



Application

13861 - 2020 Roadway Modernization

14071 - Highway 169/County Road 130 Interchange Reconstruction

Regional Solicitation - Roadways Including Multimodal Elements

Status: Submitted
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Primary Contact

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City of Maple Grove

***** Maple Grove Minnesota 55369
City State/Province Postal Code/Zip

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What Grant Programs are you most interested in? Regional Solicitation - Roadways Including Multimodal Elements

Organization Information

Name: MAPLE GROVE, CITY OF

Jurisdictional Agency (if different):

Organization Type:

City

Organization Website:

www.maplegrovern.gov

Address:

12800 Arbor Lakes Parkway N

*

MAPLE GROVE

Minnesota

55311-6180

City

State/Province

Postal Code/Zip

County:

Hennepin

Phone:*

763-494-6000

Ext.

Fax:

PeopleSoft Vendor Number

0000020964

Project Information

Project Name

Highway 169 and County Road 130 Interchange
Reconstruction

Primary County where the Project is Located

Hennepin

Cities or Townships where the Project is Located:

Maple Grove, Brooklyn Park

Jurisdictional Agency (If Different than the Applicant):

Hennepin County

The proposed reconstruction of the TH 169/CSAH 130 interchange will provide improved operations and safety at a vital interchange serving the Gravel Mining Area growth and developments in the City of Maple Grove. In addition, the CSAH 130 corridor serves an important role as an A Minor Arterial Reliever, providing an alternative east-west route in place of the I-94 freeway facility during peak travel conditions.

The TH 169/CSAH 130 interchange is currently a diamond interchange with an on-ramp loop in the northwest quadrant. CSAH 130 is a four-lane undivided roadway with closely spaced intersections between Jefferson Highway/Kilmer Lane and Mendelssohn Avenue. Operations and safety are greatly impacted along this segment due to the absence of turn lanes at the west ramp, on-ramp loop, east ramp and Mendelssohn Avenue intersections, which impacts the overall efficiencies of the interchange itself.

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

The proposed interchange improvements include the reconstruction and widening of the bridge over TH 169 to provide a diverging diamond interchange (DDI) with geometrically realigned ramps. There will be four westbound lanes and three eastbound lanes with the multi-use trail on the CSAH 130 bridge. Existing traffic signals will also be replaced at the TH 169 east and west ramp intersections. The DDI configuration will improve the overall capacity and safety of the interchange.

The interchange project will also include accommodations for bicyclists and pedestrians to provide a safe connection over TH 169 between Maple Grove and Brooklyn Park. A 10-foot multiuse trail will be added on the south side between Northland Drive and Jefferson Highway/Kilmer Lane. The proposed trail will connect the existing

trails along CSAH 130 in Maple Grove to Brooklyn Park while closing a RBTN gap. Painted crosswalks and pedestrian signing will provide better visibility to motorists, creating a safe crossing for trail users. Pedestrian signals will be upgraded to countdown timers, and pushbuttons and ramps will meet ADA standards.

The TH 169 and CSAH 130 interchange reconstruction will:

- Provide a more efficient interchange to accommodate existing and future traffic volumes
- Provide a reliable alternate route to the I-94 freeway facility during congested periods
- Provide a safer multimodal transportation system for all modes
- Enhance pedestrian and bicycle travel along the corridor by linking the Maple Grove and Brooklyn Park trail systems
- Improve access to employment opportunities in Maple Grove and Brooklyn Park
- Improve access to accommodate freight traffic to and from the Gravel Mining Area

(Limit 2,800 characters; approximately 400 words)

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

Project Length (Miles)

to the nearest one-tenth of a mile

Reconstruction of the TH 169 and CSAH 130 interchange to a DDI, Construction of multiuse trail.

0.5

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 \$7,000,000.00

Match Amount \$6,795,000.00

Minimum of 20% of project total

Project Total \$13,795,000.00

For transit projects, the total cost for the application is total cost minus fare revenues.

Match Percentage 49.26%

Minimum of 20%

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

Source of Match Funds Municipal State Aid Construction funds and the City of Maple Grove's Trunk Transportation Fund.

A minimum of 20% of the total project cost must come from non-federal sources; additional match funds over the 20% minimum can come from other federal sources

Preferred Program Year

Select one: 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-Roadways

County, City, or Lead Agency City of Maple Grove

Functional Class of Road A-minor Arterial Reliever

Road System CSAH

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

Road/Route No. 130

i.e., 53 for CSAH 53

Name of Road Elm Creek Boulevard/77th Avenue (Maple Grove),
Brooklyn Boulevard (Brooklyn Park)

Example; 1st ST., MAIN AVE

Zip Code where Majority of Work is Being Performed 55369

(Approximate) Begin Construction Date 03/17/2025

(Approximate) End Construction Date 05/07/2027

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

From:
(Intersection or Address)

To:
(Intersection or Address)

DO NOT INCLUDE LEGAL DESCRIPTION

Or At	TH 169 and CSAH 130
Miles of Sidewalk (nearest 0.1 miles)	0
Miles of Trail (nearest 0.1 miles)	0.5
Miles of Trail on the Regional Bicycle Transportation Network (nearest 0.1 miles)	0.5
Primary Types of Work	Interchange Reconstruction with Multi-use Trail

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.:	27630
New Bridge/Culvert No.:	
Structure is Over/Under (Bridge or culvert name):	TH 169

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.

Goal B: Strategies B1 and B6; Page 2.7

Goal C: Strategies C1, C4, C7, C9, C11, C12, C15, and C18; Pages 2.8-2.10

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

Goal D: Strategies D1, D2, and D3; Page 2.11

Goal E: Strategies E2, E3, E4, E5, E6, and E7; Pages 2.12-2.13

Goal F: Strategies F2, F3, F4, F5, F7, and F8; Pages 2.14-2.15

Limit 2,800 characters, approximately 400 words

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

List the applicable documents and pages:

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 right of way/transportation.

Date plan completed:

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. Yes

Date self-evaluation completed:

02/12/2020

Link to plan:

<https://www.maplegrovern.gov/departments/public-works/ada-transition-plan>

Upload plan or self-evaluation if there is no link

1589372710633_Public ROW_Self Evaluation_Feb2020.pdf

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 MnDOT's Cost Participation for Cooperative Construction Projects and Maintenance Responsibilities manual. In the case of a federally funded trunk highway project, the policy guidelines should be read as if the funded trunk highway route is under local jurisdiction.

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

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

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

Bridge Rehabilitation/Replacement projects only:

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

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

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

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

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

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

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

Requirements - Roadways Including Multimodal Elements

Specific Roadway Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Mobilization (approx. 5% of total cost)	\$500,000.00
Removals (approx. 5% of total cost)	\$500,000.00
Roadway (grading, borrow, etc.)	\$600,000.00
Roadway (aggregates and paving)	\$1,700,000.00
Subgrade Correction (muck)	\$0.00
Storm Sewer	\$800,000.00
Ponds	\$125,000.00
Concrete Items (curb & gutter, sidewalks, median barriers)	\$400,000.00
Traffic Control	\$400,000.00
Striping	\$250,000.00
Signing	\$600,000.00
Lighting	\$400,000.00
Turf - Erosion & Landscaping	\$200,000.00
Bridge	\$3,500,000.00
Retaining Walls	\$100,000.00
Noise Wall (not calculated in cost effectiveness measure)	\$0.00
Traffic Signals	\$700,000.00
Wetland Mitigation	\$100,000.00

Other Natural and Cultural Resource Protection	\$0.00
RR Crossing	\$0.00
Roadway Contingencies	\$2,000,000.00
Other Roadway Elements	\$500,000.00
Totals	\$13,375,000.00

Specific Bicycle and Pedestrian Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Path/Trail Construction	\$100,000.00
Sidewalk Construction	\$200,000.00
On-Street Bicycle Facility Construction	\$0.00
Right-of-Way	\$0.00
Pedestrian Curb Ramps (ADA)	\$50,000.00
Crossing Aids (e.g., Audible Pedestrian Signals, HAWK)	\$0.00
Pedestrian-scale Lighting	\$0.00
Streetscaping	\$50,000.00
Wayfinding	\$0.00
Bicycle and Pedestrian Contingencies	\$20,000.00
Other Bicycle and Pedestrian Elements	\$0.00
Totals	\$420,000.00

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	\$13,795,000.00
Construction Cost Total	\$13,795,000.00
Transit Operating Cost Total	\$0.00

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

Existing Employment within 1 Mile:	16295
Existing Manufacturing/Distribution-Related Employment within 1 Mile:	6500
Existing Post-Secondary Students within 1 Mile:	5676
Upload Map	1589289723634_Hwy 169 and CR 130 Interchange Reconstruction_Regional Economy.pdf

Please upload attachment in PDF form.

Measure C: Current Heavy Commercial Traffic

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

Along Tier 1:

Miles: 0
(to the nearest 0.1 miles)

Along Tier 2: Yes

Miles: 0.5
(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:

Measure A: Current Daily Person Throughput

Location	West of TH 169
Current AADT Volume	21600
Existing Transit Routes on the Project	721

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

Upload Transit Connections Map	1589493760395_Hwy169andCR130InterchangeReconstruction_TransitConnections.pdf
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Please upload attachment in PDF form.

Response: Current Daily Person Throughput

Average Annual Daily Transit Ridership	0
Current Daily Person Throughput	28080.0

Measure B: 2040 Forecast ADT

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

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

OR

Identify the approved county or city travel demand model to determine forecast (2040) ADT volume	Maple Grove 2040 Transportation Plan
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Forecast (2040) ADT volume	28000
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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 through engagement, study recommendations, or plans that provide feedback from populations that may be impacted by the proposed project. If relevant, describe how NEPA or Title VI regulations will guide engagement activities.

The TH 169 Corridor Study conducted by MnDOT in 1998 identified the need to reconstruct the interchange. Project engagement with equity populations is tied to the City's 2040 Comprehensive Plan process, as the City called on existing and new relationships with community organizations, residents, businesses, and institutions to utilize their expertise to understand project needs in the area.

Response:

Community engagement during the Plan development process was held between August 2016 and April 2018. Community Open Houses were held on April 26 and May 5, 2017. Meeting notices were published on the City's website and the Osseo Maple Grove Press newspaper.

The City of Maple Grove also developed the Gravel Mining Area South Master Plan with a process beginning in the Fall of 2018 and Plan approval in November 2019. During the development of this Plan, the city engaged with major developers and property owners in the planning area in April and May of 2019.

(Limit 2,800 characters; approximately 400 words)

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

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

The proposed DDI interchange project is in area above the regional average for population in poverty or people of color. The project will provide direct safety, access, community and public health benefits to low-income, people of color, children, people with disabilities and the elderly.

Safety: With the lack of a multiuse trail there is currently a gap in the trail system between Maple Grove and Brooklyn Park. The DDI design will benefit pedestrian and bicycle safety by adding a separate, dedicated 10-foot multiuse trail along CSAH 130 that is protected from general purpose vehicles. The improvements include ADA ramps and crossings and pedestrian refuge islands to improve mobility for people with disabilities. The design will reduce the number of conflict points between pedestrian and vehicular traffic as pedestrians will only interact with one direction of vehicle flow.

Response:

Access: The proposed improvements provide a vital link between retail services and job opportunities in Maple Grove and people living to the east. The CSAH 130 trail provides improved access for residents traveling from their neighborhoods to Monroe elementary school, parks, daycare and transit stops.

Improved transit access is especially paramount for the 5,700 students at Hennepin Technical College, located at the proposed project's northeast quadrant. Hennepin Technical college offers a two-year degree where a vast majority of its students drive or take transit to attend class. The interchange improvements will provide a safer and more efficient route to school for students attending Hennepin Technical College. In addition, those students using transit may also work in the Arbor

Lakes retail area. A 10-foot multi-use trail will provide an improved connection between school and work.

Community Connectivity: TH 169 effectively creates a barrier to connecting residents to the east side of TH 169 with the retail and jobs on the west side. The proposed interchange will improve community connectivity by providing a more efficient and safe interchange area to travel through by walking, biking or driving.

Public Health: Trail corridors provide an important transportation mode while promoting exercise and family development. The proposed multi-use trail along the south side of CSAH 130 encourages biking and walking as a recreational activity which improves the public health for all underserved communities.

(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 proposed project does not create any negative impacts for low-income populations, people of color, children, people with disabilities, or the elderly who travel through this interchange area by walking, biking or driving. Pedestrian and bicycle crossings will become safer due to ADA accessibility improvements, reduced conflict points with traffic, and the introduction of pedestrian refuge islands to separate vehicular traffic. Populations with disabilities will be able to cross the roadway without obstacle, using accessible ramps and crossings. With the introduction of the DDI, pedestrians will only interact with one direction of traffic, decreasing the difficulty in street crossing and reducing conflict opportunities between pedestrian and vehicular traffic.

Response:

As with most interchange projects, there will be temporary construction impacts on the traveling public, nearby residents and businesses such as noise, dust, vibration, traffic congestion, and general inconvenience to roadway access and mobility. Roadway users who rely on CSAH 130 to access TH 169 will be directed to other alternate routes, as needed. The project construction will incorporate proper noise, dust, and traffic mitigation and will not negatively impact disadvantaged populations present in the project area by maintaining access to businesses, housing, and minimizing construction nuisances.

(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: Yes

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:

(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

1589290371439_Hwy 169 and CR 130 Interchange
Reconstruction_Socio-Economic Conditions.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
Maple Grove	4171.0	0.45	79.0	35.511
Brooklyn Park	3056.0	0.33	100.0	32.935
Osseo	2052.0	0.22	57.0	12.605

Total Project Length

Total Project Length 0.5

Project length entered on the Project Information - General form.

Housing Performance Score

Total Project Length (Miles) or Population 9279.0

Total Housing Score 81.051

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.

Although there are no affordable housing units within ½ mile of the proposed DDI project, many nearby affordable units outside that buffer are sure to be influenced by the improved traffic operations at this well-used regional interchange. Nearby affordable housing includes:

- Bottineau Ridge Apartments: Existing development with 50 units (6 1 BR, 24 2 BR, 20 3 BR). Participates in HOME program funding and LIHTC. At least 20 percent of units are rented to those earning 50 percent or less AMI. Section 8 vouchers accepted.

- Bottineau Ridge Phase 2: Existing development with 50 units (6 1 BR, 24 2 BR, 16 3 BR, 4 4 BR). Participates in HOME program funding and LIHTC. At least 20 percent of units are rented to those earning 50 percent or less AMI. Section 8 vouchers accepted.

Response:

- Park Haven Apartments: 6917 76th Avenue, Brooklyn Park. Existing site with 28 units (1, 2 and 3 BR). Participates in an affordable housing program. Qualified residents will pay rent based on 30 percent of their adjusted income. Section 8 vouchers accepted.

These residents living east and west of TH 169 can use the improved DDI interchange for work, school and other daily activities by automobile. The proposed interchange project with the inclusion of trail improvements on the south side will improve access for all transportation modes, especially for those residents living in Brooklyn Park with limited access to a car to travel to work or retail areas in Maple Grove by use of CSAH 130.

