Application

17072 - 2022 Roadway Expansion
17578 - TH13 and Nicollet Avenue Mobility Improvement Project
Regional Solicitation - Roadways Including Multimodal Elements

Status: Submitted
Submitted Date: 04/13/2022 5:02 PM

Primary Contact

Name:* Jennifer Carroll Desruede
Pronouns First Name Middle Name Last Name

Title: City Engineer
Department: 
Email: jen.desrude@burnsville.mn.gov
Address: 100 Civic Center Parkway

*Burnsville Minnesota 55337
City State/Province Postal Code/Zip

Phone:* 952-895-4544
Phone Ext.
Fax: 

What Grant Programs are you most interested in? Regional Solicitation - Bicycle and Pedestrian Facilities

Organization Information

Name: BURNSVILLE, CITY OF
Jurisdictional Agency (if different):
Organization Type: City
Organization Website: 
Address: 100 CIVIC CTR PKY

* 
County: Dakota
Phone:* 952-895-4400
Fax: 
PeopleSoft Vendor Number 0000020927A1

---

**Project Information**

Project Name Minnesota Highway 13 & Nicollet Avenue Mobility Improvement Project
Primary County where the Project is Located Dakota
Cities or Townships where the Project is Located: City of Burnsville
Jurisdictional Agency (If Different than the Applicant):
The City of Burnsville, Minnesota is pursuing funds to grade separate the intersection of Minnesota Highway 13, a principal arterial, and Nicollet Avenue, a minor arterial. The intersection has significant safety issues, with a crash rate that is nearly double the average crash rate for similar intersections. The intersection is also nearing capacity with 2040 traffic estimates projected to bring the a.m. and p.m. peaks below acceptable levels of service. The project location serves as the northern entrance to the Burnsville Heart of the City District, a mixed-use transit-oriented development area with a growing number of jobs, residential developments, and commercial opportunities. The Heart of the City district generates a substantial number of multimodal trips to the two regional transit hubs located at the northeast and southwest corners of intersection of Highway 13 and Nicollet Avenue, the Minnesota Valley Transit Authority's (MVTA) Burnsville Transit Station and the Metro Transit Orange Line Heart of the City Station. The design of the intersection is a barrier to the operations of these transit investments, introduces substantial delay and safety deficiencies for all road users, and inhibits the further growth of the Heart of the City's TOD district.

This strategic capacity project would address substantial safety and operational deficiencies at the intersection for all road users by bridging Nicollet Avenue over Highway 13, moving Highway 13 access from Nicollet Avenue east via jughandle to a new T-junction intersection with Nicollet Avenue traffic managed by way of a multi-lane roundabout. This mobility improvement would also include an additional intersection at the north end of the Nicollet Avenue bridge that would provide direct access to northbound Interstate 35W. The final component of this redesign would be a completely grade separated shared use path connecting the MVTA Burnsville Transit Station to the Metro
Orange Line Heart of the City Station, allowing pedestrians cyclists to access both stations with no delays from automobile traffic.

This grade separation is one part of a greater suite of mobility and safety improvements along Highway 13 between the cities of Savage and Burnsville identified in MnDOT's 2021 Highway 13 Corridor Study. These improvements will have widespread benefits for traffic safety, mobility, and accessibility for transit, pedestrians, bicyclists, and other traffic along the corridor.

**TRANSPORTATION IMPROVEMENT PROGRAM (TIP)**

MN 13 GRADE SEPARATION NICOLLET AVENUE IN BURNSVILLE

Include both the CSAH/MSAS/TH references and their corresponding street names in the TIP Description (see Resources link on Regional Solicitation webpage for examples).

**Project Length (Miles)**

0.7

to the nearest one-tenth of a mile

---

**Project Funding**

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

If yes, please identify the source(s) RAISE Grant

**Federal Amount**

$10,000,000.00

**Match Amount**

$22,185,000.00

Minimum of 20% of project total

**Project Total**

$32,185,000.00

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

**Match Percentage**

68.93%

Minimum of 20%

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

**Source of Match Funds**

City of Burnsville, Dakota County Transportation Tax 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: 2026, 2027

Select 2024 or 2025 for TDM and Unique projects only. For all other applications, select 2026 or 2027.

**Additional Program Years:** 2025
## Project Information-Roadways

<table>
<thead>
<tr>
<th><strong>County, City, or Lead Agency</strong></th>
<th>City of Burnsville</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Functional Class of Road</strong></td>
<td>Principal Arterial</td>
</tr>
<tr>
<td><strong>Road System</strong></td>
<td>TH</td>
</tr>
<tr>
<td><strong>Road System</strong></td>
<td>TH, CSAH, MSAS, CO. RD., TWP. RD., CITY STREET</td>
</tr>
<tr>
<td><strong>Road/Route No.</strong></td>
<td>13</td>
</tr>
<tr>
<td><strong>Road/Route No.</strong></td>
<td>i.e., 53 for CSAH 53</td>
</tr>
<tr>
<td><strong>Name of Road</strong></td>
<td>Highway 13 &amp; Nicollet Avenue</td>
</tr>
<tr>
<td><strong>Example; 1st ST., MAIN AVE</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Zip Code where Majority of Work is Being Performed</strong></td>
<td>55337</td>
</tr>
<tr>
<td><strong>(Approximate) Begin Construction Date</strong></td>
<td>04/01/2026</td>
</tr>
<tr>
<td><strong>(Approximate) End Construction Date</strong></td>
<td>10/29/2027</td>
</tr>
<tr>
<td><strong>TERMINI:</strong> (Termini listed must be within 0.3 miles of any work)</td>
<td></td>
</tr>
<tr>
<td><strong>From:</strong> (Intersection or Address)</td>
<td>Niccol Avenue &amp; Trunk Highway 13</td>
</tr>
<tr>
<td><strong>To:</strong> (Intersection or Address)</td>
<td></td>
</tr>
<tr>
<td><strong>DO NOT INCLUDE LEGAL DESCRIPTION</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Or At</strong></td>
<td>Nicollet Avenue &amp; Trunk Highway 13</td>
</tr>
<tr>
<td><strong>Miles of Sidewalk (nearest 0.1 miles)</strong></td>
<td>0.1</td>
</tr>
<tr>
<td><strong>Miles of Trail (nearest 0.1 miles)</strong></td>
<td>0.4</td>
</tr>
<tr>
<td><strong>Miles of Trail on the Regional Bicycle Transportation Network (nearest 0.1 miles)</strong></td>
<td>0.4</td>
</tr>
<tr>
<td><strong>Primary Types of Work</strong></td>
<td>GRADE, SIDEWALK, BIKE PATH, BRIDGE, PED RAMPS, ROUNDABOUT, SIGNALS, DRAINAGE, RETAINING WALL, ROADWAY</td>
</tr>
</tbody>
</table>

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

### BRIDGE/CULVERT PROJECTS (IF APPLICABLE)

**Old Bridge/Culvert No.:**

**New Bridge/Culvert No.:**

**Structure is Over/Under (Bridge or culvert name):**
Requirements - All Projects

All Projects

1. The project must be consistent with the goals and policies in these adopted regional plans: Thrive MSP 2040 (2014), the 2040 Transportation Policy Plan (2018), the 2040 Regional Parks Policy Plan (2018), and the 2040 Water Resources Policy Plan (2015).

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

2. The project must be consistent with the 2040 Transportation Policy Plan. Reference the 2040 Transportation Plan goals, objectives, and strategies that relate to the project.
Safety and Security
B1 (p. 2.5) Regional transportation partners will incorporate safety and security considerations for all users.
B3 (p. 2.6) Transportation partners should monitor and analyze safety and security data.
B6 (p. 2.8) Transportation partners will use best practices to provide and improve facilities for safe walking and bicycling.

Access to Destinations
C1 (p. 2.10) - Transportation partners will continue to work together to plan and implement transportation systems that provide multimodal connections.
C2 (p. 2.11) - Local units of government should provide a network of interconnected roadways, bicycle facilities, and pedestrian facilities
C4 (p. 2.14) - Regional transportation partners will promote multimodal travel options and alternatives to single occupant vehicle (SOV) travel and highway congestion.
C7 (p. 2.16) Regional transportation partners will optimize the performance of the principal arterial system as measured by person throughput.
C9 (p. 2.17) - The Metropolitan Council will support investments in A-minor arterials that build Principal Arterial capacity and accessibility.
C15 (p. 2.22) - Transportation partners should focus investments on Regional Bicycle Transportation Network alignments and connections to RBTN.
C16 (p. 2.23) Transportation partners should fund projects that improve continuity, bicycle and pedestrian travel at physical barriers and/or
between jurisdictions.
C17 (2.24) - Transportation partners will support investment that provides or enhances access to valued destinations for pedestrians and people with disabilities.

Competitive Economy
D1 (p. 2.26) - The Metropolitan Council and its transportation partners will identify and pursue the level of increased funding needed to create a high quality multimodal transportation system.
D3 (p. 2.27) - The Metropolitan Council and its partners will invest in regional transit and bicycle and pedestrian facilities that improve connections to jobs and opportunity in established transit corridors.

D4 (p. 2.28) The Council, MnDOT, and local governments will invest in a transportation system that provides travel conditions that compete well with peer metropolitan areas.

Healthy Environment
E2 (p. 2.31) Reductions in transportation-related emissions of air pollutants and greenhouse gases will be prioritized in transportation investments

E3 (p. 2.31) - Regional transportation partners will plan and implement a transportation system that considers the needs of all potential users.

E5 (p. 2.33) - Transportation partners will protect, enhance and mitigate impacts when planning, constructing, and operating transportation systems.

Leveraging Transportation Investments to Guide Land Use

F4 (p. 2.37) Local governments should lead planning efforts in TOD areas
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.

- Corridor Study Report Highway 13: Savage to Burnsville (2021)
  Identified preferred design for Nicollet and Highway 13, which would bridge Nicollet over Highway 13, install a roundabout on the south side of the bridge and a new traffic signal to the north. (page 25)

- Burnsville 2040 Comprehensive Plan (2019)
  Add pedestrian bridge crossing Highway 13 at Nicollet Avenue (page 2.75)

- Trunk Highway 13 Corridor Study Update (2013)
  Long-term recommendation to add and extend dual left turn lanes at all Highway 13/Nicollet Avenue approaches; extend turn lanes for the eastern and western legs (page 12)

- Trunk Highway 13 Corridor Study Update (2013)
  Long-term recommendation to construct a pedestrian overpass on the east side of Nicollet Avenue to connect people between the Heart of the City business district and the MVTA transit station (page 12)

List the applicable documents and pages: Unique projects are exempt from this qualifying requirement because of their innovative nature.

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. Unique project costs are limited to those that are federally eligible.

Check the box to indicate that the project meets this requirement.  Yes
5. Applicant is a public agency (e.g., county, city, tribal government, transit provider, etc.) or non-profit organization (TDM and Unique Projects applicants only). 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 in Table 1. For unique projects, the minimum award is $500,000 and the maximum award is the total amount available each funding cycle (approximately $4,000,000 for the 2022 funding cycle).

- **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):** $500,000 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.

Yes

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

Date plan completed: 03/02/2020


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

Date self-evaluation completed:

Link to plan:

Upload plan or self-evaluation if there is no link

Upload as PDF

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

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

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

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.

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.

---

**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.

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

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.

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.

5. The length of the bridge clear span must exceed 20 feet.

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

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

<table>
<thead>
<tr>
<th>CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobilization (approx. 5% of total cost)</td>
<td>$1,500,000.00</td>
</tr>
<tr>
<td>Removals (approx. 5% of total cost)</td>
<td>$1,500,000.00</td>
</tr>
<tr>
<td>Roadway (grading, borrow, etc.)</td>
<td>$3,800,000.00</td>
</tr>
<tr>
<td>Roadway (aggregates and paving)</td>
<td>$2,550,000.00</td>
</tr>
<tr>
<td>Subgrade Correction (muck)</td>
<td>$140,000.00</td>
</tr>
<tr>
<td>Storm Sewer</td>
<td>$1,700,000.00</td>
</tr>
<tr>
<td>Ponds</td>
<td>$200,000.00</td>
</tr>
<tr>
<td>Concrete Items (curb &amp; gutter, sidewalks, median barriers)</td>
<td>$950,000.00</td>
</tr>
<tr>
<td>Traffic Control</td>
<td>$2,150,000.00</td>
</tr>
<tr>
<td>Striping</td>
<td>$10,000.00</td>
</tr>
<tr>
<td>Signing</td>
<td>$60,000.00</td>
</tr>
<tr>
<td>Lighting</td>
<td>$80,000.00</td>
</tr>
<tr>
<td>Turf - Erosion &amp; Landscaping</td>
<td>$1,000,000.00</td>
</tr>
<tr>
<td>Bridge</td>
<td>$6,000,000.00</td>
</tr>
<tr>
<td>Retaining Walls</td>
<td>$6,100,000.00</td>
</tr>
<tr>
<td>Noise Wall (not calculated in cost effectiveness measure)</td>
<td>$0.00</td>
</tr>
<tr>
<td>Traffic Signals</td>
<td>$800,000.00</td>
</tr>
<tr>
<td>Wetland Mitigation</td>
<td>$70,000.00</td>
</tr>
<tr>
<td>Other Natural and Cultural Resource Protection</td>
<td>$0.00</td>
</tr>
<tr>
<td>RR Crossing</td>
<td>$0.00</td>
</tr>
<tr>
<td>Roadway Contingencies</td>
<td>$2,800,000.00</td>
</tr>
<tr>
<td>Other Roadway Elements</td>
<td>$650,000.00</td>
</tr>
<tr>
<td>Totals</td>
<td>$32,060,000.00</td>
</tr>
</tbody>
</table>

### Specific Bicycle and Pedestrian Elements

<table>
<thead>
<tr>
<th>CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>CONSTRUCTION PROJECT ELEMENTS/COST</td>
<td>Cost</td>
</tr>
<tr>
<td>------------------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>Fixed Guideway Elements</td>
<td>$0.00</td>
</tr>
<tr>
<td>Stations, Stops, and Terminals</td>
<td>$0.00</td>
</tr>
<tr>
<td>Support Facilities</td>
<td>$0.00</td>
</tr>
<tr>
<td>Transit Systems (e.g. communications, signals, controls, fare collection, etc.)</td>
<td>$0.00</td>
</tr>
<tr>
<td>Vehicles</td>
<td>$0.00</td>
</tr>
<tr>
<td>Contingencies</td>
<td>$0.00</td>
</tr>
<tr>
<td>Right-of-Way</td>
<td>$0.00</td>
</tr>
<tr>
<td>Other Transit and TDM Elements</td>
<td>$0.00</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>$0.00</strong></td>
</tr>
</tbody>
</table>

## Transit Operating Costs

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Platform hours</td>
<td>0</td>
</tr>
<tr>
<td>Cost Per Platform hour (full loaded Cost)</td>
<td>$0.00</td>
</tr>
<tr>
<td>Subtotal</td>
<td>$0.00</td>
</tr>
<tr>
<td>Other Costs - Administration, Overhead,etc.</td>
<td>$0.00</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td></td>
</tr>
</tbody>
</table>
Total Cost: $32,185,000.00
Construction Cost Total: $32,185,000.00
Transit Operating Cost Total: $0.00

Congestion within Project Area:
The measure will analyze the level of congestion within the project area. Council staff will provide travel speed data on the "Level of Congestion" map. The analysis will compare the peak hour travel speed within the project area to free-flow conditions.

