



Application

04751 - 2016 Roadway Expansion

05251 - I-35 / TH 97 Interchange Reconstruction

Regional Solicitation - Roadways Including Multimodal Elements

Status: Submitted

Submitted Date: 07/15/2016 12:29 PM

Primary Contact

Name:*	Jack	L	Forslund
	<small>Salutation</small>	<small>First Name</small>	<small>Middle Name</small> <small>Last Name</small>
Title:	Multimodal Planning Manager		
Department:	Anoka County Transportation Division		
Email:	jack.forslund@co.anoka.mn.us		
Address:	1440 Bunker Lake Boulevard NW		
*	Andover	Minnesota	55304-4005
	<small>City</small>	<small>State/Province</small>	<small>Postal Code/Zip</small>
Phone:*	763-862-4230		
	<small>Phone</small>	<small>Ext.</small>	
Fax:	763-862-4201		
What Grant Programs are you most interested in?	Regional Solicitation - Roadways Including Multimodal Elements		

Organization Information

Name: ANOKA COUNTY

Jurisdictional Agency (if different):

Organization Type:

County Government

Organization Website:

Address:

1440 BUNKER LAKE BLVD

*

ANDOVER

Minnesota

55304

City

State/Province

Postal Code/Zip

County:

Anoka

Phone:*

763-862-4200

Ext.

Fax:

PeopleSoft Vendor Number

0000003633A15

Project Information

Project Name

I-35 at TH 97/CSAH 23 Interchange

Primary County where the Project is Located

Anoka

Jurisdictional Agency (If Different than the Applicant):

Anoka County seeks a federal grant of \$7 million to fund the reconstruction of the interchange at Interstate (I)-35 and Minnesota Trunk Highway (TH) 97/County State Aid Highway (CSAH) 23 in Columbus, Minnesota. This interchange is of critical importance to area businesses and over 50,000 residents in the Columbus and Forest Lake area.

This interchange is one of only two serving a large area of the northeastern region of the Twin Cities Metropolitan Area. Other than the I-35/ CSAH 2 (Broadway Avenue) interchange in Washington County, the nearest interchanges are several miles to the north or south.

The interchange is functionally obsolete and is an inhibition to the region's economic development and quality of life. During the afternoon peak travel times, the northbound I-35 traffic exiting at the interchange frequently backs up onto I-35.

Similarly, in the morning it is common to see TH 97, east of I-35, with vehicle queues of over one mile that are waiting to enter southbound I-35. This back-up is due to insufficient capacity of the interchange, which also contributes to travel safety concerns. In addition to being functionally obsolete, the bridge portion of the interchange (TH 97), which was constructed in 1967 is facing deficiencies including "black bar" - bare reinforcing steel that is corroding and causing spalled concrete to fall onto I-35.

As proposed, the existing interchange will be reconstructed as a diverging diamond interchange. Project components include widening the existing two-lane TH 97 Bridge to a four-lane facility with shoulders, adding turn lanes, consolidating access points, and constructing a multiuse trail facility. This project is part of a larger vision for the interchange area which includes realigning CSAH 54 and Hornsby Street, which will be addressed as a

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

separate project.

MnDOT has allocated \$3 million in funding to repair the structurally deficient TH 97 bridge over I-35, which is not sufficient to fund other vital improvements. The County seeks to leverage this investment by leading the effort to obtain the funding necessary to implement all critical improvements at the same time that the TH 97 bridge is closed for repair. Closure of the bridge during repair is anticipated to result in devastating impacts to local businesses, residents, and employers due to detours resulting in up to 20 additional minutes of travel time. With the proposed 4-lane bridge, traffic can be maintained during construction in lieu of the devastating affects of a bridge closure. Obtaining the funding to implement all improvements at once will prevent impacts from a future, additional construction phase.

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)

I-35 and TH 97/CSAH 23 Interchange, Columbus, Reconstruct existing interchange

Project Length (Miles)

0.8

Project Funding

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

Yes

If yes, please identify the source(s)

TIGER Grant

Federal Amount

\$7,000,000.00

Match Amount

\$3,280,000.00

Minimum of 20% of project total

Project Total

\$10,280,000.00

Match Percentage

31.91%

Minimum of 20%

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

Source of Match Funds

\$3,000,000 MnDOT Funds for TH 97 bridge replacement,
\$280,000 County General Highway Funds

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:

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

Project Information: Roadway Projects

County, City, or Lead Agency	Anoka County
Functional Class of Road	A Minor Expander (TH 97) and A Minor Reliever (CSAH 23)
Road System <i>TH, CSAH, MSAS, CO. RD., TWP. RD., CITY STREET</i>	TH (TH 97) and CSAH (CSAH 23)
Road/Route No. <i>i.e., 53 for CSAH 53</i>	97
Name of Road <i>Example; 1st ST., MAIN AVE</i>	Scandia Trail N and Lake Drive NE
Zip Code where Majority of Work is Being Performed	55025
(Approximate) Begin Construction Date	06/01/2020
(Approximate) End Construction Date	10/01/2021
TERMINI:(Termini listed must be within 0.3 miles of any work)	
From: (Intersection or Address)	
To: (Intersection or Address)	
<i>DO NOT INCLUDE LEGAL DESCRIPTION</i>	
Or At	Interchange at I-35 and TH 97/CSAH 23
Primary Types of Work	Reconstruction of interchange to a Divergent Diamond Interchange (DDI) design, Bridge, Grading, Agg Base, Bit Base, sidewalk, trail, ped ramps
<i>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.</i>	
BRIDGE/CULVERT PROJECTS (IF APPLICABLE)	
Old Bridge/Culvert No.:	02806
New Bridge/Culvert No.:	02806
Structure is Over/Under (Bridge or culvert name):	I-35

Specific Roadway Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Mobilization (approx. 5% of total cost)	\$375,000.00
Removals (approx. 5% of total cost)	\$200,000.00
Roadway (grading, borrow, etc.)	\$360,000.00
Roadway (aggregates and paving)	\$1,330,000.00
Subgrade Correction (muck)	\$175,000.00
Storm Sewer	\$600,000.00
Ponds	\$0.00
Concrete Items (curb & gutter, sidewalks, median barriers)	\$470,000.00
Traffic Control	\$230,000.00
Striping	\$70,000.00
Signing	\$20,000.00
Lighting	\$0.00
Turf - Erosion & Landscaping	\$250,000.00
Bridge	\$3,300,000.00
Retaining Walls	\$0.00
Noise Wall (do not include in cost effectiveness measure)	\$0.00
Traffic Signals	\$850,000.00
Wetland Mitigation	\$0.00
Other Natural and Cultural Resource Protection	\$0.00
RR Crossing	\$0.00
Roadway Contingencies	\$1,000,000.00
Other Roadway Elements	\$750,000.00
Totals	\$9,980,000.00

Specific Bicycle and Pedestrian Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Path/Trail Construction	\$210,000.00
Sidewalk Construction	\$40,000.00
On-Street Bicycle Facility Construction	\$0.00
Right-of-Way	\$0.00

Pedestrian Curb Ramps (ADA)	\$20,000.00
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	\$30,000.00
Other Bicycle and Pedestrian Elements	\$0.00
Totals	\$300,000.00

Specific Transit and TDM Elements

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

Transit Operating Costs

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

Totals

Total Cost	\$10,280,000.00
Construction Cost Total	\$10,280,000.00
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.

Goal B: Safety and Security (page 2.7)

Objectives:

- Reduce crashes and improve safety and security for all modes of passenger travel and freight transport. (page 2.7)
- Strategy B1: Regional transportation partners will incorporate safety and security considerations for all modes and users throughout the processes of planning, funding, construction, operation. (page 2.7)

Goal C: Access to Destinations (page 2.8)

Objectives:

- Increase the availability of multimodal travel options, especially in congested highway corridors. (page 2.8)
- Increase travel time reliability and predictability for travel on highway and transit systems. (page 2.8)
- Strategy C9: The Council will support investments in A-minor arterials that build, manage, or improve the system's ability to supplement the capacity of the principal arterial system and support access to the region's job, activity, and industrial and manufacturing concentrations. (page 2.9)

Goal D: Competitive Economy (page 2.11)

Objectives:

- Support the region's economic competitiveness through the efficient movement of freight. (page 2.11)
- Strategy D2: The Council will coordinate with other agencies planning and pursuing

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

transportation investments that strengthen connections to other regions in Minnesota and the Upper Midwest, the nation, and world including intercity bus and passenger rail, highway corridors, air service, and freight infrastructure. (page 2.11)

Goal E: Healthy Environment (page 2.12)

Objectives:

- Reduce transportation-related air emissions. (page 2.12)

- Strategy E1: Regional transportation partners recognize the role of transportation choices in reducing emissions and will support state and regional goals for reducing greenhouse gas and air pollutant emissions. The Council will provide information and technical assistance to local governments in measuring and reducing transportation-related emissions. (page 2.12)

Goal F: Leveraging Transportation Investments to Guide Land Use (page 2.14)

Objectives:

- Maintain adequate highway, riverfront, and rail-accessible land to meet existing and future demand for freight movement. (page 2.14)

- Strategy F3: Metropolitan Council, MnDOT, and local governments will plan, build, operate, maintain, and rebuild an adequate system of interconnected highways and local roads. (page 2.14)

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.

- City of Columbus 2030 Comprehensive Plan
(page 38)

List the applicable documents and pages:

- Anoka County 2016-2020 Capital Improvements
Plan (page 34)

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

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

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. Yes

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

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

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. Yes

Requirements - Roadways Including Multimodal Elements

Expander/Augmentor/Non-Freeway Principal Arterial

Select one:	Expander
Area	2.845
Project Length	0.274
Average Distance	10.3832
Upload Map	1474382845671_RAD05251135AnokaREX.pdf

Reliever: Relieves a Principle Arterial that is a Freeway Facility

Facility being relieved	I-35
Number of hours per day volume exceeds capacity (based on the Congestion Report)	0

Reliever: Relives a Principle 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:	2019
Existing Manufacturing/Distribution-Related Employment within 1 Mile:	316
Existing Students:	0
Upload Map	1468426537709_I35-TH97_Regional_Economy_06212016.pdf

Measure C: Current Heavy Commercial Traffic

Location:	TH 97 (east of I-35)
Current daily heavy commercial traffic volume:	875
Date heavy commercial count taken:	2015

Measure D: Freight Elements

The existing TH 97 Bridge over I-35 is unable to safely accommodate freight traffic. A large number of trucks use the bridge to access I-35, a major intermodal freight corridor, as well as industrial areas located on either side of the bridge. Additionally, the TH 97/CSAH 23 interchange provides access to the Daniel A. Deponti Airport, which has been identified by the Federal Aviation Administration as a potential reliever airport for the Twin Cities. As such, the airport is an important component in the movement of goods and products.

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

The narrowness of the current bridge is an impediment to safe freight movement and makes it difficult for trucks to make their necessary wide turns. Widening the bridge will allow for safer passage and access for these freight trucks. There is also little time for these trucks to obtain necessary speeds when moving through the interchange due to spacing issues.

The proposed divergent-diamond interchange design will reduce the risk of dangerous vehicle contact and therefore the possibility of hazardous material spills as well. Adding capacity and dedicated turn-lanes to accommodate the traffic movements are paramount to improving safety and mobility within the proposed project area.

Measure A: Current Daily Person Throughput

Location	TH 97 (east of I-35)
Current AADT Volume	18400
Existing Transit Routes on the Project	275, 288
<i>For New Roadways only, list transit routes that will be moved to the new roadway</i>	
Upload Transit Map	1468426740376_I35-TH97_Transit_06212016.pdf

Response: Current Daily Person Throughput

Average Annual Daily Transit Ridership	0
Current Daily Person Throughput	23920.0

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

Anoka County Travel Demand Model

Forecast (2040) ADT volume

30000

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

The reconstruction of the TH 97/CSAH 23 interchange will improve travel times and economic efficiencies for local, commuter, freight, and recreational travel on TH 97/CSAH 23 and the parallel I-35 corridor, all of which support the health and growth of northern Anoka County's local economy. These benefits help provide opportunities for job growth and stability for low-income households (10%) living around the project and immediately northeast of the project (15%) (above the County and seven-county average). The improved access to I-35 and the nearby Metro Transit Park and Ride will also enable efficient transit connections to job concentrations and manufacturing centers in and near Minneapolis and St. Paul for low-income populations taking advantage of the service.

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

The TH 97/CSAH 23 interchange coincides with additional improvements to realign local and county roads to better facilitate traffic movements/operations and provide a safer pedestrian environment within the project area. Figure 1 depicts these types of improvements. It also demonstrates the projects overall benefits in supporting future development opportunities that leverage existing industrial/commercial areas. The success and prosperity of these developments are subject to the proposed project. Completing this project will support new job opportunities.

The multiuse trail facility included in the proposed project will also improve access, increase livability around the project, improve local and regional connectivity, and expand transportation choice and recreation choice for all populations living in proximity to the project, including the elderly (10%) and children (22%), which are above and equal to county averages. Additionally, the multiuse trail facility will improve connectivity to the following

community resources:

- Forest Lake High School
- Century Junior High School
- Lamprey Pass State Wildlife Management Area
- Downtown Forest Lake
- Rice Creek Chain of Lakes Park Reserve
- Carlos Avery State Wildlife Management Area

Furthermore, right-of-way acquisition will not result in displacement or full takings from property owners. Project construction will incorporate proper noise, dust, and traffic mitigation and will not negatively impact the disadvantaged populations in the project area.

