



Application

17075 - 2022 Bridges

17452 - CSAH 4 (Eden Prairie Rd) Bridge Replacement Project

Regional Solicitation - Roadways Including Multimodal Elements

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

Organization Information

Name: HENNEPIN COUNTY

Jurisdictional Agency (if different):

Organization Type:

County Government

Organization Website:

Address:

DPT OF PUBLIC WORKS
1600 PRAIRIE DR

*

MEDINA

Minnesota

55340

City

State/Province

Postal Code/Zip

County:

Hennepin

Phone:*

763-745-7600

Ext.

Fax:

PeopleSoft Vendor Number

0000028004A9

Project Information

Project Name

CSAH 4 (Eden Prairie Rd) Bridge Replacement Project

Primary County where the Project is Located

Hennepin

Cities or Townships where the Project is Located:

Eden Prairie

Jurisdictional Agency (If Different than the Applicant):

This project includes the replacement of the CSAH 4 (Eden Prairie Rd) Bridge #27502 over Twin Cities and Western (TC&W) Railroad in the City of Eden Prairie as shown in Attachment 02. CSAH 4 (Eden Prairie Rd) is classified as an A-Minor Arterial that functions as an expander. This bridge is a key asset as CSAH 4 (Eden Prairie Rd) connects users to the following freeway systems: CSAH/TH 62, TH 5, and Highway 212.

The existing bridge (built in 1960) is classified as functionally obsolete based on geometric constraints. The bridge superstructure consists of steel and timber beams that are in relatively fair condition. However, the bridge recently required the installation of additional beams to avoid introducing weight restrictions. The timber piers are experiencing deterioration, which is typical for a structure of this age, and will continue to degrade without continued maintenance or replacement. Photos showing the existing bridge conditions are included in Attachment 03. It is anticipated that the new bridge will be designed to provide a 75-year (or greater) service life. The potential typical sections and concept for the CSAH 4 (Eden Prairie Rd) Bridge replacement are included in Attachments 04 and 05. This bridge currently has an LPI of 60 as shown in Attachment 06.

The proposed project is expected to improve accessibility, mobility, and safety for all modes. This project is anticipated to remove the existing bike/ped bridge parallel to Bridge #27502 and include multimodal facilities as part of the new bridge structure. Additional improvements along CSAH 4 (Eden Prairie Rd) between Hillcrest Ln and Baywood Ln may include the addition of a multiuse trail along the east side of the corridor and resurfacing of the existing trail along the west side

Brief Project Description (Include location, road name/functional class, type of improvement, etc.)

of the corridor to provide logical connections for the existing multimodal facilities on either end of the project. Furthermore, the proposed project is anticipated to include striping changes to incorporate dedicated left-turn lanes at the Hillcrest Ln and Baywood Ln intersections that improve user mobility and safety when compared to the existing conditions.

(Limit 2,800 characters; approximately 400 words)

TRANSPORTATION IMPROVEMENT PROGRAM (TIP)
DESCRIPTION - will be used in TIP if the project is selected for funding. See MnDOT's TIP description guidance.

CSAH 4 over TC&W Railroad in Eden Prairie - Replace Bridge #27502

Include both the CSAH/MSAS/TH references and their corresponding street names in the TIP Description (see Resources link on Regional Solicitation webpage for examples).

Project Length (Miles) 0.4

to the nearest one-tenth of a mile

Project Funding

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

If yes, please identify the source(s) Local Bridge Replacement Program (LBRP)

Federal Amount \$5,552,000.00

Match Amount \$1,388,000.00

Minimum of 20% of project total

Project Total \$6,940,000.00

For transit projects, the total cost for the application is total cost minus fare revenues.

Match Percentage 20.0%

Minimum of 20%

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

Source of Match Funds Hennepin County and LBRP

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: 2027

Select 2024 or 2025 for TDM and Unique projects only. For all other applications, select 2026 or 2027.

Additional Program Years:

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

Project Information-Roadways

County, City, or Lead Agency	Hennepin County
Functional Class of Road	A-Minor Arterial (Expander)
Road System	CSAH
<i>TH, CSAH, MSAS, CO. RD., TWP. RD., CITY STREET</i>	
Road/Route No.	4
<i>i.e., 53 for CSAH 53</i>	
Name of Road	Eden Prairie Rd
<i>Example; 1st ST., MAIN AVE</i>	
Zip Code where Majority of Work is Being Performed	55346
(Approximate) Begin Construction Date	05/03/2027
(Approximate) End Construction Date	10/29/2027
TERMINI:(Termini listed must be within 0.3 miles of any work)	
From: (Intersection or Address)	CSAH 4 and Baywood Ln
To: (Intersection or Address)	CSAH 4 and Hillcrest Ln
<i>DO NOT INCLUDE LEGAL DESCRIPTION</i>	
Or At	
Miles of Sidewalk (nearest 0.1 miles)	0
Miles of Trail (nearest 0.1 miles)	0.8
Miles of Trail on the Regional Bicycle Transportation Network (nearest 0.1 miles)	0
Primary Types of Work	REPLACE BRIDGE #27502, RETAINING WALLS, ROADWAY APPROACHES, CURB/GUTTER, MULTIUSE TRAIL, ADA
<i>Examples: GRADE, AGG BASE, BIT BASE, BIT SURF, SIDEWALK, CURB AND GUTTER,STORM SEWER, SIGNALS, LIGHTING, GUARDRAIL, BIKE PATH, PED RAMPS, BRIDGE, PARK AND RIDE, ETC.</i>	
BRIDGE/CULVERT PROJECTS (IF APPLICABLE)	
Old Bridge/Culvert No.:	27502
New Bridge/Culvert No.:	
Structure is Over/Under (Bridge or culvert name):	TC&W Rail

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 (2018), the 2040 Regional Parks Policy Plan (2018), 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.

A) Transportation System Stewardship (p 2.2-2.4)

Objectives A & B; Strategies A1 & A2

This project will replace a functionally obsolete bridge which, provides important north/south connections to TH 212, I-494 and CSAH 62/TH 62. Deferred replacement would likely result in weight restrictions and eventually closure; causing significant impacts on the approximately 7,200 people that rely on this bridge daily. The project will also close existing gaps in the county's off-street bicycle network.

B) Safety and Security (p 2.5-2.9)

Objectives A & B; Strategies B1, B3, B4, B6

Briefly list the goals, objectives, strategies, and associated pages:

This project will address the structural safety issues that exist within the functionally obsolete bridge. As assets continue to deteriorate, safety issues may arise for roadway users including the active freight railroad line which passes under the bridge. In addition, this project presents an opportunity to consolidate the adjacent pedestrian bridge into a single, high-quality facility.

C) Access to Destinations (p 2.10-2.25)

Objectives A, B, C, D, and E; Strategies C1, C2, C3, C4, C8, C9, C15, C16, C17

CSAH 4 (Eden Prairie Rd) is a regionally significant A-Minor Expander, providing connections to several principal arterials, including TH 212 and I-494. The corridor serves as a critical route for nearby

residents accessing Eden Prairie High School, Eden Prairie Community Center, and Round Lake Park; especially for those walking and biking.

D) Competitive Economy (p2.26-2.29)

Objectives A, B & C; Strategies D1, D3, D4, D5

The corridor is key for serving diverse needs for residents to access employment, shopping, and recreation destinations in Eden Prairie. Active freight rail operations, which pass underneath the bridge, may be negatively impacted if bridge assets aren't preserved in a timely fashion.

E) Healthy and Equitable Communities (p 2.30-2.34)

Objectives A, B, C, D; Strategies E1, E3, E4, E5, E6, E7

The project would enhance active transportation opportunities by consolidating an existing pedestrian bridge into a single high-quality multimodal crossing. If feasible, the project will also close an existing bicycle trail gap on the east side of the roadway and evaluate existing pedestrian crossings located that Hillcrest Ln and Baywood Ln intersections.