(Limit 2,100 characters; approximately 300 words)

Upload map:

1589307196369_Affordable Housing Map.pdf

Measure A: Year of Roadway Construction

Year of Original Roadway Construction or Most Recent Reconstruction	Segment Length	Calculation	Calculation 2
1984	0.5	992.0	1984.0
	1	992	1984

Total Project Length

Total Project Length (as entered in "Project Information" form) 0.5

Average Construction Year

Weighted Year 1984

Total Segment Length (Miles)

Total Segment Length 0.5

Measure B: Geometric, Structural, or Infrastructure Improvements

Improved roadway to better accommodate freight movements: Yes

Response:

The project will improve access to TH 169, the most heavily used non-interstate highway freight corridor in Hennepin County. The project will also improve the operational efficiency of local freight shippers and receivers located along CSAH 130 through upgraded ramp geometrics to better accommodate large trucks. CSAH 130 is a heavily traversed east-west freight corridor through the Gravel Mining Area and serves as a freight reliever providing freight carriers an alternative route to the I-94 when making shipments. Heavy commercial traffic may use CSAH 130 when congestion arises to meet shipping deadlines.

(Limit 700 characters; approximately 100 words)

Improved clear zones or sight lines:

Response:

Yes

Existing ramps will be realigned to allow for unique phase combinations and better sight distances at turn locations; effectively spreading out conflict points throughout the interchange and reducing accident prone areas. The DDI improvements will also reduce queuing onto the TH 169 mainline as well as improve clearances from the mainline to the existing bridge abutment. Specifically, the project will realign all TH 169 to CSAH 130 on and off-ramps which will have ancillary affects with improved clear zones and sight lines on TH 169.

(Limit 700 characters; approximately 100 words)

Improved roadway geometrics:

Response:

Yes

The DDI will improve roadway operations through geometric design improvements that significantly improve safety by reducing conflict points from 26 for a conventional intersection to 14 for a DDI. The new off ramps will be realigned to allow for unique phase combinations and better sight distance at turns, effectively spreading out conflict points throughout the interchange. The improved design allows for free left and right turns from all directions and increases left-turn lane capacity and lane queueing capacity between ramp terminals. There are only two signal phases needed, allowing for a shorter cycle length and better regional network synchronization.

(Limit 700 characters; approximately 100 words)

Access management enhancements:

Yes

Response:

The new interchange will consolidate access points, resulting in a more efficient interchange. Currently, there are four access points along the project segment that are not consistent with Hennepin County's access spacing guidelines. The project will eliminate two of the four access points. The existing on-ramp loop in the northwest quadrant will be removed and the access for Mendelssohn Avenue will be closed. The City of Maple Grove, the City of Brooklyn Park and Hennepin County will work together to close this access and optimize ongoing access management along the corridor.

(Limit 700 characters; approximately 100 words)

Vertical/horizontal alignment improvements:

Yes

The proposed DDI includes the reconstruction and widening of the bridge over TH 169, maintaining vertical and horizontal clearance requirements. The construction of the new off ramps will be realigned to allow for free left and right turns from all directions to improve horizontal clearance.

Response:

(Limit 700 characters; approximately 100 words)

Improved stormwater mitigation:

Yes

The new bridge, ramps and roadways will minimize stormwater runoff to the surrounding wetlands. The City has adopted erosion and sediment control policies, which will help alleviate impacts from construction on the wetlands and hydric soils. When the project is designed, all efforts will be taken to ensure that minimal impacts to the wetlands occur. Proper mitigation techniques will be used when construction takes place and best management practices will be employed. Additional right of way is not needed, construction time is reduced, and less right of way is required for a DDI than a typical cloverleaf.

Response:

(Limit 700 characters; approximately 100 words)

Signals/lighting upgrades:

Yes

New traffic signals with pedestrian countdown timers will be constructed at the TH 169 west and east ramps along CSAH 130. The project will also paint crosswalks for safer travel along the corridor. New roadway lighting fixtures along the entire bridge segment with improved photometrics will enhance vehicle and pedestrian safety by more effectively lighting the pathway for evening and early morning use.

Response:

(Limit 700 characters; approximately 100 words)

Other Improvements

No

Response:

(Limit 700 characters; approximately 100 words)

Measure A: Congestion Reduction/Air Quality

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:	EXPLANATION of methodology used to calculate railroad crossing delay, if applicable.	Synchro or HCM Reports
27.0	27.0	0	1232	1232	0	0	N/A	158949057 4594_Hwy 169andCR 130Interch angeRecon struction_J effersonHig hway.pdf
19.0	11.0	8.0	1667	935	13336.0	7480.0	N/A	158949069 7061_Hwy 169andCR 130Interch angRecons truction_Ea st.pdf

14.0	2.0	12.0	1532	486	18384.0	5832.0	N/A	158949076 4849_Hwy 169andCR 130Interch angRecons truction_W West.pdf
0	8.0	-8	0	963	0	-7704	N/A	158949082 9723_Hwy 169andCR 130Interch angRecons truction_EC West.pdf
0	0	0	0	1130	0	0	N/A	158949086 3590_Hwy 169andCR 130Interch angRecons truction_EC East.pdf

5608

Vehicle Delay Reduced

Total Peak Hour Delay Reduced	31720.0
Total Peak Hour Delay Reduced	5608.0

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

Total (CO, NOX, and VOC) Peak Hour Emissions without the Project (Kilograms):	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):
6.33	3.57	2.76
6	4	3

Total

Total Emissions Reduced:	2.76
Upload Synchro Report	1589491660785_MG Synchro Emissions Report.pdf

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

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

Total (CO, NOX, and VOC) Peak Hour Emissions without the Project (Kilograms):	Total (CO, NOX, and VOC) Peak Hour Emissions with the Project (Kilograms):	Total (CO, NOX, and VOC) Peak Hour Emissions Reduced by the Project (Kilograms):
0	0	0

Total Parallel Roadway

Emissions Reduced on Parallel Roadways 0

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

Crash Modification Factor Used:

The CMF used was to convert an interchange to a Diverging Diamond interchange.

(Limit 700 Characters; approximately 100 words)

Rationale for Crash Modification Selected:

This CMF directly relates to the proposed changes, as the interchange is planning to be rebuilt into a DDI. We utilized the most applicable CMF for specific crash types when available. This provided the most accurate reduction calculations.

(Limit 1400 Characters; approximately 200 words)

Project Benefit (\$) from B/C Ratio	\$2,143,759.00
Total Fatal (K) Crashes:	0
Total Serious Injury (A) Crashes:	0
Total Non-Motorized Fatal and Serious Injury Crashes:	0
Total Crashes:	19
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:	6

Worksheet Attachment

1589291766932_Hwy 169 and CR 130 Interchange Reconstruction_Safety Analysis.pdf

Please upload attachment in PDF form.

Roadway projects that include railroad grade-separation elements:

Current AADT volume:	0
Average daily trains:	0

Crash Risk Exposure eliminated:

0

Measure A: Multimodal Elements and Existing Connections

The project will improve safety for pedestrians and cyclists along CSAH 130 by providing a separate, dedicated pedestrian and bicycle trail parallel to general purpose vehicles. This improvement is consistent with the "Proven Safety Countermeasures" document that indicates the importance for agencies to integrate pedestrian walkways into the transportation system to provide safer travel conditions for pedestrians. The proposed 10-foot multi-use trails will be constructed from Jefferson Highway/Kilmer Lane to Northland Drive, which will complement the interchange project with a safer pedestrian system connecting the communities east and west of TH 169.

Response:

The design of the diverging diamond interchange will decrease the number of conflict opportunities between pedestrian and vehicular traffic while crossing TH 169. A DDI allows one-way traffic flow in both directions, reducing conflict points for vehicles and pedestrians crossing the roadway. The pedestrian refuge islands constructed as part of the interchange are included in the "Proven Safety Countermeasures" as a suggested method to reduce the potential for pedestrian injuries and fatalities.

Other pedestrian improvements associated with the DDI design include minimized crossing distances, reduced overall right-of-way footprint, two-phase traffic signal control with reduced pedestrian wait time, and significantly reduced conflict opportunities due to the one-directional vehicular traffic through the busy interchange. At each intersection within the project area, ADA compliant ramp and crossings will be implemented. This will ensure pedestrians of all abilities can cross TH 169 between Maple Grove and Brooklyn Park safely and without barriers.

(Limit 2,800 characters; approximately 400 words)

Measure A: Multimodal Elements and Existing Connections

The interchange reconstruction project will improve multimodal safety and security for all transportation modes - pedestrians, bicyclists and transit users.

Pedestrians/Bicyclists: Multimodal improvements include the construction of a new 10-foot multi-use trail over TH 169 from Jefferson Highway/Kilmer Lane to Northland Drive. The proposed trail removes a Tier 2 Regional Bicycle Barrier with respect to the tiered Regional Bicycle Barrier Crossing Improvement Areas defined in the TPP and Regional Bicycle Barriers Study. In addition, the new trail closes a gap in a RBTN Tier 1 Corridor to the east and provides a safe and separate pathway for pedestrians and bicyclists along CSAH 130. Its termini on the west end connects to an existing RBTN Tier 1 Alignment that extends westerly into the developed Gravel Mining Area.

Response:

ADA ramps and crossings will be implemented along CSAH 130 at all key intersections as part of the project, greatly improving pedestrian and bicycle safety. Vehicle and pedestrian conflict opportunities will be reduced through the DDI design as pedestrians are limited to crossing vehicular traffic in only one direction as they travel through the interchange area. Lastly, new lighting fixtures along the entire bridge segment will enhance vehicle and pedestrian safety by lighting the pathway for evening and early morning use.

Transit: There is one Metro Transit route with a direct connection to the project corridor. At the east end, Route 721 serves the Hennepin Technical College with a transit stop on Northland Drive and CSAH 130. Route 721 extends southerly on Northland Drive with a connection to downtown Minneapolis. With the proposed trail, pedestrian and bicycle connections with transit will be improved for area users, including those working in

the retail areas in Maple Grove who rely on walking and transit as their mode of transportation.

In the future, the continuous multi-use trail on the south side and sidewalk on the north side of CSAH 130 to West Broadway Avenue will expand transportation options by connecting to the future METRO Blue Line extension station. Maple Grove Transit (MGT) Route 784 is a planned local fixed route that will make connections from northwest Maple Grove through the heart of the City to major trip generators in Brooklyn Park. This will improve transit access for Maple Grove and Brooklyn Park communities surrounding the proposed DDI improvement.

These improvements are critical to supporting safe and reliable connections for all users of all abilities to places of employment, education and other daily activities.

(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. Yes

50%

Attach Layout

1589292637748_Hwy 169 and CR 130 Interchange
Reconstruction_Layout.pdf

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 project is not located on an identified historic bridge Yes

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 Yes

100%

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

50%

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

25%

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

0%

Anticipated date or date of acquisition

4)Railroad Involvement (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:

08/31/2017

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.

Yes

50%

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

25%

No outreach has led to the selection of this project.

0%

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

The City of Maple Grove has met with the City of Brooklyn Park and the Hennepin Technical College partner agencies to discuss the transportation problem and potential solutions. The City of Maple Grove held monthly PMT meetings to discuss ongoing involvement and options with Maple Grove, Brooklyn Park, Hennepin County and MnDOT in 2017. Meetings with the general public as well as targeted online and email outreach opportunities are planned as the project progresses.

Measure A: Cost Effectiveness

Total Project Cost (entered in Project Cost Form):	\$13,795,000.00
Enter Amount of the Noise Walls:	\$0.00
Total Project Cost subtract the amount of the noise walls:	\$13,795,000.00
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
Brooklyn Park Support Ltr_Signed.pdf	Brooklyn Park Letter of Support	48 KB
Hwy 169 and CR 130 Interchange Reconstruction_Level of Congestion.pdf	Highway 169 and County Road 130 Interchange Reconstruction Level of Congestion	3.6 MB
Maple Grove TH169 CSAH 130 Interhchange_MnDOT Support Ltr_Signed.pdf	MnDOT Letter of Support	553 KB
MG Resol No 20-061_TH 169-CSAH 130 Support.pdf	Maple Grove Resolution of Support	122 KB
Project Summary.pdf	Highway 169 and County Road 130 Interchange Reconstruction Project Summary	345 KB
SIGNED - Henn Co - Letter of Support - Maple Grove - TH 169-CSAH 130_2020-04-30.pdf	Hennepin County Letter of Support	111 KB
TH169-CSAH Interchange_Existing ConditionsPhotographs.pdf	Highway 169 and County Road 130 Interchange Reconstruction Existing Conditions Photographs	837 KB

Public Rights-of-Way

Public rights-of-way in the City of Maple Grove include roadways and their adjacent facilities that serve a transportation purpose. This includes sidewalks, curb ramps, signals, and trails that provide a transportation route. Public rights-of-way do not include buildings, publicly accessible technology, recreational trails and facilities, and private property. These are covered outside of Title II of ADA or other City of Maple Grove Documents.

Self-Evaluation

Overview

The public ROW self-evaluation examines the condition of the City's PAR/PCR and identifies potential need for PAR/PCR infrastructure improvements. This includes sidewalks, curb ramps, bicycle/pedestrian trails, traffic control signals that are located within the City ROW. Any barriers to accessibility in the PAR/PCR identified during the self-evaluation are included in this Plan.

Summary

Beginning in 2016, the City of Maple Grove inventoried their pedestrian curb ramps within the ROW and sidewalks. The complete PAR/PCR inventory includes:

- City of Maple Grove Facilities
 - 2,998 City owned curb ramps.
 - Approximately 145 miles of concrete sidewalks. (2,114 Sidewalk points)

The City also owns 21 signalized intersections, 12 with APS features. The signalized intersections with APS features may be turned on by the City upon request. Please see Appendix F to submit a Grievance Form.

The City will inspect the 12 signals with APS features in the future.

A detailed evaluation on how these facilities relate to ADA standards is found in Appendix B and will be updated periodically.

Field Guide for Data Collection

Two field guides were used to serve as a tool for the public ROW data collection process. The City developed an Inventory and Inspection Field Guide for ADA Ramps while Hennepin County's Sidewalk Field Inspection Guidelines was used as a tool for sidewalk data collection. The two guides include all the materials used to conduct the field review of public ROW for the City's future reference. The two guides are included in Appendix C.

Policies and Practices

Previous Practices

The City of Maple Grove has strived to provide accessible pedestrian features as part of the City's CIP and new development projects. The City will continue to improve procedures to accommodate required methods of providing accessible pedestrian features.

Policy

The City's objective is to continue incorporating accessible pedestrian design features with development and CIP projects. The City has adopted ADA design standards and procedures as listed in Appendix C. These standards and procedures will be updated periodically in accordance with ADA best management practices.

The City will respond to all accessibility inquiries and improvement requests appropriately. These requests and inquiries will be evaluated internally, and an appropriate response will be communicated to the requestor. This may include comment and/or consideration for implementation with related CIP projects. The City will coordinate with external agencies to ensure that all new or altered pedestrian facilities within City jurisdiction are ADA compliant to the maximum extent feasible.

Maintenance of pedestrian facilities within the public ROW will continue to follow the policies set forth by the City.

Requests for accessibility improvements can be submitted to the City's ADA Coordinator. Contact information for ADA Coordinator is located in Appendix A.