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

Upload Map

1468427500209_I35-TH97_Socio-Econ_06212016.pdf

Measure B: Affordable Housing

City/Township	Segment Length in Miles (Population)
City of Columbus	0.8
	1

Total Project Length

Total Project Length (Total Population) 0.8

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)	0.8
Total Housing Score	0

Measure A: Infrastructure Age

Year of Original Roadway Construction or Most Recent Reconstruction	Segment Length	Calculation	Calculation 2
1978.0	0.4	791.2	1978.0
	0	791	1978

Average Construction Year

Weighted Year	1978.0
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Total Segment Length (Miles)

Total Segment Length	0.4
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Measure A: Vehicle Delay Reduction

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 (Seconds)	EXPLANATION of methodology used to calculate railroad crossing delay, if applicable:	Synchro or HCM Reports
78.0	32.0	46.0	4288.0	197248.0		14684285243 59_I- 35_TH97_Syn chro.pdf

Total Delay

Total Peak Hour Delay Reduced 197248.0

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):
9.97	2.02	7.95	4288.0	34089.6
10	2		4288	34090

Total

Total Emissions Reduced: 34089.6

Upload Synchro Report 1468433919211_I-35_TH97_Synchro.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)	

Measure A: Benefit of Crash Reduction

Crash Modification Factor Used:	CR1: Increase pavement friction; CR2: Convert interchange to diverging diamond
<i>(Limit 700 Characters; approximately 100 words)</i>	
Rationale for Crash Modification Selected:	See Attached Crash Analysis
<i>(Limit 1400 Characters; approximately 200 words)</i>	

Project Benefit (\$) from B/C Ratio: 5467121.0
Worksheet Attachment 1468428975414_I-35_TH97_BC Worksheet.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

The proposed project addresses safety in multiple modes of transportation by adding capacity, shoulders, turn-lanes, and a multiuse trail within the TH 97/CSAH 23 corridor. The divergent diamond design will reduce the number of vehicle conflict points from 26 to 14, which are spread out throughout the interchange. Plus, the sight-distance at turns is much better due to better angles and the provision of simple or free right and left-turns from all directions at the intersection of TH 97 with the I-35 on/off-ramps. Recent data from interchanges that were converted to divergent-diamonds demonstrate crash reductions of over 45 percent.

Currently, there are no shoulders or sidewalks along the narrow TH 97 Bridge. The incorporation of bicyclist/pedestrian facilities with additional spacing and right-of-way access for trails and sidewalks provides users with a secure travel option. The proposed multiuse trail will enable bicyclists and pedestrians from Columbus, Forest Lake and other surrounding communities in Washington and Anoka Counties to more safely travel within the TH 97/CSAH 23 corridor and greater regional trail system.

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

The proposed multiuse trail will connect to the existing 9.5-mile Hardwood Creek Trail from TH 97. Additionally, the County intends to construct a multiuse trail along CSAH 54 as future separate project, which will connect to Running Aces Harness Park, a regional entertainment facility and major employer. The County envisions that a future trail extension will be constructed from CSAH 54 to provide a direct connection to the Cities of Lino Lakes, Centerville, and the Rice Creek Chain of Lakes Regional Park Reserve.

Furthermore, the proposed trail will expand access to transit service, including Metro Transit routes 285 and 288, which connects users to the entire

Metro Transit service area. The interchange will also be a critical connection for accessing the proposed Rush Line Corridor transit service that would operate between downtown Saint Paul and Hinckley, representing a distance of approximately 80 miles. Anoka County is a member of the multi-agency Rush Line Corridor Task Force that is overseeing this effort. The Task Force also is a strong advocate of the need for improving the I-35/TH 97 interchange as it is a critical access point for connecting people to existing and future transit service in the area.

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 06/01/2016

3) Environmental Documentation (5 Percent of Points)

EIS

EA Yes

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 01/01/2017

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 100%

Historic/archeological review under way; determination of no historic properties affected or no adverse effect anticipated Yes 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: 01/01/2017

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

01/01/2019

7)Railroad Involvement (25 Percent of Points)

No railroad involvement on project

Yes

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

0%

Anticipated date or date of executed Agreement

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

100%

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

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 Yes

50%

Construction plans have not been started

0%

Anticipated date or date of completion 01/01/2020

10)Letting

Anticipated Letting Date 03/01/2020

Measure A: Cost Effectiveness

Total Project Cost (entered in Project Cost Form): \$10,280,000.00

Enter Amount of the Noise Walls: \$0.00

Total Project Cost subtract the amount of the noise walls: \$10,280,000.00

Points Awarded in Previous Criteria

Cost Effectiveness

\$0.00

Other Attachments

File Name	Description	File Size
Anoka County Board Resolution in Support of I-35 and TH 97 Interchange Project.pdf	Anoka County Board Resolution of Support for Project	664 KB
I-35_TH97 MnDOT Letter of Support.pdf	MnDOT Letter of Support	109 KB
I-35_TH97_All Figures.pdf	Proposed project layout, graphic of existing conditions and issues, and all required Metropolitan Council maps	1.3 MB
I-35_TH97_Existing Conditions Photographs.pdf	Photographs of existing conditions	651 KB

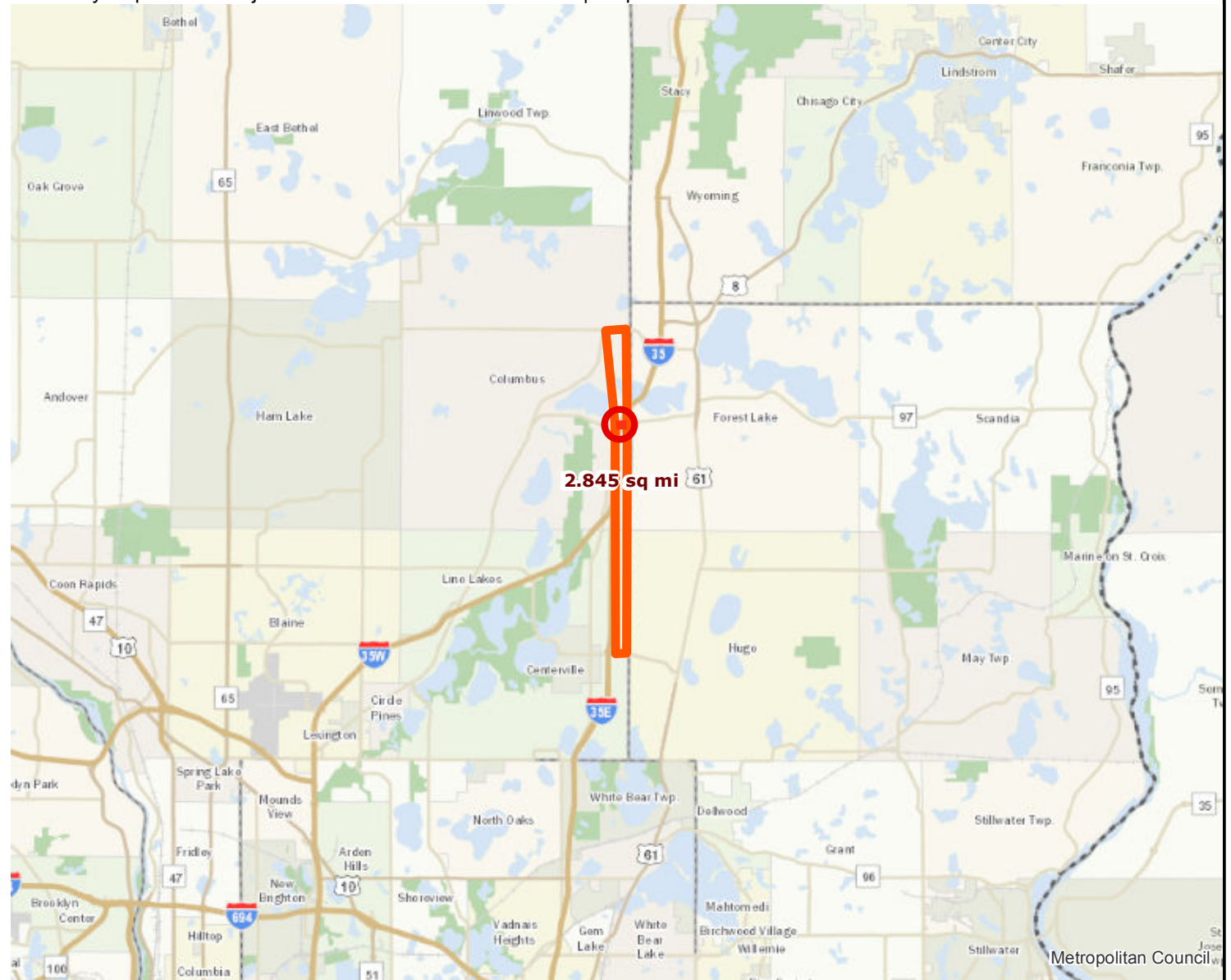
Roadway Area Definition

Roadway Expansion Project: Anoka 05251 REX I35/TH97 | Map ID: 1471880162694

Results

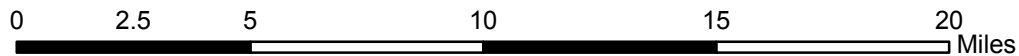
Project Length: 0.274 miles

Project Area: 2.845 sq mi



 Project Points  Project Area

 Project



Created: 8/22/2016
LandscapeRSA1



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



Regional Economy

Roadway Expansion Project: I-35 at TH97/CSAH 23 Interchange | Map ID: 1466538506731

Results

WITHIN ONE MI of project:

Totals by City:

Columbus

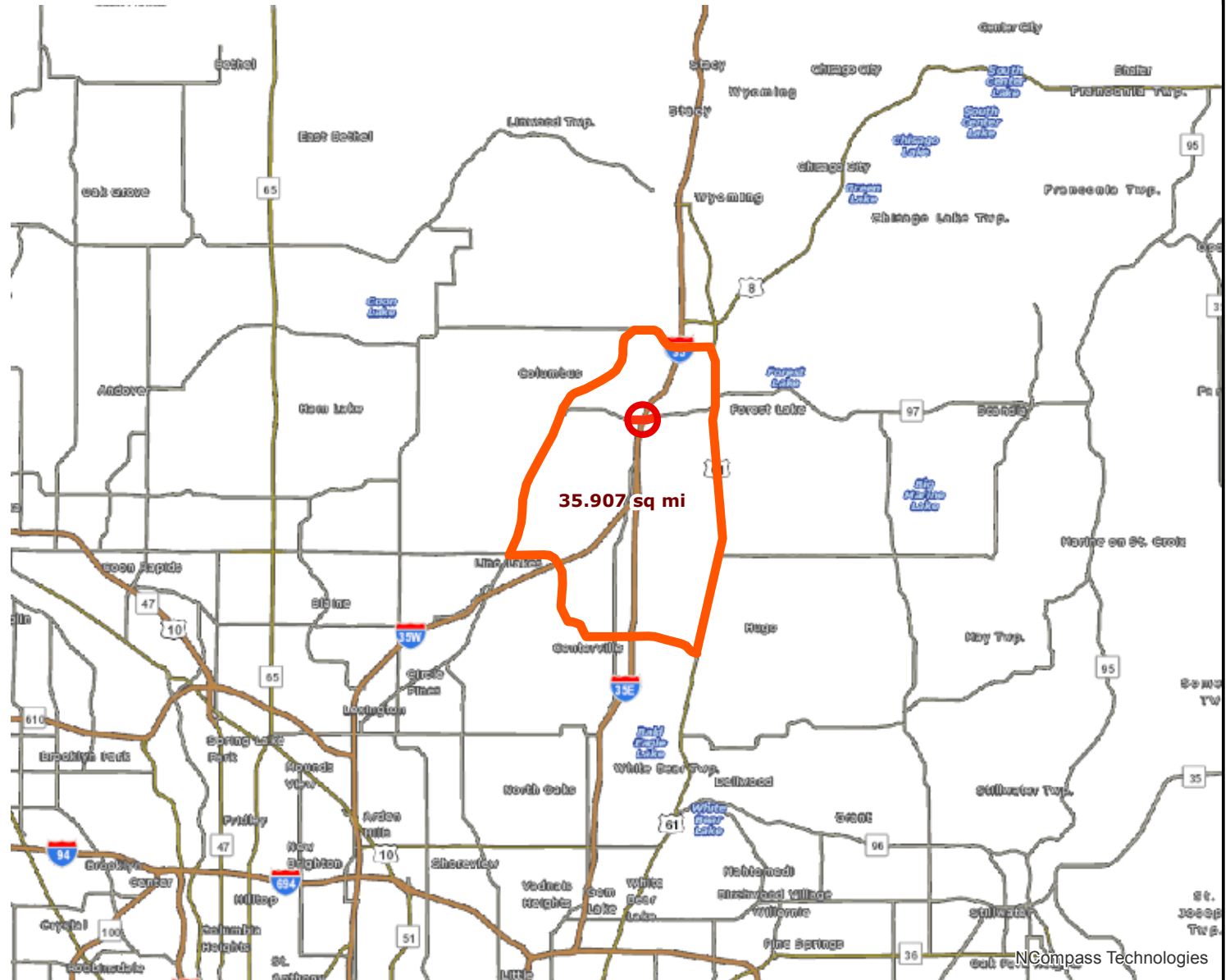
Population: 754
Employment: 692
Mfg and Dist Employment: 18

Forest Lake

Population: 3694
Employment: 1327
Mfg and Dist Employment: 298

Postsecondary Students:

0



○ Project Points □ Project Area

— Project

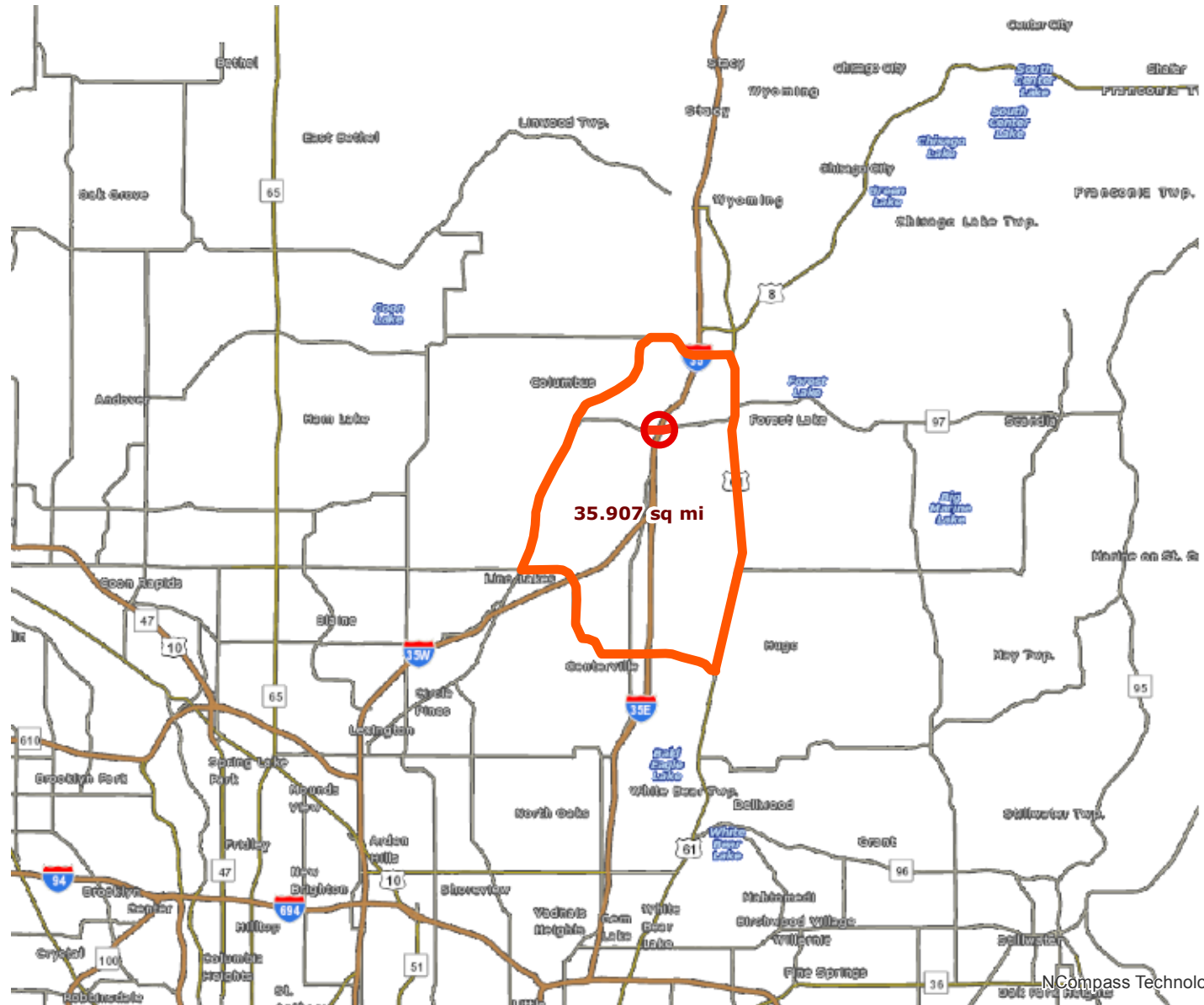


Created: 6/21/2016
LandscapeRSA5



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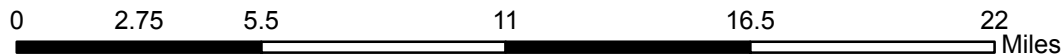


Results

Transit with a Direct Connection to project:
275 288

**indicates Planned Alignments*

-  Project Points
-  Project Area
-  Project



Created: 6/21/2016
LandscapeRSA3

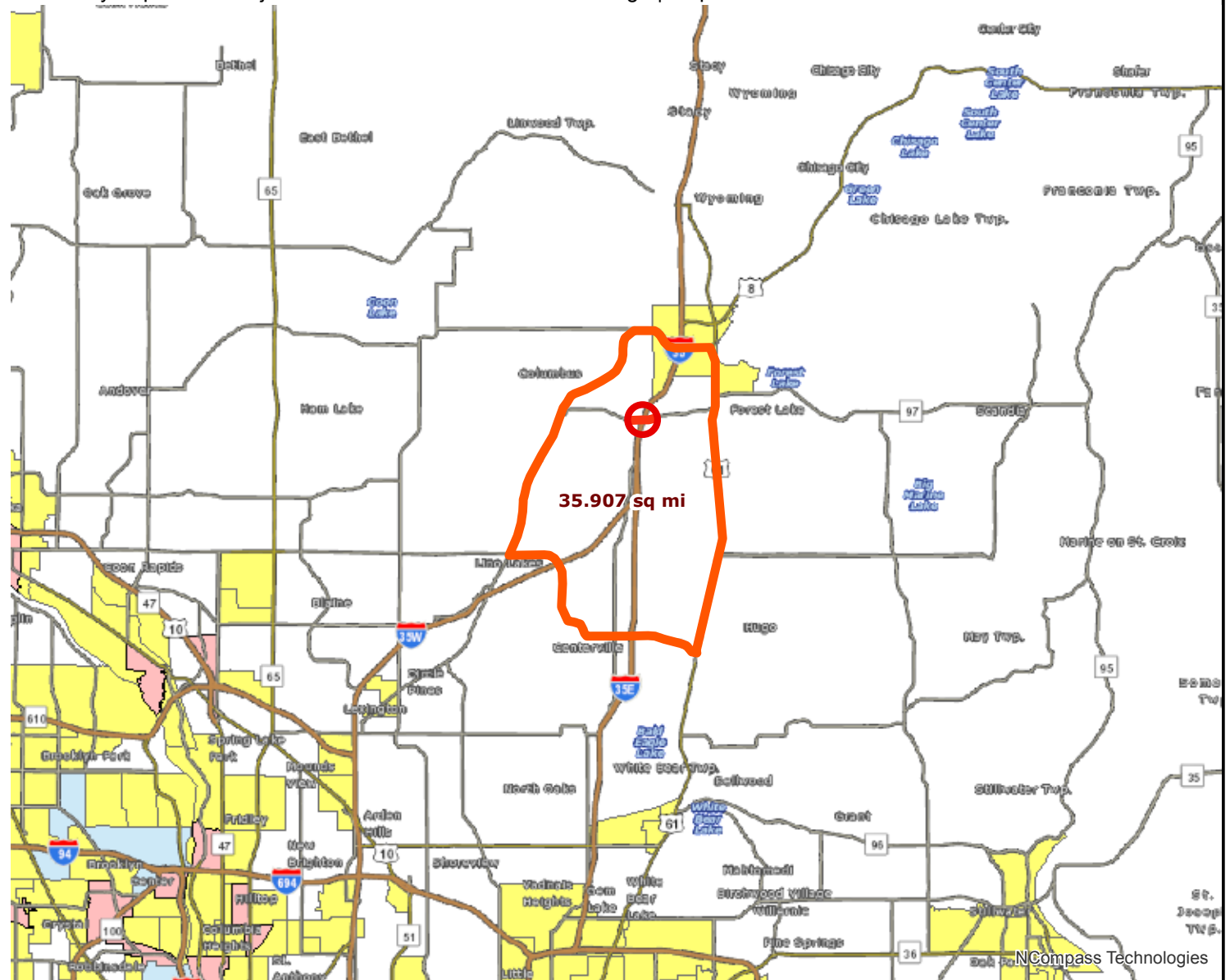








For complete disclaimer of accuracy, please visit
<http://giswebsite.metc.state.mn.us/gissitenew/notice.aspx>



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



Created: 6/21/2016
LandscapeRSA2



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



NCompass Technologies

120: SB I-35 On-Ramp/SB I-35 Off-Ramp & CSAH 23/TH 97

Direction	All
Future Volume (vph)	2264
Total Delay / Veh (s/v)	53
CO Emissions (kg)	4.02
NOx Emissions (kg)	0.78
VOC Emissions (kg)	0.93

125: NB I-35 Off-Ramp/NB I-35 On-Ramp & TH 97

Direction	All
Future Volume (vph)	2024
Total Delay / Veh (s/v)	25
CO Emissions (kg)	2.97
NOx Emissions (kg)	0.58
VOC Emissions (kg)	0.69

1: TH 97 West Int

Direction	All
Future Volume (vph)	776
Total Delay / Veh (s/v)	9
CO Emissions (kg)	0.35
NOx Emissions (kg)	0.07
VOC Emissions (kg)	0.08

2: TH 97 & 35 SBL Off Ramps

Direction	All
Future Volume (vph)	356
Total Delay / Veh (s/v)	8
CO Emissions (kg)	0.11
NOx Emissions (kg)	0.02
VOC Emissions (kg)	0.03

3: TH 97 East Int

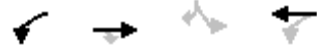
Direction	All
Future Volume (vph)	1412
Total Delay / Veh (s/v)	13
CO Emissions (kg)	0.74
NOx Emissions (kg)	0.14
VOC Emissions (kg)	0.17

14: 35 NBR Off Ramps

Direction	All
Future Volume (vph)	560
Total Delay / Veh (s/v)	0
CO Emissions (kg)	0.06
NOx Emissions (kg)	0.01
VOC Emissions (kg)	0.01

17: 35 NBL Off Ramps

Direction	All
Future Volume (vph)	1264
Total Delay / Veh (s/v)	2
CO Emissions (kg)	0.16
NOx Emissions (kg)	0.03
VOC Emissions (kg)	0.04

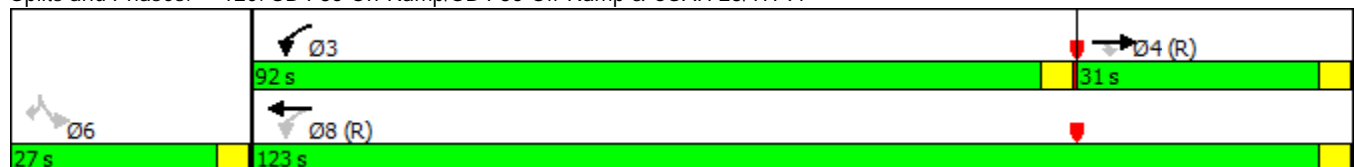


Phase Number	3	4	6	8
Movement	WBL	EBT	SBL	WBTL
Lead/Lag	Lead	Lag		
Lead-Lag Optimize	Yes	Yes		
Recall Mode	None	C-Max	Max	C-Max
Maximum Split (s)	92	31	27	123
Maximum Split (%)	61.3%	20.7%	18.0%	82.0%
Minimum Split (s)	8	20	20	20
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5
Minimum Initial (s)	4	4	4	4
Vehicle Extension (s)	3	3	3	3
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)		5	5	5
Flash Dont Walk (s)		11	11	11
Dual Entry	No	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	58	0	31	58
End Time (s)	0	31	58	31
Yield/Force Off (s)	146	27	54	27
Yield/Force Off 170(s)	146	16	43	16
Local Start Time (s)	58	0	31	58
Local Yield (s)	146	27	54	27
Local Yield 170(s)	146	16	43	16

Intersection Summary

Cycle Length	150
Control Type	Actuated-Coordinated
Natural Cycle	90
Offset: 0 (0%), Referenced to phase 4:EBT and 8:WBTL, Start of Green	

Splits and Phases: 120: SB I-35 On-Ramp/SB I-35 Off-Ramp & CSAH 23/TH 97



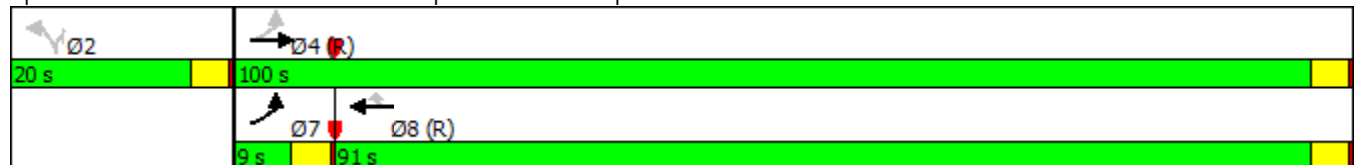


Phase Number	2	4	7	8
Movement	NBL	EBTL	EBL	WBT
Lead/Lag			Lead	Lag
Lead-Lag Optimize			Yes	Yes
Recall Mode	Max	C-Max	None	C-Max
Maximum Split (s)	20	100	9	91
Maximum Split (%)	16.7%	83.3%	7.5%	75.8%
Minimum Split (s)	20	20	8	20
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5
Minimum Initial (s)	4	4	4	4
Vehicle Extension (s)	3	3	3	3
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)	5	5		5
Flash Dont Walk (s)	11	11		11
Dual Entry	Yes	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	91	111	111	0
End Time (s)	111	91	0	91
Yield/Force Off (s)	107	87	116	87
Yield/Force Off 170(s)	96	76	116	76
Local Start Time (s)	91	111	111	0
Local Yield (s)	107	87	116	87
Local Yield 170(s)	96	76	116	76

Intersection Summary

Cycle Length	120
Control Type	Actuated-Coordinated
Natural Cycle	90
Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBT, Start of Green	

Splits and Phases: 125: NB I-35 Off-Ramp/NB I-35 On-Ramp & TH 97



TH 97/CR 23 Regional Solicitation
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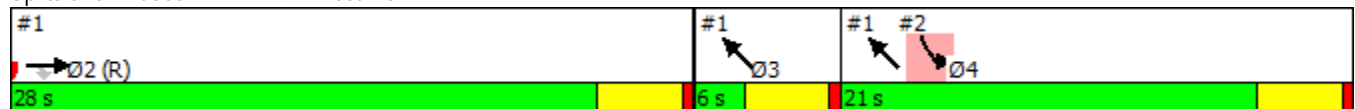


Phase Number	2	3	4
Node Number	1	1	1
Movement	EBT	NWT	NWT
Lead/Lag		Lead	Lag
Lead-Lag Optimize			
Recall Mode	C-Min	None	None
Maximum Split (s)	28	6	21
Maximum Split (%)	50.9%	10.9%	38.2%
Minimum Split (s)	25.5	6	20
Yellow Time (s)	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5
Minimum Initial (s)	4	2	4
Vehicle Extension (s)	3	3	3
Minimum Gap (s)	3	3	3
Time Before Reduce (s)	0	0	0
Time To Reduce (s)	0	0	0
Walk Time (s)			
Flash Dont Walk (s)			
Dual Entry	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes
Start Time (s)	0	28	34
End Time (s)	28	34	0
Yield/Force Off (s)	24	30	51
Yield/Force Off 170(s)	24	30	51
Local Start Time (s)	0	28	34
Local Yield (s)	24	30	51
Local Yield 170(s)	24	30	51