F) Leveraging Transportation Investments to Guide Lane Use (p 2.35-2.41)

Objectives: A & C; Strategies: F1, F2, F5, F6, F7

This project will allow for a design that better suits the surrounding suburban area. Dedicated facilities

for people walking and biking will promote choices in transportation and connect residents of nearby residential development to existing trail assets. Replacing this key bridge asset will ensure the area remains attractive for future residential development opportunities.

Limit 2,800 characters, approximately 400 words

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.

1) Hennepin County Board Resolution 22-0109
(Attachment 07)

2) Hennepin County 2040 Transportation Plan
(pages 2-11 - 2-18)

URL: [hennepin.us/-/media/hennepinus/your-government/projects-initiatives/2040-comprehensive-plan/2040-comprehensive-plan-full.pdf](https://www.hennepin.us/-/media/hennepinus/your-government/projects-initiatives/2040-comprehensive-plan/2040-comprehensive-plan-full.pdf)

3) Hennepin County Climate Action Plan (pages 50-54)

Website: <https://www.hennepin.us/climate-action/-/media/climateaction/hennepin-county-climate-action-plan-final.pdf>

List the applicable documents and pages: Unique projects are exempt from this qualifying requirement because of their innovative nature.

4) Hennepin County Complete Streets Policy

URL: [hennepin.us/completestreets](https://www.hennepin.us/completestreets)

5) Hennepin County Bike Plan (page 36)

URL: [hennepin.us/-/media/hennepinus/residents/transportation/biking/bicycle-transportation-plan.pdf](https://www.hennepin.us/-/media/hennepinus/residents/transportation/biking/bicycle-transportation-plan.pdf)

6) Hennepin County Pedestrian Plan (page 8)

URL: [hennepin.us/-/media/hennepinus/residents/transportation/documents/pedestrian-plan.pdf](https://www.hennepin.us/-/media/hennepinus/residents/transportation/documents/pedestrian-plan.pdf)

7) Aspire Eden Prairie 2040, Transportation

Chapter (pages 20-21)

URL:

edenprairie.org/home/showpublisheddocument/15138/637081248343500000

Limit 2,800 characters, approximately 400 words

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. Unique project costs are limited to those that are federally eligible.

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

5. Applicant is a public agency (e.g., county, city, tribal government, transit provider, etc.) or non-profit organization (TDM and Unique Projects applicants only). Applicants that are not State Aid 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 in Table 1. For unique projects, the minimum award is \$500,000 and the maximum award is the total amount available each funding cycle (approximately \$4,000,000 for the 2022 funding cycle).

Strategic Capacity (Roadway Expansion): \$1,000,000 to \$10,000,000

Roadway Reconstruction/Modernization: \$1,000,000 to \$7,000,000

Traffic Management Technologies (Roadway System Management): \$500,000 to \$3,500,000

Spot Mobility and Safety: \$1,000,000 to \$3,500,000

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 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 plan must be completed by the local agency before the Regional Solicitation application deadline. For the 2022 Regional Solicitation funding cycle, this requirement may include that the plan is updated within the past five years.

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

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

Date plan completed: 08/31/2015

Link to plan:

hennepin.us/-
/media/hennepinus/residents/transportation/documents/ada-sidewalk-transition-plan.pdf

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

Date self-evaluation completed:

Link to plan:

Upload plan or self-evaluation if there is no link

Upload as PDF

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. Unique projects are exempt from this qualifying requirement.

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 Strategic Capacity 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 and Strategic Capacity projects only:

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

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

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

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

Bridge Rehabilitation/Replacement projects only:

5. The length of the bridge clear span must exceed 20 feet.

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

6. The bridge must have a National Bridge Inventory Rating of 6 or less for rehabilitation projects and 4 or less for replacement projects.

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

Roadway Expansion, Reconstruction/Modernization, 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 as described in Appendix F of the 2040 Transportation Policy Plan.

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)	\$230,000.00
Removals (approx. 5% of total cost)	\$230,000.00
Roadway (grading, borrow, etc.)	\$145,000.00
Roadway (aggregates and paving)	\$355,000.00
Subgrade Correction (muck)	\$0.00
Storm Sewer	\$235,000.00
Ponds	\$0.00
Concrete Items (curb & gutter, sidewalks, median barriers)	\$80,000.00
Traffic Control	\$230,000.00
Striping	\$50,000.00
Signing	\$15,000.00
Lighting	\$0.00
Turf - Erosion & Landscaping	\$115,000.00
Bridge	\$3,130,000.00
Retaining Walls	\$205,000.00
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	\$1,500,000.00
Other Roadway Elements	\$0.00
Totals	\$6,520,000.00

Specific Bicycle and Pedestrian Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Path/Trail Construction	\$175,000.00
Sidewalk Construction	\$0.00
On-Street Bicycle Facility Construction	\$0.00
Right-of-Way	\$0.00
Pedestrian Curb Ramps (ADA)	\$15,000.00
Crossing Aids (e.g., Audible Pedestrian Signals, HAWK)	\$0.00
Pedestrian-scale Lighting	\$0.00
Streetscaping	\$115,000.00
Wayfinding	\$0.00
Bicycle and Pedestrian Contingencies	\$95,000.00
Other Bicycle and Pedestrian Elements	\$20,000.00
Totals	\$420,000.00

Specific Transit and TDM Elements

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

Transit Operating Costs

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

Totals

Total Cost	\$6,940,000.00
Construction Cost Total	\$6,940,000.00
Transit Operating Cost Total	\$0.00

Measure A: Distance to the nearest parallel bridge

RESPONSE:

Location of nearest parallel bridge crossing: CSAH 4 at Hwy 5

Explanation:

CSAH 4 (Eden Prairie Rd) serves north-south trips between CSAH 3 (Excelsior Blvd) and CSAH 61 (Flying Cloud Dr). To reach destinations along CSAH 4 (Eden Prairie Rd), two alternate routes exist. From the east, people driving can utilize CSAH 62/CSAH 60 (Baker Rd)/Hwy 212 as shown in orange in the Alternative Routes Map (Attachment 08). From the west, people driving can utilize CSAH 62/CSAH 101/Hwy 5 as shown in blue in the Alternative Routes Map. Highway 212 is a principal arterial, while all other roadways listed include a functional class of A-Minor arterial. In addition, people driving may choose to use collector routes along Edenvale Blvd/Valley View Rd/ Duck Lake Trl as shown in gray in the Alternatives Routes Map. However, this collector route is not anticipated to be the signed detour during construction activities.

During construction, people walking and biking will not have direct options for traveling along CSAH 4 (Eden Prairie), as the railroad and Duck Lake present barriers for connecting neighborhoods via local streets. Lastly, coordination between the City of Eden Prairie and Hennepin County will take place to discuss appropriate detours for all corridor users during construction activities.

(Limit 2,800 characters; approximately 400 words)

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 using non-local functionally-classified roadways (calculated by Council Staff): 0

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

Existing Employment within 1 Mile:	1932
Existing Manufacturing/Distribution-Related Employment within 1 Mile:	118
Existing Post-Secondary Students within 1 Mile:	0

Upload Map 1648584537439_2022 RS Map 02 - CSAH 4 (Eden Prairie Rd) Bridge Replacement Project - Regional Economy.pdf

Please upload attachment in PDF form.

Measure C: Regional Truck Corridor Tiers

Along Tier 1:

(65 Points)

Miles (to the nearest 0.1 miles): 0

If box above is checked, fill in length.

Along Tier 2:

(60 Points)

Miles (to the nearest 0.1 miles): 0

If box above is checked, fill in length.

Along Tier 3:

(55 Points)

Miles (to the nearest 0.1 miles): 0

If box above is checked, fill in length.