Additionally, the City of Maple Grove coordinates with other jurisdictions for maintenance and improvements of facilities. These are outlined in the following section.

Improvement Schedule

Types of Improvements

The following are typical improvements to public ROW that can be made to correct deficiencies in accessibility:

- Intersection corner ADA improvement retrofits (a stand-alone ADA improvement project).
- Intersection corner ADA improvement as part of an adjacent capital project.
- Sidewalk/Trail ADA improvement retrofit (to include at grade crossings and sidewalk ramps).
- Sidewalk/Trail ADA improvement as part of an adjacent capital project (to include at grade crossings and sidewalk ramps).

- Traffic control signal Accessible Pedestrian Signal (APS) upgrade as part of a stand-alone ADA project.
- Traffic control signal APS upgrade as part of full traffic control signal installation.

Cost estimates of these improvements are included in Appendix D.

Priority Areas

The City will work with the public during the public comment period to determine priority areas for ADA improvements. These areas will be selected due to their proximity to specific land uses such as schools, commercial areas, public buildings, and from the receipt of public comments. Factors that determine this include, but are not limited to:

- severity of non-compliance,
- barriers to access a public program or service,
- feasibility of remedies,
- safety concerns, and
- whether a location receives high public use.

Priority will also be given to locations that would most likely not be updated by other City programs. Further, priority will be given to any location where an improvement project or alteration was constructed after January 26, 1991 (marking the formalization of ADA requirements), and accessibility features were omitted. Resident requests and location are also considerations for prioritizing improvements. To best use public resources, the priority areas for planned improvements projects were identified in the completion of this plan. A preliminary list of priority areas identified during the inventory process within the City can be found in Appendix D.

Schedule

Maple Grove has set the following schedule goals for improving the accessibility of its pedestrian facilities within the City's jurisdiction:

- Baseline of the City's total existing PAR/PCR condition: 5% compliant.
- After 10 years, 50% of accessibility features that were constructed after January 26, 1991, would be reasonably ADA compliant.
- After 10 years, 50% of accessibility features within the priority areas identified by Maple Grove staff would be reasonably ADA compliant.
- After 20 years, 75% of accessibility features within the jurisdiction of the City would be reasonably ADA compliant.
- After 30 years, 90% of accessibility features within the jurisdiction of the City (as identified in this plan) would be reasonably ADA compliant and fall within with City's

monitoring program (100% compliance is not feasible given Minnesota's annual freeze-thaw cycles and pavement deterioration).

The 30-year time frame to achieve 90 percent accessibility and the required commitment of funding is framed as a policy goal. The availability of funding and future development trends in the City of Maple Grove may affect how these projects are prioritized, and the timing of public ROW improvements may affect progress toward the compliance goal.

Methodology

ADA compliance will be achieved utilizing the following two methods:

1) Scheduled improvements to utilities and ROW

This type of project would include scheduled road reconstructions and/or new development projects.

2) ADA-Specific Improvement Projects.

This type of project would include standalone ADA improvement projects such as reconstruction of a pedestrian curb ramp and/or replacement of the APS system at a signalized intersection, separate from a road construction project.

These projects will be determined by the City's CIP, or on a case by case basis determined by the ADA Coordinator and the City's grievance procedure. The City's 2018-2022 CIP is available for review at City Hall.

Appendix A – Contact Information

City of Maple Grove

ADA Coordinator

Name: John Hagen, Transportation Operations Engineer/ADA Coordinator

Address: 12800 Arbor Lakes Parkway, Maple Grove, MN 55369

Phone: 763-494-6364

E-mail: jhagen@maplegrovern.gov

Hennepin County

ADA Coordinator

Name: Caron Battle

Address: 300 South Sixth Street A040 Government Center Minneapolis, MN 55487

Phone: 612-348-7741

E-Mail: caron.battle@hennepin.us

Minnesota Department of Transportation

ADA Contact

Name: Kristie Billiar

Phone: 651-366-3174

E-Mail: Kristie.billiar@state.mn.us

Appendix B – Self-Evaluation Results

At the time of the public buildings, transit facilities and ROW inventories, the City was following general ADA design guidance and procedures. This included a commitment to providing access to all users but does not have a formal policy or procedure to assign priority regarding ADA accessibility issues within the City. Implementing a method to assign priority will be a part of this Plan effort.

Public Right-of-Way

Data Collection for the PAR/PCR (City) self-evaluation was completed in 2016. The self-evaluation was performed by City staff. The detailed inventory is found in B-6.

This initial self-evaluation of PAR/PCR yielded the following results:

Figure 5. Self-Evaluation Results for Public Right-of-Way (including the City's Curb Ramp Inventory)

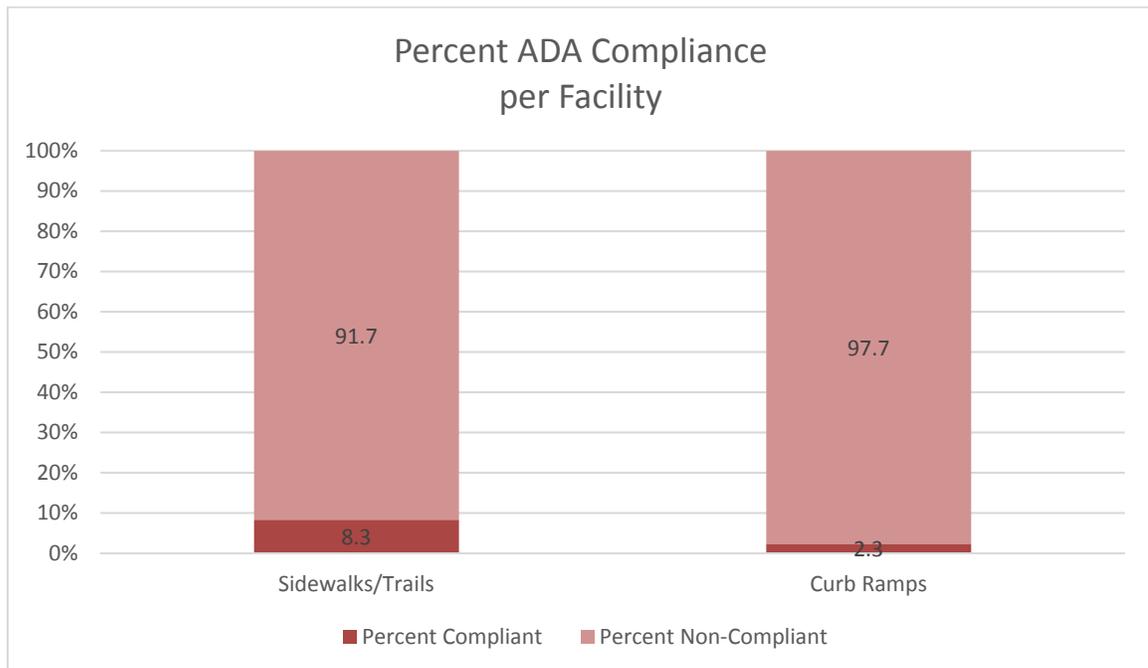


Chart Description: About eight percent of sidewalks/trails were ADA compliant. About three percent of curb ramps were compliant.

The City will inspect the 12 signals with APS features out of the 21 city-owned signals in the future. The signalized intersections with APS features may be turned on by the City upon request. Please see Appendix F to submit a Grievance Form.

Appendix C – Agency ADA Design Standards and Procedures

Design Procedures

Intersection Corners

Curb ramps or blended transitions will attempt to be constructed or upgraded to achieve compliance within all capital improvement projects. There may be limitations which make it technically infeasible for an intersection corner to achieve full accessibility within the scope of any project. Those limitations will be noted, and those intersection corners will remain on the transition plan. As future projects or opportunities arise, those intersection corners shall continue to be incorporated into future work. Regardless of whether full compliance can be achieved, each intersection corner shall be made as compliant as possible in accordance with the judgment of the City.

Sidewalks / Trails

Sidewalks and trails will attempt to be constructed or upgraded to achieve compliance within all capital improvement projects. There may be limitations which make it technically infeasible for segments of sidewalks or trails to achieve full accessibility within the scope of any project. Those limitations will be noted, and those segments will remain on the transition plan. As future projects or opportunities arise, those segments shall continue to be incorporated into future work. Regardless on if full compliance can be achieved or not, every sidewalk or trail shall be made as compliant as possible in accordance with the judgment of the City.

Traffic Control Signals

Traffic control signals will attempt to be constructed or upgraded to achieve compliance within all capital improvement projects. There may be limitations which make it technically infeasible for individual traffic control signal locations to achieve full accessibility within the scope of any project. Those limitations will be noted, and those locations will remain on the transition plan. As future projects or opportunities arise, those locations shall continue to be incorporated into future work. Regardless on if full compliance can be achieved or not, each traffic signal control location shall be made as compliant as possible in accordance with the judgment of the City.

Bus Stops

Bus stops within the City are provided by Metro Transit, a division of the Metropolitan Council. The Metropolitan Council maintains an ADA Transition Plan, which can be viewed [here](#):

<https://metro council.org/Council-Meetings/Committees/Transportation-Accessibility-Advisory-Committee/2017/TAAC-Meeting-10-04-17/Met-Council-Transition-Plan.aspx>.

If there is a specific bus stop of concern, a grievance may be filed with the Metropolitan Council. The City will attempt to coordinate replacement and new bus stops be constructed or upgraded to achieve compliance in the future. There may be limitations which make it technically infeasible for individual bus stop locations to achieve full accessibility within the scope of any project. Those limitations will be noted, and those locations will remain on the transition plan. As future projects or opportunities arise, those locations shall continue to be incorporated into future work. Regardless on if full compliance can be achieved or not, each bus stop location shall be made as compliant as possible in accordance with the judgment of City staff.

Other policies, practices and programs

Policies, practices and programs not identified in this document will follow the applicable ADA standards.

Design Standards

A copy of the Public Buildings and Facilities ADA checklist, created by the Institute for Human Centered Design (member of the ADA National Network), is provided in C-1.

For public ROW facilities, the City of Maple Grove has PROWAG, as adopted by the Minnesota Department of Transportation (MnDOT), as its design standard. A copy of this document is included in C-3.

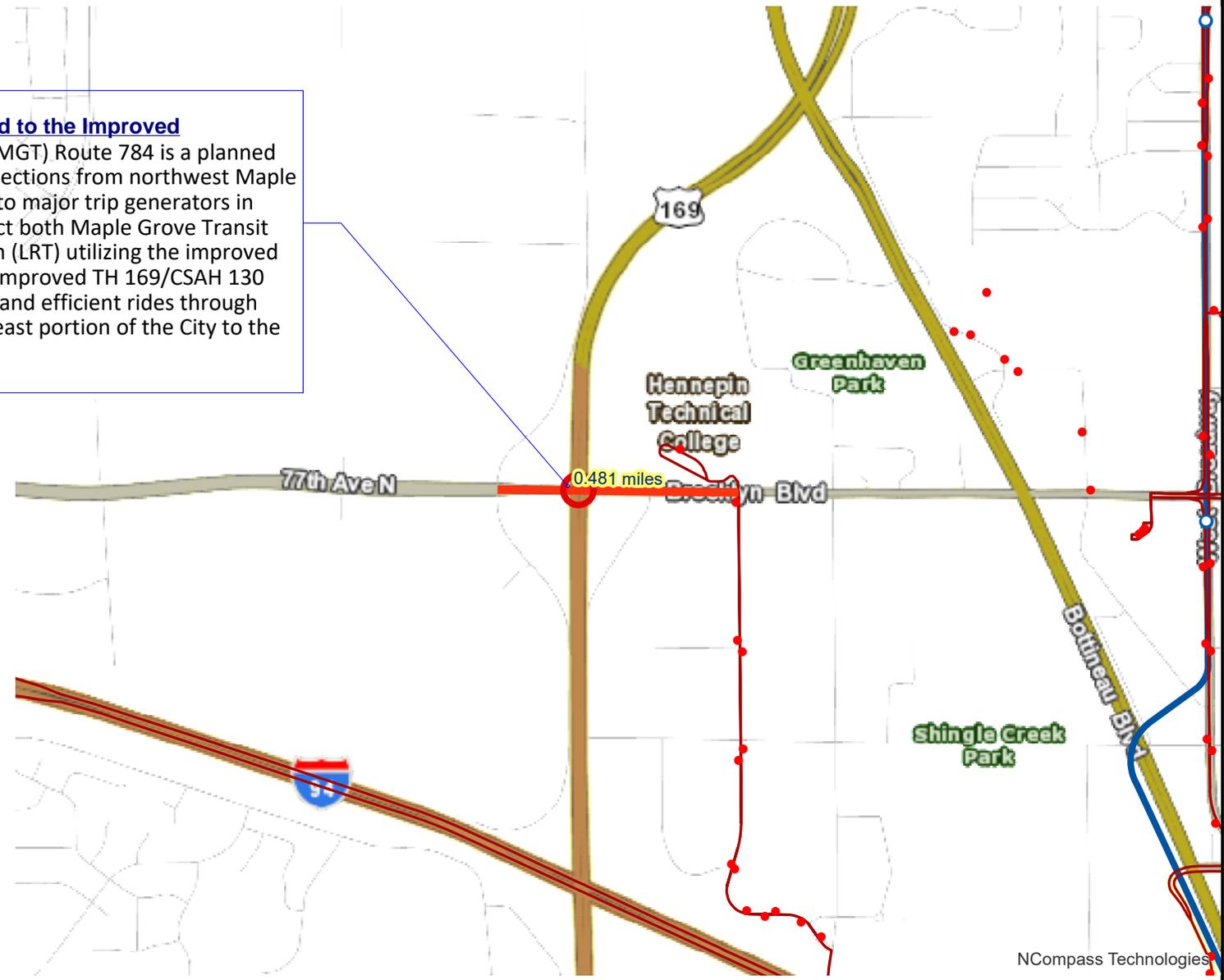
Transit Routes that will be Diverted to the Improved Interchange: Maple Grove Transit (MGT) Route 784 is a planned local fixed route that will make connections from northwest Maple Grove through the heart of the City to major trip generators in Brooklyn Park. This route will connect both Maple Grove Transit Stations with the Blue Line Extension (LRT) utilizing the improved TH 169/CSAH 130 interchange. The improved TH 169/CSAH 130 interchange will also facilitate quick and efficient rides through MGT's MY RIDE service in the southeast portion of the City to the Parkway Transit Station.