Free-Flow Travel Speed: 52
Peak Hour Travel Speed: 35
Percentage Decrease in Travel Speed in Peak Hour compared to Free-Flow: 32.69%
Upload Level of Congestion map: 1649196186631_congestion.pdf

Congestion on adjacent Parallel Routes:
Adjacent Parallel Corridor: Burnsville Parkway
Adjacent Parallel Corridor Start and End Points:
Start Point: Nicolet Avenue
End Point: Interstate 35W
Free-Flow Travel Speed: 35
Peak Hour Travel Speed: 26
Percentage Decrease in Travel Speed in Peak Hour Compared to Free-Flow: 25.71%
Upload Level of Congestion Map: 1649196186608_Alternative_Level_of_Congestion.pdf

Principal Arterial Intersection Conversion Study:
Proposed interchange or at-grade project that reduces delay at a High Priority Intersection: Yes
(80 Points)
Proposed at-grade project that reduces delay at a Medium Priority Intersection:
(60 Points)
Proposed at-grade project that reduces delay at a Low Priority Intersection:
(50 Points)
Proposed interchange project that reduces delay at a Medium Priority Intersection:
Proposed interchange project that reduces delay at a Low Priority Intersection:

Not listed as a priority in the study:

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

Existing Employment within 1 Mile: 14839
Existing Manufacturing/Distribution-Related Employment within 1 Mile: 3482
Existing Post-Secondary Students within 1 Mile: 0

Upload Map 1649196757368_regional economy.pdf

Please upload attachment in PDF form.

Measure C: Current Heavy Commercial Traffic

RESPONSE: Select one for your project, based on the updated 2021 Regional Truck Corridor Study:

Along Tier 1:
Miles: 0
(to the nearest 0.1 miles)

Along Tier 2:
Miles: 0.7
(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 Highway 13 east of Interstate 35W
Current AADT Volume 40000
Existing Transit Routes on the Project 425, 444, 460, 465, 495, METRO Orange Line

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

Upload Transit Connections Map 1649196908263_tranist_connections.pdf
**Response: Current Daily Person Throughput**

<table>
<thead>
<tr>
<th>Average Annual Daily Transit Ridership</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Daily Person Throughput</td>
<td>52000.0</td>
</tr>
</tbody>
</table>

**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

<table>
<thead>
<tr>
<th>Scott County approved model used for the 2020 TH 13 Corridor Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forecast (2040) ADT volume</td>
</tr>
<tr>
<td>44000</td>
</tr>
</tbody>
</table>

**Measure A: Engagement**

i. Describe any Black, Indigenous, and People of Color populations, low-income populations, disabled populations, youth, or older adults within a ½ mile of the proposed project. Describe how these populations relate to regional context. Location of affordable housing will be addressed in Measure C.

ii. Describe how Black, Indigenous, and People of Color populations, low-income populations, persons with disabilities, youth, older adults, and residents in affordable housing were engaged, whether through community planning efforts, project needs identification, or during the project development process.

iii. Describe the progression of engagement activities in this project. A full response should answer these questions:
The City of Burnsville, as part of MnDOT’s Highway 13 Corridor Study, participated in a multi-phase engagement effort between February 2020 and October 2021. This campaign used surveys, open houses, pop-up information tables, and engaged with business advisory groups, environmental justice populations, community organizations, and other key stakeholders to identify operational issues along the corridor and determine locally preferred alternatives. Engagement efforts were advertised through press releases, an email campaign to over 1,500 people, physical mailers distributed to over 1,700 households, and a social media campaign on Twitter and Facebook. Environmental justice communities were identified during the Environmental Assessment (EA) process and contacted through multi-lingual flyers at community hubs such as grocery stores, places of worship, multi-family housing, and community centers. When feasible, events were hybrid in-person/remote events to extend opportunities for feedback to the largest possible population.

Highway 13 and Nicollet is a barrier for all road users, with a high level of delay, a crash rate nearly double the expected critical crash rate for similar intersections, and a design that exposes pedestrians and cyclists to a high degree of stress when accessing the transit stations located at the northeast and southwest corners of the intersection. An online and print survey was issued to determine how people used the corridor and which improvements they valued most. Respondents ranked better drive times, fewer congestion delays, and better vehicle access to/from Highway 13 and side streets as ‘highly important.’

An EA was conducting during the Highway 13 Corridor Study, which examined three design alternatives for the intersection. A grade-separated intersection was favored by project partners and
the public. The EA process included another round of hybrid public meetings and opportunities for community feedback on the project. Feedback was tracked by the project team and influenced the final design selection.

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

Measure B: Equity Population Benefits and Impacts

Describe the projects benefits to Black, Indigenous, and People of Color populations, low-income populations, children, people with disabilities, youth, and older adults. Benefits could relate to:

This is not an exhaustive list. A full response will support the benefits claimed, identify benefits specific to Equity populations residing or engaged in activities near the project area, identify benefits addressing a transportation issue affecting Equity populations specifically identified through engagement, and substantiate benefits with data.

Acknowledge and describe any negative project impacts to Black, Indigenous, and People of Color populations, low-income populations, children, people with disabilities, youth, and older adults. Describe measures to mitigate these impacts. Unidentified or unmitigated negative impacts may result in a reduction in points.

Below is a list of potential negative impacts. This is not an exhaustive list.
The proposed grade separation and redesign of the intersection of Highway 13 and Nicollet Avenue in Burnsville will provide direct and positive impacts to several equity populations. The project is located directly north of an area of concentrated poverty with over 300 publicly subsidized rental housing units within a half mile of the project location. There are many benefits to separating Nicollet Avenue from Highway 13, including dedicated bicycle and pedestrian access to and from the nearby transit stations operated by MVTA and Metro Transit, increased access to the regional network of shared use paths, and increased bicycle and pedestrian access to recreation areas north of the project area (such as the Black Dog Nature Preserve and Cliff Fen Park).

Currently, the intersection of Highway 13 and Nicollet Avenue is a high crash intersection that acts as a significant barrier for all users attempting to access the MVTA Burnsville Transit Station and the Metro Transit Orange Line station located near the project site, in addition to causing significant amounts of delay for transit vehicles arriving and departing from the area. The MVTA Burnsville station provides rush hour express bus service to job hubs in downtown Minneapolis and the University of Minnesota, and the Orange Line provides all day service between downtown Minneapolis and Burnsville.

Census data from the 2014-2019 indicated that the area is a net labor importer, with most of the HOC district's residents travelling north or west into job hubs located in Downtown Minneapolis, the University of Minnesota, and Shakopee to work. On the inverse, a significant number of the people travelling into the region for work live north of Burnsville and would benefit from the improvements to the operational efficiency of the Orange Line and other regional transit investments. The project is not anticipated to have any negative
impacts, outside of minimal construction disturbances, associated with the project, nor does it anticipate significant impacts on the surrounding natural environment. The City of Burnsville will follow best practices for providing signage and route updates, ensuring that travelers understand the scope of construction, the anticipated construction timeline, and the location of appropriate detour routes when necessary. Particular attention will be given to ensure that access to existing transit services, existing pedestrian and bicycle connections, affordable housing sites, and businesses are not impacted by construction.

Measure C: Affordable Housing Access

Describe any affordable housing developments existing, under construction, or planned within ½ mile of the proposed project. The applicant should note the number of existing subsidized units, which will be provided on the Socio-Economic Conditions map. Applicants can also describe other types of affordable housing (e.g., naturally-occurring affordable housing, manufactured housing) and under construction or planned affordable housing that is within a half mile of the project. If applicable, the applicant can provide self-generated PDF maps to support these additions. Applicants are encouraged to provide a self-generated PDF map describing how a project connects affordable housing residents to destinations (e.g., childcare, grocery stores, schools, places of worship).

Describe the project’s benefits to current and future affordable housing residents within ½ mile of the project. Benefits must relate to affordable housing residents. Examples may include:

This is not an exhaustive list. Since residents of affordable housing are more likely not to own a private vehicle, higher points will be provided to roadway projects that include other multimodal access improvements. A full response will support the benefits claimed, identify benefits specific to residents of affordable housing, identify benefits addressing a transportation issue affecting residents of affordable housing specifically identified through engagement, and substantiate benefits with data.
The project is located at the northern gateway to Burnsville’s Heart of the City (HOC) mixed use zoning district. This is a transit-oriented district established in the 1990s that has seen significant redevelopment with many housing units, jobs, commercial and cultural attractions. A substantial portion of the HOC district is an area of concentrated poverty, with over 20% population in the census tracts around the HOC district earning wages below the poverty threshold per the U.S. Census American Community Survey database. Since its inception, approximately 1,255 housing units have been built, are under construction, or have been approved for development in the HOC district, including 215 affordable units. This is in addition to the 311 publicly subsidized rental housing units within a half mile of the project site. The HOC has received two Livable Communities Act (LCA) grants, and recommitted to the program in 2020. The LCA grant agreement ensures that at least 20 percent of new housing remain affordable to those making less than 80% AMI. Burnsville’s 2040 comprehensive plan projects an additional 584 apartment units in the HOC district by 2030, placing them well on track to meet the Metropolitan Council’s affordable housing goal of 146 to 266 new units. These investments in affordable housing will be supported by the project’s mobility improvements, connecting low-income transit-dependent populations with a robust transit network.

As a TOD neighborhood, the HOC benefits from investments that increase connections to transit. Nearly 28% of all households in the HOC do not have access to a vehicle, but the share of work commute trips made via transit, biking, and walking is less than 12%, lower than the regional average. The conditions at the project intersection make it difficult to access investments in the regional transit network. The project will increase accessibility to
the new Metro Transit Orange Line station as well as the MVTA Burnsville Transit station. The Orange Line provides all-day BRT service between Minneapolis, Richfield, Bloomington, and Burnsville. The Burnsville Station has MVTA's highest ridership routes services, providing connections employment hubs and destinations like Downtown Minneapolis, the University of Minnesota, the Mall of America, Mystic Lake Casino, and the Shakopee Amazon Fulfillment Center.

These improvements would enhance community cohesion by addressing a regional bicycle crossing barrier and increasing connections to resources north of Highway 13. The new trail would link the HOC to the area north of Highway 13, connecting with the existing regional trail network that, providing greater bicycle and pedestrian access to schools, places of worship, and retail establishments north of the project intersection.

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

Measure D: BONUS POINTS

Project is located in an Area of Concentrated Poverty: Yes

Projects census tracts are above the regional average for population in poverty or population of color (Regional Environmental Justice Area):

Project located in a census tract that is below the regional average for population in poverty or populations of color (Regional Environmental Justice Area):

Upload the Socio-Economic Conditions map used for this measure. 1649197252236_socioeconomic.pdf

Measure A: Infrastructure Age

<table>
<thead>
<tr>
<th>Year of Original Roadway Construction or Most Recent Reconstruction</th>
<th>Segment Length</th>
<th>Calculation 1</th>
<th>Calculation 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1985.0</td>
<td>0.7</td>
<td>1389.5</td>
<td>971.678</td>
</tr>
<tr>
<td>1985.0</td>
<td>0.73</td>
<td>1449.05</td>
<td>1013.322</td>
</tr>
</tbody>
</table>
### Average Construction Year

| Weighted Year | 1985.0 |

### Total Segment Length (Miles)

| Total Segment Length | 1.43 |

### Measure A: Congestion Reduction/Air Quality

<table>
<thead>
<tr>
<th>Volume without the Project (Vehicles per hour)</th>
<th>Volume with the Project (Vehicles Per Hour):</th>
<th>Total Peak Hour Delay Reduced by the Project:</th>
<th>Total Peak Hour Delay Reduced by the Project:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Peak Hour Delay Per Vehicle Without The Project (Seconds/ Vehicle)</td>
<td>Total Peak Hour Delay Per Vehicle With The Project (Seconds/ Vehicle)</td>
<td>Total Peak Hour Delay Per Vehicle Reduced by Project (Seconds/ Vehicle)</td>
<td>EXPLANATION of methodology used to calculate railroad crossing delay, if applicable.</td>
</tr>
</tbody>
</table>
Intersection delays were calculated for both the no build and the build conditions for existing PM peak hour traffic volumes using the Synchro 11 analysis software. Since the build alternative (Grade Separated Quadrant/Jughandle) converts one intersection to three separate intersections, traffic volumes were distributed across the three intersections based on the origins and destinations of traffic using the intersection of TH 13 and Nicollet Avenue. Origins and destinations of traffic.
using the intersection are based on turning movement counts and additional analysis completed as part of the TH 13 Corridor Study (analysis completed in 2020). To estimate the total control delay across all intersections in the build condition, a weighted average of delays across the three intersections was calculated, with the weighting based on entering traffic volumes at each of the three intersections. This methodology was used since not all traffic would use all three intersection
Vehicle Delay Reduced

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Peak Hour Delay Reduced</td>
<td>123565.2</td>
</tr>
<tr>
<td>Total Peak Hour Delay Reduced</td>
<td>123565.2</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total (CO, NOX, and VOC) Peak Hour Emissions without the Project (Kilograms):</td>
<td>16.12</td>
</tr>
<tr>
<td>Total (CO, NOX, and VOC) Peak Hour Emissions with the Project (Kilograms):</td>
<td>14.23</td>
</tr>
<tr>
<td>Total (CO, NOX, and VOC) Peak Hour Emissions Reduced by the Project (Kilograms):</td>
<td>1.89</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Emissions Reduced:</td>
<td>1.89</td>
</tr>
</tbody>
</table>

Total Parallel Roadway

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emissions Reduced on Parallel Roadways</td>
<td>0</td>
</tr>
</tbody>
</table>

Upload Synchro Report

1649727168066_Synchro Worksheets.pdf

Please upload attachment in PDF form. (Save Form, then click ‘Edit’ in top right to upload file.)
New Roadway Portion:

Cruise speed in miles per hour with the project: 0
Vehicle miles traveled with the project: 0
Total delay in hours with the project: 0
Total stops in vehicles per hour with the project: 0
Fuel consumption in gallons: 0
Total (CO, NOX, and VOC) Peak Hour Emissions Reduced or Produced on New Roadway (Kilograms): 0

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

Total (CO, NOX, and VOC) Peak Hour Emissions Reduced by the Project (Kilograms): 0.0

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

Cruise speed in miles per hour without the project: 0
Vehicle miles traveled without the project: 0
Total delay in hours without the project: 0
Total stops in vehicles per hour without the project: 0
Cruise speed in miles per hour with the project: 0
Vehicle miles traveled with the project: 0
Total delay in hours with the project: 0
Total stops in vehicles per hour with the project: 0
Fuel consumption in gallons (F1) 0
Fuel consumption in gallons (F2) 0
Fuel consumption in gallons (F3) 0
Total (CO, NOX, and VOC) Peak Hour Emissions Reduced by the Project (Kilograms): 0

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

Measure A: Benefit of Crash Reduction
Crash Modification Factor Used:

Multi-Lane Roundabout: CMF = 1.062 for all crash types; CMF = 0.367 for injury crashes. These CMF values were obtained from the Crash Modification Factors list provided on the Applying for Regional Solicitation Funds page on the Metropolitan Council website.

Rationale for Crash Modification Selected:

Note that CMFs for a Multi-Lane Roundabout were applied to only a proportion of study area crashes since the roundabout in the build condition will only carry 39% of the overall intersection volumes experienced under the existing intersection configuration. No CMFs were applied for traffic using the two signalized intersections in the build condition. Using these assumptions, the total number of crashes at the intersection of TH 13 and Nicollet Avenue were multiplied by a factor of 0.39 prior to the application of Multi-Lane Roundabout CMFs.

Project Benefit ($) from B/C Ratio: $3,259,434.00

Total Fatal (K) Crashes: 0
Total Serious Injury (A) Crashes: 1
Total Non-Motorized Fatal and Serious Injury Crashes: 0
Total Crashes: 33
Total Fatal (K) Crashes Reduced by Project: 0
Total Serious Injury (A) Crashes Reduced by Project: 2
Total Non-Motorized Fatal and Serious Injury Crashes Reduced by Project: 0
Total Crashes Reduced by Project: 11
Worksheet Attachment 1649727431243_CMF and BCA.pdf

Roadway projects that include railroad grade-separation elements:

Current AADT volume: 0
Average daily trains: 0
Crash Risk Exposure eliminated: 0
Measure A: Pedestrian Safety

Determine if these measures do not apply to your project. Does the project match either of the following descriptions? If either of the items are checked yes, then score for entire pedestrian safety measure is zero. Applicant does not need to respond to the sub-measures and can proceed to the next section.

