



Application

04776 - 2016 Bridges

04868 - CSAH 15 (Shoreline Drive) over Tanager Channel Bridge (No. 27592) Replacement

Regional Solicitation - Roadways Including Multimodal Elements

Status: Submitted

Submitted Date: 07/14/2016 11:14 AM

Primary Contact

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

Organization Information

Name: HENNEPIN COUNTY

Jurisdictional Agency (if different):

Organization Type:

County Government

Organization Website:

Address:

DPT OF PUBLIC WORKS
1600 PRAIRIE DR

*

MEDINA

Minnesota

55340

City

State/Province

Postal Code/Zip

County:

Hennepin

Phone:*

763-745-7600

Ext.

Fax:

PeopleSoft Vendor Number

0000028004A9

Project Information

Project Name

CSAH 15 (Shoreline Drive) over Tanager Channel Bridge (No. 27592) Replacement

Primary County where the Project is Located

Hennepin

Jurisdictional Agency (If Different than the Applicant):

The project includes the replacement of the CSAH 15 (Shoreline Drive) bridge over Browns Bay and Tanager Channel. This bridge is located on an A-Minor Arterial roadway that currently carries 16,500 vehicles per day in the City of Orono.

CSAH 15 is a significant regional corridor, providing travel through the Lake Minnetonka area. The regional detour length is 11 miles, so this is a critical connection for this area.

The current CSAH 15 bridge design has pre-stressed quad-T beams that are in poor condition. The pile bents have exposed piling (as designed) which are deteriorating at the water level and above. Pre-tensioning strands at the bottom of the beams are exposed at many locations. These are exhibiting section loss resulting in a reduced inventory rating. The CSAH 15 bridge is classified as structurally deficient with a sufficiency rating of 41.5.

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

The project includes a full replacement of this bridge. The current width of this bridge is 36 feet, providing two 12-foot driving lanes and two 6-foot shoulders. The new bridge design will increase the current width to provide a 40-foot typical section, with two 12-foot driving lanes and two 8-foot shoulders.

With the construction of a new bridge, there are additional improvements that can be incorporated in the design. The current bridge alignment has limited sight lines for motorists. The new bridge would be realigned to the west of the existing bridge to improve these sight lines. This will also provide a better driveway transition for a residential property located just to the southeast of the bridge.

Construction of a new bridge will also allow the height of the bridge to be lifted, which will accommodate larger boats to pass under the facility. Lastly, by keeping the current bridge functional during construction of the new bridge, this will allow for staged construction, to allow the bridge to remain open to traffic. This is important due to the significant nature of this corridor, the connection for motorists and the high traffic volumes that use the facility on a daily basis. The detour for this bridge would be 11 miles, which is significant for motorists, especially emergency and truck traffic.

The reconstruction of this bridge will include an accelerated bridge construction, to keep the roadway open to traffic in both directions. The bridge would be designed for a 75-year or greater service life.

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)

CSAH 15 (Shoreline Drive) over Tanager Channel Bridge (No. 27592) Replacement

Project Length (Miles)

0.15

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

\$2,000,000.00

Match Amount

\$500,000.00

Minimum of 20% of project total

Project Total

\$2,500,000.00

Match Percentage

20.0%

Minimum of 20%

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

Source of Match Funds

Hennepin County and State

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-Roadways

County, City, or Lead Agency	Hennepin County
Functional Class of Road	Minor Arterial (Expander)
Road System	CSAH
<i>TH, CSAH, MSAS, CO. RD., TWP. RD., CITY STREET</i>	
Road/Route No.	15
<i>i.e., 53 for CSAH 53</i>	
Name of Road	Shoreline Drive
<i>Example; 1st ST., MAIN AVE</i>	
Zip Code where Majority of Work is Being Performed	55391
(Approximate) Begin Construction Date	04/01/2020
(Approximate) End Construction Date	10/30/2020
TERMINI:(Termini listed must be within 0.3 miles of any work)	
From: (Intersection or Address)	Green Trees Road
To: (Intersection or Address)	Approximately 300 feet north of the bridge
<i>DO NOT INCLUDE LEGAL DESCRIPTION</i>	
Or At	
Primary Types of Work	Bridge Replacement
<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.:	27592
New Bridge/Culvert No.:	
Structure is Over/Under (Bridge or culvert name):	

Specific Roadway Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES

Cost

Mobilization (approx. 5% of total cost)	\$0.00
Removals (approx. 5% of total cost)	\$0.00
Roadway (grading, borrow, etc.)	\$0.00
Roadway (aggregates and paving)	\$0.00
Subgrade Correction (muck)	\$0.00
Storm Sewer	\$0.00
Ponds	\$0.00
Concrete Items (curb & gutter, sidewalks, median barriers)	\$0.00
Traffic Control	\$0.00
Striping	\$0.00
Signing	\$0.00
Lighting	\$0.00
Turf - Erosion & Landscaping	\$0.00
Bridge	\$2,500,000.00
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	\$0.00
Other Roadway Elements	\$0.00
Totals	\$2,500,000.00

Specific Bicycle and Pedestrian Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES

Cost

Path/Trail Construction	\$0.00
Sidewalk Construction	\$0.00
On-Street Bicycle Facility Construction	\$0.00
Right-of-Way	\$0.00
Pedestrian Curb Ramps (ADA)	\$0.00
Crossing Aids (e.g., Audible Pedestrian Signals, 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
Subtotal	\$0.00
Other Costs - Administration, Overhead, etc.	\$0.00

Totals

Total Cost	\$2,500,000.00
Construction Cost Total	\$2,500,000.00
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.

A) Transportation System Stewardship: Hennepin County's annual bridge inspection program ensures planned preservation and maintenance of our facilities. The project will replace a structurally deficient bridge that carries 16,500 vehicles per day. The new bridge construction will be staged and/or accelerated immediately west of the current bridge to minimize impacts to roadway users.

B) Safety/Security: The bridge replacement will solve the structural safety issues for this deficient bridge. The new bridge will be realigned to improve current sight lines, and may provide a safety benefit for the pedestrian crossings at North Shore Marina to the north. The alignment will also provide an opportunity for a safer driveway transition for the property immediately south of the bridge. If the bridge is load-posted, a significant detour will result, which will affect freight and emergency vehicles. The new bridge will increase the shoulder widths, creating a safer environment for bikes and pedestrians.

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

C) Access to Destinations: CSAH 15 is a regionally significant corridor that provides a direct connection from western Hennepin/Wright County to Highway 12 through the Lake Minnetonka area. The new bridge could be designed with an increased height to accommodate larger boats. The Dakota Rail Trail, ½-mile from the project, connects the regional trail system and nearby recreational destinations. Within ¼-mile of both sides of the bridge, Metro Transit bus routes 675 and 677 provide service between Mound, Ridgedale, and Minneapolis.

D) Competitive Economy: The CSAH 15 bridge provides a critical connection for residents to access employment, shopping and recreation in the region. If this bridge is load posted, the resulting 11-mile detour would have a major impact on

freight carrying time-sensitive goods.

E) Healthy Environment: CSAH 15 currently serves two transit routes. If bridge conditions worsen, causing closure of the bridge, these routes would face significant delays, likely resulting in reduced ridership. In addition, this project will provide some benefit to people who choose to bike this route, including bikeable shoulders on the bridge and a smoother riding surface.

F) Leveraging Transportation Investments to Guide Land Use: Due to land constraints, development will be largely limited to subdivision and redevelopment. There is an imminent need to preserve and enhance the existing infrastructure to support transportation and land use in the area.

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.

Top 20 Hennepin County Bridge Priority Ranking

MnDOT Bridge Inspection Report (pages attached)

List the applicable documents and pages:

MnDOT Structure Inventory Report (pages attached)

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

Measure A: Functional Classification

Area	0.159
Project Length	0.15
Average Distance	1.06
Upload Map	1466192021968_CSAH 015 (Shoreline Drive) Bridge - Roadway Area Def.pdf

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

Existing Employment within 1 Mile:	1016
Existing Manufacturing/Distribution-Related Employment within 1 Mile:	24
Existing Students:	0
Upload Map	1466192243859_CSAH 015 (Shoreline Drive) Bridge - Regional Economy.pdf

Measure C: Current Daily Heavy Commercial Traffic

Location	CSAH 15 (Shoreline Drive) North of Tanager Bridge
Current Daily Heavy Commercial Traffic Volume	2172.0
Date Heavy Commercial Count Taken:	05/18/2016

Measure D: Freight Elements

The CSAH 15 bridge over the Tanager Channel is a regionally significant freight route for Lake Minnetonka communities, carrying 2,172 heavy commercial vehicles per day. Traffic trends show a continued increase in freight and delivery trucks along this corridor and others in the region.

This bridge is classified as structurally deficient with a 41.5 sufficiency rating. There are currently no weight restrictions, however, further deterioration may result in significant detours of heavy vehicles. The bridge replacement would preserve this route to serve heavy vehicles. Without this crossing, there would be an 11-mile detour to the nearest crossing. With limited access routes around Lake Minnetonka and the even more scarce crossings without weight restrictions, this is a vital arterial route.

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

As the needs for freight continue to increase, this project will improve the mobility, safety and operations for truck traffic. The bridge replacement will support the economic development in the area by providing efficient access to key destinations in the area. The bridge design will widen each shoulder from 6 to 8 feet. An accelerated bridge construction method will be used to keep the roadway open to traffic. The project also straightens the roadway to improve sight lines, further benefitting larger commercial vehicles. The bridge would be designed for a 75-year or greater service life.

