	1 \$1,740,000	\$10,600,000	\$13,140,000	\$4,000,000	\$3,940,000	\$50,000	\$0	\$0	\$1,900,000	\$0	\$1,000,000	\$2,250,000	\$0	\$13,140,000
Reference (PMA)         223         233	100	2025																	
Instruction	e 6	n Edgewater Pkwy to CSAH 144 ada Phase 3 (Detwood Drive to CSAH 116)	2025	\$ \$	3250,000	\$300,000	\$1,500,000	\$2,050,000		\$1,650,000	¢4 200 000	\$400,000	61E0 000				\$000 000		\$2,050,000
3033- (15)         3034- (15)         3034- (15)         3034- (15)         10	- 11	(	5050	36	1 \$500.000	\$650.000	\$3.250,000	\$4.400.000	\$0	\$1.650.000	\$1.200.000	\$400.000	\$250.000	\$0	\$0	\$0	\$900,000	\$0	\$4.400.000
HASE (1 <sup>24</sup> harmon file to Brockin Line) 2024 51,000 53,0000 53,0000 53,0000 53,0000 54,0000 5	11	2026+																	
PHASE II (7" we lares)         2026         58         98         980000         87.44.000         84.40.000         51.40.000         87.40.0	15	i 13 (Extension from 116 to Brockton Lane)	2026+	\$1.000.000	\$500.000	\$3.000.000	\$ 15.000.000	\$19,500,000	\$7.000.000	\$8.000.000				\$4.500.000					\$19.500.000
2026         51,275.00         51,770.00         51,	- 12	HASE II (2 <sup>nd</sup> two lanes)	2026+	35	SO	\$490.000	\$2,450,000	\$2,940,000		\$2.500.000	\$440.000								\$2.940.000
mmt S d Sub Di. Lk Rd.         2026         St 30000         \$75000         \$456000         \$46000         \$46000         \$46000         \$46000         \$46000         \$46000         \$46000         \$46000         \$46000         \$46000         \$26000         \$46000         \$26000         \$46000         \$26000	100	on I-94 to Marie Ave	2026+		\$1,275,000	\$1,700,000	\$8,500,000	\$11,475,000	\$4,975,000	\$2,500,000	\$1,500,000						\$2,500,000		\$11,475,000
Mmt. Nuch Stelein (11 file in Industrial)         2028-         St \$ \$50,000         \$54,0000         \$52,0000         \$54,0000         \$52,0000         \$54,0000         \$54,0000         \$54,0000         \$54,0000         \$54,0000         \$54,0000         \$54,0000         \$54,0000         \$54,0000         \$54,0000         \$54,0000         \$52,0000         \$54,0000         \$54,0000         \$54,0000         \$54,0000         \$54,0000         \$54,0000         \$54,0000         \$54,0000         \$54,0000         \$54,0000         \$50,000         \$54,0000         \$50,000         \$54,0000         \$50,000		ment - S. of South Dia. Lk. Rd.	2026+	36	1 \$1,300,000	\$750,000	\$2,500,000	\$4,550,000						\$3,550,000			\$1,000,000		\$4,550,000
	-	ment - North Section (116 to Industrial) tions (Tucker Hassan Pkwv, Curve Radius)	2026+	80	\$300,000	\$620,000	\$3,100,000	\$4,020,000	ç	\$3,520,000	\$500,000						\$520 000		\$4,020,000
	- 11	(	2020	\$1.000.000	\$3,625,000	\$6.740.000	\$32,750,000	\$44.115.000	\$11.975.000	\$17,630,000	\$2,440,000	\$0	8	\$8.050.000	\$0	\$0	\$4,020.000	05	\$44.115.000

# **Attachment A**



# **EJSCREEN ACS Summary Report**



Location: User-specified point center at 45.174771, -93.552621

Ring (buffer): 0.5-miles radius

Description: CSAH 116 & CSAH 150 Roundabout

Summary of ACS Estimates	2013 - 2017
Population	733
Population Density (per sq. mile)	797
Minority Population	59
% Minority	8%
Households	251
Housing Units	256
Housing Units Built Before 1950	9
Per Capita Income	42,855
Land Area (sq. miles) (Source: SF1)	0.92
% Land Area	96%
Water Area (sq. miles) (Source: SF1)	0.04
% Water Area	4%

	2013 - 2017 ACS Estimates	Percent	MOE (±)
Population by Race			
Total	733	100%	680
Population Reporting One Race	721	98%	1,360
White	677	92%	771
Black	0	0%	12
American Indian	0	0%	12
Asian	41	6%	502
Pacific Islander	1	0%	18
Some Other Race	2	0%	45
Population Reporting Two or More Races	12	2%	213
Total Hispanic Population	7	1%	87
Total Non-Hispanic Population	726		
White Alone	674	92%	765
Black Alone	0	0%	12
American Indian Alone	0	0%	12
Non-Hispanic Asian Alone	41	6%	502
Pacific Islander Alone	1	0%	18
Other Race Alone	0	0%	12
Two or More Races Alone	10	1%	213
Population by Sex			
Male	346	47%	409
Female	387	53%	467
Population by Age			
Age 0-4	55	8%	241
Age 0-17	213	29%	373
Age 18+	520	71%	594
Age 65+	78	11%	261

**Data Note:** Detail may not sum to totals due to rounding. Hispanic population can be of any race. N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2013 - 2017 -



#### **EJSCREEN ACS Summary Report**



Location: User-specified point center at 45.174771, -93.552621

Ring (buffer): 0.5-miles radius

Description: CSAH 116 & CSAH 150 Roundabout

	2013 - 2017 ACS Estimates	Percent	MOE (±)
Population 25+ by Educational Attainment			
Total	463	100%	513
Less than 9th Grade	0	0%	21
9th - 12th Grade, No Diploma	14	3%	153
High School Graduate	93	20%	390
Some College, No Degree	168	36%	352
Associate Degree	57	12%	207
Bachelor's Degree or more	187	40%	372
Population Age 5+ Years by Ability to Speak English			
Total	678	100%	645
Speak only English	638	94%	675
Non-English at Home <sup>1+2+3+4</sup>	39	6%	372
<sup>1</sup> Speak English "very well"	22	3%	184
<sup>2</sup> Speak English "well"	9	1%	135
<sup>3</sup> Speak English "not well"	3	0%	46
<sup>4</sup> Speak English "not at all"	6	1%	147
<sup>3+4</sup> Speak English "less than well"	8	1%	154
<sup>2+3+4</sup> Speak English "less than very well"	18	3%	204
Linguistically Isolated Households <sup>*</sup>			
Total	2	100%	61
Speak Spanish	0	0%	12
Speak Other Indo-European Languages	0	0%	12
Speak Asian-Pacific Island Languages	2	100%	60
Speak Other Languages	0	0%	12
Households by Household Income			
Household Income Base	251	100%	241
< \$15,000	9	4%	114
\$15,000 - \$25,000	8	3%	119
\$25,000 - \$50,000	19	8%	145
\$50,000 - \$75,000	28	11%	176
\$75,000 +	186	74%	317
Occupied Housing Units by Tenure			
Total	251	100%	241
Owner Occupied	213	85%	196
Renter Occupied	38	15%	160
Employed Population Age 16+ Years			
Total	546	100%	594
In Labor Force	417	76%	522
Civilian Unemployed in Labor Force	11	2%	102
Not In Labor Force	129	24%	275

DataNote:Datail may not sum to totals due to rounding.Hispanic population can be of anyrace.N/Ameans not available.Source:U.S. Census Bureau, American Community Survey (ACS)\*Households in which no one 14 and over speaks English "very well" or speaks English only.



