Application

04774 - 2016 Roadway Modernization

05289 - 117th Street Reconstruction and Modernization

Regional Solicitation - Roadways Including Multimodal Elements

Status:	Submitted
Submitted Date:	07/15/2016 11:07 AM

Primary Contact

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

Organization Information

Name:	INVER GROVE HEIGHTS, CITY OF
Jurisdictional Agency (if different):	
Organization Type:	City
Organization Website:	
Address:	8150 BARBARA AVE

*	INVER GROVE HEIGHTS	Minnesota	55077
	City	State/Province	Postal Code/Zip

County:	Dakota
Phone:*	651-450-2500 Ext.
Fax:	
PeopleSoft Vendor Number	0000020955A1

Project Information

Project Name	117th Street Reconstruction
Primary County where the Project is Located	Dakota
Jurisdictional Agency (If Different than the Applicant):	

Brief Project Description (Limit 2,800 characters; approximately 400 words)

The proposed 117th Street Reconstruction project is located in Inver Grove Heights (IGH). The proposed project will consist of a two lane, median divided road with left-turn lanes for a one-mile segment of 117th Street between County State Aid Highway (CSAH) 71 and the Pine Bend Refinery access, just west of Trunk Highway (TH) 52.

This reconstruction and modernization project will enhance transportation system efficiency and mobility, reduce access points, improve roadway safety, and facilitate the phased development of an essential east-west transportation corridor within the region. The 117th Street corridor is an integral component of the broader Dakota County CSAH 32 corridor that connects from TH 52 on the east to Interstate (I) 35E and TH 77 on the west. The role this facility plays in the transportation system is much larger than the employment and subregional commuter traffic it serves today.

117th Street is an "A" Minor Expander roadway. The proposed project provides access to industrial land uses in the Cities of Inver Grove Heights and Rosemount, including a direct connection to the Flint Hills Resources - Pine Bend Refinery, which is the largest employer in the City of Rosemount, as well as adjacent quarries, landfill operations, and manufacturing. The corridor carries upwards of 7,000 Annual Average Daily Traffic (AADT), with heavy commercial AADTs ranging from 13 percent to 33 percent along the corridor. Heavy commercial, industrial land uses are adjacent to the corridor with 117th Street providing the direct access to the regional system. The project area is in proximity to other major employment centers as well, including the Bituminous Roadways southeast operation/plant, Shaffer Construction Quarry, Republic Services Pine Bend Landfill, and a number of other freight/heavy commercial based

industries.

The project will pave the way for future roadway improvements that will allow the road to be integrated into a future east-west corridor alignment with CSAH 32, which will connect the Flint Hills Resources - Pine Bend Refinery and a multitude of other jobs to the broader regional area of the Twin Cities. The reconstruction of 117th Street will also establish a corridor that is conducive for the future addition of sidewalks and trails, which will connect to the proposed Rich Valley Greenway alignment to the west and the existing Mississippi River Regional Trail to the east.

Include location, road name/functional class, type of improvement, etc.

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

117th Street in Inver Grove Heights from CSAH 71 to TH 52, Reconstruction

Project Length (Miles)

0.98

Project Funding

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

No

If yes, please identify the source(s)

Federal Amount

$3,441,896.00

Match Amount

$860,474.00

Minimum of 20% of project total

Project Total

$4,302,370.00

Match Percentage

20.0%

Minimum of 20%
Compute the match percentage by dividing the match amount by the project total

Source of Match Funds

Inver Grove Heights

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:

2020

For TDM projects, select 2018 or 2019. For Roadway, Transit, or Trail/Pedestrian projects, select 2020 or 2021.

Additional Program Years:

2019

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

Specific Roadway Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Mobilization (approx. 5% of total cost)	$141,000.00
Removals (approx. 5% of total cost)	$64,720.00
Roadway (grading, borrow, etc.)	$577,600.00
Roadway (aggregates and paving)	$1,190,400.00
Subgrade Correction (muck)	$0.00
Storm Sewer	$347,000.00
Ponds	$0.00
Concrete Items (curb & gutter, sidewalks, median barriers)	$482,650.00
Traffic Control	$85,000.00
Striping	$5,000.00
Signing	$35,000.00
Lighting	$0.00
Turf - Erosion & Landscaping	$116,000.00
Bridge	$0.00
Retaining Walls	$0.00
Noise Wall (do not include 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	$529,000.00
Other Roadway Elements	$729,000.00
Totals	**$4,302,370.00**

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, HAWK)	$0.00
Pedestrian-scale Lighting	$0.00
Streetscaping	$0.00
Wayfinding	$0.00
Bicycle and Pedestrian Contingencies	$0.00
Other Bicycle and Pedestrian Elements	$0.00
Totals	**$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
Substotal	$0.00
Other Costs - Administration, Overhead,etc.	$0.00

Totals

Total Cost	$4,302,370.00
Construction Cost Total	$4,302,370.00
Transit Operating Cost Total	$0.00

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, the 2040 Regional Parks Policy Plan (2015), and the 2040 Water Resources Policy Plan (2015).

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

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

List the goals, objectives, strategies, and associated pages:

The project is consistent with the Metropolitan Council 2040 Transportation Policy Plan; the following goals, objectives, and strategies are addressed:

- Goal A: Transportation System Stewardship
- Objective A: maintain the regional transportation system in a state of good repair

- Objective B: efficiently and cost-effectively connect people and freight to destinations
- Strategies: A1 (p. 2.17)

- Goal C: Access to Destinations

- Objective C: ensure access to freight terminals such as river ports, airports, and intermodal rail yards

- Strategies: C6 (p. 2.30), C7 (p. 2.30), C9 (p. 2.32), and C10 (pp. 2.32-2.33)

- Goal D: Competitive Economy
- Objectives C: support the region's economic competitiveness through the efficient movement of freight

- Strategies: D1 (p. 2.38)

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 needs and objectives are identified in the Dakota County 2030 Transportation Plan, adopted in 2012, and the Inver Grove Heights Comprehensive Plan, adopted in 2010, both of which are guided by the goals and strategies documented in the 2030 Transportation Policy Plan (2009).

- Dakota County 2030 Transportation Plan

- Goal 4: Management to Increase Transportation System Efficiency, Improve Safety and Maximize Existing Highway Capacity (pp. 7-1 to 7-31)

- 10-Ton County Highway System (p. 7-12)

- Goal 6: Improvement and Expansion of Transportation Corridors (pp. 9-1 to 9-21)

- Future County Highway Alignments (pp. 9-8 to 9-11)

- Future Studies (pp. 9-16 to 9-20)

- Inver Grove Heights Comprehensive Plan

- Chapter 5: Transportation (pp. 5-1 to 5-40)

- Future Roadway Assumptions & Deficiency Analysis (pp.5-13 to 5-18)

- 2030 Functional Classification Plan (p. 5-31)

- Chapter 11: Implementation (pp. 11-1 to 11-18)

- Financial Resources (p. 11-9)

- Action Steps (p. 11-16)

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

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

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

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

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

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

7.The requested funding amount must be more than or equal to the minimum award and less than or equal to the maximum award. The cost of preparing a project for funding authorization can be substantial. For that reason, minimum federal amounts apply. Other federal funds may be combined with the requested funds for projects exceeding the maximum award, but the source(s) must be identified in the application. Funding amounts by application category are listed below.
***Roadway Expansion:** $1,000,000 to $7,000,000*
***Roadway Reconstruction/ Modernization:** $1,000,000 to $7,000,000*
***Roadway System Management** $250,000 to $7,000,000*
***Bridges Rehabilitation/ Replacement:** $1,000,000 to $7,000,000*

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

8.The project must comply with the Americans with Disabilities Act.

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

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

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

10.The owner/operator of the facility must operate and maintain the project for the useful life of the improvement.

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

11.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

12.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

13.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 projects only:

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

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

Bridge Rehabilitation/Replacement projects only:

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

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

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

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

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

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

6. The bridge must have a sufficiency rating less than 80 for rehabilitation projects and less than 50 for replacement projects. Additionally, the bridge must also be classified as structurally deficient or functionally obsolete.

