Application

10356 - 2018 Bridges

10910 - Lexington Parkway (CSAH 51) Replacement of Bridges 5583 and 7276

Regional Solicitation - Roadways Including Multimodal Elements

Status:	Submitted
Submitted Date:	07/13/2018 6:49 AM

Primary Contact

Name:*		Joseph	Frank	Lux
	Salutation	First Name	Middle Name	Last Name
Title:	Senior Planner			
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What Grant Programs are you most interested in?	Regional Solicitation - Roadways Including Multimodal Elements			

Organization Information

Name:	RAMSEY COUNTY

Jurisdictional Agency (if different):	
Organization Type:	County Government
Organization Website:	
Address:	DEPT OF PUBLIC WORKS 1425 PAUL KIRKWOOD DR
*	ARDEN HILLS (City) / Minnesota (State/Province) / 55112 (Postal Code/Zip)
County:	Ramsey
Phone:*	651-266-7100 Ext.
Fax:	
PeopleSoft Vendor Number	0000023983A30

Project Information

Project Name	Lexington Parkway CSAH 51) Replacement of Bridges 5583 and 7276
Primary County where the Project is Located	Ramsey
Cities or Townships where the Project is Located:	Saint Paul
Jurisdictional Agency (If Different than the Applicant):	Ramsey County
Brief Project Description (Include location, road name/functional class, type of improvement, etc.)	Bridge No. 7276 carries Lexington Parkway (CSAH 51), a Class A Minor Arterial- Augmenter, over Pierce Butler Route (CSAH 33). It has a sufficiency rating of 5408 and is load limited to 16 tons for a single unit and 36 tons for combination units. Bridge 5583 carries Lexington Parkway over the BNSF Railroad and has a sufficiency rating of 3706, with similar load limits. The load limits on these facilities restrict the ability of trucks from the Midway multi-modal yards to use Lexington Parkway to access the University Avenue and I-94 corridors. Because the existing bridges are only separated by approximately 70 feet, we propose to replace them as a single project.
(Limit 2,800 characters; approximately 400 words)	
TIP Description Guidance (will be used in TIP if the project is selected for funding)	Lexington Parkway- Replacement of Bridges 5583 and 7276

Project Length (Miles) 0.1

to the nearest one-tenth of a mile

Project Funding

Are you applying for competitive funds from another source(s) to implement this project? No

If yes, please identify the source(s)

Federal Amount $7,000,000.00

Match Amount $2,192,114.00

Minimum of 20% of project total

Project Total $9,192,114.00

Match Percentage 23.85%

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

Source of Match Funds CSAH and local funds

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

Preferred Program Year

Select one: 2022

Select 2020 or 2021 for TDM projects only. For all other applications, select 2022 or 2023.

Additional Program Years: 2021

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

Project Information-Roadways

County, City, or Lead Agency Ramsey County Public Works

Functional Class of Road Class A Minor Arterial- Augmenter

Road System CSAH

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

Road/Route No. 51

i.e., 53 for CSAH 53

Name of Road Lexington Parkway

Example; 1st ST., MAIN AVE

Zip Code where Majority of Work is Being Performed 55104

(Approximate) Begin Construction Date 05/16/2022

(Approximate) End Construction Date 11/04/2022

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

From: **(Intersection or Address)**	Pierce Butler Route
To: **(Intersection or Address)**	BNSF RR
DO NOT INCLUDE LEGAL DESCRIPTION	
Or At	Bridges No. 5583 and 7276
Primary Types of Work	Bridge Construction
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.:	5583 and 7276
New Bridge/Culvert No.:	TBD
Structure is Over/Under (Bridge or culvert name):	Pierce Butler Route and BNSF RR

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 (2015), 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 goals, objectives, and strategies that relate to the project.

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

Goal: Transportation System Stewardship
Objectives: Efficiently preserve and maintain the regional transportation system in a state of

good repair. Operate the regional transportation system to efficiently and cost-effectively connect people and freight to destinations

Strategies: A1, A2

Goal: Safety and Security

Objectives:Reduce crashes and improve safety and security for all modes of passenger travel and freight transport.

Strategies: B1, B4

Goal: Access to Destinations

Objectives: Increase the availability of multi-modal travel options, especially in congested highway corridors. Ensure access to freight terminals such as river ports, airports, and inter-modal rail yards.

Strategies: C1, C4, C7, C9, C10

Goal: Competitive Economy

Objectives: Support the region?s economic competitiveness through the efficient movement of freight.

Strategies: D1

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:

Ramsey County Transportation Improvement Program (9, 29)

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

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

5.Applicants that are not 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 Modernization and Spot Mobility:** $1,000,000 to $7,000,000*
***Traffic Management Technologies (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 (ADA).

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

9.In order for a selected project to be included in the Transportation Improvement Program (TIP) and approved by USDOT, the public agency sponsor must either have, or be substantially working towards, completing a current Americans with Disabilities Act (ADA) self-evaluation or transition plan that covers the public right of way/transportation, as required under Title II of the ADA.

The applicant is a public agency that employs 50 or more people and has an adopted ADA transition plan that covers the public right of way/transportation. Yes

Date plan adopted by governing body

The applicant is a public agency that employs 50 or more people and is currently working towards completing an ADA transition plan that covers the public rights of way/transportation. Yes

Date process started

Date of anticipated plan completion/adoption

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

Date self-evaluation completed

The applicant is a public agency that employs fewer than 50 people and is working towards completing an ADA self-evaluation that covers the public rights of way/transportation. Yes

Date process started

Date of anticipated plan completion/adoption

(TDM Applicants Only) The applicant is not a public agency subject to the self-evaluation requirements in Title II of the ADA. Yes

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

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

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

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

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

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

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

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

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

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

Roadways Including Multimodal Elements

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

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

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

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

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

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

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

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

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

Requirements - Roadways Including Multimodal Elements

Specific Roadway Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Mobilization (approx. 5% of total cost)	$369,265.00
Removals (approx. 5% of total cost)	$369,265.00
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	$232,636.95
Striping	$0.00
Signing	$0.00
Lighting	$0.00
Turf - Erosion & Landscaping	$0.00
Bridge	$7,385,300.00
Retaining Walls	$0.00
Noise Wall (not calculated in cost effectiveness measure)	$0.00
Traffic Signals	$0.00
Wetland Mitigation	$0.00
Other Natural and Cultural Resource Protection	$0.00
RR Crossing	$0.00
Roadway Contingencies	$835,646.70
Other Roadway Elements	$0.00
Totals	**$9,192,113.65**

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	$9,192,113.65

Construction Cost Total	$9,192,113.65
Transit Operating Cost Total	$0.00

Measure A: Distance to the nearest parallel bridge

RESPONSE:

Location of nearest parallel bridge crossing:	Snelling Avenue (TH 51) and Dale Steet (CSAH 53)
Distance from one end of proposed project to nearest parallel crossing (that is an A-minor arterial or principal arterial) and then back to the other side of the proposed project (calculated by Council Staff):	0
Explanation:	Lexington parkway is located approximately on mile east of Snelling Avenue and one mile west of Dale Street.

(Limit 2,800 characters; approximately 400 words)

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

Existing Employment within 1 Mile:	18468
Existing Manufacturing/Distribution-Related Employment within 1 Mile:	2879
Existing Post-Secondary Students within 1 Mile:	4258
Upload Map	1529590045687_Regional Economy Map.pdf

Please upload attachment in PDF form.

Measure C: Regional Truck Corridor Tiers

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

The project is located on either a Tier 1, Tier 2, or Tier 3 corridor:

(65 Points)

The project provides a direct and immediate connection (i.e., intersects) with either a Tier 1, Tier 2, or Tier 3 corridor:	Yes

(10 Points)

The project is not located on a Tier 1, Tier 2, or Tier 3 corridor:

(0 Points)

Measure A: Current Daily Person Throughput

Location	Lexington Parkway, north of Pierce Butler Route
Current AADT Volume	23700.0

Existing Transit Routes on the Project:	83
Upload "Transit Connections" map	1529590285640_Transit Map.pdf

Please upload attachment in PDF form.

Response: Current Daily Person Throughput

Average Annual Daily Transit Ridership	456.0
Current Daily Person Throughput	31266.0

Measure B: 2040 Forecast ADT

Use Metropolitan Council model to determine forecast (2040) ADT volume	Yes
If checked, METC Staff will provide Forecast (2040) ADT volume	27500

OR

Identify the approved county or city travel demand model to determine forecast (2040) ADT volume	
Forecast (2040) ADT volume	

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

Select one:

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

(up to 100% of maximum score)

Project located in Area of Concentrated Poverty:

(up to 80% of maximum score)

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

(up to 60% of maximum score)

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

(up to 40% of maximum score)

1.(0 to 3 points) A successful project is one that has actively engaged low-income populations, people of color, children, persons with disabilities, and the elderly during the project's development with the intent to limit negative impacts on them and, at the same time, provide the most benefits.
Describe how the project has encouraged or will engage the full cross-section of community in decision-making. Identify the communities to be engaged and where in the project development process engagement has occurred or will occur. Elements of quality engagement include: outreach to specific communities and populations that are likely to be directly impacted by the project; techniques to reach out to populations traditionally not involved in the community engagement related to transportation projects; residents or users identifying potential positive and negative elements of the project; and surveys, study recommendations, or plans that provide feedback from populations that may be impacted by the proposed project. If relevant, describe how NEPA or Title VI regulations will guide engagement activities.

Response:

Lexington Parkway, CSAH 51, is part of a contiguous County State Aid Highway corridor from the Mississippi River to northern Anoka County. This segment of the route provides access to industrial areas around the Midway multi-modal yards, commercial areas to the north and south, and provides the primary access into Como Regional Park, which has a zoo, conservatory, amusement rides, picnic areas, pool, golf course, trails, athletic fields, and sculptures. The park serves approximately two million visitors each year and hosts numerous events each year, the largest being the annual Hmong Freedom and Sports Fest. Lexington Parkway runs through culturally diverse areas of St. Paul, including Frogtown, the Old Rondo neighborhood, the Summit-University area, and Highland Park, as well as Roseville, Falcon Heights, Shoreview, and Arden Hills to the north. Replacing these bridges is critical to maintaining the integrity of this critical route.

(Limit 1,400 characters; approximately 200 words)

2.(0 to 7 points) Describe the projects benefits to low-income populations, people of color, children, people with disabilities, and the elderly. Benefits could relate to safety; public health; access to destinations; travel time; gap closure; leveraging of other beneficial projects and investments; and/or community cohesion. Note that this is not an exhaustive list.