Results

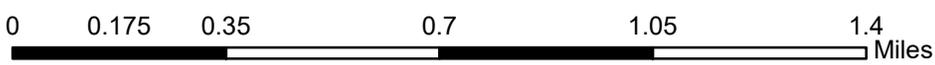
Transit with a Direct Connection to project:
721

**indicates Planned Alignments*

Transit Market areas: 3



- Project Points ● Active Stop — Transit Routes
- Project **Planned Transitway Stations** — Blue Line Extension
- Project Area ○ Blue Line Extension



Created: 4/7/2020
LandscapeRSA3



For complete disclaimer of accuracy, please visit <https://giswebsite.metc.state.mn.us/gisite/notice.aspx>



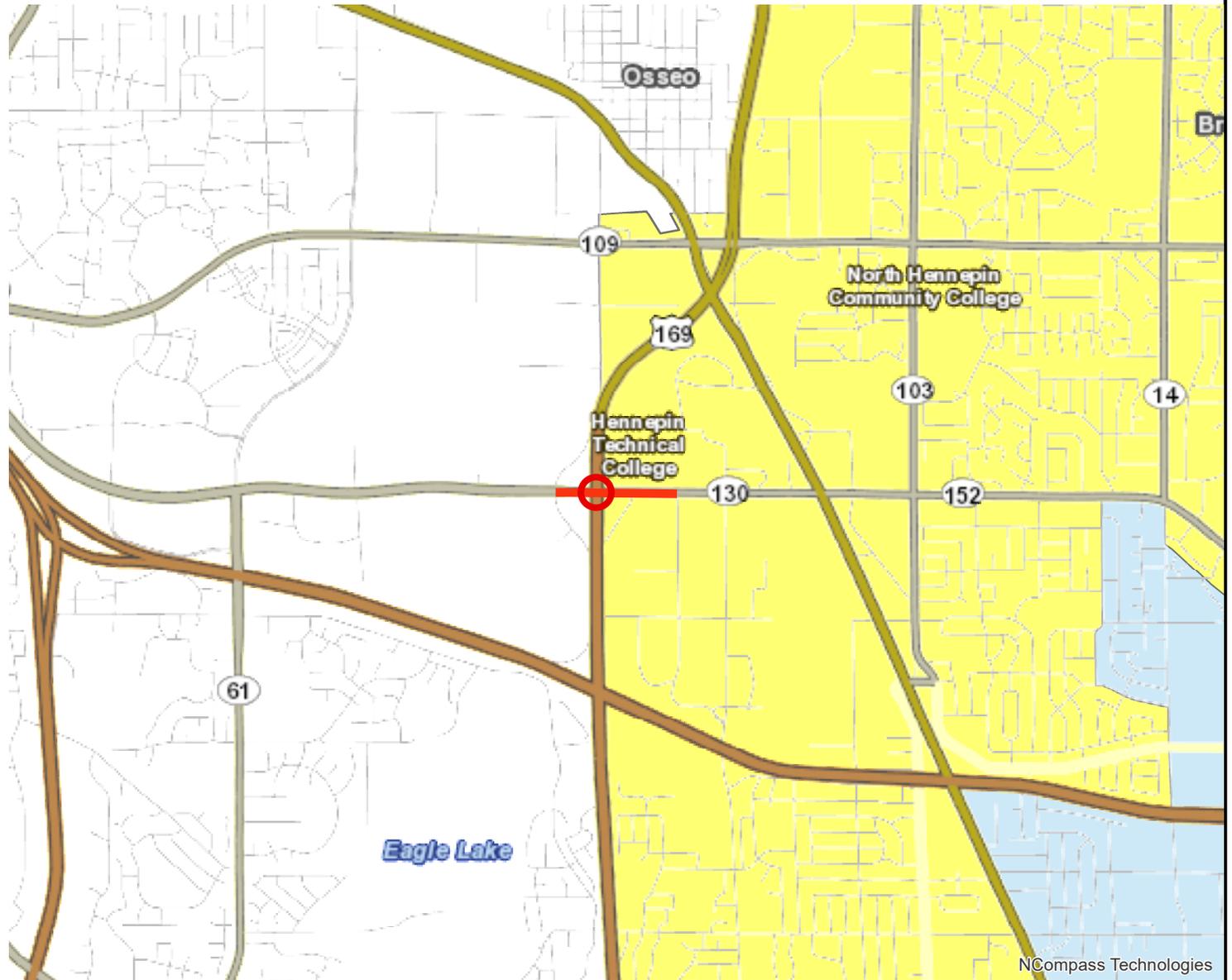
NCompass Technologies

Socio-Economic Conditions

Results

Project census tracts are above the regional average for population in poverty or population of color: (0 to 18 Points)

Tracts within half-mile: 26710 26807



Points

Lines

Area of Concentrated Poverty > 50% residents of color

Area of Concentrated Poverty

Above reg'l avg conc of race/poverty



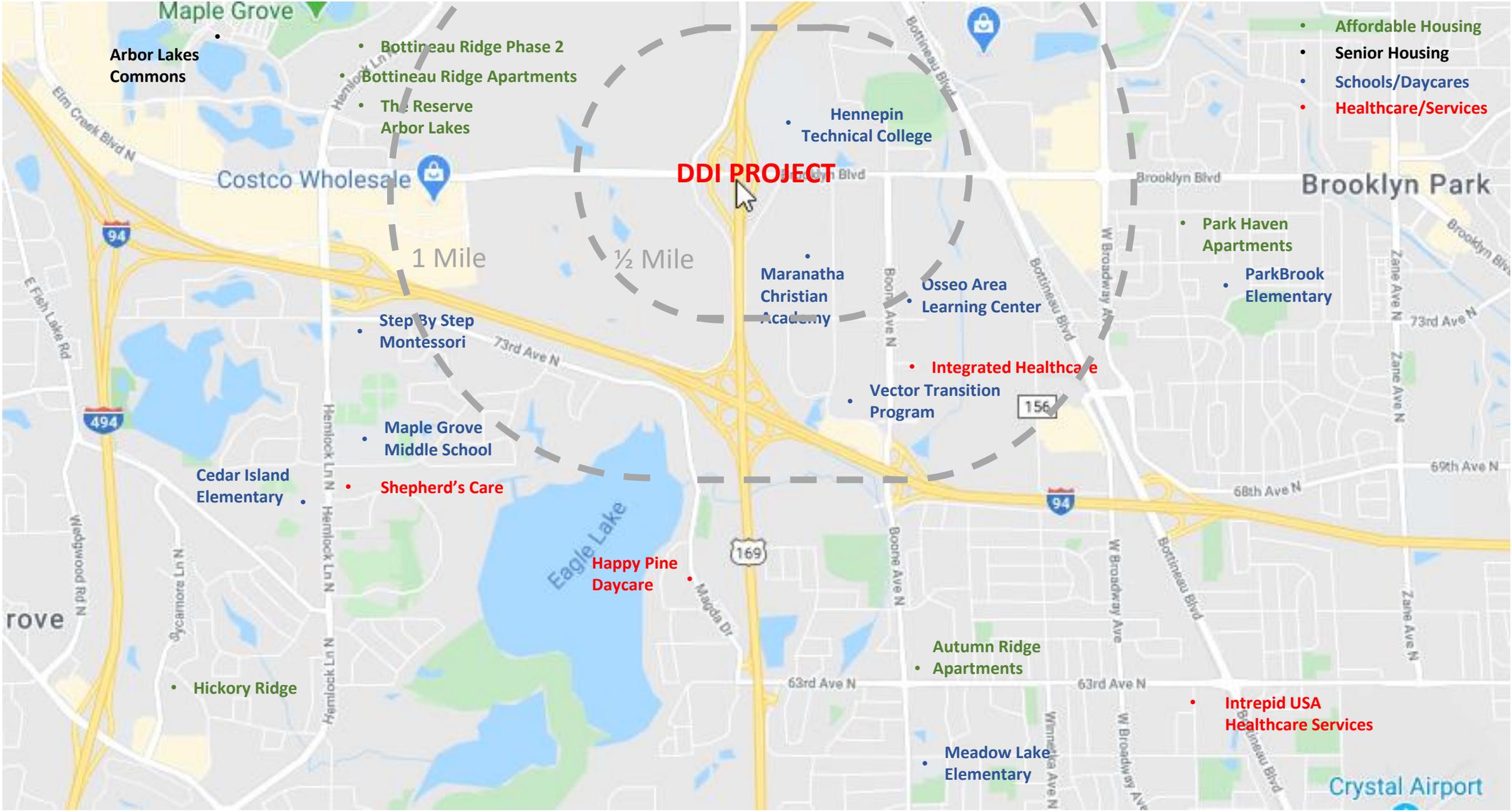
Created: 4/7/2020
LandscapeRSA2



For complete disclaimer of accuracy, please visit <http://giswebsite.metc.state.mn.us/gis/site/notice.aspx>



NCompass Technologies



DDI PROJECT

- Affordable Housing
- Senior Housing
- Schools/Daycares
- Healthcare/Services

1 Mile

1/2 Mile

Arbor Lakes Commons

- Bottineau Ridge Phase 2
- Bottineau Ridge Apartments
- The Reserve Arbor Lakes

Costco Wholesale

Hennepin Technical College

Brooklyn Park

Park Haven Apartments

ParkBrook Elementary

Maranatha Christian Academy

Osseo Area Learning Center

Step By Step Montessori

Integrated Healthcare

Vector Transition Program

Maple Grove Middle School

Shepherd's Care

Cedar Island Elementary

Happy Pine Daycare

Autumn Ridge Apartments

Intrepid USA Healthcare Services

Hickory Ridge

Meadow Lake Elementary

Crystal Airport

Maple Grove Client Regional Solicitation
 No Build AM Peak Hour

04/14/2020
 601: Jefferson Hwy & Brooklyn Blvd (Zone 25)

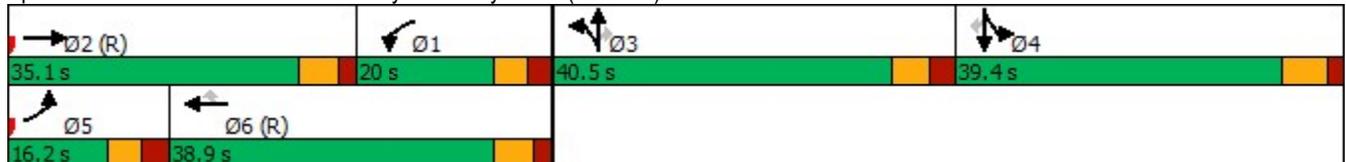


Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	27	396	70	317	99	6	92	169	5	43
Future Volume (vph)	27	396	70	317	99	6	92	169	5	43
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	Split	NA	Perm
Protected Phases	5	2	1	6		3		4	4	
Permitted Phases					6		3			4
Detector Phase	5	2	1	6	6	3	3	4	4	4
Switch Phase										
Minimum Initial (s)	10.0	12.0	10.0	12.0	12.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	16.2	34.7	16.1	36.3	36.3	40.5	40.5	39.4	39.4	39.4
Total Split (s)	16.2	35.1	20.0	38.9	38.9	40.5	40.5	39.4	39.4	39.4
Total Split (%)	12.0%	26.0%	14.8%	28.8%	28.8%	30.0%	30.0%	29.2%	29.2%	29.2%
Yellow Time (s)	3.5	4.0	3.5	4.0	4.0	4.0	4.0	4.5	4.5	4.5
All-Red Time (s)	2.7	1.7	2.6	2.0	2.0	2.5	2.5	1.9	1.9	1.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.2	5.7	6.1	6.0	6.0	6.5	6.5	6.4	6.4	6.4
Lead/Lag	Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?										
Recall Mode	None	C-Max	None	C-Max	C-Max	None	None	None	None	None
Act Effct Green (s)	10.4	71.6	13.9	81.2	81.2	10.0	10.0	14.8	14.8	14.8
Actuated g/C Ratio	0.08	0.53	0.10	0.60	0.60	0.07	0.07	0.11	0.11	0.11
v/c Ratio	0.25	0.26	0.70	0.18	0.13	0.05	0.49	0.56	0.57	0.16
Control Delay	63.4	18.2	88.8	14.0	2.5	59.2	8.2	67.9	68.4	1.0
Queue Delay	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	63.4	18.2	88.8	14.5	2.5	59.2	8.2	67.9	68.4	1.0
LOS	E	B	F	B	A	E	A	E	E	A
Approach Delay		21.0		22.7		11.3			54.9	
Approach LOS		C		C		B			D	

Intersection Summary

Cycle Length: 135
 Actuated Cycle Length: 135
 Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of 1st Green
 Natural Cycle: 135
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.70
 Intersection Signal Delay: 26.8
 Intersection LOS: C
 Intersection Capacity Utilization 46.2%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 601: Jefferson Hwy & Brooklyn Blvd (Zone 25)



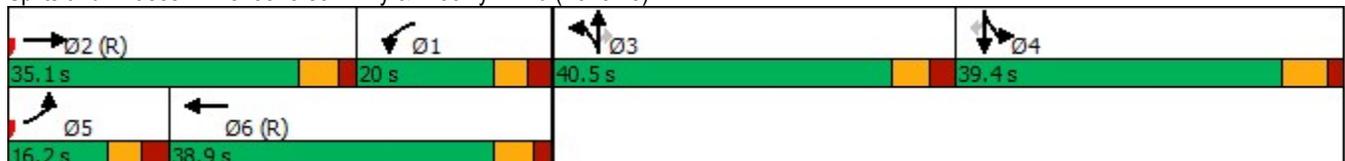


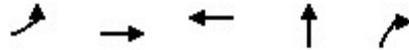
Lane Group	EBL	EBT	WBL	WBT	NBT	NBR	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	27	396	70	317	6	92	169	5	43
Future Volume (vph)	27	396	70	317	6	92	169	5	43
Turn Type	Prot	NA	Prot	NA	NA	Perm	Split	NA	Perm
Protected Phases	5	2	1	6	3		4	4	
Permitted Phases						3			4
Detector Phase	5	2	1	6	3	3	4	4	4
Switch Phase									
Minimum Initial (s)	10.0	12.0	10.0	12.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	16.2	34.7	16.1	36.3	40.5	40.5	39.4	39.4	39.4
Total Split (s)	16.2	35.1	20.0	38.9	40.5	40.5	39.4	39.4	39.4
Total Split (%)	12.0%	26.0%	14.8%	28.8%	30.0%	30.0%	29.2%	29.2%	29.2%
Yellow Time (s)	3.5	4.0	3.5	4.0	4.0	4.0	4.5	4.5	4.5
All-Red Time (s)	2.7	1.7	2.6	2.0	2.5	2.5	1.9	1.9	1.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.2	5.7	6.1	6.0	6.5	6.5	6.4	6.4	6.4
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?									
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None
Act Effct Green (s)	10.4	71.6	13.9	81.2	10.0	10.0	14.8	14.8	14.8
Actuated g/C Ratio	0.08	0.53	0.10	0.60	0.07	0.07	0.11	0.11	0.11
v/c Ratio	0.25	0.26	0.70	0.17	0.05	0.49	0.56	0.57	0.16
Control Delay	63.4	18.2	88.8	12.2	59.2	8.2	67.9	68.4	1.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	63.4	18.2	88.8	12.2	59.2	8.2	67.9	68.4	1.0
LOS	E	B	F	B	E	A	E	E	A
Approach Delay		21.0		23.2	11.3			54.9	
Approach LOS		C		C	B			D	

Intersection Summary

Cycle Length: 135
 Actuated Cycle Length: 135
 Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of 1st Green
 Natural Cycle: 135
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.70
 Intersection Signal Delay: 27.0
 Intersection LOS: C
 Intersection Capacity Utilization 46.2%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 15: Jefferson Hwy & Brooklyn Blvd (Zone 25)