# **EJSCREEN ACS Summary Report**



Location: User-specified point center at 45.174771, -93.552621 Ring (buffer): 0.5-miles radius

Description: CSAH 116 & CSAH 150 Roundabout

	2013 - 2017 ACS Estimates	Percent	MOE (±)
Population by Language Spoken at Home*			
Total (persons age 5 and above)	N/A	N/A	N/A
English	N/A	N/A	N/A
Spanish	N/A	N/A	N/A
French	N/A	N/A	N/A
French Creole	N/A	N/A	N/A
Italian	N/A	N/A	N/A
Portuguese	N/A	N/A	N/A
German	N/A	N/A	N/A
Yiddish	N/A	N/A	N/A
Other West Germanic	N/A	N/A	N/A
Scandinavian	N/A	N/A	N/A
Greek	N/A	N/A	N/A
Russian	N/A	N/A	N/A
Polish	N/A	N/A	N/A
Serbo-Croatian	N/A	N/A	N/A
Other Slavic	N/A	N/A	N/A
Armenian	N/A	N/A	N/A
Persian	N/A	N/A	N/A
Gujarathi	N/A	N/A	N/A
Hindi	N/A	N/A	N/A
Urdu	N/A	N/A	N/A
Other Indic	N/A	N/A	N/A
Other Indo-European	N/A	N/A	N/A
Chinese	N/A	N/A	N/A
Japanese	N/A	N/A	N/A
Korean	N/A	N/A	N/A
Mon-Khmer, Cambodian	N/A	N/A	N/A
Hmong	N/A	N/A	N/A
Thai	N/A	N/A	N/A
Laotian	N/A	N/A	N/A
Vietnamese	N/A	N/A	N/A
Other Asian	N/A	N/A	N/A
Tagalog	N/A	N/A	N/A
Other Pacific Island	N/A	N/A	N/A
Navajo	N/A	N/A	N/A
Other Native American	N/A	N/A	N/A
Hungarian	N/A	N/A	N/A
Arabic	N/A	N/A	N/A
Hebrew	N/A	N/A	N/A
African	N/A	N/A	N/A
Other and non-specified	N/A	N/A	N/A
Total Non-English	N/A	N/A	N/A

**Data Note:** Detail may not sum to totals due to rounding. Hispanic popultion can be of any race. N/A meansnot available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2013 - 2017. \*Population by Language Spoken at Home is available at the census tract summary level and up.

### **Attachment B**





# Attachment C



# **Rush Creek Regional Trail Corridor**

- - - Approved Route: No Construction Funding in Place Existing: Open to the Public

Three Rivers map is a compose and is prov the limi

Regional Trail Search Corridor

Areas with Natural Resource Value Along Rush Creek Regional Trail Corridor

#### **Commuter and Express Route Design**

The factors that guide the design of express routes are somewhat different from those covered in the above section for local routes. Express routes are focused on providing fast, reliable trips into major regional centers. The most important factors for express service success are high-density origins and destinations at both ends of the route (such as at a park-and-ride and downtown) and demand management that balances parking supply and cost with the demand for parking and access for transit. The level and location of congestion can also be a substantial factor in the success of express bus services.

# **Transit Market Areas**

#### **Market Areas Overview**

An important underlying element to the transit investment plan is the definition of Transit Market Areas. Transit Market Areas are defined by the demographic and urban design factors that are associated with successful transit service. There are five Transit Market Areas (see figure 6-3) as well as some unique Market Area features. The Transit Market Areas are generally associated with community designations in *Thrive MSP 2040* (see Land Use and Local Planning for more details) as follows:

- Transit Market Areas I and II are mostly Urban Center communities where urban form and density are most supportive of transit. These areas also have the largest concentrations of transit-dependent residents in the region. Transit service in these areas focuses on providing a dense network of local routes with high levels of service to accommodate a wide variety of trip purposes. Market Area II will typically have a similar route structure to Market Area I, but lower levels of service, as demand warrants.
- **Transit Market Area III** is primarily Urban along with portions of the Suburban, Suburban Edge, and Emerging Suburban Edge and is generally characterized by overall lower density and less transit-supportive urban form along with some pockets of denser development. The primary emphasis of transit service in this area is express and commuter service with some suburban local routes and dial-a-ride service providing basic access.
- **Transit Market Area IV** is primarily Suburban Edge and Emerging Suburban Edge along with portions of Suburban, and is generally characterized by consistently low-density development and an urban form that does not support frequent local transit service. Transit service in Market Area IV is primarily peak-period express and commuter service oriented to park-and-ride facilities that can effectively capture the lower density transit demand. Local trips are provided by general public dial-a-ride services.
- **Transit Market Area V** is generally all forms of Rural and Agricultural but does include the unique freestanding town centers of Stillwater, Waconia, Forest Lake, and Hastings; Market Area V is generally characterized by low-density development or undeveloped land not well suited for regular-route transit service outside of limited peak-period express and commuter service.

#### **Unique Market Areas**

The Emerging Market overlays are unique areas of Transit Market Areas II and III where significant pockets of higher density exist but surrounding conditions still limit the success of local transit. These areas should be a focus for future development that will connect them with areas of higher transit intensity, specifically looking at extensions of existing routes or connections.

Freestanding Town Centers are unique areas that grew independently of Minneapolis and Saint Paul and act as suburbs but are still separated from the urban and suburban areas by rural land. These areas typically have small downtowns of their own but also export many workers to other regional centers. Local transit services that connect to the region would not be as effective serving these areas given their location in the region, despite their relatively concentrated nature. However, these areas may still have express service demand and possible demand for small circulator services.

The Metropolitan Council and regional transit providers will also coordinate their efforts with MnDOT and transit services that connect beyond the seven-county metropolitan region. The Transit Market Areas do not address the feasibility of these kinds of services, which are coordinated on a case-by-case basis.

Two additional areas of emphasis in *Thrive MSP 2040* are important for consideration in transit service design, the special features of Areas of Concentrated Poverty, Areas of Concentrated Poverty where at least 50% of residents are people of color, and Job Concentrations. Residents of Areas of Concentrated Poverty must overcome a legacy of private disinvestment to access the opportunity of the region. In transit, this often means considering higher levels of service, better amenities, or unique service types focused on providing better access to jobs or education. These areas are also highly correlated with limited household access to a private vehicle. Job Concentrations have good potential to be served with transit because of their density and level of activity. Many of these concentrations will need to adapt and continue adding density and diversifying land uses to be truly transit-oriented. This will need to be coordinated with continued investments in transit access to these areas as well as better transit facilities.

The Transit Market Areas are shown in Figure 6-3 and described in more detail in Appendix G. Transit Market Areas are primarily used to design the regional bus system, but some guidance on their application to transitways is discussed in the Regional Transitway Guidelines.

#### Figure 6-3: Transit Market Areas





#### PUBLIC WORKS DEPARTMENT

(763) 428-8580

22350 SOUTH DIAMOND LAKE ROAD • ROGERS, MINNESOTA 55374

www.rogersmn.gov

May 4, 2020

Elaine Koutsoukos TAB Coordinator Metropolitan Council 390 Robert Street North St. Paul, Minnesota 55101

RE: CSAH 116 and CR 150 Roundabout 2020 Met Council Regional Solicitation Application

Dear Elaine:

Please find attached a resolution adopted by the Rogers City Council approving submittal of a Spot Mobility and Safety application to the Metropolitan Council as part of its 2020 Regional Solicitation for a proposed roundabout at CSAH 116 and CR 150. The City is taking the lead on this project application and coordinating with Hennepin County, who is also submitting a separate letter of support.

This project is identified in the City of Rogers Capital Improvement Program (CIP) and 2040 Comprehensive Plan.

The City of Rogers acknowledges, to the extent it has jurisdiction and controls right-of-way of the associated facilities, that the City will operate and maintain the roadway for the useful life of the improvement and will not change the use of any right-of-way acquired without prior approval from MnDOT.