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

Requirements - Roadways Including Multimodal Elements

Project Information-Roadways

County, City, or Lead Agency	Inver Grove Heights, City of
Functional Class of Road	A Minor Expander
Road System *TH, CSAH, MSAS, CO. RD., TWP. RD., CITY STREET*	City Street
Road/Route No. *i.e., 53 for CSAH 53*	
Name of Road *Example; 1st ST., MAIN AVE*	117th St
Zip Code where Majority of Work is Being Performed	55077
(Approximate) Begin Construction Date	07/01/2019
(Approximate) End Construction Date	06/01/2021

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

From: **(Intersection or Address)**	CSAH 71
To: **(Intersection or Address)**	250ft West of Flint Hills Resources Access

DO NOT INCLUDE LEGAL DESCRIPTION

Or At

Primary Types of Work

BIT REMOVAL, GRADING, AGG BASE, BIT BASE, BIT SURF, CURB AND GUTTER, MEDIAN, STORM SEWER AND TREAT, LIGHTING, MARKINGS, SIGNING, RR XING RECON

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):

Expander/Augmentor/Connector/Non-Freeway Principal Arterial

Select one:	Expander
Area	5.828
Project Length	1.517
Average Distance	3.8418
Upload Map	1474401700421_RAD117IGHRM.pdf

Reliever: Relieves a Principal Arterial that is a Freeway Facility

Facility being relieved	
Number of hours per day volume exceeds capacity (based on the Congestion Report)	0

Reliever: Relieves a Principal Arterial that is a Non-Freeway Facility

Facility being relieved	
Number of hours per day volume exceeds capacity (based on the table below)	0

Non-Freeway Facility Volume/Capacity Table

Hour	NB/EB Volume	SB/WB Volume	Capacity	Volume exceeds capacity
12:00am - 1:00am			0	
1:00am - 2:00am			0	

2:00am - 3:00am	0
3:00am - 4:00am	0
4:00am - 5:00am	0
5:00am - 6:00am	0
6:00am - 7:00am	0
7:00am - 8:00am	0
8:00am - 9:00am	0
9:00am - 10:00am	0
10:00am - 11:00am	0
11:00am - 12:00pm	0
12:00pm - 1:00pm	0
1:00pm - 2:00pm	0
2:00pm - 3:00pm	0
3:00pm - 4:00pm	0
4:00pm - 5:00pm	0
5:00pm - 6:00pm	0
6:00pm - 7:00pm	0
7:00pm - 8:00pm	0
8:00pm - 9:00pm	0
9:00pm - 10:00pm	0
10:00pm - 11:00pm	0
11:00pm - 12:00am	0

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

Existing Employment within 1 Mile:	2613
Existing Manufacturing/Distribution-Related Employment within 1 Mile:	2142
Existing Students:	0
Upload Map	1467927856845_RegionalEconomy.pdf

Measure C: Current Heavy Commercial Traffic

Location:	1/2 mile west of 117th Street/Clark Road intersection
Current daily heavy commercial traffic volume:	1750
Date heavy commercial count taken:	09/2014

Measure D: Freight Elements

Response (Limit 1,400 characters; approximately 200 words)

The land uses immediately adjacent to the 117th Street corridor are industrial lands with significant freight traffic. The corridor serves a regionally significant set of land uses that rely on direct access to US 52 and other higher functionally classified roadways.

The Dakota County 2030 Transportation Plan includes a performance measure of developing a "10-ton system on principal or minor arterial routes that provide primary access for intensive concentrations of heavy industrial land uses to state highways or other 10-ton routes." The plan proposes including 117th Street into the County's 10-ton route system, contingent on roadway improvements that are addressed by the proposed project. In parallel, the City of Inver Grove Heights has documented its intention to improve 117th Street to a 10-ton facility as well, while it remains under its jurisdiction. The proposed reconstruction project will include upgrading this facility to a 10-ton route.

The proposed project will also include turn lanes long enough to accommodate heavy commercial vehicle deceleration rates and corner radii adequate to minimize vehicle encroachments in adjacent lanes. The closure/consolidation of several access points and the inclusion of a center median will improve vehicular mobility, accessibility, and safety along the 117th Street corridor.

Measure A: Current Daily Person Throughput

Location	Near the 117th Street/Clark Road intersection
Current AADT Volume	7000
Existing Transit Routes on the Project	N/A
For New Roadways only, list transit routes that will be moved to the new roadway	
Upload Transit Map	1467929198638_TransitConnections.pdf

Response: Current Daily Person Throughput

Average Annual Daily Transit Ridership	0
Current Daily Person Throughput	9100.0

Measure B: 2040 Forecast ADT

Use Metropolitan Council model to determine forecast (2040) ADT volume	No
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	Dakota County Travel Demand Model
Forecast (2040) ADT volume	14000

Measure A: Project Location and Impact to Disadvantaged Populations

Select one:

Project located in Area of Concentrated Poverty with 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:	Yes

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

The 117th Street corridor is relied on as a major east-west arterial (via Cliff Road) given the limited continuous east-west connections between TH 52/TH 55, and to a large extent TH 3 and I-35E. As a result, the corridor serves a diverse population throughout Inver Grove Heights, Rosemount, Eagan and Apple Valley.

The proposed project is unique from a social equity and housing perceptive. First, it is important to recognize the project area is comprised primarily of industrial and manufacturing land uses. The major employer located in the area is Flint Hills Resources, an oil refinery, who employs over 2,600 people. Other supporting land uses include aggregate/mining pits and various trucking industries. Combined, these land uses support thousands of jobs that can be accessed by the proposed project. Better access to these jobs will help link the populations above the regional average of race or poverty, which are located on the boarders of the project area.

The type of jobs offered within the project area are well paying and do not typically require a post-secondary education. These types of jobs are critical in supporting the economic vitality of Inver Grove Heights, while better serving the populations in the area that are above the regional average of poverty. The proposed project will also help achieve the Metropolitan Council's 2040 TPP goals. For example, the 2040 TPP recognizes that industrial land uses adjacent to A-minor arterials are key connections to jobs and accessibility.

The project area is also surrounded by a variety of housing options for all ages and income levels. For example, a total of 7,200 housing units are located within ten miles of the project area. These homes

represent a diverse population of elderly (12 percent), students (21 percent), and individuals with disabilities (7 percent).

Overall, the proposed project provides a critical east-west link to high-paying jobs for a project area that is comprised of populations above the regional average of poverty. More importantly, the proposed project will help overcome transportation barriers by providing better access and a safer route to high-paying jobs.

The response should address the benefits, impacts, and mitigation for the populations affected by the project.

Upload Map 1467930032185_SocioEconomic.pdf

Measure B: Affordable Housing

City/Township	Segment Length in Miles (Population)
Inver Grove Heights	0.98
	1

Total Project Length

Total Project Length (Total Population) 0.98

Affordable Housing Scoring - To Be Completed By Metropolitan Council Staff

City/Township	Segment Length (Miles)	Total Length (Miles)	Score	Segment Length/Total Length	Housing Score Multiplied by Segment percent
		0	**0**	**0**	**0**

Affordable Housing Scoring - To Be Completed By Metropolitan Council Staff

Total Project Length (Miles) 0.98

Total Housing Score 0

Measure A: Year of Roadway Construction

Year of Original Roadway Construction or Most Recent Reconstruction	Segment Length	Calculation	Calculation 2
1960	0.98	1920.8	1960.0
	1	**1921**	**1960**

Average Construction Year

Weighted Year 1960

Total Segment Length (Miles)

Total Segment Length 0.98

Measure B: Geometric, Structural, or Infrastructure Improvements

Improving a non-10-ton roadway to a 10-ton roadway: Yes

Response (Limit 700 characters; approximately 100 words)

The existing two-lane rural roadway is not designed as a 10-ton roadway. The proposed project would be a 10-ton design to better accommodate the significant heavy commercial traffic that uses this corridor to access the many industrial land uses (landfills, quarries, and freight). Constructing this roadway to a 10-ton design will better tie into the future improvements further west along county roads as well; completing the 10-ton network from US 52 to TH 77.

Improved clear zones or sight lines: Yes

Response (Limit 700 characters; approximately 100 words)

All intersections incorporated into the proposed project will be designed so as to provide adequate intersection sight distance (sight lines for all vehicle types). While the majority of corridor has adequate clear zones, the existing rural section of narrow two-lane road has some adjacent areas that will have better clear zones with the proposed two-lane divided urban roadway.