Project is primarily a freeway (or transitioning to a freeway) and does not provide safe and comfortable pedestrian facilities and crossings.  
No

Existing location lacks any pedestrian facilities (e.g., sidewalks, marked crossings, wide shoulders in rural contexts) and project does not add pedestrian elements (e.g., reconstruction of a roadway without sidewalks, that doesn't also add pedestrian crossings and sidewalk or sidepath on one or both sides).  
No

SUB-MEASURE 1: Project-Based Pedestrian Safety Enhancements and Risk Elements
To receive maximum points in this category, pedestrian safety countermeasures selected for implementation in projects should be, to the greatest extent feasible, consistent with the countermeasure recommendations in the Regional Pedestrian Safety Action Plan and state and national best practices. Links to resources are provided on the Regional Solicitation Resources web page.
Please answer the following two questions with as much detail as possible based on the known attributes of the proposed design. If any aspect referenced in this section is not yet determined, describe the range of options being considered, to the greatest extent available. If there are project elements that may increase pedestrian risk, describe how these risks are being mitigated.
1. Describe how this project will address the safety needs of people crossing the street at signalized intersections, unsignalized intersections, midblock locations, and roundabouts.
   Treatments and countermeasures should be well-matched to the roadways context (e.g., appropriate for the speed, volume, crossing distance, and other location attributes). Refer to the Regional Solicitation Resources web page for guidance links.
This project will address the safety deficiencies at the intersection by bridging Nicollet Avenue over Highway 13 and installing a completely grade separated shared use path for cyclists and pedestrians travelling along Nicollet Avenue. Currently, the intersection of Highway 13 and Nicollet Avenue has several features consistent with high levels of pedestrian stress: high traffic volumes, speeds exceeding 50 miles per hour, crossing distances greater than 110 feet, and an irregular intersection design that requires crossing two unmarked and unsignalized right turn slip-lanes.

The redesign will entirely remove the need to cross Highway 13 at grade by providing a completely grade-separated pedestrian facilities on both sides of Nicollet Avenue, with the eastern facilities serving as a shared use path. A multi-lane roundabout will be installed south of the new bridge, and access to Highway 13 will be an offset T-Intersection linked to the roundabout via a jughandle. Roundabouts greatly reduce the number of pedestrian conflict points, and have been shown to reduce the rate of fatal and injury crashes by as much as 78%. The new roundabout will have three pedestrian crossings with marked crosswalks and pedestrian refuges at each location. The shared use path will connect to the existing paths on the east side of Nicollet and northside of Highway 13 and provide direct connections to both the MVTA Burnsville Station and the Metro Orange Line Heart of the City station.

(Limit 2,800 characters; approximately 400 words)

Is the distance in between signalized intersections increasing (e.g., removing a signal)?

Select one: Yes

If yes, describe what measures are being used to fill the gap between protected crossing opportunities for pedestrians (e.g., adding High-Intensity Activated Crosswalk beacons to help motorists yield and help pedestrians find a suitable gap for crossing, turning signal into a roundabout to slow motorist speed, etc.).
This project would increase the distance between signalized intersections along Nicollet Avenue by approximately 200 feet, but the proposed alignment would increase the number of safe crossing opportunities via the inclusion of a multi-lane roundabout. The roundabout design would allow for pedestrians to cross Nicollet and the new Highway 13 access road via marked crosswalks with pedestrian refuges. This would introduce a new mid-block crossing south of the proposed roundabout to allow direct access between the Metro Orange Line Heart of the City Station and commercial and housing developments on the eastern side of Nicollet. This proposed design would also include a new intersection north of the Nicollet bridge that would have direct access to northbound I-35W. There would be an ADA-accessible signalized pedestrian crossing along the western leg of the intersection, which would provide access to the new shared use path. The remaining legs of the intersection would be accessible via the network of paths.

Response:

Will your design increase the crossing distance or crossing time across any leg of an intersection? (e.g., by adding turn or through lanes, widening lanes, using a multi-phase crossing, prohibiting crossing on any leg of an intersection, pedestrian bridge requiring length detour, etc.). This does not include any increases to crossing distances solely due to the addition of bike lanes (i.e., no other through or turn lanes being added or widened).

Select one:

Yes

If yes,
How many intersections will likely be affected?

Response: 1

Describe what measures are being used to reduce exposure and delay for pedestrians (e.g., median crossing islands, curb bulb-outs, etc.)
The grade separation of the intersection allows for a design that removes most of the signalized pedestrian crossings and replaces them with shorter unsignalized crossings with median refuges, and the grade separated shared use paths remove the need three quarters of the signalized crossings at the new intersection that will be installed to the north. The short crossing distances and marked crosswalks at the multilane roundabout should result in a substantial delay for pedestrians, and the multilane design will slow down automobile traffic to 15-25 miles per hour, providing ample time to react to and yield to crossing pedestrians.

Response:

The proposed layout would reduce pedestrian delay and provide more direct routes for pedestrians travelling north and south on Nicollet Avenue. It would also provide an entirely grade separated crossing of Highway 13 on both sides of Nicollet Avenue, as well as an underpass under the Nicollet Avenue bridge linking the Heart of the City Orange Line station to the MVTA transit center. The layout uses a pedestrian underpass below the north end of the Nicollet bridge, with access via ADA-accessible switchback on either side of the underpass. Switchbacks provide the most direct and efficient route while maintaining an accessible pathway for all users. The switchbacks would introduce a slight detour when crossing between Nicollet Avenue's Orange Line Station and the MVTA transit center but the projected delay from the increased distance is less than the current delay for existing crossing movements.

Response:

If mid-block crossings are restricted or blocked, explain why this is necessary and how pedestrian crossing needs and safety are supported in other ways (e.g., nearest protected or enhanced crossing opportunity).

Response: not applicable
2. Describe how motorist speed will be managed in the project design, both for through traffic and turning movements. Describe any project-related factors that may affect speed directly or indirectly, even if speed is not the intended outcome (e.g., wider lanes and turning radii to facilitate freight movements, adding turn lanes to alleviate peak hour congestion, etc.). Note any strategies or treatments being considered that are intended to help motorists drive slower (e.g., visual narrowing, narrow lanes, truck aprons to mitigate wide turning radii, etc.) or protect pedestrians if increasing motorist speed (e.g., buffers or other separation from moving vehicles, crossing treatments appropriate for higher speed roadways, etc.).

Response:

Preliminary screening for the project conducted during the 2021 Highway 13 Corridor study stated that the proposed improvements were not expected to significantly impact the average mainline speed or travel times along Highway 13. The improvements would have some impacts to traffic speed and operations for north/south traffic movements along Nicollet Avenue. The multilane roundabout would provide traffic calming and reduce speeds, reducing the likelihood of fatal and injury crashes while maintaining an acceptable level of service along the segment. The roundabout will include a truck apron and turning movements speeds into and out of the roundabout will be managed via splitter islands that double as pedestrian crossing refuges. The proposed design would include concrete median along all of the approaches to the roundabout.

Most of the safety improvements for pedestrians and cyclists would be realized by reducing crossing distances and providing entirely separated facilities for those traversing the intersection. Roundabouts have fewer pedestrian conflict points compared to traditional signalized intersections, and this design would provide pedestrian refuges at all crossings, in addition to shortening the distances of each crossing.

If known, what are the existing and proposed design, operation, and posted speeds? Is this an increase or decrease from existing conditions?
At the time of writing, Highway 13 has a posted speed limit as 55 MPH and will continue to be posted at 55 MPH after construction is substantially completed. The existing signal at Highway 13 and Nicollet Avenue will be replaced by a grade separation, with a new signal to be installed just east of the existing intersection. This signal will be simplified as it removes the north leg from the signal phasing.

The new 'quadrant' road from Nicollet to Highway 13 will be posted 35 MPH. Speeds will be restricted by the roundabout and close proximity to the signal at Highway 13.

Nicollet Avenue currently has posted speed limits of 35 MPH and will remain at 35 MPH after construction is substantially completed. The roundabout will reduce speeds to 25 MPH when through the roundabout. The project maintains signals at River Ridge and Travelers Trail to help ensure that existing speeds along the corridor will remain as they are today.

To summarize, this project is not proposing to change the existing operational or posted speeds of any of the roadways within the project limits.

(Limit 1,400 characters; approximately 200 words)

**SUB-MEASURE 2: Existing Location-Based Pedestrian Safety Risk Factors**

These factors are based on trends and patterns observed in pedestrian crash analysis done for the Regional Pedestrian Safety Action Plan. Check off how many of the following factors are present. Applicants receive more points if more risk factors are present.

- **Existing road configuration is a One-way, 3+ through lanes**
  - Yes

- **Existing road configuration is a Two-way, 4+ through lanes**
  - Yes

- **Existing road has a design speed, posted speed limit, or speed study/data showing 85th percentile travel speeds in excess of 30 MPH or more**
  - Yes

- **Existing road has AADT of greater than 15,000 vehicles per day**
  - Yes

- **List the AADT**
  - 40000
SUB-MEASURE 3: Existing Location-Based Pedestrian Safety Exposure Factors
These factors are based on trends and patterns observed in pedestrian crash analysis done for the Regional Pedestrian Safety Action Plan. Check off how many of the following existing location exposure factors are present. Applicants receive more points if more risk factors are present.

Existing road has transit running on or across it with 1+ transit stops in the project area (If flag-stop route with no fixed stops, then 1+ locations in the project area where roadside stops are allowed. Do not count portions of transit routes with no stops, such as non-stop freeway sections of express or limited-stop routes. If service was temporarily reduced for the pandemic but is expected to return to 2019 levels, consider 2019 service for this item.)

- Yes

Existing road has high-frequency transit running on or across it and 1+ high-frequency stops in the project area (high-frequency defined as service at least every 15 minutes from 6am to 7pm weekdays and 9am to 6pm Saturdays. If service frequency was temporarily reduced for the pandemic but is expected to return to 2019 levels, consider 2019 frequency for this item.)

- Yes

Existing road is within 500 of 1+ shopping, dining, or entertainment destinations (e.g., grocery store, restaurant)

- Yes
The project location is the intersection of Highway 13 and Nicollet. Highway 13 serves as the northern barrier to Burnsville's Heart of the City District (HOC). The HOC district is a mixed-use district that prioritizes walkable connections to various services and businesses in the area. As such, the area south of the intersection has a substantial number of shopping, dining, and entertainment destinations. Within 500' south of Highway 13 in the HOC district is a strip mall development containing three dining establishments, two healthcare providers, a bookstore, a beauty supply store, a painting studio, and a combination grocery store and pharmacy. To the west of Nicollet and south of Highway 13 is the Metro Orange Line Heart of the City Station, the Burnsville Convention center, the Ames Center (a performing arts theater), and the Nicollet Commons Park, which includes a 250-seat amphitheater, picnic area, water features, and open green space. North of Highway 13 is a light industrial and commercial area that contains the MVTA Burnsville Transit Station, multiple entertainment and shopping destinations in addition to a convenience store, several houses of worship and significant amount of commercial and office space.

Existing road is within 500 of other known pedestrian generators (e.g., school, civic/community center, senior housing, multifamily housing, regulatorily-designated affordable housing) Yes
The project location is directly north of the Burnsville Heart of the City (HOC) District, a mixed-use district that has a substantial amount of affordable housing within the district, owing to the obligations of the Livable Communities Act grant money that spurred a substantial amount of the early development in the district being contingent on the provision of affordable housing. As per the Metropolitan Council's socioeconomic screening for the project, there are 368 publicly subsidized rental housing units in census tracts within 1/2 mile. Within approximately 500’ of the project corridor there are two senior housing facilities, the ‘Home Realife of Burnsville Senior Housing Cooperative’ and ‘Emerald Crest Memory Care’ assisted living facility. There are no schools within 500’ of the project area, but Burnsville High School is within half a mile of the project site. There are multiple community centers near the corridor. There three multifamily housing developments within 500’ of the project area, The Maven Apartments, the Gallery on Nicollet, and the Dakota Station Apartments. There are many multifamily developments within a half mile of the project site owning the density goals of the HOC district.

Measure A: Multimodal Elements and Existing Connections
This project was developed in part from public feedback about the highly stressful nature of this intersection for all users, with a specific focus on improving conditions for transit dependent populations who bike, walk, or roll across the intersection to access the MVTA Burnsville Station or the Metro Transit Orange Line Heart of the City Station. The intersection is a significant barrier to all users who would walk, bike, or roll to the destinations beyond or adjacent to the intersection. The current design has features consistent with elevated levels of pedestrian stress, such as long crossing distances, high traffic speed, high traffic volume, and additional conflict points due to the unsignalized and unmarked pedestrian crossings in the right-turn slip lanes. The proposed project alignment would replace the current intersection with an overpass. The overpass design includes separate pedestrian trails, a roundabout, and would off-set Highway 13 access from Nicollet Avenue. The roundabout configuration on Nicollet would reduce the number of pedestrian conflict points and provide mid-crossing refuges at every crossing while also shortening crossing distances. The new intersection design would address existent ADA-compliance issues at the intersection of Highway 13 and Nicollet Avenue and address inadequate pedestrian ramps along the multi-use trail south of the intersection.

The proposed project would include improvements to the bicycle and pedestrian network along a Tier 1 alignment of the Metropolitan’s Council Regional Bicycle Trail Network. The project extends the existing multi-use path along the east side of Nicollet beyond the current terminus at the southeast corner of the intersection and connect it with the east/west multi-use trail along the northern side of Highway 13. The intersection of Highway 13 and Nicollet was identified as a Priority 2 Regional Bicycle Barrier as per the 2019 update of the
Regional Bicycle Barrier Study. These improvements in the bicycle and pedestrian network would support the future Nicollet Avenue Multi-Use Trail Addition investment, which would provide a ten-foot-wide asphalt off-street trail on the east side of Nicollet Avenue from Trunk Highway 13 to Cliff Road. This trail addition would connect the HOC district to the Black Dog Trail and Interstate 35W multi-use trail that crosses into Bloomington.

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. 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. The focus of this section is on the opportunity for public input as opposed to the quality of input. NOTE: A written response is required and failure to respond will result in zero points.

Multiple types of targeted outreach efforts (such as meetings or online/mail outreach) specific to this project with the general public and partner agencies have been used to help identify the project need.

Yes

100%

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

50%

At least online/mail outreach effort specific to this project with the general public has been used to help identify the project need.

50%

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

25%

No outreach has led to the selection of this project.
Describe the type(s) of outreach selected for this project (i.e., online or in-person meetings, surveys, demonstration projects), the method(s) used to announce outreach opportunities, and how many people participated. Include any public website links to outreach opportunities.
Burnsville residents have long been aware of the deficiencies at the project location, both in terms of efficiency, safety, and as a barrier for accessing transit, jobs, services, and recreation in the HOC district and beyond. Engagement for this project started in 2020, when the intersection operations were studied in MnDOT's 2021 Highway 13 Corridor Evaluation, a $2.1M study of Highway 13 from Savage to Burnsville. The Corridor Evaluation study included worked with stakeholders along the entire corridor between February 2020 and October 2021. As it pertains to the intersection of Highway 13 and Nicollet, the study team issued online and print surveys that garnered over twenty responses, hosted multiple informational pop-up tabling events at the MVTA Burnsville station and at a popular HOC business. The study team assembled a business advisory group to collect feedback address concerns from local employers, and work to mitigate potential impacts from the project. The study included targeted engagement with equity and environmental justice populations in the HOC district. The study team worked with faith-based organizations that served equity populations, such as the Dar-Us-Salam Mosque & Community, 360 Communities, and the Mission Outpost Food Bank. Translated engagement were distributed at community hubs for ethnic grocers and places of worship. When possible, events were provided multiple in-person and online to allow all people opportunities to learn about the project and provide feedback. The engagement process was advertised via mail and email, news releases, project update videos, and posts of the project website and social media accounts. Feedback from this campaign consistently mentioned the inadequate operations along Highway 13 and at the intersection, safety issues at the intersection, and difficulty accessing the transit stations for cyclists and pedestrians.