Sincerely,

John Seifert Public Works Director

#### **RESOLUTION NO. 2020-28**

#### A RESOLUTION FOR APPROVAL OF METROPOLITAN COUNCIL CSAH 116 (TERRITORIAL ROAD) & CR 150 (MAIN STREET) SPOT MOBILITY & SAFETY GRANT APPLICATION SUBMITTAL AND AUTHORIZATION FOR STAFF TO PROVIDE A LETER OF SUPPORT

WHEREAS, the Metropolitan Council is requesting project submittals for federal funding under the Spot Mobility and Safety Grant Program; and

WHEREAS, the City of Rogers is proposing a roundabout at the intersection of CSAH 116 (Territorial Road) and CR 150 (Main Street) under the Spot Mobility & Safety Program for 2024/2025 funding; and

WHEREAS, this proposed roundabout improvement is identified as a top crash location in the City of Rogers 2040 Comprehensive Plan and is also identified in the currently held valid City of Rogers Capital Improvement Program (CIP); and

WHEREAS, the proposed CSAH 116 (Territorial Road) & CR 150 (Main Street) roundabout is a regionally significant federally eligible project eligible for submittal under the Spot Mobility & Safety Program; and

WHEREAS, all Metropolitan Council Regional Solicitation projects require a 20 percent local match from non-federal sources; and

WHEREAS, the City of Rogers has the legal authority to apply for financial assistance, and the institutional, managerial and financial capacity to ensure matching funds and adequate construction of the proposed project; and

WHEREAS, Hennepin County indicates financial support for the local match showing this project, and

WHEREAS, subject to a federal funding award the City Council of Rogers Minnesota, would be asked to consider authorization to execute a federal grant agreement at a future meeting; and

WHEREAS, 2024/2025 Metropolitan Council Spot Mobility & Safety Regional Solicitation grant application submittals are due on May 15, 2020.

**NOW, THEREFORE, BE IT RESOLVED** that the City Council of the City of Rogers, Minnesota, hereby:

- 1. Authorizes the City Public Works Director to submit a Metropolitan Council Spot Mobility & Safety Regional Solicitation grant application for 2024/2025 roundabout improvements at CSAH 116 (Territorial Road) and CR 150 (Main Street).
- 2. Authorizes the City Public Works Director to submit a letter of support as part of the Spot Mobility & Safety grant submittal package by the City of Rogers.
- 3. Acknowledges, to the extent it has jurisdiction and controls right-of-way of the associated facilities, that the City of Rogers will operate and maintain the proposed roadway improvement for

its useful life and will not change the use any of the right-of-way acquired without prior approval from MnDOT.

Moved by Councilmember	Eiden	, seconded by Co	ouncilmembe	er Jake	21		
The following voted in favo	r of said res	olution: Eiden,	borecki,	Ihli,	Jakel	md	Klick

The following voted against the same: MNU

The following abstained: MM

Whereupon said resolution was declared duly passed and adopted, and was signed by the Mayor, and attested by the Clerk dated this  $22^{+}$  day of \_\_\_\_\_\_, 2020.

Rick Ihli, Mayor

ATTEST:

Stacy Scharker Stacy Scharber, Asst. City Administrator/City Clerk

WSB Project:	CSAH 116 and CSAH 150 Intersection
Project Location:	City of Rogers, Hennepin County
WSB Project No:	015958-000
Date:	4/29/2020

		STATEMENT OF ESTIN	IATED QUANTITIES				
						CSAH 11 Ini	6 and CSAH 150 tersection
SHEET	Item Number	Description	Unit	Notes	Unit Price	Estimated Quantity	Estimated Cost
	2021.501	MOBILIZATION	LUMP SUM		\$100,000.00	1	\$100,000.00
	2104.518		SQ YD		\$10.00	6300	\$63,000.00
	2104.601	MISCELLANEOUS REMOVALS	LUMP SUM	1	\$50,000.00	1	\$50,000.00
	2106.507	EXCAVATION - COMMON	CU YD		\$15.00	2000	\$30,000.00
	2106.507	SELECT GRANULAR EMBANKMENT (CV)	CU YD CU YD		\$15.00	3900	\$58,500.00
	2106.507	COMMON EMBANKMENT (CV)	CU YD		\$12.00	2000	\$24,000.00
	2211.507	AGGREGATE BASE (CV) CLASS 5	CU YD	2	\$32.00	1600	\$51,200.00
	2301.504	CONCRETE PAVEMENT (7.0")	SQ YD		\$85.00	300	\$25,500.00
	2360.509	TYPE SP 9.5 WEARING COURSE MIX (4,C)	TON		\$75.00	1900	\$142,500.00
		CONSTRUCT STORM SEWER SYSTEM	LUMP SUM		\$160,000.00	1	\$160,000.00
	2521.518	4" CONCRETE WALK	SQ FT	3	\$8.00	7800	\$62,400.00
	2521.518	6" CONCRETE WALK	SQ FT		\$9.00	500	\$4,500.00
	2521.518	3" BITUMINOUS WALK	SQ FT		\$3.00	3700	\$11,100.00

WSB Project:	CSAH 116 and CSAH 150 Intersection
Project Location:	City of Rogers, Hennepin County
WSB Project No:	015958-000
Date:	4/29/2020

		STATEMENT OF ESTIMA	TED QUANTITIES				
						CSAH 116	and CSAH 150 rsection
SHEET	Item Number	Description	Unit	Notes	Unit Price	Estimated Quantity	Estimated Cost
							-
	2531.503	CONCRETE CURB & GUTTER DESIGN B624	LIN FT		\$25.00	3500	\$87,500.00
	2531.503	CONCRETE CURB & GUTTER DESIGN R424	LIN FT		\$40.00	270	\$10,800.00
	2531.618	TRUNCATED DOMES	SQ FT		\$68.00	100	\$6,800.00
		EROSION CONTROL & TURF ESTABLISHMENT (5%)	LUMP SUM		\$59,800.00	1	\$59,800.00
		INTERSECTION LIGHTING	LUMP SUM		\$44,000.00	1	\$44,000.00
		TRAFFIC CONTROL & STAGING	LUMP SUM		\$100,000.00	1	\$100,000.00
		SIGNING & STRIPING (2%)	LUMP SUM		\$24,000.00	1	\$24,000.00
					¢25.000.00	4	¢25.000.00
		LANDSCAPING (3%)	LUMP SUM		\$35,900.00	1	\$35,900.00
	TOTAL ESTIMATE						\$1 245 100 00
						25% CONTINGENCY	\$311.300.00

TOTAL ESTIMATE \$1,556,400.00

NOTES:

1. INCLUDES BUT IS NOT LIMITED TO CURB AND GUTTER, DRAINAGE PIPES, DRAINAGE STRUCTURES, MEDIANS, SIGNS, AND SAWCUTTING.

WSB Project:	CSAH 116 and CSAH 150 Intersection
Project Location:	City of Rogers, Hennepin County
WSB Project No:	015958-000
Date:	4/29/2020

		STATEMENT OF ESTIMATED QUA	NTITIES				
						CSAH 116 a Inters	nd CSAH 150 eection
SHEET	Item Number	Description	Unit	Notes	Unit Price	Estimated Quantity	Estimated Cost