Improved roadway geometrics: Yes

Response (Limit 700 characters; approximately 100 words)	The existing two-lane rural roadway does not provide turn lanes (right nor left-turn lanes). Heavy commercial vehicles currently use the gravel shoulder to make right-turn movements into their respective sites. The proposed project will include right- and left-turn lanes, along with a center median to assist with access control and improved mobility.
Access management enhancements:	Yes
Response (Limit 700 characters; approximately 100 words)	There are number of existing access points along the corridor (more than necessary to provide access to adjacent land uses). The proposed project will consolidate and/or close access points along the corridor where appropriate. The access closures do not cause an undue hardship on the existing businesses effected; the access closures have already been discussed with the affected property owners and generally agreed upon. Of the existing 13 access points along the projects extent eight are either closed or consolidated with an adjacent access; resulting in five access points with the proposed project.
Vertical/horizontal alignments improvements:	
Response (Limit 700 characters; approximately 100 words)	
Improved stormwater mitigation:	Yes
Response (Limit 700 characters; approximately 100 words)	The current rural cross section will be updated to an urban section with curb and gutter to gather stormwater. The storm sewers will meet current state aid drainage standards and additional storm water mitigation will be incorporated in the design of the proposed center median, where necessary.
Signals/lighting upgrades:	
Response (Limit 700 characters; approximately 100 words)	
Other Improvements	No
Response (Limit 700 characters; approximately 100 words)	

Measure A: Congestion Reduction/Air Quality

Total Peak Hour Delay Per Vehicle Without The Project	Total Peak Hour Delay Per Vehicle With The Project	Total Peak Hour Delay Per Vehicle Reduced by Project	Volume (Vehicles per hour)	Total Peak Hour Delay Reduced by the Project:	EXPLANATION of methodology used to calculate railroad crossing delay, if applicable.	Synchro or HCM Reports
8.0	7.0	1.0	1890	1890.0		1467994062370_HCM.pdf

Total Delay

Total Peak Hour Delay Reduced	1890.0

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

Total (CO, NOX, and VOC) Peak Hour Emissions Per Vehicle without the Project (Kilograms):	Total (CO, NOX, and VOC) Peak Hour Emissions Per Vehicle with the Project (Kilograms):	Total (CO, NOX, and VOC) Peak Hour Emissions Reduced Per Vehicle by the Project (Kilograms):	Volume (Vehicles Per Hour):	Total (CO, NOX, and VOC) Peak Hour Emissions Reduced by the Project (Kilograms):
1.9	2.02	-0.12	1890.0	-226.8
2	**2**		**1890**	**-227**

Total

Total Emissions Reduced:	-226.8
Upload Synchro Report	1467994896308_HCM.pdf

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

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

Total Parallel Roadways

Emissions Reduced on Parallel Roadways	0
Upload Synchro Report	

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)	

Transit Projects Not Requiring Construction

If the applicant is completing a transit or TDM 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

1)Project Scope (5 Percent of Points)

Meetings or contacts with stakeholders have occurred	Yes

100%

Stakeholders have been identified

40%

Stakeholders have not been identified or contacted

0%

2)Layout or Preliminary Plan (5 Percent of Points)

Layout or Preliminary Plan completed	Yes

100%

Layout or Preliminary Plan started

50%

Layout or Preliminary Plan has not been started

0%

Anticipated date or date of completion

3)Environmental Documentation (5 Percent of Points)

EIS

EA

PM

Document Status:

Document approved (include copy of signed cover sheet)

100%

Document submitted to State Aid for review

75% date submitted

Document in progress; environmental impacts identified; review request letters sent

50%

Document not started Yes

0%

Anticipated date or date of completion/approval

4)Review of Section 106 Historic Resources (10 Percent of Points)

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

100%

Historic/archeological review under way; determination of no historic properties affected or no adverse effect anticipated

80%

Historic/archaeological review under way; determination of adverse effect anticipated

40%

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

0%

Anticipated date or date of completion of historic/archeological review:

Project is located on an identified historic bridge

5)Review of Section 4f/6f Resources (10 Percent of Points)

4(f) Does the project impacts any public parks, public wildlife refuges, public golf courses, wild & scenic rivers or public private historic properties?
6(f) Does the project impact any public parks, public wildlife refuges, public golf courses, wild & scenic rivers or historic property that was purchased or improved with federal funds?

No Section 4f/6f resources located in the project area Yes

100%

No impact to 4f property. The project is an independent bikeway/walkway project covered by the bikeway/walkway Negative Declaration statement; letter of support received

100%

Section 4f resources present within the project area, but no known adverse effects

80%

Project impacts to Section 4f/6f resources likely coordination/documentation has begun

50%

Project impacts to Section 4f/6f resources likely coordination/documentation has not begun

30%

Unsure if there are any impacts to Section 4f/6f resources in the project area

0%

6)Right-of-Way (15 Percent of Points)

Right-of-way, permanent or temporary easements not required

100%

Right-of-way, permanent or temporary easements has/have been acquired

100%

Right-of-way, permanent or temporary easements required, offers made

75%

Right-of-way, permanent or temporary easements required, appraisals made

50%

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

25%

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

0%

Right-of-way, permanent or temporary easements identification has not been completed

0%

Anticipated date or date of acquisition 04/01/2019

7)Railroad Involvement (25 Percent of Points)

No railroad involvement on project

100%

Railroad Right-of-Way Agreement is executed (include signature page) 100%

Railroad Right-of-Way Agreement required; Agreement has been initiated

60%

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

40%

Railroad Right-of-Way Agreement required; negotiations not begun Yes

0%

Anticipated date or date of executed Agreement 04/01/2019

8)Interchange Approval (15 Percent of Points)*

**Please contact Karen Scheffing at MnDOT (Karen.Scheffing@state.mn.us or 651-234-7784) to determine if your project needs to go through the Metropolitan Council/MnDOT Highway Interchange Request Committee.*

Project does not involve construction of a new/expanded interchange or new interchange ramps Yes

100%

Interchange project has been approved by the Metropolitan Council/MnDOT Highway Interchange Request Committee

100%

Interchange project has not been approved by the Metropolitan Council/MnDOT Highway Interchange Request Committee

0%

9)Construction Documents/Plan (10 Percent of Points)

Construction plans completed/approved (include signed title sheet)

100%

Construction plans submitted to State Aid for review

75%

Construction plans in progress; at least 30% completion

50%

Construction plans have not been started Yes

0%

Anticipated date or date of completion 06/01/2018

10)Letting

Anticipated Letting Date 05/01/2019

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

Crash Modification Factor Used: 0.8

	Dual CRF for CR 71/117th St Intersection Improvements include adding a northbound right turn lane and a southbound left-turn bypass lane. CR1=Add right tune lane CR2=Add left-turn lane
Rationale for Crash Modification Selected:	CR=1 (1-CR1)*(1-CR2) Rear End (PDO): 1 (1-.65)*(1-.44)= .80 Left Turn (Injury): 1 (1-.35)*(1-.68)= .79 All Other (PDO): 1 (1-.35)*(1-.44) = .64 Please see attachment for greater details
(Limit 1400 Characters; approximately 200 words)	
Project Benefit ($) from B/C Ratio	$3,204,944.00
Worksheet Attachment	1468537346187_IGH Crash Analysis.pdf

Roadway projects that include railroad grade-separation elements:

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

Measure A: Multimodal Elements and Existing Connections

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

117th Street is the primary east-west connection, via CSAH 71 and CSAH 32, between the manufacturing, rail line, trucking, and barging facilities clustered in the Pine Bend area along TH 52, and the north-south corridors of CSAH 71, I-35E, and TH 77, as well as the north-south corridor of I-35W via TH 13, and the manufacturing, warehousing, trucking, and aggregate mining along TH 13. In this capacity, the road serves as an important link within the region's multimodal system. As a result of its significance within the regional transportation network, 117th Street experiences notably high heavy commercial volumes due to function and operation of this segment of roadway. Traffic levels are forecasted to increase significantly over the next 25 years.

Limited bicycle and pedestrian facilities are provided along or near 117th Street today due to the constraints created by the built environment within an industrial zoned district. However, Dakota County, in coordination with Inver Grove Heights and Rosemount, is in the process of planning expansions to its multi-modal network by adding a potential pedestrian and bicycle greenway that connects the Mississippi River corridor to the Pine Bend area and further west. A candidate is the 117th Street corridor (presented in the Rich Valley Greenway Master Plan). The proposed 117th Street reconstruction project does not preclude the corridor from being expanded to accommodate a multiuse parallel path from being constructed immediately adjacent to the roadway. This future facility will connect pedestrians and cyclists with the east-west Rich Valley Greenway and the north-south Mississippi River Regional Trail at the Pine Bend Bluffs Scientific and Natural Area.