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

(10 Points)

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

(0 Points)

Measure A: Current Daily Person Throughput

Location	CSAH 4 south of CSAH 62 (SEQ ID #42814)
Current AADT Volume	7500.0
Existing Transit Routes on the Project:	N/A
Upload "Transit Connections" map	1649249211085_2022 RS Map 04 - CSAH 4 (Eden Prairie Rd) Bridge Replacement Project - Transit Connections.pdf

Please upload attachment in PDF form.

Response: Current Daily Person Throughput

Average Annual Daily Transit Ridership 0

Current Daily Person Throughput 9750.0

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

OR

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

Forecast (2040) ADT volume

Measure A: Engagement

i. Describe any Black, Indigenous, and People of Color populations, low-income populations, disabled populations, youth, or older adults within a ½ mile of the proposed project. Describe how these populations relate to regional context. Location of affordable housing will be addressed in Measure C.

ii. Describe how Black, Indigenous, and People of Color populations, low-income populations, persons with disabilities, youth, older adults, and residents in affordable housing were engaged, whether through community planning efforts, project needs identification, or during the project development process.

iii. Describe the progression of engagement activities in this project. A full response should answer these questions:

As of time of application submittal, county staff have not yet begun public engagement activities relative to this project. Should this project be funded, Hennepin County will create an engagement plan that appropriately involves residents; including Black, Indigenous, and People of Color residents. Census tracts within a half mile of the CSAH 4 (Eden Prairie Rd) Bridge Replacement Project include 27053026014 with 18% share of BIPOC populations, 27053026005 with 26% share of BIPOC populations, and 27053026013 with 17% percent share of BIPOC populations (2020 Census). According to the 2014-2018 American Community Survey 5-year estimates, the share of the population under 18 in census tracts one-half mile from the project area ranges from 23.7% to 24.6%; representing a significant youth population that are more likely to walk or cycle.

Response:

The input of critical stakeholders and establishment of formal relationships will be key to outreach and engagement throughout the project development process. Critical stakeholders for this project include, but are not limited to, the City of Eden Prairie, users of the Eden Prairie Community Center, students and families enrolled at Eden Prairie High School, and the Twin Cities & Western Railroad. Particular engagement will focus on multimodal facilities for the replacement bridge as the corridor serves as an important north/south trail connection.

Hennepin County will provide project updates across multiple communication streams as applicable; including a project website, mobile texts, social media, and portable message display boards prior to construction activities. Outreach efforts will likely include staff from the county's Communications Team to ensure the use of best

practices and plain language during all public engagement efforts.

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

Measure B: Equity Population Benefits and Impacts

Describe the projects benefits to Black, Indigenous, and People of Color populations, low-income populations, children, people with disabilities, youth, and older adults. Benefits could relate to:

This is not an exhaustive list. A full response will support the benefits claimed, identify benefits specific to Equity populations residing or engaged in activities near the project area, identify benefits addressing a transportation issue affecting Equity populations specifically identified through engagement, and substantiate benefits with data.

Acknowledge and describe any negative project impacts to Black, Indigenous, and People of Color populations, low-income populations, children, people with disabilities, youth, and older adults. Describe measures to mitigate these impacts. Unidentified or unmitigated negative impacts may result in a reduction in points.

Below is a list of potential negative impacts. This is not an exhaustive list.

Benefits of the CSAH 4 (Eden Prairie Rd) Bridge Replacement Project for BIPOC communities include the addition of multiuse trails on the bridge; closing a gap identified in both the county's 2040 Bicycle Transportation Plan and the city's Bicycle and Pedestrian Plan. The project also consolidates a road bridge and separate trail bridge into one structure to serve people walking, biking, and driving. Even though a standalone pedestrian bridge exists along the west side of CSAH 4 (Eden Prairie Rd), its current design is relatively uninviting as it's entirely enclosed by fencing; creating a constrained feeling. These off-road facilities provide first/last mile connections for students and faculty at Eden Prairie High School that's located approximately 0.5 miles south of the project.

Response:

The addition of multiuse trail on the east side of the roadway will allow people to use the bridge to cross the railroad without having to cross CSAH 4 (Eden Prairie Rd) twice if their destination is on the east side, four times considering a round trip. This will reduce their exposure to motor vehicles, decreasing the likelihood of a crash involving people walking and biking.

Attachment 09, the Socio-Economic Equity Map, highlights key resources nearby. This project improve connections for all users with nearby places of worship, parks, and schools. The dedicated trail facilities along both sides of CSAH 4 (Eden Prairie Rd) will promote choices in transportation for people who do not have access to a vehicle, or for those who elect not to drive to their destination.

No known negative impacts are anticipated as part of this project as it greatly improves the multimodal network and improves connections to housing and

community resources; however, increased noise and impacts to the roadway are anticipated during construction. Additionally, for multimodal users, the detour route during construction will be relatively inconvenient as the railroad and Duck Lake serve as barriers in connecting local neighborhoods. Hennepin County has a specialized communications team who is responsible for managing a phone hotline and project website during the planning, design and construction phases of the project. The team will be responsible for responding to questions and concerns from residents in the area.

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

Measure C: Affordable Housing Access

Describe any affordable housing development existing, under construction, or planned within ½ mile of the proposed project. The applicant should note the number of existing subsidized units, which will be provided on the Socio-Economic Conditions map. Applicants can also describe other types of affordable housing (e.g., naturally-occurring affordable housing, manufactured housing) and under construction or planned affordable housing that is within a half mile of the project. If applicable, the applicant can provide self-generated PDF maps to support these additions. Applicants are encouraged to provide a self-generated PDF map describing how a project connects affordable housing residents to destinations (e.g., childcare, grocery stores, schools, places of worship).

Describe the projects benefits to current and future affordable housing residents within ½ mile of the project. Benefits must relate to affordable housing residents. Examples may include:

This is not an exhaustive list. Since residents of affordable housing are more likely not to own a private vehicle, higher points will be provided to roadway projects that include other multimodal access improvements. A full response will support the benefits claimed, identify benefits specific to residents of affordable housing, identify benefits addressing a transportation issue affecting residents of affordable housing specifically identified through engagement, and substantiate benefits with data.

As identified in the Socio-Economic Conditions map generated by Met Council, 169 subsidized units exist in census tracts within 0.5 miles of the project. While outside the half-mile buffer, three affordable housing developments totaling 219 units are within one mile of the project and are highly likely to utilize the CSAH 4 (Eden Prairie Rd) Bridge while driving to access critical educational, employment, and commercial needs. Attachment 10 provides a high-level overview of these subsidized housing locations proximate to the project area. Note that no affordable housing location exists within 1/2 mile of the proposed project, and the map is solely for context purposes.

Response:

The corridor is home to major educational, recreational, and civic destinations. Eden Prairie High School is directly south of the bridge, as is Round Lake Park, a large park with a variety of amenities for children and families. The Eden Prairie Community Center is approximately one half-mile south of the project area and is a significant destination for recreation, fitness, and community building for all ages. For residents of Edendale, Briarhill, and Sterling Pond residences in the one-mile project buffer; retaining a bridge connection across the TC&W Railroad representing a significant point of access for these important community facilities.

The existing bridge configuration consists of a structure for vehicles as well as a separate pedestrian bridge. The pedestrian bridge includes less than ideal conditions given the full enclosure design that creates a feeling of discomfort for people walking and biking. The proposed project will replace and combine the two bridges, construct additional trail on the east side of CSAH 4 (Eden Prairie Rd), and construct/upgrade multi-use trails to provide logical connections within the project

area. For residents of affordable housing south along CSAH 4 (Eden Prairie Rd), this would address an existing multimodal transportation gap for travel within the neighborhood and promote community cohesion; especially for families and children walking and biking from the nearby schools, community center, and park.