2. AGGREGATE DEPTH ASSUMED TO BE 6" UNDER ROAD AND MEDIANS, 6" UNDER TRAIL AND SIDEWALKS.

3. INCLUDES CONCRETE FOR MEDIANS AND SIDEWALK.



INCIDENTID	ROUTESTS	>	ROUTE NUM MEASU			URE	ROUTEN		ROUTEID		COUNTY		CITY	
00624984	04-CSAH		0116		0.000		TERRITO	ORIAL RD	040000659	94720116-I	27		Roger	s
INTERSECT WITH	-	NUM	VEH	NUM KI	LLED	DATE	TIME	DAY OF WEEK	LAT	LONG	UTM X	UTM Y	(	WORK ZONE TYPE
		2		0		08/01/18	17:28	Wed	45.1747	-93.5526	456578.2	50025	508.2	NOT APPLICABLE
BASIC TYPE			CRASH	SEVERI	ΤY	1	FIRST HARM	IFUL		LI	GHT CONDITI	ON	W	EATHER PRIMARY
Angle			C - Pos	sible In	jury		Motor Vehic	le In Transport		Da	aylight		CI	oudy
				Un	it 1			Unit 2		Unit	3			Unit 4
	Unit Ty	уре	Motor V	Vehicle	in Tra	nsport	Motor Ve	hicle in Transp	ort					
	Vehicle Ty	уре	Passer	nger Ca	r		Passeng	er Car						
Direc	tion of Tra	avel	Eastbo	und			Eastbour	nd						
١	/eh Manue	ver	Turning	g Left			Moving F	orward						
	Age/S	Sex	36 M				48 F							
Р	hysical Co	ond	Appare	ently No	rmal		Apparen	tly Normal						
Contribu	uting Facto	or 1	Failure	to Yield	d Righ	t-of-Way	No Clear	Contributing A	ction					
												I		
OFFICER SKETC	ж							NARRAT	VE					



DRIVER OF UNIT 2 WAS WB ON TERRITORIAL ROAD. DRIVER 2 STATED SHE WAS DRIVING 50 MPH. DRIVER 2 STATED THAT AS SHE PASSED THROUGH THE INTERSECTION WITH MAIN STREET, UNIT 1 MADE A LEFT TURN INTO HER AND THE COLLISION OCCURRED. DRIVER 2 INDICATED SHE HAD NO TIME TO AVOID THE COLLISION. DRIVER 1 HAD BEEN EB ON TERRITORIAL ROAD AND WAS PREPARING TO MAKE A LEFT TURN TO PROCEED ON NB MAIN STREET. DRIVER 1 STATED THAT UNIT 2 WAS APPROACHING WITH RIGHT TURN BLINKER ON (DRIVER 2 DENIED HAVING BLINKER ON). DRIVER 1 THEN MADE A LEFT TURN DIRECTLY IN FRONT OF UNIT 2 AND COLLISION OCCURRED. WITNESS WAS STOPPED AT THE MAIN STREET STOP SIGN, PREPARING TO MAKE A RIGHT TURN ONTO WB TERRITORIAL ROAD. THE WITNESS WAS LOOKING AT UNIT 2 APPROACHING FROM THE EAST WHEN COLLISION OCCURRED. THE WITNESS DID NOT RECALL THE TURN SIGNAL BEING ON OR OFF, BUT DID NOT THINK

INCIDENT ID	ROUTE SYS	ROUTE	NUM	MEAS	URE	ROUTE N	AME	ROUTE	ID		COU	NTY	CI	ITY		
00329761	04-CSAH	0116		9.260		TERRIT	ORIAL RD	04000	0659	4720116-I	27		R	ogers	6	
INTERSECT WI	TH N	JM VEH	NUM KI	LLED	DATE	TIME	DAY OF WEEK	LAT		LONG	UTM X		UTM Y	1	NORK ZONE TYP	ъ
MAIN ST	2		0		02/16/16	3 16:20	Tue	45.174	7	-93.5526	45657	8.3	500250	9.5 I	NOT APPLICAE	BLE
BASIC TYPE		CRASH	SEVERI	TΥ		FIRST HARM	IFUL			L	IGHT CO	NDITIO	DN	WE	ATHER PRIMARY	Y
Left Turn		N - Pro	op Dama	age Or	nly	Motor Vehic	cle In Transport			0	Daylight			Clo	budy	
						1										
			Un	it 1			Unit 2			Uni	it 3				Unit 4	
	Unit Typ	e Motor	Vehicle	in Trai	nsport	Motor Ve	hicle in Transp	ort								
	Vehicle Typ	e Sport	Utility Ve	ehicle		Passeng	jer Car									
Dire	ection of Trave	Eastbo	ound			Westbou	Ind									
	Veh Manueve	r Turnin	g Left			Swerved	l or Attempt to A	void								
	Age/Se	<b>x</b> 16 F				29 F										
	Physical Con	d Appar	ently No	rmal		Apparen	tly Normal									
Contri	buting Factor	1 Failure	e to Yield	d Righ	t-of-Way	No Clea	r Contributing A	ction								



NARRATIVE

-ON 02/16/2016 AT APPROXIMATELY 1625 HOURS , I, SGT. BOHLSEN WAS RESPONDING TO AN EMERGENCY CALL AT RESIDENCE ON THE SOUTH SIDE OF ROGERS WHEN I DISCOVERED A CRASH AT THE INTERSECTION OF TERRITORIAL RD AND MAIN ST. I OBSERVED SEVERAL VEHICLES PARKED ON NORTHBOUND MAIN ST AND OTHERS ON WESTBOUND TERRITORIAL RD JUST WEST OF THE INTERSECTION. I OBSERVED SMALL VEHICLE PARTS DEBRIS IN THE MIDDLE OF THE INTERSECTION AND THERE WERE PEOPLE OUTSIDE WALKING AROUND. ONE MAN WAS USING A BROOM TO SWEEP UP THE DEBRIS. I LEARNED THAT ONLY TWO VEHICLES WERE INVOLVED AND NO ONE REPORTED ANY INJURIES. I LEARNED THAT VEHICLE #1 HAD MADE A LEFT TURN ONTO MAIN ST FROM EASTBOUND TERRITORIAL RD AND HAD CUT OFF VEHICLE #2 WHICH WAS HEADED STRAIGHT ON WESTBOUND TERRITORIAL RD. THE VEHICLES COLLIDED AT AN ANGLE IN THE INTERSECTION. -I OBSERVED



INCIDENT ID	ROUTE SYS	3	ROUTE N	OUTE NUM ME		JRE	ROUTE NA	ME	ROUTE ID		COUNTY		CITY	
00367450	04-CSAH		0116		9.260		TERRITO	RIAL RD	04000065	94720116-I	27		Rogei	rs
INTERSECT WITH	-	NUM	VEH	NUM K	LLED	DATE	TIME	DAY OF WEEK	LAT	LONG	υтм х	UTM Y	(	WORK ZONE TYPE
		2		0		07/29/16	10:36	Fri	45.1747	-93.5526	456578.4	5002	509.6	NOT APPLICABLE
BASIC TYPE			CRASH	SEVER	ΤY	FI	RST HARM	FUL		LIG	HT CONDITI	ON	w	EATHER PRIMARY
Head On			N - Pro	p Dama	age Or	nly M	lotor Vehicl	e In Transport		Da	ylight		С	lear
				Ur	it 1			Unit 2		Unit	3			Unit 4
	Unit T	ype	Motor V	Vehicle	in Trar	nsport	Motor Vel	hicle in Transpo	ort					
	Vehicle Ty	ype	Sport l	Jtility Ve	ehicle		Passenge	er Car						
Direc	tion of Tra	vel	Eastbo	und			Westbour	nd						
۱	/eh Manue	ver	Turning	g Left			Moving F	orward						
	Age/S	Sex	53 F				66 M							
Р	hysical Co	ond	Asleep	or Fati	gued		Apparent	ly Normal						
Contribu	uting Facto	or 1	Failure	to Yiel	d Right	t-of-Way	No Clear	Contributing A	ction					



