Application

04776 - 2016 Bridges

05379 - Rehabilitation of Lafayette Road Bridge No. 62515

Regional Solicitation - Roadways Including Multimodal Elements

Status:	Submitted
Submitted Date:	07/14/2016 2:03 PM

Primary Contact

Name:*		Brent		Christensen
	Salutation	First Name	Middle Name	Last Name
Title:	Civil Engineer IV			
Department:	City of Saint Paul Public Works			
Email:	brent.christensen@ci.stpaul.mn.us			
Address:	900 CHA			
	25 W 4th Street			
*	Saint Paul	Minnesota	55102	
	City	State/Province	Postal Code/Zip	
Phone:*	651-266-6182			
	Phone		Ext.	
Fax:				
What Grant Programs are you most interested in?	Regional Solicitation - Roadways Including Multimodal Elements			

Organization Information

Name:	ST PAUL, CITY OF

Jurisdictional Agency (if different):

Organization Type: City

Organization Website:

Address: DEPT OF PUBLIC WORKS-CITY HALL ANNEX

25 W 4TH ST #1500

*	ST PAUL	Minnesota	55101
	City	State/Province	Postal Code/Zip

County: Ramsey

Phone:* 651-266-9700 Ext.

Fax:

PeopleSoft Vendor Number 0000003222A22

Project Information

Project Name Rehabilitation of Lafayette Road Bridge No. 62515

Primary County where the Project is Located Ramsey

Jurisdictional Agency (If Different than the Applicant):

Brief Project Description (Limit 2,800 characters; approximately 400 words) *Include location, road name/functional class, type of improvement, etc.*	This project is for the rehabilitation of Lafayette Road approach roadways and Bridge No. 62515 over CP and BNSF Railways. The Project limits are between E University Avenue and N Otsego Street. The total project length is 1,190 feet, with a bridge project length of approximately 450 feet. The existing 5-span, 450 foot bridge was constructed in 1969. In 1983 the City reconstructed bridge expansion joints and milled and overlaid the upper two inches of bridge deck wearing surface. The bridge has a sufficiency rating of 66.9 per its most recent MnDOT structure inventory report. In prior years the bridge was designated as functionally obsolete, though recent deck analysis resulted in a re-assignment to adequate status. City engineers consider the bridge a good candidate for rehabilitation based on its current condition. MSAS 113 Lafayette Road (and bridge) is a four lane roadway with a pedestrian sidewalk on its north side only. Improvements to non-motorized travel modes will be addressed during project design and may require reconstruction of approach roadway. The bridge represents a vital link over a railway corridor with limited access, and is notable for its location between a job concentration center and area of concentrated poverty.
TIP Description Guidance (will be used in TIP if the project is selected for funding)	MSAS 113, FROM E UNIVERSITY AVE TO N OTSEGO ST IN SAINT PAUL - REHAB BR 62515 AND APPROACH ROADWAYS
Project Length (Miles)	0.23

Project Funding

Are you applying for funds from another source(s) to implement this project?	Yes
If yes, please identify the source(s)	State Bridge Bonds, MSA funds, Local bonds
Federal Amount	$5,064,000.00

Match Amount $4,311,000.00

Minimum of 20% of project total

Project Total $9,375,000.00

Match Percentage 45.98%

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

Source of Match Funds State Bridge Bonds, MSA funds, Local bonds

A minimum of 20% of the total project cost must come from non-federal sources; additional match funds over the 20% minimum can come from other federal sources

Preferred Program Year

Select one: 2020

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

Additional Program Years: 2019

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

Project Information-Roadways

County, City, or Lead Agency City of Saint Paul, MN

Functional Class of Road A-Minor Arterial

Road System MSAS

TH, CSAH, MSAS, CO. RD., TWP. RD., CITY STREET

Road/Route No. 113

i.e., 53 for CSAH 53

Name of Road Lafayette Road

Example; 1st ST., MAIN AVE

Zip Code where Majority of Work is Being Performed 55130

(Approximate) Begin Construction Date 04/01/2020

(Approximate) End Construction Date 12/31/2021

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

From:
(Intersection or Address) E University Ave

To:
(Intersection or Address) N Otsego St

DO NOT INCLUDE LEGAL DESCRIPTION

Or At

Primary Types of Work Bridge, Approach Roadway, Sidewalk

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

BRIDGE/CULVERT PROJECTS (IF APPLICABLE)

Old Bridge/Culvert No.:	62515
New Bridge/Culvert No.:	62515
Structure is Over/Under (Bridge or culvert name):	CP and BNSF Railways

Specific Roadway Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Mobilization (approx. 5% of total cost)	$360,000.00
Removals (approx. 5% of total cost)	$300,000.00
Roadway (grading, borrow, etc.)	$30,000.00
Roadway (aggregates and paving)	$180,000.00
Subgrade Correction (muck)	$20,000.00
Storm Sewer	$60,000.00
Ponds	$40,000.00
Concrete Items (curb & gutter, sidewalks, median barriers)	$20,000.00
Traffic Control	$30,000.00
Striping	$20,000.00
Signing	$10,000.00
Lighting	$180,000.00
Turf - Erosion & Landscaping	$20,000.00
Bridge	$5,910,000.00
Retaining Walls	$150,000.00
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	$10,000.00
Other Roadway Elements	$0.00
Totals	**$7,340,000.00**

Specific Bicycle and Pedestrian Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Path/Trail Construction	$0.00
Sidewalk Construction	$40,000.00
On-Street Bicycle Facility Construction	$80,000.00
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	$20,000.00
Other Bicycle and Pedestrian Elements	$0.00
Totals	**$160,000.00**

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
Substotal	$0.00
Other Costs - Administration, Overhead,etc.	$0.00

Totals

Total Cost	$7,500,000.00
Construction Cost Total	$7,500,000.00
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.

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

Rehabilitation of the Lafayette Road Bridge No. 62515 is consistent with the 2040 Transportation Policy Plan, and will achieve each of its goals. Rehabilitation capitalizes on cost-effective reuse of sufficient bridge elements to rebuild substandard and deficient portions of the bridge, significantly extending the service life of existing infrastructure (p58). Project scope includes replacement of the deck, enabling the City to improve access and safety of multi-mode travel, which includes passenger/freight vehicles, public transit, bicycles and pedestrians (p60, p70). The bridge is a critical link between a job concentration center and a disadvantaged residential area. The bridge will continue to serve its role on the arterial road network - and further, rehabilitation will introduce new and improved travel options for biking and walking, which are of great importance to the local population (p62, p64, p66). In summary, the Lafayette Road bridge sustains and promotes growth in a diverse land-use area that is immediate to road/rail freight, job centers, and disadvantaged resident populations (p70).

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

List the applicable documents and pages:

This project is included in the 5-year prioritized bridge replacement plan approved by the Saint Paul City Council on December 19, 2014.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Roadways Including Multimodal Elements

1.All roadway and bridge projects must be identified as a Principal Arterial (Non-Freeway facilities only) or A-Minor Arterial as shown on the latest TAB approved roadway functional classification map.

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

Roadway Expansion and Reconstruction/Modernization projects only:

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

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

Bridge Rehabilitation/Replacement projects only:

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

Check the box to indicate that the project meets this requirement. 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	0.227
Project Length	0.225
Average Distance	1.0089
Upload Map	1467917763531_62515 Roadway Area Definition map.pdf

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

Existing Employment within 1 Mile:	72052
Existing Manufacturing/Distribution-Related Employment within 1 Mile:	3412
Existing Students:	22097
Upload Map	1467917718672_62515 Regional Economy map.pdf

Measure C: Current Daily Heavy Commercial Traffic

Location	Lafayette Road btw E University and N Otsego
Current Daily Heavy Commercial Traffic Volume	405.0
Date Heavy Commercial Count Taken:	07/01/2012

Measure D: Freight Elements

Response (Limit 1,400 characters; approximately 200 words)	Bridge 62515 supports both roadway and railway freight transport. Lafayette Road is part of the City's Municipal State Aid highway system and thereby accommodates trucking. Immediacy to the concentrated areas of industrial business and connection to railway hubs make the roadway an attractive alternate to adjacent freeway truck routes. CP and BNSF Railways operate multiple main-line tracks beneath the bridge. Vertical clearance beneath the bridge beams is inadequate as per railway standards. The scope of rehabilitation includes replacement of the hinge-bearing type beams (which are obsolete and exhibit deterioration), enabling the span geometry and bridge clearances to be improved to present-day standards.

Measure A: Current Daily Person Throughput

Location	Lafayette Rd btw University Ave and Otsego St
Current AADT Volume	8100.0
Existing Transit Routes on the Project:	53, 64, 860
Upload Transit Map	1467917584697_62515 Transit Connections map.pdf

Response: Current Daily Person Throughput

Average Annual Daily Transit Ridership	0
Current Daily Person Throughput	10530.0

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	
Forecast (2040) ADT volume	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):	Yes
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:	
Response (Limit 2,800 characters; approximately 400 words)	The project limits are located within Saint Paul's Payne-Phalen neighborhood district, an area of concentrated poverty wherein the majority of residents are people of color. The project also falls within the eastern portion of a job concentration center. Local zoning maps illustrate how essential the bridge is to disadvantaged populations, especially those for whom walkability and public transit is a necessity of employment and/or livelihood. The properties on the east side of the bridge are largely residential and business; to the west is a region by industry, central business, and service centers offering assistance and programs for disadvantaged persons. Railroad crossings are widely spaced and this particular crossing is situated midway between I-35E and I-94 (freeway corridors that do not serve non-motorized travel modes).