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

Measure D: BONUS POINTS

Project is located in an Area of Concentrated Poverty:

Projects census tracts are above the regional average for population in poverty or population of color (Regional Environmental Justice Area):

Project located in a census tract that is below the regional average for population in poverty or populations of color (Regional Environmental Justice Area):

Yes

Upload the Socio-Economic Conditions map used for this measure.

1646930152420_2022 RS Map 03 - CSAH 4 (Eden Prairie Rd) Bridge Replacement Project - Socio Economic Conditions.pdf

Measure A: Bridge Condition

6.0

5.0

5.0

0

0

Lowest National Bridge Inventory Condition Rating:

5.0

Upload Structure Inventory Report

1649429086273_Attachment 06 - Minnesota Structure Inventory Report.pdf

Please upload attachment in PDF form.

Measure A: Infrastructure Age

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

Measure A: Multimodal Elements and Existing Connections

Response:

The CSAH 4 (Eden Prairie Rd) Bridge Replacement Project will benefit people walking through the addition of approximately 0.25 miles of new multiuse trail facilities along the east side of CSAH 4 (Eden Prairie Rd), including on the bridge, and replacing/upgrading approximately 0.25 miles of multiuse trail on the west side of CSAH 4 (Eden Prairie Rd). The project will remove an existing pedestrian bridge over the TC&W Railroad and consolidate it as part of the new bridge structure along CSAH 4 (Eden Prairie Rd). The new multiuse trail will close a pedestrian gap by tying into existing multiuse trail facilities at both ends. These improvements will eliminate the need for unnecessary pedestrian crossings caused by the lack of dedicated trail facility along the east side. Crossings are especially challenging given the 40 mph posted speed limit along CSAH 4 (Eden Prairie Rd). In addition, the proposed project will revise the CSAH 4/Hillcrest and CSAH 4/Baywood intersections by introducing dedicated left-turn lanes for people driving to improve user predictability. Furthermore, the project will include accessible ramps for travelling both along and across CSAH 4 (Eden Prairie Rd) to ensure full accessibility for people with limited mobility.

Similarly, people biking will also benefit by the CSAH 4 (Eden Prairie Rd) Bridge Replacement Project through the construction or upgrading of multi-use trail facilities along both sides. The multiuse trails are identified in Hennepin County's 2040 Bicycle Transportation Plan as well as in Eden Prairie's Pedestrian and Bicycle Plan as a primary route. The bridge replacement will remove a barrier identified in the city's Pedestrian and Bicycle Plan. In addition, the existing shoulders widths do not promote on-road biking, especially across the existing bridge structure. It's anticipated that shoulder widths will be increased to provide

consistent widths along the project limits to provide adequate space for biking for those who choose to travel on-road.

At this time, no fixed route transit currently operates along CSAH 4 (Eden Prairie Rd).

In summary, the CSAH 4 (Eden Prairie Rd) Bridge Replacement Project will retain a critical connection across the TC&W Railroad; leveraging an opportunity to introduce a new typical section that better serves people walking, biking, and driving through the area. Once completed, approximately 10,000 daily users will experience an improved quality of life; including students and faculty at Eden Prairie High School, located approximately 0.5 miles south of the bridge. Attachment 11 illustrates the nearby multimodal connections in the project area; demonstrating the roadway's importance in the overall bicycle transportation system.

(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. Public Involvement (20 Percent of Points)

Projects that have been through a public process with residents and other interested public entities are more likely than others to be successful. The project applicant must indicate that events and/or targeted outreach (e.g., surveys and other web-based input) were held to help identify the transportation problem, how the potential solution was selected instead of other options, and the public involvement completed to date on the project. The focus of this section is on the opportunity for public input as opposed to the quality of input. NOTE: A written response is required and failure to respond will result in zero points.

Multiple types of targeted outreach efforts (such as meetings or online/mail outreach) specific to this project with the general public and partner agencies have been used to help identify the project need.

100%

At least one meeting specific to this project with the general public has been used to help identify the project need.

50%

At least online/mail outreach effort specific to this project with the general public has been used to help identify the project need.

50%

No meeting or outreach specific to this project was conducted, but the project was identified through meetings and/or outreach related to a larger planning effort. Yes

25%

No outreach has led to the selection of this project.

0%

Describe the type(s) of outreach selected for this project (i.e., online or in-person meetings, surveys, demonstration projects), the method(s) used to announce outreach opportunities, and how many people participated. Include any public website links to outreach opportunities.

This project was selected for pursuit of Regional Solicitation funding based on the overall asset condition. No public outreach specific to the project has taken place at this time, but is expected to occur during the design phase of the project. Future outreach is likely to be coordinated with the City of Eden Prairie and TC&W Railroad.

It should be noted that the multiuse trail component of this project was identified as a need in the city of Eden Prairie's Bicycle and Pedestrian Plan. That plan:

Response:

- Offered multiple opportunities for participation through in-person and online engagement activities; seeking the participation of under-represented and health-disparity communities

- Met residents at places they were already gathering

- Provided useful guidance for development of the Plan; including guidance on policy priorities, Plan vision, network development, and facility designs

- Public engagement effort metrics included 162 online surveys, 281 geo-specific comments, and 70 residents who attended in-person events; including open houses and community listening sessions

(Limit 2,800 characters; approximately 400 words)

2. Layout (25 Percent of Points)

Layout includes proposed geometrics and existing and proposed right-of-way boundaries. A basic layout should include a base map (north arrow; scale; legend; city and/or county limits; existing ROW, labeled; existing signals;* and bridge numbers*) and design data (proposed alignments; bike and/or roadway lane widths; shoulder width;* proposed signals;* and proposed ROW). An aerial photograph with a line showing the projects termini does not suffice and will be awarded zero points. *If applicable*

Layout approved by the applicant and all impacted jurisdictions (i.e., cities/counties/MnDOT. If a MnDOT trunk highway is impacted, approval by MnDOT must have occurred to receive full points. A PDF of the layout must be attached along with letters from each jurisdiction to receive points.

100%

A layout does not apply (signal replacement/signal timing, stand-alone streetscaping, minor intersection improvements). Applicants that are not certain whether a layout is required should contact Colleen Brown at MnDOT Metro State Aid colleen.brown@state.mn.us.

100%

For projects where MnDOT trunk highways are impacted and a MnDOT Staff Approved layout is required. Layout approved by the applicant and all impacted local jurisdictions (i.e., cities/counties), and layout review and approval by MnDOT is pending. A PDF of the layout must be attached along with letters from each jurisdiction to receive points.

75%

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

50%

Layout has been started but is not complete. A PDF of the layout must be attached to receive points.

25%

Layout has not been started

0%

Attach Layout

1649430995285_Attachment 05 - Potential Concept.pdf

Please upload attachment in PDF form.

Additional Attachments

Please upload attachment in PDF form.