Intersection Summary

Cycle Length	55
Control Type	Actuated-Coordinated
Natural Cycle	55
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green	

Splits and Phases: 1: TH 97 West Int



TH 97/CR 23 Regional Solicitation
 AM Peak Improved

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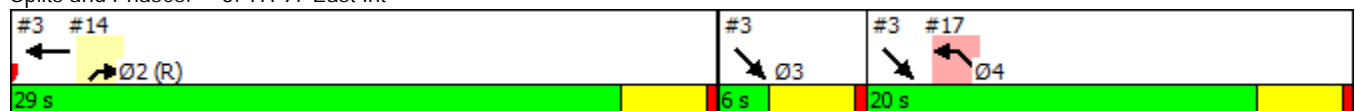


Phase Number	2	3	4
Node Number	3	3	3
Movement	WBT	SET	SET
Lead/Lag		Lead	Lag
Lead-Lag Optimize			
Recall Mode	C-Min	Min	None
Maximum Split (s)	29	6	20
Maximum Split (%)	52.7%	10.9%	36.4%
Minimum Split (s)	20	6	20
Yellow Time (s)	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5
Minimum Initial (s)	4	2	4
Vehicle Extension (s)	3	3	3
Minimum Gap (s)	3	3	3
Time Before Reduce (s)	0	0	0
Time To Reduce (s)	0	0	0
Walk Time (s)			
Flash Dont Walk (s)			
Dual Entry	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes
Start Time (s)	0	29	35
End Time (s)	29	35	0
Yield/Force Off (s)	25	31	51
Yield/Force Off 170(s)	25	31	51
Local Start Time (s)	0	29	35
Local Yield (s)	25	31	51
Local Yield 170(s)	25	31	51

Intersection Summary

Cycle Length	55
Control Type	Actuated-Coordinated
Natural Cycle	55
Offset: 0 (0%), Referenced to phase 2:WBT, Start of Green, Master Intersection	

Splits and Phases: 3: TH 97 East Int



120: SB I-35 On-Ramp/SB I-35 Off-Ramp & CSAH 23/TH 97

Direction	All
Future Volume (vph)	2264
Total Delay / Veh (s/v)	53
CO Emissions (kg)	4.02
NOx Emissions (kg)	0.78
VOC Emissions (kg)	0.93

125: NB I-35 Off-Ramp/NB I-35 On-Ramp & TH 97

Direction	All
Future Volume (vph)	2024
Total Delay / Veh (s/v)	25
CO Emissions (kg)	2.97
NOx Emissions (kg)	0.58
VOC Emissions (kg)	0.69

1: TH 97 West Int

Direction	All
Future Volume (vph)	776
Total Delay / Veh (s/v)	9
CO Emissions (kg)	0.35
NOx Emissions (kg)	0.07
VOC Emissions (kg)	0.08

2: TH 97 & 35 SBL Off Ramps

Direction	All
Future Volume (vph)	356
Total Delay / Veh (s/v)	8
CO Emissions (kg)	0.11
NOx Emissions (kg)	0.02
VOC Emissions (kg)	0.03

3: TH 97 East Int

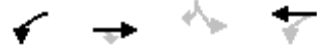
Direction	All
Future Volume (vph)	1412
Total Delay / Veh (s/v)	13
CO Emissions (kg)	0.74
NOx Emissions (kg)	0.14
VOC Emissions (kg)	0.17

14: 35 NBR Off Ramps

Direction	All
Future Volume (vph)	560
Total Delay / Veh (s/v)	0
CO Emissions (kg)	0.06
NOx Emissions (kg)	0.01
VOC Emissions (kg)	0.01

17: 35 NBL Off Ramps

Direction	All
Future Volume (vph)	1264
Total Delay / Veh (s/v)	2
CO Emissions (kg)	0.16
NOx Emissions (kg)	0.03
VOC Emissions (kg)	0.04

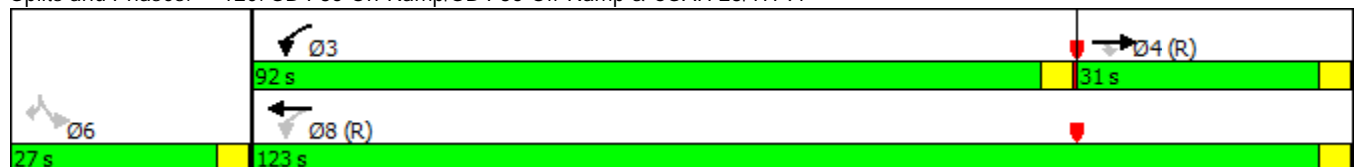


Phase Number	3	4	6	8
Movement	WBL	EBT	SBL	WBTL
Lead/Lag	Lead	Lag		
Lead-Lag Optimize	Yes	Yes		
Recall Mode	None	C-Max	Max	C-Max
Maximum Split (s)	92	31	27	123
Maximum Split (%)	61.3%	20.7%	18.0%	82.0%
Minimum Split (s)	8	20	20	20
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5
Minimum Initial (s)	4	4	4	4
Vehicle Extension (s)	3	3	3	3
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)		5	5	5
Flash Dont Walk (s)		11	11	11
Dual Entry	No	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	58	0	31	58
End Time (s)	0	31	58	31
Yield/Force Off (s)	146	27	54	27
Yield/Force Off 170(s)	146	16	43	16
Local Start Time (s)	58	0	31	58
Local Yield (s)	146	27	54	27
Local Yield 170(s)	146	16	43	16

Intersection Summary

Cycle Length	150
Control Type	Actuated-Coordinated
Natural Cycle	90
Offset: 0 (0%), Referenced to phase 4:EBT and 8:WBTL, Start of Green	

Splits and Phases: 120: SB I-35 On-Ramp/SB I-35 Off-Ramp & CSAH 23/TH 97



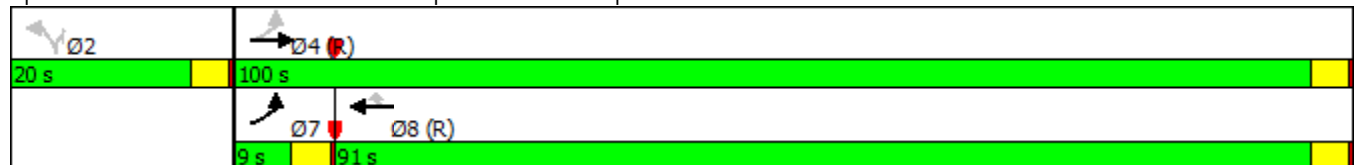


Phase Number	2	4	7	8
Movement	NBL	EBTL	EBL	WBT
Lead/Lag			Lead	Lag
Lead-Lag Optimize			Yes	Yes
Recall Mode	Max	C-Max	None	C-Max
Maximum Split (s)	20	100	9	91
Maximum Split (%)	16.7%	83.3%	7.5%	75.8%
Minimum Split (s)	20	20	8	20
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5
Minimum Initial (s)	4	4	4	4
Vehicle Extension (s)	3	3	3	3
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)	5	5		5
Flash Dont Walk (s)	11	11		11
Dual Entry	Yes	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	91	111	111	0
End Time (s)	111	91	0	91
Yield/Force Off (s)	107	87	116	87
Yield/Force Off 170(s)	96	76	116	76
Local Start Time (s)	91	111	111	0
Local Yield (s)	107	87	116	87
Local Yield 170(s)	96	76	116	76

Intersection Summary

Cycle Length	120
Control Type	Actuated-Coordinated
Natural Cycle	90
Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBT, Start of Green	

Splits and Phases: 125: NB I-35 Off-Ramp/NB I-35 On-Ramp & TH 97



TH 97/CR 23 Regional Solicitation
 AM Peak Improved

7/12/2016

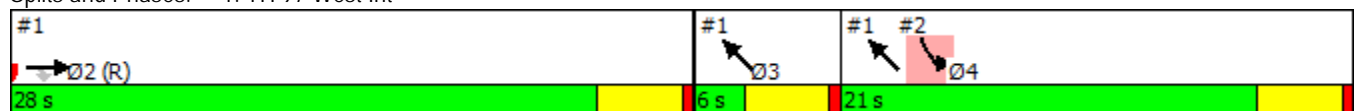


Phase Number	2	3	4
Node Number	1	1	1
Movement	EBT	NWT	NWT
Lead/Lag		Lead	Lag
Lead-Lag Optimize			
Recall Mode	C-Min	None	None
Maximum Split (s)	28	6	21
Maximum Split (%)	50.9%	10.9%	38.2%
Minimum Split (s)	25.5	6	20
Yellow Time (s)	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5
Minimum Initial (s)	4	2	4
Vehicle Extension (s)	3	3	3
Minimum Gap (s)	3	3	3
Time Before Reduce (s)	0	0	0
Time To Reduce (s)	0	0	0
Walk Time (s)			
Flash Dont Walk (s)			
Dual Entry	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes
Start Time (s)	0	28	34
End Time (s)	28	34	0
Yield/Force Off (s)	24	30	51
Yield/Force Off 170(s)	24	30	51
Local Start Time (s)	0	28	34
Local Yield (s)	24	30	51
Local Yield 170(s)	24	30	51

Intersection Summary

Cycle Length	55
Control Type	Actuated-Coordinated
Natural Cycle	55
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green	

Splits and Phases: 1: TH 97 West Int



TH 97/CR 23 Regional Solicitation
 AM Peak Improved

7/12/2016

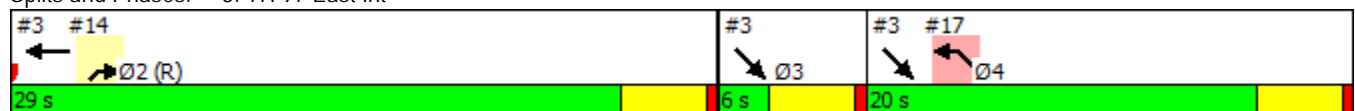


Phase Number	2	3	4
Node Number	3	3	3
Movement	WBT	SET	SET
Lead/Lag		Lead	Lag
Lead-Lag Optimize			
Recall Mode	C-Min	Min	None
Maximum Split (s)	29	6	20
Maximum Split (%)	52.7%	10.9%	36.4%
Minimum Split (s)	20	6	20
Yellow Time (s)	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5
Minimum Initial (s)	4	2	4
Vehicle Extension (s)	3	3	3
Minimum Gap (s)	3	3	3
Time Before Reduce (s)	0	0	0
Time To Reduce (s)	0	0	0
Walk Time (s)			
Flash Dont Walk (s)			
Dual Entry	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes
Start Time (s)	0	29	35
End Time (s)	29	35	0
Yield/Force Off (s)	25	31	51
Yield/Force Off 170(s)	25	31	51
Local Start Time (s)	0	29	35
Local Yield (s)	25	31	51
Local Yield 170(s)	25	31	51

Intersection Summary

Cycle Length	55
Control Type	Actuated-Coordinated
Natural Cycle	55
Offset: 0 (0%), Referenced to phase 2:WBT, Start of Green, Master Intersection	

Splits and Phases: 3: TH 97 East Int



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					
			TH 97	Interchange Area with I-35					Anoka County	1/1/2013	12/31/2015					
Description of Proposed Work		Reconstruct interchange to a diverging diamond and improve pavement														
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	Other	Total	
Study Period: Number of Crashes	Fatal	F														
	Personal Injury (PI)	A														
		B														
		C		3				2		1		2			8	
	Property Damage	PD		7		5		2		7		1		1		3
% Change in Crashes	Fatal	F														
	PI	A														
		B														
		C		-79%					-75%		-81%		-81%			
	Property Damage	PD		-79%		-72%		-100%		-63%		-72%		-72%		
Change in Crashes = No. of crashes X % change in crashes	Fatal	F														
	PI	A														
		B														
		C		-2.37					-1.50		-0.81		-1.62		-6.30	
	Property Damage	PD		-5.53		-3.60		-2.00		-4.41		-0.72		-0.72		-2.16
Year (Safety Improvement Construction)		2020														
Project Cost (exclude Right of Way)		\$ 10,280,000		Type of Crash	Study Period: Change in Crashes	Annual Change in Crashes	Cost per Crash	Annual Benefit	<div style="border: 1px solid black; background-color: #FFC0CB; padding: 5px; display: inline-block;">B/C= 0.53</div> Using present worth values, B= \$ 5,467,121 C= \$ 10,280,000 See "Calculations" sheet for amortization.							
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	-6.30	-2.10	\$ 83,000	\$ 174,459								
2. Project Service Life (n)		30		PD	-19.14	-6.39	\$ 7,600	\$ 48,532								
				Total				\$ 222,992								
										Office of Traffic, Safety and Technology September 2014						

▪ Countermeasure: Improve pavement friction (increase skid resistance)

CMF	CRF(%)	Quality	Crash Type	Crash Severity	Area Type	Reference	Comments
0.799	20.1	★★★★★	All	All	All	Lyon and Persaud, 2008	

▪

0.667	33.3	★★★★★	All	All	All	Lyon and Persaud, 2008	
-------	------	-------	-----	-----	-----	------------------------	--

▪

0.819	18.1	★★★★★	All	All	All	Lyon and Persaud, 2008	
-------	------	-------	-----	-----	-----	------------------------	--

▪

0.797	20.3	★★★★★	All	All	All	Lyon and Persaud, 2008	
-------	------	-------	-----	-----	-----	------------------------	--

▪

1.271	- 27.1	★★★★★	All	All	All	Lyon and Persaud, 2008	
-------	-----------	-------	-----	-----	-----	------------------------	--

▪

0.426	57.4	★★★★★	Wet road	All	All	Lyon and Persaud, 2008	
-------	------	-------	----------	-----	-----	------------------------	--

▪

0.372	62.8	★★★★★	Wet road	All	All	Lyon and Persaud,	
-------	------	-------	----------	-----	-----	-------------------	--