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

Upload Map	1467919637802_62515 Socioeconomic Conditions map.pdf

Measure B: Affordable Housing

City/Township	Segment Length in Miles (Population)
Saint Paul	33924.0
	33924

Total Project Length

Total Project Length (Total Population)	0.23

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)	33924.0
Total Housing Score	0

Measure A: Bridge Condition

Bridge Sufficiency Rating	66.9

Measure B: Project Improvements

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

Measure A: Multimodal Elements and Existing Connections

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

The Saint Paul Bicycle Plan adopted by City Council in 2015 identifies the bridge and approach roadways to include an in-street separated bike lane in each direction. Presently the bridge is very utilitarian and motor-centric in its design and deck geometry, providing 4 vehicular traffic lanes, 2-foot roadway shoulders, and a single 6-foot wide sidewalk.

Rehabilitation scope includes reconstruction of the deck and roadway approaches, which enables vast improvements to the safety and encouragement of biking and walking. These travel modes are vitally important. In addition to general non-motorized transportation and commuting purposes, the route connects residents east of the bridge (>50% people of color) to services and employment areas located west of the bridge.

Preliminary review of traffic volumes suggest that the number of motorist lanes may be reduced without level of service impacts, allowing for increased sidewalk width and the addition of separated designated bike lanes.

All improvements to multimodal transit will be in accordance with current accessibility standards including ADA and PROWAG, and coordinated with project stakeholders.

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

100%

Stakeholders have been identified Yes

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 03/01/2017

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 07/01/2017

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

80%

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

40%

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

0%

Anticipated date or date of completion of historic/archeological review: 01/01/2018

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 Yes

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

0%

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

0%

Anticipated date or date of acquisition

7)Railroad Involvement (25 Percent of Points)

No railroad involvement on project

100%

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

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

60%

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

40%

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

0%

Anticipated date or date of executed Agreement 01/01/2018

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	01/01/2019

10)Letting

Anticipated Letting Date	10/01/2019

Measure A: Cost Effectiveness

Total Project Cost (entered in Project Cost Form):	$7,500,000.00
Enter Amount of the Noise Walls:	$0.00
Total Project Cost subtract the amount of the noise walls:	$7,500,000.00
Points Awarded in Previous Criteria	
Cost Effectiveness	$0.00

Other Attachments

File Name	Description	File Size
2016 Routine Inspection 62515 Lafayette - approved.pdf	Most recent routine Bridge Inspection Report (2016)	1.8 MB
62515 City Map.pdf	Map of project location within City of Saint Paul	13.6 MB
62515 Project Area Map.pdf	Map of project area	8.0 MB
RES 16-1053 SignatureCopy12-Jul-2016-03-18-08.pdf	Local match resolution, Saint Paul City Council	118 KB

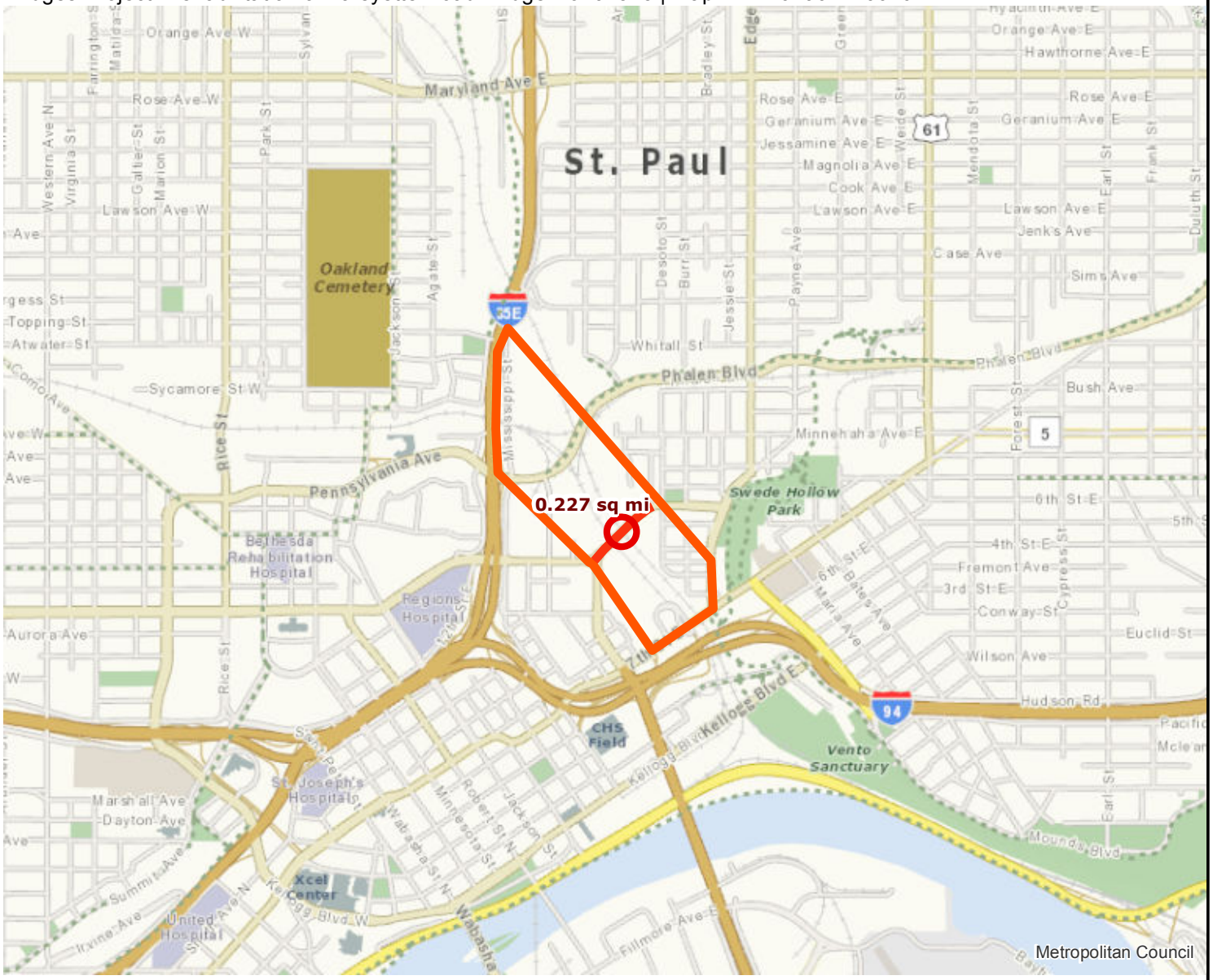
Roadway Area Definition

Bridges Project: Rehabilitation of Lafeyette Road Bridge No. 62515 | Map ID: 1467904416670

Results

Project Length: 0.225 miles

Project Area: 0.227 sq mi



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

0 0.275 0.55 1.1 1.65 2.2 Miles

Created: 7/7/2016
LandscapeRSA1

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

METROPOLITAN COUNCIL

Regional Economy

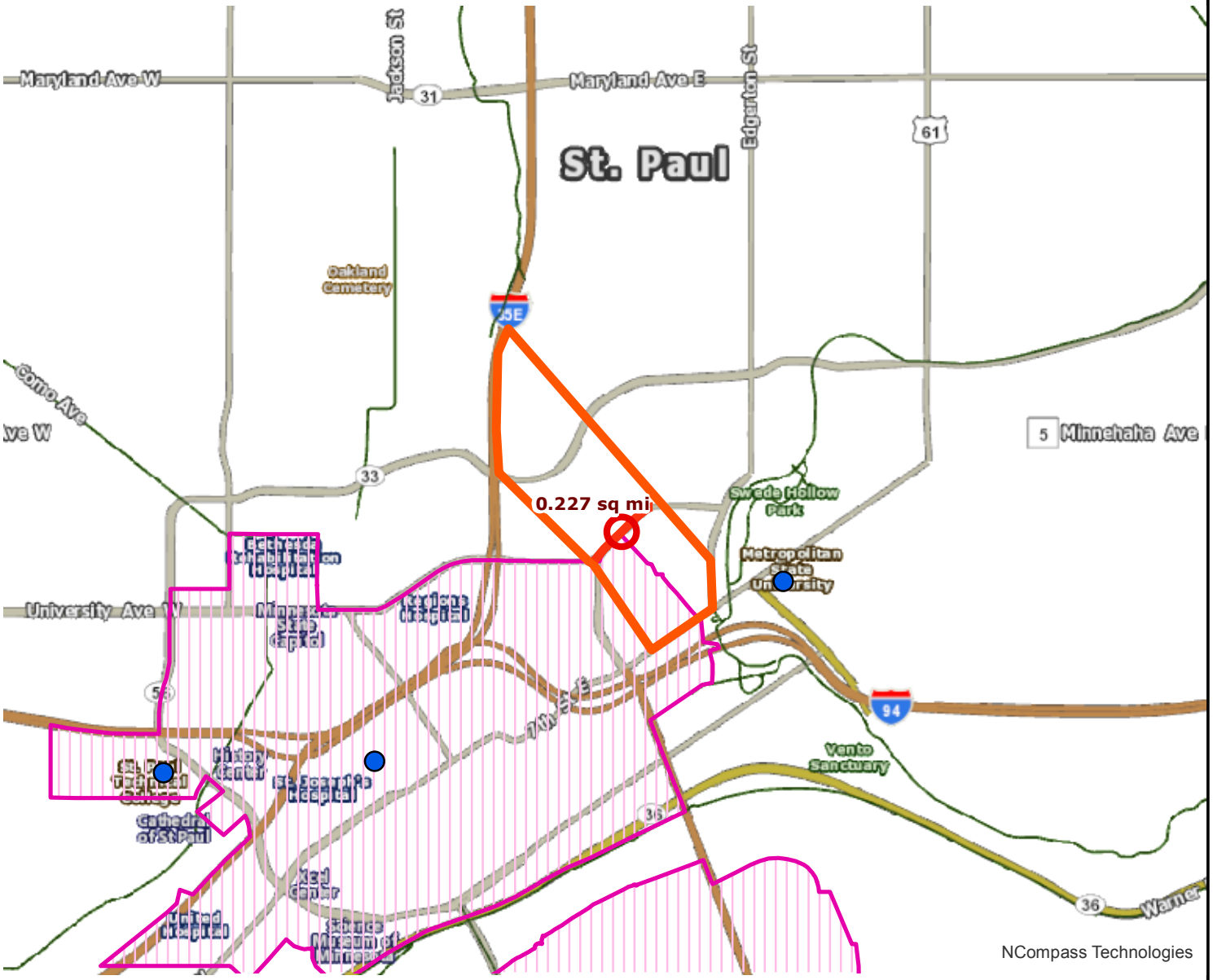
Bridges Project: Rehabilitation of Lafeyette Road Bridge No. 62515 | Map ID: 1467904416670