3.Review of Section 106 Historic Resources (15 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

4.Right-of-Way (25 Percent of Points)

Right-of-way, permanent or temporary easements, and MnDOT agreement/limited-use permit either not required or all have been acquired

100%

Right-of-way, permanent or temporary easements, and/or MnDOT agreement/limited-use permit required - plat, legal descriptions, or official map complete

50%

Right-of-way, permanent or temporary easements, and/or MnDOT agreement/limited-use permit required - parcels identified Yes

25%

Right-of-way, permanent or temporary easements, and/or MnDOT agreement/limited-use permit required - parcels not all identified

0%

5.Railroad Involvement (15 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%

Measure A: Cost Effectiveness

Total Project Cost (entered in Project Cost Form): \$6,940,000.00

Enter Amount of the Noise Walls: \$0.00

Total Project Cost subtract the amount of the noise walls: \$6,940,000.00

Enter amount of any outside, competitive funding: \$0.00

Attach documentation of award:

Points Awarded in Previous Criteria

Cost Effectiveness \$0.00

Other Attachments

File Name	Description	File Size
Attachment 00 - List of Attachments.pdf	Attachment 00 - List of Attachments	76 KB
Attachment 01 - Project Narrative.pdf	Attachment 01 - Project Narrative	116 KB
Attachment 02 - Project Location Map.pdf	Attachment 02 - Project Location Map	229 KB
Attachment 03 - Existing Bridge Condition Photos.pdf	Attachment 03 - Existing Bridge Condition Photos	1.0 MB
Attachment 04 - Potential Typical Sections.pdf	Attachment 04 - Potential Typical Sections	99 KB
Attachment 05 - Potential Concept.pdf	Attachment 05 - Potential Concept	1.1 MB
Attachment 06 - Minnesota Structure Inventory Report.pdf	Attachment 06 - Minnesota Structure Inventory Report	142 KB
Attachment 07 - Hennepin County Board Resolution 22-0109.pdf	Attachment 07 - Hennepin County Board Resolution 22-0109	451 KB
Attachment 08 - Alternate Routes Map.pdf	Attachment 08 - Alternate Routes Map	693 KB
Attachment 09 - Socio-Economic Equity Map.pdf	Attachment 09 - Socio-Economic Equity Map	1.2 MB
Attachment 10 - Affordable Housing Access Map.pdf	Attachment 10 - Affordable Housing Access Map	1.2 MB
Attachment 11 - Multimodal Connections Map.pdf	Attachment 11 - Multimodal Connections Map	993 KB
Attachment 12 - City of Eden Prairie Support Letter.pdf	Attachment 12 - City of Eden Prairie Support Letter	256 KB

Regional Economy

Bridges Project: CSAH 4 (Eden Prairie Rd) Bridge Replacement Project | Map ID: 1646870219733

Results

WITHIN ONE MI of project:
Postsecondary Students: 0

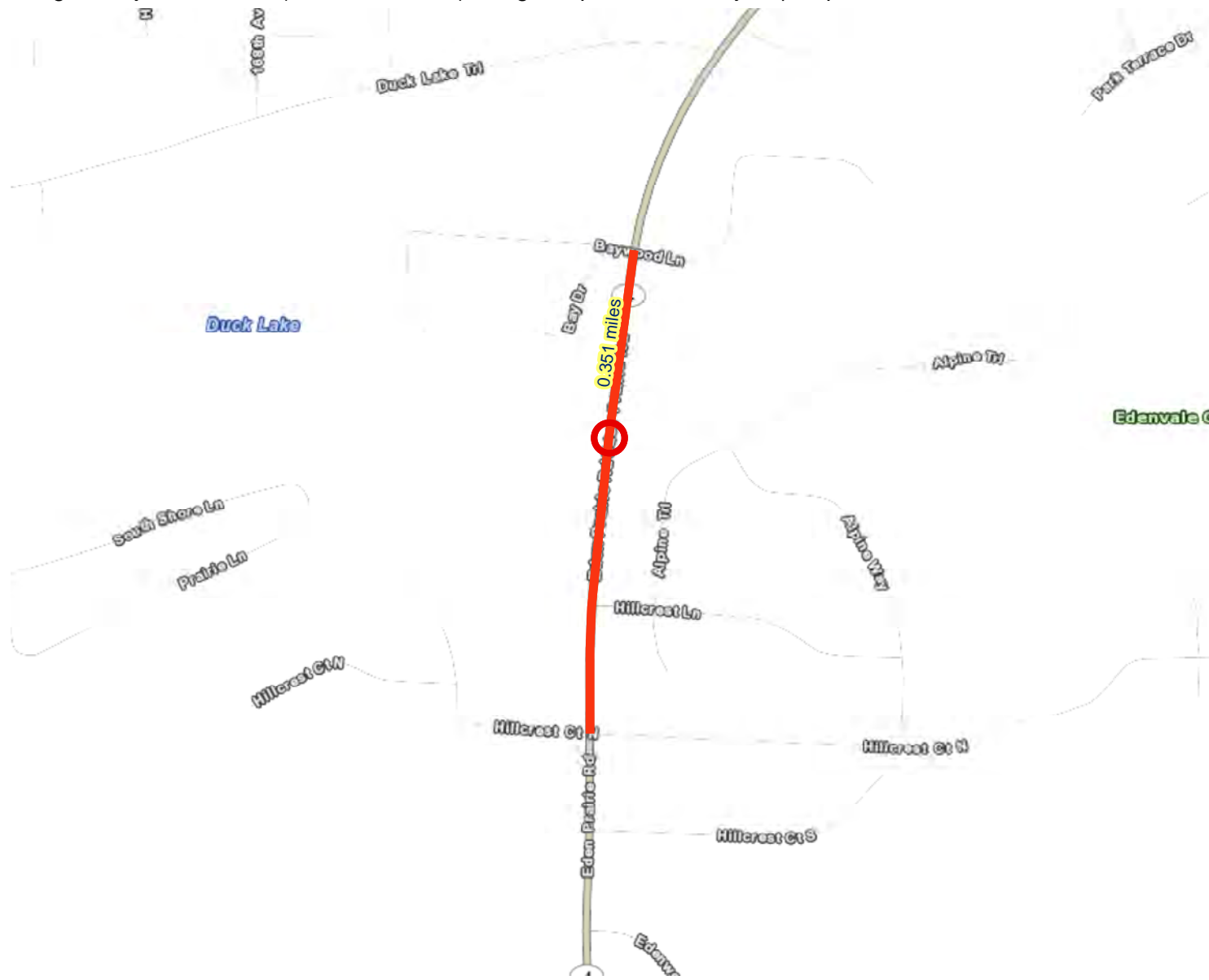
Totals by City:





Eden Prairie

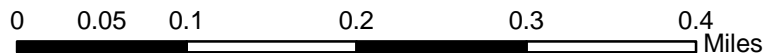
Population: 11478
Employment: 1683
Mfg and Dist Employment: 108

Minnetonka

Population: 2061
Employment: 249
Mfg and Dist Employment: 10



-  Project Points
-  Project
-  Manufacturing/Distribution Centers
-  Job Concentration Centers