0.575

42.5



Rear end, Wet road

All

Lyon and Persaud, 2008

0.59

41



All

All

All

Lyon and Persaud, 2008

0.589

41.1



All

All

All

Lyon and Persaud, 2008

0.361

63.9



Wet road

All

All

Lyon and Persaud, 2008

0.304

69.6



Rear end

All

All

Lyon and Persaud, 2008

0.943

5.7



Rear end

All

All

Lyon and Persaud, 2008

0.504

49.6



Rear end

All

All

Lyon and Persaud, 2008

0.221

77.9



Rear end, Wet road

All

All

Lyon and Persaud, 2008

0.787

21.3



Angle

All

All

Lyon and Persaud, 2008

0.828

17.2



Angle

All

All

Lyon and Persaud, 2008

0.898

10.2



Angle

All

All

Lyon and Persaud, 2008

0.799

20.1



Angle, Wet road

All

All

Lyon and Persaud, 2008

0.47

53



Angle, Wet road

All

All

Lyon and Persaud, 2008

0.828

17.2



Angle, Wet road

All

All

Lyon and Persaud, 2008

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

Compare	CMF	CRF(%)	Quality	Crash Type	Crash Severity	Area Type	Reference	Comments
	0.374	62.6	★★★★☆	All	Fatal,Serious injury,Minor injury	Not specified	Edara et al., 2015	This CMF applies to the ... [read more]
	0.649	35.1	★★★★☆	All	Property damage only (PDO)	Not specified	Edara et al., 2015	This CMF applies to the ... [read more]
	0.592	40.8	★★★★☆	All	All	Not specified	Edara et al., 2015	This CMF applies to the ... [read more]
	0.322	67.8	★★★★☆	All	Fatal,Serious injury,Minor injury	Not specified	Edara et al., 2015	This CMF applies to the ... [read more]
	0.466	53.4	★★★★☆	All	Property damage only (PDO)	Not specified	Edara et al., 2015	This CMF applies to the ... [read more]
	0.434	56.6	★★★★☆	All	All	Not specified	Edara et al., 2015	This CMF applies to the ... [read more]
	0.54	46	★★★★☆	All	All	Urban	Chilukuri et al., 2011	The authors computed the CMF ... [read more]
	0.28	72	★★★★☆	All	Minor injury	Urban	Chilukuri et al., 2011	The authors computed the CMF ... [read more]
	0.63	37	★★★★☆	All	Property damage only (PDO)	Urban	Chilukuri et al., 2011	The authors computed the CMF ... [read more]
	0.71	29	★★★★☆	Rear end	All	Urban	Chilukuri et al., 2011	The authors computed the CMF ... [read more]
	0.81	19	★★★★☆	Not specified	All	Urban	Chilukuri et al., 2011	The authors computed the CMF ... [read more]
	0	100	★★★★☆	Left turn	All	Urban	Chilukuri et al., 2011	The authors computed the CMF ... [read more]

Dual CRF for TH 97 Diverging Diamond Interchange

Improvements include reconstructing the interchange to a diverging diamond and improving the pavement with the reconstruction

CR1=Increase pavement friction

CR2=Convert interchange to diverging diamond

$$CR=1 - (1-CR1)*(1-CR2)$$

Rear End (PDO): $1 - (1-.70)*(1-.29) = .79$

Rear End (Injury): $1 - (1-.70)*(1-.29) = .79$

All Other (PDO): $1 - (1-.41)*(1-.53) = .72$

All Other (Injury): $1 - (1-.41)*(1-.68) = .81$

Angle Crashes (PDO): $1 - (1-.21)*(1-.53) = .63$

Angle (Injury): $1 - (1-.21)*(1-.68) = .75$

Left Turn: 1.0

TH 97 and CSAH 23 (Lake Drive) from Holiday's west driveway to Hornsby Street (2013 -2015

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
03	00000097	000+00.068	0300000097	0.068	N	J51	A	1	R
03	00000097	000+00.068	0300000097	0.068	Z	J09	A	1	R
03	00000097	000+00.068	0300000097	0.068	Z	J51	A	1	R
03	00000097	000+00.068	0300000097	0.068	E	J52	A	1	R
03	00000097	000+00.068	0300000097	0.068	E	J51	A	1	R
03	00000097	000+00.068	0300000097	0.068	Z	J51	1	1	R
03	00000097	000+00.068	0300000097	0.068	W	J09	2	1	R
03	00000097	000+00.068	0300000097	0.068	E	J52	1	1	R
03	00000097	000+00.068	0300000097	0.068	Z	J51	1	1	R
03	00000097	000+00.068	0300000097	0.068	Z	J51	1	1	R
03	00000097	000+00.068	0300000097	0.068	W	J51	1	1	R
03	00000097	000+00.068	0300000097	0.068	Z	J09	1	1	R
03	00000097	000+00.068	0300000097	0.068	Z	J52	A	1	U
03	00000097	000+00.068	0300000097	0.068	Z	J51	2	2	R
03	00000097	000+00.068	0300000097	0.068	Z	J51	1	1	R
03	00000097	000+00.078	0300000097	0.078	Z		1	0	R
03	00000097	000+00.079	0300000097	0.079	Z		B	3	R
03	00000097	000+00.199	0300000097	0.199	E		A	1	R
03	00000097	000+00.199	0300000097	0.199	W		1	1	R
03	00000097	000+00.199	0300000097	0.199	Z		1	1	R
03	00000097	000+00.199	0300000097	0.199	Z		1	1	R
03	00000097	000+00.199	0300000097	0.199	Z		1	1	R
03	00000097	000+00.199	0300000097	0.199	Z		1	1	R
03	00000097	000+00.199	0300000097	0.199	W		1	1	R
03	00000097	000+00.206	0300000097	0.206	Z		A	2	R
03	00000097	000+00.209	0300000097	0.209	Z		A	1	R
03	00000097	000+00.234	0300000097	0.234	W		1	1	R
03	00000097	000+00.241	0300000097	0.241	W		A	1	R
03	00000097	000+00.293	0300000097	0.293	E		2	1	R
03	00000097	000+00.300	0300000097	0.300	E		A	1	R
04	02000023	013+00.083	0402000023	13.083	Z		1	2	R
04	02000023	013+00.138	0402000023	13.138	Z	J52	A	2	R
04	02000023	013+00.138	0402000023	13.138	E		1	2	R
10	07920109	001+00.260	1007920109	1.260	Z		1	2	R

) - created on 06-24-2016 by rile1che

ATP	CO	CITY	DOW	MONTH	DAY	YEAR	TIME	SEV	NUM_KILLED
DRIVER VEH 1 CLAIMED HE WAS NORTHBOUND ISTH 35W EX	2	0792	3-Tue	3	5	2013	1728	C	0
V1 WAS STATIONARY ON MNTH 97 OVER ISTH 35, IN TRAF	82	0792	2-Mon	6	17	2013	1724	N	0
VEH 1, VEH 2 WB HWY 97 AT 35. VEH 1 REAREND VEH 2	82	0792	7-Sat	6	29	2013	1458	C	0
DRIVER OF VEHICLE 1 STATED HE CAME NORTH ON COUNTY	82	0792	2-Mon	7	1	2013	0823	N	0
V1 AND V2 INVOLVED IN SIDESWIPE CRASH ON MNTH 97 A	82	0792	4-Wed	9	18	2013	1433	N	0
BOTH VEHICLES EXITED NB 35 TO GO EAST ON 97. BOTH VEHICLES TURNING RIGHT, DRIVER OF UNIT 2 NOT FROM	82	0792	6-Fri	2	21	2014	1221	N	0
BOTH VEHICLES WEST ON 97, VEHICLE 2 STOPPED IN TRAFFIC AND WAS REAR ENDED BY VEHICLE 1, BOTH PARTIE	82	0792	4-Wed	5	28	2014	0631	N	0
VEH 1 HAD LEFT TURN GREEN ARROW TO GO S ON 35 RAMP. VEH 1 SLOW TO TURN, WAS HONKED AT BY WITNESS B	82	0792	6-Fri	6	27	2014	1342	N	0
BOTH VEHICLES WERE TURNING EASTBOUND FROM NORTHBOUND I35. DRIVER 1 STATED THAT VEHICLE 2 TURNED	82	0792	2-Mon	6	30	2014	1444	N	0
V1 WB 97 GOING STRAIGHT. V2 EAST ON 97 TURNING NORTH, LEFT, IN INTERSECTION. BOTH VEHICLES WITH YEL	82	0792	4-Wed	10	1	2014	0837	N	0
VEH 1 EB MNTH 97 TO TURN LEFT TO GO NB ISTH 35. VEH 2 WB 97 AT 35 INTERCHANGE. VEH 2 WB WITH GREE	82	0792	3-Tue	10	14	2014	1350	C	0
VEH 1 WAS TRAVELING EB ON MNTH 97 OVER ISTH 35. VEH 1 LOST CONTROL AND HIT GUARDRAIL ON RIGHT. TH	82	0792	2-Mon	10	27	2014	2322	N	0
DRIVER OF VEHICLE ONE STATED HE WAS TRAVELING IN T	13	2845	3-Tue	11	4	2014	0601	N	0
UNIT 1,2 AND 3 STOPPED AT A RED LIGHT. UNIT 4 CRASHED INTO THE BACK OF UNIT 1 CAUSING IT TO CRASH I	82	0792	5-Thu	9	24	2015	1651	N	0
VEHICLE ONE WAS TRAVELING W/B ON HWY 97 AND WAS TAKING A RIGHT ONTO THE RAMP TO GO NORTH ON ISTH 3	82	0792	5-Thu	10	22	2015	1929	N	0
	82	0792	3-Tue	2	4	2014	0700	N	0
WHILE TRAVELING W/B ON SCANDIA TRL N DRIVER OBSERV	82	0792	4-Wed	12	18	2013	1904	N	0
DRIVER #1 WAS MAKING A LEFT HAND TURN FROM HORNSBY	82	0792	6-Fri	4	19	2013	1407	N	0
ALL VEHICLES WERE TRAVELING ON W/B HWY 97. VEHICLES WERE STOPPED FAR BACK FROM THE INTERSECTION TH	82	0792	3-Tue	4	29	2014	1608	N	0
VEHICLE 1 WAS TURNING LEFT FROM HORNSBY ST AND PULLED OUT IN FRONT OF VEHICLE 2 WHO WAS GOING WEST	82	0792	5-Thu	6	26	2014	1919	N	0
V#1 WAS WB 97 AT HORNSBY ST STOPPED IN TRAFFIC. V#2 WAS BEHIND V#1 AND COULD NOT STOP IN TIME AND S	82	0792	3-Tue	1	6	2015	0948	N	0
VEH 1 WB MNTH 97 AT HORNSBY. VEH 2 SB HORNSBY AT MNTH 97. VEH 1 IN STOPPED TRAFFIC BACKUP FOR STO	82	0792	1-Sun	1	18	2015	1324	N	0
DRIVER OF VEHICLE ONE STATED TO THE TROOPER THAT HE WAS TRAVELING W/B ON HWY 97. HIS INTENDED DEST	82	0792	6-Fri	10	9	2015	1625	N	0
MN97 WAS WET FROM SNOW THAT HAD FALLEN EARLIER THAT DAY. BOTH VEHICLES WERE WEST ON MN97. D1 EXPLAI	82	0792	3-Tue	12	29	2015	1213	C	0
UNIT 1 WAS STOPPED IN TRAFFIC AT THE RED LIGHT FOR	82	0792	4-Wed	10	9	2013	1750	N	0
V#1 WAS EB 97 FROM 35. V#1 STATED THAT A VEHICLE	82	0792	5-Thu	5	2	2013	0539	C	0
V #1 TRAVELING SOUTHBOUND HORNSBY ST. N.E. V #1 WAS STOPPED AT STOP SIGN PRIOR TO CRASH. V #2 TRA	82	0792	2-Mon	5	12	2014	0941	N	0
VEHICLE 1 AND VEHICLE 2 WESTBOUND 97 APPROACHING H	82	0792	5-Thu	10	24	2013	0655	C	0
V2 HAD JUST MERGED INTO LANE EB MNTH 97 ACCORDING TO DRIVER OF V2 AND WITNESS WHALEY. BOTH SAID THA	82	0792	4-Wed	11	5	2014	1649	N	0
ALL V`S WERE STOPPED FOR TRAFFIC. TRAFFIC STARTED	82	0792	4-Wed	7	31	2013	1712	N	0
UNIT 1 WAS WB ON LAKE DR NE TRAFFIC WAS AT A STOP FOR EB LAKE DR BUT NOT BLOCKING THE INTERSECTION.	2	0792	3-Tue	9	8	2015	1711	N	0
DRIVER #1 - WESTBOUND ON LAKE DRIVE, PREPARING TO	2	0792	6-Fri	2	22	2013	0657	C	0
V1 IN LEFT TURN LANE TO GO WB ONTO LAKE DR. V2 WAS STATIONARY IN THE LEFT TURN LANE TO GO NB ON I35	2	0792	1-Sun	6	15	2014	0338	N	0
UNIT 1 WAS TRAVELING NORTHBOUND ON LAKE DR NE. UNIT 2 WAS HEADED SOUTHBOUND ON LAKE DR NE. UNIT 1 C	2	0792	1-Sun	9	27	2015	1740	C	0