Providing residents with bicycle and pedestrian

facilities along 117th Street will increase alternative modes of transportation by facilitating safe passage along a segment of road with significant heavy commercial vehicle traffic. Residents will also benefit from improved connections to nearby employment sites, local retail and services, and natural amenities along the Mississippi River.

Measure A: Cost Effectiveness

Total Project Cost (entered in Project Cost Form):	$4,302,370.00
Enter Amount of the Noise Walls:	$0.00
Total Project Cost subtract the amount of the noise walls:	$4,302,370.00
Points Awarded in Previous Criteria	
Cost Effectiveness	$0.00

Other Attachments

File Name	Description	File Size
117th St project MnDOT letter of support_cv edits.pdf	MnDOT Letter of Support	167 KB
9301_log-s.pdf	117th Street Layout	7.4 MB
Federal STBGP Letter of Support for 117th Street IGH.pdf	County Letter of Support	543 KB
StreetView.docx	StreetView	1.0 MB

Roadway Area Definition

Roadway Reconstruction/Modernization Project: 05308 Csah 117th Street IGH | Map ID: 1472044708137

Results

Project Length: 1.517 miles

Project Area: 5.828 sq mi

Project Points Project Area

Project

0 1.75 3.5 7 10.5 14 Miles

Created: 8/24/2016
LandscapeRSA1

For complete disclaimer of accuracy, please visit
http://giswebsite.metc.state.mn.us/gissitenew/notice.aspx

METROPOLITAN COUNCIL

Regional Economy

Roadway Reconstruction/Modernization Project: 117th Street Reconstruction | Map ID: 1466709802411

Results

WITHIN ONE MI of project:

Totals by City:

Inver Grove Heights
Population: 1426
Employment: 533
Mfg and Dist Employment: 258

Rosemount
Population: 126
Employment: 2080
Mfg and Dist Employment: 1884

Postsecondary Students:
0

Project Points
Project Area
Project

0 1.75 3.5 7 10.5 14 Miles

Created: 6/23/2016
LandscapeRSA5

For complete disclaimer of accuracy, please visit
http://giswebsite.metc.state.mn.us/gissitenew/notice.aspx

METROPOLITAN COUNCIL

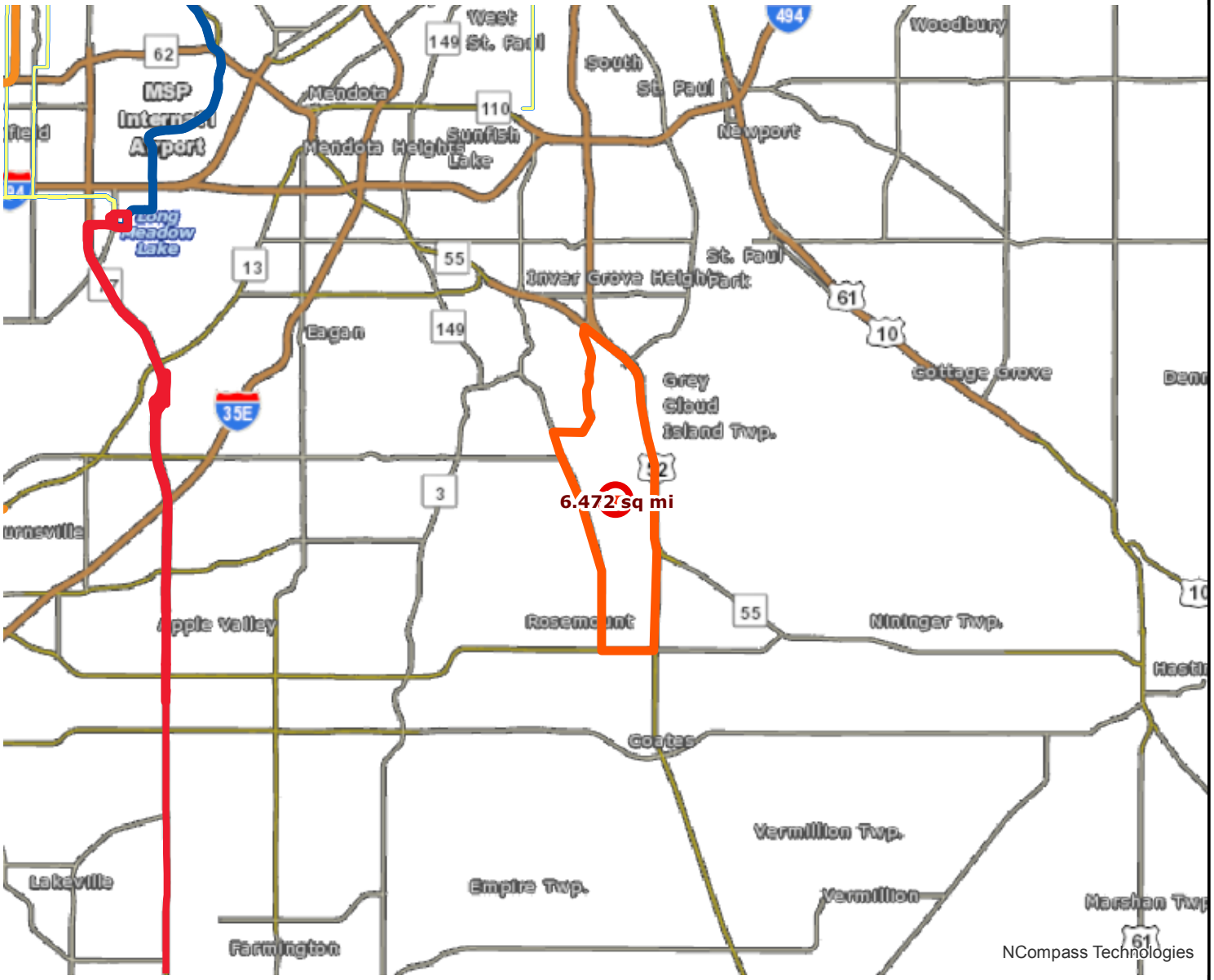
Transit Connections

Roadway Reconstruction/Modernization Project: 117th Street Reconstruction | Map ID: 1466709802411

