

### Application

13860 - 2020 Roadway Expansion		
14165 - TH65 Grade Separated Intersections 99th Ave and 117th Ave City of Blaine		
Regional Solicitation - Roadways Including Multimodal Elements		
Status:	Submitted	
Submitted Date:	05/14/2020 2:32 PM	

# **Primary Contact**

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*	<b>Blaine</b> <sub>City</sub>	Minneso State/Provinc		55449 Postal Code/Zip
Phone:*	763-785-6167 Phone		Ext.	
Fax:				
What Grant Programs are you most interested in?	Regional Solicitation - Roadways Including Multimodal Elements			

# **Organization Information**

Name:

Jurisdictional Agency (if different):

Organization Type:	City
Organization Website:	
Address:	10801 TOWNSQUARE DR

*	BLAINE	Minnesota	55449
	City	State/Province	Postal Code/Zip
County:	Anoka		
Phone:*	763-784-6700		
		Ext.	
Fax:			
PeopleSoft Vendor Number	0000020925A2		

# **Project Information**

Project Name	TH 65 at 99th Ave NE Grade Separation
Primary County where the Project is Located	Anoka
Cities or Townships where the Project is Located:	Blaine
Jurisdictional Agency (If Different than the Applicant):	

The proposed project is a grade separation of TH 65 (Central Avenue NE) at 99th Avenue NE. TH 65 is a Principal Arterial and 99th Avenue NE at this location is an A Minor Arterial. The project will improve safety and mobility by removing an existing signalized intersection and will also include frontage roads to maintain local access.

The need for the project was identified as part of the MnDOT TH 65 Planning and Environmental Linkage (PEL) Study. Various conceptual alternatives are currently being developed at multiple locations along the corridor. Two alternatives have been developed for this grade separation at 99th Avenue NE.

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

(Limit 2,800 characters; approximately 400 words)

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

**Project Length (Miles)** 

to the nearest one-tenth of a mile

- Alternative 1: The first alternative proposes a grade separation at 99th and a tight diamond interchange configuration with a roundabout on the eastern interchange intersection.

- Alternative 2: The second alternative proposes two grade separations to the north and south of 99th Avenue NE. Users crossing TH 65 at 99th would use the frontage road system to divert to the north or south grade separation.

More information and conceptual layouts are included in the one-page project summary attached to this application. For the purposes of this application, the higher cost alternative (Alternative 2) will be used for the sake of benefit-cost analysis.

TH 65 AT 99TH AVE IN BLAINE-GRADE SEPARATION, IMPROVE FRONTAGE ROAD CONFIGURATIONS

1.4

### **Project Funding**

Are you applying for competitive funds from another source(s) to implement this project?	Yes	
If yes, please identify the source(s)	The city is considering applying for Highway Safety Improvement Program (HSIP) and MnDOT Local Partnership Program (LPP) funding	
Federal Amount	\$10,000,000.00	
Match Amount	\$19,800,000.00	
Minimum of 20% of project total		
Project Total	\$29,800,000.00	
For transit projects, the total cost for the application is total cost minus fare revenues.		
Match Percentage	66.44%	
Minimum of 20% Compute the match percentage by dividing the match amount by the project tota	1	
Source of Match Funds	Local Funding	
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:	2024	
Select 2022 or 2023 for TDM projects only. For all other applications, select 2024 or 2025.		
Additional Program Years:	2022, 2023	
Select all years that are feasible if funding in an earlier year becomes available.		

# Project Information-Roadways

County, City, or Lead Agency	City of Blaine
Functional Class of Road	Principal Arterial
Road System	ТН
TH, CSAH, MSAS, CO. RD., TWP. RD., CITY STREET	
Road/Route No.	65
i.e., 53 for CSAH 53	
Name of Road	Central Avenue NE
Example; 1st ST., MAIN AVE	
Example; 1st ST., MAIN AVE Zip Code where Majority of Work is Being Performed	55434
Zip Code where Majority of Work is Being Performed	55434
Zip Code where Majority of Work is Being Performed (Approximate) Begin Construction Date	55434 04/01/2025 10/30/2026

From: (Intersection or Address) To: (Intersection or Address)

DO NOT INCLUDE LEGAL DESCRIPTION

Or At	99th Avenue NE
Miles of Sidewalk (nearest 0.1 miles)	0
Miles of Trail (nearest 0.1 miles)	1.5
Miles of Trail on the Regional Bicycle Transportation Network (nearest 0.1 miles)	1.0
Primary Types of Work	Grade Separation
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.:	n/a
New Bridge/Culvert No.:	TBD
Structure is Over/Under (Bridge or culvert name):	n/a

# **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.

### 2040 TPP Goals, Objectives, and Strategies

Safety and Security

'The regional transportation system is safe and secure for all users' (page 2.20), Objective A.

a.B1 (page 2.20) Regional transportation partners will incorporate safety and security considerations for all modes and users throughout the processes of planning, funding, construction, operation.

b.B3 (page 2.21) Regional transportation partners should monitor and routinely analyze safety and security data by mode and severity to identify priorities and progress.

c.B6 (page 2.23) Regional transportation partners will use best practices to provide and improve facilities for safe walking and bicycling, since pedestrians and bicyclists are the most vulnerable users of the transportation system.

Access to Destinations

'People and businesses prosper by using a reliable, affordable, and efficient multimodal transportation system that connects them to destinations throughout the region and beyond' (page 2.24), Objective A.

a.C7 (page 2.30) Regional transportation partners will manage and optimize the performance of the

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

principal arterial system as measured by person throughput.

b.C8 (page 2.31) Regional transportation partners will prioritize all regional highway capital investments based on a project's expected contributions to achieving the outcomes, goals, and objectives identified in Thrive MSP 2040 and the Transportation Policy Plan.

c.C16 (page 2.36) Regional transportation partners should fund projects that provide for bicycle and pedestrian travel across or around physical barriers and/or improve continuity between jurisdictions.

Competitive Economy

'The regional transportation system supports the economic competitiveness, vitality, and prosperity of the region and state' (page 2.38), Objective C.

a.D4 (page 2.40) 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

'The regional transportation system advances equity and contributes to communities' livability and sustainability while protecting the natural, cultural, and developed environments' (page 2.42), Objective A and Objective C.

a.E2 (page 2.43) The Council and MnDOT will consider reductions in transportation-related emissions of air pollutants and greenhouse gases when prioritizing transportation investments.

#### Limit 2,800 characters, approximately 400 words

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

### List the applicable documents and pages:

The project need and grade separation solutions are identified in the Principal Arterial Intersection Conversion Study completed in 2017. The TH 65 corridor through the project area is summarized on page 24. This study and the proposed plan to grade separate multiple intersections along the corridor are shown in the Draft Blaine Comprehensive Plan on page 177.

### Limit 2,800 characters, approximately 400 words

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

and has a completed ADA transition plan that covers the public right of way/transportation.	Yes
Date plan completed:	01/31/2020
Link to plan:	https://www.blainemn.gov/DocumentCenter/View/1 0218/Blaine-ADA-Transition-Plan

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

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### Date self-evaluation completed:

Link to plan:

### Upload plan or self-evaluation if there is no link

Upload as PDF

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

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

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

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

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

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

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

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

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

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

### **Roadways Including Multimodal Elements**

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

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

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

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

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

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

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

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

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

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

### Bridge Rehabilitation/Replacement projects only:

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

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

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

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

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

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

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

### **Requirements - Roadways Including Multimodal Elements**

### **Specific Roadway Elements**

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Mobilization (approx. 5% of total cost)	\$0.00
Removals (approx. 5% of total cost)	\$0.00
Roadway (grading, borrow, etc.)	\$17,900,000.00
Roadway (aggregates and paving)	\$0.00
Subgrade Correction (muck)	\$0.00
Storm Sewer	\$0.00
Ponds	\$0.00
Concrete Items (curb & gutter, sidewalks, median barriers)	\$0.00
Traffic Control	\$0.00

Striping	\$0.00
Signing	\$0.00
Lighting	\$0.00
Turf - Erosion & Landscaping	\$0.00
Bridge	\$11,900,000.00
Retaining Walls	\$0.00
Noise Wall (not calculated in cost effectiveness measure)	\$0.00
Traffic Signals	\$0.00
Wetland Mitigation	\$0.00
Other Natural and Cultural Resource Protection	\$0.00
RR Crossing	\$0.00
Roadway Contingencies	\$0.00
Other Roadway Elements	\$0.00
Totals	\$29,800,000.00

# Specific Bicycle and Pedestrian Elements

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

# Specific Transit and TDM Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Fixed Guideway Elements	\$0.00

Stations, Stops, and Terminals	\$0.00
Support Facilities	\$0.00
Transit Systems (e.g. communications, signals, controls, fare collection, etc.)	\$0.00
Vehicles	\$0.00
Contingencies	\$0.00
Right-of-Way	\$0.00
Other Transit and TDM Elements	\$0.00
Totals	\$0.00

# **Transit Operating Costs**

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

# Totals

Total Cost	\$29,800,000.00
Construction Cost Total	\$29,800,000.00
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 fee-flow conditions.