Measure A: Current Daily Person Throughput

Location	CSAH 15 (Shoreline Drive), north of Tanager Bridge
Current AADT Volume	16500.0
Existing Transit Routes on the Project:	675, 677

Response: Current Daily Person Throughput

Average Annual Daily Transit Ridership	0
Current Daily Person Throughput	21450.0

Measure B: 2040 Forecast ADT

Use Metropolitan Council model to determine forecast (2040) ADT volume	Yes
METC Staff - Forecast (2040) ADT volume	0
OR	
Approved county or city travel demand model to determine forecast (2040) ADT volume	No
Forecast (2040) ADT volume	20900.0

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

This project is located in the City of Orono, which is identified as a census tract that is below the regional average for population in poverty or populations of color. This project is in an area that includes children, people with disabilities and the elderly; although not in concentrations recognized by the Metropolitan Council.

The CSAH 15 bridge connects residents (inclusive of all races, ethnicity, incomes, and abilities) to jobs and educational opportunities. The replacement of this bridge will maintain a vital east-west link through the communities around Lake Minnetonka. CSAH 15 is a heavily used corridor that currently provides two 6-foot shoulders. The project will provide a benefit to all residents, including children and elderly that currently live in the area by increasing the space to walk or bike along this facility. The new bridge will provide two 8-foot shoulders to better accommodate pedestrian, bicycle and wheelchair use. This will allow all transportation modes with the freedom to use this facility for commuting, recreational or social purposes.

The CSAH 15 bridge replacement project will provide a safer bridge design and additional space on the bridge for all residents, including children and elderly, to walk or bike along this facility. The project will not negatively impact low-income populations, populations of color, or the elderly. All facilities will be upgraded to current ADA standards to improve access for people with disabilities.

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

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

Upload Map

1466192662031_CSAH 015 (Shoreline Drive) Bridge - SocioEconomic.pdf

Measure B: Affordable Housing

City/Township	Segment Length in Miles (Population)
Orono	3003.0
Wayzata	463.0
	3466

Total Project Length

Total Project Length (Total Population) 0.15

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) 3466.0
 Total Housing Score 0

Measure A: Bridge Condition

Bridge Sufficiency Rating 41.5

Measure B: Project Improvements

Load Posted (Check box if the bridge is load-posted):

Measure A: Multimodal Elements and Existing Connections

The CSAH 15 Bridge Reconstruction project will include the following multimodal elements:

- Bikeable shoulders
- Improved site distance for pedestrian crossings at North Shore Marina pedestrian crossings

The CSAH 15 Bridge currently serves Metro Transit routes 675 and 677 with express service between Mound, Ridgedale, and Downtown Minneapolis. CSAH 15 is not identified as a planned bikeway in the county bike plan or Orono's Trail System Plan. Orono's Comprehensive Plan states that CSAH 15 is purposefully not included as a proposed trail corridor due to severe limitations for development of parallel or adjacent trail facilities. The Dakota Rail Trail, located on the opposite side of Tanager Lake approximate one half mile from the project area, provides an alternative bike route and connects users to the greater regional trail system and to nearby commercial and recreational destinations. This project will nonetheless provide some benefits to people who choose to bike this route, including bikeable shoulders on the bridge and a smoother riding surface.

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

In addition, this project proposes a slight realignment of the bridge, which will yield improved site distances for pedestrians and drivers at the North Shore / Brown's Bay Marina pedestrian crosswalk. The crossing was recently studied by the county due to high pedestrian crossing volumes. Findings resulted in crossing upgrades, including installation of Rapid Rectangular Flashing Beacons (RRFBs) to improve driver yielding behavior and enhance pedestrian comfort and safety. Realignment will provide further safety benefits to pedestrians crossing at that location,

which provides access to an express transit bus stop and popular recreation destinations.

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

100%

Layout or Preliminary Plan started

50%

Layout or Preliminary Plan has not been started Yes

0%

Anticipated date or date of completion 06/28/2019

3)Environmental Documentation (5 Percent of Points)

EIS

EA

PM Yes

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

08/30/2019

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

25%

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

Yes

0%

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

0%

Anticipated date or date of acquisition

04/15/2019

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 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 12/31/2019

10)Letting

Anticipated Letting Date 04/15/2020

Measure A: Cost Effectiveness

Total Project Cost (entered in Project Cost Form): \$2,500,000.00

Enter Amount of the Noise Walls: \$0.00

Total Project Cost subtract the amount of the noise walls: \$2,500,000.00

Points Awarded in Previous Criteria

Cost Effectiveness \$0.00

Other Attachments

File Name	Description	File Size
Fig 01 - Project Map_CSAH 15 Bridge.pdf	Project Map_CSAH 15 Bridge	373 KB
Fig 02- MnDOT Bridge Inspection and Inventory Reports - CSAH 15 Bridge.pdf	MnDOT Bridge Inspection and Inventory Reports - CSAH 15 Bridge	97 KB
Fig 03 - Photos of CSAH 15 Deficiencies.pdf	Photos of CSAH 15 Deficiencies	766 KB
Fig 04 - Proposed Typical Section - CSAH 015.pdf	Proposed Typical Section - CSAH 15	155 KB
Fig 05 - CSAH 15 Bridge 2016 Heavy Commercial Volumes.pdf	CSAH 15 Bridge 2016 Heavy Commercial Volumes	48 KB
Fig 06 - AADT Vols CSAH 15 Bridge - MnDOT 50 Series Map - 5E.pdf	AA DT Vols CSAH 15 Bridge - MnDOT 50 Series Map - 5E	1.6 MB
Fig 07 - Orono - Public Transit Routes.pdf	Orono - Public Transit Routes	515 KB
Fig 08 - CSAH 15 Bridge 2040 Forecasts from Mark Filipi.pdf	CSAH 15 Bridge 2040 Forecasts from Mark Filipi	96 KB
Fig 09 - Orono - Comprehensive Trail System Map.pdf	Orono - Comprehensive Trail System Map	750 KB
Fig 10 - Orono CSAH 15 Bridge Support Letter.pdf	Orono CSAH 15 Bridge Support Letter	31 KB

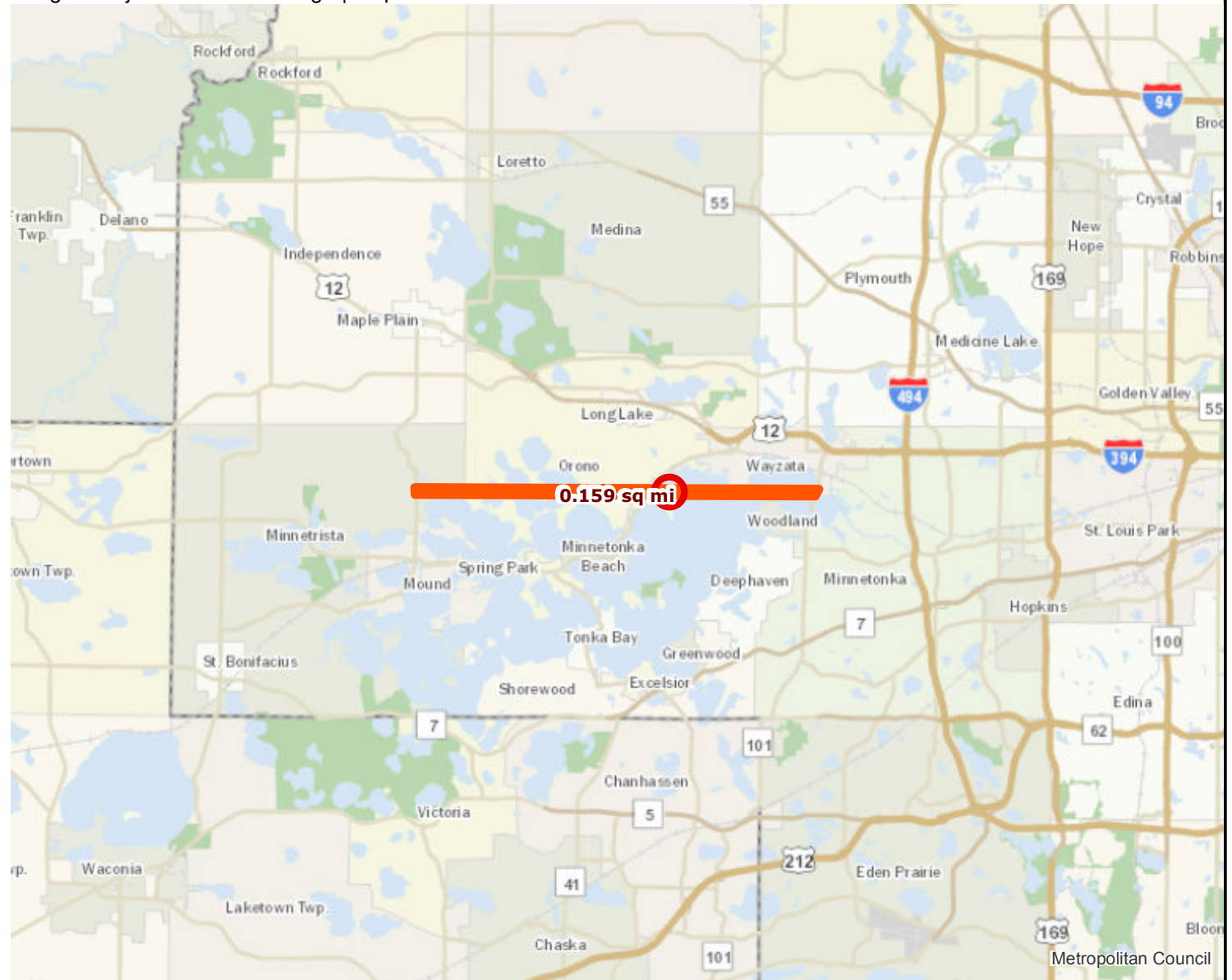
Roadway Area Definition

Bridges Project: CSAH 15 Bridge | Map ID: 1465846575898

Results

Project Length: 0.15 miles

Project Area: 0.159 sq mi



 Project Points  Project Area

 Project



Created: 6/13/2016
LandscapeRSA1



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



Regional Economy

Bridges Project: CSAH 15 Bridge | Map ID: 1465846575898

Results

WITHIN ONE MI of project:

Totals by City:

Orono

Population: 3003
Employment: 852
Mfg and Dist Employment: 16

Wayzata

Population: 463
Employment: 164
Mfg and Dist Employment: 8

Postsecondary Students:

0



 Project Points  Project Area

 Project



Created: 6/13/2016
LandscapeRSA5



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





Results

Transit with a Direct Connection to project:
675 677

**indicates Planned Alignments*

○ Project Points
 Project Area
 Planned Alignments
— Light Rail, Blue Line Extension
— Light Rail, Green Line Extension
— Arterial BRT
— Project



Created: 6/13/2016
LandscapeRSA3



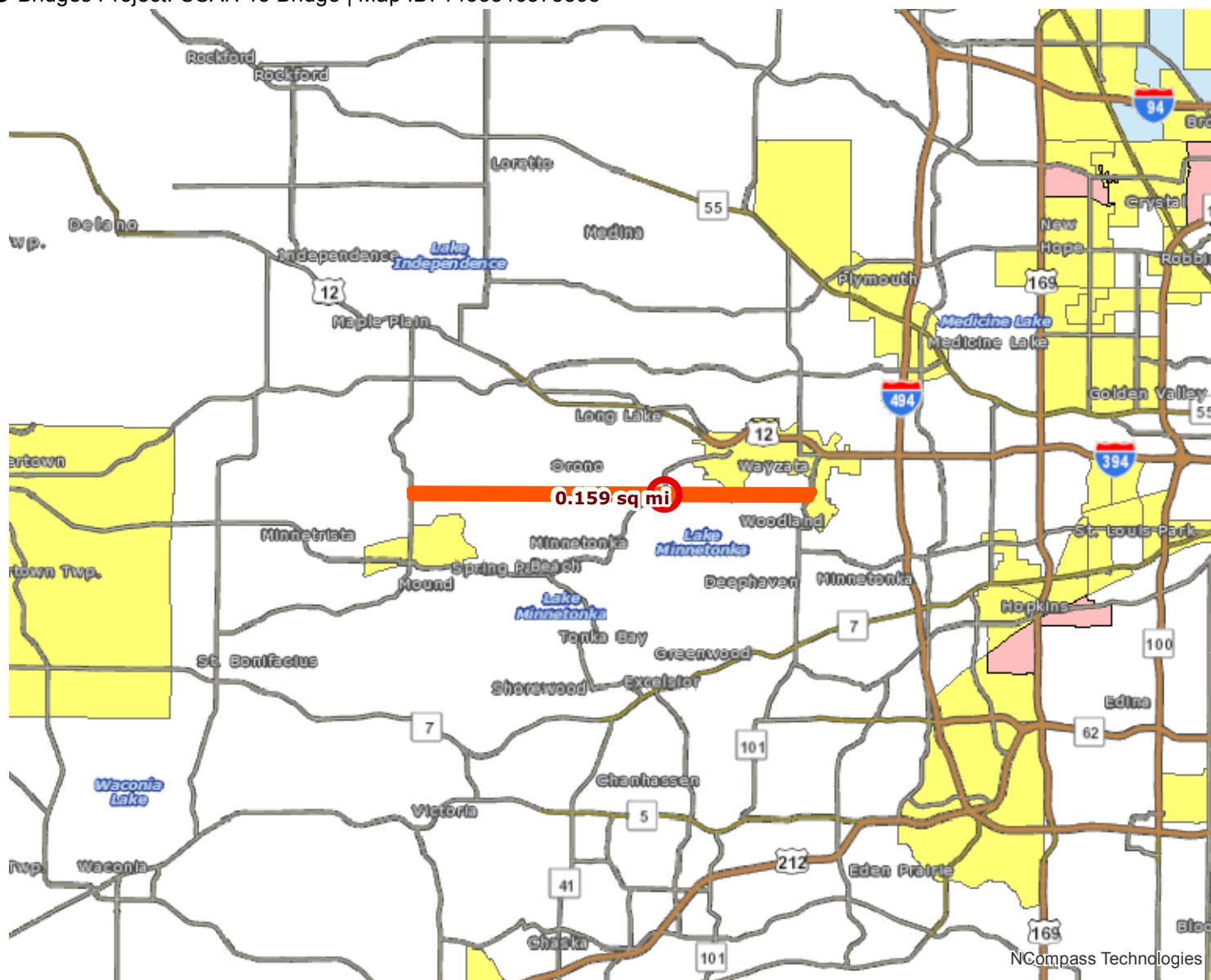
For complete disclaimer of accuracy, please visit
<http://giswebsite.metc.state.mn.us/gissitenew/notice.aspx>



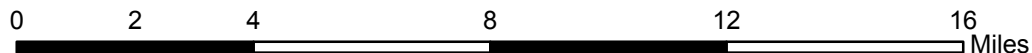
NCompass Technologies

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: 6/13/2016
LandscapeRSA2



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



CSAH 15 (Shoreline Dr) - Bridge Rehabilitation Project

Figure 01 - Project Location Map



Transportation
Planning
www.hennepin.us
07/11/2016



Project Location



MINNESOTA STRUCTURE INVENTORY REPORT

Bridge ID: 27592

CSAH 15 over BROWNS BAY-TANAGER LK CH

Date: 06/10/2016

+ GENERAL +	+ ROADWAY +	+ INSPECTION +
Agency Br. No.	Bridge Match ID (TIS) 1	Deficient Status S.D.
District METRO Maint. Area	Roadway O/U Key 1-ON	Sufficiency Rating 41.5
County 27 - HENNEPIN	Route Sys/Nbr CSAH 15	Last Inspection Date 07-28-2015
City ORONO	Roadway Name or Description	Inspection Frequency 12
Township	CSAH 15	Inspector Name HENNEPIN COUNTY
Desc. Loc. 0.9 MI NE OF JCT CSAH 51	Roadway Function MAINLINE	Status A-OPEN
Sect., Twp., Range 11 - 117N - 23W	Roadway Type 2 WAY TRAF	+ NBI CONDITION RATINGS +
Latitude 44d 57m 31.93s	Control Section (TH Only)	Deck 5 % UNSOUND 4
Longitude 93d 33m 32.42s	Ref. Point	Superstructure 4
Custodian COUNTY	Date Opened to Traffic 09-01-1979	Substructure 5
Owner COUNTY	Detour Length 11 mi.	Channel 7
Inspection By HENNEPIN COUNTY	Lanes 2 Lanes ON Bridge	Culvert N
Year Built 1979	ADT (YEAR) 19,474 (2008)	+ NBI APPRAISAL RATINGS +
MN Year Remodeled	HCA DT	Structure Evaluation 4
FHWA Year Reconstructed	Functional Class. URB/MINOR ART	Deck Geometry 4
Bridge Plan Location COUNTY	+ RDWY DIMENSIONS +	Underclearances N
Potential ABC N.A.	If Divided NB-EB SB-WB	Waterway Adequacy 8
	Roadway Width 36.0 ft	Approach Alignment 8
	Vertical Clearance	+ SAFETY FEATURES +
Service On HIGHWAY	Max. Vert. Clear.	Bridge Railing 1-MEETS STANDARDS
Service Under STREAM	Horizontal Clear. 36.0 ft	GR Transition 1-MEETS STANDARDS
Main Span Type PRESTR QUAD TEE	Lateral Clr. - Lt/Rt	Appr. Guardrail 1-MEETS STANDARDS
Main Span Detail	Appr. Surface Width 36.0 ft	GR Termini 0-SUBSTANDARD
Appr. Span Type	Bridge Roadway Width 36.0 ft	+ IN DEPTH INSP. +
Appr. Span Detail	Median Width on Bridge	Frac. Critical N
Skew 5R	+ MISC. BRIDGE DATA +	Underwater N
Culvert Type	Structure Flared NO	Pinned Asbly. N
Barrel Length	Parallel Structure NONE	Spec. Feat.
Number of Spans	Field Conn. ID	+ WATERWAY +
MAIN: 3 APPR: 0 TOTAL: 3	Cantilever ID	Drainage Area
Main Span Length 40.0 ft	Foundations	Waterway Opening 300 sq ft
Structure Length 92.8 ft	Abut. CONC - PILE BENT	Navigation Control NO PRMT REQD
Deck Width 39.6 ft	Pier CONC - PILE BENT	Pier Protection
Deck Material C-I-P CONCRETE	Historic Status NOT ELIGIBLE	Nav. Vert./Horz. Clr.
Wear Surf Type LOW SLUMP CONC	On - Off System ON	Nav. Vert. Lift Bridge Clear.
Wear Surf Install Year 1979	+ PAINT +	MN Scour Code I-LOW RISK
Wear Course/Fill Depth 0.17 ft	Year Painted Pct. Unsound	Scour Evaluation Year 1991
Deck Membrane NONE	Painted Area	+ CAPACITY RATINGS +
Deck Rebars NONE	Primer Type	Design Load HS 20
Deck Rebars Install Year	Finish Type	Operating Rating HS 28.80
Structure Area 3,675 sq ft	+ BRIDGE SIGNS +	Inventory Rating HS 13.20
Roadway Area 3,337 sq ft	Posted Load NOT REQUIRED	Posting
Sidewalk Width - L/R 0.8 ft 0.8 ft	Traffic NOT REQUIRED	Rating Date 10-29-2013
Curb Height - L/R	Horizontal OBJECT MARKERS	Overweight Permit Codes
Rail Codes - L/R 22 22	Vertical NOT APPLICABLE	A: N B: N C: N