Results

Transit with a Direct Connection to project:
-- NONE --

**indicates Planned Alignments*



Project Points
Project
Project Area

Transitway
Blue Line
Red Line

Planned Alignments
BRT, Red Line - Phase 2
Arterial BRT
BRT, Orange Line

0 1.75 3.5 7 10.5 14 Miles

Created: 6/23/2016
LandscapeRSA3

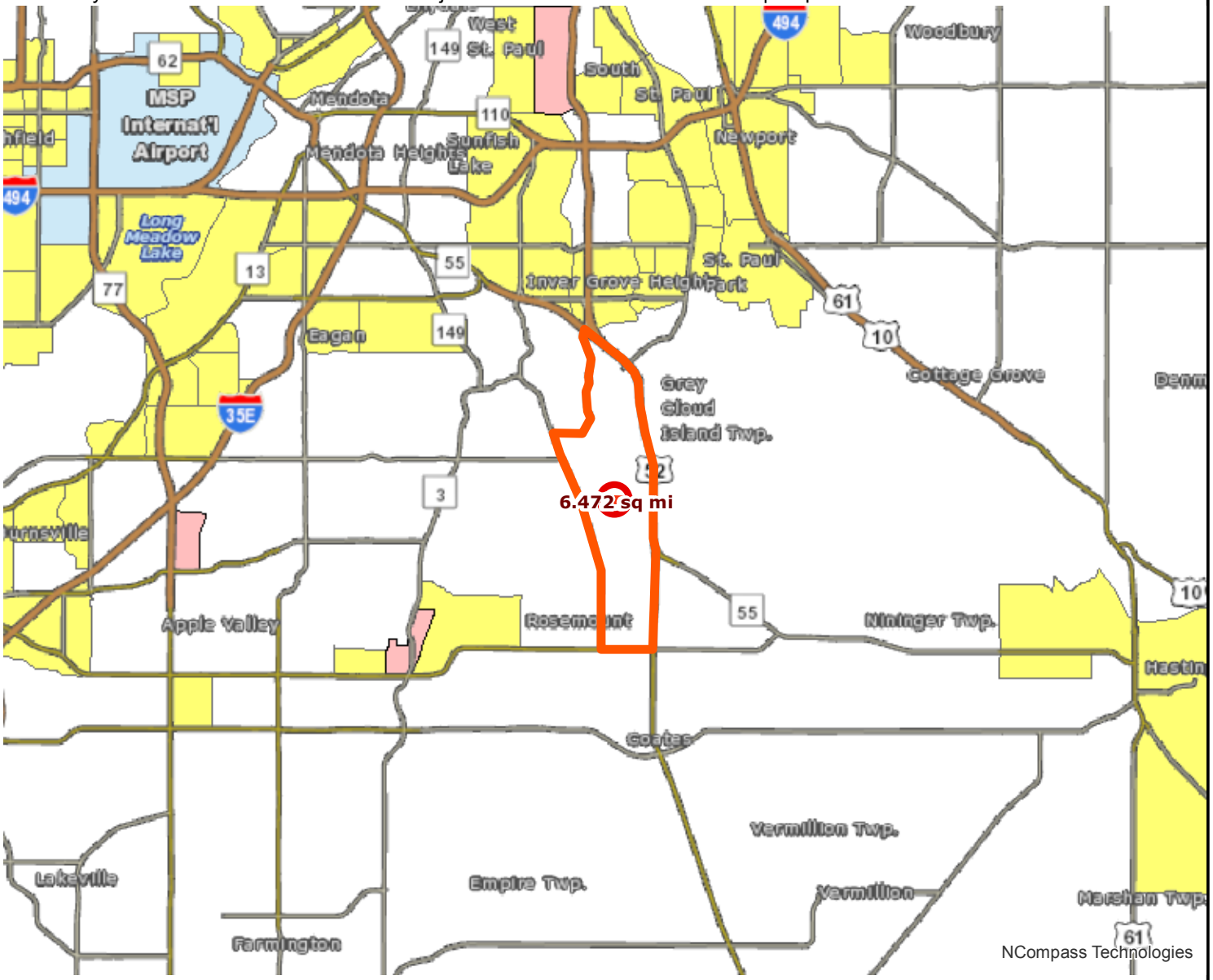
METROPOLITAN COUNCIL

Socio-Economic Conditions

Roadway Reconstruction/Modernization Project: 117th Street Reconstruction | Map ID: 1466709802411

Results

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:
(0 to 12 Points)



Project Points
Project
Project Area

Area of Concentrated Povertry > 50% residents of color
Area of Concentrated Poverty
Above reg'l avg conc of race/poverty

0 1.75 3.5 7 10.5 14 Miles

Created: 6/23/2016
LandscapeRSA2

For complete disclaimer of accuracy, please visit
http://giswebsite.metc.state.mn.us/gissitenew/notice.aspx

METROPOLITAN COUNCIL

15: CSAH 71 & 117th Street

Direction	All
Future Volume (vph)	1020
Total Delay / Veh (s/v)	8
CO Emissions (kg)	1.11
NOx Emissions (kg)	0.22
VOC Emissions (kg)	0.26

25: 117th Street & Drive B

Direction	All
Future Volume (vph)	870
Total Delay / Veh (s/v)	0
CO Emissions (kg)	0.22
NOx Emissions (kg)	0.04
VOC Emissions (kg)	0.05

15: CSAH 71 & 117th Street

Direction	All
Future Volume (vph)	1020
Total Delay / Veh (s/v)	7
CO Emissions (kg)	1.20
NOx Emissions (kg)	0.23
VOC Emissions (kg)	0.28

25: 117th Street & Drive B

Direction	All
Future Volume (vph)	870
Total Delay / Veh (s/v)	0
CO Emissions (kg)	0.22
NOx Emissions (kg)	0.04
VOC Emissions (kg)	0.05

15: CSAH 71 & 117th Street

Direction	All
Future Volume (vph)	1020
Total Delay / Veh (s/v)	8
CO Emissions (kg)	1.11
NOx Emissions (kg)	0.22
VOC Emissions (kg)	0.26

25: 117th Street & Drive B

Direction	All
Future Volume (vph)	870
Total Delay / Veh (s/v)	0
CO Emissions (kg)	0.22
NOx Emissions (kg)	0.04
VOC Emissions (kg)	0.05

15: CSAH 71 & 117th Street

Direction	All
Future Volume (vph)	1020
Total Delay / Veh (s/v)	7
CO Emissions (kg)	1.20
NOx Emissions (kg)	0.23
VOC Emissions (kg)	0.28

25: 117th Street & Drive B

Direction	All
Future Volume (vph)	870
Total Delay / Veh (s/v)	0
CO Emissions (kg)	0.22
NOx Emissions (kg)	0.04
VOC Emissions (kg)	0.05

HSIP worksheet

Control Section	T.H. / Roadway	Location	Beginning Ref. Pt.	Ending Ref. Pt.	State, County, City or Township	Study Period Begins	Study Period Ends
	117th St	Intersection at CR 71			Inver Grove Heights	1/1/2013	12/31/2015

Description of Proposed Work: Add NBR and SBL (Bypass) Lanes

Accident Diagram Codes			1 Rear End	2 Sideswipe Same Direction	3 Left Turn Main Line	5 Right Angle	4,7 Ran off Road	8, 9 Head On/ Sideswipe - Opposite Direction	Pedestrian	6, 90, 99 Other	Total
Study Period: Number of Crashes	Fatal	**F**									
	Personal Injury (PI)	**A**			1						**1**
		B									
		C									
	Property Damage	**PD**	1							2	**3**
% Change in Crashes *Use Crash Modification Factors Clearinghouse	Fatal	**F**									
	PI	**A**			-79%						
		B									
		C									
	Property Damage	**PD**	-80%							-64%	
Change in Crashes = No. of crashes **x** % change in crashes	Fatal	**F**									
	PI	**A**			**-0.79**						**-0.79**
		B									
		C									
	Property Damage	**PD**	**-0.80**							**-1.28**	**-2.08**

Year (Safety Improvement Construction): **2020**

Project Cost (exclude Right of Way): **$ 4,302,370**

Right of Way Costs (optional):

Traffic Growth Factor: **3%**

Capital Recovery

1. **Discount Rate:** **4.5%**
2. **Project Service Life (n):** **20**

Type of Crash	Study Period: Change in Crashes	Annual Change in Crashes	Cost per Crash	Annual Benefit
F			**$ 1,400,000**	
A	**-0.79**	**-0.26**	**$ 570,000**	**$ 150,237**
B			**$ 170,000**	
C			**$ 83,000**	
PD	**-2.08**	**-0.69**	**$ 7,600**	**$ 5,274**
Total				**$ 155,511**

B/C= 0.63

Using present worth values,

B= $ 2,720,503

C= $ 4,302,370

See "Calculations" sheet for amortization.

Office of Traffic, Safety and Technology **September 2014**

HSIP worksheet

Control Section	T.H. / Roadway	Location	Beginning Ref. Pt.	Ending Ref. Pt.	State, County, City or Township	Study Period Begins	Study Period Ends
	117th St	Segment between CR 71 and Clark Ave			Inver Grove Heights	1/1/2013	12/31/2015

Description of Proposed Work: Install a median

Accident Diagram Codes			1 Rear End	2 Sideswipe Same Direction	3 Left Turn Main Line	5 Right Angle	4,7 Ran off Road	8, 9 Head On/ Sideswipe - Opposite Direction	Pedestrian	6, 90, 99 Other	Total
Study Period: Number of Crashes	Fatal	**F**									
	Personal Injury (PI)	**A**									
		B									
		C						1			**1**
	Property Damage	**PD**									
% Change in Crashes *Use Crash Modification Factors Clearinghouse	Fatal	**F**									
	PI	**A**									
		B									
		C						-100%			
	Property Damage	**PD**									
Change in Crashes = No. of crashes **X** % change in crashes	Fatal	**F**									
	PI	**A**									
		B									
		C						**-1.00**			**-1.00**
	Property Damage	**PD**									

Year (Safety Improvement Construction): **2020**

		Type of Crash	Study Period: Change in Crashes	Annual Change in Crashes	Cost per Crash	Annual Benefit
Project Cost (exclude Right of Way)	**$ 4,302,370**					
Right of Way Costs (optional)		**F**			**$ 1,400,000**	
Traffic Growth Factor	**3%**	**A**			**$ 570,000**	
Capital Recovery		**B**			**$ 170,000**	
1. Discount Rate	**4.5%**	**C**	**-1.00**	**-0.33**	**$ 83,000**	**$ 27,692**
2. Project Service Life (n)	**20**	**PD**			**$ 7,600**	
		Total				**$ 27,692**

B/C= 0.11

Using present worth values,

B= $ 484,441

C= $ 4,302,370

See "Calculations" sheet for amortization.