Study website:
2. Layout (25 Percent of Points)

Layout includes proposed geometrics and existing and proposed right-of-way boundaries. A basic layout should include a base map (north arrow; scale; legend; city and/or county limits; existing ROW, labeled; existing signals; and bridge numbers) and design data (proposed alignments; bike and/or roadway lane widths; shoulder width; proposed signals; and proposed ROW). An aerial photograph with a line showing the projects termini does not suffice and will be awarded zero points. *If applicable

Layout approved by the applicant and all impacted jurisdictions (i.e., cities/counties/MnDOT. If a MnDOT trunk highway is impacted, approval by MnDOT must have occurred to receive full points. A PDF of the layout must be attached along with letters from each jurisdiction to receive points.

100%

A layout does not apply (signal replacement/signal timing, stand-alone streetscaping, minor intersection improvements). Applicants that are not certain whether a layout is required should contact Colleen Brown at MnDOT Metro State Aid colleen.brown@state.mn.us.

100%

For projects where MnDOT trunk highways are impacted and a MnDOT Staff Approved layout is required. Layout approved by the applicant and all impacted local jurisdictions (i.e., cities/counties), and layout review and approval by MnDOT is pending. A PDF of the layout must be attached along with letters from each jurisdiction to receive points.

75%

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

50%

Layout has been started but is not complete. A PDF of the layout must be attached to receive points.

25%

Layout has not been started

0%

Attach Layout

Please upload attachment in PDF form.

3. 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  
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

4. Right-of-Way (25 Percent of Points)

Right-of-way, permanent or temporary easements, and MnDOT agreement/limited-use permit either not required or all have been acquired  
Yes  
100%

Right-of-way, permanent or temporary easements, and/or MnDOT agreement/limited-use permit required - plat, legal descriptions, or official map complete  
50%

Right-of-way, permanent or temporary easements, and/or MnDOT agreement/limited-use permit required - parcels identified  
25%

Right-of-way, permanent or temporary easements, and/or MnDOT agreement/limited-use permit required - parcels not all identified  
0%

5. 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.
Measure A: Cost Effectiveness

Total Project Cost (entered in Project Cost Form): $32,170,000.00
Enter Amount of the Noise Walls: $0.00
Total Project Cost subtract the amount of the noise walls: $32,170,000.00
Enter amount of any outside, competitive funding: $0.00
Attach documentation of award:

Points Awarded in Previous Criteria
Cost Effectiveness $0.00

Other Attachments

<table>
<thead>
<tr>
<th>File Name</th>
<th>Description</th>
<th>File Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>RS Attachments.pdf</td>
<td>Project Need one pager, existing conditions photo, letters and resolutions of support</td>
<td>7.5 MB</td>
</tr>
</tbody>
</table>
Level of Congestion

Strategic Capacity Project: Minnesota Highway 13 & Nicollet Avenue Mobility Improvement | Map ID: 1649196078974

0.569 miles

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

0 0.15 0.3 0.6 0.9 1.2
Miles

Created: 4/5/2022
For complete disclaimer of accuracy, please visit https://giswebsite.metc.state.mn.us/gissite/notice.aspx
Results

WITHIN ONE MI of project:
Postsecondary Students: 0

Totals by City:
Burnsville
Population: 17238
Employment: 14839
Mfg and Dist Employment: 3482
Results

Transit with a Direct Connection to project: 425 444 460 465 495 904

*indicates Planned Alignments

Transit Market areas: 3
Results

Total of publicly subsidized rental housing units in census tracts within 1/2 mile: 368

Project located IN an Area of Concentrated Poverty.
### 3: Nicollet Ave & TH 13

<table>
<thead>
<tr>
<th>Direction</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Future Volume (vph)</td>
<td>5106</td>
</tr>
<tr>
<td>Total Delay / Veh (s/v)</td>
<td>47</td>
</tr>
<tr>
<td>CO Emissions (kg)</td>
<td>11.30</td>
</tr>
<tr>
<td>NOx Emissions (kg)</td>
<td>2.20</td>
</tr>
<tr>
<td>VOC Emissions (kg)</td>
<td>2.62</td>
</tr>
</tbody>
</table>
Timings
3: Nicollet Ave & TH 13

<table>
<thead>
<tr>
<th>Lane Group</th>
<th>EBL</th>
<th>EBT</th>
<th>EBR</th>
<th>WBL</th>
<th>WBT</th>
<th>WBR</th>
<th>NBL</th>
<th>NBT</th>
<th>NBR</th>
<th>SBL</th>
<th>SBT</th>
<th>SBR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traffic Volume (vph)</td>
<td>127</td>
<td>1382</td>
<td>373</td>
<td>214</td>
<td>1622</td>
<td>66</td>
<td>258</td>
<td>159</td>
<td>180</td>
<td>81</td>
<td>303</td>
<td>341</td>
</tr>
<tr>
<td>Future Volume (vph)</td>
<td>127</td>
<td>1382</td>
<td>373</td>
<td>214</td>
<td>1622</td>
<td>66</td>
<td>258</td>
<td>159</td>
<td>180</td>
<td>81</td>
<td>303</td>
<td>341</td>
</tr>
<tr>
<td>Turn Type</td>
<td>Prot</td>
<td>NA</td>
<td>Perm</td>
<td>Prot</td>
<td>NA</td>
<td>Perm</td>
<td>Split</td>
<td>NA</td>
<td>Perm</td>
<td>Split</td>
<td>NA</td>
<td>Perm</td>
</tr>
<tr>
<td>Protected Phases</td>
<td>7</td>
<td>4</td>
<td>3</td>
<td>8</td>
<td>2</td>
<td>2</td>
<td>6</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Permitted Phases</td>
<td>4</td>
<td>8</td>
<td>2</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Detector Phase</td>
<td>7</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>8</td>
<td>8</td>
<td>2</td>
<td>2</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

Intersection Capacity Utilization 83.9% ICU Level of Service E

Maximum v/c Ratio: 1.01
Actuated g/C Ratio 0.05 0.47 0.47 0.08 0.50 0.50 0.16 0.16 0.16 0.15 0.15 0.15

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green
Natural Cycle: 120
Control Type: Pretimed
Maximum v/c Ratio: 1.01
Intersection Signal Delay: 47.2
Intersection LOS: D
Intersection Capacity Utilization 83.9%
ICU Level of Service E
Analysis Period (min) 15

Approach Delay 36.4 55.6 40.6 58.5
Approach LOS D E D

Splits and Phases: 3: Nicollet Ave & TH 13
# Measures of Effectiveness

## 2: Nicollet Ave & Jughandle

<table>
<thead>
<tr>
<th>Direction</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Future Volume (vph)</td>
<td>1986</td>
</tr>
<tr>
<td>CO Emissions (kg)</td>
<td>1.65</td>
</tr>
<tr>
<td>NOx Emissions (kg)</td>
<td>0.32</td>
</tr>
<tr>
<td>VOC Emissions (kg)</td>
<td>0.38</td>
</tr>
</tbody>
</table>
## Measures of Effectiveness

1: TH 13 & Jughandle

<table>
<thead>
<tr>
<th>Direction</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Future Volume (vph)</td>
<td>4425</td>
</tr>
<tr>
<td>Total Delay / Veh (s/v)</td>
<td>21</td>
</tr>
<tr>
<td>CO Emissions (kg)</td>
<td>7.87</td>
</tr>
<tr>
<td>NOx Emissions (kg)</td>
<td>1.53</td>
</tr>
<tr>
<td>VOC Emissions (kg)</td>
<td>1.82</td>
</tr>
</tbody>
</table>

3: Nicollet Ave & 35W Access Road

<table>
<thead>
<tr>
<th>Direction</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Future Volume (vph)</td>
<td>1176</td>
</tr>
<tr>
<td>Total Delay / Veh (s/v)</td>
<td>4</td>
</tr>
<tr>
<td>CO Emissions (kg)</td>
<td>0.46</td>
</tr>
<tr>
<td>NOx Emissions (kg)</td>
<td>0.09</td>
</tr>
<tr>
<td>VOC Emissions (kg)</td>
<td>0.11</td>
</tr>
</tbody>
</table>
### Intersection

Intersection Delay, s/veh | 9.5
--- | ---
Intersection LOS | A

### Approach WB NB SB

| Entry Lanes | 2 | 2 | 2 |
| Conflicting Circle Lanes | 2 | 2 | 2 |
| Adj Approach Flow, veh/h | 848 | 649 | 662 |
| Demand Flow Rate, veh/h | 865 | 662 | 676 |
| Vehicles Circulating, veh/h | 291 | 340 | 651 |
| Vehicles Exiting, veh/h | 711 | 987 | 505 |
| Ped Vol Crossing Leg, #/h | 0 | 0 | 0 |
| Ped Cap Adj | 1.000 | 1.000 | 1.000 |
| Approach Delay, s/veh | 10.7 | 6.9 | 10.5 |
| Approach LOS | B | A | B |

### Lane Designated Moves Left Right Left Right Left Right

| RT Channelized | L | TR | LT | TR | LT | TR |

### Lane Util Left Right Left Right Left Right

| Lane Util | 0.753 | 0.440 | 0.560 | 0.503 | 0.497 |

### Follow-Up Headway, s

| Follow-Up Headway, s | 2.667 | 2.667 | 2.667 | 2.667 | 2.667 |

### Critical Headway, s


### Entry Flow, veh/h

| Flow Rate | 651 | 214 | 291 | 371 | 340 | 336 |

### Cap Entry Lane, veh/h

| Cap Entry Lane, veh/h | 1033 | 1109 | 987 | 1064 | 740 | 817 |

### Entry HV Adj Factor

| Entry HV Adj Factor | 0.980 | 0.981 | 0.980 | 0.981 | 0.979 | 0.980 |

### Flow Entry, veh/h

| Flow Rate | 638 | 210 | 285 | 364 | 333 | 329 |

### Cap Entry, veh/h

| Cap Entry, veh/h | 1012 | 1088 | 968 | 1044 | 726 | 801 |

### V/C Ratio

| V/C Ratio | 0.630 | 0.193 | 0.295 | 0.349 | 0.458 | 0.412 |

### Control Delay, s/veh

| Control Delay, s/veh | 12.6 | 5.1 | 6.7 | 7.0 | 11.4 | 9.7 |

### LOS

| LOS | B | A | A | A | B | A |

### 95th %tile Queue, veh

| 95th %tile Queue, veh | 5 | 1 | 1 | 2 | 2 | 2 |
Timings
1: TH 13 & Jughandle

03/08/2022

Lane Configurations

<table>
<thead>
<tr>
<th>Lane Group</th>
<th>NBL</th>
<th>NBR</th>
<th>NET</th>
<th>NER</th>
<th>SWL</th>
<th>SWT</th>
</tr>
</thead>
</table>

Traffic Volume (vph)

<table>
<thead>
<tr>
<th>Turn Type</th>
<th>Prot</th>
<th>Perm</th>
<th>NA</th>
<th>Perm</th>
<th>Prot</th>
<th>NA</th>
</tr>
</thead>
</table>

Future Volume (vph)

<table>
<thead>
<tr>
<th>Protected Phases</th>
<th>Permitted Phases</th>
<th>Detector Phase</th>
<th>Switch Phase</th>
<th>Lead/Lag Optimize?</th>
<th>Recall Mode</th>
<th>Act Effct Green (s)</th>
<th>v/c Ratio</th>
<th>Control Delay</th>
<th>Queue Delay</th>
<th>Total Delay</th>
<th>LOS</th>
<th>Approach Delay</th>
<th>Approach LOS</th>
</tr>
</thead>
</table>

Minimum Initial (s)

<table>
<thead>
<tr>
<th>Minimum Split (s)</th>
<th>Total Split (s)</th>
<th>Total Split (%)</th>
<th>Yellow Time (s)</th>
<th>All-Red Time (s)</th>
<th>Lost Time Adjust (s)</th>
<th>Total Lost Time (s)</th>
<th>Lead/Lag</th>
<th>Lead-Lag Optimize?</th>
<th>Recall Mode</th>
<th>Act Effct Green (s)</th>
<th>v/c Ratio</th>
<th>Control Delay</th>
<th>Queue Delay</th>
<th>Total Delay</th>
<th>LOS</th>
<th>Approach Delay</th>
<th>Approach LOS</th>
</tr>
</thead>
</table>

Intersection Summary

Cycle Length: 75
Actuated Cycle Length: 75
Offset: 0 (0%), Referenced to phase 2:NBL and 6; Start of Green
Natural Cycle: 75
Control Type: Pretimed
Maximum v/c Ratio: 0.92
Intersection Signal Delay: 20.7
Intersection LOS: C
Intersection Capacity Utilization 68.3%
ICU Level of Service C
Analysis Period (min) 15

Splits and Phases:

<table>
<thead>
<tr>
<th>Splits and Phases:</th>
<th>1: TH 13 &amp; Jughandle</th>
</tr>
</thead>
</table>

2019 PM Peak 4:00 pm 10/29/2019 Grade Separated Jughandle
### Lane Configurations

<table>
<thead>
<tr>
<th></th>
<th>NBL</th>
<th>NBT</th>
<th>SBT</th>
<th>SBR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traffic Volume (vph)</td>
<td>103</td>
<td>352</td>
<td>609</td>
<td>112</td>
</tr>
<tr>
<td>Future Volume (vph)</td>
<td>103</td>
<td>352</td>
<td>609</td>
<td>112</td>
</tr>
</tbody>
</table>

### Turn Type

- Protected (Prot): NA
- Permitted (Perm): NA

### Splits and Phases

- **Protected Phases:** 5
- **Permitted Phases:** 6
- **Detector Phase:** 5
- **Switch Phase:**
  - Minimum Initial (s): 5.0
  - Minimum Split (s): 9.5
  - Total Split (s): 12.0
  - Total Split (%): 30.0%
- **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 Optimize?** Yes
- **Recall Mode:** Max
- **Act Effct Green (s):** 7.5
- **Actuated g/C Ratio:** 0.19
- **v/c Ratio:** 0.17
- **Control Delay:** 14.5
- **Queue Delay:** 0.0
- **Total Delay:** 14.5

### LOS

- **B A A A**

---

### Intersection Summary

- **Cycle Length:** 40
- **Actuated Cycle Length:** 40
- **Offset:** 0 (0%), Referenced to phase 2:NBL and 6:SBT, Start of Green
- **Natural Cycle:** 40
- **Control Type:** Pretimed
- **Maximum v/c Ratio:** 0.32
- **Intersection Signal Delay:** 3.9
- **Intersection LOS:** A
- **Intersection Capacity Utilization:** 28.5%
- **ICU Level of Service:** A
- **Analysis Period (min):** 15

---

### Splits and Phases Diagram

- **Phase 1:** NBL
- **Phase 2:** NBT
- **Phase 3:** SBT
- **Phase 4:** SBR

---

2019 PM Peak 4:00 pm 10/29/2019 Grade Separated Jughandle

Synchro 11 Report
Page 2
### Measures of Effectiveness

**3: Nicollet Ave & TH 13**

<table>
<thead>
<tr>
<th>Direction</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Future Volume (vph)</td>
<td>5106</td>
</tr>
<tr>
<td>Total Delay / Veh (s/v)</td>
<td>47</td>
</tr>
<tr>
<td>CO Emissions (kg)</td>
<td>11.30</td>
</tr>
<tr>
<td>NOx Emissions (kg)</td>
<td>2.20</td>
</tr>
<tr>
<td>VOC Emissions (kg)</td>
<td>2.62</td>
</tr>
</tbody>
</table>
### Timings