NUM_VEH	JUNC	SL	TYPE	DIAG	LOC1	TCD	LIT	WTHR1	WTHR2	SURF	CHAR	DESGN	ACC_NUM	PERSON1				
														VTYPE	DIR	ACT	FAC1	FAC2
2	4	70	1	5	1	1	1	2	0	2	2	2	130660232	2	N	6	2	0
2	7	50	1	90	1	1	1	1	0	1	1	8	131690246	11	E	11	1	0
2	4	55	1	1	1	1	1	1	2	1	1	8	131860173	1	W	1	15	0
1	4	55	22	90	1	1	1	1	0	1	1	3	131900280	35	E	1	1	0
2	7	55	1	2	1	1	1	1	0	1	6	2	132720147	35	NE	5	99	0
2	4	70	1	2	1	1	1	1	0	5	1	2	140600353	35	N	1	10	0
2	1	55	1	1	1	98	1	1	0	1	1	3	141480188	2	W	1	4	0
2	4	50	1	2	1	1	1	2	0	1	1	5	141810186	1	S	6	8	0
2	4	70	1	2	1	1	1	2	0	1	1	2	141830208	1	NE	5	1	0
2	7	55	1	3	1	1	1	3	0	2	2	8	142760282	4	W	1	1	0
2	4	55	1	8	1	1	1	1	0	1	2	3	142890287	3	E	6	2	0
1	1	45	34	7	4	98	4	1	0	1	1	8	143020266	3	E	1	15	0
2	7	35	1	3	1	1	2	1	0	1	1	5	143090269	1	E	1	5	15
3	1	45	1	1	1	1	1	1	1	1	2	8	152670184	4	W	11	1	1
2	7	55	1	5	1	1	4	3	0	1	2	6	152990176	1	E	6	2	0
2	0	55	1	1	0	1	1	1	0	2	0	0	140700069	1	W	9	0	0
1	1	55	8	90	1	98	6	1	1	1	1	8	133540060	1	W	1	1	1
2	7	55	1	5	1	4	1	1	0	1	1	8	131120200	1	N	9	2	15
3	7	55	1	1	1	1	1	3	4	2	2	3	141250144	1	W	11	1	0
2	2	55	1	5	1	4	1	2	0	1	1	1	141790273	2	S	6	2	0
2	2	55	1	1	1	98	1	2	0	2	1	8	150060481	3	W	11	1	0
2	2	55	1	5	1	98	1	1	0	1	1	3	150190160	1	W	15	7	0
2	7	55	1	5	1	98	1	1	0	1	1	90	153090201	1	E	6	1	0
2	7	55	1	1	1	98	1	2	0	2	1	3	153640288	1	W	1	15	0
1	1	55	1	1	1	1	1	1	0	1	1	8	132820171	1	W	11	1	0
1	2	55	37	7	4	98	1	2	0	1	1	8	131410219	3	E	1	16	3
2	7	55	1	5	1	4	1	2	0	1	1	3	141480185	2	W	15	7	15
2	1	55	1	1	1	98	6	2	0	1	1	8	133000141	1	W	1	1	0
2	1	55	1	2	1	98	6	3	2	2	90	8	143200303	2	E	15	8	0
2	1	55	1	1	1	98	1	1	0	1	1	8	132130300	3	E	11	1	0
2	7	40	1	5	2	4	1	1	1	1	1	8	152510130	1	E	1	7	99
2	4	45	1	5	1	1	1	4	2	5	1	8	130540022	1	E	1	1	1
2	4	50	2	8	1	1	4	3	0	2	2	8	141670016	3	E	90	90	0
2	1	55	1	9	1	98	1	2	99	1	1	99	152710122	1	N	38	20	90

						PERSON2					PERSON3									
POSN	INJ	EQP	PHYS	AGE	SEX	VTYPE	DIR	ACT	FAC1	FAC2	POSN	INJ	EQP	PHYS	AGE	SEX	VTYPE	DIR	ACT	FAC1
1	N	4	1	43	M	1	E	1	1	0	1	C	4	1	18	F				
1	N	12	1	19	M	3	E	17	11	15	1	N	4	1	47	M				
1	N	4	1	46	F	3	W	11	1	0	1	C	4	1	89	M				
1	N	4	1	44	M															
1	N	4	1	79	M	1	NE	5	99	0	1	N	4	1	62	M				
1	N	4	1	45	M	2	N	1	1	0	1	N	4	1	42	M				
1	N	4	1	32	M	2	W	10	1	0	1	N	4	1	23	M				
1	N	4	1	32	F	1	S	3	2	0	1	N	4	1	79	M				
1	N	4	1	32	M	4	NE	5	1	0	1	N	4	1	48	M				
1	N	4	1	39	F	1	N	6	10	0	1	N	4	1	58	M				
1	C	4	1	75	M	1	W	1	1	0	1	N	4	1	19	M				
1	N	4	99	55	F															
1	N	4	1	19	M	1	S	6	1	0	1	N	4	1	49	M				
1	N	4	1	45	F	3	W	9	1	1	1	N	4	1	33	F	1	W		
1	N	4	1	59	F	1	W	5	1	0	1	N	4	1	22	M				
1	N	4	0	56	M	3	W	11	0	0	1	N	0	0	902	M				
1	N	4	1	29	M															
1	N	4	1	44	F	3	E	1	1	0	1	N	4	1	19	M				
1	N	4	1	27	M	1	W	11	1	0	1	N	4	1	27	F	3	W		
1	N	4	1	63	M	4	W	1	1	0	1	N	4	1	37	F				
1	N	4	1	33	M	1	W	1	4	3	1	N	4	1	19	M				
1	N	4	1	44	M	1	S	6	1	0	1	N	4	1	23	F				
1	N	4	1	78	F	1	W	15	8	7	1	N	4	1	39	M				
1	C	4	1	23	M	1	W	11	1	0	1	N	4	1	32	M				
1	N	4	1	70	M															
1	C	4	1	16	M															
1	N	4	1	51	M	1	S	6	1	0	1	N	4	1	18	F				
1	C	4	1	51	F	1	W	1	8	4	1	N	4	1	60	M				
1	N	4	1	47	M	4	E	16	1	0	1	N	4	1	42	M				
1	N	4	1	60	F	2	E	1	15	0	1	N	4	1	26	M				
1	N	4	1	50	M	1	S	6	1	1	1	N	4	1	23	M				
1	C	4	1	32	M	1	SW	37	2	15	1	C	4	1	59	F				
1	N	4	1	34	M	1	W	6	10	0	1	N	99	2	34	M				
1	C	98	3	46	M	2	S	1	1	1	1	N	98	1	50	M				

FAC2	POSN	INJ	EQP	PHYS	AGE	SEX	PERSON4	VTYPE	DIR	ACT	FAC1	FAC2	POSN	INJ	EQP	PHYS	AGE	SEX
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BOARD OF COUNTY COMMISSIONERS

Anoka County, Minnesota

DATE: July 12, 2016

RESOLUTION #2016-94

OFFERED BY COMMISSIONER: Schulte

**RESOLUTION AUTHORIZING SUBMITTAL OF
FEDERAL FUNDING APPLICATION FOR
THE I-35 AND TH 97/CSAH 23 INTERCHANGE**

WHEREAS, the interchange of I-35 and TH 97/CSAH 23 serves as an important regional access point to eastern Anoka County; and,

WHEREAS, Anoka County, the Minnesota Department of Transportation, and the cities of Columbus and Forest Lake have identified the need to improve the TH 97 bridge over I-35 serving the cities of Columbus and Forest Lake; and,

WHEREAS, Anoka County, the City of Columbus, and the Minnesota Department of Transportation have completed a study that identifies design options for improving the I-35 and TH 97/CSAH 23 interchange area through the reconstruction of the interchange; and,

WHEREAS, existing and future traffic volumes on CSAH 23, TH 97, and I-35 have been increasing and are projected to continue to increase as the area develops; and,

WHEREAS, existing travel safety is a concern at the interchange and adjacent intersections; and,

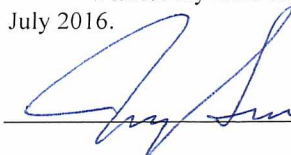
WHEREAS, proposed transportation improvements to the I-35 and TH 97/CSAH 23 interchange will improve the safety and mobility for all modes of travel:

NOW, THEREFORE, BE IT RESOLVED that the Anoka County Highway Department is hereby authorized to submit an application to the Transportation Advisory Board of the Metropolitan Council for 2019-2021 to receive federal transportation funds to make improvements to the I-35/TH 97/CSAH 23 interchange.

STATE OF MINNESOTA)
COUNTY OF ANOKA) ss

I, Jerry Soma, County Administrator, Anoka County, Minnesota, hereby certify that I have compared the foregoing copy of the resolution of the county board of said county with the original record thereof on file in the Administration Office, Anoka County, Minnesota, as stated in the minutes of the proceedings of said board at a meeting duly held on July 12, 2016, and that the same is a true and correct copy of said original record and of the whole thereof, and that said resolution was duly passed by said board at said meeting.

Witness my hand and seal this 12th day of July 2016.


JERRY SOMA
COUNTY ADMINISTRATOR

	<u>YES</u>	<u>NO</u>
DISTRICT #1 – LOOK	X	
DISTRICT #2 – BRAASTAD	X	
DISTRICT #3 – WEST	X	
DISTRICT #4 – KORDIAK	X	
DISTRICT #5 – GAMACHE	X	
DISTRICT #6 – SIVARAJAH	X	
DISTRICT #7 – SCHULTE	X	



Minnesota Department of Transportation

Metro District
1500 West County Road B-2
Roseville, MN 5511

July 8, 2016

Jack Forslund, PTP
Multimodal Planning Manager
Anoka County Transportation Division
Highway-Transit-Surveyor-GIS
1440 Bunker Lake Boulevard, NW
Andover, MN 55304

RE: Regional Solicitation Application for I-35 at TH 97 Interchange Improvement

Dear Mr. Forslund:

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 I-35 at TH 97 Interchange Improvement project impacts MnDOT right of way on I-35.

MnDOT, as the agency with jurisdiction over I-35, would allow the improvements included in the application for I-35 at TH 97 Interchange Improvement project. Details of a future maintenance agreement with the City would be determined during project development to define how the improvements will be maintained for the project's useful life.

Within the subject project area, there is a MnDOT bridge programmed to be replaced in 2018. The TH 97 Bridge (# 02806) over I-35 will be replaced as part of a larger bridge and pavement project led by MnDOT on I-35. The TH 97 Bridge is programmed with approximately \$3,500,000 to replace the bridge with existing bridge dimensions. While it is programmed project in the State Transportation Improvement Program (STIP), given the fluctuations in MnDOT funding, a project could move out of the programmed year or be modified in some other way. Please continue to work with MnDOT Area staff to coordinate project funding.

Sincerely,

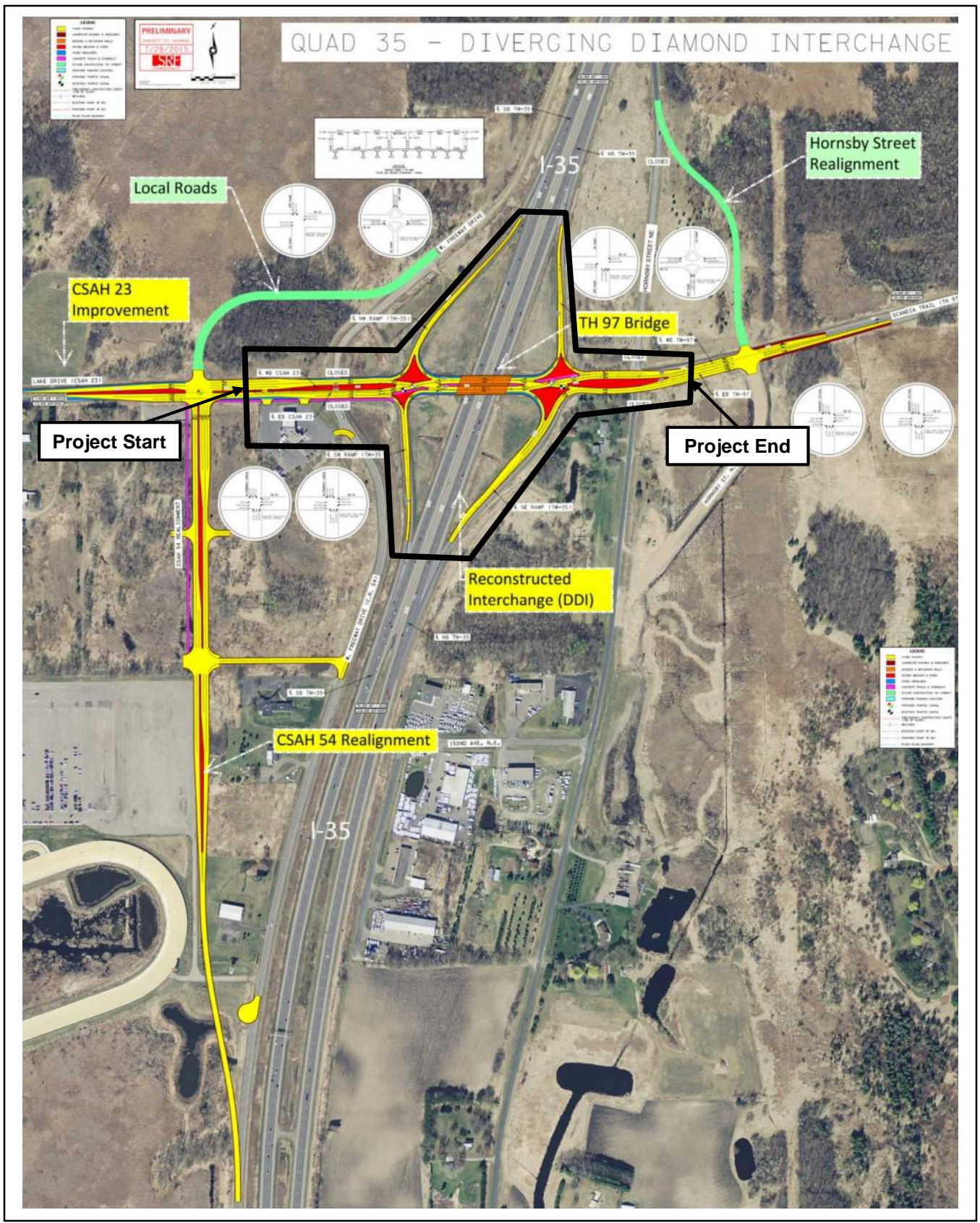
A handwritten signature in blue ink that reads "Scott McBride".