Office of Traffic, Safety and Technology **September 2014**

Countermeasure(s)	Crash Type	Crash Severity	Area Type	Config	Control	Major Daily Traffic Volume (veh/day)	Minor Daily Traffic Volume (veh/day)	Ref	Obs	Effectiveness: Crash Reduction Factor / Function	Effectiveness: Std Error	Effectiveness: Range Low	Effectiveness: Range High	Study Type
LEFT-TURN COUNTERMEASURES														
Add indirect left-turn treatments to minimize conflicts	All	All			Stop	>34,000		59		18	8			Cross-section
	All	All			Stop	>34,000 4 lanes		59		-24	35			Cross-section
	All	All			Stop	>34,000 6 lanes		59		26	8			Cross-section
	All	All			Stop	>34,000 8 lanes		59		24	63			Cross-section
	All	Fatal/Injury			Stop	>34,000		59		27	12			Cross-section
	All	PDO			Stop	>34,000		59		6	11			Cross-section
Create directional median openings to allow left-turns and u-turns	All	All			Signal			51		51				
Install left-turn lane	All	All	All					1		25				
	All	All	Rural	3-Leg	Signal	4,200-26,000	1,300-11,400	22	199	15				Expert Panel
	All	All	Rural	3-Leg	Stop	1,100-32,400	25-11,800	22		**44**	6			EB Before-After
	All	All	Rural	4-Leg (1 app)	Signal	4,200-26,000	1,300-11,400	22	199	18				Expert Panel
	All	All	Rural	4-Leg (1 app)	Stop	1,100-32,400	25-11,800	22		**28**	3			EB Before-After
	All	All	Rural	4-Leg (2 app)	Stop	1,100-32,400	25-11,800	22		**48**	3			EB Before-After
	All	All			No signal			15		34				
	All	All			No signal			15		35				Simple Before-After
	All	All			No signal			15		35				Cross-section
	All	All			No signal			15		25				Simple Before-After
	All	All			No signal			15		40				Simple Before-After

Countermeasure(s)	Crash Type	Crash Severity	Area Type	Config	Control	Major Daily Traffic Volume (veh/day)	Minor Daily Traffic Volume (veh/day)	Ref	Obs	Effectiveness				Study Type
										Crash Reduction Factor / Function	Std Error	Range Low	Range High	
Install left-turn lane (cont'd)	All	All			No signal			28		33		25	41	
	All	All	Urban	3-Leg	Signal	4,600-55,100	100-26,000	22	199	7				Expert Panel
	All	All	Urban	3-Leg	Stop	1,520-40,600	80-8,000	22		**33**	12			EB Before-After
	All	All	Urban	4-Leg (1 app)	Signal	4,600-55,100	100-26,000	22		**10**	10			EB Before-After
	All	All	Urban	4-Leg (1 app)	Stop	1,520-40,600	80-8,000	22		**27**	3			EB Before-After
	All	All	Urban	4-Leg (2 app)	Signal	4,600-55,100	100-26,000	22		19	13			EB Before-After
	All	All	Urban	4-Leg (2 app)	Stop	1,520-40,600	80-8,000	22		**47**	4			EB Before-After
	All	Fatal/Injury	Rural	3-Leg	Stop	1,100-32,400	25-11,800	22		**55**	8			EB Before-After
	All	Fatal/Injury	Rural	4-Leg (1 app)	Stop	1,100-32,400	25-11,800	22		**35**	3			EB Before-After
	All	Fatal/Injury	Rural	4-Leg (2 app)	Stop	1,100-32,400	25-11,800	22		**58**	4			EB Before-After
	All	Fatal/Injury	Urban	4-Leg (1 app)	Signal	4,600-55,100	100-26,000	22		**9**	1			EB Before-After
	All	Fatal/Injury	Urban	4-Leg (1 app)	Stop	1,520-40,600	80-8,000	22		**29**	4			EB Before-After
	All	Fatal/Injury	Urban	4-Leg (2 app)	Signal	4,600-55,100	100-26,000	22		**17**	2			EB Before-After
	All	Fatal/Injury	Urban	4-Leg (2 app)	Stop	1,520-40,600	80-8,000	22		50	6			Comparison Group
	All	Fatal/Injury	All	All	All			58		30				
	Left-turn	All	Rural	3-Leg	Stop	1,100-32,400	25-11,800	21	35	62				Comparison Group Before-After
	Left-turn	All	Rural	4-Leg (1 app)	Stop	1,100-32,400	25-11,800	21	23	37				EB Before-After
	Left-turn	All	Rural	4-Leg (2 app)	Stop	1,100-32,400	25-11,800	21	23	60				EB Before-After
	Left-turn	All			No signal			15		55				
	Left-turn	All			No signal			15		55				Simple Before-After

Countermeasure(s)	Crash Type	Crash Severity	Area Type	Config	Control	Major Daily Traffic Volume (veh/day)	Minor Daily Traffic Volume (veh/day)	Ref	Obs	Effectiveness: Crash Reduction Factor / Function	Effectiveness: Std Error	Effectiveness: Range Low	Effectiveness: Range High	Study Type
Install left-turn lane (cont'd)	Left-turn	All			No signal			28		68		50	86	
	Left-turn	All			Signal	>5,000/lane(Total)		15		24				Simple Before-After
	Left-turn	All	Urban	4-Leg (1 app)	Signal	4,600-55,100	100-26,000	21	35	13				Yorked Comparison Before-After
	Left-turn	All	Urban	4-Leg (1 app)	Stop	1,520-40,600	80-8,000	21	7	26				EB Before-After
	Left-turn	All	Urban	4-Leg (2 app)	Signal	4,600-55,100	100-26,000	21	35	24				Yorked Comparison Before-After
	Left-turn	All	Urban	4-Leg (2 app)	Stop	1,520-40,600	80-8,000	21	7	45				EB Before-After
	Night	All			Signal	>5,000/lane(Total)		15		28				Simple Before-After
	Overturn	All			Signal	>5,000/lane(Total)		15		28				Simple Before-After
Install left-turn lane (double)	Head-on	Fatal/Injury						15		75				Simple Before-After
	Left-turn	Fatal/Injury						15		47				Simple Before-After
	Left-turn	PDO						15		71				Simple Before-After
	ROR	Fatal/Injury						15		8				Simple Before-After
	ROR	PDO						15		13				Simple Before-After
	Rear-end	Fatal/Injury						15		29				Simple Before-After
	Rear-end	PDO						15		32				Simple Before-After
	Right-angle	Fatal/Injury						15		20				Simple Before-After
	Right-angle	PDO						15		8				Simple Before-After
	Sideswipe	Fatal/Injury						15		50				Simple Before-After

Countermeasure(s)	Crash Type	Crash Severity	Area Type	Config	Control	Major Daily Traffic Volume (veh/day)	Minor Daily Traffic Volume (veh/day)	Ref	Obs	Effectiveness: Crash Reduction Factor / Function	Effectiveness: Std Error	Effectiveness: Range Low	Effectiveness: Range High	Study Type
RIGHT-TURN COUNTERMEASURES														
Increase length of right-turn lane	All	Fatal/Injury	All	All	All			58		15				
Install right-turn lane	All	All	All	4-Leg (1 app)	Signal	4,200-55,100	100-26,000	22		**4**	2			EB Before-After
	All	All	All	4-Leg (1 app)	Stop	1,100-40,600	25-11,800	22		**14**	5			EB Before-After
	All	All	All	4-Leg (2 app)	Signal	4,200-55,100	100-26,000	22		**8**	3			EB Before-After
	All	All	All	4-Leg (2 app)	Stop	1,100-40,600	25-11,800	22		**26**	7			EB Before-After
	All	All	All	All	All			58		35				
	All	All	All					1		25				
	All	All	Rural	4-Leg (1 app)	No signal			28		14				
	All	All	Rural	4-Leg (1 app)	No signal			28		21		14	27	
	All	All		All	No signal			28		27		24	30	
	All	All						15		25				
	All	All						15		25				Cross-section
	All	All						15		25				Simple Before-After
	All	All						15		25				Simple Before-After
	All	Fatal/Injury	All	4-Leg (1 app)	Signal	4,200-55,100	100-26,000	22		**9**	3			EB Before-After
	All	Fatal/Injury	All	4-Leg (1 app)	Stop	1,100-40,600	25-11,800	22		**23**	7			EB Before-After
	All	Fatal/Injury	All	All	No signal			58		35				
	All	Fatal/Injury	All	All	Signal			58		35				
	All	Fatal/Injury	All	All				51		40				
	All	Fatal/Injury	Rural	All	All			58		35				
	All	Fatal/Injury	Urban	All	All			58		30				
	Rear-end	All						15		65				Simple Before-After

Countermeasure(s)	Crash Type	Crash Severity	Area Type	Config	Control	Major Daily Traffic Volume (veh/day)	Minor Daily Traffic Volume (veh/day)	Ref	Obs	Effectiveness				Study Type
										Crash Reduction Factor / Function	Std Error	Range		
												Low	High	
Install right-turn lane (cont'd)	Right-angle	All						15		50				Simple Before-After
	Right-turn	All						15		53				
	Right-turn	All						15		56				Simple Before-After
	Right-turn	All						15		50				Cross-section
	Sideswipe	All						15		20				Simple Before-After
Install right-turn lane (painted separation)	All	Fatal/Injury	All	All	All			58		30				
Install right-turn lane (physical channelization)	All	Fatal/Injury	All	All	All			58		35				

Dual CRF for CR 71/117th St Intersection

Improvements include adding a northbound right turn lane and a southbound left-turn bypass lane.