#### 3: Nicollet Ave & TH 13

<table>
<thead>
<tr>
<th>Lane Group</th>
<th>EBL</th>
<th>EBT</th>
<th>EBR</th>
<th>WBL</th>
<th>WBT</th>
<th>WBR</th>
<th>NBL</th>
<th>NBT</th>
<th>NBR</th>
<th>SBL</th>
<th>SBT</th>
<th>SBR</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lane Configurations</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Traffic Volume (vph)</strong></td>
<td>127</td>
<td>1382</td>
<td>373</td>
<td>214</td>
<td>1622</td>
<td>66</td>
<td>258</td>
<td>159</td>
<td>180</td>
<td>81</td>
<td>303</td>
<td>341</td>
</tr>
<tr>
<td><strong>Future Volume (vph)</strong></td>
<td>127</td>
<td>1382</td>
<td>373</td>
<td>214</td>
<td>1622</td>
<td>66</td>
<td>258</td>
<td>159</td>
<td>180</td>
<td>81</td>
<td>303</td>
<td>341</td>
</tr>
<tr>
<td><strong>Turn Type</strong></td>
<td>Prot</td>
<td>NA</td>
<td>Perm</td>
<td>Prot</td>
<td>NA</td>
<td>Perm</td>
<td>Split</td>
<td>NA</td>
<td>Perm</td>
<td>Split</td>
<td>NA</td>
<td>Perm</td>
</tr>
<tr>
<td><strong>Protected Phases</strong></td>
<td>7</td>
<td>4</td>
<td>3</td>
<td>8</td>
<td>2</td>
<td>2</td>
<td>6</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Permitted Phases</strong></td>
<td>4</td>
<td>8</td>
<td>2</td>
<td>2</td>
<td>6</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Detector Phase</strong></td>
<td>7</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>8</td>
<td>8</td>
<td>2</td>
<td>2</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
</tbody>
</table>

#### Lane Group Timings

<table>
<thead>
<tr>
<th>Lane Group</th>
<th>EBL</th>
<th>EBT</th>
<th>EBR</th>
<th>WBL</th>
<th>WBT</th>
<th>WBR</th>
<th>NBL</th>
<th>NBT</th>
<th>NBR</th>
<th>SBL</th>
<th>SBT</th>
<th>SBR</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Timings</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Intersection Summary

- **Cycle Length:** 120
- **Actuated Cycle Length:** 120
- **Offset:** 0 (0%), Referenced to phase 2:NBTL, Start of Green
- **Natural Cycle:** 120
- **Control Type:** Pretimed
- **Maximum v/c Ratio:** 1.01

#### Actuation

- **Intersection Signal Delay:** 47.2
- **Intersection LOS:** D
- **Intersection Capacity Utilization:** 83.9%
- **ICU Level of Service:** E

#### Analysis Period (min) 15

#### Splits and Phases: 3: Nicollet Ave & TH 13

#### Traffic Flow

- Traffic Flow Rates
  - Traffic Flow per Lane
- Traffic Flow per Phase

#### Capacity

- Capacity per Lane
- Capacity per Phase

#### Delay

- Delay per Lane
- Delay per Phase

#### LOS

- LOS per Lane
- LOS per Phase

#### Recall Mode

- Recall Mode
  - Max
  - Max

#### Lead-Lag

- Lead-Lag
  - Optimize?
  - Yes
  - Yes

#### Lead-Lag Optimize

- Lead-Lag Optimize?
  - Yes
  - Yes
  - Yes

#### Minimum Initial

- Minimum Initial
  - (s)
  - 5.0
  - 5.0

#### Minimum Split

- Minimum Split
  - (s)
  - 9.5
  - 22.5

#### Actuated Cycle Length

- Actuated Cycle Length
  - (s)
  - 10.1
  - 60.5

#### Actuated g/C Ratio

- Actuated g/C Ratio
  - 0.05
  - 0.47

#### Intersection Capacity Utilization

- Intersection Capacity Utilization
  - 83.9%
  - ICU Level of Service E
2: Nicollet Ave & Jughandle

<table>
<thead>
<tr>
<th>Direction</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Future Volume (vph)</td>
<td>1986</td>
</tr>
<tr>
<td>CO Emissions (kg)</td>
<td>1.65</td>
</tr>
<tr>
<td>NOx Emissions (kg)</td>
<td>0.32</td>
</tr>
<tr>
<td>VOC Emissions (kg)</td>
<td>0.38</td>
</tr>
</tbody>
</table>
### 1: TH 13 & Jughandle

<table>
<thead>
<tr>
<th>Direction</th>
<th>Future Volume (vph)</th>
<th>Total Delay / Veh (s/v)</th>
<th>CO Emissions (kg)</th>
<th>NOx Emissions (kg)</th>
<th>VOC Emissions (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>4425</td>
<td>21</td>
<td>7.87</td>
<td>1.53</td>
<td>1.82</td>
</tr>
</tbody>
</table>

### 3: Nicollet Ave & 35W Access Road

<table>
<thead>
<tr>
<th>Direction</th>
<th>Future Volume (vph)</th>
<th>Total Delay / Veh (s/v)</th>
<th>CO Emissions (kg)</th>
<th>NOx Emissions (kg)</th>
<th>VOC Emissions (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>1176</td>
<td>4</td>
<td>0.46</td>
<td>0.09</td>
<td>0.11</td>
</tr>
</tbody>
</table>
### Intersection

<table>
<thead>
<tr>
<th>Intersection Delay, s/veh</th>
<th>9.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intersection LOS</td>
<td>A</td>
</tr>
</tbody>
</table>

### Approach

<table>
<thead>
<tr>
<th></th>
<th>WB</th>
<th>NB</th>
<th>SB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entry Lanes</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Conflicting Circle Lanes</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Adj Approach Flow, veh/h</td>
<td>848</td>
<td>649</td>
<td>662</td>
</tr>
<tr>
<td>Demand Flow Rate, veh/h</td>
<td>865</td>
<td>662</td>
<td>676</td>
</tr>
<tr>
<td>Vehicles Circulating, veh/h</td>
<td>291</td>
<td>340</td>
<td>651</td>
</tr>
<tr>
<td>Vehicles Exiting, veh/h</td>
<td>711</td>
<td>987</td>
<td>505</td>
</tr>
<tr>
<td>Ped Vol Crossing Leg, #/h</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Ped Cap Adj</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
</tr>
<tr>
<td>Approach Delay, s/veh</td>
<td>10.7</td>
<td>6.9</td>
<td>10.5</td>
</tr>
<tr>
<td>Approach LOS</td>
<td>B</td>
<td>A</td>
<td>B</td>
</tr>
</tbody>
</table>

### Lane

<table>
<thead>
<tr>
<th>Lane</th>
<th>Left</th>
<th>Right</th>
<th>Left</th>
<th>Right</th>
<th>Left</th>
<th>Right</th>
</tr>
</thead>
<tbody>
<tr>
<td>Designated Moves</td>
<td>L</td>
<td>TR</td>
<td>LT</td>
<td>TR</td>
<td>LT</td>
<td>TR</td>
</tr>
<tr>
<td>Assumed Moves</td>
<td>L</td>
<td>TR</td>
<td>LT</td>
<td>R</td>
<td>L</td>
<td>TR</td>
</tr>
</tbody>
</table>

### Lane Util

| RT Channelized        | Lane Util | 0.753 | 0.247 | 0.440 | 0.560 | 0.503 | 0.497 |

### Critical Headway


### Entry Flow, veh/h

| Entry Flow, veh/h     | 651   | 214   | 291   | 371   | 340   | 336   |

### Cap Entry Lane, veh/h

| Cap Entry Lane, veh/h| 1033  | 1109  | 987   | 1064  | 742   | 817   |

### Entry HV Adj Factor

| Entry HV Adj Factor   | 0.980 | 0.981 | 0.980 | 0.981 | 0.979 | 0.980 |

### Flow Entry, veh/h

| Flow Entry, veh/h     | 638   | 210   | 285   | 364   | 333   | 329   |

### Cap Entry, veh/h

| Cap Entry, veh/h      | 1012  | 1088  | 968   | 1044  | 726   | 801   |

### V/C Ratio

| V/C Ratio             | 0.630 | 0.193 | 0.295 | 0.349 | 0.458 | 0.412 |

### Control Delay, s/veh

| Control Delay, s/veh  | 12.6  | 5.1   | 6.7   | 7.0   | 11.4  | 9.7   |

### LOS

| LOS                   | B     | A     | A     | A     | B     | A     |

### 95th %tile Queue, veh

| 95th %tile Queue, veh | 5     | 1     | 1     | 2     | 2     | 2     |
### Timings

**1: TH 13 & Jughandle**

- **03/08/2022**

#### Lane Group Configurations

<table>
<thead>
<tr>
<th>Lane Group</th>
<th>NBL</th>
<th>NBR</th>
<th>NET</th>
<th>NER</th>
<th>SWL</th>
<th>SWT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traffic Volume (vph)</td>
<td>380</td>
<td>261</td>
<td>1382</td>
<td>500</td>
<td>280</td>
<td>1622</td>
</tr>
<tr>
<td>Future Volume (vph)</td>
<td>380</td>
<td>261</td>
<td>1382</td>
<td>500</td>
<td>280</td>
<td>1622</td>
</tr>
<tr>
<td>Turn Type</td>
<td>Prot</td>
<td>Perm</td>
<td>NA</td>
<td>Perm</td>
<td>Prot</td>
<td>NA</td>
</tr>
</tbody>
</table>

#### Switch Phase

- **Minimum Initial (s)**: 5.0 5.0 5.0 5.0 5.0 5.0
- **Minimum Split (s)**: 22.5 22.5 22.5 22.5 9.5 22.5
- **Total Split (s)**: 23.0 23.0 39.0 39.0 13.0 52.0
- **Total Split (%)**: 30.7% 30.7% 52.0% 52.0% 17.3% 69.3%
- **Yellow Time (s)**: 3.5 3.5 3.5 3.5 3.5 3.5
- **All-Red Time (s)**: 1.0 1.0 1.0 1.0 1.0 1.0
- **Lost Time Adjust (s)**: 0.0 0.0 0.0 0.0 0.0 0.0
- **Total Lost Time (s)**: 4.5 4.5 4.5 4.5 4.5 4.5

#### Lead/Lag

- **Lead-Lag Optimize?**: Yes Yes Yes
- **Recall Mode**: Max Max Max Max Max Max
- **Act Effct Green (s)**: 18.5 18.5 34.5 34.5 8.5 47.5
- **Actuated g/C Ratio**: 0.25 0.25 0.46 0.46 0.11 0.63
- **v/c Ratio**: 0.49 0.51 0.92 0.53 0.78 0.79
- **Control Delay**: 26.5 9.8 30.4 3.4 48.2 13.3
- **Queue Delay**: 0.0 0.0 0.0 0.0 0.0 0.0
- **Total Delay**: 26.5 9.8 30.4 3.4 48.2 13.3
- **LOS**: C A C A D B
- **Approach LOS**: B C B

#### Intersection Summary

- **Cycle Length**: 75
- **Actuated Cycle Length**: 75
- **Offset**: 0 (0%), Referenced to phase 2:NBL and 6; Start of Green
- **Natural Cycle**: 75
- **Control Type**: Pretimed
- **Maximum v/c Ratio**: 0.92
- **Intersection Signal Delay**: 20.7
- **Intersection LOS**: C
- **Intersection Capacity Utilization**: 68.3%
- **ICU Level of Service**: C
- **Analysis Period (min)**: 15

#### Splits and Phases

- **2019 PM Peak 4:00 pm 10/29/2019 Grade Separated Jughandle**
- **Synchro 11 Report**
- **Page 1**
### Lane Configurations

<table>
<thead>
<tr>
<th>NBL</th>
<th>NBT</th>
<th>SBT</th>
<th>SBR</th>
</tr>
</thead>
<tbody>
<tr>
<td>103</td>
<td>352</td>
<td>609</td>
<td>112</td>
</tr>
</tbody>
</table>

### Traffic Volume (vph)

| Future Volume (vph) | 103 | 352 | 609 | 112 |

### Turn Type

- Protected (Prot)
- No Access (NA)
- Permanent (Perm)

### Protected Phases

- 5
- 2
- 6

### Permitted Phases

- 6

### Detector Phase

- 5
- 2
- 6
- 6

### Switch Phase

- Minimum Initial (s): 5.0, 5.0, 5.0, 5.0
- Minimum Split (s): 9.5, 22.5, 22.5, 22.5
- Total Split (s): 12.0, 40.0, 28.0, 28.0
- Total Split (%): 30.0%, 100.0%, 70.0%, 70.0%
- Yellow Time (s): 3.5, 3.5, 3.5, 3.5
- All-Red Time (s): 1.0, 1.0, 1.0, 1.0
- Lost Time Adjust (s): 0.0, 0.0, 0.0, 0.0
- Total Lost Time (s): 4.5, 4.5, 4.5, 4.5

### Lead/Lag

- Lead
- Lag
- Lag

### Lead-Lag

- Optimize?: Yes, Yes, Yes

### Recall Mode

- Max, Max, Max, Max

### Act Effct Green (s)

- 7.5, 40.0, 23.5, 23.5

### Actuated g/C Ratio

- 0.19, 1.00, 0.59, 0.59

### v/c Ratio

- 0.17, 0.11, 0.32, 0.12

### Control Delay

- 14.5, 0.1, 4.7, 1.4

### Total Delay

- 14.5, 0.1, 4.7, 1.4

### LOS

- B, A, A, A

### Approach Delay

- 3.3, 4.2

### Approach LOS

- A, A

### Intersection Summary

- Cycle Length: 40
- Actuated Cycle Length: 40
- Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
- Natural Cycle: 40
- Control Type: Pretimed
- Maximum v/c Ratio: 0.32
- Intersection Signal Delay: 3.9
- Intersection LOS: A
- Intersection Capacity Utilization 28.5%

### Analysis Period (min)

- 15

### Splits and Phases

- 3: Nicollet Ave & 35W Access Road
Date: December 16th, 2020
To: Derek Leuer, P.E. -MnDOT
From: Ross Tillman, P.E.
Chloe Weber, EIT
Subject: Regional Solicitation Before and After Study Phase II: HSIP CMF Guide

Project No.: T41.121214

Depending on staffing at various agencies who may apply for HSIP funds, the level of expertise in terms of safety analysis widely varies. In addition, there are times when two applications for a similar project will utilize different CMFs with varying levels of anticipated crash reductions. Based on these factors, there is a desire to simplify the process as well as consolidate a list of CMFs for use to the extent possible. Certain projects will always require further research and analysis using the Highway Safety Manual or CMF Clearinghouse, but a simple guide could satisfy the needs for most other projects.

Our team began by collecting the 2016 and 2018 HSIP project information. Frequency of CMFs utilized was determined as a starting point to understand which CMFs to include in an overall guide. See Table 1.

![Table 1: CMFs applied per category, from 2016 and 2018 application data](image)

Ultimately, the team incorporated all the used CMFs into the guide based on relevancy and overall effort. This information was sorted by CMF to include and compare the details of the CMFs used in those years’ HSIP applications. These details include the value of the CMF, the standard error, if it is listed in the HSM, the star rating, crash type, and crash severity. These details differentiate one CMF from the next and allow applicants to find the CMF that best fits the scenario of the project being applied for. From
there, counterpart CMFs (rural vs. urban, for example) were added from the CMF Clearinghouse to round out the options one might want to consider when choosing a CMF for an HSIP application. The guide was split into two parts to differentiate between CMFs that apply to all/property damage only crashes and those that are focused on injury crashes only.