Response:

Lexington Parkway is a route through a diverse, low-income area. Maintaining this route is critical to residents' ability to access the destinations listed above and the integrity of the bridges is necessary to preserving the safety of that route. The load limits necessary due to the structural deficiencies of the bridges restrict transit and thus, restrict the ability of transit-dependent and disabled populations from fully utilizing the route.

(Limit 2,800 characters; approximately 400 words)

3.(-3 to 0 points) Describe any negative externalities created by the project along with measures that will be taken to mitigate them. Negative externalities can result in a reduction in points, but mitigation of externalities can offset reductions.
Below is a list of negative impacts. Note that this is not an exhaustive list.
Increased difficulty in street crossing caused by increased roadway width, increased traffic speed, wider turning radii, or other elements that negatively impact pedestrian access.
Increased noise.
Decreased pedestrian access through sidewalk removal / narrowing, placement of barriers along the walking path, increase in auto-oriented curb cuts, etc.
Project elements that are detrimental to location-based air quality by increasing stop/start activity at intersections, creating vehicle idling areas, directing an increased number of vehicles to a particular point, etc.
Increased speed and/or cut-through traffic.
Removed or diminished safe bicycle access.
Inclusion of some other barrier to access to jobs and other destinations.
Displacement of residents and businesses.
Construction/implementation impacts such as dust; noise; reduced access for travelers and to businesses; disruption of utilities; and eliminated street crossings. These tend to be temporary.
Other

Response:

During construction, access across the bridges will be restricted, though it is anticipated that limited access can be maintained. There will be the expected noise and other construction impacts. The adjacent bike and pedestrian bridge can remain open during construction. We anticipate no long-term negative impacts from rebuilding these bridges.

(Limit 2,800 characters; approximately 400 words)

Upload Map

1529592333687_Socio Economic Map.pdf

Measure B: Affordable Housing

City	Segment Length (For stand-alone projects, enter population from Regional Economy map) within each City/Township	Segment Length/Total Project Length	Score	Housing Score Multiplied by Segment percent
St. Paul	0.1	1.0	100.0	100.0

Total Project Length

Total Project Length (as entered in the "Project Information" form) 0.1

Affordable Housing Scoring

Total Project Length (Miles) or Population	0.1
Total Housing Score	100.0

Affordable Housing Scoring

Measure A: Bridge Condition

Bridge Sufficiency Rating	37.6
Upload Structure Inventory Report	1529607085953_2017 Routine Inspection - 5583 Lexington-CSAH 51 over BNSF railroad.pdf

Please upload attachment in PDF form.

Measure B: Load-Posting

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

Measure A: Multimodal Elements and Existing Connections

Response:

Bridges 5583 and 7276 have six-foot wide sidewalks on each side. These will be increased to ten feet with this project. Adjacent to these bridges, on the west side of Lexington Parkway, are two bike/pedestrian bridge, each with a twelve foot wide surface. There is a trail associated with these bridges that connects to the north and south, continuing north into Como Park.

(Limit 2,800 characters; approximately 400 words)

Transit Projects Not Requiring Construction

If the applicant is completing a transit application that is operations only, check the box and do not complete the remainder of the form. These projects will receive full points for the Risk Assessment.
Park-and-Ride and other transit construction projects require completion of the Risk Assessment below.

Check Here if Your Transit Project Does Not Require Construction

Measure A: Risk Assessment - Construction Projects

1)Layout (30 Percent of Points)

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

Layout approved by the applicant and all impacted jurisdictions (i.e., cities/counties that the project goes through or agencies that maintain the roadway(s)). A PDF of the layout must be attached along with letters from each jurisdiction to receive points.

100%

Attach Layout

Please upload attachment in PDF form.

Layout completed but not approved by all jurisdictions. A PDF of the layout must be attached to receive points. Yes

50%

Attach Layout

Please upload attachment in PDF form.

Layout has not been started

0%

Anticipated date or date of completion

2)Review of Section 106 Historic Resources (20 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%

There are historical/archeological properties present but determination of no historic properties affected is anticipated.

100%

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

80%

Historic/archeological property impacted; determination of adverse effect anticipated

40%

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

0%

Project is located on an identified historic bridge

3)Right-of-Way (30 Percent of Points)

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

100%

Right-of-way, permanent or temporary easements required, plat, legal descriptions, or official map complete

50%

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

25%

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

0%

Anticipated date or date of acquisition

4)Railroad Involvement (20 Percent of Points)

No railroad involvement on project or railroad Right-of-Way agreement is executed (include signature page, if applicable)

100%

Signature Page

Please upload attachment in PDF form.

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

50%

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

0%

Anticipated date or date of executed Agreement	01/31/2020

Measure A: Cost Effectiveness

Total Project Cost (entered in Project Cost Form):	$9,192,113.65
Enter Amount of the Noise Walls:	$0.00
Total Project Cost subtract the amount of the noise walls:	$9,192,113.65
Points Awarded in Previous Criteria	
Cost Effectiveness	$0.00

Other Attachments

File Name	Description	File Size
2017 Routine Inspection - 5583 Lexington-CSAH 51 over BNSF railroad.pdf	Bridge No. 5583 Inspection Report	1.3 MB
2017 Routine Inspection - 7276 CSAH 51 - Lexington Pkwy-CSAH 51 over CSAH 33-Pierce Butler Route.pdf	Bridge No. 7276 Inspection Report	1.4 MB
BRIDGES 5583 AND 7276 ESTIMATE.pdf	Engineer's Estimate	112 KB
Lexington Bridges Layout.pdf	Project Layout	884 KB
Lexington Bridges Letter of Support RC 06.19.18.pdf	City of Saint Paul Support Letter	233 KB
LexPkwyBRoverPrcButler&BNSF_LocationMap.pdf	Project Location Map	774 KB

Regional Economy

Bridges Project: Lexington Parkway- Replacement of Bridges 5583 and 7276 | Map ID: 1529431146403

Results

WITHIN ONE MI of project:
Postsecondary Students: 4258

Totals by City:
St. Paul
Population: 32282
Employment: 18468
Mfg and Dist Employment: 2879

Project Points
Project
Manfacturing/Distribution Centers
Job Concentration Centers

0 0.0225 0.045 0.09 0.135 0.18 Miles

Created: 6/19/2018
LandscapeRSA5

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

METROPOLITAN COUNCIL

Transit Connections

Bridges Project: Lexington Parkway- Replacement of Bridges 5583 and 7276 | Map ID: 1529431146403

Results

Transit with a Direct Connection to project:
83

**indicates Planned Alignments*

Project Points
Active Stop
Project
Transit Routes

0 0.035 0.07 0.14 0.21 0.28 Miles

Created: 6/19/2018
LandscapeRSA3

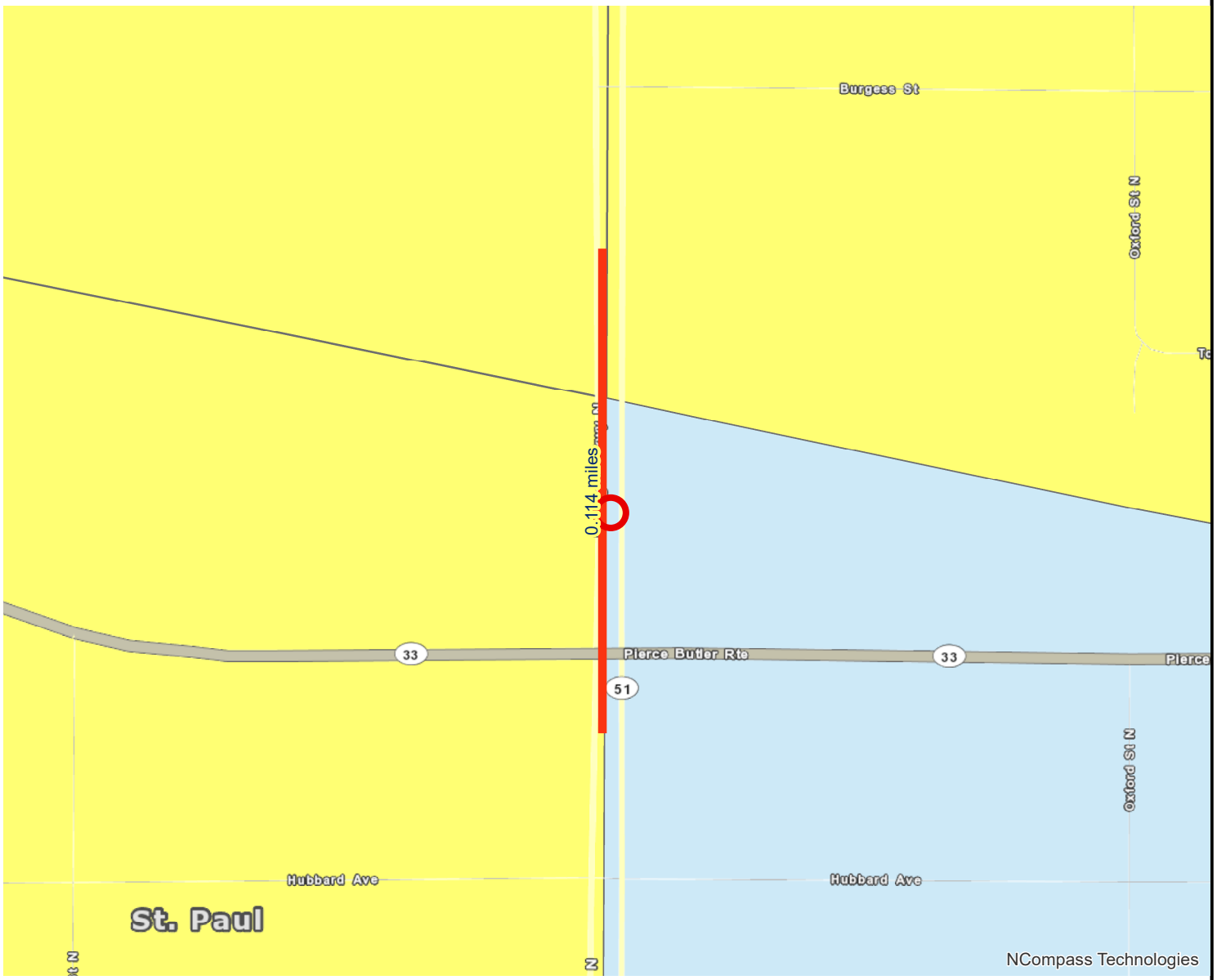
METROPOLITAN COUNCIL

Socio-Economic Conditions

Bridges Project: Lexington Parkway- Replacement of Bridges 5583 and 7276 | Map ID: 1529431146403