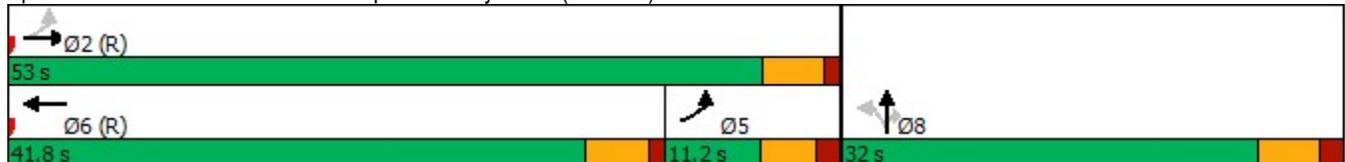


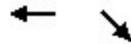
Lane Group	EBL	EBT	WBT	NBT	NBR
Lane Configurations		↔↑	↔↔	↔	↔
Traffic Volume (vph)	67	729	206	0	401
Future Volume (vph)	67	729	206	0	401
Turn Type	pm+pt	NA	NA	NA	Perm
Protected Phases	5	2	6	8	
Permitted Phases	2				8
Detector Phase	2.5	2.5	6	8	8
Switch Phase					
Minimum Initial (s)	6.0	12.0	12.0	20.0	20.0
Minimum Split (s)	11.2	40.1	40.1	30.6	30.6
Total Split (s)	11.2	53.0	41.8	32.0	32.0
Total Split (%)	13.2%	62.4%	49.2%	37.6%	37.6%
Yellow Time (s)	3.5	4.0	4.0	4.0	4.0
All-Red Time (s)	1.7	1.1	1.1	1.6	1.6
Lost Time Adjust (s)		0.0	0.0	0.0	0.0
Total Lost Time (s)		5.1	5.1	5.6	5.6
Lead/Lag	Lag		Lead		
Lead-Lag Optimize?					
Recall Mode	None	C-Max	C-Max	Max	Max
Act Effct Green (s)		47.9	36.7	26.4	26.4
Actuated g/C Ratio		0.56	0.43	0.31	0.31
v/c Ratio		0.53	0.21	0.53	0.81
Control Delay		13.0	12.5	29.4	31.2
Queue Delay		0.0	0.0	0.0	0.0
Total Delay		13.0	12.5	29.4	31.2
LOS		B	B	C	C
Approach Delay		13.0	12.5	30.6	
Approach LOS		B	B	C	

Intersection Summary

Cycle Length: 85
 Actuated Cycle Length: 85
 Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of 1st Green
 Natural Cycle: 85
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.81
 Intersection Signal Delay: 19.2
 Intersection LOS: B
 Intersection Capacity Utilization 61.9%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 603: 169 E Ramps & Brooklyn Blvd (Zone 25)



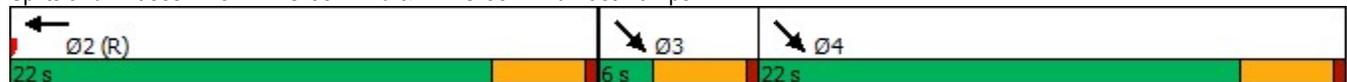


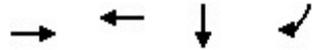
Lane Group	WBT	SET	Ø3	Ø4
Lane Configurations	↑↑	↑↑		
Traffic Volume (vph)	206	729		
Future Volume (vph)	206	729		
Turn Type	NA	NA		
Protected Phases	2	4 3	3	4
Permitted Phases				
Detector Phase	2	4 3		
Switch Phase				
Minimum Initial (s)	4.0		2.0	4.0
Minimum Split (s)	20.0		6.0	20.0
Total Split (s)	22.0		6.0	22.0
Total Split (%)	44.0%		12%	44%
Yellow Time (s)	3.5		3.5	3.5
All-Red Time (s)	0.5		0.5	0.5
Lost Time Adjust (s)	0.0			
Total Lost Time (s)	4.0			
Lead/Lag			Lead	Lag
Lead-Lag Optimize?				
Recall Mode	C-Min		Min	None
Act Effct Green (s)	19.9	22.1		
Actuated g/C Ratio	0.40	0.44		
v/c Ratio	0.16	0.51		
Control Delay	10.4	11.2		
Queue Delay	0.0	0.0		
Total Delay	10.4	11.2		
LOS	B	B		
Approach Delay	10.4	11.2		
Approach LOS	B	B		

Intersection Summary

Cycle Length: 50
 Actuated Cycle Length: 50
 Offset: 0 (0%), Referenced to phase 2:WBT, Start of Green, Master Intersection
 Natural Cycle: 50
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.51
 Intersection Signal Delay: 11.0
 Intersection Capacity Utilization 32.5%
 Analysis Period (min) 15
 Intersection LOS: B
 ICU Level of Service A

Splits and Phases: 5: Elm Creek Blvd & Elm Creek Blvd East Ramps



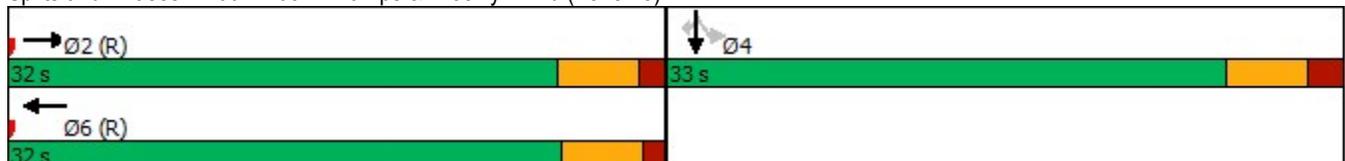


Lane Group	EBT	WBT	SBT	SBR
Lane Configurations	↑↑	↑↑	↑	↑
Traffic Volume (vph)	432	306	25	180
Future Volume (vph)	432	306	25	180
Turn Type	NA	NA	NA	Perm
Protected Phases	2	6	4	
Permitted Phases				4
Detector Phase	2	6	4	4
Switch Phase				
Minimum Initial (s)	25.0	25.0	8.0	8.0
Minimum Split (s)	30.3	30.1	30.8	30.8
Total Split (s)	32.0	32.0	33.0	33.0
Total Split (%)	49.2%	49.2%	50.8%	50.8%
Yellow Time (s)	4.0	4.0	4.0	4.0
All-Red Time (s)	1.3	1.1	1.8	1.8
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.3	5.1	5.8	5.8
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	C-Max	C-Max	None	None
Act Effct Green (s)	30.0	30.2	23.9	23.9
Actuated g/C Ratio	0.46	0.46	0.37	0.37
v/c Ratio	0.52	0.25	0.71	0.30
Control Delay	11.6	12.1	23.6	3.3
Queue Delay	0.2	0.0	0.0	0.0
Total Delay	11.9	12.1	23.6	3.3
LOS	B	B	C	A
Approach Delay	11.9	12.1	17.1	
Approach LOS	B	B	B	

Intersection Summary

Cycle Length: 65
 Actuated Cycle Length: 65
 Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of 1st Green
 Natural Cycle: 65
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.71
 Intersection Signal Delay: 13.9
 Intersection Capacity Utilization 51.6%
 Analysis Period (min) 15
 Intersection LOS: B
 ICU Level of Service A

Splits and Phases: 602: 169 W Ramps & Brooklyn Blvd (Zone 25)





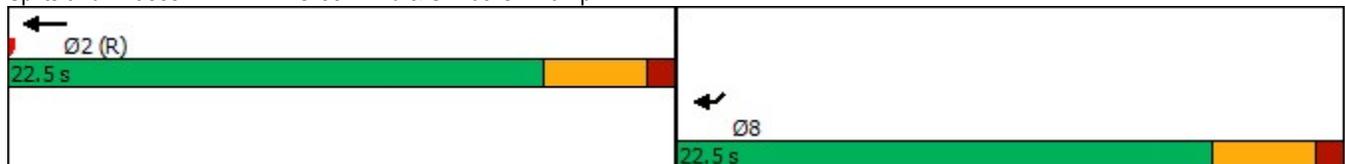
Lane Group	WBT	SWR
Lane Configurations	↑↑	↑↑
Traffic Volume (vph)	306	180
Future Volume (vph)	306	180
Turn Type	NA	Prot
Protected Phases	2	8
Permitted Phases		
Detector Phase	2	8
Switch Phase		
Minimum Initial (s)	5.0	5.0
Minimum Split (s)	22.5	22.5
Total Split (s)	22.5	22.5
Total Split (%)	50.0%	50.0%
Yellow Time (s)	3.5	3.5
All-Red Time (s)	1.0	1.0
Lost Time Adjust (s)	0.0	0.0
Total Lost Time (s)	4.5	4.5
Lead/Lag		
Lead-Lag Optimize?		
Recall Mode	C-Max	None
Act Effct Green (s)	33.4	5.5
Actuated g/C Ratio	0.74	0.12
v/c Ratio	0.13	0.21
Control Delay	2.5	0.5
Queue Delay	0.5	0.0
Total Delay	3.0	0.5
LOS	A	A
Approach Delay	3.0	
Approach LOS	A	

Intersection Summary

Cycle Length: 45
 Actuated Cycle Length: 45
 Offset: 0 (0%), Referenced to phase 2:WBT and 6:., Start of Green
 Natural Cycle: 45
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.21
 Intersection Signal Delay: 2.1
 Intersection Capacity Utilization 22.3%
 Analysis Period (min) 15

Intersection LOS: A
 ICU Level of Service A

Splits and Phases: 11: Elm Creek Blvd & SB169 Off Ramp





Lane Group	EBT	SEL
Lane Configurations	↑↑	↑↑
Traffic Volume (vph)	401	729
Future Volume (vph)	401	729
Turn Type	NA	Prot
Protected Phases	2!	Free!
Permitted Phases		
Detector Phase	2	3
Switch Phase		
Minimum Initial (s)	5.0	
Minimum Split (s)	22.5	
Total Split (s)	40.0	
Total Split (%)	100.0%	
Yellow Time (s)	3.5	
All-Red Time (s)	1.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	4.5	
Lead/Lag		
Lead-Lag Optimize?		
Recall Mode	C-Max	
Act Effct Green (s)	40.0	40.0
Actuated g/C Ratio	1.00	1.00
v/c Ratio	0.12	0.23
Control Delay	0.1	0.2
Queue Delay	0.0	0.0
Total Delay	0.1	0.2
LOS	A	A
Approach Delay	0.1	0.2
Approach LOS	A	A

Intersection Summary

Cycle Length: 40
 Actuated Cycle Length: 40
 Offset: 0 (0%), Referenced to phase 2:EBT and 6:, Start of Green
 Natural Cycle: 40
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.23
 Intersection Signal Delay: 0.1
 Intersection Capacity Utilization 39.0%
 Analysis Period (min) 15

Intersection LOS: A
 ICU Level of Service A

! Phase conflict between lane groups.

Splits and Phases: 4: NB 169 Off Ramp & Elm Creek Blvd



601: Jefferson Hwy & Brooklyn Blvd (Zone 25)

Direction	All
Future Volume (vph)	1232
Total Delay / Veh (s/v)	27
CO Emissions (kg)	1.28
NOx Emissions (kg)	0.25
VOC Emissions (kg)	0.30

602: 169 W Ramps & Brooklyn Blvd (Zone 25)

Direction	All
Future Volume (vph)	1532
Total Delay / Veh (s/v)	14
CO Emissions (kg)	1.44
NOx Emissions (kg)	0.28
VOC Emissions (kg)	0.33

603: 169 E Ramps & Brooklyn Blvd (Zone 25)

Direction	All
Future Volume (vph)	1667
Total Delay / Veh (s/v)	19
CO Emissions (kg)	1.72
NOx Emissions (kg)	0.33
VOC Emissions (kg)	0.40

3602: Brooklyn Blvd (Zone 25)

Direction	All
Future Volume (vph)	1202
Total Delay / Veh (s/v)	0
CO Emissions (kg)	0.22
NOx Emissions (kg)	0.04
VOC Emissions (kg)	0.05

4: NB 169 Off Ramp & Elm Creek Blvd

Direction	All
Future Volume (vph)	1130
Total Delay / Veh (s/v)	0
CO Emissions (kg)	0.14
NOx Emissions (kg)	0.03
VOC Emissions (kg)	0.03

5: Elm Creek Blvd & Elm Creek Blvd East Ramps

Direction	All
Future Volume (vph)	935
Total Delay / Veh (s/v)	11
CO Emissions (kg)	0.48
NOx Emissions (kg)	0.09
VOC Emissions (kg)	0.11

10: Elm Creek Blvd West Ramps & Elm Creek Blvd

Direction	All
Future Volume (vph)	963
Total Delay / Veh (s/v)	8
CO Emissions (kg)	0.41
NOx Emissions (kg)	0.08
VOC Emissions (kg)	0.10

11: Elm Creek Blvd & SB169 Off Ramp

Direction	All
Future Volume (vph)	486
Total Delay / Veh (s/v)	2
CO Emissions (kg)	0.10
NOx Emissions (kg)	0.02
VOC Emissions (kg)	0.02

15: Jefferson Hwy & Brooklyn Blvd (Zone 25)

Direction	All
Future Volume (vph)	1232
Total Delay / Veh (s/v)	27
CO Emissions (kg)	1.37
NOx Emissions (kg)	0.27
VOC Emissions (kg)	0.32

Maple Grove Application

1 Jefferson Hwy

2 W West Ramps

3 East Ramps

4 Elm Creek West Intersection

5 Elm Creek East Intersection

Emissions

No Build	1	2	3	4	5	6	7	8	9	10	Total
CO	1.28	1.44	1.72								4.44
NOx	0.25	0.28	0.33								0.86
VOC	0.3	0.33	0.4								1.03
Total No Build											6.33

Build	1	2	3	4	5	6	7	8	9	10	Total
CO	1.37	0.1	0.48	0.41	0.14						2.5
NOx	0.27	0.02	0.09	0.08	0.03						0.49
VOC	0.32	0.02	0.11	0.1	0.03						0.58
Total Build											3.57

Total Reduction	2.76
------------------------	-------------

Traffic Safety Benefit-Cost Calculation

Highway Safety Improvement Program (HSIP) Reactive Project



A. Roadway Description

Route	Elm Creek Boulevard	District	_____	County	Hennepin
Begin RP	_____	End RP	_____	Miles	_____
Location	Elm Creek Boulevard and US 169 Interchange				

B. Project Description

Proposed Work	Convert interchange to a Diverging Diamond Interchange		
Project Cost*	\$13,795,000	Installation Year	2025
Project Service Life	20 years	Traffic Growth Factor	2.0%

* exclude Right of Way from Project Cost

C. Crash Modification Factor

0.33	Fatal (K) Crashes	Reference	Crash Clearinghouse
0.33	Serious Injury (A) Crashes		
0.33	Moderate Injury (B) Crashes	Crash Type	Angle
0.33	Possible Injury (C) Crashes		
0.33	Property Damage Only Crashes		www.CMFClearinghouse.org

D. Crash Modification Factor (optional second CMF)

0.64	Fatal (K) Crashes	Reference	Crash Clearinghouse
0.64	Serious Injury (A) Crashes		
0.64	Moderate Injury (B) Crashes	Crash Type	Rear End
0.64	Possible Injury (C) Crashes		
0.64	Property Damage Only Crashes		www.CMFClearinghouse.org

E. Crash Data

Begin Date	1/1/2016	End Date	12/31/2018	3 years
Data Source	MnDOT			
	Crash Severity	Angle	Rear End	
	K crashes			
	A crashes			
	B crashes		1	
	C crashes		1	
	PDO crashes	3	9	

F. Benefit-Cost Calculation

\$1,281,595	Benefit (present value)	B/C Ratio = 0.10
\$13,795,000	Cost	

Proposed project expected to reduce 2 crashes annually, 0 of which involving fatality or serious injury.