Scott McBride, P.E.
Metro District Engineer

Cc: Elaine Koustsoukos, Metropolitan Council
Sheila Kauppi, MnDOT Metro District – North Area Manager
Adam Josephson, MnDOT Metro District – East Area Manager

An Equal Opportunity Employer

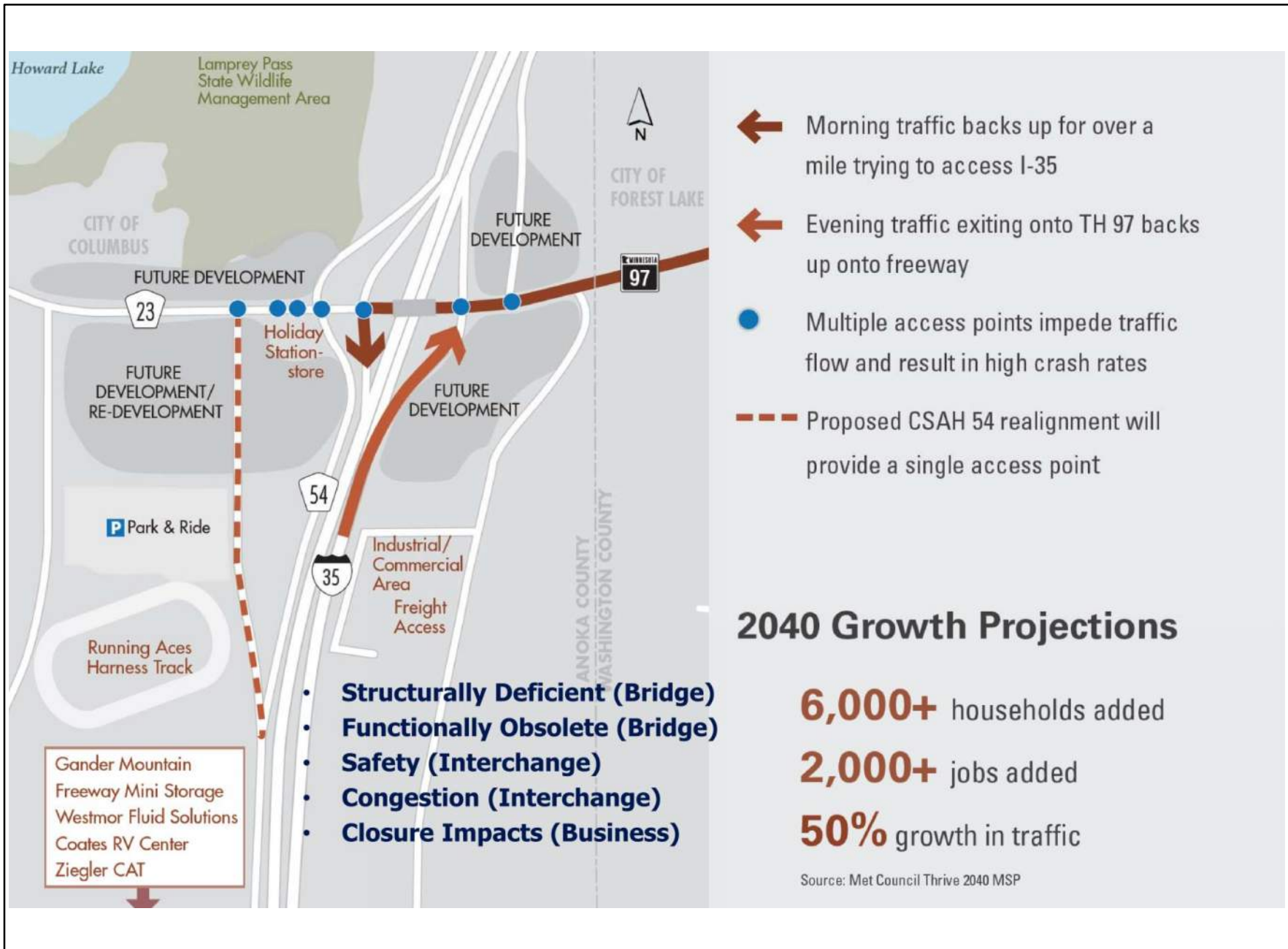




Project Layout

I-35 at TH 97/CSAH 23 Interchange – Regional Solicitation Grant Application
 Anoka County

Figure 1



Existing Conditions and Issues

Figure 2A



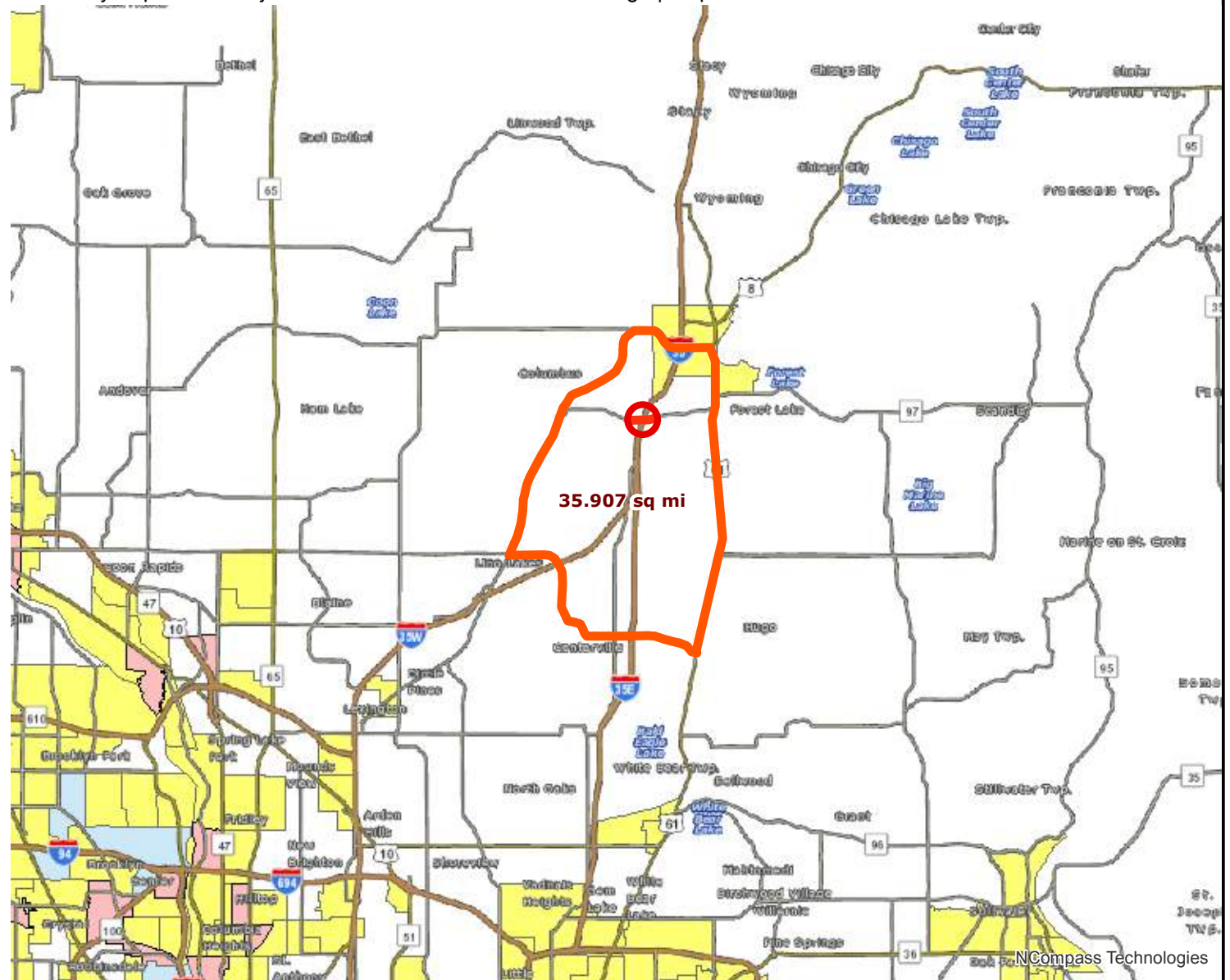
Project Area Context and Issues

I-35 at TH 97/CSAH 23 Interchange – Regional Solicitation Grant Application
 Anoka County

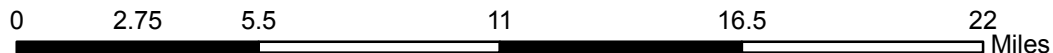
Figure 2B

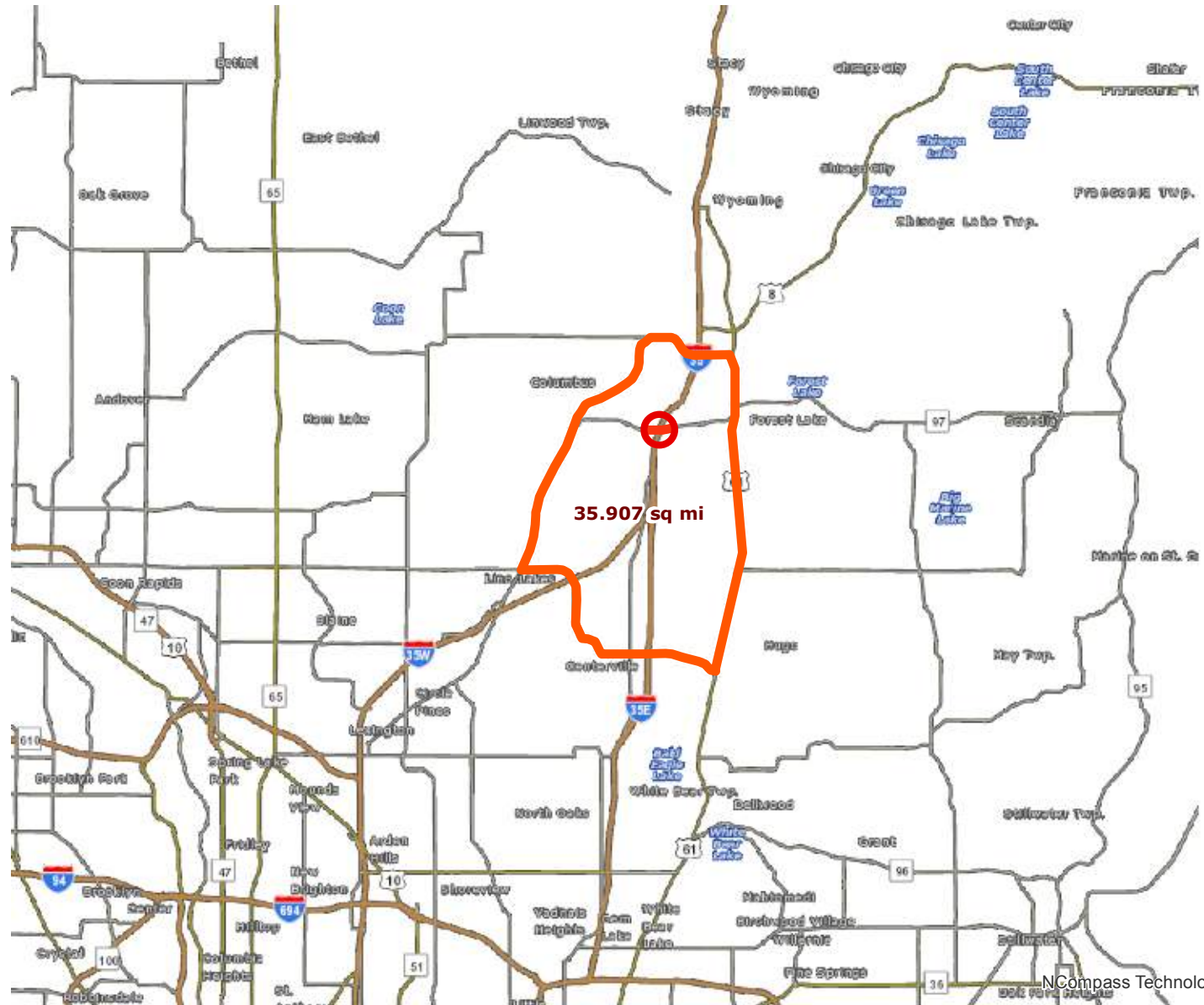
Results

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





Results

Transit with a Direct Connection to project:
275 288

**indicates Planned Alignments*

○ Project Points □ Project Area

— Project



Created: 6/21/2016
LandscapeRSA3



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



NCompass Technologies

Structurally Deficient (Bridge)

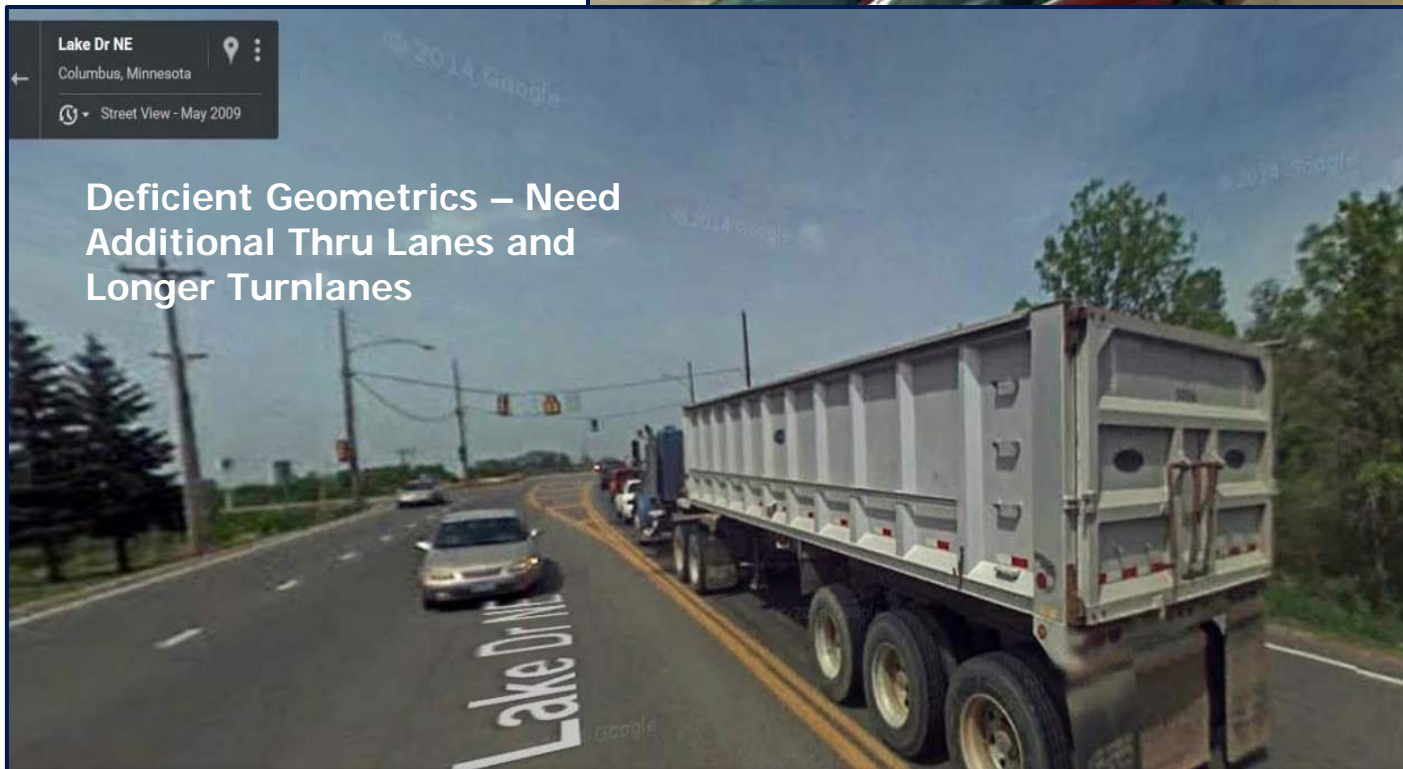


The Highway 97 bridge was constructed in 1967 and is facing structural deficiencies including “black bar” – bare reinforcing steel that is corroding and causing spalled concrete to fall onto the freeway below!