Results

Project census tracts are above the regional average for population in poverty or population of color:
(0 to 18 Points)



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

0 0.0225 0.045 0.09 0.135 0.18 Miles

Created: 6/19/2018
LandscapeRSA2

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

METROPOLITAN COUNCIL

2017 ROUTINE
BRIDGE INSPECTION REPORT

BRIDGE # 5583
CSAH 51(LEX PKWY) over BNSF RR

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

STATE: Minnesota

Date of Inspection: 10/16/2017
Equipment Used:

Owner: County Highway Agency

Inspected By: Burt, Dick; Engel, Michael; Grau, Joe

Report Written By: Joe Grau
Report Reviewed By: Glenn Pagel
Final Report Date: 12/27/2017

Table of Contents

Minnesota Structure Inventory Report

Bridge ID: 5583 **CSAH 51(LEX PKWY) over BNSF RR** Date: 10/16/2017

+GENERAL+

Agency Br. No.	**Crew**
District	05 **Maint. Area**
County	062 - Ramsey
City	St Paul
Township	
Desc. Loc.	0.8 MI N OF UNIV AVE
Sect., Twp., Range	26 - 029N - 23W
Latitude	44 ° 58 ' 02.69 "
Longitude	-93 ° 08 ' 47.73 "
Custodian	02 - County Highway Agency
Owner	02 - County Highway Agency
BMU Agreement	
Year Built	1936
MN Year Reconstructed	1982
FHWA Year Reconstructed	
MN Temporary Status	
Bridge Plan Location	4 - MUNICIPAL
Date Opened to Traffic	
On - Off System	1 - ON
Legislative District	65A
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	
Appr. Span Design	
Appr. Span Detail	
Skew	11 RIGHT
Culvert Type	
Barrel Length	
Cantilever ID	

Number of Spans

MAIN: 5 **APPR:** 0 **TOTAL:**

Main Span Length	66.0	**ft.**
Structure Length	251.3	**ft.**
Deck Width (Out-to-Out)	62.3	**ft.**
Deck Material	1 - Concrete Cast-in-Place	
Wear Surf Type	4 - Low Slump Concrete	
Wear Surf Install Year	1982	
Wear Course/Fill Depth	0.17 **ft.**	
Deck Membrane	0 - None	
Deck Rebars	1 - Epoxy Coated Reinforcing	
Deck Rebars Install Year	1982	
Structure Area (Out-to-Out)	15656	**sq. ft.**
Roadway Area (Curb-to-Curb)	12066	**sq. ft.**

Sidewalk Width	**50A. Lt**	6.00 **ft.**	**50B. Rt**	6.00	**ft.**
Curb Height	**Lt**	0.83 **ft.**	**Rt**	0.83	**ft.**
Rail Type	**Lt**	27	**Rt**	27	

+ROADWAY+

Bridge Match ID (TIS)	0
Roadway O/U Key	Route On Structure
Route Sys	04 - CSAH **Number** 51
Roadway Name or Description	CSAH 51
Level of Service	1 - MAINLINE
Roadway Type	2 - 2-way traffic
Control Section (TH Only)	
Reference Point	
Detour Length	2.0 **mi.**
Lanes	**ON** 4 **UNDER** 0
	ADT 24402 **YEAR** 2008
HCADT	**ADTT** **%**
Functional Class	16 - Urban - Minor Arterial

+RDWY DIMENSIONS+

If Divided	**NB-EB**	**SB-WB**
Roadway Width	48.00 **ft.**	**ft.**
Vertical Clearance	**ft.**	**ft.**
Max. Vert. Clear.	**ft.**	**ft.**
Horizontal Clear.	47.9 **ft.**	**ft.**
Lateral Clearance	**ft.**	**ft.**

Appr. Surface Width	48.0	**ft.**
Bridge Roadway Width	48.0	**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 (Material/Type)	1 - CONC 3 - FTG PILE
Pier Foundation (Material/Type)	1 - CONC 1 - SPRD SOIL
Historic Status	5 - Not eligible

+PAINT+

Year Painted	1982
Unsound Paint %	5
Painted Area	20000 **sq. ft.**
Primer Type	1 - Lead - non 3309
Finish Type	F - - Phenolic Resin Alum

+BRIDGE SIGNS+

Posted Load	2 - Vehicle & Semi (Type R12-5)
Traffic	0 - Not Required
Horizontal	0 - Not Required
Vertical	N - Not Applicable

+INSPECTION+

Userkey	199
Structurally Deficient	N
Functionally Obsolete	Y
Sufficiency Rating	37.6
Routine Inspection Date	10/16/2017
Routine Inspection Frequency	12
Inspector Name	Grau, Joe
Status	P - Posted for Load

+NBI CONDITION RATINGS+

Deck	6	**Unsound Deck %**
Superstructure	6	
Substructure	5	
Channel	N	
Culvert	N	

+NBI APPRAISAL RATINGS+

Structure Evaluation	4
Deck Geometry	2
Underclearances	4
Waterway Adequacy	N
Approach Alignment	7

+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			
Underwater			
Pinned Asbly.			
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	6 - HS 20+MOD	
Operating Rating	2 - HS TRUCK	17.0
Inventory Rating	2 - HS TRUCK	10.2

Posting **VEH:** 25 **SEMI:** 36 **DBL:** 36

Rating Date 05/14/2014

Overweight Permit Codes

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

Minnesota Structure Inventory Report

Additional Roadways

Bridge ID: 5583 CSAH 51(LEX PKWY) over BNSF RR **Date:** 12/27/2017

MINNESOTA BRIDGE INSPECTION REPORT

12/27/2017

BRIDGE 5583 CSAH 51(LEX PKWY) OVER BNSF RR

County: Ramsey
City: St Paul
Township:
Section: 26 Township: 029N Range: 23W
Span Type: 4 - Steel Continuous 2 - Stringer/Multi-beam or Girder
List:
NBI Deck: 6 Super: 6 Sub: 5 Chan: N Culv: N

Location: 0.8 MI N OF UNIV AVE
Route: 04 - CSAH 51 Ref. Pt.: 003+00.825
Control Section:
Maint. Area:
Local Agency Bridge Nbr.:
Open, Posted, Closed: P - Posted for Load
MN Scour Code: A - NON WATERWAY

Length: 251.3 ft.
Deck Width: 62.3 ft.
Rdwy. Area/ Pct. Unsnd: 12066 sq. ft. / %
Paint Area/ Pct. Unsnd: 20000 sq. ft. / 5%
Culvert: N/A
Postings: 25 36 36

Appraisal Ratings - Approach: 7 Waterway: N
Required Bridge Signs - Load Posting: 2 - Vehicle & Semi (Type R12-5) Traffic: 0 - Not Required
Horizntal: 0 - Not Required Vertical: N - Not Applicable

Unofficial Structurally Deficient N
Unofficial Functionally Obsolete Y
Unofficial Sufficiency Rating 37.6

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	10/16/2017	15656 SF	15302	287	67	0
		Routine	10/16/2016	15656 SF	15317	280	59	0

Notes: Distressed areas - efflorescence, rust staining and cracking present. 2011-17
Water / salt saturation is isolated to the gutter lines. 2017
57 SF of delamination / spall is present. 2016-17
280 SF of cracking with efflorescence is present. 2016-17
25 SF of water / salt saturation. 2016-17

	510 - Wearing Surfaces	Routine	10/16/2017	12066 SF	11825	0	241	0
		Routine	10/16/2016	12066 SF	11825	0	241	0

Notes: Low Slump Overlay with Epoxy Rebar Notes:
Crack sealing recommended. 2011-17
3 sq. ft. of spalling with exposed rebar where repair took place in 2005-07. (TKDA 2012)
4 Sq. ft. spall - asphalt patched - SE end. 2014-15

107	Steel Open Girder/Beam	Routine	10/16/2017	3012 LF	2907	75	30	0
		Routine	10/16/2016	3012 LF	2907	75	30	0

Notes: Gunite spalling off beams in span 3 over the RR. (TKDA 2012)
Pack rust distress at steel beam ends / bearing areas. 2011-17
Moderate toward extensive corrosion at the steel beam ends. (critical stress areas.) 2017

	515 - Steel Protective Coating	Routine	10/16/2017	21886 SF	0	20793	656	437
		Routine	10/16/2016	21886 SF	0	20793	656	437

Notes: The paint system has extensive deterioration at the beam ends. 2015-17
Corrosion with flaking rust present at the beam ends. 2011-17
Prep. and paint recommended. 2011-17
Moderate toward extensive corrosion at the steel beam ends. (critical stress areas.) 2017

205	Reinforced Concrete Column	Routine	10/16/2017	20 EA	10	5	5	0
		Routine	10/16/2016	20 EA	12	3	5	0

Notes: 4 sq. ft. +/- spalling concrete with exposed rebar on Pier #4 south face. (TKDA 2012) -16
All columns at S. pier have delamination's. 2017
Various column spalls / delamination's - see photos. 2014-17
1 SF spall at pier 3, S. face, delamination is below. 2016-17