CR1=Add right tune lane
CR2=Add left-turn lane

CR=1 – (1-CR1)*(1-CR2)

Rear End (PDO): 1 – (1-.65)*(1-.44)= .80
Left Turn (Injury): 1 – (1-.35)*(1-.68)= .79
All Other (PDO): 1 – (1-.35)*(1-.44) = .64

117th Street From County Road 71 to TH 52 (2013 -2015) - created on 06-21-2016 by rile1che

Crash data is managed by the Mn/DOT Office of Traffic, Safety, and Operations.

SYS	NUM	REF_POINT	GIS_ROUTE	GIS_TM	RD_DIR	ELEM	RELY	INV	R_U
CR 71									
10	18860075	000+00.000	1018860075	0.000	Z		1	3	U
10	18860075	000+00.000	1018860075	0.000	Z		1	3	U
10	18860075	000+00.000	1018860075	0.000	Z		1	3	U
10	18860075	000+00.016	1018860075	0.016	Z		1	3	U
Segment									
10	18860075	000+00.250	1018860075	0.250	Z		2	3	U
~~10~~	~~18860075~~	~~001+00.078~~	~~1018860075~~	~~1.078~~	~~Z~~	~~—~~	~~2~~	~~3~~	~~U~~
~~10~~	~~18860075~~	~~001+00.183~~	~~1018860075~~	~~1.183~~	~~Z~~	~~—~~	~~1~~	~~3~~	~~U~~
~~10~~	~~18860075~~	~~001+00.183~~	~~1018860075~~	~~1.183~~	~~Z~~	~~—~~	~~1~~	~~3~~	~~U~~
~~10~~	~~18860075~~	~~001+00.183~~	~~1018860075~~	~~1.183~~	~~Z~~	~~—~~	~~1~~	~~3~~	~~U~~
~~10~~	~~18860075~~	~~001+00.183~~	~~1018860075~~	~~1.183~~	~~E~~	~~—~~	~~1~~	~~3~~	~~U~~
~~10~~	~~18860075~~	~~001+00.183~~	~~1018860075~~	~~1.183~~	~~E~~	~~—~~	~~1~~	~~3~~	~~U~~
~~10~~	~~18860075~~	~~001+00.376~~	~~1018860075~~	~~1.376~~	~~Z~~	~~952~~	~~1~~	~~3~~	~~U~~
~~10~~	~~18860075~~	~~001+00.376~~	~~1018860075~~	~~1.376~~	~~Z~~	~~—~~	~~1~~	~~3~~	~~U~~
~~10~~	~~18860075~~	~~001+00.376~~	~~1018860075~~	~~1.376~~	~~Z~~	~~951~~	~~1~~	~~1~~	~~U~~
~~10~~	~~18860075~~	~~001+00.769~~	~~1018860075~~	~~1.769~~	~~Z~~	~~952~~	~~1~~	~~1~~	~~U~~

ATP	CO	CITY	DOW	MONTH	DAY	YEAR	TIME	SEV
DRIVER 1 CALLED IN TO REPORT THIS ACCIDENT AFTER THE FACT. I DID NOT VIEW HER VEHICLE. SHE SAID A	19	1886	4-Wed	8	21	2013	1115	N
VEHICLE #1 WAS STOPPING AT THE (117TH/RICH VALLEY BLVD)INTERSECTION AND VEHICLE #2 WAS ALSO STOPPIN	19	1886	3-Tue	10	7	2014	1255	N
VEH 1 WAS TRAVELING NORTH ON RICH VALLEY BLVD. VEH 2 WAS MAKING A LEFT TURN FROM WB 117TH TO SB RI	19	1886	4-Wed	2	4	2015	1847	A
BOTH VEHICLES STOPPED FOR THE STOP SIGN. DRIVER 2 SAID HE THOUGHT DRIVER 1 WAS GOING TO TURN LEFT	19	1886	6-Fri	8	1	2014	0701	N
VEHICLE #1 WAS TRAVELING EASTBOUND 117TH STREET WHILE VEHICLE #2 WAS TRAVELING WESTBOUND 117TH. TH	19	1886	7-Sat	3	16	2013	0651	C
~~UNIT #2 AND UNIT #3 WERE E/B ON 117TH APPROACHING CLARK ROAD. TRAFFIC SIGNAL FOR E/B 117TH WAS GRE~~	~~19~~	~~1886~~	~~5 Thu~~	~~12~~	~~17~~	~~2015~~	~~1742~~	~~N~~
~~DISPATCHED FOR A ONE VEHICLE ROLLOVER PI. VEHICLE LEFT THE ROAD 20 YARDS WEST, HIT SNOW AND ROLLED~~	~~19~~	~~1886~~	~~1 Sun~~	~~12~~	~~8~~	~~2013~~	~~0038~~	~~A~~
~~VEHICLE #1 WAS W/B ON 117TH ST AND MAKING A LEFT-HAND TURN TO GO S/B ON CLARK RD. THE INTERSECTION~~	~~19~~	~~1886~~	~~7 Sat~~	~~3~~	~~15~~	~~2014~~	~~0606~~	~~N~~
~~UNIT 1 WAS TRAVELING EB ON 117TH STREET AT CLARK ROAD. UNIT 2 WAS ALSO TRAVELING EB ON 117TH STREET~~	~~19~~	~~1886~~	~~5 Thu~~	~~9~~	~~18~~	~~2014~~	~~1529~~	~~N~~
~~UNITS 1 AND 2 WERE TRAVELING WESTBOUND IN THE TURN LANE TO GO SOUTH ON CLARK RD FROM 117TH. ST. UNI~~	~~19~~	~~1886~~	~~6 Fri~~	~~8~~	~~7~~	~~2015~~	~~1840~~	~~N~~
~~DRIVER 1 OF VEH 1 WAS STOPPED AT THE INTERSECTION OF CLARK AND 117TH AT A RED LIGHT. DRIVER 1 PULLE~~	~~19~~	~~1886~~	~~4 Wed~~	~~11~~	~~11~~	~~2015~~	~~1805~~	~~N~~
~~VEHICLE APPEARED TO BE ATTEMPTING TO MAKE A RIGHTHAND TURN FROM THE RAMP TO WESTBOUND 117TH STREET.~~	~~19~~	~~1886~~	~~5 Thu~~	~~1~~	~~30~~	~~2014~~	~~2135~~	~~N~~
~~VEHICLE #1 (SEMI TRUCK) WAS TRAVELING SOUTHBOUND/HWY 52 RAMP GOING NORTHBOUND HWY 52 WHILE VEHICLE~~	~~19~~	~~1886~~	~~3 Tue~~	~~11~~	~~18~~	~~2014~~	~~0730~~	~~N~~
~~THIS REPORT WAS TAKEN OVER THE PHONE. I DID NOT SEE THE CRASH OR DAMAGE. DRIVER #1 TOLD ME THE FO~~	~~19~~	~~1886~~	~~4 Wed~~	~~12~~	~~17~~	~~2014~~	~~0625~~	~~N~~
~~V1 AND V2 WERE MAKING A LEFT TURN ONTO 117TH STREET FROM SOUTHBOUND 52. V1 WAS IN THE RIGHT LEFT T~~	~~19~~	~~1886~~	~~2 Mon~~	~~3~~	~~3~~	~~2014~~	~~1519~~	~~C~~