Free-Flow Travel Speed:	47
Peak Hour Travel Speed:	30
Percentage Decrease in Travel Speed in Peak Hour compared to Free-Flow:	36.17%
Upload Level of Congestion map:	1587500187237_Level of Congestion.pdf

# **Congestion on adjacent Parallel Routes:**

Adjacent Parallel Corridor	CSAH 51 (University Ave NE)
Adjacent Parallel Corridor Start and End Points:	
Start Point:	US 10

End Point:	109th Avenue NE
Free-Flow Travel Speed:	32
The Free-Flow Travel Speed is black number.	
Peak Hour Travel Speed:	21
The Peak Hour Travel Speed is red number.	
Percentage Decrease in Travel Speed in Peak Hour Compared to Free-Flow:	34.38%
Upload Level of Congestion Map:	1587500187237_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:	
(40 Points)	
Proposed interchange project that reduces delay at a Low Priority Intersection:	
(0 Points)	
Not listed as a priority in the study:	
(0 Points)	

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

Existing Employment within 1 Mile:	9363
Existing Manufacturing/Distribution-Related Employment within 1 Mile:	2229
Existing Post-Secondary Students within 1 Mile:	0
Upload Map	1587565689041_Regional Economy.pdf
Please upload attachment in PDF form.	

# Measure C: Current Heavy Commercial Traffic

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

### Along Tier 1:

Miles:	0
(to the nearest 0.1 miles)	
Along Tier 2:	
Miles:	0
(to the nearest 0.1 miles)	
Along Tier 3:	Yes
Miles:	1.4
(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	TH 65 @ 99th Avenue NE	
Current AADT Volume	51000	
Existing Transit Routes on the Project	865	
For New Roadways only, list transit routes that will likely be diverted to the new proposed roadway (if applicable).		
Upload Transit Connections Map	1587566013743_Transit Connections.pdf	
Please upload attachment in PDF form.		
Response: Current Daily Person Throughput		
Average Annual Daily Transit Ridership	0	
Current Daily Person Throughput	66300.0	

# Measure B: 2040 Forecast ADT

Use Metropolitan Council model to determine forecast (2040) ADT volume	Yes
If checked, METC Staff will provide Forecast (2040) ADT volume	
OR	
Identify the approved county or city travel demand model to determine forecast (2040) ADT volume	
Forecast (2040) ADT volume	

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

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

The PEL study used to determine the proposed improvements at this location included an extensive engagement process. The project team conducted multiple ethnographic interviews with the goal of reaching multiple target population groups representing the demographics of the corridor, held a public open house and online surveys, pop-up events, held Local Official Briefings and has engaged a Public Advisory Committee to vet over 60 alternatives.

Example locations and events where study outreach efforts were conducted include the following:

- Table at Centerview Elementary Curriculum Night
- Booth at Blaine World Fest
- Pop up event at Mary Ann Young Senior Center
- Pop up event at Blaine Caribou Coffee
- Information Booth at Blaine Festival

(Limit 2,800 characters; approximately 400 words)

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

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

Response:

The proposed project will provide multiple benefits to disadvantaged population groups along the corridor. The project will substantially improve the performance of TH 65 and will improve the speed and reliability of access to jobs and essential services in the area.

TH 65 has been identified in previous plans and studies as a barrier to pedestrian and bicycle traffic due to the high traffic volumes and speeds. The proposed project will enable much safer east-west crossing access for pedestrians and bicyclists at this location.

The project will also improve public health by reducing emissions from the passenger and commercial vehicles currently forced to stop at the signalized intersection at 99th Avenue.

(Limit 2,800 characters; approximately 400 words)

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

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

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

Increased noise.

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

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

Increased speed and/or cut-through traffic.

Removed or diminished safe bicycle access.

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

Displacement of residents and businesses.

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

Other

Response:

The replacement of the signalized intersection at 99th Avenue with a grade separated crossing will increase vehicle speeds on both TH 65 and 99th Avenue. However, the potential safety impacts to population groups will be mitigated by the improved crossing conditions of a grade separated interchange at 99th Avenue.

The higher traffic speeds have the potential to increase vehicle noise. Noise mitigation measures will be evaluated prior to project implementation.

One project alternative has the potential to result in a residential relocation. Means of mitigating this impact under this alternative will be evaluated as design progresses.

(Limit 2,800 characters; approximately 400 words)

### Select one:

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

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

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

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

Yes

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

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

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

Project located in a census tract that is below the regional average for population in poverty or populations of color or includes children, people with disabilities, or the elderly:

(up to 40% of maximum score )

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

### **Upload Map**

1587567195361\_SocioEconomic.pdf

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

### Response:

City	Segment Length (For stand-alone projects, enter population from Regional Economy map) within each City/Township	Segment Length/Total Project Length	Score	Housing Score Multiplied by Segment percent	
Blaine	1.4	1.0	100.0	) 100.0	
Total Project Length         Total Project Length         Project length entered on the Project Information - General form.					
Housing Pe	erformance Score				
Total Project Length (Miles) or Population			1.4		
Total Housing Score			100.0		

# Affordable Housing Scoring

# Part 2: Affordable Housing Access

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

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

Three existing manufactured home developments are located adjacent to the project location. These include Blaine International Village (147 units), Matt's Homes (209 units), and Northview Villa (225 units).

Current list prices for homes in these areas range between \$29,900 and \$114,900 with an average list price of approximately \$60,000. All of these home prices are below the Met Council 2019 Home **Ownership Affordable Home Price level** corresponding with 50% of area median income (\$163,500). The majority of home prices are also below the level corresponding with 30% of area median income (\$92,500).

The current main access points to these developments will be maintained either through use of the existing local street network or the construction of a frontage road system, depending on the alternative selected for implementation.

(Limit 2,100 characters; approximately 300 words)

Upload map:

**Response:** 

1589472475863\_Housing Map.PNG

1960.0	1.4			
		2744.0	980.0	
1924.0	1.4	2693.6	962.0	
	3	5438	1942	
Average Construction Yea	r			
leighted Year		1942.0		

**Total Segment Length (Miles)** 

Total Peak Hour Delay Per Vehicle Without The Project (Seconds/ Vehicle)	Total Peak Hour Delay Per Vehicle With The Project (Seconds/ Vehicle)	Total Peak Hour Delay Per Vehicle Reduced by Project (Seconds/ Vehicle)	Volume without the Project (Vehicles per hour)	Volume with the Project (Vehicles Per Hour):	Total Peak Hour Delay Reduced by the Project:	Total Peak Hour Delay Reduced by the Project:	EXPLANA TION of methodolo gy used to calculate railroad crossing delay, if applicable.	Synchro or HCM Reports	
86.5	1.1	85.4	4678	5345	399501.2	456463.0	n/a	158937837 3946_Blain e 99th Synchro Combined. pdf	
						456463			
Vehicle Delay Reduced					•				
	Total Peak Hour Delay Reduced     399501.2       Total Peak Hour Delay Reduced     456463.0								
	Total Peak Hour Delay Reduced     456463.0								

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

Total (CO, NOX, and VOC) Peak Hour Emissions without the Project (Kilograms):	Total (CO, NOX, and VOC) Peak Hour Emissions with the Project (Kilograms):	Total (CO, NOX, and VOC) Peak Hour Emissions Reduced by the Project (Kilograms):		
24.45	1.22	23.23		
24	1	23		
Total				
Total Emissions Reduced:		23.23		
Upload Synchro Report		1588959584176_Blaine 99th Synchro Combined.pdf		
Disease unless of the human's in DDE forms (Serve Share sh				

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

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

0

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

# **Total Parallel Roadway**

Emissions Reduced on Parallel Roadways

**Upload Synchro Report** 

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

## **New Roadway Portion:**

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

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

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

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

# Measure A: Benefit of Crash Reduction

Crash Modification Factor Used:	CMF = 0.58 (CRF = 0.46) based on countermeasure "Convert at-grade intersection into grade-separated interchange". All crash types; all severity types. CMF Clearinghouse Reference Elvik, R. and Erke, A, 2007.
(Limit 700 Characters; approximately 100 words)	
Rationale for Crash Modification Selected:	There are six CMF values provided by the CMF Clearinghouse For the countermeasure "Convert at-grade intersection into grade-separated interchange". The CMF of 0.58 was chosen because it applies to all crash types and is applicable to existing 4-leg intersection geometry.
(Limit 1400 Characters; approximately 200 words)	
Project Benefit (\$) from B/C Ratio:	\$12,274,450.00
Total Fatal (K) Crashes:	0
Total Serious Injury (A) Crashes:	1
Total Non-Motorized Fatal and Serious Injury Crashes:	1
Total Crashes:	33
Total Fatal (K) Crashes Reduced by Project:	0
Total Serious Injury (A) Crashes Reduced by Project:	0
Total Non-Motorized Fatal and Serious Injury Crashes Reduced by Project:	0
Total Crashes Reduced by Project:	13
Worksheet Attachment	1588267915071_Safety BC Worksheet - Blaine TH 65.xls
Please upload attachment in PDF form.	