BRIDGE 5583 CSAH 51(LEX PKWY) OVER BNSF RR

ELEM NBR	ELEMENT NAME	REPORT TYPE	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
215	Reinforced Concrete Abutment	Routine	10/16/2017	155 LF	121	25	9	0
		Routine	10/16/2016	155 LF	121	25	9	0
	Notes: Abut. south, 1st bay from the east has 12 sq. ft. concrete spalling with exposed rebar. (TKDA 2012)-17 Exposed rebar along with the 3rd bay in from the east on the abut. back wall. (TKDA 2012) Abut. south, 1st bay from the west has 3 sq. ft. concrete spalling with exposed rebar. (TKDA 2012)-17 Moisture along the entire N.W. abut. back wall. Joint is above. (TKDA 2012) NBI of 5. 2017 NW abut seat and deck repaired. 2014 Abut. south seat repair is recommended. 2015-17 The top of the west wing wall is spalled. 2002-13 NE & SE corner caps are spalled 05-13 The northeast wing is spalled on the top 1" mortar cap. 2005-14							
220	Reinforced Concrete Pile Cap/Footing	Routine	10/16/2017	216 LF	204	0	12	0
		Routine	10/16/2016	216 LF	204	0	12	0
	Notes: Wide cracks are present - .05" vertical. 2016-17							
234	Reinforced Concrete Pier Cap	Routine	10/16/2017	233 LF	229	4	0	0
		Routine	10/16/2016	233 LF	230	3	0	0
	Notes: Small delamination at pier 1. 2016-17 4' vertical crack at the S. pier cap. (Both sides). 2017 Rust staining at the N. pier cap. (west end below the bearing). 2017							
300	Strip Seal Expansion Joint	Routine	10/16/2017	115 LF	0	115	0	0
		Routine	10/16/2016	115 LF	0	115	0	0
	Notes: Strip seals are dirty. 2015-17 Gland leaks. 2017							
301	Pourable Joint Seal	Routine	10/16/2017	115 LF	0	115	0	0
		Routine	10/16/2016	115 LF	0	115	0	0
	Notes: Poured sealant has loss of adhesion in some areas. 2015-17							
311	Movable Bearing	Routine	10/16/2017	60 EA	36	24	0	0
		Routine	10/16/2016	60 EA	36	24	0	0
	Notes: Clean, prep and painting is recommended. 2015-17							
313	Fixed Bearing	Routine	10/16/2017	12 EA	6	6	0	0
		Routine	10/16/2016	12 EA	6	6	0	0
	Notes: Abut. bearings are fixed. 2011 Pier 3 and 4 bearings are fixed. 2011 see sheet 10 of 17. 1982 remodel Corrosion on each facia beam bearing, typical. (TKDA 2012) NW facia bearing, corrosion with possible section loss. 2013 NW abut seat repair completed. 2014 Clean, prep and painting is recommended. 2015-17							
321	Reinforced Concrete Approach Slab	Routine	10/16/2017	1920 SF	1874	46	0	0
		Routine	10/16/2016	1920 SF	1874	6	40	0
	Notes: 6 SF of spall on the N & S approaches. 2016 repaired in 2017. Unsound patches found at south approach panel. 2016 repaired in 2017. Unsealed cracks of wide size on the approaches. 2016-17							
330	Metal Bridge Railing	Routine	10/16/2017	502 LF	502	0	0	0
		Routine	10/16/2016	502 LF	502	0	0	0
	515 - Steel Protective Coating	Routine	10/16/2017	657 SF	607	0	0	50
		Routine	10/16/2016	657 SF	657	0	0	0
	Notes: Rust staining at the base plates of the metal railing. 2017							

BRIDGE 5583 CSAH 51(LEX PKWY) OVER BNSF RR

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	10/16/2017	502 LF	502	0	0	0
		Routine	10/16/2016	502 LF	502	0	0	0
	Notes: Vertical cracking of the concrete bridge rail. 2005-17							
800	Critical Deficiencies or Safety Hazards	Routine	10/16/2017	1 EA	1	0	0	0
		Routine	10/16/2016	1 EA	1	0	0	0
	Notes: NO CRITICAL FINDINGS OBSERVED DURING THE LAST INSPECTION. 2016-17							
810	Concrete Decks - Cracking & Sealing	Routine	10/16/2017	5653 LF	0	5653	0	0
		Routine	10/16/2016	5653 LF	0	5653	0	0
	Notes: the cracks are unsealed. 2017 Moderate map cracking at a density of less than five feet. 2013-17 4,853 LF of cracks on the roadway wear surface. 2016-17 800 LF of cracks on the sidewalks. 2016-17							
815	Plow Fingers	Routine	10/16/2017	1 EA	1	0	0	0
		Routine	10/16/2016	1 EA	1	0	0	0
	Notes: All repairs completed. 2016-17							
855	Secondary Members (Superstructure)	Routine	10/16/2017	1 EA	0	0	1	0
		Routine	10/16/2016	1 EA	0	0	1	0
	Notes: 2nd bay east concrete end diaphram has spalling concrete with exposed rebar near the flange of the steel beam. (TKDA 2012) -17							
883	Concrete Shear Cracking	Routine	10/16/2017	1 EA	1	0	0	0
		Routine	10/16/2016	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.							
890	Load Posting or Vertical Clearance Signing	Routine	10/16/2017	1 EA	1	0	0	0
		Routine	10/16/2016	1 EA	1	0	0	0
	Notes: Rating and Load Posting Analysis done. 2012 Revised by TKDA : 25 / 36 / 36 Ton 1-15-2013 MNDOT notified by email. 2014 Required load posting signs are in place. 2014-17							
892	Slopes & Slope Protection	Routine	10/16/2017	1 EA	0	1	0	0
		Routine	10/16/2016	1 EA	0	1	0	0
	Notes: 1/2 cu. yd. void at the top of the S. slope. Minor to moderate erosion on the S. slope. 2016-17							
894	Deck & Approach Drainage	Routine	10/16/2017	1 EA	1	0	0	0
		Routine	10/16/2016	1 EA	1	0	0	0
	Notes: Use this element to rate the condition, function, and adequacy of the drainage system.							
895	Sidewalk, Curb, & Median	Routine	10/16/2017	1 EA	1	0	0	0
		Routine	10/16/2016	1 EA	0	1	0	0
	Notes: Resealing of cracks recommended. 2011-17 Isolated delam - SB curb at the S. end. 2016 South end joint, curb repair and repair hole at the gutter line. 2017							
899	Miscellaneous Items	Routine	10/16/2017	1 EA	1	0	0	0
		Routine	10/16/2016	1 EA	1	0	0	0
	Notes: Lighting is present on the bridge rail - both sides. (2 total) 2015-17							

BRIDGE 5583 CSAH 51(LEX PKWY) OVER BNSF RR

ELEM NBR	ELEMENT NAME	REPORT TYPE	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
900	Protected Species	Routine	10/16/2017	1 EA	1	0	0	0
		Routine	10/16/2016	1 EA	1	0	0	0

Notes: Use this element to track the presence of protected species living on this structure.
None found in 2016-17.

General Notes: BNSF-RR contact:
Michael Anderson (763) 782-3310 cell (612) 749-3401 michael.anderson5@bnsf.com
Kyle Kirberger cell (612) 219-4219 Kyle.Kirberger@BNSF.com

Bridge Owner - Ramsey County

58. Deck NBI: Moderate cracking, minor delams / spalls. 2011

36A. Brdg Railings NBI:

36B. Transitions NBI:

36C. Appr Guardrail NBI:

36D. Appr Guardrail Terminal NBI:

59. Superstructure NBI: Moderate toward extensive corrosion at the steel beam ends. (critical stress areas.) 2017

60. Substructure NBI: Substructure has moderate deterioration. 2017
Concrete abutment - Moderate spalling of abutment seats. (south side abut.) 2017
- Exposed reinforcement is present. (corrosion / rust) 2017
Concrete columns - Minor to moderate deterioration. Isolated spalls with exposed reinforcement. 2017

61. Channel NBI:

62. Culvert NBI:

71. Waterway Adeq NBI:

72. Appr Roadway Alignment NBI:

Joe Grau
Inspector's Signature

Glenn Pagel
Reviewer's Signature

1. beam ends pier 1 - rusty - north face.JPG

2. beam ends pier 4 - rusty.JPG

3. longitudinal cracking at curb face east side mid span.JPG

4. longitudinal cracks south approach panel.JPG

5. 2013 Google view - Lex_3.png

6. Diaphragm at pier 4 (1).JPG

7. 2nd pier fron N, E end.JPG

8. 2016 google view_3.PNG

9. deck.JPG

10. N abut W end.JPG

11. N pier W end.JPG

12. NE Abut Seat.JPG

13. NE Abut.JPG

14. S abut E end.JPG

15. S abut W end.JPG

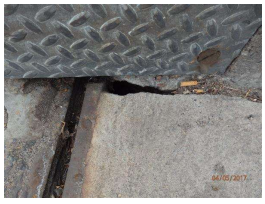
16. S pier cap midspan (1).JPG

17. S pier cap midspan (2).JPG

18. SE Abut Seat.JPG

19. SE Abut.JPG

20. SE Exp.JPG



21. SE Hole.JPG

22. SE Slope.JPG

23. South Apr.JPG

24. SW Abut seat.JPG

25. SW Abut Spall.JPG

26. SW Exp.JPG

27. SW Hole.JPG

28. SW Slope.JPG

2017 ROUTINE
BRIDGE INSPECTION REPORT

BRIDGE # 5583
CSAH 51(LEX PKWY) over BNSF RR

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

STATE: Minnesota

Date of Inspection: 10/16/2017
Equipment Used:

Owner: County Highway Agency

Inspected By: Burt, Dick; Engel, Michael; Grau, Joe

Report Written By: Joe Grau
Report Reviewed By: Glenn Pagel
Final Report Date: 12/27/2017

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Minnesota Structure Inventory Report

Bridge ID: 5583 **CSAH 51(LEX PKWY) over BNSF RR** Date: 10/16/2017

+GENERAL+

Agency Br. No.	**Crew**
District	05 **Maint. Area**
County	062 - Ramsey
City	St Paul
Township	
Desc. Loc.	0.8 MI N OF UNIV AVE
Sect., Twp., Range	26 - 029N - 23W
Latitude	44 ° 58 ' 02.69 "
Longitude	-93 ° 08 ' 47.73 "
Custodian	02 - County Highway Agency
Owner	02 - County Highway Agency
BMU Agreement	
Year Built	1936
MN Year Reconstructed	1982
FHWA Year Reconstructed	
MN Temporary Status	
Bridge Plan Location	4 - MUNICIPAL
Date Opened to Traffic	
On - Off System	1 - ON
Legislative District	65A
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	
Appr. Span Design	
Appr. Span Detail	
Skew	11 RIGHT
Culvert Type	
Barrel Length	
Cantilever ID	

Number of Spans

MAIN: 5 **APPR:** 0 **TOTAL:**

Main Span Length	66.0	**ft.**
Structure Length	251.3	**ft.**
Deck Width (Out-to-Out)	62.3	**ft.**
Deck Material	1 - Concrete Cast-in-Place	
Wear Surf Type	4 - Low Slump Concrete	
Wear Surf Install Year	1982	
Wear Course/Fill Depth	0.17 **ft.**	
Deck Membrane	0 - None	
Deck Rebars	1 - Epoxy Coated Reinforcing	
Deck Rebars Install Year	1982	
Structure Area (Out-to-Out)	15656	**sq. ft.**
Roadway Area (Curb-to-Curb)	12066	**sq. ft.**