Results

WITHIN ONE MI of project:

Totals by City:
St. Paul
Population: 33924
Employment: 72052
Mfg and Dist Employment: 3412

Postsecondary Students:
22097



Project Points
Project
Project Area
PostSecondary Education Centers
Manfacturing/Distribution Centers
Job Concentration Centers

0 0.275 0.55 1.1 1.65 2.2 Miles

Created: 7/7/2016
LandscapeRSA5

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

METROPOLITAN COUNCIL

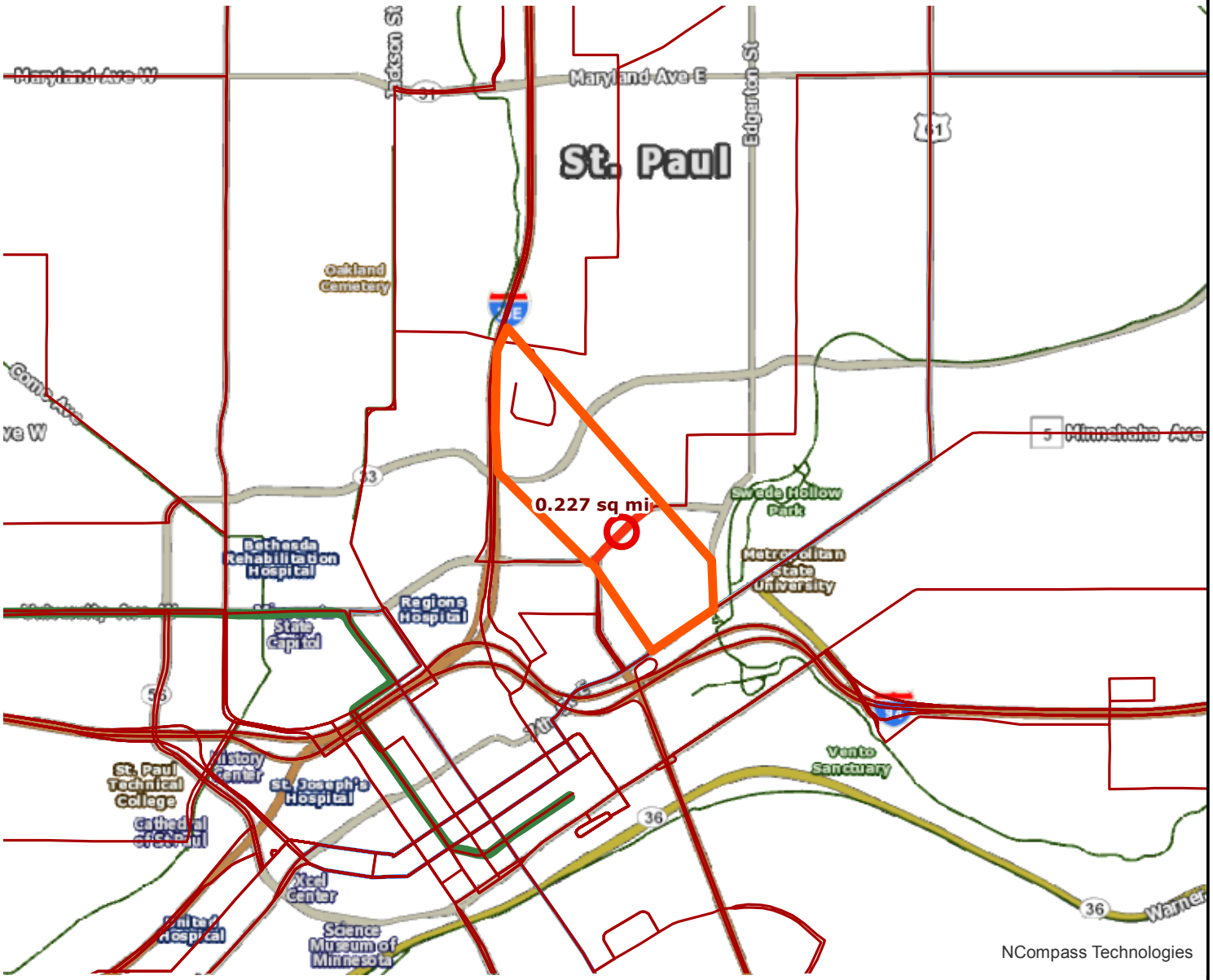
Transit Connections

Bridges Project: Rehabilitation of Lafeyette Road Bridge No. 62515 | Map ID: 1467904416670

Results

Transit with a Direct Connection to project:
53 64 860

**indicates Planned Alignments*



Project Points | Project Area | **Transitway** | **Planned Alignments**

Project | Transit Routes | Green Line | Arterial BRT

0 0.275 0.55 1.1 1.65 2.2 Miles

Created: 7/7/2016
LandscapeRSA3

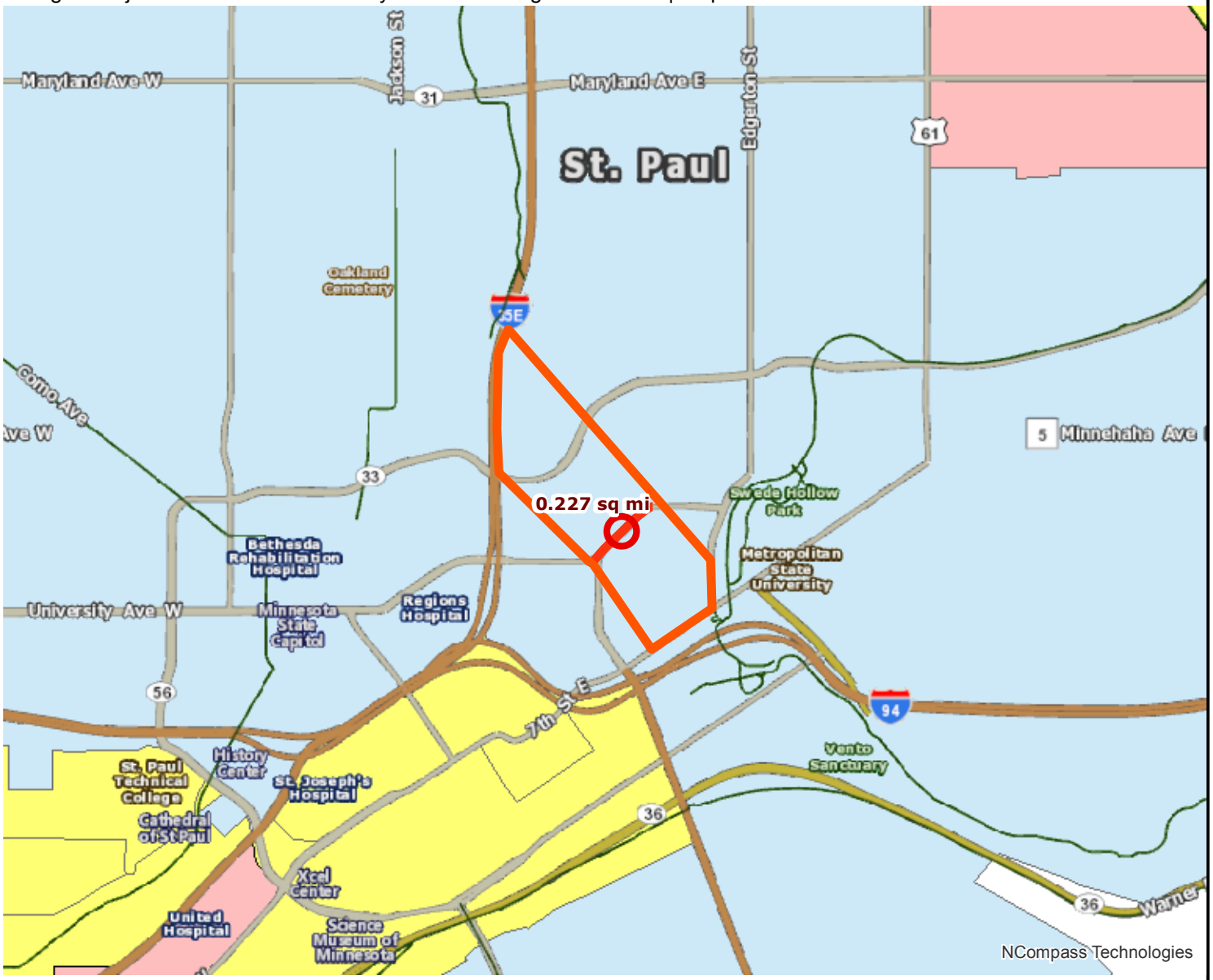
METROPOLITAN COUNCIL

Socio-Economic Conditions

Bridges Project: Rehabilitation of Lafeyette Road Bridge No. 62515 | Map ID: 1467904416670