Roadway projects that include railroad grade-separation elements:

Current AADT volume:	0
Average daily trains:	0
Crash Risk Exposure eliminated:	0

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

	As outlined in the document Minnesota's Best
	Practices for Pedestrian/Bicycle Safety, creation of
	a grade separated crossing is a proven method for
Response:	improving safety for these multi-modal users.
Nesponse.	Grades separations such as the proposed project
	have shown a reduction of approximately 86
	percent for total pedestrian crashes and 90 percent
	for fatal and injury pedestrian crashes.

(Limit 2,800 characters; approximately 400 words)

### Measure A: Multimodal Elements and Existing Connections

**Response:** 

The Regional Bicycle Barriers Study defined TH 65 as an expressway barrier type. The proposed grade separation will be located within improvement area A042. This area is designated as priority Tier 3. TH 65 is also designated as a Tier 2 corridor on the Regional Bicycle Transportation Network. Additional trails are proposed to be constructed on frontage roads adjacent to TH 65 (between 1.0 and 2.8 miles depending on the alternative selected). Trails will also be constructed on cross-streets at 93rd, 99th, and 105th.

TH 65 is a significant barrier to east-west multimodal traffic in its current configuration. The proposed grade separation will greatly improve conditions for pedestrians and bicyclists.

(Limit 2,800 characters; approximately 400 words)

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

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

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

### Measure A: Risk Assessment - Construction Projects

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

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

Layout approved by the applicant and all impacted jurisdictions (i.e., cities/counties that the project goes through or agencies that maintain the roadway(s)). A PDF of the layout must be attached along with letters from each jurisdiction to receive points. 100% Attach Layout Please upload attachment in PDF form. Layout completed but not approved by all jurisdictions. A PDF of the layout must be attached to receive points. 50% **Attach Layout** Please upload attachment in PDF form. Layout has not been started Yes 0% Anticipated date or date of completion 2) Review of Section 106 Historic Resources (15 Percent of Points) No known historic properties eligible for or listed in the National Register of Historic Places are located in the project area, and Yes project is not located on an identified historic bridge 100% There are historical/archeological properties present but determination of no historic properties affected is anticipated.

100%

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

80%

Historic/archeological property impacted; determination of adverse effect anticipated

40%

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

0%

Project is located on an identified historic bridge

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

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

#### 100%

Right-of-way, permanent or temporary easements required, plat, legal descriptions, or official map complete 50% Right-of-way, permanent or temporary easements required, Yes parcels identified 25% Right-of-way, permanent or temporary easements required, parcels not all identified 0% Anticipated date or date of acquisition 4)Railroad Involvement (15 Percent of Points) No railroad involvement on project or railroad Right-of-Way Yes agreement is executed (include signature page, if applicable) 100% **Signature Page** Please upload attachment in PDF form. Railroad Right-of-Way Agreement required; negotiations have begun 50% Railroad Right-of-Way Agreement required; negotiations have not begun.

0%

Anticipated date or date of executed Agreement

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

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

Meeting with general public:	03/18/2019
Meeting with partner agencies:	04/01/2020
Targeted online/mail outreach:	10/19/2019
Number of respondents:	1096
Meetings specific to this project with the general public and partner agencies have been used to help identify the project need.	Yes
100%	
Targeted outreach to this project with the general public and partner agencies have been used to help identify the project need.	
75%	

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

50%

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

50%

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

25%

No outreach has led to the selection of this project.

0%

Public involvement for this project has taken place over multiple phases during the TH 65 Corridor Study.

The first phase of engagement focused on understanding the community and issues/needs along the Hwy 65 corridor. This included the following outreach efforts:

-Seven ethnography phone interviews and twenty three online surveys were conducted early in the project to learn more about the local residents and community stakeholders in the project area. These interactions provided valuable perspectives about the local mindset and the daily experience of a variety of people who rely on Hwy 65 to get to work or conduct daily errands.

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

-One business meeting and one public open house was held to educate businesses and the community on the project, explain the PEL process, and gather input on key transportation issues, priorities and concerns for Hwy 65.

- One virtual open house was available online to make it convenient for the community to participate in the project, especially those were not able to attend the in-person event.

The second phase of engagement introduced innovative intersection concepts to the community to get input on their potential as solutions for the Hwy 65 corridor.

- One online engagement was available for viewers to learn about the innovative intersection concepts and provided an opportunity for input.

- Five pop-up/in-person events to educate, engage with the community, and introduce the innovative intersection concepts and inform about the potential benefits of these newer designs that may be part of the alternatives developed for Hwy 65.

Ongoing engagement for this project continues with regular checkpoints between the project team and technical and community stakeholders.

- 13 Technical Advisory Committee (TAC) meetings for members to provide technical review and feedback. An additional four meetings are anticipated.

- Four Public Advisory Committee (PAC) meetings for members to provide community review and feedback. An additional two meetings are anticipated.

- Three Local Officials Briefing meetings to keep officials educated and updated on the project schedule, progress, and community input. Two additional meetings are anticipated.

- One final Open House meeting and online engagement effort are anticipated to reveal the findings of the study.

Total Project Cost (entered in Project Cost Form):	\$29,800,000.00
Enter Amount of the Noise Walls:	\$0.00
Total Project Cost subtract the amount of the noise walls:	\$29,800,000.00
Enter amount of any outside, competitive funding:	\$0.00
Attach documentation of award:	
Points Awarded in Previous Criteria	
Cost Effectiveness	\$0.00