06/10/2016

MINNESOTA BRIDGE INSPECTION REPORT

Inspected by: HENNEPIN COUNTY

BRIDGE 27592 CSAH 15 OVER BROWNS BAY-TANAGER LK CH

INSP. DATE: 07-28-2015

County: HENNEPIN Location: 0.9 MI NE OF JCT CSAH 51 Length: 92.8 ft
 City: ORONO Route: CSAH 15 Ref. Pt.: 011+00.710 Deck Width: 39.6 ft
 Township: Control Section: Maint. Area: Rdwy. Area / Pct. Unsnd: 3,337 sq ft 5 %
 Section: 11 Township: 117N Range: 23W Local Agency Bridge Nbr: Paint Area / Pct. Unsnd:
 Span Type: PRESTR QUAD TEE Culvert : N/A
 NBI Deck: 4 Super: 4 Sub: 5 Chan: 7 Culv: N
 Open, Posted, Closed: OPEN
 Appraisal Ratings - Approach: 8 Waterway: 8 MN Scour Code: I-LOW RISK Def. Stat: S.D. Suff. Rate: 41.5
 Required Bridge Signs - Load Posting: NOT REQUIRED Traffic: NOT REQUIRED
 Horizontal: OBJECT MARKERS Vertical: NOT APPLICABLE

ELEM NBR	ELEMENT NAME	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
800	CRITICAL DEFS OR SAFETY HAZARDS	07-28-2015	1 EA	1	0	0	0
Notes: No critical structural deficiencies or serious safety hazards are present on this structure.							
15	PRESTRESSED CONCRETE TOP FLANGE	07-28-2015	3,675 SF	3,675	0	0	0
Notes: [2016] Migrator assumed CS1.							
510	WEARING SURFACE	07-28-2015	3,337 SF	3,003	0	334	0
Notes: Low Slump Overlay with Uncoated Rebar Notes: 22. Trans and long cracks in concrete surface, some sealed, most seals deteriorated. Long cracks w/ some large spalls @ top surface @ each quad-T joint-most filled w/ bit sealer, but sealer failing in many areas. '13-large(2' x 1') spall in SBL @ S end. '14-spall in SBL @ S end has been patched w/ bit. Sealer failing in many areas. '15-New sealer in place, some spalled/patched areas are large in size, patch in SBL at S end is failing and the remaining conc pieces are settling							
810	CONC WEAR SURF-CRACKING SEALING	07-28-2015	0 LF	0	0	0	0
Notes: 358. Long cracks @ T joints. Some transverse cracks. '11-cracks up to 1" wide and less than 5' in density. '13-unsealed cracks of mod size, density <5'. '14-no change. '15-Cracks sealed							
301	POURED SEAL JOINT	07-28-2015	80 LF	61	19	0	0
Notes: 301. Spalls @ intersection of joint and quad-T joint. Joint material missing @ quad-T joints. '13-qty changed. Joints are over piers. Some material only partially adhered @ both. '14-few areas of minor deterioration @ both joints. 15'-S joint is severely spalled near centerline							
331	REINFORCED CONC BRIDGE RAILING	07-28-2015	187 LF	0	187	0	0
Notes: 331. Numerous vert cracks w/ efflor. Face of west railbase pitted. Form-tie popouts on outside of both railbases. Slight misalignment @ SW corner. Large spall in top of SW railing. Cork in joint is deteriorated. '13-W railing has areas of scale. '14-no change. '15-Misalignment @ SW corner is 3/4".							
822	BITUMINOUS APPROACH ROADWAY	07-28-2015	2 EA	0	0	2	0
Notes: 320. Low spot in gutter @ SE driveway. Settled and spalled @ both ends. Badly spalled in NE. '13- 8" spall in SW. Diag crack in SW. '14-spall in SW is patched. N is slightly settled & patched @ deck joint. S has a 1' x 6" spall in NBL near CL. '15-Majority of N joint is spalled in NBL							
225	STEEL OR CIP PILING	07-28-2015	12 EA	0	5	7	0
Notes: 382. Pilings are rusted. Paint has peeled, minor section loss on few piles. '13-section loss on some piles. '14-section loss on 1, 3, 4 & 5 from W @ N pier; 1, 2 & 3 from W @ S. '15-no change							
515	STEEL PROTECTIVE COATING	07-28-2015	999 SF	999	0	0	0
Notes: [2016] Migrator assumed CS1 and a quantity of 999 SF.							
215	REINFORCED CONCRETE ABUTMENT	07-28-2015	119 LF	84	35	0	0

Notes: [2016] Migrator added 40 LF to abutment quantity to account for wingwalls (CS1:20 CS2:20 CS3:0 CS4:0).
215. Vertical cracks w/ efflor, rust stains @ both abuts. Leakage @ both abuts. North-3 SF delam. South-spall on back in SW corner. '13-no change. '14-same. '15-same

Wingwall notes: 387. Vert cracks in wingwalls. NW wall spalled @ wall/abut joint. Form-tie hole popouts on walls. Spall @ SW corner. '13-no change. '14-same. '15-no change

234	REINFORCED CONCRETE PIER CAP	07-28-2015	82 LF	64	18	0	0
Notes: 234. South-2 vert cracks. Water leakage and rust stain on the bent cap. '13-now 4 vert cracks. North-diagonal and vert cracks w/ efflor @ W end. Vert crack on S side over 3rd pile from W. '13-4 vert cracks on S side. '14-S has 5 minor - mod full height cracks w/ efflor. Minor cracks on S side of N are full height w/ efflor. '15-Heavy effl on N face on N cap @ W end @ the diag crack							
109	PRESTRESSED CONC GIRDER OR BEAM	07-28-2015	2,970 LF	1,293	1,253	343	81
Notes: [2016] Migrator estimated the quantity of the quad tees. Verify the quantity by multiplying the number of vertical beams by the deck length. 374. Many quad-T legs cracked, some w/ efflor @ N and S pier cap. 1 quad-T leg cracked @ N abut. 5 legs cracked @ S abut. Some long cracks w/ rust in quad-T legs in center span. 2 west T's have adjoining webs long cracked on each quad for full length in center span. West fascia stringer is chipped in several areas @ bottom of stem in center span. Concrete is cracked w/ efflor over piers on both sides. Crumbled and punky concrete w/ spalled areas @ a few center span bearings-monitor. Stringer has been scraped above channel. Spall @ each end of SW fascia T @ bearing. Joints mostly stained and many spalled. Cracks, spalls and delams on legs of some T's, especially on W side. Full length, 6"-12" deep spall @ joint of E leg of 4th T from W in S span. Strands broke @ leg of west T. All exp reinforcing strands rusty w/ section loss. '13-no change. '14-4th & 5th tees from W have exposed rebar for +10' w/ section loss. 5th tee from W has 1/5 LF spall w/ rebar exp in leg @ S abut; 2nd tee from W leg has 1 LF spall w/ rebar exp @ P1. '15-heavy effl @ many jts. All jts in span 1 have spalls, 2nd jt from east in main span has a large spall, 1st tee from the west in the S span is cracked in the leg for entire length, S span centerline jt is spalled for entire length							
310	ELASTOMERIC EXPANSION BEARING	07-28-2015	2 EA	2	0	0	0
Notes: 310. Continuous, full length bearing pads @ each abut. '13-no change. '14-same. '15-same.							
313	FIXED BEARING	07-28-2015	4 EA	4	0	0	0
Notes: 313. 2 continuous, full length bearing pads @ each pier. '14-no change. '15-no change.							
855	SECONDARY MEMBERS (SUPER)	07-28-2015	1 EA	0	1	0	0
Notes: 380. Concrete end diaphragms are spalled @ both abuts. '13-no change. '14-no change. '15-no change							
883	CONCRETE SHEAR CRACKING	07-28-2015	1 EA	1	0	0	0
Notes: Use this element to monitor the presence of shear cracking on concrete elements. Pay particular attention to the concrete pier caps.							
891	OTHER BRIDGE SIGNING	07-28-2015	1 EA	1	0	0	0
Notes: 981. Horiz clearance marker X4-4 @ approach lanes only. No Parking sign @ NW, NE & SW corners. 35 MPH sign @ NE corner. Lake information signs on both fascias. X4-5 @ end of guardrail in NE. No Fishing Or Standing On Bridge in NW & SE. '15-no change							
892	SLOPES & SLOPE PROTECTION	07-28-2015	1 EA	0	0	0	1
Notes: 985. Grouted riprap is cracked @ both abuts. Slope paving pulled away from N and S abuts, 3"-4" horiz and up to 7" vert. Large crack w/ up to 10" shift (@ S slope) near toe of both slopes. Undermined and sand @ toe. Erosion behind NE wingwall. Grouted rip rap @ N slope has slumped 3" horiz and 1" vert away from abut. Erosion behind NE wingwall. '13-N slope has slumped 2"-3" away from abut. '14-SW corner broken off & undermined. N has sunk 1' near top under CL. '15-large cracks @ undermining @ N abut slope							
893	GUARDRAIL	07-28-2015	1 EA	1	0	0	0
Notes: 982. Rail @ SE corner turns for driveway. Rail turned down @ all other corners. Loose bolt in SW. '13-no change. '14-rail turned down @ N ends. SW is continuous from intersection w/ crashworthy end treatment. '15-Small tree has fallen on SW Rail, no damage visible							
894	DECK & APPROACH DRAINAGE	07-28-2015	1 EA	1	0	0	0
Notes: 984. CB in SW approach. '14-water standing in NW corner of deck. '15-no change							

899	MISCELLANEOUS ITEMS	07-28-2015	1 EA	1	0	0	0
Notes: 988. Four 3.5" dia pipes located in 2nd bay from West. 4 hanger assemblies removed @ N span. Conc ret wall on W side of both abuts. Spalls in ret wall joint by NW abut. Drain outlet is located by SW wall. Several vert cracks w/ efflor in both ret wall railings. Underground telephone cable buried @ W side. B624 curb in NE. '15-no change							

900	PROTECTED SPECIES	07-28-2015	1 EA	1	0	0	0
Notes: Use this element to track the presence of protected species living on this structure.							