#### NARRATIVE

ON 07/29/2016 AT 1036 HOURS, I, SGT. BOHLSEN RESPONDED TO A CALL OF A PROPERTY DAMAGE ACCIDENT INVOLVING TWO VEHICLES AT THE INTERSECTION OF TERRITORIAL RD AND MAIN ST IN THE CITY OF ROGERS. I ARRIVED ON SCENE AND OBSERVED BOTH VEHICLES INVOLVED PULLED OVER TO THE RIGHT SHOULDER OF WESTBOUND TERRITORIAL RD, JUST WEST OF THE T INTERSECTION WITH MAIN ST. THE VEHICLES WERE NOT BLOCKING ROADWAY BUT THEY WERE OBSTRUCTING THE VIEW OF TERRITORIAL RD FROM SOUTHBOUND MAIN ST. I CHECKED ON BOTH DRIVERS AND FOUND THAT NO ONE WAS INJURED, BOTH HAD BEEN WEARING SEATBELTS, AND NO AIRBAGS WERE DEPLOYED. BOTH DRIVERS WERE ALSO CURRENTLY EXCHANGING INFORMATION. I ASKED IF EITHER OF THEM WOULD LIKE A POLICE REPORT AND DRIVER #2 SAID YES. I THEN COLLECTED DRIVER'S LICENSES AND PROOF OF INSURANCE FROM BOTH DRIVERS. I IDENTIFIED DRIVER #2 AS JOHN BRADLEY ASP; DOB:

								DOUT				00111171		0171	
INCIDENT ID	ROUTE SYS	ROUTE N	IUM	MEAS	URE	ROUTE NA	AME	ROUT	EID			COUNTY		CITY	
00370762	04-CSAH	0116	1	9.261		TERRITO	ORIAL RD	04000	00659	94720116-	I	27		Roge	rs
INTERSECT WI	TH NU	M VEH	NUM KIL	LLED	DATE	TIME	DAY OF WEEK	LAT		LONG	U	тм х	UTM Y	,	WORK ZONE TYPE
	3		0		08/10/16	16:38	Wed	45.174	47	-93.5526	4	56576.7	5002	510.5	NOT APPLICABLE
BASIC TYPE		CRASH	SEVERI	TΥ	F	IRST HARM	FUL			1	LIGH	IT CONDITI	ON	W	EATHER PRIMARY
Left Turn		N - Pro	p Dama	ige Or	nly M	lotor Vehic	le In Transport			1	Dayl	light		С	loudy
			Uni	it 1			Unit 2			Un	it 3				Unit 4
	Unit Typ	Motor \	Vehicle i	in Trai	nsport	Motor Ve	hicle in Transpo	ort	Mot	or Vehicle	in T	ransport			
	Vehicle Type	Pickup				Passenge	er Car		Med	lium / Hea	vy T	rucks (Mo	r€		
Dire	ection of Trave	I Eastbo	und			Westbou	nd		Sou	thbound					
	Veh Manueve	r Turning	g Left			Moving F	orward		Slov	wing					
	Age/Se	56 M				18 F			35 N	N					
	Physical Con	Appare	ently Nor	rmal		Apparent	ly Normal		Арр	arently No	rma	I			
Contril	buting Factor	Failure	to Yield	Righ	t-of-Way	No Clear	o Clear Contributing Action No Clear Contributing Action			ting Actior	ı				





	ROUTESTS	>	ROUTER	NUM	MEAS	URE	ROUTEN		ROUTEID		COUNT	r	CITY	
00525995	04-CSAH		0116		9.261		TERRITO	ORIAL RD	040000659	94720116-I	27		Rogers	
INTERSECT WITH	1	NUM	VEH	NUM KI	LLED	DATE	TIME	DAY OF WEEK	LAT	LONG	<b>UTM X</b>	UTM	Y WORK ZONE TYPE	E
		2		0		12/17/17	09:59	Sun	45.1747	-93.5526	456577.4	77.4 5002510.5 NOT APPLI		LE
BASIC TYPE			CRASH	SEVERI	ΤY		FIRST HARM	FUL		L	IGHT COND	TION	WEATHER PRIMARY	
Angle			N - Pro	p Dama	age Or	nly l	Motor Vehic	le In Transport		C	Daylight		Cloudy	
							1		_					
				Un	it 1			Unit 2		Uni	t 3		Unit 4	
	Unit Ty	уре	Motor V	Vehicle	in Tra	nsport	Motor Ve	hicle in Transpo	ort					
	Vehicle Ty	уре	Cargo	Van 10,	000lbs	s Less (N	Pickup							
Direc	tion of Tra	vel	Southb	bound			Southbou	und						
v	/eh Manue	ver	Turning	g Left			Moving F	orward						
	Age/S	Sex	41 M				49 M							
Р	hysical Co	ond	Appare	ently No	rmal		Apparent	ly Normal						
Contribu	iting Facto	or 1	Operat	ted Moto	or Veh	icle: Care	No Clear	Contributing Ad	ction					
							1							



#### NARRATIVE

OFFICER WAS DISPATCHED TO AN ACCIDENT AT THE INTERSECTION OF TERRITORIAL RD AND MAIN ST. OFFICER ARRIVED ON SCENE AND COULD SEE DAMAGE TO A CARGO VAN AND PICKUP TRUCK. OFFICER SPOKE TO DRIVER #2 THAT STATED HE WAS TRAVELING WB ON TERRITORIAL RD APPROACHING MAIN ST. WHEN UNIT #1 ATTEMPTED TO MAKE A LEFT TURN FROM MAIN ST ONTO EB TERRITORIAL RD. DRIVER #2 STATED THAT THE VEHICLE FAILED TO YIELD WHILE AT THE STOP SIGN AND PULLED OUT IN FRONT OF HIM. DRIVER #2 SAID THAT HE SLAMMED ON THE BRAKES BUT COULDN'T STOP IN TIME AND HIS FRONT DRIVERS SIDE HIT UNIT #2'S DRIVERS SIDE REAR. DRIVER #2 POINTED OUT HIS SKID MARKS HE MADE WHILE TRYING TO STOP. I SPOKE TO DRIVER #1 THAT STATED HE WAS MAKING A LEFT TURN ONTO EB TERRITORIAL RD FROM MAIN ST. THE DRIVER TOLD ME HE MADE THE LEFT TURN AND WAS STRUCK BY UNIT #2. BOTH VEHICLES WERE DRIVABLE AND NO INJURIES WERE

INCIDENT ID	ROUTE SYS	5	ROUTE N	MUM	MEAS	URE	ROUTE N/	AME	ROUTE	E ID		COUNTY		CITY		
00360232	04-CSAH		0150		0.003		MAIN ST		04000	0659	94720150-I	27		Roge	rs	
INTERSECT WIT	ГН	NUM	VEH	NUM KI	LLED	DATE	TIME	DAY OF WEEK	LAT		LONG	UTM X	UTM	ſ	WORK ZONE TYPE	
		2		0		06/26/16	13:46	Sun	45.174	8	-93.5526	456576.9	5002	514.9	NOT APPLICABLE	-
BASIC TYPE			CRASH	SEVERI	ΤY	F	<b>IRST HARM</b>	FUL			LI	GHT CONDITI	ON	w	EATHER PRIMARY	
Angle			N - Pro	p Dama	age Or	nly N	lotor Vehic	le In Transport			Da	aylight		С	lear	
			-				1									_
				Un	it 1			Unit 2			Unit	3			Unit 4	
	Unit T	уре	Motor V	Vehicle	in Tra	nsport	Motor Ve	hicle in Transpo	ort							
	Vehicle T	уре	Passer	nger Ca	ır		Sport Uti	lity Vehicle								
Dire	ction of Tra	ivel	Southb	ound			Westbou	nd								
	Veh Manue	ver	Vehicle	e Stopp	ed or S	Stalled in	Moving F	orward								
	Age/	Sex	53 F				45 M									
l	Physical Co	ond	Appare	ently No	rmal		Apparent	ly Normal								
Contrib	outing Facto	or 1	Failed	to Keep	in Pro	oper Lane	No Clear	Contributing A	ction							