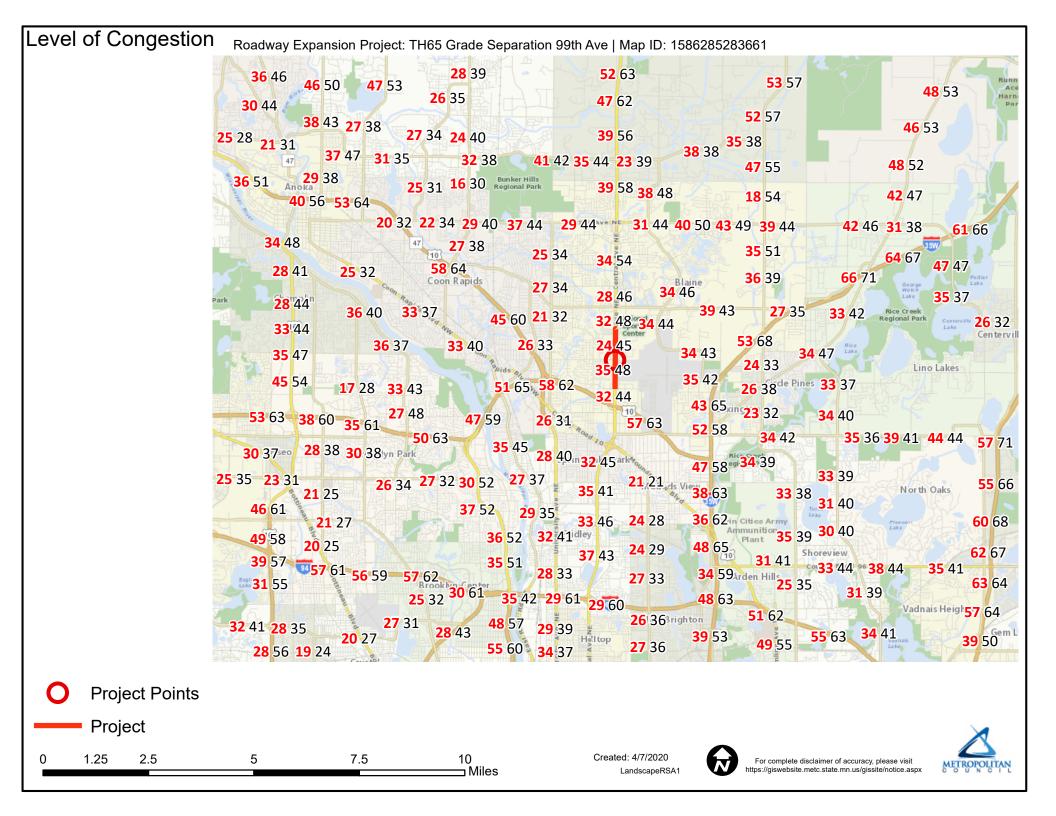
# **Other Attachments**

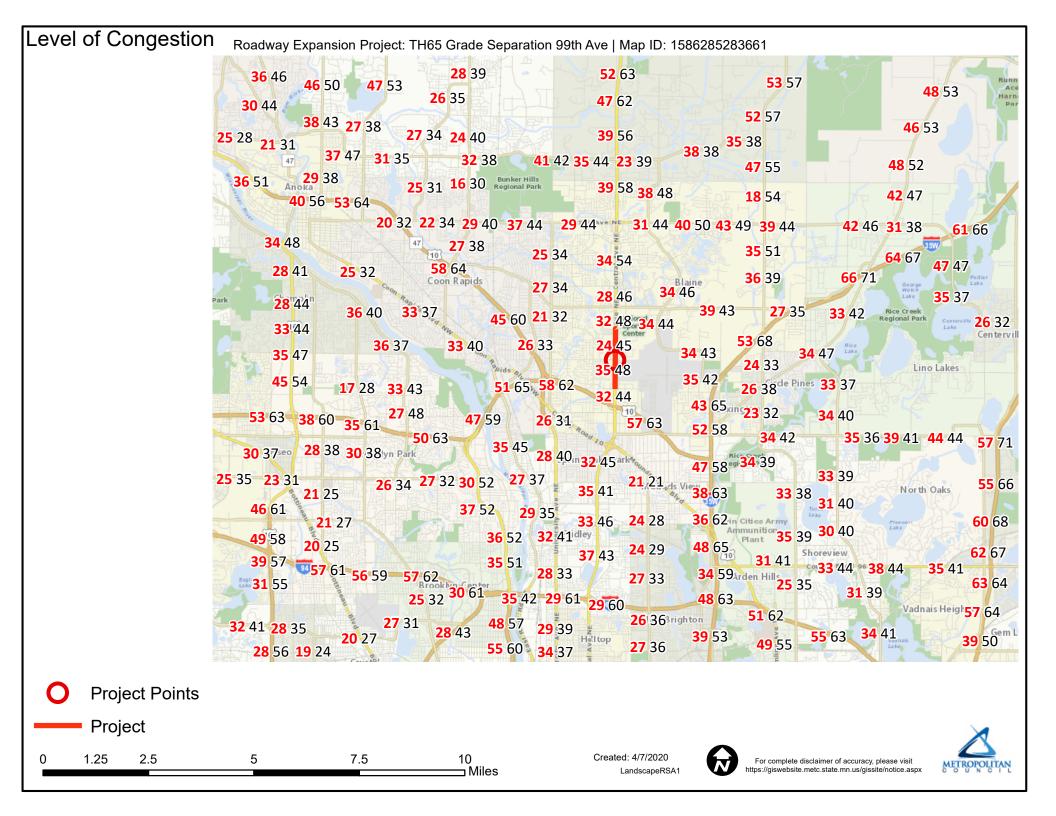


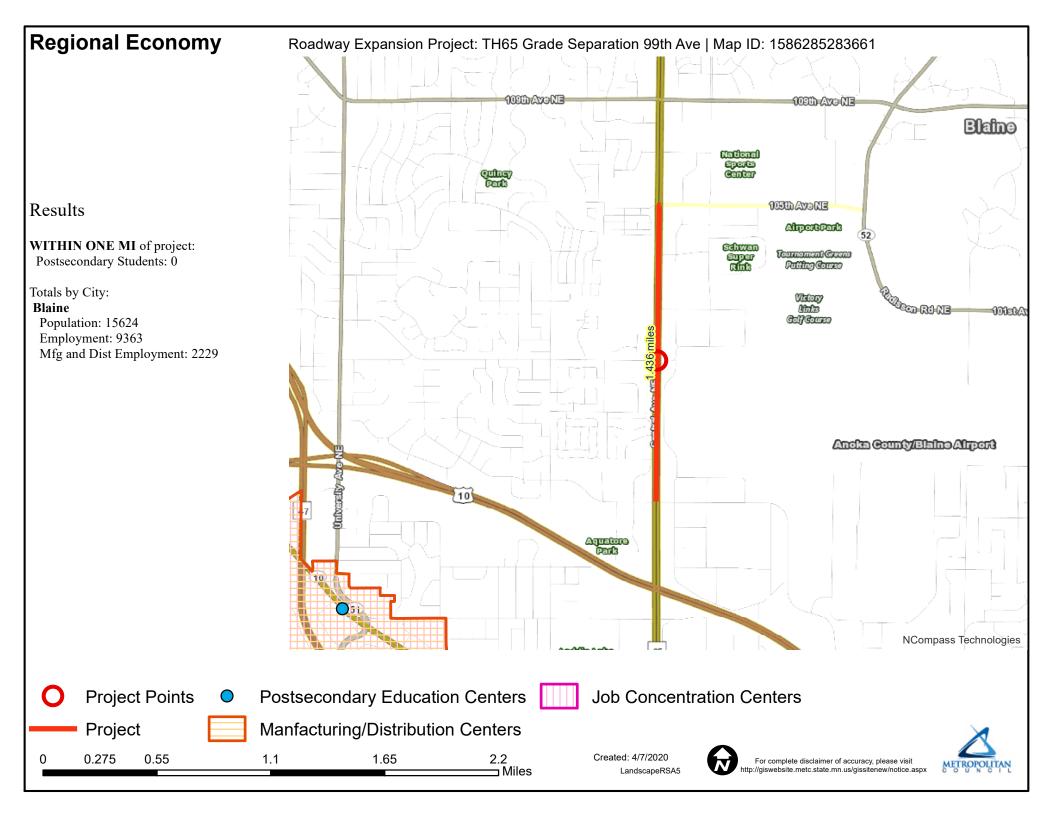
Photograph of Intersection of TH 65 and 99th Avenue NE