Results

Project located **IN**
Area of Concentrated Poverty with 50% or more of residents are people of color (ACP50):
(0 to 30 Points)



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

0 0.275 0.55 1.1 1.65 2.2 Miles

Created: 7/7/2016
LandscapeRSA2

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

METROPOLITAN COUNCIL

2016 ROUTINE
BRIDGE INSPECTION REPORT

BRIDGE # 62515
MSAS 113(LAFAYET) over BNSF; CP RAIL

DISTRICT: Metro **COUNTY:** Ramsey **CITY/TOWNSHIP:** St Paul

STATE: Minnesota

Date of Inspection: 07/07/2016
Equipment Used: Full Body Harness

Owner: City or Municipal Highway Agency

Inspected By: Ekstrand, Ron; Engel, Michael; Reimer, Dan

Report Written By: Ron Ekstrand
Report Reviewed By: Glenn Pagel
Final Report Date: 07/13/2016

Table of Contents

Minnesota Structure Inventory Report

Bridge ID: 62515 MSAS 113(LAFAYET) **over** BNSF; CP RAIL **Date:** 07/13/2016

GENERAL

Agency Br. No.
District Metro
Maint. Area **Crew**
County 062 - Ramsey
City St Paul
Township
Desc. Loc. 0.2 MI N OF JCT MSAS 137
Sect., Twp., Range 32 - 029N - 22W
Latitude **Deg** 44 **Min** 57 **Sec** 32.55
Longitude **Deg** 93 **Min** 5 **Sec** 0.48
Custodian 04 - City or Municipal Highway Agency
Owner 04 - City or Municipal Highway Agency
BMU Agreement
Year Built 1969
MN Year Reconstructed
FHWA Year Reconstructed
MN Temporary Status
Bridge Plan Location 4 - MUNICIPAL
Date Opened to Traffic
On-Off System 1 - ON
Legislative District 66A
ABC Suitable

STRUCTURE

Service On 5 - Highway-pedestrian
Service Under 2 - Railroad
Main Span Type
4 - Steel Continuous 01 - Beam Span
Main Span Detail
Appr. Span Type
3 - Steel 01 - Beam Span
Appr. Span Detail
Skew 2 L
Culvert Type
Barrel Length ft.
Cantilever ID F - Friction Hinge

NUMBER OF SPANS

MAIN: 4 **APPR:** 1 **TOTAL:** 5
Main Span Length 135.8 ft.
Structure Length 449.5 ft.
Deck Width (Out-to-Out) 61.2 ft.
Deck Material 1 - Concrete Cast-in-Place
Wear Surf Type 4 - Low Slump Concrete
Wear Surf Install Year 1983
Wear Course/Fill Depth 0.21 ft.
Deck Membrane 0 - None
Deck Rebars 0 - None
Deck Rebars Install Year
Structure Area (Out-to-Out) 27509 sq. ft.
Roadway Area (Curb-to-Curb) 23379 sq. ft.
Sidewalk Width **Lt** 6.40 ft. **Rt** 0.70 ft.
Curb Height **Lt** 0.75 ft. **Rt** 0.75 ft.
Rail Type **Lt** 17 **Rt** 17

ROADWAY

Bridge Match ID (TIS) 0
Roadway O/U Key Route On Structure
Route Sys 05 - MSAS **Number** 113
Roadway Name or Description
MSAS 113
Level of Service 1 - MAINLINE
Roadway Type 2 - 2-way traffic
Control Section (TH Only)
Reference Point 000+00.430
Detour Length 1.0 mi
Lanes **On** 4 **Under** 0
ADT 12600 **Year** 2008
HCADT 0 **ADTT** 0 **%**
Functional Class 16 - Urban - Minor Arterial

RDWY DIMENSIONS

If Divided	NB-EB	SB-WB
Roadway Width	52.00 ft.	ft.
Vertical Clearance	ft.	ft.
Max. Vert. Clear.	ft.	ft.
Horizontal Clear.	51.9 ft.	ft.
Lateral Clearance	ft.	ft.

Appr. Surface Width 52.0 ft.
Bridge Roadway Width 52.0 ft.
Median Width On Bridge ft.

MISC. BRIDGE DATA

Structure Flared 0 - No flare
Parallel Structure N - No parallel structure
Field Conn. ID 4 - Bolted
Abutment Foundation 1 - CONC
(Material/Type) 3 - FTG PILE
Pier Foundation 1 - CONC
(Material/Type) 3 - FTG PILE
Historic Status 5 - Not eligible

PAINT

Year Painted 1969
Unsound Paint % 10
Painted Area 54000 sq. ft.
Primer Type 1 - Lead - non 3309
Finish Type A - Red Lead

BRIDGE SIGNS

Posted Load 0 - Not Required
Traffic 0 - Not Required
Horizontal 0 - Not Required
Vertical 0 - Not Required

INSPECTION

Userkey 199
Unofficial Structurally Deficient N
Unofficial Functionally Obsolete N
Unofficial Sufficiency Rating 66.9
Routine Inspection Date 07/07/2016
Routine Inspection Frequency 12
Inspector Name CO Bridge
Status A - Open

NBI CONDITION RATINGS

Deck 5 - Fair Condition
Unsound Deck %
Superstructure 5 - Fair Condition
Substructure 7 - Good Condition
Channel N - Not Applicable
Culvert N - Not Applicable

NBI APPRAISAL RATINGS

Structure Evaluation 5
Deck Geometry 4
Underclearances 6
Water Adequacy N - Not Applicable
Approach Alignment 8 - Equal to present desirabl

SAFETY FEATURES

Bridge Railing 1 - MEETS STANDARDS
GR Transition N - NOT REQUIRED
Appr. Guardrail N - NOT REQUIRED
GR Termini N - NOT REQUIRED

IN DEPTH INSP.

	Y/N	Freq	Date
Frac. Critical	N		
Underwater	N		
Pinned Asbly.	N		
Spec. Feat.			

WATERWAY

Drainage Area (sq. mi.)
Waterway Opening sq. ft.
Navigation Control N - Not applicable, no waterw
Pier Protection
Nav. Clr. (ft.) **Vert.** ft. **Horiz.** ft.
Nav. Vert. Lift Bridge Clear. (ft.)
MN Scour Code A - NON WATER **Year**

CAPACITY RATINGS

Design Load 5 - HS 20
Operating Rating 1 - LF (LF) HS 29.6
Inventory Rating 1 - LF (LF) HS 17.6
Posting VEH: **SEMI:** **DBL:**
Rating Date 10/16/2013

Minnesota Permit Codes

A: N - N/A
B: N - N/A
C: N - N/A

Minnesota Structure Inventory Report

Bridge ID: 62515 **MSAS 113(LAFAYET) over BNSF; CP RAIL** Date: 07/08/2016

+GENERAL+

Agency Br. No.	**Crew**
District	05 **Maint. Area**
County	062 - Ramsey
City	St Paul
Township	
Desc. Loc.	0.2 MI N OF JCT MSAS 137
Sect., Twp., Range	32 - 029N - 22W
Latitude	44 ° 57 ' 32.55 "
Longitude	93 ° 5 ' 0.48 "
Custodian	04 - City or Municipal Highway
Owner	04 - City or Municipal Highway
BMU Agreement	
Year Built	1969
MN Year Reconstructed	
FHWA Year Reconstructed	
MN Temporary Status	
Bridge Plan Location	4 - MUNICIPAL
Date Opened to Traffic	
On - Off System	1 - ON
Legislative District	66A
Potential ABC	2 - N/A

+STRUCTURE+

Service On	5 - Highway-pedestrian
Service Under	2 - Railroad
Main Span Type	4 - Steel Continuous
Main Span Design	01 - Beam Span
Main Span Detail	
Appr. Span Type	3 - Steel
Appr. Span Design	01 - Beam Span
Appr. Span Detail	
Skew	2 LEFT
Culvert Type	
Barrel Length	
Cantilever ID	F - Friction Hinge

Number of Spans

MAIN: 4 **APPR:** 1 **TOTAL:**

Main Span Length	135.8 **ft.**
Structure Length	449.5 **ft.**
Deck Width (Out-to-Out)	61.2 **ft.**
Deck Material	1 - Concrete Cast-in-Place
Wear Surf Type	4 - Low Slump Concrete
Wear Surf Install Year	1983
Wear Course/Fill Depth	0.21 **ft.**
Deck Membrane	0 - None
Deck Rebars	0 - None
Deck Rebars Install Year	
Structure Area (Out-to-Out)	27509 **sq. ft.**
Roadway Area (Curb-to-Curb)	23379 **sq. ft.**