Created: 3/9/2022
LandscapeRSA5

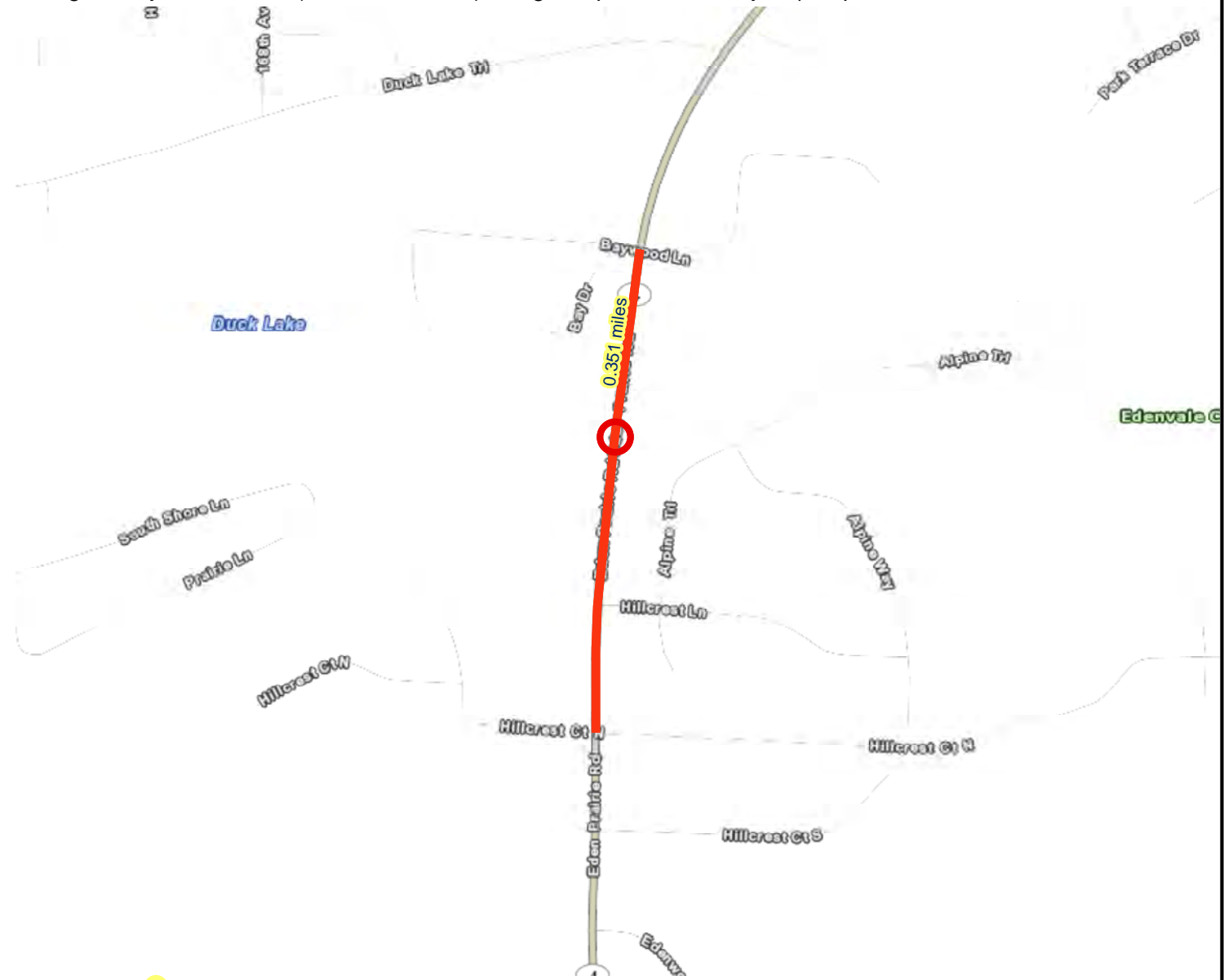


For complete disclaimer of accuracy, please visit
<http://giswebsite.metc.state.mn.us/gissitenew/notice.aspx>



Transit Connections

Bridges Project: CSAH 4 (Eden Prairie Rd) Bridge Replacement Project | Map ID: 1646870219733



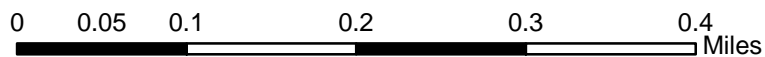
Results

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

**indicates Planned Alignments*

Transit Market areas: 3

- | | | | | | | | | | | | |
|--|----------------------------|--|-----------------------------|--|-----------------------------|--|-----------------------------|--|-----------------------------|--|---------------------------|
| | Project Points | | Commuter Rail | | Commuter Rail | | Dedicated Bus Rapid Transit | | Arterial Bus Rapid Transit | | Modern Streetcar |
| | Project | | Dedicated Bus Rapid Transit | | Dedicated Bus Rapid Transit | | Highway Bus Rapid Transit | | Commuter Rail | | Undetermined |
| | Project Area | | Highway Bus Rapid Transit | | Highway Bus Rapid Transit | | Light Rail | | Dedicated Bus Rapid Transit | | Highway Bus Rapid Transit |
| | Active Stop | | Light Rail | | Light Rail | | Modern Streetcar | | Highway Bus Rapid Transit | | Light Rail |
| | Arterial Bus Rapid Transit | | Arterial Bus Rapid Transit | | Arterial Bus Rapid Transit | | Undetermined | | Light Rail | | |



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LandscapeRSA3



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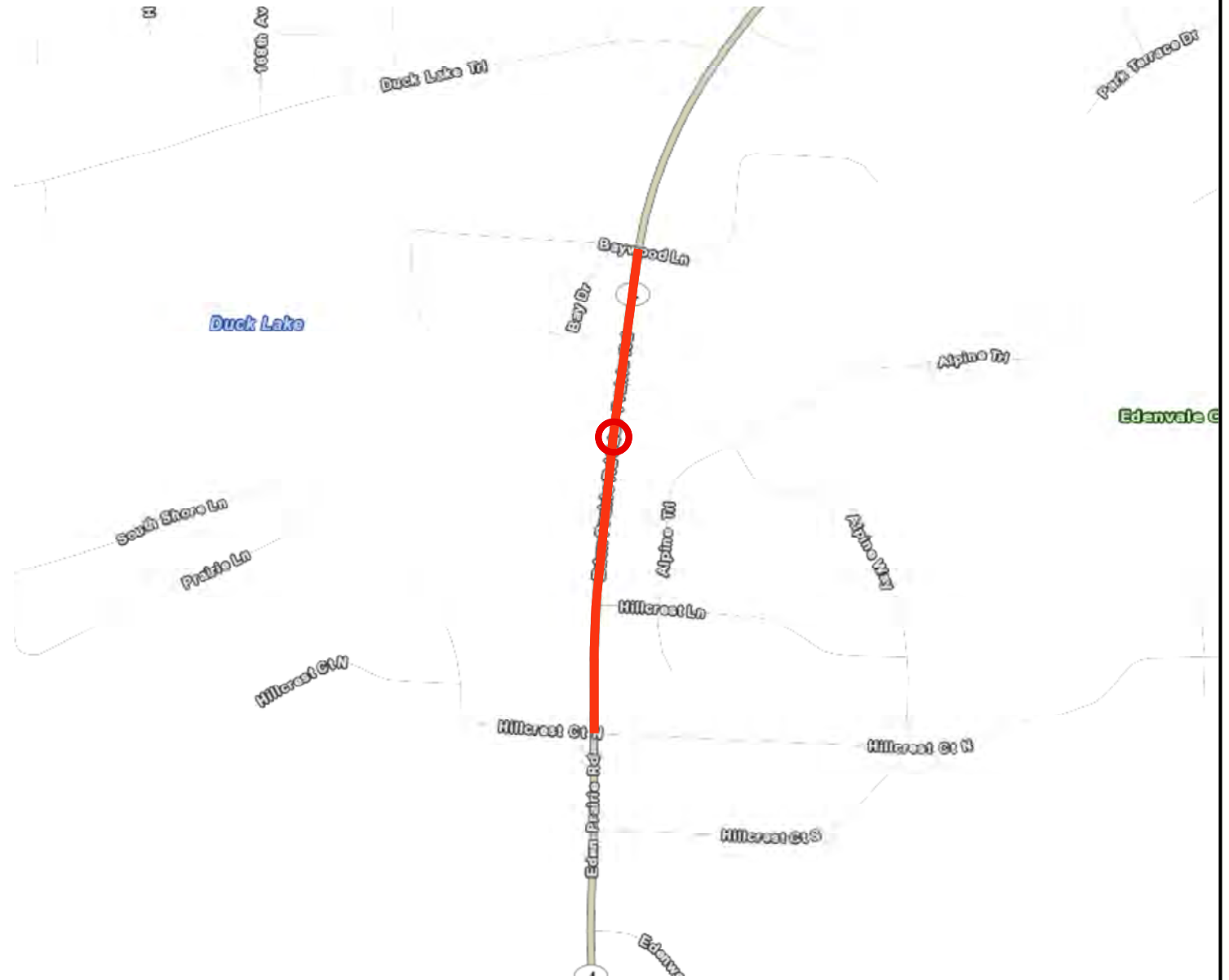
Socio-Economic Conditions

Bridges Project: CSAH 4 (Eden Prairie Rd) Bridge Replacement Project | Map ID: 1646870219733

Results

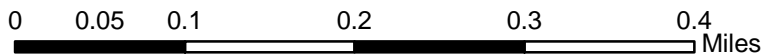
Total of publicly subsidized rental housing units in census tracts within 1/2 mile: 169

Project located in census tracts that are BELOW the regional average for population in poverty or population of color.