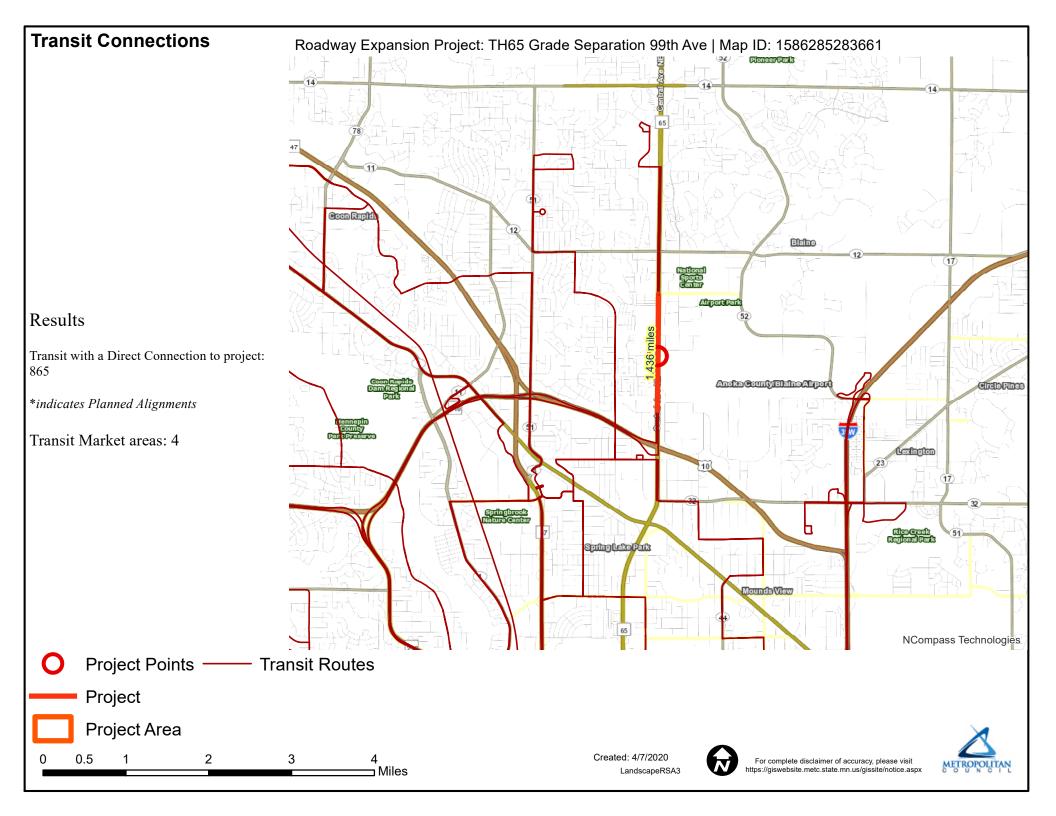
2.9 MB

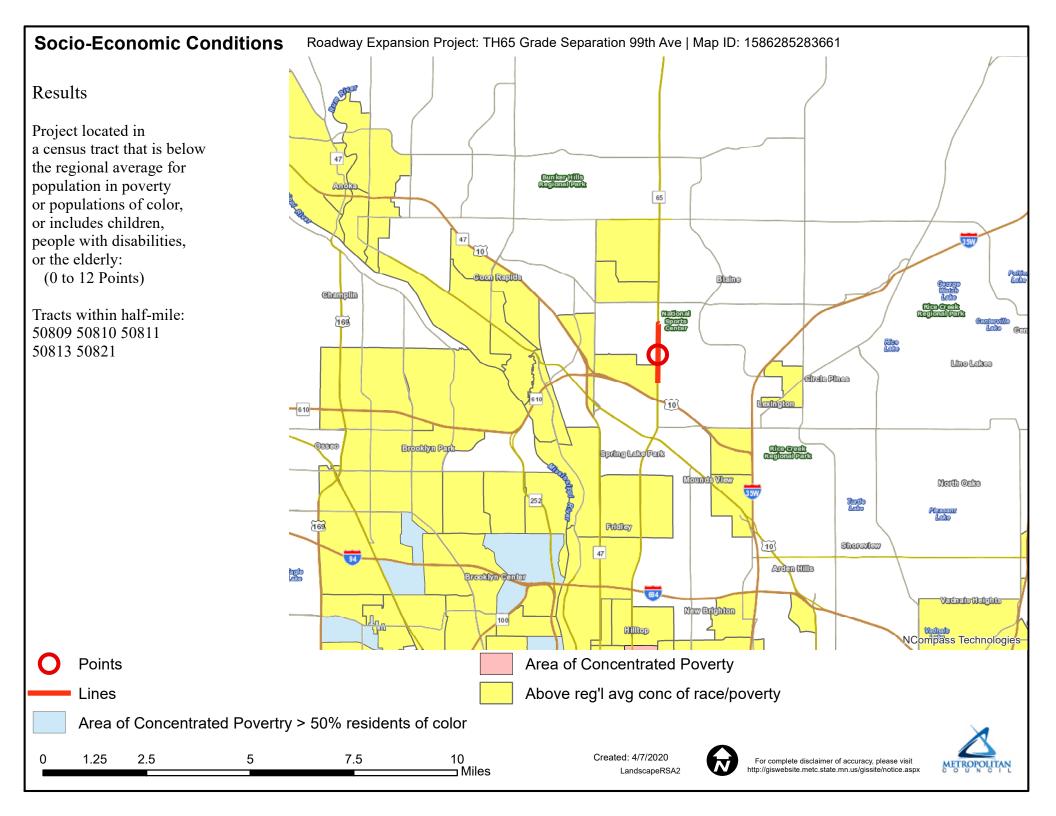
File Name	Description	File Size
Blaine TH65 - One-Page Project Summary 2020-05-14.pdf	One-Page Project Summary	331 KB
IPRC-TH 65 99th-117th.pdf	Letter of approval from MnDOT Interchange Planning Review Committee.	221 KB
Level of Congestion.pdf	Make-a-map - Congestion	2.5 MB
MnDOT Letter of Support - TH 65.pdf	MnDOT Letter of Support	475 KB
Regional Economy.pdf	Make-a-Map - Regional Economy	3.1 MB
SocioEconomic.pdf	Make-a-Map - SocioEconomic	2.9 MB
TH65_CorridorConcepts_GrantApp.pdf	Conceptual Layouts	1.7 MB
Transit Connections.pdf	Make-a-Map - Transit Connections	5.1 MB











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ane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR	
ane Configurations	ሻ	<b>†</b>	1	ሻ	<b>≜</b> î≽	ሻ	<u></u>	1	٦	- <b>†</b> †	1	
Traffic Volume (vph)	70	57	153	58	57	40	1189	34	13	2851	150	
Future Volume (vph)	70	57	153	58	57	40	1189	34	13	2851	150	
ane Group Flow (vph)	80	65	174	64	70	46	1367	39	15	3240	170	
Furn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	
Protected Phases	7	4		3	8	1	6		5	2		
Permitted Phases			4					6			2	
Detector Phase	7	4	4	3	8	1	6	6	5	2	2	
Switch Phase												
Ainimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	15.0	15.0	7.0	15.0	15.0	
/linimum Split (s)	15.0	26.5	26.5	15.0	50.5	15.0	44.0	44.0	15.0	49.0	49.0	
Total Split (s)	15.0	48.5	48.5	17.0	50.5	15.0	69.5	69.5	15.0	69.5	69.5	
Total Split (%)	10.0%	32.3%	32.3%	11.3%	33.7%	10.0%	46.3%	46.3%	10.0%	46.3%	46.3%	
ellow Time (s)	3.0	4.5	4.5	3.0	4.5	3.0	5.5	5.5	3.0	5.5	5.5	
All-Red Time (s)	3.5	3.0	3.0	3.5	3.0	3.0	1.5	1.5	3.0	1.5	1.5	
ost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
otal Lost Time (s)	6.5	7.5	7.5	6.5	7.5	6.0	7.0	7.0	6.0	7.0	7.0	
.ead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lag	Lag	Lead	Lead	Lead	
ead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max	
Act Effct Green (s)	8.2	13.1	13.1	9.9	12.1	8.6	103.4	103.4	7.1	96.7	96.7	
Actuated g/C Ratio	0.05	0.09	0.09	0.07	0.08	0.06	0.69	0.69	0.05	0.64	0.64	
/c Ratio	0.72	0.35	0.54	0.50	0.22	0.41	0.50	0.03	0.15	1.22	0.14	
Control Delay	102.5	70.9	14.6	80.6	58.0	79.2	13.4	0.1	72.2	127.5	1.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	102.5	70.9	14.6	80.6	58.0	79.2	13.4	0.1	72.2	127.5	1.6	
.OS	F	E	В	F	E	E	В	А	E	F	А	
Approach Delay		48.1			68.8		15.1			121.0		
Approach LOS		D			E		В			F		
Stops (vph)	66	53	19	55	51	38	558	0	14	2144	6	
uel Used(gal)	3	2	3	2	2	2	41	1	1	186	4	
CO Emissions (g/hr)	220	153	181	119	105	158	2846	54	54	12975	275	
NOx Emissions (g/hr)	43	30	35	23	20	31	554	11	11	2525	54	
/OC Emissions (g/hr)	51	36	42	27	24	37	660	13	13	3007	64	
Dilemma Vehicles (#)	0	1	0	0	0	0	40	0	0	76	0	
ntersection Summary												
Cycle Length: 150												
Actuated Cycle Length: 150												
Offset: 0 (0%), Referenced to	o phase 2	:SBT and	6:NBT, S	Start of 1s	t Green							
Vatural Cycle: 150												
Control Type: Actuated-Coor	rdinated											
Maximum v/c Ratio: 1.22												
ntersection Signal Delay: 86	<b>5</b> .5			lr	ntersectio	n LOS: F						
ntersection Capacity Utilizat		)		[(	CU Level	of Service	e F					
Analysis Period (min) 15												

Splits and Phases: 23: TH 65 & 99 Ave



Intersection					
Intersection Delay, s/veh	4.9				
Intersection LOS	А				
Approach	EB		NB		SW
Entry Lanes	1		1		1
Conflicting Circle Lanes	1		1		1
Adj Approach Flow, veh/h	170		87		110
Demand Flow Rate, veh/h	175		93		120
Vehicles Circulating, veh/h	0		175		131
Vehicles Exiting, veh/h	251		0		137
Follow-Up Headway, s	3.186	3	3.186	3	.186
Ped Vol Crossing Leg, #/h	0		0		0
Ped Cap Adj	1.000	1	1.000	1	.000
Approach Delay, s/veh	4.7		5.0		5.1
Approach LOS	А		А		А
Lane	Left	Left		Left	
Designated Moves	L	R		R	
Assumed Moves	L	R		R	
RT Channelized					
Lane Util	1.000	1.000		1.000	
Critical Headway, s	5.193	5.193		5.193	
Entry Flow, veh/h	175	93		120	
Cap Entry Lane, veh/h	1130	949		991	
Entry HV Adj Factor	0.969	0.935		0.917	
Flow Entry, veh/h	170	87		110	
Cap Entry, veh/h	1095	887		909	
V/C Ratio	0.155	0.098		0.121	
				F 1	
Control Delay, s/veh	4.7	5.0		5.1	
Control Delay, s/veh LOS 95th %tile Queue, veh	4.7 A	5.0 A		5.1 A	

	-	-	1
Lane Group	EBT	WBT	NBL
Lane Group Flow (vph)	170	110	87
Stops (vph)	102	66	37
Fuel Used(gal)	1	1	1
CO Emissions (g/hr)	79	66	62
NOx Emissions (g/hr)	15	13	12
VOC Emissions (g/hr)	18	15	14
Dilemma Vehicles (#)	0	0	0
Intersection Summary			

Synchro does not provide emissions information for roundabout configurations. For the purposes of calculating emissions reductions for this application, this intersection was modeled as a simple two-phase traffic signal optimized using Synchro default timings. It is assumed that actual emissions would be similar or lower to this traffic signal configuration.