															PERSON1		
NUM_KILLED	NUM_VEH	JUNC	SL	TYPE	DIAG	LOC1	TCD	LIT	WTHR1	WTHR2	SURF	CHAR	DESGN	ACC_NUM	VTYPE	DIR	ACT
0	2	2	50	1	1	1	4	1	1	1	1	1	8	132330090	38	5	6
0	2	2	45	1	90	1	4	1	1	1	1	1	8	142800115	1	7	11
0	2	2	50	1	5	1	4	4	2	0	1	1	8	150350234	2	4	6
0	2	2	50	1	90	1	4	1	1	1	1	1	8	142130024	99	7	9
0	2	1	45	1	8	1	90	1	2	2	5	2	8	130750227	2	7	15
0	3	1	40	1	1	1	98	6	1	0	1	1	90	153510205	1	3	1
0	1	1	45	51	90	2	98	4	2	0	5	1	8	133420031	3	3	1
0	2	4	45	1	5	1	1	4	1	0	1	1	3	140740026	1	6	4
0	2	4	35	1	1	1	1	1	1	0	1	1	90	142610184	38	3	1
0	2	4	30	1	2	1	2	1	1	1	1	1	5	152190165	1	7	1
0	2	4	35	1	1	4	1	4	3	2	2	3	5	153150124	2	2	3
0	1	4	35	22	6	3	1	4	2	0	3	3	5	140310204	99	0	5
0	2	7	45	1	5	1	1	1	1	1	1	1	2	143220040	35	5	1
0	2	4	30	1	1	1	1	6	1	0	1	1	5	150090414	1	3	10
0	2	4	30	1	2	1	1	1	2	0	1	1	3	140630307	35	5	6

								PERSON2											PERSON3
FAC1	FAC2	POSN	INJ	EQP	PHYS	AGE	SEX	VTYPE	DIR	ACT	FAC1	FAC2	POSN	INJ	EQP	PHYS	AGE	SEX	VTYPE
1	1	1	N	99	99	901	Z	1	7	10	4	4	1	N	4	1	35	F	
1	1	1	N	98	98	61	M	32	7	17	11	11	1	N	99	0	58	M	
0	0	1	N	1	1	33	M	1	1	1	1	0	1	A	4	1	38	M	
4	4	1	N	4	1	51	M	1	7	11	1	1	1	N	4	1	902	M	
7	61	1	N	4	1	46	M	1	3	1	1	1	1	C	4	1	47	M	
~~15~~	~~0~~	~~1~~	~~N~~	~~4~~	~~1~~	~~21~~	~~M~~	~~3~~	~~3~~	~~11~~	~~1~~	~~0~~	~~1~~	~~N~~	~~4~~	~~1~~	~~31~~	~~M~~	~~4~~
~~18~~	~~15~~	~~1~~	~~A~~	~~4~~	~~2~~	~~41~~	~~M~~												
~~5~~	~~2~~	~~1~~	~~N~~	~~4~~	~~1~~	~~34~~	~~M~~	~~3~~	~~3~~	~~1~~	~~1~~	~~0~~	~~1~~	~~N~~	~~4~~	~~1~~	~~59~~	~~M~~	
~~1~~	~~0~~	~~1~~	~~N~~	~~4~~	~~1~~	~~32~~	~~M~~	~~4~~	~~3~~	~~1~~	~~21~~	~~0~~	~~1~~	~~N~~	~~4~~	~~1~~	~~30~~	~~M~~	
~~1~~	~~1~~	~~1~~	~~N~~	~~98~~	~~1~~	~~24~~	~~F~~	~~35~~	~~6~~	~~6~~	~~2~~	~~1~~	~~1~~	~~N~~	~~98~~	~~1~~	~~44~~	~~M~~	
~~1~~	~~0~~	~~1~~	~~N~~	~~4~~	~~1~~	~~51~~	~~F~~	~~1~~	~~2~~	~~3~~	~~1~~	~~0~~	~~1~~	~~N~~	~~4~~	~~1~~	~~47~~	~~M~~	
~~3~~	~~0~~	~~1~~	~~N~~	~~99~~	~~99~~	~~902~~	~~Z~~												
~~1~~	~~1~~	~~1~~	~~N~~	~~4~~	~~1~~	~~57~~	~~M~~	~~1~~	~~4~~	~~5~~	~~21~~	~~3~~	~~1~~	~~N~~	~~4~~	~~1~~	~~31~~	~~M~~	
~~1~~	~~0~~	~~1~~	~~N~~	~~4~~	~~1~~	~~42~~	~~M~~	~~2~~	~~3~~	~~1~~	~~4~~	~~0~~	~~1~~	~~N~~	~~99~~	~~99~~	~~903~~	~~Z~~	
~~8~~	~~0~~	~~1~~	~~N~~	~~4~~	~~1~~	~~46~~	~~M~~	~~1~~	~~5~~	~~6~~	~~1~~	~~0~~	~~1~~	~~N~~	~~4~~	~~1~~	~~64~~	~~M~~	


PERSON4
DIR
ACT
FAC1
FAC2
POSN
INJ
EQP
PHYS
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SEX
VTYPE
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FAC1
FAC2
POSN
INJ
EQP
PHYS
AGE
SEX

~~3~~

Minnesota Department of Transportation
Metro District
1500 West County Road B-2
Roseville, MN 5511

July 8, 2016

Scott Thureen
Public Works Director
City of Inver Grove Heights
8150 Barbara Ave
Inver Grove Heights, MN 55077

RE: Regional Solicitation Application for 117th Street East A-Minor Arterial Reconstruction/Modernization project

Dear Mr. Thureen:

Thank you for requesting a letter of support from MnDOT for the Metropolitan Council/Transportation Advisory Board (TAB) 2016 Regional Solicitation. Your application for the 117th Street East A-Minor Arterial Reconstruction/Modernization project has no impact on MnDOT right of way.

This project has no funding from MnDOT. In addition, the Metro District currently has no discretionary funding in year 2020 of the State Transportation Improvement Program (STIP) or year 2021 of the Capital Highway Investment Plan (CHIP) to assist with construction or assist with MnDOT services such as the design or construction engineering of the project. Please continue to work with MnDOT Area staff to assist in identifying additional project funding if needed.

Sincerely,

Scott McBride, P.E.
Metro District Engineer

Cc: Elaine Koustsoukos, Metropolitan Council
Jon Solberg, MnDOT Metro District – South Area Manager

PRELIMINARY
SUBJECT TO CHANGE
7/7/2016
SRF
Consulting Group, Inc.
0 100 200
scale in feet
LEGEND
PARCEL LINES
WETLANDS
TRANSMISSION LINE
OVERHEAD POWER LINE
PETROLEUM PIPE LINES
PROPOSED RIGHT OF WAY
PAVED ROADWAY
RAISED MEDIANS & CURBS
PAVED SHOULDERS
RAILROAD CROSSING
EXISTING TRAFFIC SIGNAL
117TH STREET
C.S.A.H. 71
CLARK ROAD
T.H. 52
CLOSED

Dakota
COUNTY

July 13, 2016

Physical Development Division
Steven C. Mielke, Director

Dakota County
Western Service Center
14955 Galaxie Avenue
Apple Valley, MN 55124-8579

952.891.7000
Fax 952.891.7031
www.dakotacounty.us

Environmental Resources
Land Conservation
Groundwater Protection
Surface Water
Waste Regulation
Environmental Initiatives

Office of Planning

Operations Management
Facilities Management
Fleet Management
Parks

Transportation
Highways
Surveyor's Office
Transit Office

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

RE: Federal STBGP Letter of Support for
117th Street from CSAH 71 to TH 52

Dear Ms. Koutsoukos:

The County Board of Commissioners has committed to support construction of the proposed extension of 117th Street from CSAH 71 (Rich Valley Blvd) to Trunk Highway 52. One of the primary goals of this extension is to provide better east-west continuity across Dakota County. This project would provide more options for east-west flow and reduce pressure on other critical east-west routes such as CSAH 42. This project also integrates other modes of transportation with the highway upgrade.

Dakota County is aware of and understands the proposed project being submitted. Dakota County has jurisdiction over CSAH 71 and commits to working with the City Inver Grove Heights to operate and maintain the proposed facilities for its useful design life.

Dakota County appreciates your efforts to secure funding for 117th Street extension project improvements, and is supportive of the City of Inver Grove Heights moving forward with this project.

We will be happy to answer any questions you may have regarding this project.

Sincerely,

Mark J. Krebsbach, P.E.
Transportation Director/County Engineer