F. Analysis Assumptions

Crash Severity	Crash Cost
K crashes	\$1,360,000
A crashes	\$680,000
B crashes	\$210,000
C crashes	\$110,000
PDO crashes	\$12,000

Link: mndot.gov/planning/program/appendix_a.html

Real Discount Rate 1.2%
 Traffic Growth Rate 2.0%
 Project Service Life 20 years

G. Annual Benefit

Crash Severity	Crash Reduction	Annual Reduction	Annual Benefit
K crashes	0.00	0.00	\$0
A crashes	0.00	0.00	\$0
B crashes	0.36	0.12	\$25,200
C crashes	0.36	0.12	\$13,200
PDO crashes	5.25	1.75	\$21,000

\$59,400

H. Amortized Benefit

Year	Crash Benefits	Present Value
2025	\$59,400	\$59,400
2026	\$60,588	\$59,870
2027	\$61,800	\$60,343
2028	\$63,036	\$60,820
2029	\$64,296	\$61,301
2030	\$65,582	\$61,785
2031	\$66,894	\$62,274
2032	\$68,232	\$62,766
2033	\$69,597	\$63,262
2034	\$70,988	\$63,762
2035	\$72,408	\$64,266
2036	\$73,856	\$64,774
2037	\$75,334	\$65,286
2038	\$76,840	\$65,802
2039	\$78,377	\$66,323
2040	\$79,945	\$66,847
2041	\$81,543	\$67,375
2042	\$83,174	\$67,908
2043	\$84,838	\$68,445
2044	\$86,535	\$68,986
0	\$0	\$0
0	\$0	\$0
0	\$0	\$0
0	\$0	\$0
0	\$0	\$0
0	\$0	\$0
0	\$0	\$0
0	\$0	\$0
0	\$0	\$0
0	\$0	\$0
0	\$0	\$0
0	\$0	\$0
0	\$0	\$0
0	\$0	\$0
0	\$0	\$0

Total = \$1,281,595

Traffic Safety Benefit-Cost Calculation

Highway Safety Improvement Program (HSIP) Reactive Project



A. Roadway Description

Route	Elm Creek Boulevard	District		County	Hennepin
Begin RP		End RP		Miles	
Location	Elm Creek Boulevard and US 169 Interchange				

B. Project Description

Proposed Work	Convert interchange to a Diverging Diamond Interchange		
Project Cost*	\$13,795,000	Installation Year	2025
Project Service Life	20 years	Traffic Growth Factor	2.0%

* exclude Right of Way from Project Cost

C. Crash Modification Factor

1.27	Fatal (K) Crashes	Reference	Crash Clearinghouse
1.27	Serious Injury (A) Crashes		
1.27	Moderate Injury (B) Crashes	Crash Type	Sideswipe
1.27	Possible Injury (C) Crashes		
1.27	Property Damage Only Crashes		www.CMFClearinghouse.org

D. Crash Modification Factor (optional second CMF)

0.59	Fatal (K) Crashes	Reference	Crash Clearinghouse
0.59	Serious Injury (A) Crashes		
0.59	Moderate Injury (B) Crashes	Crash Type	All
0.67	Possible Injury (C) Crashes		
0.67	Property Damage Only Crashes		www.CMFClearinghouse.org

E. Crash Data

Begin Date	1/1/2016	End Date	12/31/2018	3 years
Data Source	MnDOT			
Crash Severity	Sideswipe	All		
K crashes				
A crashes				
B crashes			1	
C crashes			1	
PDO crashes	2		1	

F. Benefit-Cost Calculation

\$862,164	Benefit (present value)	B/C Ratio = 0.07
\$13,795,000	Cost	

Proposed project expected to reduce 1 crashes annually, 0 of which involving fatality or serious injury.

F. Analysis Assumptions

Crash Severity	Crash Cost
K crashes	\$1,360,000
A crashes	\$680,000
B crashes	\$210,000
C crashes	\$110,000
PDO crashes	\$12,000

Link: mndot.gov/planning/program/appendix_a.html

Real Discount Rate 1.2%
 Traffic Growth Rate 2.0%
 Project Service Life 20 years

G. Annual Benefit

Crash Severity	Crash Reduction	Annual Reduction	Annual Benefit
K crashes	0.00	0.00	\$0
A crashes	0.00	0.00	\$0
B crashes	0.41	0.14	\$28,700
C crashes	0.33	0.11	\$12,100
PDO crashes	-0.21	-0.07	-\$840

\$39,960

H. Amortized Benefit

Year	Crash Benefits	Present Value
2025	\$39,960	\$39,960
2026	\$40,759	\$40,276
2027	\$41,574	\$40,594
2028	\$42,406	\$40,915
2029	\$43,254	\$41,239
2030	\$44,119	\$41,565
2031	\$45,001	\$41,893
2032	\$45,901	\$42,224
2033	\$46,820	\$42,558
2034	\$47,756	\$42,895
2035	\$48,711	\$43,234
2036	\$49,685	\$43,575
2037	\$50,679	\$43,920
2038	\$51,693	\$44,267
2039	\$52,726	\$44,617
2040	\$53,781	\$44,970
2041	\$54,857	\$45,325
2042	\$55,954	\$45,684
2043	\$57,073	\$46,045
2044	\$58,214	\$46,409
0	\$0	\$0
0	\$0	\$0
0	\$0	\$0
0	\$0	\$0
0	\$0	\$0
0	\$0	\$0
0	\$0	\$0
0	\$0	\$0
0	\$0	\$0
0	\$0	\$0
0	\$0	\$0
0	\$0	\$0
0	\$0	\$0
0	\$0	\$0
0	\$0	\$0
0	\$0	\$0

Total = \$862,164

Countermeasure: Convert diamond interchange to Diverging Diamond Interchange (DDI) or Double Crossover Diamond (DCD)

<input type="checkbox"/>	CMF	CRF(%)	Quality	Crash Type	Crash Severity	Area Type	Reference	Comments
<input type="checkbox"/>	0.67	33	★★★★☆	All	All	Suburban	HUMMER ET AL., 2016	The volume here is the ... [READ MORE]
<input type="checkbox"/>	0.59	41	★★★★☆	All	Fatal,Serious injury,Minor injury	Suburban	HUMMER ET AL., 2016	The volume here is the ... [READ MORE]
<input type="checkbox"/>	0.33	67	★★★★☆	Angle	All	Suburban	HUMMER ET AL., 2016	The volume here is the ... [READ MORE]
<input type="checkbox"/>	0.64	36	★★★★☆	Rear end	All	Urban	HUMMER ET AL., 2016	The volume here is the ... [READ MORE]
<input type="checkbox"/>	1.27	-27	★★★★☆	Sideswipe	All	Suburban	HUMMER ET AL., 2016	The volume here is the ... [READ MORE]
<input type="checkbox"/>	0.76	24	★★★★☆	Single vehicle	All	Suburban	HUMMER ET AL., 2016	The volume here is the ... [READ MORE]
<input type="checkbox"/>	0.374	62.6	★★★★☆	All	Fatal,Serious injury,Minor injury	Urban	CLAROS ET AL., 2015	This CMF applies to the ... [READ MORE]
<input type="checkbox"/>	0.649	35.1	★★★★☆	All	Property damage only (PDO)	Urban	CLAROS ET AL., 2015	This CMF applies to the ... [READ MORE]
<input type="checkbox"/>	0.592	40.8	★★★★☆	All	All	Urban	CLAROS ET AL., 2015	This CMF applies to the ... [READ MORE]
<input type="checkbox"/>	0.45	55	★★★★☆	All	Fatal,Serious injury,Minor injury	Urban	CLAROS ET AL., 2017	This CMF applies to the ... [READ MORE]
<input type="checkbox"/>	0.686	31.4	★★★★☆	All	Property damage only (PDO)	Urban	CLAROS ET AL., 2017	This CMF applies to the ... [READ MORE]
<input type="checkbox"/>	0.625	37.5	★★★★☆	All	All	Urban	CLAROS ET AL., 2017	This CMF applies to the ... [READ MORE]
<input type="checkbox"/>	0.633	36.7	★★★★☆	All		Not specified	NYE ET AL., 2019	

West Ramps

objectid	Incident ID	Date and T Year	Hour	Crash Seve	Number Kil	Number of Officer Nar	Constructic	County	City	Township
1790843	456222	6/1/2017,	2017	7 Property D	0	2 On June	M	HENNEPIN	Maple Grove	
1830248	472204	6/24/2017,	2017	10 Property D	0	2 VEHICLE	M	HENNEPIN	Maple Grove	
1946687	395169	11/17/2016,	2016	9 Property D	0	2 Vehicle #1	M	HENNEPIN	Maple Grove	
2109545	357937	6/13/2016,	2016	6 Property D	0	2 UPON	M	Hennepin	Maple Grove	
2112168	411472	1/2/2017, (	2017	18 Property D	0	3 Unit #1 sto	M	HENNEPIN	Maple Grove	
2526367	455085	5/26/2017,	2017	16 Property D	0	2 On Friday	M	HENNEPIN	Maple Grove	
2576981	418164	1/25/2017,	2017	7 Property D	0	1 vehicle one	M	HENNEPIN	Maple Grove	

East Ramps

1809088	649137	10/2/2018,	2018	12 Property D	0	2 EXIT	M	Hennepin	Brooklyn Park	
2095007	324506	1/29/2016,	2016	19 Minor Injur	0	2 UNIT #1	M	HENNEPIN	Brooklyn Park	
2139147	609370	7/7/2018, (	2018	18 Possible Inj	0	2 D1 was exit	M	HENNEPIN	Brooklyn Park	
2527696	522979	12/7/2017,	2017	15 Property D	0	1 unit 1 trav	M	HENNEPIN	Brooklyn Park	

In between Interchange Intersections

1855527	374445	8/26/2016,	2016	14 Possible Inj	0	4 Units one	M	HENNEPIN	Maple Grove	
1960302	527554	12/22/201	2017	16 Property D	0	2 Traffic on	M	HENNEPIN	Brooklyn Park	
1960930	668881	12/7/2018,	2018	18 Minor Injur	0	2 Unit 1 was	M	HENNEPIN	Maple Grove	
1972420	374832	8/16/2016,	2016	7 Property D	0	2 THE	M	Hennepin	Maple Grove	
2074029	359279	6/25/2016,	2016	15 Property D	0	3 Vehicle #1	M	HENNEPIN	Maple Grove	
2188693	379953	9/14/2016,	2016	8 Property D	0	2 BOTH VEHI	M	Hennepin	Maple Grove	
2424078	489413	7/25/2017,	2017	13 Property D	0	3 Unit 3 was	M	Hennepin	Maple Grove	
2526560	457766	6/7/2017,	2017	7 Property D	0	2 BOTH	M	Hennepin	Maple Grove	

Route Type	Route ID	Route Mea	Roadway N	Divided Ro.	Intersectio	Manner of	First Harmf	Relative Tr	Lighting Co	Road Circu	road_circu	Road Circu
County Sta	040000659	4.149789	77TH AVE	West		Angle	Motor Veh On Roadw	Daylight	None			
County Sta	040000659	4.147953	77TH AVE	West		Angle	Motor Veh On Roadw	Daylight	None			
Ramp or Cr	220000659	0.011287	RAMP366	North		Angle	Motor Veh On Roadw	Daylight	None			
Ramp or Cr	220000659	0.020339	RAMP366	South		Front to Re	Motor Veh On Roadw	Sunrise	None			
Ramp or Cr	220000659	0.00416	RAMP366	South		Front to Re	Motor Veh On Roadw	Dark (Stree	None			
County Sta	040000659	4.157544	77TH AVE	East		Front to Re	Motor Veh On Roadw	Daylight	None			
Ramp or Cr	220000659	0.009769	RAMP366	South			Light Pole/ On Roadw	Daylight		Road Surface Condition (wet, icy, :		
Ramp or Cr	220000659	0.19121	RAMP380	Not Applicable		Sideswipe ·	Motor Veh On Roadw	Daylight	None			
Ramp or Cr	220000659	0.00389	RAMP327	East		Front to Fr	Motor Veh On Roadw	Dark (Stree		Road Surface Condition (wet, icy, :		
County Sta	040000659	4.309004	BROOKLYN	East	RAMP380	Other	Motor Veh On Roadw	Daylight	None			
Ramp or Cr	220000659	0.021077	RAMP327			Front to Re	Motor Veh On Should	Daylight		Road Surface Condition (wet, icy, :		
County Sta	040000659	4.247714	77TH AVE	Not Applicable		Front to Re	Motor Veh On Roadw	Daylight	None			
County Sta	040000659	4.26953	77TH AVE	East		Front to Re	Motor Veh On Roadw	Daylight	None			
County Sta	040000659	4.239528	77TH AVE	West		Front to Re	Motor Veh On Roadw	Dark (Stree	None			
U.S. Trunk	020000000	136.0511	USTH 169	South		Front to Re	Motor Veh On Roadw	Daylight	None			
County Sta	040000659	4.259799	77TH AVE	East	USTH 169	Sideswipe ·	Motor Veh On Roadw	Daylight	None			
County Sta	040000659	4.239824	77TH AVE	South		Front to Re	Motor Veh On Roadw	Daylight	None			
County Sta	040000659	4.248871	77TH AVE	Not Applicable		Front to Re	Motor Veh On Roadw	Daylight	None			
U.S. Trunk	020000000	136.0385	USTH 169	South		Front to Re	Motor Veh On Roadw	Daylight	None			

road_circu	Relative Int	Traffic Con	Weather P	Weather S	Surface Co	Work Zone	Work Zone	Work Zone	Workers Pr	Unit1 Type	Unit1 Vehi	Unit1 Direc
	Four-Way I	Traffic Con	Clear		Dry	2		NOT APPLICABLE		Motor Veh	Passenger	Westbound
	Four-Way I	Traffic Con	Clear		Dry	2		NOT APPLICABLE		Motor Veh	Passenger	Westbound
	Four-Way I	Traffic Con	Cloudy		Dry	2		NOT APPLICABLE		Motor Veh	Sport Utilit	Southbound
	Entrance/E	Traffic Con	Rain		Wet	2		NOT APPLICABLE		Motor Veh	Pickup	Southbound
	Entrance/E	Traffic Con	Sleet, Hail (Freezing Ra		Ice/Frost	2		NOT APPLICABLE		Motor Veh	Passenger	Southbound
	Four-Way I	Traffic Con	Clear		Dry	2		NOT APPLICABLE		Motor Veh	Passenger	Eastbound
snow, slush	T Intersecti	Traffic Con	Snow		Wet	2		NOT APPLICABLE		Motor Veh	Passenger	Southbound
	Entrance/E	No Control	Cloudy		Dry	2		NOT APPLICABLE		Motor Veh	Passenger	Northbound
snow, slush	Four-Way I	Traffic Con	Rain	Sleet, Hail (	Wet	2		NOT APPLICABLE		Motor Veh	Passenger	Eastbound
	Interchang	Traffic Con	Clear		Dry	1	Activity Area	Lane Closure	No	Motor Veh	Passenger	Northbound
snow, slush	Interchang	No Control	Clear		Ice/Frost	2		NOT APPLICABLE		Motor Veh	Pickup	Northbound
	Four-Way I	Traffic Con	Clear		Dry	2		NOT APPLICABLE		Motor Veh	Sport Utilit	Eastbound
	Not at Inte	Not Applic	Clear		Dry	2		NOT APPLICABLE		Motor Veh	Pickup	Eastbound
	Intersectio	Traffic Con	Clear		Dry	2		NOT APPLICABLE		Motor Veh	Passenger	Westbound
	Not at Inte	No Control	Clear		Dry	2		NOT APPLICABLE		Motor Veh	Passenger	Southbound
	Four-Way I	Traffic Con	Severe Cro	Blowing Sa	Dry	2		NOT APPLICABLE		Motor Veh	Sport Utilit	Eastbound
	Not at Inte	No Control	Clear		Dry	2		NOT APPLICABLE		Motor Veh	Pickup	Southbound
	Not at Inte	Traffic Con	Clear		Dry	2		NOT APPLICABLE		Motor Veh	Passenger	Eastbound
	Not at Inte	No Control	Clear		Dry	2		NOT APPLICABLE		Motor Veh	Sport Utilit	Southbound