Lastly, the team developed a simple step by step list for use of the guide and application of CMFs, intended to go along with the guides in future HSIP applications as an attachment. This list walks users through the categories in the guide, as well as highlights specific measures to be aware of when choosing a CMF for a project.
Steps for using the CMF guides and applying CMFs:

1. Look through the project types and sub-types that may be applicable to the project
2. Consider additional qualifiers that may help fit the CMF to the project (often, these are existing conditions of what is to be improved)
3. Choose which area type the project exists in (Urban, Rural, Suburban, etc.)
4. Consider the crash types and crash severities
5. Select a CMF for use that best fit the project as well as context of the area. Some projects may require the use of multiple CMFs to best represent the improvements, although the use of more than two is not recommended for most HSIP projects
6. Ensure you are applying the CMF to the correct crash severities and types. CMFs that cover all severities and types should be used with caution
7. Ensure that the crashes utilized match the timeframe/conditions of the application. Use whole calendar years

See the attached CMF guide information which could be appended to future HSIP solicitation packets.
<table>
<thead>
<tr>
<th>Project Type</th>
<th>Additional Qualifiers</th>
<th>Area Type</th>
<th>CMF</th>
<th>Value</th>
<th>Adjusted Standard Error</th>
<th>Star Rating</th>
<th>In HSM?</th>
<th>Crash type</th>
<th>Crash Severity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median Construction</td>
<td>Uncontrolled Pedestrian Crossing</td>
<td>Urban/Suburban</td>
<td>175</td>
<td>0.54</td>
<td>0.38</td>
<td>3</td>
<td>No</td>
<td>Yes</td>
<td>Veh/Ped</td>
</tr>
<tr>
<td>High Visibility Crosswalk</td>
<td></td>
<td>Urban/Suburban</td>
<td>4123</td>
<td>0.5</td>
<td>NA</td>
<td>2</td>
<td>No</td>
<td>No</td>
<td>Veh/Ped</td>
</tr>
<tr>
<td>Install Shared Path</td>
<td>No Shared Path Present</td>
<td>Rural</td>
<td>926</td>
<td>0.75</td>
<td>NA</td>
<td>1</td>
<td>No</td>
<td>No</td>
<td>Veh/Ped</td>
</tr>
<tr>
<td>Install Bike Lanes</td>
<td>No Bike Facilities Present</td>
<td>Urban</td>
<td>2350</td>
<td>1.05</td>
<td>NA</td>
<td>3</td>
<td>No</td>
<td>No</td>
<td>Veh/Ped</td>
</tr>
<tr>
<td>Install Bike Lanes</td>
<td>No Bike Facilities Present</td>
<td>Rural</td>
<td>4650</td>
<td>0.95</td>
<td>NA</td>
<td>3</td>
<td>No</td>
<td>Yes</td>
<td>Veh/Ped</td>
</tr>
</tbody>
</table>

**Reduced Conflict Intersections**

| Turn Lane | Install Left Turn Lane | Urban | 3950 | 0.8 | NA | 3 | No | All | PDO |
| Turn Lane | Install Left Turn Lane | Rural | 783 | 0.69 | NA | 3 | No | All | PDO |
| Turn Lane | Left Turn Lane on One Major Approach | Rural | 253 | 0.56 | 0.07 | 4 | Yes | All | PDO |
| Turn Lane | Left Turn Lane on Both Approaches | Rural | 248 | 0.52 | 0.09 | 5 | Yes | All | PDO |
| Turn Lane | Improve Angle of Channelized Right Turn Lane | Not Specified | 583 | 0.64 | 0.09 | 5 | No | All | PDO |
| Single Lane Roundabout | Originally Signal Controlled | Rural | 229 | 0.29 | 0.05 | 5 | Yes | All | PDO |
| Single Lane Roundabout | Originally Stop Controlled | Rural | 207 | 0.43 | 0.13 | 4 | No | All | PDO |
| Single Lane Roundabout | Originally Signal Controlled | Urban | 208 | 0.38 | 0.10 | 4 | No | All | PDO |
| Single Lane Roundabout | Originally Signal Controlled, and Non-Controlled | Rural | 9135 | 0.48 | NA | 5 | No | Other | PDO |
| Single Lane Roundabout | Originally Signal Controlled | Rural | 225 | 0.52 | 0.06 | 5 | Yes | All | PDO |
| Median Shoulder | Install Directional Median Openings to Allow Left-Turns and U-Turns | Not Specified | 1516 | 0.49 | NA | 2 | No | All | PDO |
| Signal Head | Add Signal (Additional Primary Head) | Urban | 1414 | 0.72 | NA | 3 | No | All | PDO |
| Signal Head | Add Signal (Additional Primary Head) | Rural | 1416 | 0.69 | NA | 3 | No | All | PDO |
| Signal Head | Convert Signal From Pedestal-Mounted to Mast Arm | Not Specified | 1420 | 0.51 | NA | 2 | No | All | PDO |
| Signal Head | Convert Signal From Pedestal-Mounted to Mast Arm | Rural | 1429 | 0.49 | NA | 2 | No | All | PDO |
| Signal Head | Add Signal (one near each approach lane) | Urban | 1485 | 0.94 | NA | 2 | No | All | PDO |
| Signal Head | Replace 8" Red with 12" | Not Specified | 2334 | 0.97 | NA | 3 | No | All | PDO |
| Intersection Traffic Control | Change Permission Left to Protected or Protected/Permissive | Urban | 4340 | 0.08 | NA | 2 | No | All | PDO |
| Intersection Traffic Control | Change Permission to Flashing Yellow Arrow | Urban | 465 | 0.49 | NA | 2 | No | All | PDO |
| Intersection Traffic Control | Install Intersection Traffic Control System | Urban/Suburban | 8760 | 0.58 | NA | 4 | No | All | PDO |
| Intersection Traffic Control | Install Intersection Traffic Control System | Rural | 5727 | 0.65 | NA | 4 | No | All | PDO |
| Intersection Traffic Control | Install Traffic Signal Control | Urban/Suburban | 6058 | 0.70 | NA | 4 | No | All | PDO |
| Intersection Traffic Control | Change from Permissive Only to Flashing Yellow Arrow | Urban | 7088 | 0.018 | NA | 2 | No | All | PDO |
| Intersection Traffic Control | Change from Permissive Only to Flashing Yellow Arrow | Rural | 5089 | 0.42 | NA | 3 | No | All | PDO |
| Intersection Traffic Control | Change Number of Traffic Signal Cycles Per Hour on Arterial with Signal Coordination From X to Y | Urban/Suburban | 3072 | e^-0.0444(Y -X) | NA | 3 | No | Rear End | PDO |
| Advanced Technology and ITS | Install Red- Light Indicator Lights | Not Specified | 8824 | 0.713 | NA | 3 | No | All | PDO |
| Access Management | Create Directional Median Openings to Allow Left-Turns and U-Turns | Not Specified | 1516 | 0.49 | NA | 2 | No | All | PDO |

**Roadway**

<table>
<thead>
<tr>
<th>Roadway</th>
<th>Safety Improvement</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Roadway</td>
<td>Lighting</td>
<td>Illumination</td>
<td>Not Specified</td>
<td>496</td>
<td>0.69</td>
<td>0.38</td>
<td>5</td>
<td>Yes</td>
<td>Other</td>
</tr>
<tr>
<td>Roadway</td>
<td>Wet Reflective Pavement Markings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roadway</td>
<td>Median</td>
<td>Install Centerline and Shoulder Rumble Strips</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roadway</td>
<td>Road Diet</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shoulder Treatments</td>
<td>Previously Narrow Paved Shoulder</td>
<td>Rural</td>
<td>7605</td>
<td>0.65</td>
<td>NA</td>
<td>4</td>
<td>Yes</td>
<td>Yes</td>
<td>PDO</td>
</tr>
</tbody>
</table>

*Minnesota study underway
**Results in Minnesota have indicated an increase in crashes
***See section 13.4.2.4 in the HSM for additional shoulder CMF information
### CMF Guide (Injury Crashes)

<table>
<thead>
<tr>
<th>Project Type</th>
<th>Additional Qualifiers</th>
<th>Area Type</th>
<th>CMF</th>
<th>Value</th>
<th>Adjusted Standard Error</th>
<th>Star Rating</th>
<th>In HSM?</th>
<th>Crash type</th>
<th>Crash Severity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pedestrian</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Median Treatment for Ped/Bike Safety</td>
<td>Install Various Treatments Such as Fencing, Planters, Pedestrian Islands</td>
<td>Urban</td>
<td>9121</td>
<td>0.91</td>
<td>NA</td>
<td>4</td>
<td>No</td>
<td>All</td>
<td>K, A, B</td>
</tr>
<tr>
<td>Install-Bike Lanes</td>
<td></td>
<td>Urban</td>
<td>3240</td>
<td>0.46</td>
<td>NA</td>
<td>2</td>
<td>No</td>
<td>Vehicle</td>
<td>K, A, B, C</td>
</tr>
<tr>
<td>Install-Bike Lanes</td>
<td>No Bike Facilities Present</td>
<td>Urban</td>
<td>3240</td>
<td>0.46</td>
<td>NA</td>
<td>2</td>
<td>No</td>
<td>Vehicle</td>
<td>K, A, B, C</td>
</tr>
<tr>
<td>*<em>Reduced Conflict Intersections</em></td>
<td></td>
<td>Rural</td>
<td>5595</td>
<td>0.14</td>
<td>NA</td>
<td>2</td>
<td>No</td>
<td>All</td>
<td>A</td>
</tr>
<tr>
<td>J-Turn</td>
<td>Previously Two Way Stop Controlled</td>
<td>Urban</td>
<td>1948</td>
<td>0.79</td>
<td>NA</td>
<td>3</td>
<td>No</td>
<td>All</td>
<td>K, A, B, C</td>
</tr>
<tr>
<td>Turn Lane</td>
<td>Install Left Turn Lane</td>
<td>Urban</td>
<td>3902</td>
<td>0.73</td>
<td>NA</td>
<td>3</td>
<td>No</td>
<td>All</td>
<td>K, A, B, C</td>
</tr>
<tr>
<td>Turn Lane</td>
<td>Install Left Turn Lane</td>
<td>Rural</td>
<td>3902</td>
<td>0.73</td>
<td>NA</td>
<td>3</td>
<td>No</td>
<td>All</td>
<td>K, A, B, C</td>
</tr>
<tr>
<td>Turn Lane</td>
<td>J-Turn Lane on One Major Approach</td>
<td>Rural</td>
<td>3902</td>
<td>0.73</td>
<td>NA</td>
<td>3</td>
<td>No</td>
<td>All</td>
<td>K, A, B, C</td>
</tr>
<tr>
<td>Turn Lane</td>
<td>J-Turn Lane on Both Major Approaches</td>
<td>Rural</td>
<td>3902</td>
<td>0.73</td>
<td>NA</td>
<td>3</td>
<td>No</td>
<td>All</td>
<td>K, A, B, C</td>
</tr>
<tr>
<td>Turn Lane</td>
<td>J-Turn Lane on One Major Approach</td>
<td>All</td>
<td>3902</td>
<td>0.73</td>
<td>NA</td>
<td>3</td>
<td>No</td>
<td>All</td>
<td>K, A, B, C</td>
</tr>
<tr>
<td>Lighting</td>
<td>Provide Intersection Illumination</td>
<td>Not Specified</td>
<td>3902</td>
<td>0.73</td>
<td>NA</td>
<td>3</td>
<td>No</td>
<td>All</td>
<td>K, A, B, C</td>
</tr>
<tr>
<td>Single Lane Roundabout</td>
<td>Originally Stop Controlled</td>
<td>All</td>
<td>3902</td>
<td>0.73</td>
<td>NA</td>
<td>3</td>
<td>No</td>
<td>All</td>
<td>K, A, B, C</td>
</tr>
<tr>
<td>Single Lane Roundabout</td>
<td>Originally Stop Controlled</td>
<td>Rural</td>
<td>3902</td>
<td>0.73</td>
<td>NA</td>
<td>3</td>
<td>No</td>
<td>All</td>
<td>K, A, B, C</td>
</tr>
<tr>
<td>Single Lane Roundabout</td>
<td>Originally Stop Controlled</td>
<td>Rural</td>
<td>3902</td>
<td>0.73</td>
<td>NA</td>
<td>3</td>
<td>No</td>
<td>All</td>
<td>K, A, B, C</td>
</tr>
<tr>
<td>Single Lane Roundabout</td>
<td>Originally Stop Controlled</td>
<td>All</td>
<td>3902</td>
<td>0.73</td>
<td>NA</td>
<td>3</td>
<td>No</td>
<td>All</td>
<td>K, A, B, C</td>
</tr>
<tr>
<td>Multi-Lane Roundabout</td>
<td>Originally No Control, YIELD, TWSC, AWSC, or Signal Control</td>
<td>All</td>
<td>3902</td>
<td>0.73</td>
<td>NA</td>
<td>3</td>
<td>No</td>
<td>All</td>
<td>K, A, B, C</td>
</tr>
<tr>
<td>Multi-Lane Roundabout</td>
<td>Originally No Control, YIELD, TWSC, AWSC, or Signal Control</td>
<td>Rural</td>
<td>3902</td>
<td>0.73</td>
<td>NA</td>
<td>3</td>
<td>No</td>
<td>All</td>
<td>K, A, B, C</td>
</tr>
<tr>
<td>Multi-Lane Roundabout</td>
<td>Originally AWSC</td>
<td>All</td>
<td>3902</td>
<td>0.73</td>
<td>NA</td>
<td>3</td>
<td>No</td>
<td>All</td>
<td>K, A, B, C</td>
</tr>
<tr>
<td>Roadway</td>
<td>Roadway</td>
<td>All</td>
<td>3902</td>
<td>0.73</td>
<td>NA</td>
<td>3</td>
<td>No</td>
<td>All</td>
<td>K, A, B, C</td>
</tr>
<tr>
<td>Median</td>
<td>Install Cable Median Barrier (High Tension)</td>
<td>Rural</td>
<td>3902</td>
<td>0.73</td>
<td>NA</td>
<td>3</td>
<td>No</td>
<td>All</td>
<td>K, A, B, C</td>
</tr>
<tr>
<td>Shoulder Treatments</td>
<td>Previously Narrow Paved Shoulder</td>
<td>Urban</td>
<td>0.705</td>
<td>0.74</td>
<td>NA</td>
<td>3</td>
<td>No</td>
<td>Fixed Object, Head on, Run Off Road, Sideswipe</td>
<td>A, B, C</td>
</tr>
</tbody>
</table>

*Minnesota study underway

Injury crash CMF used for analysis
## Traffic Safety Benefit-Cost Calculation

**Highway Safety Improvement Program (HSIP) Reactive Project**

### A. Roadway Description

<table>
<thead>
<tr>
<th>Route</th>
<th>District</th>
<th>County</th>
</tr>
</thead>
<tbody>
<tr>
<td>TH 13</td>
<td>________</td>
<td>________</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Begin RP</th>
<th>End RP</th>
<th>Miles</th>
</tr>
</thead>
<tbody>
<tr>
<td>________</td>
<td>________</td>
<td>________</td>
</tr>
</tbody>
</table>

**Location**: Intersection of TH 13 and Nicollet Ave - Burnsville

### B. Project Description

**Proposed Work**: Convert Intersection to Grade Separated Jughandle (Quadrant Interchange)

**Project Cost**: $42,768,000  
**Installation Year**: 2026  
**Project Service Life**: 25 years  
**Traffic Growth Factor**: ________

* exclude Right of Way from Project Cost

### C. Crash Modification Factor

<table>
<thead>
<tr>
<th>Crash Type</th>
<th>Crash Modification Factor</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fatal (K) Crashes</td>
<td>0.37</td>
<td>MnDOT HSIP CMF Guide - Multi-Lane Roundabout</td>
</tr>
<tr>
<td>Serious Injury (A) Crashes</td>
<td>0.37</td>
<td></td>
</tr>
<tr>
<td>Moderate Injury (B) Crashes</td>
<td>0.37</td>
<td></td>
</tr>
<tr>
<td>Possible Injury (C) Crashes</td>
<td>0.37</td>
<td></td>
</tr>
<tr>
<td>Property Damage Only Crashes</td>
<td>1.06</td>
<td><a href="http://www.CMFclearinghouse.org">www.CMFclearinghouse.org</a></td>
</tr>
</tbody>
</table>

### D. Crash Modification Factor (optional second CMF)

<table>
<thead>
<tr>
<th>Crash Type</th>
<th>Crash Modification Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fatal (K) Crashes</td>
<td></td>
</tr>
<tr>
<td>Serious Injury (A) Crashes</td>
<td></td>
</tr>
<tr>
<td>Moderate Injury (B) Crashes</td>
<td></td>
</tr>
<tr>
<td>Possible Injury (C) Crashes</td>
<td></td>
</tr>
<tr>
<td>Property Damage Only Crashes</td>
<td></td>
</tr>
</tbody>
</table>

Reference: www.CMFclearinghouse.org

### E. Crash Data

<table>
<thead>
<tr>
<th>Begin Date</th>
<th>End Date</th>
<th>Data Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/1/2019</td>
<td>12/31/2021</td>
<td>MnCMAT 2 (Data below reflects 39% of total crashes between 2019-2021 at TH 13/Nicollet Ave)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Crash Severity</th>
<th>All manners of collision</th>
<th>&lt; optional 2nd CMF &gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>K crashes</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>A crashes</td>
<td>0.39</td>
<td></td>
</tr>
<tr>
<td>B crashes</td>
<td>0.78</td>
<td></td>
</tr>
<tr>
<td>C crashes</td>
<td>1.95</td>
<td></td>
</tr>
<tr>
<td>PDO crashes</td>
<td>9.75</td>
<td></td>
</tr>
</tbody>
</table>