Sidewalk Width	**50A. Lt**	6.00 **ft.**	**50B. Rt**	6.00	**ft.**
Curb Height	**Lt**	0.83 **ft.**	**Rt**	0.83	**ft.**
Rail Type	**Lt**	27	**Rt**	27	

+ROADWAY+

Bridge Match ID (TIS)	0
Roadway O/U Key	Route On Structure
Route Sys	04 - CSAH **Number** 51
Roadway Name or Description	CSAH 51
Level of Service	1 - MAINLINE
Roadway Type	2 - 2-way traffic
Control Section (TH Only)	
Reference Point	
Detour Length	2.0 **mi.**
Lanes	**ON** 4 **UNDER** 0
	ADT 24402 **YEAR** 2008
HCADT	**ADTT** **%**
Functional Class	16 - Urban - Minor Arterial

+RDWY DIMENSIONS+

If Divided	**NB-EB**	**SB-WB**
Roadway Width	48.00 **ft.**	**ft.**
Vertical Clearance	**ft.**	**ft.**
Max. Vert. Clear.	**ft.**	**ft.**
Horizontal Clear.	47.9 **ft.**	**ft.**
Lateral Clearance	**ft.**	**ft.**

Appr. Surface Width	48.0	**ft.**
Bridge Roadway Width	48.0	**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 (Material/Type)	1 - CONC 3 - FTG PILE
Pier Foundation (Material/Type)	1 - CONC 1 - SPRD SOIL
Historic Status	5 - Not eligible

+PAINT+

Year Painted	1982
Unsound Paint %	5
Painted Area	20000 **sq. ft.**
Primer Type	1 - Lead - non 3309
Finish Type	F - - Phenolic Resin Alum

+BRIDGE SIGNS+

Posted Load	2 - Vehicle & Semi (Type R12-5)
Traffic	0 - Not Required
Horizontal	0 - Not Required
Vertical	N - Not Applicable

+INSPECTION+

Userkey	199
Structurally Deficient	N
Functionally Obsolete	Y
Sufficiency Rating	37.6
Routine Inspection Date	10/16/2017
Routine Inspection Frequency	12
Inspector Name	Grau, Joe
Status	P - Posted for Load

+NBI CONDITION RATINGS+

Deck	6	**Unsound Deck %**
Superstructure	6	
Substructure	5	
Channel	N	
Culvert	N	

+NBI APPRAISAL RATINGS+

Structure Evaluation	4
Deck Geometry	2
Underclearances	4
Waterway Adequacy	N
Approach Alignment	7

+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			
Underwater			
Pinned Asbly.			
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	6 - HS 20+MOD	
Operating Rating	2 - HS TRUCK	17.0
Inventory Rating	2 - HS TRUCK	10.2

Posting **VEH:** 25 **SEMI:** 36 **DBL:** 36

Rating Date 05/14/2014

Overweight Permit Codes

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

Minnesota Structure Inventory Report

Additional Roadways

Bridge ID: 5583 CSAH 51(LEX PKWY) over BNSF RR **Date:** 12/27/2017

MINNESOTA BRIDGE INSPECTION REPORT

12/27/2017

BRIDGE 5583 CSAH 51(LEX PKWY) OVER BNSF RR

County: Ramsey
City: St Paul
Township:
Section: 26 Township: 029N Range: 23W
Span Type: 4 - Steel Continuous 2 - Stringer/Multi-beam or Girder
List:
NBI Deck: 6 Super: 6 Sub: 5 Chan: N Culv: N

Location: 0.8 MI N OF UNIV AVE
Route: 04 - CSAH 51 Ref. Pt.: 003+00.825
Control Section:
Maint. Area:
Local Agency Bridge Nbr.:
Open, Posted, Closed: P - Posted for Load
MN Scour Code: A - NON WATERWAY

Length: 251.3 ft.
Deck Width: 62.3 ft.
Rdwy. Area/ Pct. Unsnd: 12066 sq. ft. / %
Paint Area/ Pct. Unsnd: 20000 sq. ft. / 5%
Culvert: N/A
Postings: 25 36 36

Appraisal Ratings - Approach: 7 Waterway: N
Required Bridge Signs - Load Posting: 2 - Vehicle & Semi (Type R12-5) Traffic: 0 - Not Required
Horizntal: 0 - Not Required Vertical: N - Not Applicable

Unofficial Structurally Deficient N
Unofficial Functionally Obsolete Y
Unofficial Sufficiency Rating 37.6

ELEM NBR	ELEMENT NAME	REPORT TYPE	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
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57 SF of delamination / spall is present. 2016-17
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		Routine	10/16/2016	12066 SF	11825	0	241	0

Notes: Low Slump Overlay with Epoxy Rebar Notes:
Crack sealing recommended. 2011-17
3 sq. ft. of spalling with exposed rebar where repair took place in 2005-07. (TKDA 2012)
4 Sq. ft. spall - asphalt patched - SE end. 2014-15

107	Steel Open Girder/Beam	Routine	10/16/2017	3012 LF	2907	75	30	0
		Routine	10/16/2016	3012 LF	2907	75	30	0

Notes: Gunite spalling off beams in span 3 over the RR. (TKDA 2012)
Pack rust distress at steel beam ends / bearing areas. 2011-17
Moderate toward extensive corrosion at the steel beam ends. (critical stress areas.) 2017

	515 - Steel Protective Coating	Routine	10/16/2017	21886 SF	0	20793	656	437
		Routine	10/16/2016	21886 SF	0	20793	656	437

Notes: The paint system has extensive deterioration at the beam ends. 2015-17
Corrosion with flaking rust present at the beam ends. 2011-17
Prep. and paint recommended. 2011-17
Moderate toward extensive corrosion at the steel beam ends. (critical stress areas.) 2017

205	Reinforced Concrete Column	Routine	10/16/2017	20 EA	10	5	5	0
		Routine	10/16/2016	20 EA	12	3	5	0

Notes: 4 sq. ft. +/- spalling concrete with exposed rebar on Pier #4 south face. (TKDA 2012) -16
All columns at S. pier have delamination's. 2017
Various column spalls / delamination's - see photos. 2014-17
1 SF spall at pier 3, S. face, delamination is below. 2016-17

BRIDGE 5583 CSAH 51(LEX PKWY) OVER BNSF RR

ELEM NBR	ELEMENT NAME	REPORT TYPE	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
215	Reinforced Concrete Abutment	Routine	10/16/2017	155 LF	121	25	9	0
		Routine	10/16/2016	155 LF	121	25	9	0
	Notes: Abut. south, 1st bay from the east has 12 sq. ft. concrete spalling with exposed rebar. (TKDA 2012)-17 Exposed rebar along with the 3rd bay in from the east on the abut. back wall. (TKDA 2012) Abut. south, 1st bay from the west has 3 sq. ft. concrete spalling with exposed rebar. (TKDA 2012)-17 Moisture along the entire N.W. abut. back wall. Joint is above. (TKDA 2012) NBI of 5. 2017 NW abut seat and deck repaired. 2014 Abut. south seat repair is recommended. 2015-17 The top of the west wing wall is spalled. 2002-13 NE & SE corner caps are spalled 05-13 The northeast wing is spalled on the top 1" mortar cap. 2005-14							
220	Reinforced Concrete Pile Cap/Footing	Routine	10/16/2017	216 LF	204	0	12	0
		Routine	10/16/2016	216 LF	204	0	12	0
	Notes: Wide cracks are present - .05" vertical. 2016-17							
234	Reinforced Concrete Pier Cap	Routine	10/16/2017	233 LF	229	4	0	0
		Routine	10/16/2016	233 LF	230	3	0	0
	Notes: Small delamination at pier 1. 2016-17 4' vertical crack at the S. pier cap. (Both sides). 2017 Rust staining at the N. pier cap. (west end below the bearing). 2017							
300	Strip Seal Expansion Joint	Routine	10/16/2017	115 LF	0	115	0	0
		Routine	10/16/2016	115 LF	0	115	0	0
	Notes: Strip seals are dirty. 2015-17 Gland leaks. 2017							
301	Pourable Joint Seal	Routine	10/16/2017	115 LF	0	115	0	0
		Routine	10/16/2016	115 LF	0	115	0	0
	Notes: Poured sealant has loss of adhesion in some areas. 2015-17							
311	Movable Bearing	Routine	10/16/2017	60 EA	36	24	0	0
		Routine	10/16/2016	60 EA	36	24	0	0
	Notes: Clean, prep and painting is recommended. 2015-17							
313	Fixed Bearing	Routine	10/16/2017	12 EA	6	6	0	0
		Routine	10/16/2016	12 EA	6	6	0	0
	Notes: Abut. bearings are fixed. 2011 Pier 3 and 4 bearings are fixed. 2011 see sheet 10 of 17. 1982 remodel Corrosion on each facia beam bearing, typical. (TKDA 2012) NW facia bearing, corrosion with possible section loss. 2013 NW abut seat repair completed. 2014 Clean, prep and painting is recommended. 2015-17							
321	Reinforced Concrete Approach Slab	Routine	10/16/2017	1920 SF	1874	46	0	0
		Routine	10/16/2016	1920 SF	1874	6	40	0
	Notes: 6 SF of spall on the N & S approaches. 2016 repaired in 2017. Unsound patches found at south approach panel. 2016 repaired in 2017. Unsealed cracks of wide size on the approaches. 2016-17							
330	Metal Bridge Railing	Routine	10/16/2017	502 LF	502	0	0	0
		Routine	10/16/2016	502 LF	502	0	0	0
	515 - Steel Protective Coating	Routine	10/16/2017	657 SF	607	0	0	50
		Routine	10/16/2016	657 SF	657	0	0	0
	Notes: Rust staining at the base plates of the metal railing. 2017							