General Bridge 27592 CSAH 15/Browns Bay-Tanager Lake 7/28/15. PTH and JDE. Inspected using Tony B's boat.

Notes: '13-start to plan to replace deck, piers and piling.

Recommended Repairs:

- 22. Seal large deck cracks w/ bit. Seal other deck cracks w/ epoxy.
- 301. Repair poured deck joints.
- 320. Repair spalled approaches.
- 374. Monitor cracked and deteriorated concrete quad-T beams. Clean, lightly blast and coat exposed prestressing strands on 2 West T's.
- 382. Clean and paint piling.
- 985. Repair slumped slope paving.
- 988. Notify utility company of missing hanger assemblies in N span.

05/04/2016 Update report created and approved by LH, MnDOT Bridge Office. Report created to correct sync issue..

Substructure: [5] Cracking of pier caps. Corrosion, section loss of piles.

MINNESOTA BRIDGE INSPECTION REPORT OLD ELEMENT SYSTEM

06/10/2016

Inspected by: HENNEPIN COUNTY

BRIDGE 27592 CSAH 15 OVER BROWNS BAY-TANAGER LK CH

INSP. DATE: 07-28-2015

ELEM NBR	ELEMENT NAME	ENV	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4	QTY CS 5
22	LS O/L (CONC DECK)	4	07-28-2015 07-28-2014	3,670 SF 3,670 SF	0 0	0 0	3,670 3,670	0 0	0 0
Notes: 22. Trans and long cracks in concrete surface, some sealed, most seals deteriorated. Long cracks w/ some large spalls @ top surface @ each quad-T joint-most filled w/ bit sealer, but sealer failing in many areas. '13-large(2' x 1') spall in SBL @ S end. '14-spall in SBL @ S end has been patched w/ bit. Sealer failing in many areas. '15-New sealer in place, some spalled/patched areas are large in size, patch in SBL at S end is failing and the remaining conc pieces are settling									
301	POURED DECK JOINT	4	07-28-2015 07-28-2014	80 LF 80 LF	61 75	19 5	0 0	N/A N/A	N/A N/A
Notes: 301. Spalls @ intersection of joint and quad-T joint. Joint material missing @ quad-T joints. '13-qty changed. Joints are over piers. Some material only partially adhered @ both. '14-few areas of minor deterioration @ both joints. '15-S joint is severely spalled near centerline									
320	CONC APPR SLAB-BITOL	4	07-28-2015 07-28-2014	2 EA 2 EA	0 0	0 1	2 1	0 0	N/A N/A
Notes: 320. Low spot in gutter @ SE driveway. Settled and spalled @ both ends. Badly spalled in NE. '13- 8" spall in SW. Diag crack in SW. '14-spall in SW is patched. N is slightly settled & patched @ deck joint. S has a 1' x 6" spall in NBL near CL. '15-Majority of N joint is spalled in NBL									
331	CONCRETE RAILING	4	07-28-2015 07-28-2014	187 LF 187 LF	0 0	187 187	0 0	0 0	N/A N/A
Notes: 331. Numerous vert cracks w/ efflor. Face of west railbase pitted. Form-tie popouts on outside of both railbases. Slight misalignment @ SW corner. Large spall in top of SW railing. Cork in joint is deteriorated. '13-W railing has areas of scale. '14-no change. '15-Misalignment @ SW corner is 3/4".									
374	P/S CONCRETE TEE	2	07-28-2015 07-28-2014	735 LF 735 LF	320 350	310 280	85 85	20 20	N/A N/A
Notes: 374. Many quad-T legs cracked, some w/ efflor @ N and S pier cap. 1 quad-T leg cracked @ N abut. 5 legs cracked @ S abut. Some long cracks w/ rust in quad-T legs in center span. 2 west T's have adjoining webs long cracked on each quad for full length in center span. West fascia stringer is chipped in several areas @ bottom of stem in center span. Concrete is cracked w/ efflor over piers on both sides. Crumbled and punky concrete w/ spalled areas @ a few center span bearings-monitor. Stringer has been scraped above channel. Spall @ each end of SW fascia T @ bearing. Joints mostly stained and many spalled. Cracks, spalls and delams on legs of some T's, especially on W side. Full length, 6"-12" deep spall @ joint of E leg of 4th T from W in S span. Strands broke @ leg of west T. All exp reinforcing strands rusty w/ section loss. '13-no change. '14-4th & 5th tees from W have exposed rebar for +10' w/ section loss. 5th tee from W has 1/5 LF spall w/ rebar exp in leg @ S abut; 2nd tee from W leg has 1 LF spall w/ rebar exp @ P1. '15-heavy effl @ many jts. All jts in span 1 have spalls, 2nd jt from east in main span has a large spall, 1st tee from the west in the S span is cracked in the leg for entire length, S span centerline jt is spalled for entire length									
380	SECONDARY ELEMENTS	2	07-28-2015 07-28-2014	1 EA 1 EA	0 0	1 1	0 0	0 0	N/A N/A
Notes: 380. Concrete end diaphragms are spalled @ both abuts. '13-no change. '14-no change. '15-no change									
310	ELASTOMERIC BEARING	3	07-28-2015 07-28-2014	2 EA 2 EA	2 2	0 0	0 0	N/A N/A	N/A N/A
Notes: 310. Continuous, full length bearing pads @ each abut. '13-no change. '14-same. '15-same.									
313	FIXED BEARING	2	07-28-2015 07-28-2014	4 EA 4 EA	4 4	0 0	0 0	N/A N/A	N/A N/A
Notes: 313. 2 continuous, full length bearing pads @ each pier. '14-no change. '15-no change.									
215	CONCRETE ABUTMENT	4	07-28-2015 07-28-2014	79 LF 79 LF	64 64	15 15	0 0	0 0	N/A N/A
Notes: 215. Vertical cracks w/ efflor, rust stains @ both abuts. Leakage @ both abuts. North-3 SF delam. South-spall on back in SW corner. '13-no change. '14-same. '15-same									