○ Points ■ Area of Concentrated Poverty

— Lines



Created: 3/9/2022
LandscapeRSA2



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CSAH 4 (Eden Prairie Rd) Bridge Replacement Project

Attachment 06 | Minnesota Structure Inventory Report

Bridge ID: 27502

EDEN PRAIRIE RD over TC;W RR

Date: 04/06/2022

+ GENERAL +	+ ROADWAY ON BRIDGE +	+ INSPECTION +
Agency Br. No. Crew District METRO Maint. Area County 27 - HENNEPIN City EDEN PRAIRIE Township Desc. Loc. 1.1 MI N OF JCT TH 5 Sect., Twp., Range 05 - 116N - 22W Latitude 44d 52m 39.65s Longitude 93d 29m 07.60s Custodian COUNTY Owner COUNTY Insp Responsibility HENNEPIN COUNTY Year Built 1960 Date Opened to Traffic 10-01-1960 MN Year Remodeled FHWA Year Reconstructed Bridge Plan Location COUNTY Potential ABC N.A.	Facility CSAH 4 Functional Class URB/MINOR ART ADT (YEAR) 7,200 (2016) HCADT National Highway System N Route Sys/Nbr (TIS) CSAH 4 Ref. Point (TIS) 004+00.470 Detour Length 5 mi. Lanes 2 Lanes ON Bridge Control Section (TH Only) Function MAINLINE Type 2 WAY TRAF Bridge Match ID 1 Roadway Key 1-ON + RDWY DIMENSIONS ON BRIDGE + If Divided NB-EB SB-WB Roadway Width 30.0 ft Vertical Clearance Max. Vert. Clear. Horizontal Clear. 29.9 ft Appr. Surface Width 48.0 ft Bridge Roadway Width 30.0 ft Median Width on Bridge NA + MISC. BRIDGE DATA + Structure Flared NO Parallel Structure NONE Field Conn. ID Cantilever ID Foundations Abut. CONC - FTG PILE Pier TIMBER - PILE BENT Historic Status NOT ELIGIBLE On - Off System ON + PAINT + Year Painted 1960 Painted Area 2,640 sf Primer Type LEAD Finish Type ALKYD IRON OXIDE + BRIDGE SIGNS + Posted Load NOT REQUIRED Traffic NOT REQUIRED Horizontal OBJECT MARKERS Vertical NOT APPLICABLE	Deficient Status F.O. Local Planning Index 60 Last Routine Insp Date 06-11-2020 Routine Insp Frequency 24 Inspector Name HENNEPIN COUNTY Status A-OPEN + NBI CONDITION RATINGS + Deck 6 Superstructure 5 Substructure 5 Channel N Culvert N + NBI APPRAISAL RATINGS + Structure Evaluation 5 Deck Geometry 3 Underclearances 4 Waterway Adequacy N Approach Alignment 6 + SAFETY FEATURES + Bridge Railing 0-SUBSTANDARD GR Transition 0-SUBSTANDARD Appr. Guardrail 1-MEETS STANDARDS GR Termini 0-SUBSTANDARD + SPECIAL INSPECTIONS + Frac. Critical N Underwater N Pinned Asbly. N + WATERWAY + Drainage Area Waterway Opening Navigation Control NOT APPL Pier Protection Nav. Vert./Horz. Clr. Nav. Vert. Lift Bridge Clear. MN Scour Code A-NON WATERWAY Scour Evaluation Year 1991 + CAPACITY RATINGS + Design Load H 20 Operating Rating HS 26.20 Inventory Rating HS 15.70 Posting Rating Date 03-29-2013 Overweight Permit Codes A: N B: N C: N
+ STRUCTURE +		
Service On HWY;PED Service Under RAILROAD Main Span Type STEEL BM SPAN Main Span Detail Appr. Span Type TIMB BEAM SPAN Appr. Span Detail Skew 35L Culvert Type Barrel Length Number of Spans MAIN: 1 APPR: 8 TOTAL: 9 Main Span Length 48.0 ft Structure Length 178.1 ft Deck Width 38.5 ft Deck Material C-I-P CONCRETE Wear Surf Type LOW SLUMP CONC Wear Surf Install Year 1981 Wear Course/Fill Depth 0.25 ft Deck Membrane NONE Deck Rebars NONE Deck Rebars Install Year Structure Area 6,857 sq ft Roadway Area 5,339 sq ft Sidewalk Width - L/R 3.0 ft 3.0 ft Curb Height - L/R 0.75 ft 0.75 ft Rail Codes - L/R 19 19		

CSAH 4 (Eden Prairie Rd) Bridge Replacement Project

Attachment 06 | Minnesota Structure Inventory Report

Page No: 2

04/06/2022

MINNESOTA BRIDGE INSPECTION REPORT

Crew:
Insp Responsibility: HENNEPIN COUNTY

BRIDGE 27502 EDEN PRAIRIE RD OVER TC;W RR

INSP. DATE: 06-11-2020

County: HENNEPIN	Location: 1.1 MI N OF JCT TH 5	Length: 178.1 ft
City: EDEN PRAIRIE	Route (TIS): CSAH 4 Ref Pt (TIS): 004+00.470	Deck Width: 38.5 ft
Township:	Control Section: Maint. Area:	Rdwy. Area 5,339 sq ft
Section: 05 Township: 116N Range: 22W	Local Agency Bridge Nbr:	Paint Area 2,640 sq ft
Main Span Type: STEEL BM SPAN		Culvert: N/A

NBI Deck: 6 Super: 5 Sub: 5 Chan: N Culv: N	Open, Posted, Closed: OPEN
Appraisal Ratings - Approach: 6 Waterway: N	MN Scour Code: A-NON WATERWAY Def. Stat: F.O. Suff. Rate: 55.5
Required Bridge Signs - Load Posting: NOT REQUIRED	Traffic: NOT REQUIRED
Horizontal: OBJECT MARKERS	Vertical: NOT APPLICABLE

ELEM NBR	ELEMENT NAME	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
800	CRITICAL DEFS OR SAFETY HAZARDS	06-11-2020	1 EA	1	0	0	0
		06-27-2018	1 EA	1	0	0	0

Notes: 800. No critical structural deficiencies or serious safety hazards are present on this structure.

12	REINFORCED CONCRETE DECK	06-11-2020	6,857 SF	6,208	572	77	0
		06-27-2018	6,857 SF	6,208	576	73	0

Notes: 12. Wood stay in place forms under concrete in approach spans. A few cracks w/ efflor on bottom of steel span. Haunch is spalled @ E fascia stringer near S abut. 2nd & 4th bays from W in timber span 8, 2nd bay from E in timber span 9 & N 2 spans have cracked & deteriorated form boards. Rust spots @ several cracks. Cracks & efflor on cantilever @ rail base columns. Some large spall & cracks on coping. 4 spalls in coping @ span 1 on E side. Large (2' X 1') spall in SE cantilever w/ rebar exposed. 2 large spalls (2' X 1') @ E coping @ piers 4 & 5. Patches over bents on both sides of RR. Some delams. Few small spalls w/ rebar exp. Large spall in coping @ SW corner. Deck is patched @ both ends of main span. '14-main span-spalls-2 SF & 1 SF w/ rebar exp; 10 SF of delam; 22 SF of conc patches; 400 LF of random cracks & 14 LF of cracks w/ efflor. Some small areas of unconsolidated conc. '16-8' section of leakage through deck @ W end of P1. Decks misaligned horizontally 5/8" @ N compression joint & @ W end vertically 1/2". Approach spans are concrete over wood deck. Some of this deck at N abut has decayed boards & concrete debris on abut seat. 16 SF of spalls & 3 SF of spalls w/ rebar exp. 52' of cracks w/ efflor & rust. '18-most deterioration in W 2 bays, water stained timber forms. Scale, efflor & spalls w/ rebar exp in main span. '20-3' spall with exposed rebar E fascia @ N pier. Failed patch.