Unit1 Factc	Unit1 Factc	Unit1 Most	Unit1 Vehic	Unit1 Traff	Unit1 Postc	Unit1 Horiz	Unit1 Road	Unit1 Nonr	Unit1 Injur	Unit1 Phys	Unit1 Age	Unit1 Sex
No Clear Contributing	Motor Veh	Moving For	Two-Way, I	45	Straight	Level			No Appare	Apparently	65	Female
Ran Red Light	Motor Veh	Moving For	Two-Way, I	45	Straight	Level			No Appare	Apparently	68	Female
Driver Speeding	Motor Veh	Moving For	Other	45	Straight	Level			No Appare	Apparently	39	Female
No Clear Contributing	Motor Veh	Swerved or	Two-Way, I	55	Straight	Hillcrest			No Appare	Apparently	41	Female
No Clear Contributing	Motor Veh	Vehicle Sto	One Way T	25	Straight	Level			No Appare	Apparently	46	Female
No Clear Contributing	Motor Veh	Swerved or	Two-Way, I	40	Straight	Level			No Appare	Apparently	76	Female
Other Contributing Act	Traffic Sign	Moving For	One Way T	55	Straight	Level			No Appare	Apparently	33	Male
Failure to Yield Right-c	Motor Veh	Moving For	One Way T	30	Straight	Uphill			No Appare	Apparently	38	Male
Failure to Yield Right-c	Motor Veh	Turning Lef	Two-Way, I	40	Straight	Level			Possible Inj	Apparently	23	Female
No Clear Contributing	Motor Veh	Turning Lef	Two-Way, I	40	Straight	Level			Possible Inj	Apparently	27	Female
Driver Distracted	Motor Veh	Moving For	One Way T	55	Straight	Downhill			No Appare	Apparently	53	Male
No Clear Contributing	Motor Veh	Vehicle Sto	Two-Way, I	45	Straight	Level			No Appare	Apparently	33	Female
No Clear Contributing	Motor Veh	Vehicle Sto	Two-Way, I	30	Straight	Level			No Appare	Apparently	28	Male
No Clear Contributing	Motor Veh	Vehicle Sto	Two-Way, Not Divided		Straight	Downhill			Suspected	Apparently	38	Female
No Clear Contributing	Motor Veh	Vehicle Sto	Two-Way, I	55	Straight	Level			No Appare	Apparently	41	Female
No Clear Contributing	Motor Veh	Moving For	Two-Way, I	40	Straight	Level			No Appare	Apparently	38	Male
No Clear Contributing	Motor Veh	Slowing	Two-Way, I	55	Straight	Level			No Appare	Apparently	29	Male
No Clear Contributing	Motor Veh	Vehicle Sto	Two-Way, I	45	Straight	Level			No Appare	Apparently	40	Female
No Clear Contributing	Motor Veh	Vehicle Sto	Two-Way, I	55	Straight	Level			No Appare	Apparently	61	Female

Unit2 Type	Unit2 Vehic	Unit2 Direc	Unit2 Factc	Unit2 Factc	Unit2 Most	Unit2 Vehic	Unit2 Nonr	Unit2 Injur	Unit2 Physi	Unit2 Age	Unit2 Sex	Unit3 Type
Motor Veh Pickup		Westbound	Ran Red Light		Motor Veh Moving Forward		No Appare	Apparently		42	Male	
Motor Veh Passenger		Westbound	No Clear Contributing		Motor Veh Moving Forward		No Appare	Apparently		76	Male	
Motor Veh Medium / I		Southbound	No Clear Contributing		Motor Veh Moving Forward		No Appare	Apparently		47	Male	
Motor Veh Sport Utilit		Southbound	Following Too Closely		Motor Veh Moving Forward		No Appare	Apparently		42	Male	
Motor Veh Passenger		Southbound	No Clear Contributing		Motor Veh Vehicle Stopped or Sta		No Appare	Apparently		56	Female	Motor Veh
Motor Veh Medium / I		Eastbound	No Clear Contributing		Motor Veh Moving Forward		No Appare	Apparently		52	Male	
Motor Veh Passenger		Northbound	Improper Turn/Merge		Motor Veh Moving Forward		No Appare	Apparently		31	Female	
Motor Veh Passenger		Westbound	No Clear Contributing		Motor Veh Moving Forward		No Appare	Apparently		36	Male	
Motor Veh Passenger		Eastbound	Ran Red Light		Motor Veh Moving Forward		No Appare	Apparently		38	Male	
Parked/Sta Pickup		Northbound			Motor Veh Vehicle Stopped or Stalled in Roadway							
Motor Veh Passenger		Eastbound	Operated Motor Vehic		Motor Veh Vehicle Stopped or Sta		No Appare	Apparently		21	Male	Motor Veh
Motor Veh Passenger		Eastbound	Following Too Closely		Motor Veh Moving Forward		No Appare	Apparently		39	Male	
Motor Veh Passenger		Westbound	Driver Distracted		Motor Veh Moving Forward		No Appare	Apparently		22	Male	
Motor Veh Passenger		Southbound	Following Too Closely		Motor Veh Moving Forward		No Appare	Apparently		41	Female	
Motor Veh Passenger		Eastbound	No Clear Contributing		Motor Veh Moving Forward		No Appare	Apparently		33	Female	Motor Veh
Motor Veh Sport Utilit		Southbound	Following Too Closely		Motor Veh Moving Forward		No Appare	Apparently		28	Male	
Motor Veh Sport Utilit		Eastbound	Operated Motor Vehic		Motor Veh Moving Forward		No Appare	Apparently		26	Female	Motor Veh
Motor Veh Passenger		Southbound	Following Too Closely		Motor Veh Moving Forward		No Appare	Apparently		24	Male	

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

Passenger | Southboun Other Contributing Act Motor Veh Slowing No Appare Unknown 34 Female

Passenger | Eastbound No Clear Contributing Motor Veh Moving Forward Possible Inj Apparently 17 Male Motor Veh Sport Utilit

Passenger | Eastbound Operated Failed to K Motor Veh Moving Forward No Appare Apparently 27 Female

Medium / | Eastbound No Clear Contributing Motor Veh Vehicle Stopped or Sta No Appare Apparently 31 Male

Unit4 Direc Unit4 Factc Unit4 Factc Unit4 Most Unit4 Vehic Unit4 Nonr Unit4 Injur Unit4 Physi Unit4 Age Unit4 Sex interchange otst_inters city_section

USTH 169 / 77TH AVE

USTH 169 / 77TH AVE/BROOKLYN

USTH 169 / 77TH AVE/BROOKLYN

USTH 169 / 77TH AVE

Eastbound Operated Motor Vehic Motor Veh Moving Forward

No Appare Apparently

19 Female

USTH 169 / 77TH AVE

USTH 169 / 77TH AVE

USTH 169 / 77TH AVE

USTH 169 / 77TH AVE US169 Fror

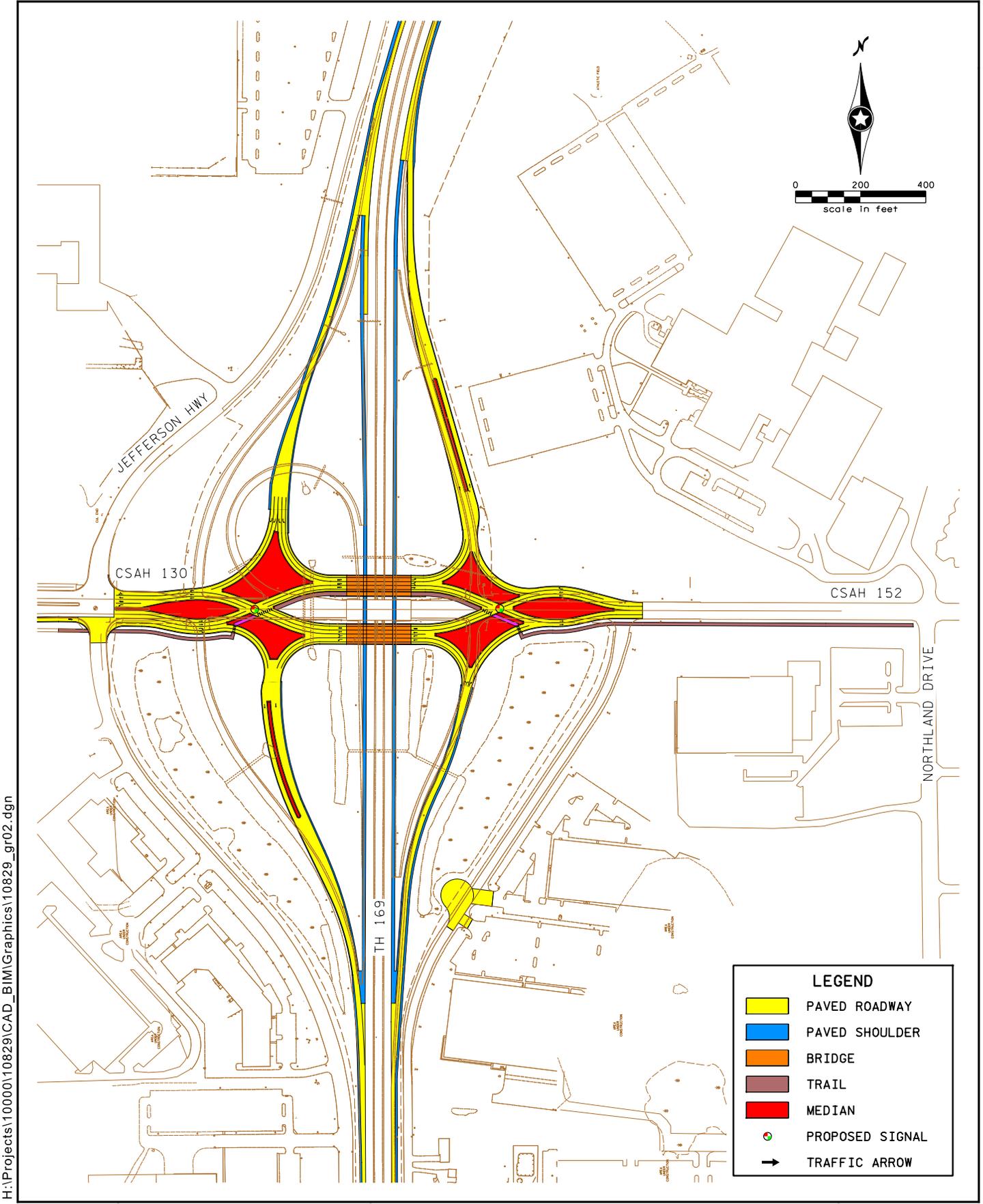
USTH 169 / 77TH AVE

USTH 169 / 77TH AVE

USTH 169 / 77TH AVE

USTH 169 / 77TH AVE US169 Fror

utm_x	utm_y	x	y
468181.4	4993531	468181.4	4993531
468178.4	4993535	468178.4	4993535
468175	4993552	468175	4993552
468178	4993566	468178	4993566
468173.8	4993540	468173.8	4993540
468193.9	4993532	468193.9	4993532
468174.5	4993549	468174.5	4993549
468423.5	4993503	468423.5	4993503
468428.2	4993540	468428.2	4993540
468437.5	4993533	468437.5	4993533
468431.4	4993568	468431.4	4993568
468338.8	4993536	468338.8	4993536
468374	4993535	468374	4993535
468325.7	4993535	468325.7	4993535
468351.5	4993541	468351.5	4993541
468358.3	4993535	468358.3	4993535
468326.1	4993536	468326.1	4993536
468341	4993526	468341	4993526
468321.9	4993545	468321.9	4993545



H:\Projects\100001\10829\CAD_BIM\Graphics\10829_gr02.dgn



Diverging Diamond Interchange
 TH 169 & Elm Creek Blvd Interchange Reconstruction
 City of Maple Grove, Minnesota

Job #10829
 8/22/2017

Figure 2



City of Brooklyn Park
City Hall
5200 85th Ave. N.
Brooklyn Park, MN 55443
763-424-8000
www.brooklynpark.org

May 14, 2020

Ken Ashfeld, P.E.
Director of Public Works/City Engineer
City of Maple Grove
12800 Arbor Lakes Parkway
Maple Grove, Minnesota 55369

Re: Letter of Support for Maple Grove's Regional Solicitation Application and Project
TH 169 / Elm Creek Boulevard (CSAH 130) Interchange Reconstruction

Dear Mr. Ashfeld,

The City of Brooklyn Park supports Maple Grove's federal funding application through the 2020 Regional Solicitation for the proposed TH 169 / Elm Creek Boulevard (CSAH 130) Interchange Reconstruction project, which would include the following improvements:

- Redesign of the existing roadway configuration to improve mobility through the interchange
- Replace/upgrade existing temporary span-wire signals to permanent traffic signal systems
- Introduction of off-road facilities to accommodate people biking and walking through the area

The city supports Maple Grove in its efforts to improve this interchange by providing additional capacity and safety for multiple traffic modes. Improvements at this interchange will enhance the safety and mobility of people biking, driving, and walking along CSAH 130 corridor (Elm Creek Boulevard / Brooklyn Boulevard).

Thank you for making us aware of this application effort and the opportunity to provide support. The city looks forward to working with the City of Maple Grove, MnDOT, and Hennepin County on this project.