# Timings 5: 99 Ave & TH 65 SB On and Off Ramp

05/05/2020
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	٦	-	-	•	1	1
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	5	<b>†</b> †	1	1	1	1
Traffic Volume (vph)	203	139	78	55	10	156
Future Volume (vph)	203	139	78	55	10	156
Lane Group Flow (vph)	231	158	87	61	11	177
Turn Type	pm+pt	NA	NA	Perm	Prot	Prot
Protected Phases	7	4	8		1	1
Permitted Phases	4			8		
Detector Phase	7	4	8	8	1	1
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	13.0	28.5	28.5	28.5	13.5	13.5
Total Split (s)	13.0	41.5	28.5	28.5	13.5	13.5
Total Split (%)	23.6%	75.5%	51.8%	51.8%	24.5%	24.5%
Yellow Time (s)	3.0	4.5	4.5	4.5	3.0	3.0
All-Red Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	7.5	7.5	7.5	6.0	6.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	None	None	None	None	None
Act Effct Green (s)	18.6	17.6	8.4	8.4	7.9	7.9
Actuated g/C Ratio	0.51	0.48	0.23	0.23	0.22	0.22
v/c Ratio	0.35	0.08	0.19	0.14	0.02	0.33
Control Delay	6.6	5.5	15.5	6.1	14.8	5.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	6.6	5.5	15.5	6.1	14.8	5.6
LOS	A	A	B	A	B	A
Approach Delay	,,	6.1	11.6	, (	6.2	,,
Approach LOS		A	В		A	
Stops (vph)	91	62	65	18	13	33
Fuel Used(gal)	3	2	1	1	0	2
CO Emissions (g/hr)	238	160	95	36	12	106
NOx Emissions (g/hr)	46	31	19	7	2	21
VOC Emissions (g/hr)	55	37	22	8	3	25
Dilemma Vehicles (#)	0	13	8	0	0	0
Intersection Summary						
Cycle Length: 55						
Actuated Cycle Length: 36.7	7					
Natural Cycle: 55						
Control Type: Actuated-Unc	coordinated					
Maximum v/c Ratio: 0.35						
Intersection Signal Delay: 7	3			Ir	ntersectio	n I OS <sup>,</sup> A
Intersection Capacity Utiliza						of Service
Analysis Period (min) 15				N		

Splits and Phases: 5: 99 Ave & TH 65 SB On and Off Ramp

▲ <sub>Ø1</sub>			
13.5 s	41.5 s		
		<u>4</u> Ø8	
	13 s	28.5 s	

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ane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR	
ane Configurations	ሻ	<b>†</b>	1	ሻ	<b>≜</b> î≽	ሻ	<u></u>	1	٦	- <b>†</b> †	1	
Traffic Volume (vph)	70	57	153	58	57	40	1189	34	13	2851	150	
Future Volume (vph)	70	57	153	58	57	40	1189	34	13	2851	150	
ane Group Flow (vph)	80	65	174	64	70	46	1367	39	15	3240	170	
Furn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	
Protected Phases	7	4		3	8	1	6		5	2		
Permitted Phases			4					6			2	
Detector Phase	7	4	4	3	8	1	6	6	5	2	2	
Switch Phase												
Ainimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	15.0	15.0	7.0	15.0	15.0	
/linimum Split (s)	15.0	26.5	26.5	15.0	50.5	15.0	44.0	44.0	15.0	49.0	49.0	
Total Split (s)	15.0	48.5	48.5	17.0	50.5	15.0	69.5	69.5	15.0	69.5	69.5	
Total Split (%)	10.0%	32.3%	32.3%	11.3%	33.7%	10.0%	46.3%	46.3%	10.0%	46.3%	46.3%	
ellow Time (s)	3.0	4.5	4.5	3.0	4.5	3.0	5.5	5.5	3.0	5.5	5.5	
All-Red Time (s)	3.5	3.0	3.0	3.5	3.0	3.0	1.5	1.5	3.0	1.5	1.5	
ost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
otal Lost Time (s)	6.5	7.5	7.5	6.5	7.5	6.0	7.0	7.0	6.0	7.0	7.0	
.ead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lag	Lag	Lead	Lead	Lead	
ead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max	
Act Effct Green (s)	8.2	13.1	13.1	9.9	12.1	8.6	103.4	103.4	7.1	96.7	96.7	
Actuated g/C Ratio	0.05	0.09	0.09	0.07	0.08	0.06	0.69	0.69	0.05	0.64	0.64	
/c Ratio	0.72	0.35	0.54	0.50	0.22	0.41	0.50	0.03	0.15	1.22	0.14	
Control Delay	102.5	70.9	14.6	80.6	58.0	79.2	13.4	0.1	72.2	127.5	1.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	102.5	70.9	14.6	80.6	58.0	79.2	13.4	0.1	72.2	127.5	1.6	
.OS	F	Е	В	F	E	E	В	А	E	F	А	
Approach Delay		48.1			68.8		15.1			121.0		
Approach LOS		D			E		В			F		
Stops (vph)	66	53	19	55	51	38	558	0	14	2144	6	
uel Used(gal)	3	2	3	2	2	2	41	1	1	186	4	
CO Emissions (g/hr)	220	153	181	119	105	158	2846	54	54	12975	275	
NOx Emissions (g/hr)	43	30	35	23	20	31	554	11	11	2525	54	
/OC Emissions (g/hr)	51	36	42	27	24	37	660	13	13	3007	64	
Dilemma Vehicles (#)	0	1	0	0	0	0	40	0	0	76	0	
ntersection Summary												
Cycle Length: 150												
Actuated Cycle Length: 150												
Offset: 0 (0%), Referenced to	o phase 2	:SBT and	6:NBT, S	Start of 1s	t Green							
Vatural Cycle: 150												
Control Type: Actuated-Coor	rdinated											
Maximum v/c Ratio: 1.22												
ntersection Signal Delay: 86	<b>5</b> .5			lr	ntersectio	n LOS: F						
ntersection Capacity Utilizat		)		[(	CU Level	of Service	e F					
Analysis Period (min) 15												

Splits and Phases: 23: TH 65 & 99 Ave



Intersection					
Intersection Delay, s/veh	4.9				
Intersection LOS	А				
Approach	EB		NB		SW
Entry Lanes	1		1		1
Conflicting Circle Lanes	1		1		1
Adj Approach Flow, veh/h	170		87		110
Demand Flow Rate, veh/h	175		93		120
Vehicles Circulating, veh/h	0		175		131
Vehicles Exiting, veh/h	251		0		137
Follow-Up Headway, s	3.186	3	3.186	3	.186
Ped Vol Crossing Leg, #/h	0		0		0
Ped Cap Adj	1.000	1	1.000	1	.000
Approach Delay, s/veh	4.7		5.0		5.1
Approach LOS	А		А		А
Lane	Left	Left		Left	
Designated Moves	L	R		R	
Assumed Moves	L	R		R	
RT Channelized					
Lane Util	1.000	1.000		1.000	
Critical Headway, s	5.193	5.193		5.193	
Entry Flow, veh/h	175	93		120	
Cap Entry Lane, veh/h	1130	949		991	
Entry HV Adj Factor	0.969	0.935		0.917	
Flow Entry, veh/h	170	87		110	
Cap Entry, veh/h	1095	887		909	
V/C Ratio	0.155	0.098		0.121	
				F 1	
Control Delay, s/veh	4.7	5.0		5.1	
Control Delay, s/veh LOS 95th %tile Queue, veh	4.7 A	5.0 A		5.1 A	

	-	-	1
Lane Group	EBT	WBT	NBL
Lane Group Flow (vph)	170	110	87
Stops (vph)	102	66	37
Fuel Used(gal)	1	1	1
CO Emissions (g/hr)	79	66	62
NOx Emissions (g/hr)	15	13	12
VOC Emissions (g/hr)	18	15	14
Dilemma Vehicles (#)	0	0	0
Intersection Summary			

Synchro does not provide emissions information for roundabout configurations. For the purposes of calculating emissions reductions for this application, this intersection was modeled as a simple two-phase traffic signal optimized using Synchro default timings. It is assumed that actual emissions would be similar or lower to this traffic signal configuration.