### F. Benefit-Cost Calculation

<table>
<thead>
<tr>
<th>Benefit (present value)</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>$3,259,434</td>
<td>$42,768,000</td>
</tr>
</tbody>
</table>

**B/C Ratio = 0.08**

Proposed project expected to reduce 1 crashes annually, 1 of which involving fatality or serious injury.
### F. Analysis Assumptions

<table>
<thead>
<tr>
<th>Crash Severity</th>
<th>Crash Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>K crashes</td>
<td>$1,440,000</td>
</tr>
<tr>
<td>A crashes</td>
<td>$720,000</td>
</tr>
<tr>
<td>B crashes</td>
<td>$220,000</td>
</tr>
<tr>
<td>C crashes</td>
<td>$120,000</td>
</tr>
<tr>
<td>PDO crashes</td>
<td>$13,000</td>
</tr>
</tbody>
</table>

**Link:** [mndot.gov/planning/program/appendix_a.html](mndot.gov/planning/program/appendix_a.html)

**Real Discount Rate:** 1.2%

**Traffic Growth Rate:** 0.5%

**Project Service Life:** 25 years

### G. Annual Benefit

<table>
<thead>
<tr>
<th>Crash Severity</th>
<th>Crash Reduction</th>
<th>Annual Reduction</th>
<th>Annual Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>K crashes</td>
<td>0.00</td>
<td>0.00</td>
<td>$0</td>
</tr>
<tr>
<td>A crashes</td>
<td>0.25</td>
<td>0.08</td>
<td>$58,968</td>
</tr>
<tr>
<td>B crashes</td>
<td>0.49</td>
<td>0.16</td>
<td>$36,036</td>
</tr>
<tr>
<td>C crashes</td>
<td>1.23</td>
<td>0.41</td>
<td>$49,140</td>
</tr>
<tr>
<td>PDO crashes</td>
<td>-0.60</td>
<td>-0.20</td>
<td>-$2,620</td>
</tr>
</tbody>
</table>

**Total:** $141,525

### H. Amortized Benefit

<table>
<thead>
<tr>
<th>Year</th>
<th>Crash Benefits</th>
<th>Present Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2026</td>
<td>$141,525</td>
<td>$141,525</td>
</tr>
<tr>
<td>2027</td>
<td>$142,232</td>
<td>$140,546</td>
</tr>
<tr>
<td>2028</td>
<td>$142,943</td>
<td>$139,573</td>
</tr>
<tr>
<td>2029</td>
<td>$143,658</td>
<td>$138,608</td>
</tr>
<tr>
<td>2030</td>
<td>$144,376</td>
<td>$137,649</td>
</tr>
<tr>
<td>2031</td>
<td>$145,098</td>
<td>$136,697</td>
</tr>
<tr>
<td>2032</td>
<td>$145,824</td>
<td>$135,752</td>
</tr>
<tr>
<td>2033</td>
<td>$146,553</td>
<td>$134,813</td>
</tr>
<tr>
<td>2034</td>
<td>$147,286</td>
<td>$133,880</td>
</tr>
<tr>
<td>2035</td>
<td>$148,022</td>
<td>$132,954</td>
</tr>
<tr>
<td>2036</td>
<td>$148,762</td>
<td>$132,034</td>
</tr>
<tr>
<td>2037</td>
<td>$149,506</td>
<td>$131,121</td>
</tr>
<tr>
<td>2038</td>
<td>$150,253</td>
<td>$130,214</td>
</tr>
<tr>
<td>2039</td>
<td>$151,005</td>
<td>$129,313</td>
</tr>
<tr>
<td>2040</td>
<td>$151,760</td>
<td>$128,419</td>
</tr>
<tr>
<td>2041</td>
<td>$152,519</td>
<td>$127,531</td>
</tr>
<tr>
<td>2042</td>
<td>$153,281</td>
<td>$126,649</td>
</tr>
<tr>
<td>2043</td>
<td>$154,048</td>
<td>$125,773</td>
</tr>
<tr>
<td>2044</td>
<td>$154,818</td>
<td>$124,903</td>
</tr>
<tr>
<td>2045</td>
<td>$155,592</td>
<td>$124,039</td>
</tr>
<tr>
<td>2046</td>
<td>$156,370</td>
<td>$123,181</td>
</tr>
<tr>
<td>2047</td>
<td>$157,152</td>
<td>$122,329</td>
</tr>
<tr>
<td>2048</td>
<td>$157,937</td>
<td>$121,482</td>
</tr>
<tr>
<td>2049</td>
<td>$158,727</td>
<td>$120,642</td>
</tr>
<tr>
<td>2050</td>
<td>$159,521</td>
<td>$119,808</td>
</tr>
</tbody>
</table>

**Total:** $3,259,434
Project Name: Minnesota Highway 13 & Nicollet Avenue Mobility Improvement Project

Applicant: City of Burnsville, Minnesota

Location: Dakota County

Application Category: Roadway Strategic Capacity

Funding Information:
Requested Award Amount: $10M
Local Match: $22.8M
Project Total: $32.8M (2026 dollars)

Additional Funding Sources:
• Pursuing $25M RAISE Grant
• $2.6M commitment from City of Burnsville & Dakota County

Primary Contact:
Jen Desrude
City Engineer
952-895-4544
jen.desrude@burnsvillemn.gov

Project Description
The City of Burnsville, Minnesota is pursuing funds to grade separate the intersection of Minnesota Highway 13 and Nicollet Avenue, the northern entrance to the Burnsville Heart of the City District, a mixed-use transit-oriented area with a growing number of jobs, residents, and commercial opportunities.

This grade separation is one part of a greater suite of mobility and safety improvements along Highway 13 between the cities of Savage and Burnsville. As a whole, these improvements will have widespread benefits for traffic safety, mobility, and accessibility for transit, pedestrians, bicyclists, and other traffic along the corridor. The Highway 13 and Nicollet Avenue intersection today is plagued with safety and operational issues, and the project would address these issues via the following design elements:

A grade separated crossing for Nicollet Avenue over Highway 13 and a new offset traffic signal to manage access between Highway 13 and Nicollet Avenue

A grade-separated crossings for cyclists and pedestrians between the MVTA Transit Station and Metro Orange Line Station

Direct access to Northbound I-35W access from Nicollet Avenue

Project Benefits
This project would provide a grade-separated, multi-modal crossing of Highway 13 that will improve safety and operations for all road users. The improvements would also significantly decrease congestion and delay at the intersection, greatly benefitting MVTA and Orange Line transit operations. The grade separated shared use path would remove a major barrier to accessing jobs, transit stations, and services in the area, and significantly improve bikeability and walkability.

Regional Significance/Context
The project location is at the northern gateway to Burnsville’s Heart of the City District, near an area of concentrated poverty. The intersection stands at odds with the district’s priority on investments that support community, transit, and active lifestyles. The intersection is a barrier to accessing transit service, and congestion and delays impact transit reliability. Burnsville has long terms plans for more high-density TOD-style development in the region. Disruptions along Highway 13 impact freight operations downstream at the Ports of Savage.

Project Development and Status
This project was identified through the MnDOT Highway 13 Corridor Study, $2.1M study to identify solutions to operational and safety issues along the corridor. Through this study, a hybrid environmental assessment for the proposed redesign of the intersection has already been completed, and community engagement has begun. Interest in a redesign is high, and community members are interested in improvements that prioritize safety, accessibility, and reduce congestions and delays. The project is pursuing funding through a RAISE Grant and Regional Solicitation.

Learn more at: https://burnsvillemn.gov/13Nicollet
The Highway 13 & Nicollet Avenue project will provide mobility and safety improvements that will have widespread benefits for traffic safety, mobility, and accessibility for regional transit, pedestrians, bicyclists, and other traffic within Burnsville's Heart of the City.

**Current Pursuit:** $10M from Metropolitan Council Regional Solicitation

**Committed Funds:** $2.6M from the City of Burnsville and Dakota County

**Project Website:** [https://burnsvillemn.gov/13Nicollet](https://burnsvillemn.gov/13Nicollet)

**Project Need:**
- Highway 13 is a principal arterial carrying 38,000 vehicles per day (1,200 heavy commercial) and is a key freight route between river crossings, commercial and employment centers, and the Ports of Savage.
- The Highway 13 and Nicollet Avenue intersection operations are failing today and traffic is anticipated to increase to 44,000 per day by 2040 (+6,000).
- The Heart of the City land use emphasizes transit-oriented development with walkable neighborhoods and affordable housing options.
- The Minnesota Valley Transit Authority (MVTA) and MetroTransit Orange Line Station with routes to Minneapolis and Saint Paul.
- The project area saw 104 crashes from 2016-2020 (2.6x statewide average).
- Access to Burnsville High School (23% African American and 19% Hispanic students).

**Project Benefits:**
- Provide a grade separated, multi-modal crossing of Highway 13 for improved safety and operations of commuters, freight, transit, pedestrians, and cyclists.
- Significantly decreases congestion and delay within the project area.
- Improves bikeability and walkability increasing options for active transportation and public transportation.
- Creates better access to jobs and daily services.
- Removes a significant barrier for older and mobility handicapped residents.
- Provides access to regional recreational resources.

**Schedule**

<table>
<thead>
<tr>
<th>Year</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
<th>2026-2027</th>
</tr>
</thead>
<tbody>
<tr>
<td>Update</td>
<td>Preliminary Design</td>
<td>Final Design</td>
<td>Construction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental Management Plan</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Funding Need**

**Secured** $2.6M

**Total Investment Needed** $42.8M

**Inflated to 2026 dollars**

**10% 20% 30% 40% 50% 60% 70% 80% 90%**

**Hybrid Environmental Assessment Complete!**
Dear Secretary Buttigieg,

This letter is in reference to the Rebuilding American Infrastructure with Sustainability and Equity application for the grade separated crossing for Nicollet Avenue at Trunk Highway 13 in the city of Burnsville. This project is a locally led project on MnDOT’s trunk highway system. The proposed project would consist of a Quadrant Intersection arrangement, with Nicollet Avenue grade separated over a 4-lane TH 13, a traffic signal on TH 13 offset to the east of Nicollet Avenue, a roadway from the signal linking to a traffic circle on Nicollet south of the TH 13 corridor, a traffic signal on Nicollet on the north side of TH 13 providing access to an I-35W northbound on-ramp, and grade-separated pedestrian accommodations on both sides of Nicollet Avenue, linking the transit stations and extending the regional trail over TH 13. This arrangement will allow better traffic performance for both Nicollet Avenue and TH 13 while accomplishing Burnsville’s goals to provide a grade-separated non-motorized transportation crossing of TH 13 and improved access to transit stations at this important transit-oriented development location.

Currently the total project cost estimate is $29 million. The city of Burnsville has identified $3.9 million for this project. MnDOT currently does not have this project included in the State Transportation Improvement Program (STIP) or funding identified in MnDOT’s 10-year Capital Highway Investment Plan (CHIP). It is MnDOT’s assumption at this time that the local agency will be responsible for delivery costs and funding gaps. This project is planned for construction in 2026.

MnDOT looks forward to continued cooperation with the city of Burnsville as this effort moves forward to improve this transportation need.

Thank you for your interest and support to improve Minnesota’s transportation system.

Sincerely,

Nancy Daubenberger, P.E.
Interim Commissioner, Minnesota Department of Transportation

CC Regina Dean, Assistant Community Development Director, City of Burnsville
Michael Barnes, MnDOT District Engineer

Equal Opportunity Employer
July 7, 2021

Mr. Pete Buttigieg  
Secretary of Transportation  
1200 New Jersey Ave, SE  
Washington, DC 20590

RE: 2021 Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Infrastructure Grant submittal for Minnesota Highway 13 / Nicollet Avenue

Dear Secretary Buttigieg,

First, I want to again Congratulate you on your appointment as Secretary of Transportation. It was a pleasure to work with you at the United States Conference of Mayors as colleagues advocating for our cities. I am so proud of you and all that you have accomplished and continue to do to help cities and our country. Thank you.

I want to thank you and Secretary Mayor Marty Walsh for talking with us Mayors on the Bi-partisan Infrastructure Framework Bill. It was important for us to hear from you and rally together as a non-partisan group to support this bill.

Secretary Mayor Pete, I have the pleasure to serve as Mayor of a diverse and growing community in Burnsville, Minnesota. We’re a city that plans for long-term health and stability and the well-being of our residents, businesses and visitors. As a fully developed city, Burnsville is strategically redeveloping in key areas to allow for higher densities and with a mix of land uses. The Heart of the City District is among the most important of these. This area includes affordable and lifecycle-appropriate housing, jobs, retail, amenities and access to public transportation in a single, convenient location. This vital area is strongly integrated into regional transportation networks, including Interstate-35W, Minnesota Highway 13, the Minnesota Valley Transit Authority hub at Burnsville Transit Center, and the soon-to-open Metro Transit Orange Line Bus Rapid Transit service.

We’re proud of what Heart of the City has become over the past 20 years of careful planning, and public and private investment. We think this is a great model for other growing suburban communities in the Twin Cities Metro and elsewhere in the U.S. Today, Heart of the City hosts a variety of uses, two regional transit stations, and is increasingly a great place to walk and bicycle. Yet the intersection of Highway 13 and Nicollet Avenue – the gateway to the northern end of the district – poses serious problems. Traffic congestion and safety here are among the region’s worst, and it is extremely difficult and uncomfortable for
pedestrians and bicyclists to cross the high volume, high speed highway to access public transportation, job opportunities, and other services.

The proposed intersection improvements at Highway 13 and Nicollet Avenue will greatly improve traffic operations and safety, benefit transit operations and access to stations, and provide a grade-separated crossing for bicyclists and pedestrians. It is part of achieving Burnsville’s long-term vision for Heart of the City as a mixed-use, pedestrian-friendly and transit-oriented area.

We are confident that this investment will pay dividends to support the continued vitality of this area and encourage people to use Public Transportation. The City of Burnsville is committed to the careful design and effective implementation of this project, and to meeting our maintenance obligations into the future. We are excited about the positive changes this project can bring to Burnsville.

Sincerely,

Elizabeth B. Kautz
Mayor
July 8, 2021

Jen Desrude PE
Burnsville City Engineer
100 Civic Center Parkway

Dear Ms. Desrude,

As President of the Burnsville Chamber of Commerce, I am happy to express the Chamber’s support for the City of Burnsville’s federal RAISE grant application for the intersection of Nicollet Avenue and Minnesota Highway 13.

As a local chamber, we work hard to keep our members informed and engaged with local transportation issues through our Business Transportation Forum and Public Policy Committee. We have been active partners on numerous transportation projects, providing insight from Burnsville’s business community and communicating needs to transportation project managers.

The Chamber has been involved for several years in Highway 13 planning issues and in the continued development of the Heart of the City District, as well as transportation planning related to the Minnesota Valley Transit Agency’s Burnsville Transit Center and the new Metro Transit Orange Line Station set to open soon. We strongly support the effort to improve accessibility and safety along Highway 13 at Nicollet Avenue. Improved access and a better front door to the Heart of the City District is important for its continued success. And as the district has become more walkable in recent years, the desire for better walking and bicycling facilities has become more important. The new sidewalks and grade-separated connections for people to cross Highway 13 will greatly improve access between Heart of the City District and the two transit stations, connections for transit riders between the two stations, and access across the busy highway to retail and office areas north of Highway 13. This project will better link public transportation investments to job-rich areas of Burnsville.

These factors are important for Burnsville’s business community and the ongoing vitality of Heart of the City and surrounding business districts, therefore, we support of the City of Burnsville’s RAISE application and are excited about the positive changes it can bring to this vital and growing area of the city.