NARRATIVE

DRIVER OF UNIT 1 STATED SHE WAS STOPPED FOR STOP SIGN AT THE INTERSECTION OF MAIN STREET/TERRITORIAL ROAD. DRIVER 1 STATED SHE WAS NOSING OUT INTO TRAFFIC TO INCREASE VISION TO MAKE TURN, AND WENT TOO FAR INTO THE INTERSECTION. DRIVER OF UNIT 2 WAS TRAVELING WEST ON TERRITORIAL ROAD AND STRUCK THE FRONT OF UNIT 1. DRIVER OF UNIT 2 ATTEMPTED TO AVOID UNIT 1 WHICH HAD ENTERED HIS LANE, BUT WAS UNABLE TO SWERVE COMPLETELY AROUND THE PASSENGER CAR, STRIKING THE FRONT BUMPER AREA. THE INTERSECTION OF MAIN STREET/TERRITORIAL ROAD IS A T-INTERSECTION. THE SB MAIN STREET LANE IS CONTROLLED BY A STOP SIGN. TRAFFIC ON TERRITORIAL ROAD IS NOT CONTROLLED BY A TRAFFIC SIGN OR SIGNAL, AND DOES NOT STOP AT THIS INTERSECTION. UNIT 1 WAS TOWED FROM SCENE BY BURDA'S TOWING. FRONT PASSENGER OF UNIT 2 REPORTED NECK STIFFNESS, BUT DECLINED MEDICAL.



INCIDENT ID	ROUTE SYS	ROUTE N	MUN	MEAS	URE	ROUTE NA	AME	ROUTE II	D		COUNTY	,	CITY	
00390413	04-CSAH	0150		0.008		MAIN ST		0400006	55947	720150-I	27		Roge	rs
INTERSECT WIT	H NUM	VEH	NUM KI	LLED	DATE	TIME	DAY OF WEEK	LAT	L	.ONG	UTM X	UTM	Ŷ	WORK ZONE TYPE
	2		0		10/29/16	13:40	Sat	45.1748	-9	93.5526	456577.6	5002	522.8	NOT APPLICABLE
BASIC TYPE		CRASH	SEVERI	TΥ	F	IRST HARM	FUL			LIC	GHT CONDI	TION	v	EATHER PRIMARY
Rear End		N - Pro	p Dama	age Or	nly N	lotor Vehic	le In Transport			Da	aylight		R	ain
			Un	it 1			Unit 2			Unit	3			Unit 4
	Unit Type	Motor V	Vehicle	in Tra	nsport	Motor Ve	hicle in Transpo	ort						
	Vehicle Type	Sport l	Jtility Ve	ehicle		Passenge	er Van (Seats Ir	nstalle						
Direc	tion of Travel	Southb	ound			Southbou	ind							
١	/eh Manuever	Turning	g Right			Turning F	Right							
	Age/Sex	25 F				62 M								
F	Physical Cond	Appare	ently No	rmal		Apparent	ly Normal							
Contrib	uting Factor 1	No Cle	ar Cont	ributin	g Action	No Clear	Contributing A	ction						



#### Selection Filter:

WORK AREA: County('659472')	- FILTER: Year('2016','2017','2018') - SPATIAL FILTER APPLIED
Analyst:	Notes:

Mallori Fitzpatrick



#### Memorandum

To:	File
From:	Mallori Fitzpatrick, EIT
Date:	May 11, 2020
Re:	Hennepin CSAH 116 and CSAH 150 Roundabout (Spot Safety and Mobility Application) Task 3 and 4 WSB Project No. 015958-000

The purpose of this technical memorandum is to analyze the Congestion Reduction/Air Quality and Safety of the existing condition and proposed Hennepin CSAH 1116 and CSAH 150 roundabout project to satisfy the requirements of the Spot Mobility and Safety criteria.

#### Task 3. Congestion Reduction/Air Quality

A capacity and emissions analysis was conducted at the intersection using 2019 AM peak hour traffic counts. HCM software within Synchro was used to analyze the delay for the existing and proposed network. Synchro was used to report the Carbon Monoxide (CO), Nitrogen Oxides (NOx), and Volatile Organic Compound (VOC) emissions at the intersection of Hennepin CSAH 116 and CSAH 150.

**Table 1** identifies the existing and build condition delays at the intersection during the AM peak hour as reported from HCM 6<sup>th</sup> Edition.

AM PEAK							
Existing Vehicles		Build Vehicles	HCM Existing Delay per vehicle (s)	HCM Build Delay per vehicle (s)	HCM Existing Total Delay (s)	HCM Build Total Delay (s)	
CSAH 116 & CSAH 150	873	873	8.1	7.9	7071.3	6896.7	

#### Table 1. Existing and Build Condition Delays

The following includes responses to Part A:

- Total Peak Hour Delay/Vehicle without the Project (Seconds/Vehicle): 8.1
- Total Peak Hour Delay/Vehicle with the Project (Seconds/Vehicle): 7.9
- Total Peak Hour Delay/Vehicle Reduced by the Project (Seconds/Vehicle): 0.2
- Volume without the Project (Vehicles per hour): 873
- Volume with the Project (Vehicles per hour): 873
- Total Peak Hour Delay Reduced by the Project (Seconds): 175

**Table 2** identifies the existing and build condition emission outputs at the intersection during the PM peak hour as reported from Synchro 10.

ΑΜ ΡΕΑΚ								
	Existing CO Emissions (kg)	Existing Nox Emissions (kg)	Existing VOC Emissions (kg)	Build CO Emissions (kg)	Build NOx Emissions (kg)	Build VOC Emissions (kg)		
CSAH 116 & CSAH 150	0.92	0.18	0.21	1.39	0.27	0.32		
Total	1.31			1.98				

#### Table 2. Existing and Build Emissions

The following includes responses to Part B:

- Total (CO, NOx, and VOC) Peak Hour Emissions without the Project (Kilograms): 1.31
- Total (CO, NOx, and VOC) Peak Hour Emissions with the Project (Kilograms): 1.98
- Total (CO, NOx, and VOC) Peak Hour Emissions Reduced by the Project (Kilograms): -0.67 (increase in emissions)

#### Task 4. Safety

A safety analysis was conducted at the intersection of CSAH 116 and CSAH 150. Three years of crash data (2016-2018) was collected at intersection and analyzed in a Benefit/Cost (B/C) worksheet. A total of seven crashes occurred at the intersection within the three-year period. **Table 3** identifies the severity and type of collisions from the data set.