BRIDGE 5583 CSAH 51(LEX PKWY) OVER BNSF RR

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	10/16/2017	502 LF	502	0	0	0
		Routine	10/16/2016	502 LF	502	0	0	0
	Notes: Vertical cracking of the concrete bridge rail. 2005-17							
800	Critical Deficiencies or Safety Hazards	Routine	10/16/2017	1 EA	1	0	0	0
		Routine	10/16/2016	1 EA	1	0	0	0
	Notes: NO CRITICAL FINDINGS OBSERVED DURING THE LAST INSPECTION. 2016-17							
810	Concrete Decks - Cracking & Sealing	Routine	10/16/2017	5653 LF	0	5653	0	0
		Routine	10/16/2016	5653 LF	0	5653	0	0
	Notes: the cracks are unsealed. 2017 Moderate map cracking at a density of less than five feet. 2013-17 4,853 LF of cracks on the roadway wear surface. 2016-17 800 LF of cracks on the sidewalks. 2016-17							
815	Plow Fingers	Routine	10/16/2017	1 EA	1	0	0	0
		Routine	10/16/2016	1 EA	1	0	0	0
	Notes: All repairs completed. 2016-17							
855	Secondary Members (Superstructure)	Routine	10/16/2017	1 EA	0	0	1	0
		Routine	10/16/2016	1 EA	0	0	1	0
	Notes: 2nd bay east concrete end diaphram has spalling concrete with exposed rebar near the flange of the steel beam. (TKDA 2012) -17							
883	Concrete Shear Cracking	Routine	10/16/2017	1 EA	1	0	0	0
		Routine	10/16/2016	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.							
890	Load Posting or Vertical Clearance Signing	Routine	10/16/2017	1 EA	1	0	0	0
		Routine	10/16/2016	1 EA	1	0	0	0
	Notes: Rating and Load Posting Analysis done. 2012 Revised by TKDA : 25 / 36 / 36 Ton 1-15-2013 MNDOT notified by email. 2014 Required load posting signs are in place. 2014-17							
892	Slopes & Slope Protection	Routine	10/16/2017	1 EA	0	1	0	0
		Routine	10/16/2016	1 EA	0	1	0	0
	Notes: 1/2 cu. yd. void at the top of the S. slope. Minor to moderate erosion on the S. slope. 2016-17							
894	Deck & Approach Drainage	Routine	10/16/2017	1 EA	1	0	0	0
		Routine	10/16/2016	1 EA	1	0	0	0
	Notes: Use this element to rate the condition, function, and adequacy of the drainage system.							
895	Sidewalk, Curb, & Median	Routine	10/16/2017	1 EA	1	0	0	0
		Routine	10/16/2016	1 EA	0	1	0	0
	Notes: Resealing of cracks recommended. 2011-17 Isolated delam - SB curb at the S. end. 2016 South end joint, curb repair and repair hole at the gutter line. 2017							
899	Miscellaneous Items	Routine	10/16/2017	1 EA	1	0	0	0
		Routine	10/16/2016	1 EA	1	0	0	0
	Notes: Lighting is present on the bridge rail - both sides. (2 total) 2015-17							

BRIDGE 5583 CSAH 51(LEX PKWY) OVER BNSF RR

ELEM NBR	ELEMENT NAME	REPORT TYPE	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
900	Protected Species	Routine	10/16/2017	1 EA	1	0	0	0
		Routine	10/16/2016	1 EA	1	0	0	0

Notes: Use this element to track the presence of protected species living on this structure.
None found in 2016-17.

General Notes: BNSF-RR contact:
Michael Anderson (763) 782-3310 cell (612) 749-3401 michael.anderson5@bnsf.com
Kyle Kirberger cell (612) 219-4219 Kyle.Kirberger@BNSF.com

Bridge Owner - Ramsey County

58. Deck NBI: Moderate cracking, minor delams / spalls. 2011

36A. Brdg Railings NBI:

36B. Transitions NBI:

36C. Appr Guardrail NBI:

36D. Appr Guardrail Terminal NBI:

59. Superstructure NBI: Moderate toward extensive corrosion at the steel beam ends. (critical stress areas.) 2017

60. Substructure NBI: Substructure has moderate deterioration. 2017
Concrete abutment - Moderate spalling of abutment seats. (south side abut.) 2017
- Exposed reinforcement is present. (corrosion / rust) 2017
Concrete columns - Minor to moderate deterioration. Isolated spalls with exposed reinforcement. 2017

61. Channel NBI:

62. Culvert NBI:

71. Waterway Adeq NBI:

72. Appr Roadway Alignment NBI:

Joe Grau
Inspector's Signature

Glenn Pagel
Reviewer's Signature

1. beam ends pier 1 - rusty - north face.JPG

2. beam ends pier 4 - rusty.JPG

3. longitudinal cracking at curb face east side mid span.JPG

4. longitudinal cracks south approach panel.JPG

5. 2013 Google view - Lex_3.png

6. Diaphragm at pier 4 (1).JPG

7. 2nd pier fron N, E end.JPG

8. 2016 google view_3.PNG

9. deck.JPG

10. N abut W end.JPG

11. N pier W end.JPG

12. NE Abut Seat.JPG

13. NE Abut.JPG

14. S abut E end.JPG

15. S abut W end.JPG

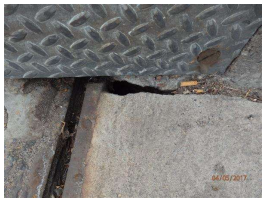
16. S pier cap midspan (1).JPG

17. S pier cap midspan (2).JPG

18. SE Abut Seat.JPG

19. SE Abut.JPG

20. SE Exp.JPG



21. SE Hole.JPG

22. SE Slope.JPG

23. South Apr.JPG

24. SW Abut seat.JPG

25. SW Abut Spall.JPG

26. SW Exp.JPG

27. SW Hole.JPG

28. SW Slope.JPG

2017 ROUTINE
BRIDGE INSPECTION REPORT

BRIDGE # 7276
CSAH 51(LEX PKWY) over CSAH 33(PIERCE BUTLER)

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

STATE: Minnesota

Date of Inspection: 10/16/2017
Equipment Used:

Owner: County Highway Agency

Inspected By: Engel, Michael; Reimer, Dan; Sanders, Rick

Report Written By: Dan Reimer
Report Reviewed By: Glenn Pagel
Final Report Date: 12/27/2017

Table of Contents

Minnesota Structure Inventory Report

Bridge ID: 7276 **CSAH 51(LEX PKWY) over CSAH 33(PIERCE BUTLER)** Date: 10/16/2017

+GENERAL+

Agency Br. No.		**Crew**	
District	05	**Maint. Area**	
County	062 - Ramsey		
City	St Paul		
Township			
Desc. Loc.	0.7 MI N OF UNIV AVE		
Sect., Twp., Range	26 - 029N - 23W		
Latitude	44 ° 57 ' 59.44 ''		
Longitude	-93 ° 08 ' 47.73 ''		
Custodian	02 - County Highway Agency		
Owner	02 - County Highway Agency		
BMU Agreement			
Year Built	1959		
MN Year Reconstructed	1982		
FHWA Year Reconstructed			
MN Temporary Status			
Bridge Plan Location	1 - CENTRAL		
Date Opened to Traffic			
On - Off System	1 - ON		
Legislative District	66B		
Potential ABC	2 - N/A		

+STRUCTURE+

Service On	5 - Highway-pedestrian
Service Under	1 - Highway, w/ or w/out ped.
Main Span Type	3 - Steel
Main Span Design	01 - Beam Span
Main Span Detail	
Appr. Span Type	
Appr. Span Design	
Appr. Span Detail	
Skew	0
Culvert Type	
Barrel Length	
Cantilever ID	

Number of Spans

MAIN: 3 **APPR:** 0 **TOTAL:**

Main Span Length				63.0	**ft.**
Structure Length				122.9	**ft.**
Deck Width (Out-to-Out)				62.3	**ft.**
Deck Material	1 - Concrete Cast-in-Place				
Wear Surf Type	4 - Low Slump Concrete				
Wear Surf Install Year	1982				
Wear Course/Fill Depth	0.17 **ft.**				
Deck Membrane	0 - None				
Deck Rebars	1 - Epoxy Coated Reinforcing				
Deck Rebars Install Year	1982				
Structure Area (Out-to-Out)	7657 **sq. ft.**				
Roadway Area (Curb-to-Curb)	5899 **sq. ft.**				
Sidewalk Width	**50A. Lt** 6.00 **ft.**		**50B. Rt** 6.00 **ft.**		
Curb Height	**Lt** 0.83 **ft.**		**Rt** 0.83 **ft.**		
Rail Type	**Lt** 27		**Rt** 27		

+ROADWAY+

Bridge Match ID (TIS)	1				
Roadway O/U Key	Route On Structure				
Route Sys	04 - CSAH	**Number** 51			
Roadway Name or Description	CSAH 51				
Level of Service	1 - MAINLINE				
Roadway Type	2 - 2-way traffic				
Control Section (TH Only)					
Reference Point					
Detour Length	2.0 **mi.**				
Lanes	**ON** 4	**UNDER** 4			
	ADT 24500	**YEAR** 2005			
HCADT		**ADTT**	**%**		
Functional Class	16 - Urban - Minor Arterial				

+RDWY DIMENSIONS+

If Divided	**NB-EB**	**SB-WB**
Roadway Width	48.00 **ft.**	**ft.**
Vertical Clearance	**ft.**	**ft.**
Max. Vert. Clear.	**ft.**	**ft.**
Horizontal Clear.	47.9 **ft.**	**ft.**
Lateral Clearance	**ft.**	**ft.**

Appr. Surface Width	48.0	**ft.**
Bridge Roadway Width	48.0	**ft.**
Median Width On Bridge		**ft.**

+MISC. BRIDGE DATA+

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

+PAINT+

Year Painted	1995	
Unsound Paint %		
Painted Area	8000	**sq. ft.**
Primer Type	0 - Other - non 3309	
Finish Type	M - Urethane	

+BRIDGE SIGNS+

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

+INSPECTION+

Userkey	199		
Structurally Deficient	N		
Functionally Obsolete	Y		
Sufficiency Rating	54.8		
Routine Inspection Date		10/16/2017	
Routine Inspection Frequency		24	
Inspector Name	Reimer, Dan		
Status	A - Open		

+NBI CONDITION RATINGS+

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

+NBI APPRAISAL RATINGS+

Structure Evaluation	5
Deck Geometry	2
Underclearances	3
Waterway Adequacy	N
Approach Alignment	7

+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			
Underwater			
Pinned Asbly.			
Spec. Feat.			