MINNESOTA BRIDGE INSPECTION REPORT

OLD ELEMENT SYSTEM

06/10/2016

Inspected by: HENNEPIN COUNTY

BRIDGE 27592 CSAH 15 OVER BROWNS BAY-TANAGER LK CH

INSP. DATE: 07-28-2015

ELEM NBR	ELEMENT NAME	ENV	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4	QTY CS 5
234	CONCRETE CAP	4	07-28-2015 07-28-2014	82 LF 82 LF	64 64	18 18	0 0	0 0	N/A N/A
	Notes: 234. South-2 vert cracks. Water leakage and rust stain on the bent cap. '13-now 4 vert cracks. North-diagonal and vert cracks w/ efflor @ W end. Vert crack on S side over 3rd pile from W. '13-4 vert cracks on S side. '14-S has 5 minor - mod full height cracks w/ efflor. Minor cracks on S side of N are full height w/ efflor. '15-Heavy effl on N face on N cap @ W end @ the diag crack								
382	CAST-IN-PLACE PILING	4	07-28-2015 07-28-2014	12 EA 12 EA	0 0	5 5	7 7	0 0	N/A N/A
	Notes: 382. Pilings are rusted. Paint has peeled, minor section loss on few piles. '13-section loss on some piles. '14-section loss on 1, 3, 4 & 5 from W @ N pier; 1, 2 & 3 from W @ S. '15-no change								
387	CONCRETE WINGWALL	2	07-28-2015 07-28-2014	4 EA 4 EA	2 2	2 2	0 0	0 0	N/A N/A
	Notes: 387. Vert cracks in wingwalls. NW wall spalled @ wall/abut joint. Form-tie hole popouts on walls. Spall @ SW corner. '13-no change. '14-same. '15-no change								
358	CONC DECK CRACKING	2	07-28-2015 07-28-2014	1 EA 1 EA	0 0	0 0	0 0	1 1	N/A N/A
	Notes: 358. Long cracks @ T joints. Some transverse cracks. '11-cracks up to 1" wide and less than 5' in density. '13-unsealed cracks of mod size, density <5'. '14-no change. '15-Cracks sealed								
964	CRITICAL FINDING	2	07-28-2015 07-28-2014	1 EA 1 EA	1 1	0 0	N/A N/A	N/A N/A	N/A N/A
	Notes: 964.								
981	SIGNING	2	07-28-2015 07-28-2014	1 EA 1 EA	1 1	0 0	0 0	0 0	0 0
	Notes: 981. Horiz clearance marker X4-4 @ approach lanes only. No Parking sign @ NW, NE & SW corners. 35 MPH sign @ NE corner. Lake information signs on both fascias. X4-5 @ end of guardrail in NE. No Fishing Or Standing On Bridge in NW & SE. '15-no change								
982	GUARDRAIL	2	07-28-2015 07-28-2014	1 EA 1 EA	1 1	0 0	0 0	N/A N/A	N/A N/A
	Notes: 982. Rail @ SE corner turns for driveway. Rail turned down @ all other corners. Loose bolt in SW. '13-no change. '14-rail turned down @ N ends. SW is continuous from intersection w/ crashworthy end treatment. '15-Small tree has fallen on SW Rail, no damage visible								
984	DRAINAGE	2	07-28-2015 07-28-2014	1 EA 1 EA	1 1	0 0	0 0	N/A N/A	N/A N/A
	Notes: 984. CB in SW approach. '14-water standing in NW corner of deck. '15-no change								
985	SLOPES	2	07-28-2015 07-28-2014	1 EA 1 EA	0 0	0 0	1 1	N/A N/A	N/A N/A
	Notes: 985. Grouted riprap is cracked @ both abuts. Slope paving pulled away from N and S abuts, 3"-4" horiz and up to 7" vert. Large crack w/ up to 10" shift (@ S slope) near toe of both slopes. Undermined and sand @ toe. Erosion behind NE wingwall. Grouted rip rap @ N slope has slumped 3" horiz and 1" vert away from abut. Erosion behind NE wingwall. '13-N slope has slumped 2"-3" away from abut. '14-SW corner broken off & undermined. N has sunk 1' near top under CL. '15-large cracks @ undermining @ N abut slope								
988	MISCELLANEOUS	2	07-28-2015 07-28-2014	1 EA 1 EA	1 1	0 0	0 0	N/A N/A	N/A N/A
	Notes: 988. Four 3.5" dia pipes located in 2nd bay from West. 4 hanger assemblies removed @ N span. Conc ret wall on W side of both abuts. Spalls in ret wall joint by NW abut. Drain outlet is located by SW wall. Several vert cracks w/ efflor in both ret wall railings. Underground telephone cable buried @ W side. B624 curb in NE. '15-no change								

MINNESOTA BRIDGE INSPECTION REPORT OLD ELEMENT SYSTEM

06/10/2016

Inspected by: HENNEPIN COUNTY

BRIDGE 27592 CSAH 15 OVER BROWNS BAY-TANAGER LK CH**INSP. DATE: 07-28-2015**

ELEM NBR	ELEMENT NAME	ENV	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4	QTY CS 5
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General Notes: Bridge 27592 CSAH 15/Browns Bay-Tanager Lake 7/28/15. PTH and JDE. Inspected using Tony B's boat.
'13-start to plan to replace deck, piers and piling.

Recommended Repairs:

- 22. Seal large deck cracks w/ bit. Seal other deck cracks w/ epoxy.
- 301. Repair poured deck joints.
- 320. Repair spalled approaches.
- 374. Monitor cracked and deteriorated concrete quad-T beams. Clean, lightly blast and coat exposed prestressing strands on 2 West T's.
- 382. Clean and paint piling.
- 985. Repair slumped slope paving.
- 988. Notify utility company of missing hanger assemblies in N span.



CSAH 015 - CP 1634 Bridge Replacement



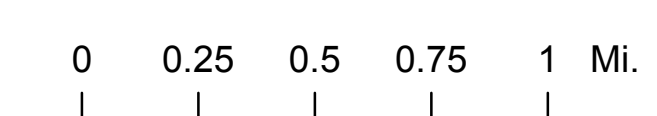
Classification Grand Totals

Interval Start	Total	Motor Bikes	Cars & Trailers	2 Axle Long	Hourly Averages Combined										Tailgating
					Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	
12:00 AM	65.0	0.5	50.5	12.5	0.5	0.5	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
1:00 AM	42.0	0.0	34.5	6.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2:00 AM	27.5	0.0	22.5	4.5	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
3:00 AM	25.5	0.5	19.5	4.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4:00 AM	92.5	2.0	64.0	23.5	0.0	2.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
5:00 AM	357.0	3.0	227.5	94.0	3.5	22.5	0.0	0.0	6.5	0.0	0.0	0.0	0.0	0.0	0.0
6:00 AM	885.5	10.0	611.0	180.0	31.0	38.0	1.5	0.0	10.5	2.5	0.0	1.0	0.0	0.0	0.0
7:00 AM	1278.5	12.5	864.0	230.5	78.5	53.5	1.5	0.5	26.0	1.0	0.0	8.0	0.5	2.0	0.0
8:00 AM	1137.0	15.0	739.5	220.0	73.0	42.5	4.5	0.5	29.0	3.5	0.5	6.5	0.0	2.5	0.0
9:00 AM	940.5	9.5	558.5	213.5	67.5	57.5	2.5	0.0	22.0	3.0	0.0	4.5	0.0	2.0	0.0
10:00 AM	823.0	5.0	504.5	188.0	37.5	53.0	6.0	1.5	22.0	4.0	0.0	1.5	0.0	0.0	0.0
11:00 AM	830.5	6.0	506.5	193.5	46.5	45.0	4.0	1.5	22.5	2.5	0.0	2.5	0.0	0.0	0.0
12:00 PM	871.5	5.5	540.5	189.5	52.0	49.5	3.5	0.0	23.5	4.5	0.0	2.0	0.0	1.0	0.0
1:00 PM	932.5	13.0	591.0	192.5	49.5	57.5	4.0	0.0	18.0	1.5	0.5	4.5	0.0	0.5	0.0
2:00 PM	912.5	12.5	570.0	200.0	60.0	45.0	1.5	2.5	14.0	1.5	0.5	4.5	0.0	0.5	0.0
3:00 PM	1108.0	16.5	699.0	233.5	78.5	49.5	3.0	0.5	16.0	0.5	0.0	9.0	0.5	1.5	0.0
4:00 PM	1237.5	22.0	767.5	241.0	105.5	57.0	1.0	0.0	28.0	1.0	0.0	11.0	1.0	2.5	0.0
5:00 PM	1286.5	19.5	836.0	220.0	117.0	47.0	1.5	0.0	34.5	1.0	0.0	7.5	0.5	1.5	0.5
6:00 PM	1029.0	13.0	691.0	178.0	75.5	37.0	0.5	0.0	24.5	1.0	0.0	7.0	1.0	0.5	0.0
7:00 PM	798.0	22.5	548.0	154.5	30.0	32.5	0.0	0.0	8.0	0.5	0.0	2.0	0.0	0.0	0.0
8:00 PM	731.0	8.5	538.5	126.0	21.5	21.5	1.0	0.0	12.5	0.5	0.0	0.5	0.0	0.5	0.0
9:00 PM	596.5	12.5	438.5	108.5	16.5	14.0	0.0	0.0	5.0	1.0	0.0	0.5	0.0	0.0	0.0
10:00 PM	296.0	2.0	240.0	45.5	2.5	5.5	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
11:00 PM	146.0	0.5	121.5	21.5	0.5	1.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Daily Average	16449.5	212.0	10784.0	3280.5	948.5	733.5	36.5	7.0	324.0	30.5	1.5	72.5	3.5	15.0	0.5

Study Grand Totals															
	Total	Motor Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Tailgating
Combined	32899	424	21568	6561	1897	1467	73	14	648	61	3	145	7	30	1
		1.3 %	65.6 %	19.9 %	5.8 %	4.5 %	0.2 %	0.0 %	2.0 %	0.2 %	0.0 %	0.4 %	0.0 %	0.1 %	0.0 %
E.B.	16395	210	10866	3237	891	712	39	9	323	41	0	62	0	5	0
		1.3 %	66.3 %	19.7 %	5.4 %	4.3 %	0.2 %	0.1 %	2.0 %	0.3 %	0.0 %	0.4 %	0.0 %	0.0 %	0.0 %
W.B.	16504	214	10702	3324	1006	755	34	5	325	20	3	83	7	25	1
		1.3 %	64.8 %	20.1 %	6.1 %	4.6 %	0.2 %	0.0 %	2.0 %	0.1 %	0.0 %	0.5 %	0.0 %	0.2 %	0.0 %

DAILY TOTAL OF HEAVY COMMERCIAL VEHICLES = 2,172

2014 Publication Traffic Volumes Metro Street Series - 5E



Numerals Indicate Average Annual Daily Traffic (AADT) Volumes on Designated Roads

Traffic Volumes are Subject to Variability and Construction Effects
For More Info Visit:
<http://www.dot.state.mn.us/traffic/data/coll-methods.html#fp>