	CSAH 116 and CSAH 150 (2016-2018)								
Classification by Type									
 			1	Ran Off					
Severity	Rear End	Side Swipe	Left Turn	Road	<b>Right Angle</b>	Right Turn	Head On	Other	
К	0	0	0	0	0	0	0	0	
Α	0	0	0	0	0	0	0	0	
В	0	0	0	0	0	0	0	0	
С	0	0	0	0	1	0	0	0	
N	1	0	2	0	2	0	1	0	
Total	1	0	2	0	3	0	1	0	

#### Table 3. Existing Intersection Crash Data

The following includes responses to Part A:

- A crash modification factor was identified using the Federal Highway Administration's (FHWA) Crash Modification Factors (CMF) Clearinghouse to predict the annual crash reduction and cost benefit. The following CMF was applied:
  - Convert intersection with Minor-Road Stop Control to Modern Roundabout (CMF = 0.29 for all crash and severity types at a rural intersection)
- Project Benefit (\$) from B/C ratio: \$1,097,017
- Total Fatal (K) Crashes: 0
- Total Serious Injury (A) Crashes: 0
- Total Non-Motorized Fatal and Serious Injury Crashes: 0
- Total Crashes: 7
- Total Fatal (K) Crashes Reduced by Project: 0
- Total Serious Injury (A) Crashes Reduced by Project: 0
- Total Non-Motorized Fatal and Serious Injury Crashes Reduced by Project: 0
- Total Crashes Reduced by Project: 33.2 crashes over 20 years

The overall Benefit/Cost (B/C) Ratio is 0.71, see the B/C worksheet for the breakdown of the benefit analysis.
# City of Rogers: CSAH 116 & CSAH 150 Roundabout

**Existing Conditions Images** 



CSAH 150 (Main Street), facing South towards proposed roundabout. Photo Credit: Google (Street View)



CSAH 116 (Territorial Road), facing west towards proposed roundabout. Photo Credit: Google (Street View)



City of Rogers, MN Hennepin County





Figure 2 - Project Location Aerial CSAH 116 and CSAH 150 Roundabout City of Rogers, MN Hennepin County



# HENNEPIN COUNTY

April 30, 2020

Elaine Koutsoukos - TAB Coordinator Metropolitan Council 390 North Robert Street St. Paul, MN 55101

Re: Support for 2020 Regional Solicitation Application CSAH 116 (Territorial Road) & CSAH 150 (Main Street) Spot Mobility and Safety Project

Dear Ms. Koutsoukos,

Hennepin County has been notified that the City of Rogers is submitting an application for funding as part of the 2020 Regional Solicitation through the Metropolitan Council. The proposed project will improve safety and mobility at the existing CSAH 116 (Territorial Road) and CSAH 150 (Main Street) intersection which currently operates under Minor-Street Stop intersection traffic control. It is anticipated that a new intersection design will be introduced to address poor visibility caused by the surrounding topography. Furthermore, this project will expand on lighting upgrades implemented by Hennepin County at this intersection in 2015. These improvements will complement planned development located within close proximity of this intersection that will likely generate more activity in the area.

Hennepin County supports this funding application and will operate and maintain both CSAH 116 (Territorial Road) and CSAH 150 (Main Street) for the useful life of improvements. At this time, Hennepin County has no funding programmed in its 2020-2024 Transportation Capital Improvement Program (CIP) for this project. Therefore, county staff is currently unable to commit county cost participation in this project. However, we request that the City of Rogers includes county staff as part of the design process to discuss potential intersection modification strategies. Hennepin County looks forward to working with the City of Rogers to improve safety and mobility at the CSAH 116 (Fletcher Lane) and CSAH 150 (Main Street) intersection.

Sincerely,

Cara Streve

Carla Stueve, P.E., P.T.O.E. Transportation Project Delivery Director and County Engineer

cc: Chad Ellos, P.E. - Transportation Planning Division Manager

Hennepin County Transportation Project Delivery 7009 York Avenue South, MN 55435 (Temporary) 612-596-0241 | hennepin.us









# CHAPTER 9 – TRANSPORTATION



# Programmed & Planned Improvements

Programmed and planned roadway improvements identified in the Rogers Transportation Capital Improvement Program (CIP) or Hennepin County's Capital Improvement Program (CIP) within the City of Rogers include:

- Fletcher Lane (CR 116) Bypass. The City has been working with Hennepin County on plans to upgrade and re-route Fletcher Lane to the east, bypassing the Fletcher area to connect with CSAH 81. This rerouting would allow better connection of minor arterials and relocate through traffic from downtown Main Street (CSAH 150) onto Fletcher Lane (CR 116). Ultimately, the Fletcher Lane (CR 116) Bypass will connect to CSAH 13 north of I-94 via an overpass.
- **Downtown Main Street Reconstruction.** In conjunction with the Fletcher Lane (CR 116) bypass project, the City is redesigning Main Street from CR 81 to Point Drive as part of a major reconstruction project that will feature pedestrian and bicycle enhancements and streetscape elements to improve the walkability of downtown and its connection to Triangle Park and adjacent neighborhoods.
- Extension of 109th Avenue (CR 117). Movement along the community's southern boundary will be facilitated by the extension of 109th Avenue (CR 117) from Fletcher Lane (CR 116) to Brockton Lane (CSAH 101).
- Brockton Lane (CSAH 13) Expansion. The City plans to work with Hennepin County and the City of Dayton to expand Brockton Lane (CSAH 13) to a 4-Lane roadway from CSAH 81 to Rogers Drive. This expansion will add the necessary roadway capacity to support future demand along this eastern boundary.
- **141st Avenue (CSAH 144) Expansion.** To support future land uses and increased demand along the 141st Avenue (CSAH 144) corridor, the City plans to work with Hennepin County to finish building out this corridor as a future 3-lane roadway from the I-94 overpass to Northdale Boulevard. The segment from Northdale Boulevard to Brockton Lane (CSAH 13) plans to be a 4-lane roadway.
- Industrial Boulevard Extension. To improve residential access and continuity in the City's roadway system, Industrial Boulevard will be extended from Edgewater Parkway to 141st Avenue (CSAH 144).

Although not located in the City of Rogers, the Dayton Parkway Interchange is a programmed roadway improvement in MnDOT's Transportation System Plan. This new interchange is located east of Brockton Lane (CSAH 101), within the City of Dayton. Design work continues for this new Interchange, which will benefit the Rogers community by providing an additional access point to I-94 and reduce overall traffic volumes near the existing I-94 and TH 101 interchange area. Improvements to adjacent roadways, such as the extension of 109th Avenue (CR 117), is being planned to facilitate traffic to and from the new interchange.

The City of Rogers will continue to coordinate with adjacent jurisdictions – Dayton, Maple Grove, Corcoran and Hanover – and Hennepin County and MnDOT when planning future improvements. This on-going coordination will result in financial and time savings through economies of scale; such coordination may reduce construction impacts to residents and businesses.

Several Hennepin County roadways border the Crow-Hassan Park Reserve. The City of Rogers will continue to coordinate with Hennepin County and the Three Rivers Park District when considering and planning for any roadway realignments to minimize negative impacts to the park reserve.

## 2040 Travel Demand Forecasts

The pattern and intensity of travel is directly related to the distribution and magnitude of households, population and employment within a community, neighboring communities, and the larger region. This section provides an overview of the existing land use pattern in the City of Rogers.



**Rogers 2040 Comprehensive Plan** 







Created by: City of Rogers > Public Works > GIS





Created by: City of Rogers > Public Works > GIS



## CHAPTER 9 – TRANSPORTATION



The methodology described above is a planning-level analysis that uses average daily traffic volumes and is not appropriate for all traffic conditions. For example, traffic conditions that do not fit the average daily traffic criteria, such as weekend travel, holiday travel, and special events, are likely to produce different levels of congestion. Additionally, factors such as the amount of access and street geometrics may influence capacity, as will additional street features or mobility accommodations – on-street bicycle lanes, shared bicycle lanes, on-street parking, etc.

# Future Roadway System Improvements

Future roadway improvements are derived from the combination of future traffic demand, safety, system continuity and connectivity, and the intended function of each roadway as it relates to the adjacent land use.

#### **Regional System Improvements**

The Rogers Transportation Plan does not identify the need for improvements to I-94 or TH 101 within City limits. Design work continues for the Dayton Parkway interchange which will reduce overall traffic volumes near the existing I-94 and TH 101 interchange area and provide an additional access point to I-94. In addition, the City will continue to work with MnDOT to address long-term access issues from TH 101 to I-94.

## **County System Improvements**

Currently, there are no additional capacity improvements identified on Hennepin County roadways within the City beyond those mentioned in the previous Programmed and Planned Improvements section.