Sidewalk Width	**50A. Lt**	6.40 **ft.**	**50B. Rt**	0.70 **ft.**
Curb Height	**Lt**	0.75 **ft.**	**Rt**	0.75 **ft.**
Rail Type	**Lt**	17	**Rt**	17

+ROADWAY+

Bridge Match ID (TIS)	0
Roadway O/U Key	Route On Structure
Route Sys	05 - MSAS **Number** 113
Roadway Name or Description	MSAS 113
Level of Service	1 - MAINLINE
Roadway Type	2 - 2-way traffic
Control Section (TH Only)	
Reference Point	000+00.430
Detour Length	1.0 **mi.**
Lanes	**ON** 4 **UNDER** 0
	ADT 12600 **YEAR** 2008
HCADT	**ADTT** **%**
Functional Class	16 - Urban - Minor Arterial

+RDWY DIMENSIONS+

If Divided	**NB-EB**	**SB-WB**
Roadway Width	52.00 **ft.**	**ft.**
Vertical Clearance	**ft.**	**ft.**
Max. Vert. Clear.	**ft.**	**ft.**
Horizontal Clear.	51.9 **ft.**	**ft.**
Lateral Clearance	**ft.**	**ft.**

Appr. Surface Width	52.0 **ft.**
Bridge Roadway Width	52.0 **ft.**
Median Width On Bridge	**ft.**

+MISC. BRIDGE DATA+

Structure Flared	0 - No flare
Parallel Structure	N - No parallel structure
Field Conn. ID	4 - Bolted
Abutment	1 - CONC
Foundation (Material/Type)	3 - FTG PILE
Pier Foundation (Material/Type)	1 - CONC 3 - FTG PILE
Historic Status	5 - Not eligible

+PAINT+

Year Painted	1969
Unsound Paint %	10
Painted Area	54000 **sq. ft.**
Primer Type	1 - Lead - non 3309
Finish Type	A - Red Lead

+BRIDGE SIGNS+

Posted Load	0 - Not Required
Traffic	0 - Not Required
Horizontal	0 - Not Required
Vertical	0 - Not Required

+INSPECTION+

Userkey	199
Structurally Deficient	N
Functionally Obsolete	N
Sufficiency Rating	66.9
Routine Inspection Date	07/07/2016
Routine Inspection Frequency	12
Inspector Name	Ekstrand, Ron
Status	A - Open

+NBI CONDITION RATINGS+

Deck	5	**Unsound Deck %**
Superstructure	5	
Substructure	7	
Channel	N	
Culvert	N	

+NBI APPRAISAL RATINGS+

Structure Evaluation	5
Deck Geometry	4
Underclearances	6
Waterway Adequacy	N
Approach Alignment	8

+SAFETY FEATURES+

Bridge Railing	1 - MEETS STANDARDS
GR Transition	N - NOT REQUIRED
Appr. Guardrail	N - NOT REQUIRED
GR Termini	N - NOT REQUIRED

+IN DEPTH INSP.+

	Y/N	**Freq**	**Date**
Frac. Critical	N		
Underwater	N		
Pinned Asbly.	N		
Spec. Feat.			

+WATERWAY+

Drainage Area (sq. mi.)	
Waterway Opening (sf.)	
Navigation Control	N - Not applicable, no
Pier Protection	
Nav. Clr. (ft.)	**Vert.** 0.0 **Horiz.** 0.0
Nav. Vert. Lift Bridge Clear. (ft.)	
MN Scour Code	A - NON **Year**

+CAPACITY RATINGS+

Design Load	5 - HS 20	
Operating Rating	2 - HS TRUCK	29.6
Inventory Rating	2 - HS TRUCK	17.6

Posting VEH: **SEMI:** **DBL:**

Rating Date 10/16/2013

Overweight Permit Codes

A N - N/A **B** N - N/A **C** N - N/A

BRIDGE 62515 MSAS 113(LAFAYET) OVER BNSF; CP RAIL **ROUTINE INSP. DATE: 07/07/2016**

County: Ramsey
City: St Paul
Township:
Section: 32 Township: 029N Range: 22W
Span Type: 4 - Steel Continuous 2 - Stringer/Multi-beam or Girder
List:
NBI Deck: 5 Super: 5 Sub: 7 Chan: N Culv: N

Location: 0.2 MI N OF JCT MSAS 137
Route: 05 - MSAS 113 Ref. Pt.: 000+00.430
Control Section:
Maint. Area:
Local Agency Bridge Nbr.:
Open, Posted, Closed: A - Open
MN Scour Code: A - NON WATERWAY

Length: 449.5 ft.
Deck Width: 61.2 ft.
Rdwy. Area/ Pct. Unsnd: 23379 sq. ft. / %
Paint Area/ Pct. Unsnd: 54000 sq. ft. / 10%
Culvert: N/A
Postings:

Appraisal Ratings - Approach: 8 Waterway: N
Required Bridge Signs - Load Posting: 0 - Not Required Traffic: 0 - Not Required
Horizntal: 0 - Not Required Vertical: 0 - Not Required

Unofficial Structurally Deficient N
Unofficial Functionally Obsolete N
Unofficial Sufficiency Rating 66.9

ELEM NBR	ELEMENT NAME	ENV	REPORT TYPE	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4	QTY CS 5
022	Low Slump O/L (Concrete Deck with Uncoated Rebar)	2	Routine	07/07/2016	27513 SF	0	27513	0	0	0
			Routine	08/13/2015	27513 SF	0	27513	0	0	0
	Notes: Severe scaling of low slump overlay up to 1/4" deep in SB lane; approximately 85% of S.B. lane. 84-10. Four sq. ft. spall at center bay over 2nd pier from the east abutment. 03-14 Combined unsound wear surface is 2% or less of the total deck area. 2014 Recommend chaining the deck for delams. 2015									
107	Painted Steel Girder or Beam	2	Routine	07/07/2016	3592 LF	3400	150	42	0	0
			Routine	08/13/2015	3592 LF	3400	150	42	0	0
	Notes: Beam ends are rusty and corroded. 2014 Blistered and missing paint in several bays - NW abut, mostly the middle bay. 2014 Steel has moderate deterioration. 2014-15 Paint system has extensive deterioration. 2014-15 Surface corrosion is prevelent. 2014-15 Severe corrosion with flaking rust at isolated areas is present. 2015 The severe corrosion areas are at the stripseal locations. 2015									
205	Reinforced Concrete Column	2	Routine	07/07/2016	16 EA	14	2	0	0	N/A
			Routine	08/13/2015	16 EA	14	2	0	0	N/A
	Notes: Surface delaminations on two columns. 2010-15 N and S columns at pier 2 have minor delams toward the top. 2014-15									
215	Reinforced Concrete Abutment	2	Routine	07/07/2016	121 LF	113	8	0	0	N/A
			Routine	08/13/2015	121 LF	113	8	0	0	N/A
	Notes: Minor vertical cracking. 2010-15 12 LF of cracking at the top of the NE abut. 2014-15 Debris on bridge seat areas. 2015									
234	Reinforced Concrete Pier Cap	2	Routine	07/07/2016	246 LF	236	10	0	0	N/A
			Routine	08/13/2015	246 LF	236	10	0	0	N/A
	Notes: The 2nd pier from the west has 10 lin.ft. of cracking on the top east side. 2005-15 Moderate cracking at pier 2. 2015									

ELEM NBR	ELEMENT NAME	ENV	REPORT TYPE	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4	QTY CS 5
300	Strip Seal Deck Joint	2	Routine	07/07/2016	246 LF	0	177	69	N/A	N/A
			Routine	08/13/2015	246 LF	0	177	69	N/A	N/A

Notes: 45 linear feet of torn gland at the third joint from the south. 2014
20 linear feet of torn gland at the second joint from the south. 2011-14
4' of gland pulled out at the N.side stripseal. 2014
Debris in joint is causing problems. 2015
Recommend replacing stripseals. 2015

301	Poured Deck Joint	2	Routine	07/07/2016	492 LF	388	104	0	N/A	N/A
			Routine	08/13/2015	492 LF	388	104	0	N/A	N/A

Notes: Changed quantity to 492 LF. 2014
Quantity = 208' on the deck + 284' at the approaches = 492 LF total 2014
Poured joints have adhesion loss at the approaches. 2015
Recommend sealing poured joints. 2015

311	Expansion Bearing	2	Routine	07/07/2016	32 EA	30	2	0	N/A	N/A
			Routine	08/13/2015	32 EA	30	2	0	N/A	N/A

Notes: Corrosion and rusting of the bearings is present. 1992-2015
NE outside bearing has moderate to severe deterioration. 2011-15
Extensive bearing corrosion, anchor bolts corroded. 2011-15
Changed quantity to 32 total. 2015
Expansion Bearings located at:
E.abut. = 8
Pier 4 = 4
Pier 3 = 8
Pier 2 = 4
Pier 1 = 8
Expansion bearings = 32 total
(Excludes Hinges - see element # 373)
CS-2 bearings at pier 1. 2015