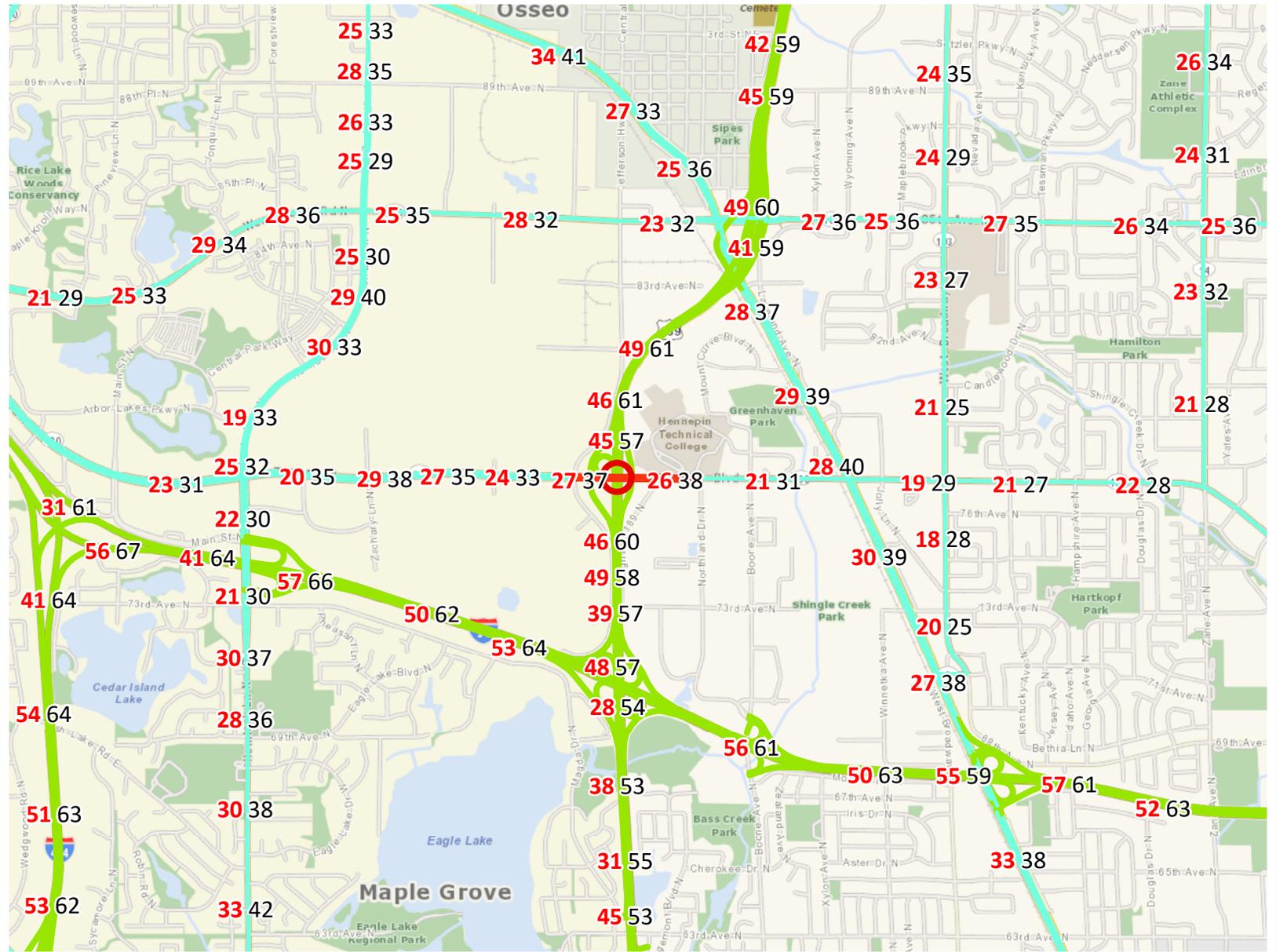
Sincerely,

A handwritten signature in blue ink, appearing to read "Jesse Struve". The signature is fluid and cursive, written over a light blue horizontal line.

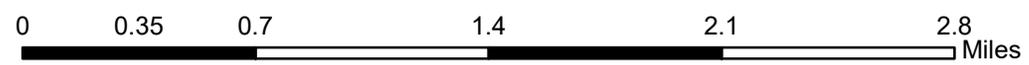
Jesse Struve, P.E.
City Engineer

Level of Congestion

Roadway Reconstruction/Modernization Project: Highway 169 and County Road 130 Interchange Reconstruction | Map ID: 158627018208



- Project Points
- Principal Arterials
- Principal Arterials Planned
- Project
- A Minor Arterials
- A Minor Arterials Planned



Created: 4/7/2020
LandscapeRSA1



For complete disclaimer of accuracy, please visit <https://giswebsite.metc.state.mn.us/gis/site/notice.aspx>





**MnDOT Metro District
1500 West County Road B-2
Roseville, MN 55113**

May 12, 2020

Ken Ashfield, P.E.
Director of Public Works, City Engineer
City of Maple Grove
12800 Arbor Lakes parkway
Maple Grove, MN 55369

**Re: MnDOT Letter for the City of Maple Grove
Metropolitan Council/Transportation Advisory Board 2020 Regional Solicitation Funding
Request for TH 169/CSAH 130 (Elm Creek Blvd) Interchange Project**

Dear Ken Ashfield,

This letter documents MnDOT Metro District's recognition for Hennepin County to pursue funding for the Metropolitan Council/Transportation Advisory Board's (TAB) 2020 Regional Solicitation for TH 169/CSAH 130 Interchange Project

As proposed, this project impacts MnDOT right-of-way on US 169. As the agency with jurisdiction over US 169, MnDOT will allow Maple Grove to seek improvements proposed in the application for the CSAH 130 Interchange project. If funded, details of any future maintenance agreement with Maple Grove will need to be determined during project development to define how the improvements will be maintained for the project's useful life.

There is no funding from MnDOT currently planned or programmed for this project/location. Due to expected loss of future state and federal transportation revenues as a result of the COVID-19 pandemic, there is likely to be significant disruptions to the current MnDOT construction program that will surface in the next year. MnDOT does not anticipate partnering on local projects beyond current agreements.

In addition, the Metro District currently does not anticipate any significant discretionary funding in state fiscal years 2024 or 2025 that could fund project construction, nor do we have the resources to assist with MnDOT services such as the design or construction engineering of the project. If your project receives funding, continue to work with MnDOT Area staff to coordinate project development and to periodically review needs and opportunities for cooperation.

MnDOT Metro District looks forward to continued cooperation with Maple Grove as this project moves forward and as we work together to improve safety and travel options within the Metro Area.

If you have questions or require additional information at this time, please reach out to West Area Manager April Crockett at April.Crockett@state.mn.us or 651-234-7728.

Sincerely,

Michael Barnes, PE
Metro District Engineer

CC: April Crockett, Metro District Area Manager
Molly McCartney, Metro Program Director
Dan Erickson, Metro State Aid Engineer

CERTIFICATION:

**STATE OF MINNESOTA
COUNTY OF HENNEPIN
CITY OF MAPLE GROVE**

I, the undersigned, City Clerk of Maple Grove, Minnesota, hereby certify that the copy of the resolution attached: **RESOLUTION NO. 20-061, A RESOLUTION OF SUPPORT FOR THE TH 169/ELM CREEK BOULEVARD (CSAH 130) PROJECT** is a true and correct copy of the original resolution adopted by the City Council of the City of Maple Grove on the 4th day of May, 2020, on file at City Hall.

WITNESS my hand this 4th day of May, 2020.



Amy Dietl, City Clerk

RESOLUTION NO. 20-061

RESOLUTION OF SUPPORT FOR THE TH 169/ELM CREEK BOULEVARD (CSAH 130) PROJECT

WHEREAS, the TH 169/Elm Creek Boulevard (CSAH 130) interchange provides an important connection to existing and future freight operations within the City of Maple Grove and the northwest Twin Cities Metropolitan Area; and

WHEREAS, the improvement of the TH 169/Elm Creek Boulevard (CSAH 130) interchange will improve traffic operations and safety, and is vital to the success of current and future freight operations within the City of Maple Grove and along adjacent TH 169, which is the most heavily used non-interstate highway freight corridor in Hennepin County; and

WHEREAS, MnDOT, the Cities of Maple Grove, Brooklyn Park, Hennepin County and the Minnesota Department of Transportation are collaborating on the development and design of the TH 169/Elm Creek Boulevard (CSAH 130) interchange improvements; and

WHEREAS, the TH 169/Elm Creek Boulevard (CSAH 130) project is consistent with local and regional plans; and

WHEREAS, the TH 169 is part of the National Highway System (NHS); and

WHEREAS, the Metropolitan Council is currently accepting grant applications for federal transportation funding of locally-initiated projects that meet regional transportation needs through the 2020 Regional Solicitation; and

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Maple Grove, Minnesota:

1. The City of Maple Grove does hereby declare their unified support for the TH 169/Elm Creek Boulevard (CSAH 130) interchange modification project.
2. The City of Maple Grove further supports the application for the 2020 Regional Solicitation funds and along with local partners (City of Brooklyn Park, Hennepin County and the Minnesota Department of Transportation) are committed to the required local match identified in the application.

Adopted by the City Council on this 4th day of May, 2020.

The motion for the adoption of the foregoing resolution was made by Councilmember Jaeger, seconded by Councilmember Hanson and upon vote being duly taken thereon, the following voted in favor thereof Mayor Steffenson and Councilmembers Jaeger, Leith, Hanson and Barnett

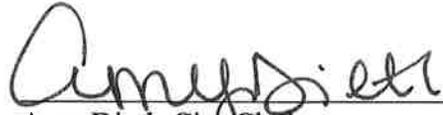
and the following voted against the same: None

and the following were absent: None

whereupon said resolution was declared duly passed and adopted.

STATE OF MINNESOTA)
COUNTY OF HENNEPIN) SS.
CITY OF MAPLE GROVE)

I, the undersigned, being the duly qualified and acting Clerk of the City of Maple Grove, Hennepin County, Minnesota, a Minnesota municipal corporation, hereby certify that the above and foregoing Resolution No. 20-061 is a true and correct copy of the Resolution as adopted by the City Council on the 4th day of May, 2020.



Amy Dietl, City Clerk

2020 Metropolitan Council Regional Solicitation Highway 169 and County Road 130 Interchange Reconstruction - Project Summary

Location Map:

Project Name: Highway 169 and County Road 130 Interchange Reconstruction

Applicant: City of Maple Grove

Contact: John Hagen, PE, PTOE,
Transportation Operations Engineer

Email/Phone: jhagen@maplegrovern.gov
(763) 494-6364

Project Details:

- Total Project Cost = \$13,795,000
- Requested Award Amount = \$7,000,000
- Construction Dates: Begin by June 2025
- Consistent with local & regional plans
- Preliminary plans completed
- No Right of way acquisition required

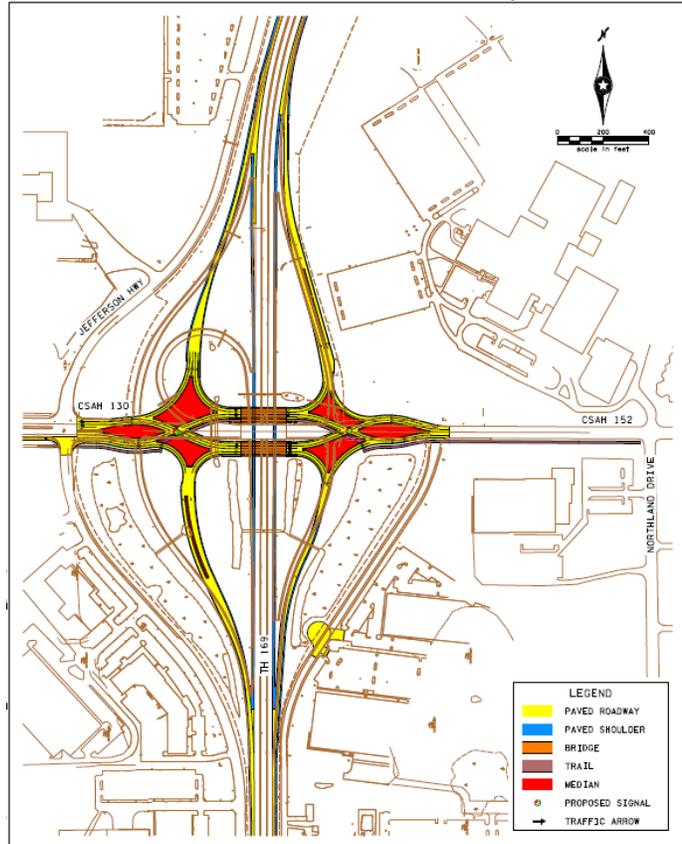
Project Description:

The proposed interchange improvements include the reconstruction and widening of the bridge over TH 169 to provide a diverging diamond interchange (DDI) with geometrically realigned ramps. There will be four westbound lanes and three eastbound lanes with the multi-use trail on the CSAH 130 bridge. Existing traffic signals will also be replaced at the TH 169 east and west ramp intersections. The DDI configuration will improve the overall capacity and safety of the interchange.

The interchange project will also include accommodations for bicyclists and pedestrians to provide a safe connection over TH 169 between Maple Grove and Brooklyn Park. A 10-foot multiuse trail will be added on the south side between Northland Drive and Jefferson Highway/Kilmer Lane. The proposed trail will connect the existing trails along CSAH 130 in Maple Grove to Brooklyn Park while closing a RBTN gap. Painted crosswalks and pedestrian signing will provide better visibility to motorists, creating a safe crossing for trail users. Pedestrian signals will be upgraded to countdown timers, and pushbuttons and ramps will meet ADA standards.

Project Benefits:

- Provide a more efficient interchange to accommodate existing and future traffic volumes
- Provide a reliable alternate route to the I-94 freeway facility during congested periods
- Provide a safer multimodal transportation system for all modes
- Enhance pedestrian and bicycle travel by linking the Maple Grove and Brooklyn Park trail systems
- Improve access to employment opportunities in Maple Grove and Brooklyn Park
- Improve access to accommodate freight traffic to and from the Gravel Mining Area



HENNEPIN COUNTY
MINNESOTA

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 130 (Elm Creek Boulevard) Reconstruction Project at TH 169

Dear Ms. Koutsoukos,

Hennepin County has been notified that the City of Maple Grove is submitting an application for funding as part of the 2020 Regional Solicitation through the Metropolitan Council. The proposed project is the reconstruction of the existing interchange along CSAH 130 (Elm Creek Boulevard) at TH 169 which is anticipated to include the following improvements:

- Redesign of the existing roadway configuration to improve mobility through the area
- Upgrading of the existing span-wire traffic signals to permanent traffic signal systems
- Introduction of off-road facilities to accommodate people biking and walking through the area

Hennepin County supports this funding application and agrees to operate and maintain the roadway facilities along CSAH 130 (Elm Creek Boulevard) 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. Additionally, we kindly request that the City of Maple Grove includes county staff in the project development process to ensure project success. We look forward to working together to improve the safety and mobility of people biking, driving, and walking along CSAH 130 (Elm Creek Boulevard).

Sincerely,



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

cc: Chad Ellos, P.E., P.T.O.E. – Transportation Planning Division Manager





Existing Conditions within Project Area

TH 169/CSAH 130 Interchange Reconstruction Project
City of Maple Grove