## Local System Improvements

Potential capacity improvements on local roadways in Rogers have not been identified as a need has not been warranted. The City of Roger's local roadways do not have existing capacity deficiencies and are not expected to have capacity deficiencies under year 2040 conditions.

The Rogers Transportation Capital Improvement Program (CIP) does identify residential access improvements, roadway realignments, and intersections improvements to support future development, maintain a connected roadway network, and improve overall roadway safety.

#### **Roadway System Impacts**

As the City plans to reconstruct, widen street widths and construct new street segments to meet future connectivity demands or accommodate development projects and anticipated growth, developers of private and public lands will be encouraged to retain natural areas and consider wildlife needs during the roadway design process and after construction to enhance the health and diversity of wildlife populations.

# Safety Issues

In addition to a reliable roadway system, roadway safety is a high priority to the Rogers community. A statewide database of crash records identifies the location, severity and circumstances associated with crashes in Minnesota. The most current dataset (years 2011-2015) was analyzed to identify the number, location and severity of crashes on roadways, excluding I-94, in the City of Rogers.



# CHAPTER 9 - TRANSPORTATION ·



In general, these crashes were widely distributed throughout the City with most locations accounting for only one or two incidents, suggesting that a crash at that location was a random event. However, several crashes were concentrated at a limited number of locations. The ten intersection locations with the highest frequency of crashes between 2011 and 2015 are illustrated in **Figure 9.10** and listed in **Table 9.4**.

Many of the crashes in Rogers were minor incidents with no pattern of reoccurrence. These crashes were widely distributed throughout the City and suggest that the crashes were random events. The intersection locations with a 5-year average of two or more were compiled in **Table 9.4** and illustrated in **Figure 9.10**.

Location	Number of Crashes		Troffic Control
Location	5-Year Total	5-Year Average	Traffic Control
1. TH 101 and South Diamond Lake Road	102	20	Signal
2. TH 101 and 141st Avenue (CSAH 144)	64	13	Interchange (Opened 2015)
3. Rogers Drive and South Diamond Lake Road	63	13	Signal
4. 141st Avenue (CSAH 144) and James Road	49	10	All-Way Stop
5. CSAH 81 and Brockton Lane (CSAH 13)	44	9	Signal
6. Main Street (CSAH 150) and Industrial Boulevard	39	8	Signal
7. Northdale Boulevard and South Diamond Lake Road	28	6	Signal
8. CSAH 81 and Memorial Drive	27	5	Signal
9. Main Street (CSAH 150) and CSAH 116 (Territorial Road)	15	3	Side-Street Stop
10. Brockton Lane (CSAH 13) and 124th Avenue	14	3	Side-Street Stop
11. Brockton Lane (CSAH 13) and South Diamond Lake Road	14	3	Signal
12. Brockton Lane (CSAH 13) and David Koch Avenue	13	3	Side-Street Stop
13. CSAH 81 and Main Street (CSAH 150)	11	2	Right-In/Right-Out
14. 141st Avenue (CSAH 144) and Northdale Boulevard	10	2	Side-Street Stop

Table 9.4:	Top 10 City of Rogers Crash Sites by Frequency (Years 2011-2015)

As shown in **Table 9.4**, two of the intersections with the most crashes are along South Diamond Lake Road (CSAH 49) in an area with high peak hour volumes and truck traffic. The City needs to continue to work with MnDOT to evaluate driver behavior, crash type, crash patterns and severity at these two closely spaced intersections to develop potential strategies to improve overall intersection safety.

One example within the City of Rogers where the number of crashes has significantly been reduced is the TH 101 and 141st Avenue (CSAH 144) intersection. Prior to the construction of a new interchange, this intersection averaged 15 crashes per year from year 2011 to 2014. After the construction of the interchange in 2015, only four crashes have occurred. The City is will continue to monitor and evaluate high crash locations to determine the need for addition intersection improvements.





## **CHAPTER 9 – TRANSPORTATION**



# **Access Management**

Roadway access management for both cross-street spacing and driveway placement is critical to maintain roadway safety and the mobility of important transportation corridors. Access management involves balancing the access and mobility functions of a roadway. Access refers to providing roadway access to properties and is needed at both ends of a trip. Mobility is the ability to get from one place to another. Most roadways serve both functions to some degree based on their functional classification. The roadway's functional classification has a direct and corresponding relationship to mobility and access, as described in the Functional Classification section.

The City of Rogers does not currently have its own access management guidelines to guide development or evaluate access requests. However, the City will continue to support and utilize Access Management guidelines established by MnDOT and Hennepin County for roadways in Rogers.

# **Right-of-Way Preservation**

Right-of-Way (ROW) is a valuable public asset. Therefore, it needs to be protected and managed to respect the roadway's intended function, while serving pedestrians, bicyclists, utilities and the greatest public good. Rogers will need to consider that adequate ROW be maintained or secured along with initial design work. The City will also coordinate with MnDOT and Hennepin County for ROW acquisition along County or State routes.

# Bicycle & Trail System Plan

It is important for Rogers to expand its pedestrian and bicycle facilities to provide strong connections to schools, parks, public spaces and employment, as well as regional trail corridors. As **Figure 9.11** shows, these facilities focus on serving the local community for multi-modal transportation needs for all people and modes.

The City of Rogers' Park, Open Space and Trails Plan referenced in Chapter 6 provides additional detail on the City's future plans to address gaps in the system and future trail routes throughout the community for a complete sidewalk and trail system. As the community continues to develop, the trail plan should be reviewed to ensure its adequacy as traffic conditions change and to identify new opportunities, such as the connection of trails to commercial nodes, civic campuses, park and recreation areas and possible transit services. The City recognizes the recreational opportunities provided by trails and sidewalks, but also recognizes their ability to provide options for multi-modal transportation.

The City of Rogers currently has 26.6 miles of sidewalks in the City. Sidewalks are primarily used as a means to connect neighborhoods to local destinations and developed areas, as well as to other facilities in the trail system. Sidewalks are an essential part of the trail system, particularly for those who rely on walking as a means of transportation, recreation, or exercise, such as youth, seniors, or non-car owners. It is anticipated that the sidewalk network will grow as the City fills in gaps in the sidewalk network and as new development occurs.







# Project Name: Roundabout at CSAH 116 and CSAH 150

Applicant: City of Rogers Project Location: Intersection of CSAH 116 and CSAH 150 Total Project Cost: \$1,556,400 Requested Federal Amount: \$1,245,120 Local Match: \$311,280 (20% local match)

## **Project Description:**

The City of Rogers is proposing a roundabout at the CSAH 116 and CSAH 150 intersection. This is currently a "T" intersection and used heavily by the many Rogers residential properties to travel south and east toward the Twin Cities Metro Area. There is an ongoing crash problem at this intersection, with 7 crashes documented from 2016-2018. The proposed project includes construction of a three-legged roundabout with splitter and center islands that will provide areas of refuge for pedestrians. The proposed design will also better align vehicular traffic, eliminate an existing bypass lane, require non-motorized users to travel through the roundabout and reduce vehicular traffic speeds at the intersection. In total, the proposed project will also include a 10-foot wide multiuse trail along the east side of CSAH 150, enhancing connectivity, mobility, and safety for non-motorized users. The City of Rogers growth area is along CSAH 116 (Territorial Road) through the project area, with development plans in place today for hundreds of lots.

## **Project Benefits:**

- Enhanced safety for motorists entering and exiting the intersection
- Reduced total annual crashes
- Reduced vehicular speed when approaching the intersection
- Improved safety and access for pedestrians and bicyclists through extension of an existing trail – connecting to a Tier 1 RBTN
- Reduced emissions due to fewer vehicular stops



## **Project Area:**