313	Fixed Bearing	2	Routine	07/07/2016	16 EA	13	3	0	N/A	N/A
			Routine	08/13/2015	16 EA	13	3	0	N/A	N/A

Notes: Changed quantity to 16 total. 2015
Fixed Bearings located at:
W.abut. = 8
Pier 4 = 4
Pier 2 = 4
Fixed bearings = 16 total
CS-2 bearings at pier 2. 2015

321	Concrete Approach Slab-Concrete Wearing Surface	2	Routine	07/07/2016	2 EA	0	1	1	0	N/A
			Routine	08/13/2015	2 EA	0	1	1	0	N/A

Notes: West approach panel needs patching. 2010-15
Large transverse crack at west approach. 2010-15
Recommend approach panel repairs. 2015

333	Masonry, Other or Combination Material Railing	2	Routine	07/07/2016	889 LF	800	89	0	N/A	N/A
			Routine	08/13/2015	889 LF	800	89	0	N/A	N/A

Notes: Date 2004-11-04 -
Longitudnal cracking at the S.side bridge railing. 2015

ELEM NBR	ELEMENT NAME	ENV	REPORT TYPE	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4	QTY CS 5
356	Fatigue Cracking Smart Flag	2	Routine	07/07/2016	1 EA	1	0	0	N/A	N/A
			Routine	08/13/2015	1 EA	1	0	0	N/A	N/A
	Notes:									
357	Pack Rust Smart Flag	2	Routine	07/07/2016	1 EA	1	0	0	0	N/A
			Routine	08/13/2015	1 EA	1	0	0	0	N/A
	Notes: NE side outside bearing corrosion present. 2011-15									
358	Concrete Deck Cracking Smart Flag	2	Routine	07/07/2016	1 EA	0	1	0	0	N/A
			Routine	08/13/2015	1 EA	0	1	0	0	N/A
	Notes: Recommend sealing all cracks. 07-15 Cracks of moderate size or density. 2015 Recommend chaining the deck for delams. 2015									
359	Underside of Concrete Deck Smart Flag	2	Routine	07/07/2016	1 EA	0	1	0	0	0
			Routine	08/13/2015	1 EA	0	1	0	0	0
	Notes: 4 sq. ft. spall at the bottom of the deck in the center bay at the 2nd pier from the east end of the bridge. 1999-2008. Various underdeck patches present. 2011-15 Fire damage is prevelent in the middle bay at the S.end. 2014 Coping at the top of the beam has delaminated. 2014 Map cracking and efflorescence present at the underside of the deck. 2014-15 Underdeck distress is 2% or less than the entire deck area. 2015									
363	Section Loss Smart Flag	2	Routine	07/07/2016	1 EA	1	0	0	0	N/A
			Routine	08/13/2015	1 EA	1	0	0	0	N/A
	Notes:									
373	Steel Hinge Assembly	2	Routine	07/07/2016	16 EA	14	2	0	0	0
			Routine	08/13/2015	16 EA	14	2	0	0	0
	Notes: Added element # 373 steel hinge assembly. 2013 Each hinge has 8 bearing assemblies X 2 hinges = 16 bearing assembles CS-2 = Minor deterioration - supporting steel No restriction of movement Minor wear and functioning properly Paint system has some deterioration and corrosion present									
380	Secondary Structural Elements	2	Routine	07/07/2016	1 EA	1	0	0	0	N/A
			Routine	08/13/2015	1 EA	1	0	0	0	N/A
	Notes: Changed quantity to 1 total. 2013 Vertical delamination N.end of crash strut - 2nd set of columns from the west. 2014									
387	Reinforced Concrete Wingwall	2	Routine	07/07/2016	4 EA	4	0	0	0	N/A
			Routine	08/13/2015	4 EA	4	0	0	0	N/A
	Notes:									

ELEM NBR	ELEMENT NAME	ENV	REPORT TYPE	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4	QTY CS 5
964	Critical Finding Smart Flag	2	Routine	07/07/2016	1 EA	1	0	N/A	N/A	N/A
			Routine	08/13/2015	1 EA	1	0	N/A	N/A	N/A
	Notes: Previous comments > DO NOT DELETE THIS CRITICAL FINDING SMART FLAG.									
982	Approach Guardrail	2	Routine	07/07/2016	1 EA	1	0	0	N/A	N/A
			Routine	08/13/2015	1 EA	1	0	0	N/A	N/A
	Notes: Posted speed does NOT exceed 40 MPH. 2014-15									
984	Deck & Approach Drainage	2	Routine	07/07/2016	1 EA	0	1	0	N/A	N/A
			Routine	08/13/2015	1 EA	0	1	0	N/A	N/A
	Notes: The deck drains from pier 4 to the west. 2 sets of deck drains are east of hinge 1 and 2. 2015 Drainage components are deteriorated. 2015									
985	Slopes & Slope Protection	2	Routine	07/07/2016	1 EA	0	1	0	N/A	N/A
			Routine	08/13/2015	1 EA	0	1	0	N/A	N/A
	Notes: 8 sq. ft. spall with exposed rebars. 1997-2015 The east slope paving has several large cracks. 2006-15									
986	Curb & Sidewalk	2	Routine	07/07/2016	1 EA	0	1	0	N/A	N/A
			Routine	08/13/2015	1 EA	0	1	0	N/A	N/A
	Notes: There are numerous 1/4 inch horizontal cracks in the south curb. 2008-15 SW sidewalk on approach needs repair. 2011-15 1 SF spall at NW stripseal on curb/walk. 2014-15 Sidewalks have moderate deterioration. 2015									
988	Miscellaneous Items	1	Routine	07/07/2016	1 EA	1	0	0	N/A	N/A
			Routine	08/13/2015	1 EA	1	0	0	N/A	N/A
	Notes: Several fires were started at the SW and NE abutments resulting with popping of the concrete on the abutment face and burned paint. 1984-2014 The gas main was replaced in 2004. SW gas main bracket has cracked welds. 2014									

General Notes: A load rating and posting report was done by TKDA in 2013.
Load posting was not required. 2014

BNSF contacts:
Michael Anderson (763) 782-3310 cell (612) 749-3401 michael.anderson5@bnsf.com
Lane Gilliland cell (612) 219-4219

58. Deck NBI: Moderate deterioration is present. 2016
Extensive cracking, leaching and scaling of LS overlay / deck. 2016

36A. Brdg Railings NBI:

36B. Transitions NBI: Posted speed does NOT exceed 40 MPH. 2014

36C. Appr Guardrail NBI:

36D. Appr Guardrail Terminal NBI:

59. Superstructure NBI: Moderate deterioration of the superstructure is present. 2016
Extensive corrosion and section loss in the critical stress areas. (Hinges and Bearings) 2016

60. Substructure NBI:

61. Channel NBI:

ELEM NBR	ELEMENT NAME	ENV	REPORT TYPE	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4	QTY CS 5

62. Culvert NBI:

71. Waterway Adeq NBI:

72. Appr Roadway Alignment NBI:

Inventory Notes:

Ron Ekstrand
Inspector's Signature

Glenn Pagel
Reviewer's Signature

MINNESOTA BRIDGE INSPECTION REPORT

07/13/2016

Inspector: CO Bridge

BRIDGE 62515 MSAS 113(LAFAYET) OVER BNSF; CP RAIL

County: Ramsey
City: St Paul
Township:
Section: 32 Township: 029N Range: 22W
Span Type: 4 - Steel Continuous 2 - Stringer/Multi-beam or Girder
List:
NBI Deck: 5 Super: 5 Sub: 7 Chan: N Culv: N
Open, Posted, Closed: A - Open
MN Scour Code: A - NON WATERWAY
Appraisal Ratings - Approach: 8 Waterway: N
Required Bridge Signs - Load Posting: 0 - Not Required Traffic: 0 - Not Required
Horizntal: 0 - Not Required Vertical: 0 - Not Required

Location: 0.2 MI N OF JCT MSAS 137
Route: 05 - MSAS 113 Ref. Pt.: 000+00.430
Control Section:
Maint. Area:
Local Agency Bridge Nbr.:

Length: 449.5 ft.
Deck Width: 61.2 ft.
Rdwy. Area/ Pct. Unsnd: 23379 sq. ft. / %
Paint Area/ Pct. Unsnd: 54000 sq. ft. / 10%
Culvert: N/A
Postings:

Unofficial Structurally Deficient N
Unofficial Functionally Obsolete N
Unofficial Sufficiency Rating 66.9

ELEM NBR	ELEMENT NAME	REPORT TYPE	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
12	Reinforced Concrete Deck	Routine	07/07/2016	27509 SF	26959	0	550	0
		Migrated Values		27509 SF	26959	0	550	0

Notes: 4 sq. ft. spall at the bottom of the deck in the center bay at the 2nd pier from the east end of the bridge. 1999-2008.
Various underdeck patches present. 2011-16
Fire damage is prevelent in the middle bay at the S.end. 2014-16
Coping at the top of the beam has delaminated. 2014
Map cracking and efflorescence present at the underside of the deck. 2014-16

	510 - Wearing Surfaces	Routine	07/07/2016	23379 SF	12591	10362	426	0
		Migrated Values		23379 SF	12591	10362	426	0

Notes: Low Slump Overlay with Uncoated Rebar Notes:
Severe scaling of low slump overlay up to 1/4" deep in SB lane; approximately 85% of S.B. lane. 84-10.
Unsealed cracks from .050 to .125 are present. 2016
Recommend chaining the deck for delams. 2015-16