+WATERWAY+

Drainage Area (sq. mi.)			
Waterway Opening (sf.)			
Navigation Control	N - Not applicable, no		
Pier Protection	5 - None present;		
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	1 - H TRUCK	26.9	
Inventory Rating	1 - H TRUCK	16.1	
Posting	**VEH:**	**SEMI:**	**DBL:**
Rating Date	03/31/2015		

Overweight Permit Codes

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

Minnesota Structure Inventory Report

Additional Roadways

Bridge ID: 7276 CSAH 51(LEX PKWY) over CSAH 33(PIERCE BUTLER) **Date:** 12/27/2017

ROADWAY	
Bridge Match ID (TIS):	2
5A. Roadway On/Under:	2 - UNDERRECORD 2 TYPE (IF ONLY 1
Bridge Route System:	4 - COUNTY HIGHWAY
5D. Route Number:	33
Roadway Name or Description	
CSAH 33	
5C. Level of Service:	1 - MAINLINE
102. Direction of Traffic:	2 - 2-way traffic
Control Section (TH Only):	62
Reference Point:	
19. Detour Length (mi):	2.0
Lanes:	4
29. ADT:	6800
30. Year:	2005
26. Functional Class:	16
Traffic Sequence Number:	
InterRegional Corridor (TH Only):	

ROADWAY DIMENSIONS		
	NB-EB	SB-WB
Roadway Width (ft):	48.00	
Vertical Clearance (ft):	14.7	
Max. Vert. Clear. (ft):	14.7	
Horizontal Clear. (ft):	59.6	
	Left	Right
Lateral Clearance (ft):		5.3
32. Appr. Roadway Width (ft):	48.0	
51. Brdg Roadway Width (ft):	48.0	
Median Width (ft):		
10. Vertical Clearance (ft):	14.7	
47. Horizontal Clearance	59.6	

MINNESOTA BRIDGE INSPECTION REPORT

12/27/2017

BRIDGE 7276 CSAH 51(LEX PKWY) OVER CSAH 33(PIERCE BUTLER)

County: Ramsey
City: St Paul
Township:
Section: 26 Township: 029N Range: 23W
Span Type: 3 - Steel 2 - Stringer/Multi-beam or Girder
List:
NBI Deck: 7 Super: 5 Sub: 7 Chan: N Culv: N

Location: 0.7 MI N OF UNIV AVE
Route: 04 - CSAH 51 Ref. Pt.: 003+00.770
Control Section:
Maint. Area:
Local Agency Bridge Nbr.:
Open, Posted, Closed: A - Open
MN Scour Code: A - NON WATERWAY

Length: 122.9 ft.
Deck Width: 62.3 ft.
Rdwy. Area/ Pct. Unsnd: 5899 sq. ft. / %
Paint Area/ Pct. Unsnd: 8000 sq. ft. / %
Culvert: N/A
Postings:

Appraisal Ratings - Approach: 7 Waterway: N
Required Bridge Signs - Load Posting: 0 - Not Required Traffic: 0 - Not Required
Horizntal: 0 - Not Required Vertical: N - Not Applicable

Unofficial Structurally Deficient N
Unofficial Functionally Obsolete Y
Unofficial Sufficiency Rating 54.8

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	10/16/2017	7657 SF	7656	1	0	0
		Migrated Values		7657 SF	7656	1	0	0
	Notes: 1 SF of spall at the SE corner. 2017							
	510 - Wearing Surfaces	Routine	10/16/2017	5899 SF	5167	732	0	0
		Migrated Values		5899 SF	5167	732	0	0
	Notes: Low Slump Overlay with Epoxy Rebar Notes: Wearing surface - Some minor cracks. 1990-03. Unsealed cracks from 0.012" to 0.050" wide. 2017							
107	Steel Open Girder/Beam	Routine	10/16/2017	1220 LF	990	210	20	0
		Migrated Values		1220 LF	990	210	20	0
	Notes: Painted in 1999. Slight deflection in fascia stringers. 1994-17 West fascia beam appears bent East slightly above EB lane. 1995-17 Fascia beam rust present. Minor surface corrosion. 2011-17 Fascia beam ends at abuts have rust and corrosion on bottom flanges and web. 2015-17 Fascia beam ends at abuts also have flaking rust present. 2017 Flaking paint from extreme cold winter temps. 2014 Pack Rust Notes: Several areas in the bottom flange have small rust spots in the center span. 2009							
	515 - Steel Protective Coating	Routine	10/16/2017	8000 SF	4000	2400	800	800
		Migrated Values		8000 SF	4000	2400	800	800
	Notes: All condition states are present. 2017							
205	Reinforced Concrete Column	Routine	10/16/2017	10 EA	3	6	1	0
		Migrated Values		10 EA	3	6	1	0
	Notes: SE corner of center column of N. pier is micro silica concrete - Shot Crete repair. 1990 Pier columns S. side - 2 columns have delamination's. 1 has a spall greater than 6" deep. (CS-3) 2011-17 Pier columns N. side - 4 columns have delamination's. (CS-2) 2017							
215	Reinforced Concrete Abutment	Routine	10/16/2017	158 LF	135	22	1	0
		Migrated Values		158 LF	135	22	1	0
	Notes: The east corner of the N. Abutment has cracked and has a spall at the top. CS-3, wide crack. 2005-17 1 moderate width vertical crack at the S. and N. abuts. CS-2. 2017 Rust staining is present. Mostly at the ends. CS-2 2017 Wing wall notes: 2 LF delamination at the N. abut. back wall. 2017							

BRIDGE 7276 CSAH 51(LEX PKWY) OVER CSAH 33(PIERCE BUTLER)

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	10/16/2017	118 LF	105	13	0	0
		Migrated Values		118 LF	105	13	0	0
	Notes: Rust staining present at fascia beams. CS-2 2011-17 5' transverse crack at the top of the cap. Pier 1 - E. end. 2013-17							
300	Strip Seal Expansion Joint	Routine	10/16/2017	115 LF	114	1	0	0
		Migrated Values		115 LF	114	1	0	0
	Notes: The expansion joints are dirty. 2002-17 1 LF of gland is pulling out at the N. strip seal - E. end. 2017							
311	Movable Bearing	Routine	10/16/2017	30 EA	20	6	2	2
		Migrated Values		30 EA	20	6	2	2
	Notes: Located at abuts and pier 2. 2013 The fascia bearings are in CS3. Pack rust is present. 2014-17 Abut. bearings - corrosion and rust is present. 2011-17 NW and NE abut fascia bearigs both have broken anchor bolts. CS-4 2014-17							
313	Fixed Bearing	Routine	10/16/2017	10 EA	6	2	2	0
		Migrated Values		10 EA	6	2	2	0
	Notes: The fascia bearings are rusty. Pack rust is present. 2009-17 Corrosion and freckled rust present at the inside bearings. 2017 Changed quantity to 10 total. 2013 Fixed bearings are located at pier 1 only. 2013							
321	Reinforced Concrete Approach Slab	Routine	10/16/2017	2352 SF	2261	88	3	0
		Migrated Values		2352 SF	2261	88	3	0
	Notes: There is a 3 sq. ft. spall in the north approach panel at the east gutter line. 2017 Transverse and longitudinal cracks present. 1992-17 Moderate width cracks are sealed with hot rubber. 2017 The N. railings and sidewalk are settled 1 1/4"& 3/4". 2015-17							
330	Metal Bridge Railing	Routine	10/16/2017	801 LF	801	0	0	0
		Migrated Values		801 LF	801	0	0	0
	Notes: Painted metal railing. 1995							
	515 - Steel Protective Coating	Routine	10/16/2017	534 SF	534	0	0	0
		Migrated Values		534 SF	534	0	0	0
331	Reinforced Concrete Bridge Railing	Routine	10/16/2017	801 LF	801	0	0	0
		Migrated Values		801 LF	801	0	0	0
	Notes: Vertical cracks. 1992-2017 Rust stains below metal railing anchor locations. 2017							
800	Critical Deficiencies or Safety Hazards	Routine	10/16/2017	1 EA	1	0	0	0
		Migrated Values		1 EA	1	0	0	0
	Notes: NO CRITICAL FINDINGS OBSERVED DURING THE LAST INSPECTION. 2017							
810	Concrete Decks - Cracking & Sealing	Routine	10/16/2017	1624 LF	0	1624	0	0
		Migrated Values		1624 LF	0	1624	0	0
	Notes: Unsealed cracks are from 0.012" to 0.050" wide. - previous sealant has failed. 2017							
850	Steel Hinge Assembly	Routine	10/16/2017	20 EA	16	4	0	0
		Migrated Values		20 EA	16	4	0	0
	Notes: Quantity is = 20 hinges assemblies total. 2015 Surface corrosion present at the fascia hinges. 2017							

BRIDGE 7276 CSAH 51(LEX PKWY) OVER CSAH 33(PIERCE BUTLER)

ELEM NBR	ELEMENT NAME	REPORT TYPE	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
855	Secondary Members (Superstructure)	Routine	10/16/2017	1 EA	0	1	0	0
		Migrated Values		1 EA	0	1	0	0
	Notes: Steel diaphragms. Surface corrosion and rust located at the center diaphragm - N. abut. 2017							
880	Impact Damage	Routine	10/16/2017	1 EA	1	0	0	0
		Migrated Values		1 EA	1	0	0	0
	Notes: Located at the base of pier 2 - W. end. 2015-17							
883	Concrete Shear Cracking	Routine	10/16/2017	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.							
892	Slopes & Slope Protection	Routine	10/16/2017	1 EA	0	1	0	0
		Migrated Values		1 EA	0	1	0	0
	Notes: Slope paving has differential settlement up to 2"of the blocks. 1995-2017							
894	Deck & Approach Drainage	Routine	10/16/2017	1 EA	1	0	0	0
		Migrated Values		1 EA	1	0	0	0
	Notes: Use this element to rate the condition, function, and adequacy of the drainage system.							
895	Sidewalk, Curb, & Median	Routine	10/16/2017	2 EA	0	2	0	0
		Migrated Values		2 EA	0	2	0	0
	Notes: Walks are cracked traverse and longitudinal. 1992-2017 Recommend sealing. 2015-17 SW, NW and SE approach walks are down 1' from settlement. 1996-00. 5' x 2' spall 1/2" deep at the N end of the N. Approach walk. 05. 1 sq.ft. spall at the N end the E approach walk. 05.							
899	Miscellaneous Items	Routine	10/16/2017	1 EA	1	0	0	0
		Migrated Values		1 EA	1	0	0	0
900	Protected Species	Routine	10/16/2017	1 EA	1	0	0	0
		Migrated Values		1 EA	1	0	0	0
	Notes: Use this element to track the presence of protected species living on this structure. None found in 2017.							