Jennifer Harmening
President
Burnsville Chamber of Commerce
Direct: 952-898-5641
General 952-435-6000
Email: jennifer@burnsvillechamber.com
April 12, 2022

Elaine Koutsoukos, Transportation Coordinator
Transportation Advisory Board
Metropolitan Council
390 Robert Street North
St. Paul, MN 55101

RE: TAB Regional Solicitation Resolution of Support for Trunk Highway 13 and Nicollet Avenue Mobility Project

Dear Ms. Koutsoukos:

Please see the attached Dakota County Board resolution regarding the City of Burnsville’s Regional Solicitation federal funding application for the grade separation of Nicollet Avenue at Trunk Highway (TH) 13.

Though neither roadway is under Dakota County’s jurisdiction, TH 13 is important mobility corridor for residents and businesses in the County and region. Furthermore, the intersection of TH 13 and Nicollet support two important transit hubs, the MVTA Burnsville Transit Station and Metro Transit’s Heart of the City Orange Line station.

Dakota County appreciates the City’s efforts to secure funding for this important multi-modal project.

Sincerely,

Erin Laberee, P.E.
County Engineer
Resolution No. 22-144

Motion by Commissioner Hamann-Roland

Second by Commissioner Atkins

I, Jeni Reynolds, Clerk to the Board of the County of Dakota, State of Minnesota, do hereby certify that I have compared the foregoing copy of a resolution with the original minutes of the proceedings of the Board of County Commissioners, Dakota County, Minnesota, at their session held on the 5th day of April 2022, now on file in the County Administration Department, and have found the same to be a true and correct copy thereof.

Witness my hand and official seal of Dakota County this 5th day of April 2022.

Jeni Reynolds
Clerk to the Board

Boards of County Commissioners
Dakota County, Minnesota

April 5, 2022

Resolution No. 22-144

Motion by Commissioner Hamann-Roland

Second by Commissioner Atkins

Approval Of Grant Application Submittals For 2022 Regional Federal Funding Solicitation And Rebuilding American Infrastructure With Sustainability And Equity Grant Program

WHEREAS, the Transportation Advisory Board (TAB) is requesting project submittals for federal funding under the Fixing America’s Surface Transportation (FAST) Act; and

WHEREAS, the U.S. Department of Transportation is requesting project submittals for Rebuilding American Infrastructure with Sustainability and Equity (RAISE) grant program; and

WHEREAS, the FAST federal programs fund up to 80 percent of project construction costs; and

WHEREAS, the RAISE federal grant program in rural areas funds up to 100 percent of project costs and 80 percent of project costs in urban areas; and

WHEREAS, federal funding of projects reduces the burden, local taxpayers, for regional improvements; and

WHEREAS, project submittals are due on April 14, 2022; and

WHEREAS, all projects proposed are consistent with the adopted Dakota County Comprehensive Plan; and

WHEREAS, subject to federal funding award, the Dakota County Board of Commissioners would be asked to consider authorization to execute a grant agreement at a future meeting.

NOW, THEREFORE, BE IT RESOLVED, That the Dakota County Board of Commissioners hereby approves the following County led projects for submittal to TAB for federal funding:

1) County State Aid Highway (CSAH) 46 (160th Street/Brandel Drive) from Trunk Highway (TH) 3 to TH 52 in Coates, Empire Township and Rosemount
2) CSAH 46 (160th Street) from 1,300 feet west of General Sieben Drive to Highway 61 in Hastings
3) CSAH 42 (150th Street) from Redwood Drive to 147th Street in Apple Valley
4) CSAH 26 (Lone Oak Road) from TH 13 to Interstate 35E in Eagan
5) CSAH 46 (160th Street) at CSAH 85 (Goodwin Avenue) in Nininger and Vermillion Townships
6) CSAH 60 (185th Street) from CSAH 50 (Kenwood Trail) to Ipava Avenue in Lakeville
7) CSAH 63 (Delaware Avenue) Trail from TH 62 to Marie Avenue in Mendota Heights and West St. Paul – Safe Routes To School

STATE OF MINNESOTA
County of Dakota

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slavik</td>
<td>X</td>
</tr>
<tr>
<td>Gaylord</td>
<td>X</td>
</tr>
<tr>
<td>Halverson</td>
<td>X</td>
</tr>
<tr>
<td>Atkins</td>
<td>X</td>
</tr>
<tr>
<td>Workman</td>
<td>Absent</td>
</tr>
<tr>
<td>Holberg</td>
<td>X</td>
</tr>
<tr>
<td>Hamann-Roland</td>
<td>X</td>
</tr>
</tbody>
</table>

I, Jeni Reynolds, Clerk to the Board of the County of Dakota, State of Minnesota, do hereby certify that I have compared the foregoing copy of a resolution with the original minutes of the proceedings of the Board of County Commissioners, Dakota County, Minnesota, at their session held on the 5th day of April 2022, now on file in the County Administration Department, and have found the same to be a true and correct copy thereof.

Witness my hand and official seal of Dakota County this 5th day of April 2022.

Jeni Reynolds
Clerk to the Board
BE IT FURTHER RESOLVED, That the Dakota County Board of Commissioners hereby supports the following city led submittals to TAB for federal funding:

1) Nicollet Avenue and TH 13 interchange in Burnsville
2) CSAH 9 (Dodd Boulevard) pedestrian overpass at 147th Street in Apple Valley – Transit Modernization
3) CSAH 46 (160th Street/Brandel Drive) from Trunk Highway (TH) 3 to TH 52 in Coates, Empire Township, and Rosemount
4) Mississippi River Greenway Trail, Rosemount east segment

; and

BE IT FURTHER RESOLVED, That the Dakota County Board of Commissioners hereby approves the following County led project for submittal to U.S. Department of Transportation for the RAISE grant program:

1) County State Aid Highway (CSAH) 46 (160th Street/Brandel Drive) from Trunk Highway (TH) 3 to TH 52 in Coates, Empire Township, and Rosemount
2) Mississippi River Greenway Trail, Rosemount east segment

; and

BE IT FURTHER RESOLVED, That the Dakota County Board of Commissioners hereby supports the following city led submittal to U.S. Department of Transportation for the RAISE grant program:

1) TH 13 and Nicollet Avenue grade-separated intersection in Burnsville

; and

BE IT FURTHER RESOLVED, That, subject to federal funding award of the city-led projects, the Dakota County Board of Commissioners will provide the local match for regional greenway projects and for non-greenway projects will provide Dakota County’s share of the matching funds consistent with Dakota County transportation cost-share policies.
July 6, 2021

Jen Desrude, PE
Burnsville City Engineer
100 Civic Center Parkway
Burnsville, MN 55337

RE: 2021 Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Infrastructure Grant submittal for Minnesota Highway 13 / Nicollet Avenue

Dear Ms. Desrude:

Metro Transit extends its support for the City of Burnsville’s proposed intersection improvements at Minnesota Highway 13 and Nicollet Avenue and your application for federal RAISE Infrastructure Grant funding. Metro Transit is finishing construction of the METRO Orange Line BRT Heart of the City Station, immediately adjacent to this intersection. The improvements proposed will enhance the pedestrian and bicycle environment for the Heart of the City Area and between the Orange Line Station and the Minnesota Valley Transit Authority’s Burnsville Transit Center – located across Highway 13. This will help connect and support ridership on the new Orange Line service and other transit routes. Overall, this project will improve connections and access the Heart of the City BRT Station.

Opening in late 2021, Orange Line is a 17-mile planned bus rapid transit service that will connect Burnsville to Minneapolis along I-35W. It will provide frequent, all-day service in both directions, seven days a week. It is intended to provide competitive running times for station-to-station trips and will offer an attractive and affordable transportation option for people traveling north and south along the Interstate corridor, particularly to reach job centers like Burnsville Heart of the City and Downtown Minneapolis.

Federal funds including FTA Small Starts and Congestion Management and Air Quality Programs comprise the majority of the Orange Line’s capital financing, but funding for the project is a strong collaborative effort among state and local program partners, including the State of Minnesota, Hennepin County, Metropolitan Council, Dakota County, and the Counties Transit Improvement Board.

Metro Transit appreciates your efforts to secure funding for intersection improvements at this location and looks forward to continued coordination as the project progresses.

Respectfully,

Wes Kooistra
General Manager
June 29, 2021

Jen Desrude
Burnsville City Engineer
100 Civic Center Parkway
Burnsville, MN 55337

RE: 2021 Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Infrastructure Grant submittal for Minnesota Highway 13 / Nicollet Avenue

Dear Ms. Desrude:

The Minnesota Valley Transit Authority (MVTA) extends its support for the City of Burnsville’s proposed intersection improvements at Minnesota Highway 13 and Nicollet Avenue and your application for federal RAISE infrastructure Grant funding. Overall, this project will improve connections and access at MVTA’s busiest transit hub, Burnsville Transit Station. MVTA’s highest ridership express and local routes (460/444) serve Burnsville Transit Station, providing over 630,000 rides in 2019. Currently, over 150 trips operate out of this location on a daily basis, with pre-COVID levels nearing 260 daily trips.

MVTA appreciates your efforts to secure funding for intersection improvements at this location and looks forward to continued coordination as the project progresses.

Respectfully,

Luther Wynder
Chief Executive Officer
Minnesota Valley Transit Authority
April 5, 2022

Jen Desrude, PE
Burnsville City Engineer
100 Civic Center Parkway
Burnsville, MN 55337

RE: Support of the TH 13 and Nicollet Avenue Mobility Improvement Project’s Funding Pursuit

Dear Ms. Desrude:

Please accept this letter in support of the TH 13 and Nicollet Avenue Mobility Improvement Project’s current funding pursuit. We have been made aware of the City of Burnsville’s efforts to reconstruct this intersection to provide a grade separated, multi-modal crossing of Highway 13 for improved safety and operations of commuters, freight, transit, pedestrians, and cyclists. We believe this project will reduce congestion delays and create better access to jobs and services in our region.

The proposed project will increase mobility along Highway 13 and in Burnsville’s Heart of the City, the city’s core downtown. A grade-separated crossing will decrease congestion and separate pedestrian access to the downtown and transit stations from high volume and speed highway traffic which is mutually beneficial to the safety and efficiency of all travelers through the project area.

These outcomes are important for the continued success of our business. Improvements that provide easy accessibility for all modes of transportation are critical to the success of the Ames Center. Being better suited to accommodate pedestrians and cyclists will only increase the value Ames Center provides to Burnsville residents and regional visitors alike. This project will also encourage future residential and business growth, providing the levels of accessibility the Heart of the City needs.

For the reasons above, Ames Center supports all funding pursuits to advance and construct this locally and regionally significant project. We look forward to experiencing the project benefits upon its timely completion.

Sincerely,

[Signature]
Executive Director
Ames Center
July 08, 2021

The Honorable Pete Buttigieg  
U.S. Secretary of Transportation  
1200 New Jersey Ave SE  
Washington D.C. 20590

RE: 2021 Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Infrastructure Grant submittal for Minnesota Highway 13 / Nicollet Avenue

Dear Secretary Buttigieg,

As U.S. Representative for Minnesota’s 2nd Congressional District, I am writing to express my support for the City of Burnsville’s 2021 RAISE Infrastructure Grant request to fund construction of improvements at Minnesota Highway 13 and Nicollet Avenue in Burnsville, Minnesota.

If awarded, the project located in my Congressional District will provide significant enhancements for safety, mobility, and accessibility for buses, pedestrians, bicyclists, and other traffic at this important gateway to a flourishing urban area in the southern Twin Cities metro.

The Minnesota Department of Transportation (MnDOT) is nearing the completion of a corridor study and hybrid environmental assessment it commissioned starting in 2019. Data indicates that the Highway 13 / Nicollet intersection recently had the highest number of crashes, critical crash rate and critical index among all study intersections for this 6-mile corridor. This intersection is also an important northern entry to Burnsville’s Heart of the City District, which is also impacted by the safety concerns.

The City of Burnsville adopted the Heart of the City design framework in 1999 in effort to develop a central area and civic core for the city. Adopted into the comprehensive plan and zoning code, the Heart of the City District has seen significant housing and commercial development, alongside strong public investment in civic buildings and streetscape. Nicollet is Main Street for the Heart of the City. The Highway 13 intersection hosts two major regional transit resources – the Minnesota Valley Transit Authority’s Burnsville Transit Center and the Metro Transit Orange Line BRT Heart of the City Station (set to open in 2022).

The Heart of the City is a vital, mixed-use district, with growing diversity, more and better transit connections, and expanding bicycling and walking options for people who live, work and play here. It is a model suburban community embracing transit-oriented development and
working hard to develop a sense of community. I am confident that a redefined intersection at Highway 13 will support these efforts and demonstrate how good transportation design can support strong civic values, improved safety, and more climate-friendly transportation options.

For the reasons I have outlined, I wholly support and request your strong consideration of the City of Burnsville’s RAISE Infrastructure Grant application. The project partners and I thank you for this opportunity to present this project for your consideration. If you have questions, please feel free to contact Will Mitchell, my Legislative Director, at (202) 225-2271 or by email at will.mitchell@mail.house.gov.

Sincerely,

Angie Craig
Member of Congress
United States Senate
WASHINGTON, DC 20510

July 9, 2021

The Honorable Pete Buttigieg
United States Secretary of Transportation
United States Department of Transportation
1200 New Jersey Avenue Southeast
Washington, DC 20590

RE: City of Burnsville, Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Program

Dear Secretary Buttigieg:

I write in support of the City of Burnsville’s application for funding through the United States Department of Transportation’s Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Program. If awarded, the funding would support improvements to the intersection of Minnesota Highway 13 and Nicollet Avenue, which would address critical safety concerns, enhance connectivity, promote alternate forms of transportation, and spur economic development.

The intersection of Minnesota Highway 13 and Nicollet Avenue is located in the heart of Burnsville, Minnesota; a Twin Cities suburb that is experiencing significant development and growth. It is located in a multi-use district with growing numbers of commercial, employment, and housing opportunities. The intersection also serves as a regional hub for public transit—both the Minnesota Valley Transit Authority’s transit center and Metro Transit Orange Line Bus Rapid Transit station are located nearby. In order to accommodate the significant growth in the region, additions and improvements to public infrastructure are necessary.

Funding from the RAISE Program would be used to construct a bridge on Nicollet Avenue over Minnesota Highway 13, separated pedestrian and bicycle facilities to cross the highway, new signals and a roundabout at the intersection, and a new on-ramp from Nicollet Avenue to Interstate 35W. These improvements would not only provide increased access to the regional transit center, but would also maintain the safety of both pedestrians and bikers while enhancing traffic operations at the intersection. This project would also help provide access to employment opportunities, support freight movement across our state, improve traffic capacity and safety along Interstate 35W, and create direct and reliable access to both I-35 and Minnesota Highway 13.

Again, I support the City of Burnsville’s application for funding through the Rebuilding American Infrastructure with Sustainability and Equity Program. If you have any questions, please contact Rommel Lee in my Minnesota office at (612) 727-5220 or by email at Rommel_Lee@Klobuchar.senate.gov.

Sincerely,

Amy Klobuchar
United States Senator
Mr. Pete Buttigieg  
Secretary of Transportation  
1200 New Jersey Ave, SE  
Washington, DC 20590  

To Secretary Buttigieg,  

I am writing to encourage your strong consideration of the City of Burnsville’s 2021 RAISE Infrastructure Grant request to fund construction of improvements at Minnesota Highway 13 and Nicollet Avenue in Burnsville, Minnesota.  

This project will benefit walking, bicycling and public transportation in Burnsville’s growing Heart of the City District as well as in a concentrated area of jobs just north of Highway 13. It’s an important example of how we can target federal dollars to retrofit a suburban community in a way that helps reduce air pollution, improves our environment and public health, and provides better access to jobs.  

Burnsville’s Heart of the City is a mixed-use area designed as a transit-oriented district. Two regional transit stations already exist at this important intersection. Part of this zone is designated an Area of Concentrated Poverty by the Metropolitan Council. Burnsville is a suburban community that is increasingly diverse and is growing and changing in a way that is sustainable, forward-thinking, and that meets the needs of all of its residents. This project embodies that vision.  

For the reasons above, I encourage your strong consideration of this proposal. If you have any questions or need additional information, please contact Jake Schwitzer on my staff at 651-221-1016.  

Sincerely,  

US Senator Tina Smith