Existing Conditions and Issues Figure-Attachment 2 (*continued*)

Functionally Obsolete (Bridge)



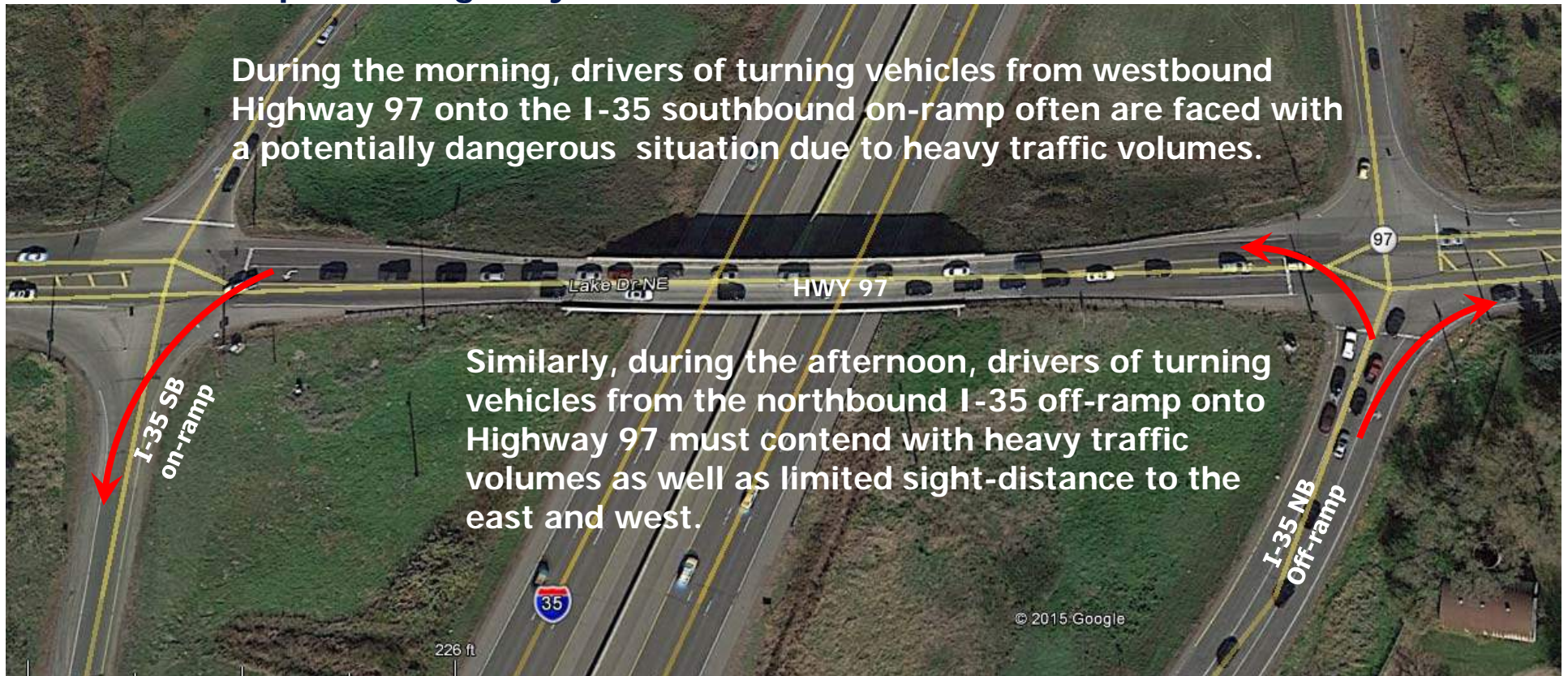
Existing Conditions and Issues Figure-Attachment 2 (continued)



Safety (Interchange)

According to the *Anoka County 2030 Transportation Plan* and *Minnesota Department of Public Safety Crash Records* the project area is considered relatively high in crash incidents.

Intersection crash history indicates crash rates exceeding the critical crash rate for the area. Areas experiencing well above average crash rates include the intersections of the I-35 on/off-ramps with Highway 97



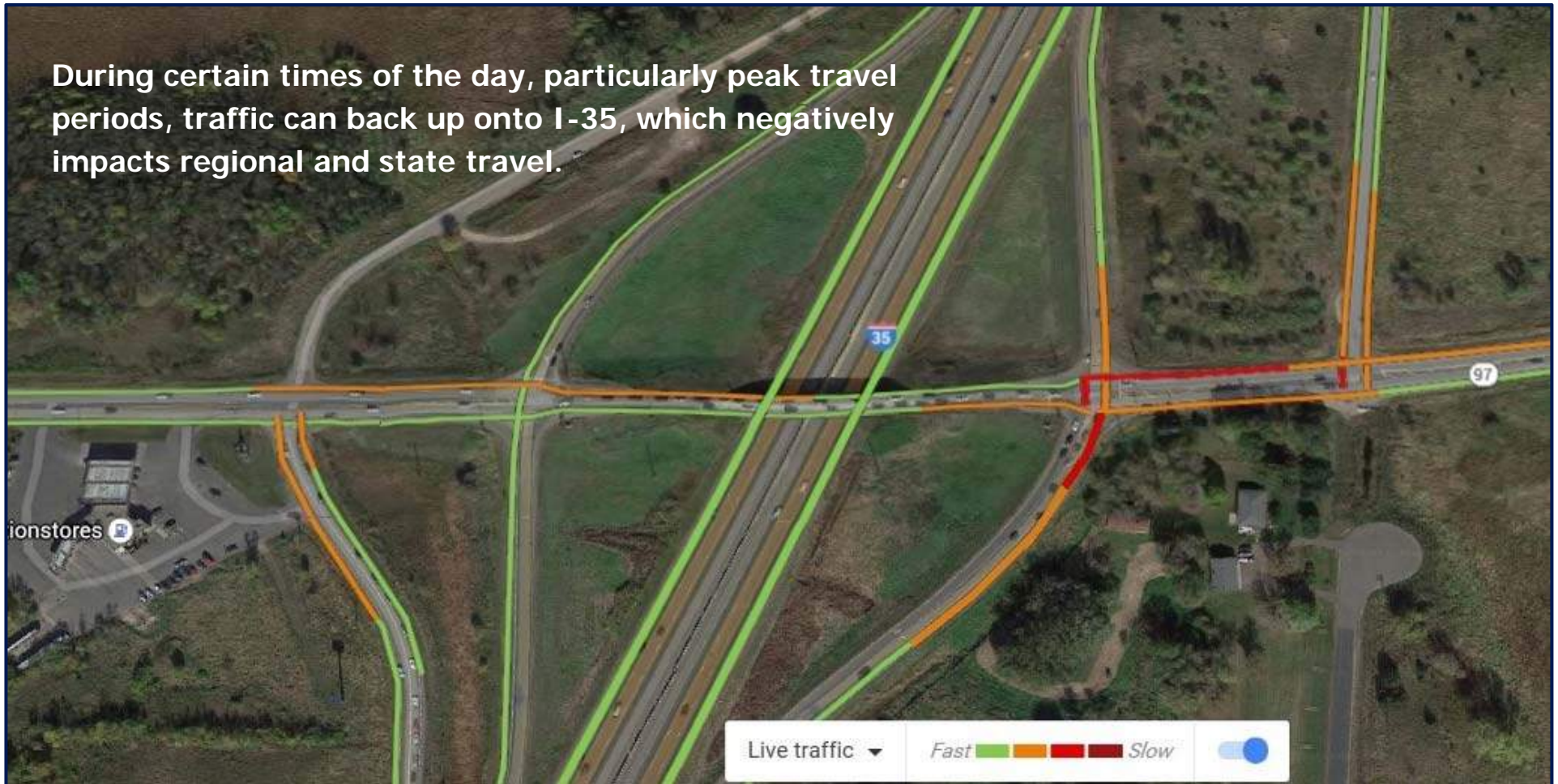
Existing Conditions and Issues Figure-Attachment 2 (continued)



Congestion (Interchange)

Even while there are numerous concerns over congestion and mobility, it is projected that conditions for the interchange will become increasingly worse in the near future. For example, traffic on I-35 is projected to increase by up to 25,000 and could nearly double on both Highways 23 and 97.

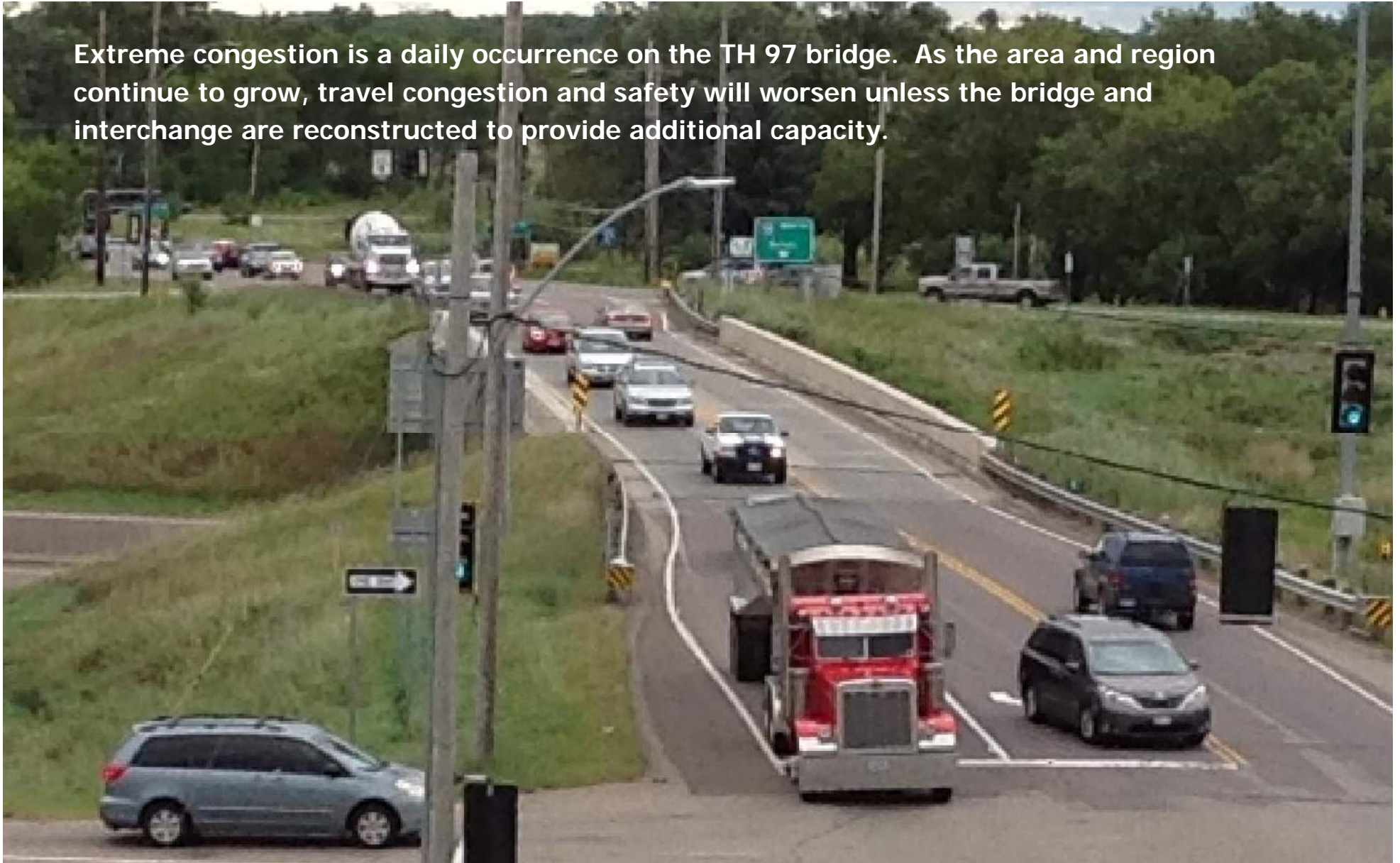
During certain times of the day, particularly peak travel periods, traffic can back up onto I-35, which negatively impacts regional and state travel.



Existing Conditions and Issues Figure-Attachment 2 (continued)

Congestion (Interchange)

Extreme congestion is a daily occurrence on the TH 97 bridge. As the area and region continue to grow, travel congestion and safety will worsen unless the bridge and interchange are reconstructed to provide additional capacity.



Existing Conditions and Issues Figure-Attachment 2 (*continued*)