# Timings 5: 99 Ave & TH 65 SB On and Off Ramp

05/05/2020
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	٦	-	-	•	1	1
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	5	<b>†</b> †	1	1	1	1
Traffic Volume (vph)	203	139	78	55	10	156
Future Volume (vph)	203	139	78	55	10	156
Lane Group Flow (vph)	231	158	87	61	11	177
Turn Type	pm+pt	NA	NA	Perm	Prot	Prot
Protected Phases	7	4	8		1	1
Permitted Phases	4			8		
Detector Phase	7	4	8	8	1	1
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	13.0	28.5	28.5	28.5	13.5	13.5
Total Split (s)	13.0	41.5	28.5	28.5	13.5	13.5
Total Split (%)	23.6%	75.5%	51.8%	51.8%	24.5%	24.5%
Yellow Time (s)	3.0	4.5	4.5	4.5	3.0	3.0
All-Red Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	7.5	7.5	7.5	6.0	6.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	None	None	None	None	None
Act Effct Green (s)	18.6	17.6	8.4	8.4	7.9	7.9
Actuated g/C Ratio	0.51	0.48	0.23	0.23	0.22	0.22
v/c Ratio	0.35	0.08	0.19	0.14	0.02	0.33
Control Delay	6.6	5.5	15.5	6.1	14.8	5.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	6.6	5.5	15.5	6.1	14.8	5.6
LOS	A	A	B	A	B	A
Approach Delay	,,	6.1	11.6	, (	6.2	,,
Approach LOS		A	В		A	
Stops (vph)	91	62	65	18	13	33
Fuel Used(gal)	3	2	1	1	0	2
CO Emissions (g/hr)	238	160	95	36	12	106
NOx Emissions (g/hr)	46	31	19	7	2	21
VOC Emissions (g/hr)	55	37	22	8	3	25
Dilemma Vehicles (#)	0	13	8	0	0	0
Intersection Summary						
Cycle Length: 55						
Actuated Cycle Length: 36.7	7					
Natural Cycle: 55						
Control Type: Actuated-Unc	coordinated					
Maximum v/c Ratio: 0.35						
Intersection Signal Delay: 7	3			Ir	ntersectio	n I OS <sup>,</sup> A
Intersection Capacity Utiliza						of Service
Analysis Period (min) 15				N		

Splits and Phases: 5: 99 Ave & TH 65 SB On and Off Ramp

▲ <sub>Ø1</sub>			
13.5 s	41.5 s		
		<u>4</u> Ø8	
	13 s	28.5 s	

# Grade Separation of TH 65 at 99<sup>th</sup> Ave NE

Trunk Highway (TH) 65 is a principal arterial located within the Twin Cities metropolitan area in Anoka County. As the only continuous north/south corridor of its size and capacity in Anoka County, TH 65 is a vital link for traffic traveling between the Twin Cities urban core and northern suburban and exurban communities. At the project location, TH 65 is currently a four-lane divided highway with the following characteristics:

- Classified as a principal arterial with a primary function of providing mobility, while also
  providing access to adjacent land uses
- Posted speed limit is 55 miles per hour (mph)
- Signalized intersection with 99<sup>th</sup> Ave NE with no restricted turn movements
- Serves approximately 50,000 vehicles per day

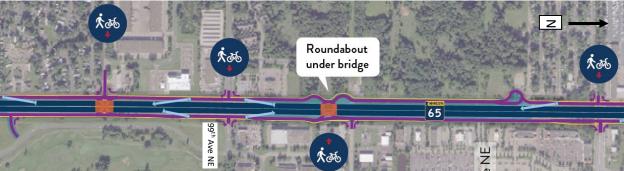
The proposed project would implement one or more grade separated crossings at 99<sup>th</sup> Ave NE to reduce congestion and improve pedestrian and bicycle access across TH 65. The need for the project was identified as part of the MnDOT Highway 65 Safety and Mobility Corridor Study. Various conceptual alternatives are currently being developed at multiple locations along the corridor. Two alternatives have been developed for this grade separation at 99th Avenue NE:

- Alternative 1: The first alternative proposes a grade separation at 99th and a tight diamond interchange configuration with a roundabout on the eastern interchange intersection.
- Alternative 2: The second alternative proposes two grade separations to the north and south of 99th Avenue NE. Users crossing TH 65 at 99th would use the frontage road system to divert to the north or south grade separation.



#### Alternative 1

#### Alternative 2



# DEPARTMENT OF TRANSPORTATION

Metropolitan District 1500 County Road B2 West Roseville, MN 55113

May 7, 2020

Jon Haukaas, PE Director of Public Works City of Blaine 1801 101<sup>st</sup> Ave NE Blaine, MN 55449

Dear Mr. Haukaas,

This letter is to serve as your notification that the Interchange Planning Review Committee has determined that your request to modify the accesses at TH 65 and 99th Avenue and TH 65 and 117<sup>th</sup> Avenue from at-grade facilities to grade separated interchanges are generally consistent with the qualifying criteria found in Appendix F of the Metropolitan Council's Transportation Policy Plan.

Criterion 3 of Appendix F states that "Principal arterial system interchanges should only connect principal arterials to other principal arterials or to an A-minor arterial as defined in the functional classification system adopted by the Transportation Advisory Board and approved by the Metropolitan Council." Currently 99th and 117th Avenues are classified as major collectors. Since MnDOT and the Metropolitan Council are in the midst of a Metro-wide functional classification study, this requirement will be waived.

In addition, the Committee has concerns regarding short weaving sections between 99<sup>th</sup> and 105<sup>th</sup> as well as between 103<sup>rd</sup> and 107<sup>th</sup>. There is also a concern about traffic entering from Southbound 99<sup>th</sup> accelerating towards traffic queues from the signalized intersection at 93<sup>rd</sup> Avenue. The design of the facility will need to provide for acceptable traffic operations in these sections. As the project progresses, please continue to work with MnDOT and the Metropolitan Council to assure the technical and design criteria of Appendix F continue to be met.

In addition, please ensure that appropriate steps are taken to complete the Metropolitan Council's Metro Freeway Project Approval process. The formal Metro Freeway Project Approval request typically happens toward the end of the planning process once an environmental document is completed. However, the approval must take place before the project right-of-way is purchased or construction begins. Additional information on the Metro Freeway Project Approval process can be found by following this link:

<u>https://metrocouncil.org/Transportation/Planning-2/Transit-Plans,-Studies-Reports/Highways-</u> <u>Roads/MetroFreewayProjectApproval.aspx?source=child</u> or contacting Tony Fischer at 651-602-1703.

We appreciate your efforts to work with the Interchange Review Committee in our effort to understand this project.

If you have any questions concerning this review letter please contact me at (651) 234-7793.

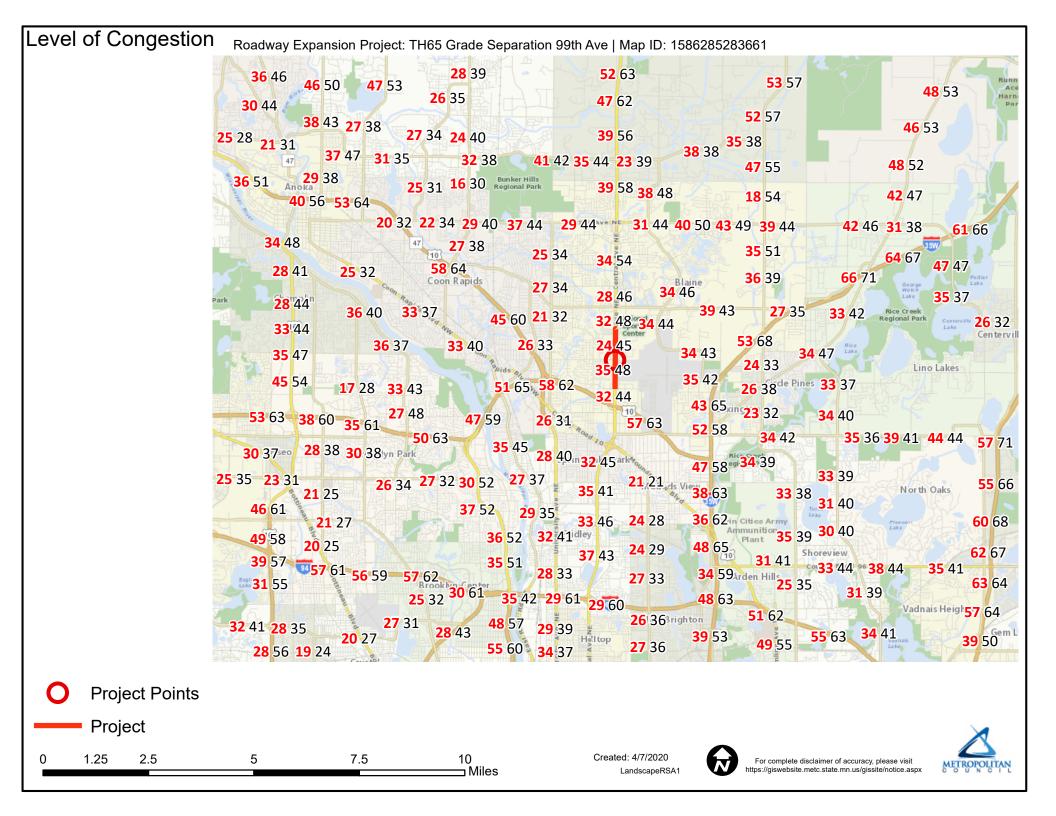
Sincerely,

Michael J. Corbett

Michael J. Corbett, PE State Program Administrator

Copy sent via E-Mail:

Melissa Barnes, MnDOT Jason Junge, MnDOT Steve Peterson, Metropolitan Council Tony Fischer, Metropolitan Council Jennifer Wiltgen, MnDOT Molly McCartney, MnDOT David Burns, Metropolitan Council



# DEPARTMENT OF TRANSPORTATION

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

May 12, 2020

Jon Haukaas, Public Works Director City of Blaine 10801 Town Square Drive NE Blaine, MN 55449

#### Re: MnDOT Letter for City of Blaine Metropolitan Council/Transportation Advisory Board 2020 Regional Solicitation Funding Request for TH 65 Grade Separation Project

Dear Jon Haukaas,

This letter documents MnDOT Metro District's recognition for the City of Blaine to pursue funding for the Metropolitan Council/Transportation Advisory Board's (TAB) 2020 Regional Solicitation for TH 65 Grade Separation Project.

As proposed, this project impacts MnDOT right-of-way on TH 65. As the agency with jurisdiction over TH 65, MnDOT will allow City of Blaine to seek improvements proposed in the application for the improvement. If funded, details of any future maintenance agreement with City of Blaine will need to be determined during the project development to define how the improvements will be maintained for the project's useful life.

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

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

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

If you have questions or require additional information at this time, please reach out to North Area Manager Melissa Barnes at Melissa.Barnes@state.mn.us or 651-234-7718.

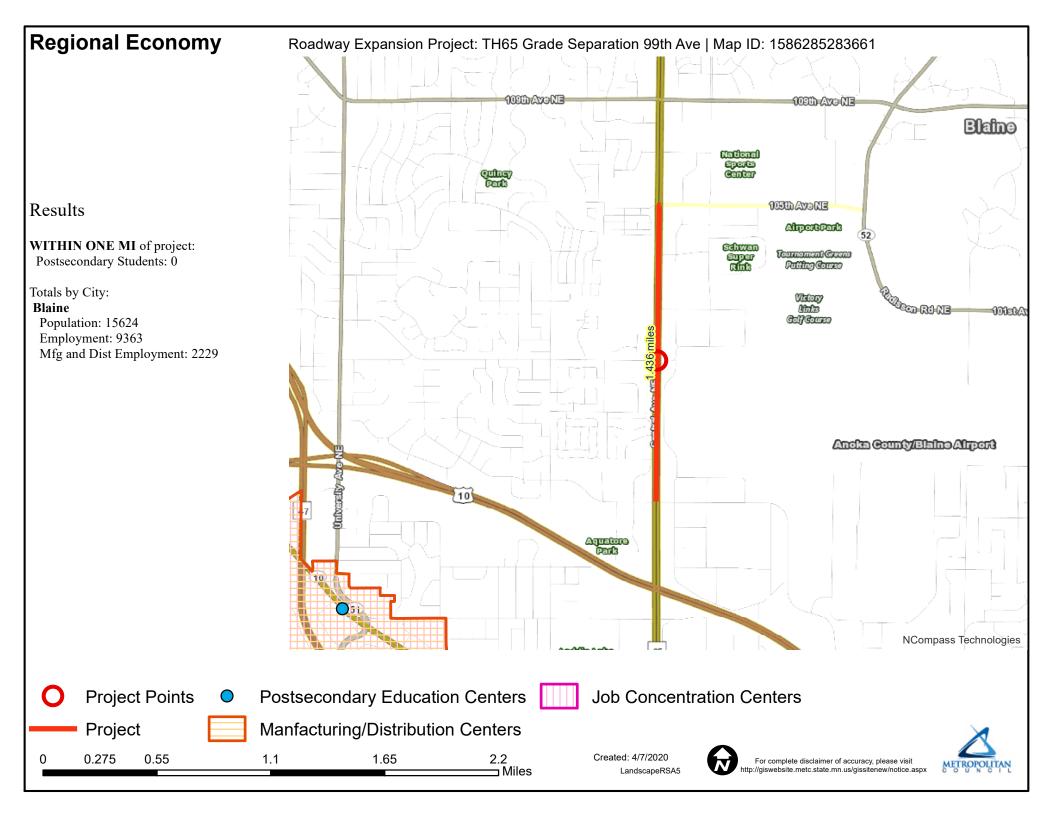
Sincerely,

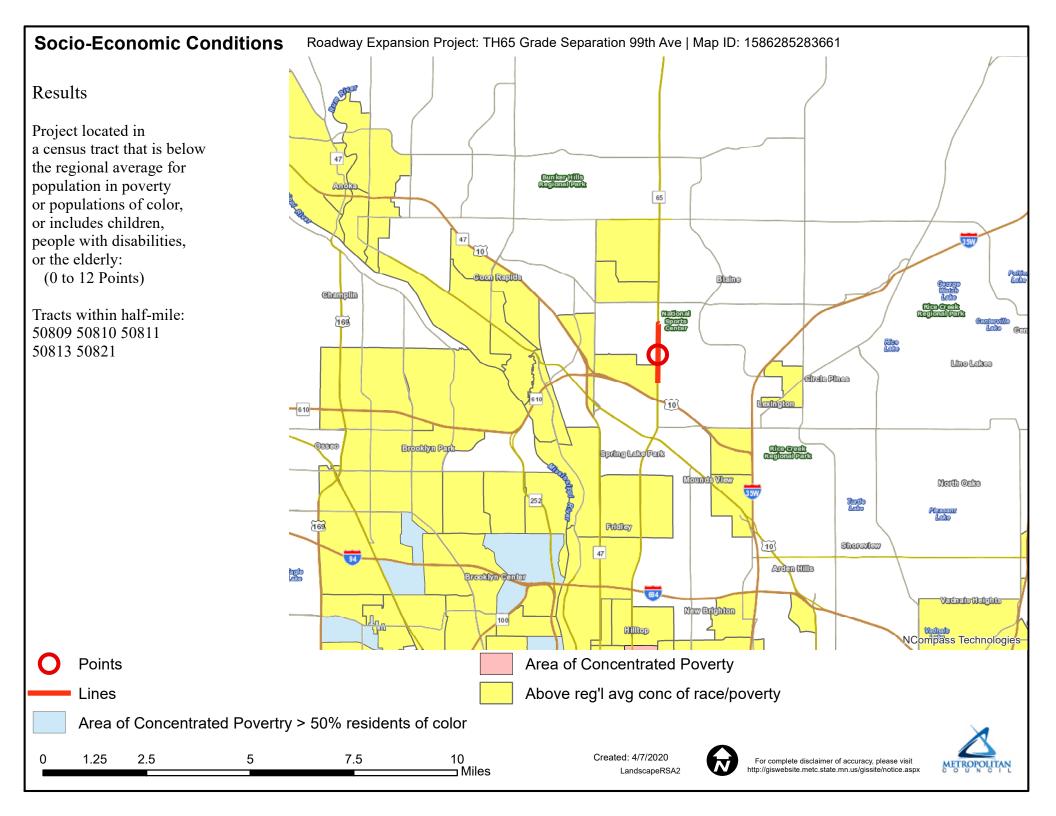
Michael Digitally signed by Michael Barnes Barnes Date: 2020.05.12 16:50:26-05'00'

Michael Barnes, PE

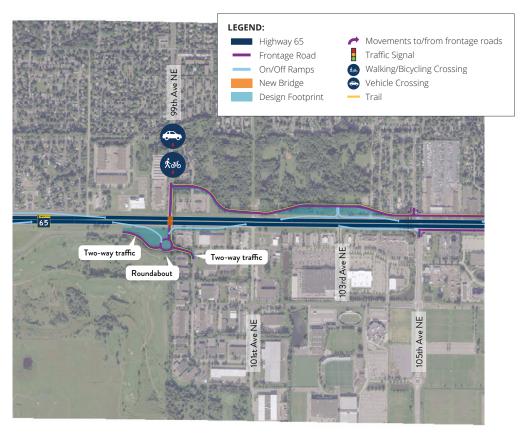
Metro District Engineer

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





# Concept 1: Freeway



# Concept 2: Hybrid Freeway