General Notes:

58. Deck NBI: Minor isolated deterioration. 2011
Minor cracking and leaching. 2011

36A. Brdg Railings NBI:

36B. Transitions NBI:

36C. Appr Guardrail NBI:

36D. Appr Guardrail Terminal NBI:

59. Superstructure NBI: Moderate corrosion and rust present. 2014
Moderate deterioration of the fascia bearings. 2014
NW and NE abut fascia bearings have broken anchor bolts. 2014

60. Substructure NBI: Minor cracks and spalls. 2011

61. Channel NBI:

62. Culvert NBI:

BRIDGE 7276 CSAH 51(LEX PKWY) OVER CSAH 33(PIERCE BUTLER)

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

71. Waterway Adeq NBI:

72. Appr Roadway Alignment NBI:

Dan Reimer
Inspector's Signature

Glenn Pagel
Reviewer's Signature

1. 2011 elevation_2.jpg

2. bearings N.side_10.jpg

3. bearings S.side_1.jpg

4. bearings S.side_3.jpg

5. bearings S.side_7.jpg

6. column N.side_1.jpg

7. column S.side damage_1.jpg

8. column S.side_1.jpg

9. pier N.side joint_1.jpg

10. pier N.side joint_2.jpg

11. pier S.side joint_1.jpg

12. pier S.side joint_2.jpg

13. underdeck_1.jpg

14. underdeck_2.jpg

15. flaking paint 019.JPG

16. flaking paint 020.JPG

17. flaking paint 021.JPG

18. flaking paint 035.JPG

19. NE abut bearing anchor bolt 007.JPG

20. NW abut bearing anchor bolt 001.JPG

21. NE pier 2 bearing 014.JPG

22. SE abut bearing anchor bolt 029.JPG

23. SW abut bearing anchor bolt 032.JPG

24. 2nd Beam from E, S end (1).JPG

25. 2nd Beam from E, S end (2).JPG

26. 2016 google view_2.PNG

27. Center Diaphram on N end.JPG

28. Impact damage at base of W end of Pier 2.JPG

29. N Abut Backwall near center.JPG

30. N Strip Seal, E end.JPG

31. NE Abut.JPG

32. NE Approach panel.JPG

33. SE corner Deck.JPG

34. W side of 2nd column from the E, Pier 2.JPG

35. W side of center column, Pier 2.JPG

ENGINEERS ESTIMATE BRIDGES 5583 AND 7276

ITEM	UNIT	TOTAL ESTIMATED QUANTITY	UNIT PRICE	AMOUNT
BRIDGE No. 5583 REPLACEMENT	SQFT	15,656	$ 325.00	$5,088,200.00
BRIDGE No. 5583 REMOVAL	LUMP SUM	1	$ 254,410.00	$254,410.00
BRIDGE No. 7276 REPLACEMENT	SQFT	7,657	$ 300.00	$2,297,100.00
BRIDGE No. 7276 REMOVAL	LUMP SUM	1	$ 114,855.00	$114,855.00
ROADWAY (LEXINGTON AVENUE)	EACH	1	TBD	$0.00
MOBILIZATION (5%)	LUMP SUM	1	$369,265.00	$369,265.00
TRAFFIC CONTROL (3%)	LUMP SUM	1	$232,636.95	$232,636.95
CONTINGENCY (10%)	LUMP SUM	1	$ 835,646.70	$835,646.70
				$9,192,113.65

LEXINGTON PARKWAY (CSAH 51)

BRIDGE No. 7276 - STRUCTURE AREA = 7657 SQUARE FEET

BRIDGE No. 5583 - STRUCTURE AREA = 15656 SQUARE FEET

SCALE IN FEET

0 50 100

DEPARTMENT OF PUBLIC WORKS
Kathy Lantry, Director

CITY OF SAINT PAUL
Melvin W. Carter, Mayor

1500 City Hall Annex
25 W. Fourth Street
Saint Paul, MN 55102-1660

Fax: 651-266-6222

June 19, 2018

Mr. Ted Schoenecker
Public Works Director/County Engineer
Ramsey County Public Works
1425 Paul Kirkwold Drive
Arden Hills, MN 55112

RE: **Metropolitan Council Regional Solicitation – Project Support**
Lexington Parkway Bridges over Pierce Butler Route and the BNSF Railroad

Dear Mr. Schoenecker,

I am writing to express the City of Saint Paul's strong support for Ramsey County's Lexington Parkway Bridge Reconstruction project over Pierce Butler Route and the BNSF Railroad (Bridges No. 5583 and No. 7276). The City agrees that reconstructing these bridges will greatly enhance the structural integrity of the bridges and improve the condition of the roadway on the bridges. Lexington Parkway is a major corridor that carries residents and visitors to and from the Como Regional Park area of Saint Paul. Maintaining a safe and improved transportation system will allow continued direct access into the Como Regional Park area.

The City of Saint Paul is proud to support the safety improvements being proposed on the Lexington Parkway Bridges over Pierce Butler and the BNSF Railroad. The City looks forward to working in partnership with Ramsey County through the design and construction phases if the project is awarded federal funding.

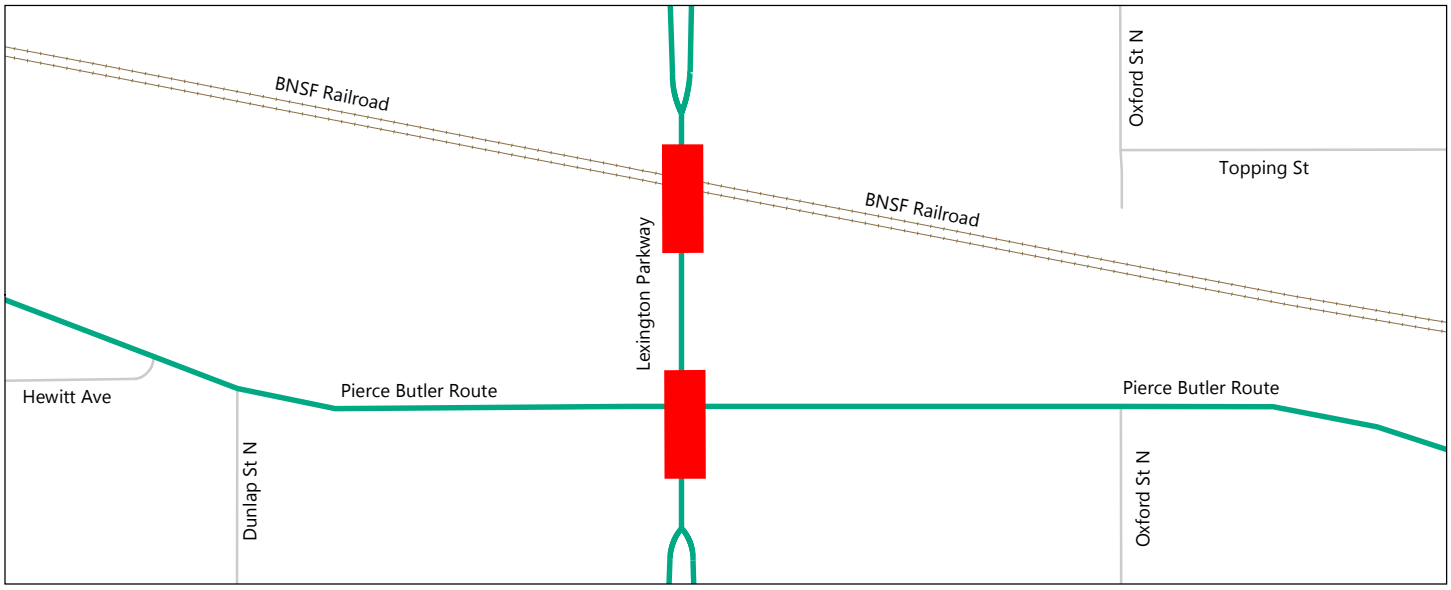
Thank you for including the City of Saint Paul in the review of this project. Please know that the project and the County have our full support.

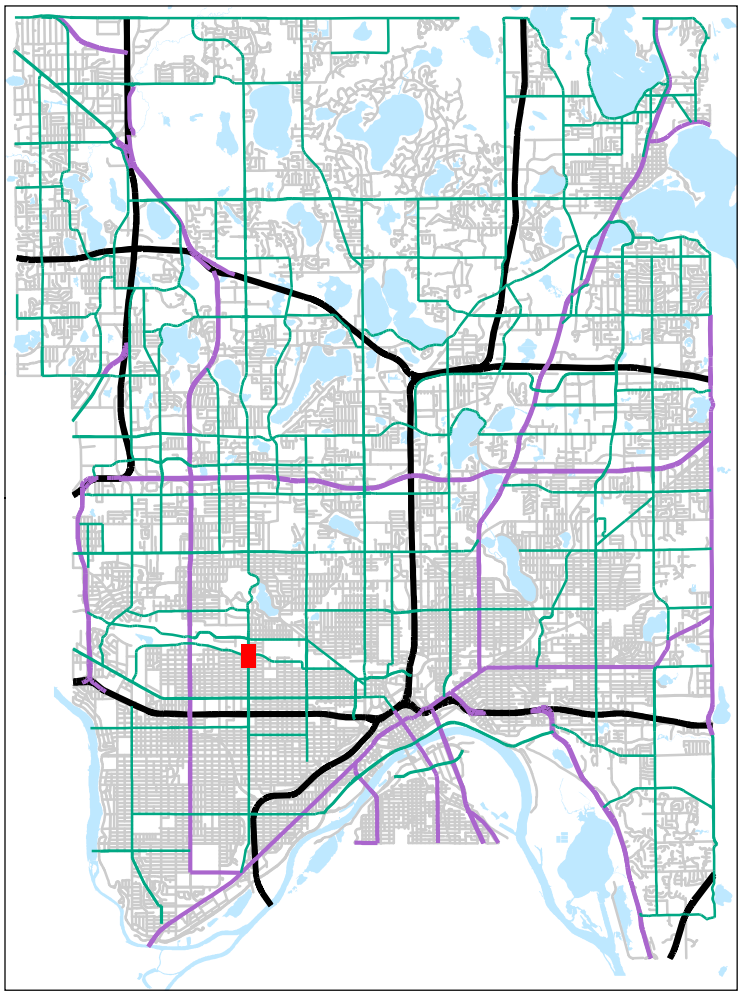
Sincerely,

Kathy Lantry
Director of Public Works

Lexington Parkway (51) Bridge over Pierce Butler Rt & BNSF RR

Map Produced 6/12/2018 by Ramsey County Public Works





- Interstate
- US & MN Highway
- County Road
- Municipal Street
- Project Location

RAMSEY COUNTY

Working with you to enhance our quality of life

Prepared by Ramsey County Enterprise GIS | RCGISMetaData@Co.Ramsey.MN.US
LexPkwyBRoverPrcButler&BNSF
6/12/2018