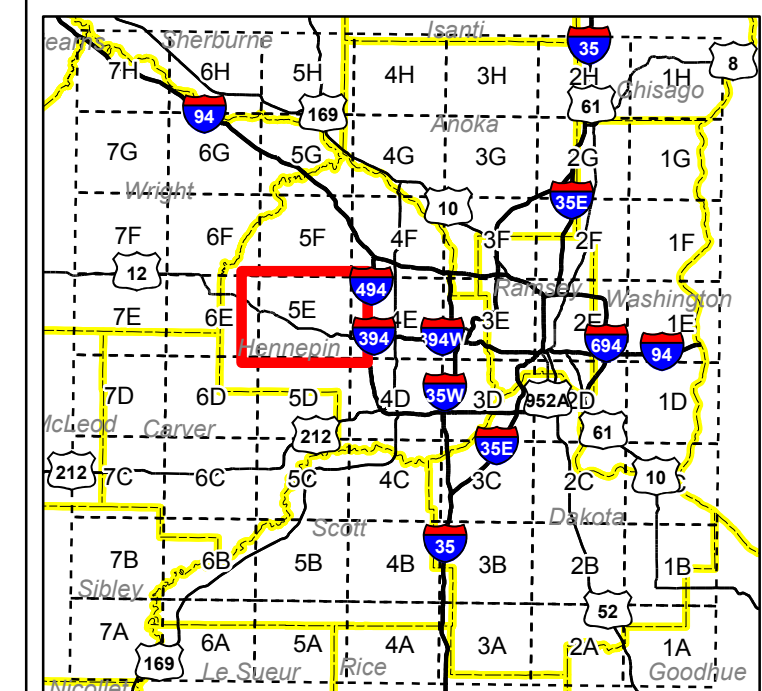
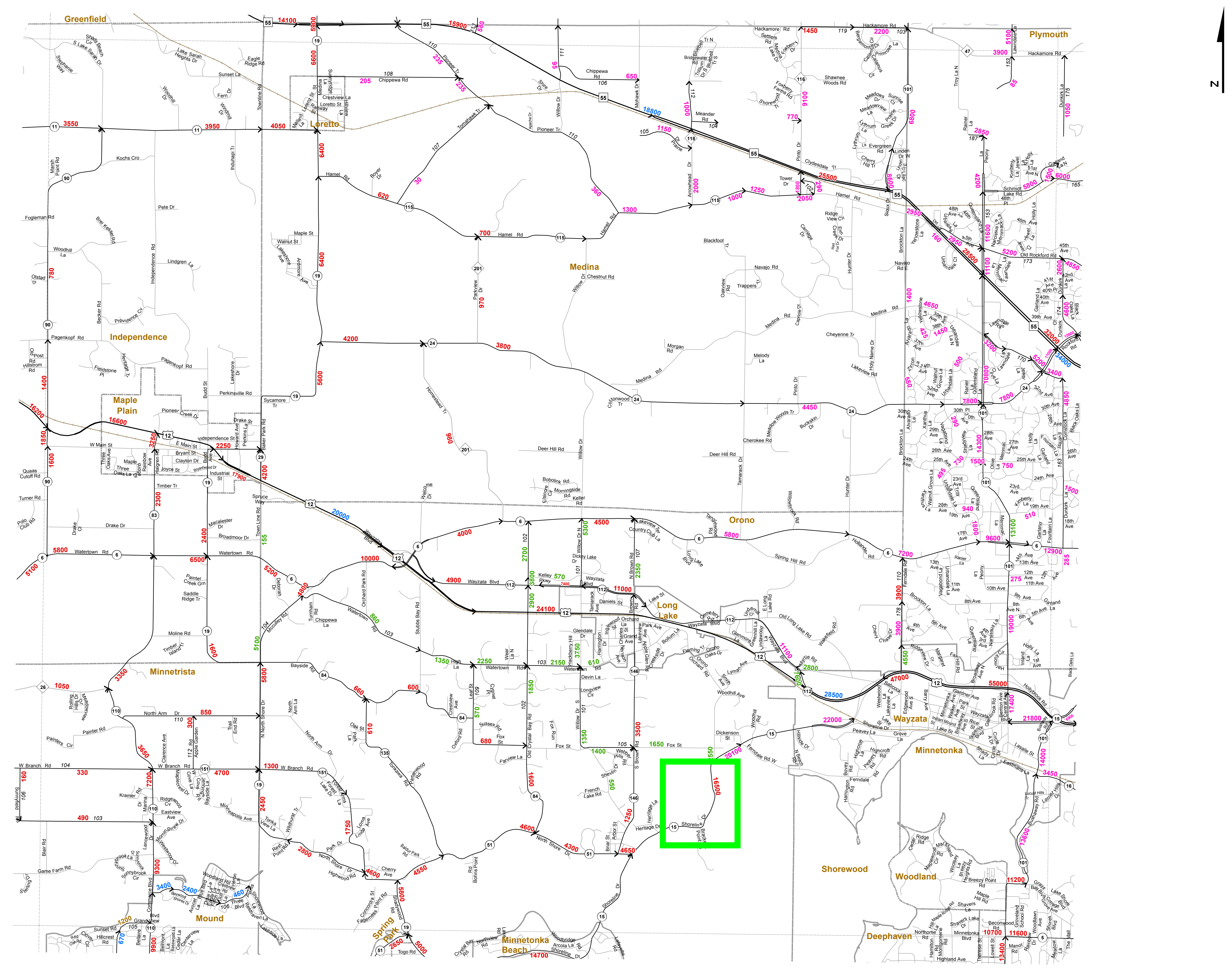
Minnesota Department of Transportation
Office of Transportation Data and Analysis
Traffic Volume Program
<http://www.dot.state.mn.us/traffic/data/index.html>

MAP LEGEND

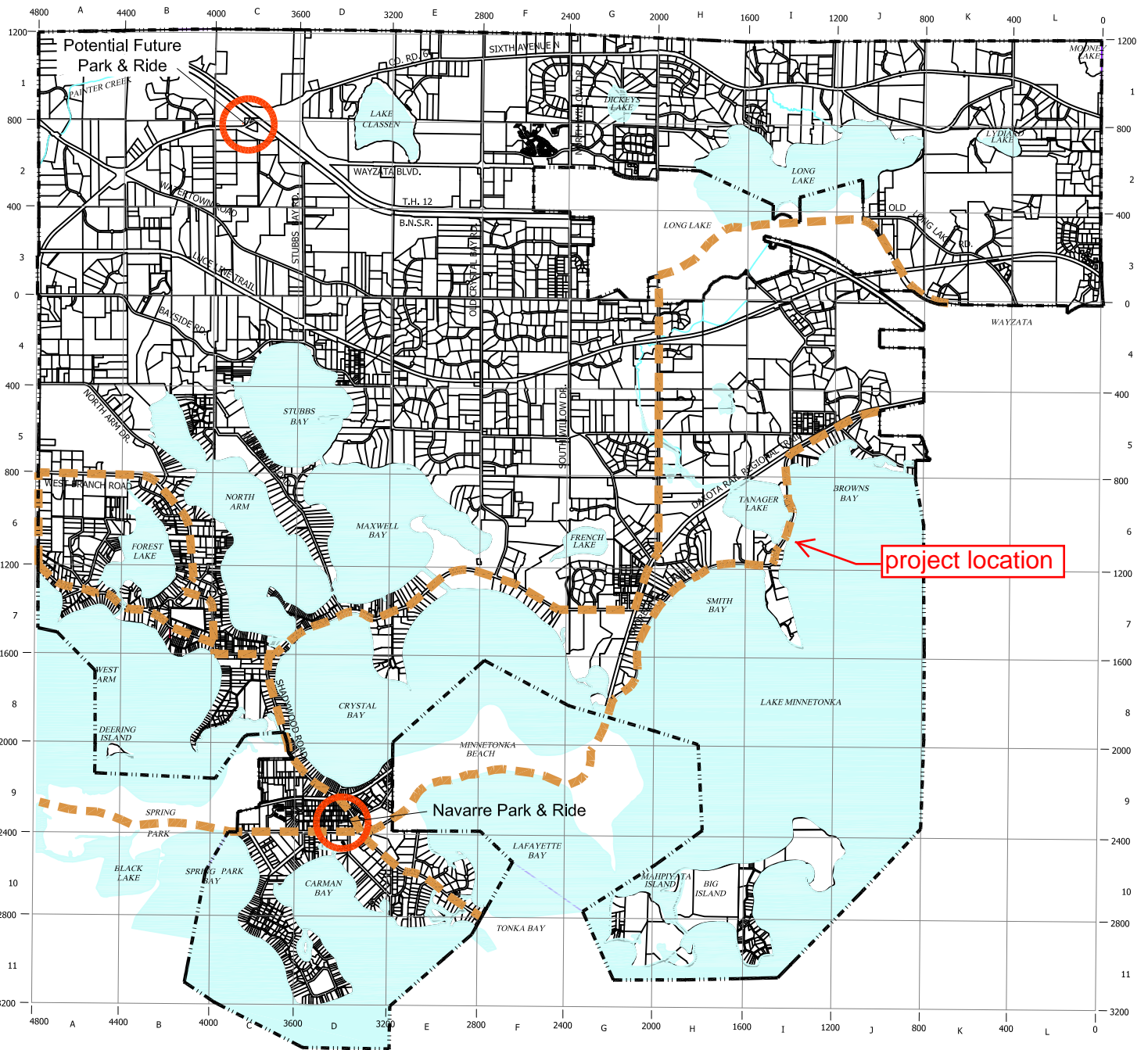
AADT Year
2014 2013
2012 2011
2010 and older

- Interstate
- US Highway
- MN Highway
- CSAH
- MSAS
- County Road

- Other Roads
- Railroads
- Street Series Grid
- Cities
- COUNTIES
- Lakes
- Rivers
- Perennial Streams
- Ditches
- National Forests
- National Parks
- Tribal Gov'ts
- State Forests
- State Parks





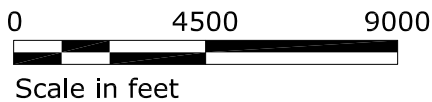
Map Source:
Minnesota Department of Transportation
Office of Transportation Data and Analysis
Traffic Volume Program
2014 AADT Product
<http://www.dot.state.mn.us/traffic/data/data-products.html>



Public Transportation Routes

City of Orono
Minnesota

-  Current Metro Transit Bus Route
-  Park & Ride Facilities



MAP 4A-5

From: [Filipi, Mark](#)
To: [Sierra Saunders](#)
Cc: [Jason R Pieper](#); [Jason D Gottfried](#); [Carla J Stueve](#); [Robert H. Byers](#)
Subject: RE: 2016 Regional Solicitation - Forecast AADT's
Date: Thursday, June 16, 2016 10:23:49 AM
Attachments: [image006.png](#)
[image008.png](#)
[image010.png](#)

Sierra,

Here is the data you requested. It is generated from the model runs from the most recent update of the Council's 2040 Transportation Policy Plan and is based in the four-step trip-based regional travel demand forecast model.