107	Steel Open Girder/Beam	Routine	07/07/2016	3592 LF	3352	192	48	0
		Migrated Values		3592 LF	3352	192	48	0

Notes: Beam ends are rusty and corroded. 2014-16
Steel has moderate deterioration. 2014-16
Surface corrosion is prevelent. 2014-16
Severe corrosion with flaking rust at isolated areas is present. 2015-16
The severe corrosion areas are at the stripseal locations. 2015-16
CS3 at the hinge areas-pack rust is present. 2016

	515 - Steel Protective Coating	Routine	07/07/2016	54000 SF	51114	0	2255	631
		Migrated Values		54000 SF	51114	0	2255	631

Notes: [2016] Migrator used inventory quantity of 54,000 SF and estimated the condition states.
Blistered and missing paint in several bays - NW abut, mostly the middle bay. 2014-16

205	Reinforced Concrete Column	Routine	07/07/2016	16 EA	14	2	0	0
		Migrated Values		16 EA	14	2	0	0

Notes: Surface delaminations on two columns. 2010-16
N and S columns at pier 2 have minor delams toward the top. 2014-16

215	Reinforced Concrete Abutment	Routine	07/07/2016	183 LF	171	12	0	0
		Migrated Values		183 LF	171	12	0	0

Notes: Minor vertical cracking. 2010-16
12 LF of cracking at the top of the NE abut. CS-2 2014-16
Debris on bridge seat areas. 2015-16

BRIDGE 62515 MSAS 113(LAFAYET) OVER BNSF; CP RAIL

ELEM NBR	ELEMENT NAME	REPORT TYPE	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
234	Reinforced Concrete Pier Cap	Routine	07/07/2016	246 LF	226	20	0	0
		Migrated Values		246 LF	226	20	0	0
	Notes: The 2nd pier from the west has 20 lin.ft. of cracking on the top east side. 2005-16 Moderate cracking at pier 2. 2015-16							
300	Strip Seal Expansion Joint	Routine	07/07/2016	246 LF	0	177	69	0
		Migrated Values		246 LF	0	177	69	0
	Notes: 45 linear feet of torn gland at the third joint from the south. 2014-16 20 linear feet of torn gland at the second joint from the south. 2011-16 4' of gland pulled out at the N.side stripseal. 2014-16 Recommend replacing stripseals. 2015-16							
301	Pourable Joint Seal	Routine	07/07/2016	492 LF	388	24	80	0
		Migrated Values		492 LF	388	24	80	0
	Notes: Changed quantity to 492 LF. 2014 Quantity = 208' on the deck + 284' at the approaches = 492 LF total 2014 Poured joints have adhesion loss at the approaches. 2015-16 E. approach is worst. 2016 Recommend sealing poured joints. 2015-16							
311	Movable Bearing	Routine	07/07/2016	32 EA	29	3	0	0
		Migrated Values		32 EA	29	3	0	0
	Notes: Corrosion and rusting of the bearings is present. 1992-2016 NE outside bearing has moderate to severe deterioration. 2011-16 Extensive bearing corrosion, anchor bolts corroded. 2011-16 Changed quantity to 32 total. 2015 Expansion Bearings located at: E.abut. = 8, Pier 4 = 4, Pier 3 = 8, Pier 2 = 4, Pier 1 = 8 Expansion bearings = 32 total (Excludes Hinges - see element # 373) CS-2 bearings at pier 1. 2015-16							
313	Fixed Bearing	Routine	07/07/2016	16 EA	13	3	0	0
		Migrated Values		16 EA	13	3	0	0
	Notes: Changed quantity to 16 total. 2015 Fixed Bearings located at: W.abut. = 8, Pier 4 = 4, Pier 2 = 4 Fixed bearings = 16 total CS-2 bearings at pier 2. 2015-16							
321	Reinforced Concrete Approach Slab	Routine	07/07/2016	3276 SF	3080	42	154	0
		Migrated Values		3276 SF	3080	42	154	0
	Notes: West approach panel needs patching. Asphalt patch is present. 2010-16 Wide cracks at both approaches. 2010-16 Moderate cracks and patches present. 2016 Recommend approach panel repairs. 2015-16							
330	Metal Bridge Railing	Routine	07/07/2016	889 LF	866	23	0	0
		Migrated Values		889 LF	866	23	0	0
	Notes: Plow damage on the S.side of the bridge. 2016							
	515 - Steel Protective Coating	Routine	07/07/2016	1778 SF	1778	0	0	0
		Migrated Values		1778 SF	1778	0	0	0

BRIDGE 62515 MSAS 113(LAFAYET) OVER BNSF; CP RAIL

ELEM NBR	ELEMENT NAME	REPORT TYPE	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
331	Reinforced Concrete Bridge Railing	Routine	07/07/2016	889 LF	667	100	122	0
		Migrated Values		889 LF	667	100	122	0
	Notes: Longitudnal cracking at the S.side bridge railing. Crack width is .012 to .050. 2015-16 Leaching with rust staining is present. 2016 Vertical cracks less than .012. 2016							
800	Critical Deficiencies or Safety Hazards	Routine	07/07/2016	1 EA	1	0	0	0
		Migrated Values		1 EA	1	0	0	0
	Notes: NO CRITICAL FINDINGS OBSERVED DURING THE LAST INSPECTION. 2016							
810	Concrete Decks - Cracking & Sealing	Routine	07/07/2016	4487 LF	0	2243	2244	0
		Migrated Values		4487 LF	0	2243	2244	0
	Notes: Recommend sealing all cracks. 07-16 Crack sealant is deteriorated. 2016 Some crack sealant has failed. 2016							
850	Steel Hinge Assembly	Routine	07/07/2016	16 EA	5	4	6	1
		Migrated Values		16 EA	5	4	6	1
	Notes: Each hinge has 8 bearing assemblies X 2 hinges = 16 bearing assembles CS-2 = Alignment is tolerable-slight Minor restriction, cleaning and lubricating recommended Hinge components are moderate deterioration Corrosion-freckled rust is present Adjacent members have minor to moderate deterioration CS-3 = Restricted, cleaning and lubricating required Misalignment is significant Hinge components are significantly deteriorated Corrosion-section loss, flaking and pack rust is present Loss of bearing area is 10% - 25% Adjacent members have extensive deterioration							
855	Secondary Members (Superstructure)	Routine	07/07/2016	1 EA	1	0	0	0
		Migrated Values		1 EA	1	0	0	0
	Notes: Changed quantity to 1 total. 2013 Bracing between beams. 2016							
881	Steel Section Loss	Routine	07/07/2016	1 EA	0	0	1	0
		Migrated Values		1 EA	0	0	1	0
	Notes: See hinge and bearing elements. 2016							
882	Steel Cracking	Routine	07/07/2016	1 EA	1	0	0	0
		Migrated Values		1 EA	1	0	0	0
	Notes: None noticed. 2016							
883	Concrete Shear Cracking	Routine	07/07/2016	1 EA	1	0	0	0
		Migrated Values		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. None noticed. 2016							
892	Slopes & Slope Protection	Routine	07/07/2016	1 EA	0	1	0	0
		Migrated Values		1 EA	0	1	0	0
	Notes: 8 sq. ft. spall with exposed rebars. 1997-2016 The east slope paving has several large cracks. 2006-16							
893	Guardrail	Routine	07/07/2016	1 EA	1	0	0	0
		Migrated Values		1 EA	1	0	0	0
	Notes: Posted speed does NOT exceed 40 MPH. 2014-16							

BRIDGE 62515 MSAS 113(LAFAYET) OVER BNSF; CP RAIL

ELEM NBR	ELEMENT NAME	REPORT TYPE	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
894	Deck & Approach Drainage	Routine	07/07/2016	1 EA	0	1	0	0
		Migrated Values		1 EA	0	1	0	0
	Notes: The deck drains from pier 4 to the west. 2 sets of deck drains are east of hinge 1 and 2. 2015 Drainage components are deteriorated. 2015-16							
895	Sidewalk, Curb, & Median	Routine	07/07/2016	1 EA	0	1	0	0
		Migrated Values		1 EA	0	1	0	0
	Notes: SW sidewalk on approach needs repair. 2011-16 1 SF spall at NW stripseal on curb/walk. 2014-16 Sidewalks have moderate deterioration. 2015-16							
899	Miscellaneous Items	Routine	07/07/2016	1 EA	1	0	0	0
		Migrated Values		1 EA	1	0	0	0
	Notes: Several fires were started at the SW and NE abutments resulting with popping of the concrete on the abutment face and burned paint. 1984-2016 The gas main was replaced in 2004. SW gas main bracket has cracked welds. 2014-16							
900	Protected Species	Routine	07/07/2016	1 EA	1	0	0	0
		Migrated Values		1 EA	1	0	0	0
	Notes: None noticed. 2016							

General Notes: A load rating and posting report was done by TKDA in 2013.
Load posting was not required. 2014

BNSF contacts:
Michael Anderson (763) 782-3310 cell (612) 749-3401 michael.anderson5@bnsf.com
Lane Gilliland cell (612) 219-4219

58. Deck NBI: Moderate deterioration is present. 2016
Extensive cracking, leaching and scaling of LS overlay / deck. 2016

36A. Brdg Railings NBI:

36B. Transitions NBI: Posted speed does NOT exceed 40 MPH. 2014

36C. Appr Guardrail NBI:

36D. Appr Guardrail Terminal NBI:

59. Superstructure NBI: Moderate deterioration of the superstructure is present. 2016
Extensive corrosion and section loss in the critical stress areas. (Hinges and Bearings) 2016

60. Substructure NBI:

61. Channel NBI:

62. Culvert NBI:

71. Waterway Adeq NBI:

72. Appr Roadway Alignment NBI:

Inventory Notes:

Ron Ekstrand
Inspector's Signature

Glenn Pagel
Reviewer's Signature

1. 002 LS wear.JPG

2. 005 approach.JPG

3. 006 approach.JPG

4. 007 approach.JPG

5. 008 approach.JPG

6. 013 underdeck.JPG

7. 014 underdeck.JPG

8. 015 underdeck.JPG

9. 016 underdeck.JPG

10. 017 LS wear.JPG

11. 018 LS wear.JPG

12. 019 hinge 1 br 1.JPG

13. 020 hinge 1 br 2.JPG

14. 021 hinge 1 br 2.JPG

15. 022 hinge 1, br 3.JPG

16. 023 hinge 1, br 3.JPG

17. 024 hinge 1 br 3.JPG

18. 025 hinge 1 br 4.JPG

19. 026 hingr 1 br 4.JPG

20. 027 hinge 1 br 5.JPG

21. 028 hinge 1 br 6.JPG

22. 029 hinge 1 br 7.JPG

23. 030 hinge 1 br 8.JPG

24. 044 hinge 2 br 7.JPG

25. 045 hinge 2 br 7.JPG

26. 046 hinge 2 br 6.JPG

27. 047 hinge 2 br 6.JPG

28. 049 hinge 2 br 5.JPG

29. 050 hinge 2 br 5.JPG

30. 051 hinge 2 br 6.JPG

31. 052 hinge 2 br 4.JPG

32. 053 hinge 2.JPG

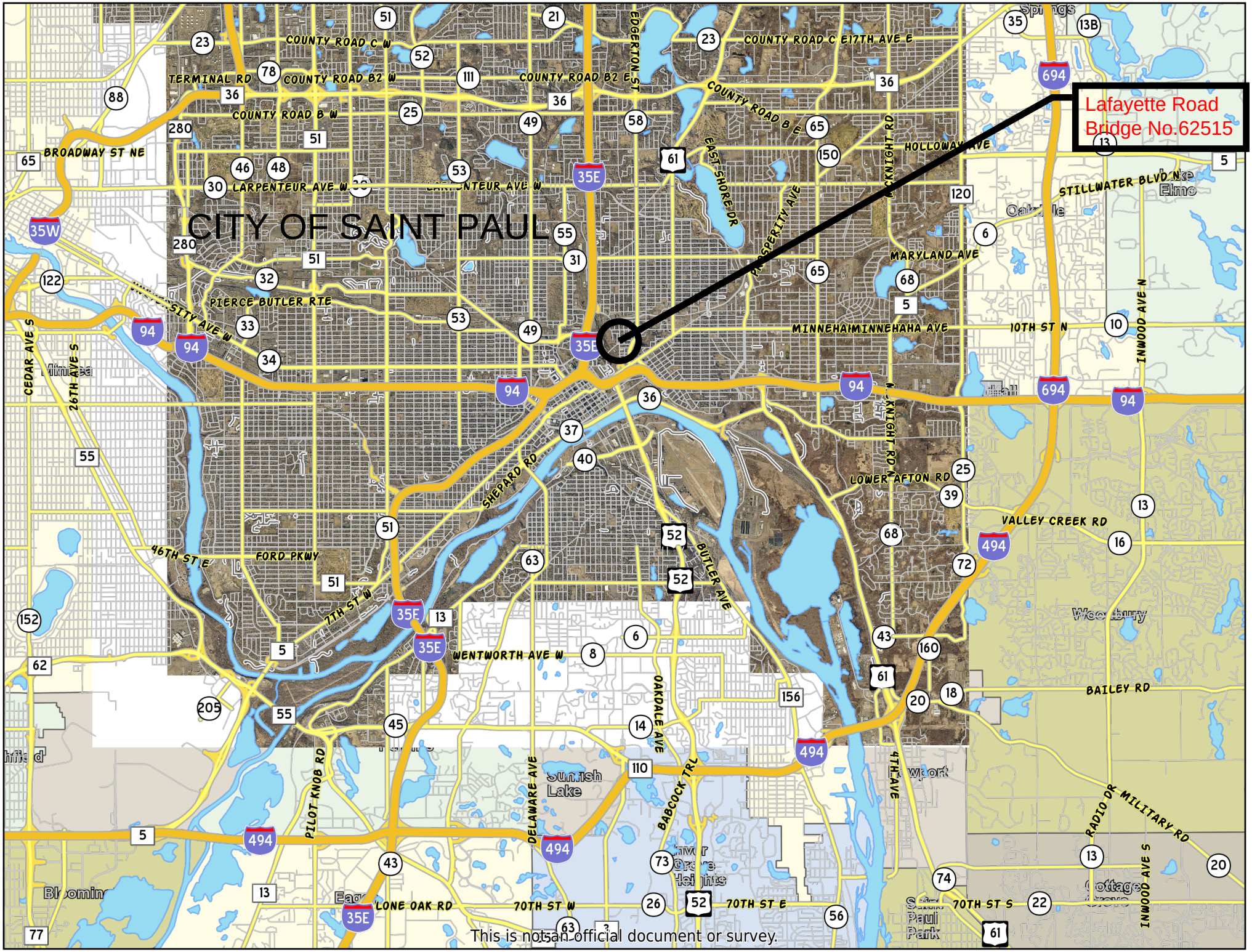
33. 054 hinge 2 br 3.JPG

34. 055 hinge 2 br 2.JPG

35. 057 hingr 2 br 1.JPG

36. 2016 google view - Deck.PNG

37. LS wear-side view facingwest.JPG


Lafayette Road
Bridge No.62515
CITY OF SAINT PAUL
This is not an official document or survey.


JACKSON ST
PENNSYLVANIA AVE
EDGERTON ST
MINNEHAHA AVE E
COMO AVE
PAYNE AVE
RICE ST
UNIVERSITY AVE W
MARION ST
ROBERT ST N
7TH ST E
7TH ST W
SHEPARD RD
WARNER RD
PLATO BLVD E
IAFAYETTE ROAD
BRIDGE NO. 62515
This is not an official document or survey.

City of Saint Paul

City Hall and Court House
15 West Kellogg Boulevard
Phone: 651-266-8560

Signature Copy

Resolution: RES 16-1053

File Number: RES 16-1053

Authorizing the Departments of Public Works and Parks and Recreation to submit 14 project applications for federal funding into the 2016 Metropolitan Council Regional Solicitation Program and to authorize the commitment of a 20% local funding match for any project(s) that get awarded federal funding.

WHEREAS, The Departments of Public Works and Parks and Recreation are proposing to submit 14 project applications for possible federal transportation funding in years 2020 and 2021 under the Metropolitan Council Regional Solicitation Process, and

WHEREAS, there is a required twenty percent local funding match to any project(s) awarded to an agency under the Regional Solicitation Program, and

WHEREAS, the projects to be submitted by the City under the Metropolitan Council Regional Solicitation are:

- Freight Connection from Pierce Butler to I-94 via Transfer, Ellis and Vandalia
- University Avenue Reconstruction - I35E to Lafayette Road
- Sidewalk Infill, Replacement and ADA Compliance - Area Bounded by Maryland-Case-Forest-Duluth
- Tedesco Street Reconstruction - University Avenue to Payne Avenue
- Como Avenue Trail Construction - Raymond Avenue to Hamline Avenue
- Troutbrook Road Connection - Kittson Street to Lafayette/University
- Eastbound Kellogg Boulevard Bridge near the RiverCentre Ramp
- Johnson Parkway Trail (Grand Round) - Burns Avenue to Phalen Boulevard
- Bruce Vento Bicycle and Pedestrian Bridge - connects Sam Morgan Trail with Bruce Vento Trail
- Pierce Butler East Extension - Grotto to Arundel
- Battle Creek to Sam Morgan Regional Trial Rehabilitation
- Arterial Corridor Management (Snelling and Lexington) - Implement Technology to Improve Traffic Flow & Safety (Fiber Optics, Detection, ADA Upgrades)
- Safe Routes to School (SRTS) - Washington Magnet School Area and Ran-Ham Schools (Cretin, Holy Spirit Elementary and Expo Elementary)
- Lafayette Bridge reconstruction from University to Otsego

WHEREAS, these projects all fall within appropriate funding categories and all meet the conditions and requirements specified for eligibility of federal funding, and so

THEREFORE BE IT RESOLVED, by the Council of the City of Saint Paul to authorize submission of the thirteen project applications for possible award of federal transportation funds through the Metropolitan Council Regional Solicitation Program, and

BE IT FURTHER RESOLVED, by the Council of the City of Saint Paul to authorize the commitment of local funds on a twenty percent match basis for any project(s) awarded federal funding under

the Regional Solicitation Program.

At a meeting of the City Council on 7/6/2016, this Resolution was Passed.

Yea: 6 Councilmember Bostrom, Councilmember Brendmoen, Councilmember Tolbert, City Council President Stark, Councilmember Noecker, and Councilmember Prince

Nay: 0

Absent: 1 Councilmember Thao

Vote Attested by Council Secretary Trudy Moloney **Date** 7/6/2016

Approved by the Mayor Chris Coleman **Date** 7/8/2016