Project	Forecast Volume
CSAH 15 (Shoreline Dr) Bridge Replacement	20,900
CSAH 19 (Manitou Rd/Shadywood Rd) Bridge Rehabilitation	16,200
CSAH 23 (Marshall St NE)	10,500
CSAH 32 (Penn Ave) Reconstruction you cite of 12,800 is actually outside your project area. 10,800 is the only AADT reported in your project area)	16,200 (Note: The 2014 AADT 10,800 is the only AADT reported in your project area)
CSAH 66 (Golden Valley Rd) Reconstruction	19,900 (West of Noble Ave.) 10,200 (East of Indiana Ave.)
CSAH 81 (Bottineau Blvd) Expansion	51,100
CSAH 81 (Broadway Ave) Bridge Replacement	24,700
CSAH 152 (Webber Pkwy) Reconstruction	This roadway is not in the regional model. The model links in the area show an annualized growth rate of 0.5%. When applied to the 13,700 2013 volume, this grows to 16,100.

If you have any questions, please feel free to contact me.



Mark Filipi, AICP PTP

Manager, Technical Planning Support
Metropolitan Transportation Services
mark.filipi@metc.state.mn.us
P.651.602.1725 | F.651.602.1739
390 North Robert Street | St. Paul, MN | 55101 | metro council.org

CONNECT WITH US



From: Sierra Saunders [mailto:Sierra.Saunders@hennepin.us]
Sent: Wednesday, June 15, 2016 8:02 AM
To: Filipi, Mark <Mark.Filipi@metc.state.mn.us>
Cc: Jason R Pieper <Jason.Pieper@hennepin.us>; Jason Gottfried <Jason.gottfried@hennepin.us>;
Carla Stueve <Carla.Stueve@hennepin.us>; Robert H. Byers <Robert.Byers@hennepin.us>
Subject: 2016 Regional Solicitation - Forecast AADT's

Greetings Mark,

I'm writing to request 2040 Forecast AADT information for the Regional Solicitation. Below is the list of projects with our most recent adjusted traffic counts. Project location maps are attached, in the same order as the list below:

- CSAH 15 (Shoreline Dr) Bridge Replacement (Over Browns Bay/Tanager Channel): **16,500** (2014 AADT)
- CSAH 19 (Manitou Rd/Shadywood Rd) Bridge Rehabilitation (Over Narrows Channel): **11,900** (2016 AADT)
- CSAH 23 (Marshall St NE) Reconstruction: **8,800** (2016 AADT)
- CSAH 32 (Penn Ave) Reconstruction: **12,800** (2014 AADT)
- CSAH 66 (Golden Valley Rd) Reconstruction: **11,900** (2016 AADT)
- CSAH 81 (Bottineau Blvd) Expansion (4-lane divided to 6-lane divided): **21,400** (2013 AADT)
- CSAH 81 (Broadway Ave) Bridge Replacement (Over CSAH 153 [Lowry Ave]): **12,100** (2016 AADT)
- CSAH 152 (Webber Pkwy) Reconstruction: **13,700** (2013 AADT)

Please let me know if you need any additional information, and thank you!

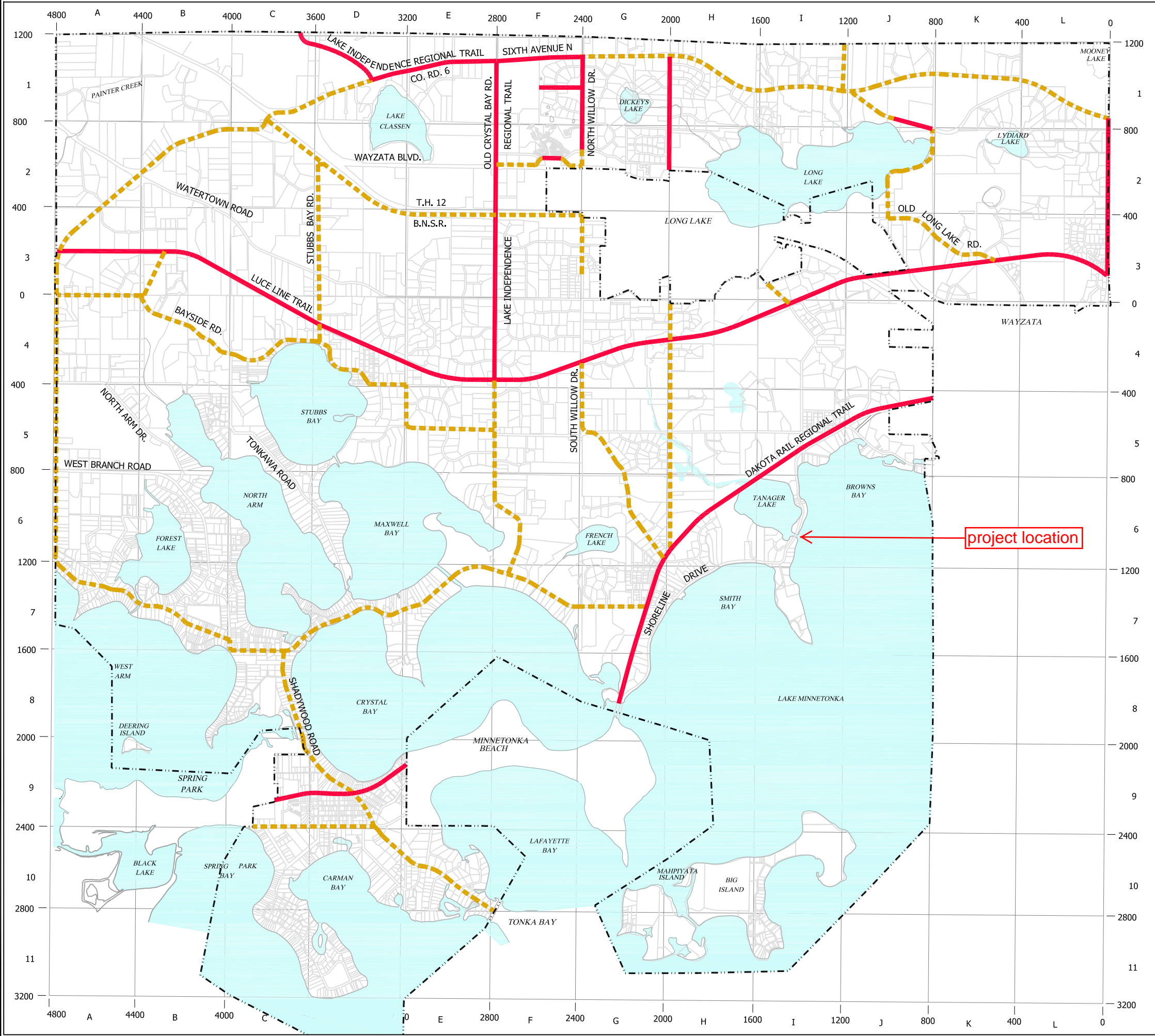
Sierra Saunders
Multimodal Planner
Hennepin County Public Works
1600 Prairie Drive, Medina, MN 55340



Office: 612.596.0364
sierra.saunders@hennepin.us

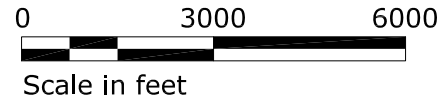
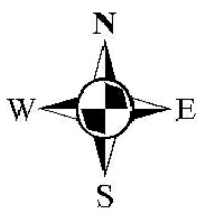
Disclaimer: If you are not the intended recipient of this message, please immediately notify the sender of the transmission error and then promptly delete this message from your computer system.

Comprehensive Trail System Plan

City of Orono
Minnesota



-  Existing Separated Trails
-  Future Trails (May Be Road Shoulder or Separated)



MAP 4E-3



CITY OF ORONO

Street Address:
2750 Kelley Parkway
Orono, MN 55356

Mailing Address:
P.O. Box 66
Crystal Bay, MN 55323

Telephone (952) 249-4600
Fax (952) 249-4616
www.ci.orono.mn.us

June 06, 2016

James N. Grube, P.E.
Hennepin County Engineer
Transportation Department
1600 Prairie Drive
Medina, MN 55340

Re: Support for Regional Solicitation Application
CSAH 15 (Shoreline Drive) Bridge over Tanager Channel

Dear Mr. Grube:

The City of Orono supports Hennepin County's federal funding application through the Regional Solicitation for the proposed CSAH 15 (Shoreline Drive) bridge replacement project over the Tanager Channel.

The city supports this project to replace the existing bridge structure with a new bridge design. This bridge replacement project will enhance the livability and quality of life for Orono and Hennepin County residents.

Thank you for making us aware of this application effort and the opportunity to provide support. The city looks forward to working with you on this project.

Sincerely,

Adam Edwards, P.E.
Director of Public Works/City Engineer