510 WEARING SURFACE	06-11-2020	5,339 SF	4,785	552	2	0
	06-27-2018	5,339 SF	4,819	450	45	25

Notes: 510. Numerous cracks and several large trans cracks in wearing surface. '14-map cracking in NB gutter. '16-Sealed trans, long, & map cracks, w/ 1'-3' spacing. '18-25 SF heavy density (1'-3') & 25 SF severe density (<1') map cracks, minor in size. Minor abrasion in wheel path of both lanes. '20-new map cracking. 421 SF of map cracking. 98 SF sealed cracks. 33 SF unsealed cracks.

302	COMPRESSION DECK JOINT	06-11-2020	85 LF	0	0	0	85
		06-27-2018	85 LF	0	0	0	85

Notes: 302. Joints are filled w/ sand. '14-joints are partially filled w/ debris. '16-Joint closed tight. Monitor for substructure settlement. S gutter filled with debris.

330	METAL BRIDGE RAILING	06-11-2020	358 LF	357	1	0	0
		06-27-2018	358 LF	333	3	4	18

Notes: 330. '20-metal railing in good condition. 1st post E rail cracked & lose, some bolts slightly rusted.

515 STEEL PROTECTIVE COATING	06-11-2020	623 SF	0	623	0	0
	06-27-2018	623 SF	0	623	0	0

Notes: 515. '16-Paint chalking and fading. '20-no change.

331	REINFORCED CONC BRIDGE RAILING	06-11-2020	358 LF	0	315	41	2
		06-27-2018	358 LF	0	340	18	0

Notes: 331. H.C. Operations repaired delams, spalls and rebar section loss @ both concrete rails. H.C. Operations widened rail and added rebar in '03. See file. New bridge railing repair has many vert cracks. One spall w/ rebar exposed @ joint in W rail. Spalls w/ rebar exposed in several spots on E rail. '14-2 spalls w/ rebar exp(1 SF) @ W rail joint. Cracks are spaced +/- 3' apart. '16-Openings @ bottom of rail filled w/ concrete on one side. Some spalling & deterioration of these patches. Some spalls have been repaired. Cracks on top of E rail sealed. Very minor vert cracks spaced 2'. Spall w/ rebar outside of E rail over tracks & in other locations on both rails. '18-some spalls on outside both rails have been patched. '20-heavy spalls exposed rebar outside both rails.

822	BITUMINOUS APPROACH ROADWAY	06-11-2020	2 EA	0	0	2	0
		06-27-2018	2 EA	0	0	2	0

CSAH 4 (Eden Prairie Rd) Bridge Replacement Project

Notes: 822. Deteriorated, settled, cracked and spalled @ bridge ends. South-bit spalls patched. North-SBL O/L extends 5' onto deck. Bit settled in NBL and raised in SBL. Spalls patched. '14-new O/L on both approaches this year. '16-S approach has large map cracks & spalls for width of bridge. N approach has large map cracks in NBL. '18-spall in SBL of N app. '20-N & S app has extensive deterioration, settlement, cracking & patching. N app NBL settled.

107	STEEL GIRDER OR BEAM	06-11-2020	341 LF	0	196	128	17
		06-27-2018	341 LF	0	196	128	17
Notes: 107. Center span girders: 7 girders total. Fascia stringer is rusted on end & bottom flange. 2" x 1" and 3" x 3" hole from section loss in web of W fascia girder of main span @ S end over pier. 2" x 3" and 2" x 1" hole from section loss in web of E fascia girder of main span @ N end. Several interior stringers are rusted along bottom flange. Some minor rust on top & bottom flange of center stringer. Some sheet rust on S end. Sheet rust on the top flanges of the 3rd beam from E @ the N end. Some sheet rust on main span girders @ S end over pier-3rd and 6th from E. '14-section loss holes in E fascia @ N end: 2.5" x 2.5", 1" x .5" and 1" x 2". +/-2' of beam ends @ N pier have minor section loss. Load ratings by BJJ show no posting or reduction in capacity necessary-moved qty from CS5 to CS4. '16-All beams have bottom flange surface rust. 5' of all beam ends have flaking rust & 6' have some section loss, up to 100%. '18-17' of beams, mainly fascia girders, have section loss. More extensive areas of flaking rust on all beams. '20-no change.							
515	STEEL PROTECTIVE COATING	06-11-2020	2,640 SF	0	0	1,584	1,056
		06-27-2018	2,640 SF	0	0	1,584	1,056
Notes: 515. '16-Majority of paint close to failure w/ spot rust showing through. Approx 25% of paint has failed. '18-est approx 40% of paint failed. Remainder is flaked, peeled. '20-no change.							
215	REINFORCED CONCRETE ABUTMENT	06-11-2020	105 LF	56	32	17	0
		06-27-2018	105 LF	56	32	17	0
Notes: 215. SOUTH-Water leakage behind S. '18-no change. NORTH-5' x 1' spall w/ rebar exp in NE. '14-5' minor crack in NW corner. '16-No change. '18-timber cap is split @ E end. 4' x 1' x 3" spall in parapet near center. Spall between 4th & 5th beams from E. Water leakage. '20-N parapet spalls exposing rebar. Wingwall notes: Some spalling, 3' x 1' on NE wing. '14-1 SF spall in SW. '16-wings 5' each. '18-spall in NE has exp rebar.							
117	TIMBER STRINGER	06-11-2020	1,558 LF	1,111	285	162	0
		06-27-2018	1,558 LF	1,111	285	162	0
Notes: 117. Numerous stringers have horiz cracks. 3 stringers have shear cracks - 5th from W S of bent 3; 5th from W N of bent 6; 4th from W N of bent 2. All shear cracked stringers were repaired by placing glue laminated beams adj to them. 2nd stringer from E @ bent 2 end in span 2 is partially split, but not a major structural flaw. 2nd, 7th, 8th & 9th from W in span 2 are horiz cracked & checked. '14-no change. '16-3' section of beam laying on ground @ W end of P1. '20-2 1/4" deep surface check 10' long @ bent 1, 6th from E. 15' surface check 1 1/2" deep @ the 7th stringer from the E @ bent 1. 15' surface check 2 3/4" deep @ the 10th stringer from the E @ bent 1.							
228	TIMBER PILING	06-11-2020	112 EA	34	68	10	0
		06-27-2018	112 EA	39	68	5	0
Notes: 228. OK. '14-many columns have checks up to 1/2" wide. Minor fire damage to bents @ B1. Minor fire damage @ all @ P3 & W 2 pile on B3. '18-corrected notes from '16-mislabeled directions. B6, 2nd from W is off 1-1/2"; 3rd from W is off 3-1/2". B5, 2nd from E is off 2". '20-B2 end cracking.							
235	TIMBER PIER CAP	06-11-2020	367 LF	295	64	8	0
		06-27-2018	367 LF	295	64	8	0
Notes: 235. Several caps have horiz checks. '14-some checks are up to 1/2" wide. '18-large crack in to of B2 @ W end. '20-no change.							
855	SECONDARY MEMBERS (SUPER)	06-11-2020	1 EA	0	1	0	0
		06-27-2018	1 EA	0	1	0	0
Notes: 855. 24 steel bolted diaphragms on center span. 1 brace broken off @ E side of N main span. Stiffeners @ ends of main span generally sheet rusted, section loss. '14-no change. '20-no change.							
856	SECONDARY MEMBERS (SUB)	06-11-2020	1 EA	0	1	0	0
		06-27-2018	1 EA	0	1	0	0
Notes: 856. X-bracing between piles. '18-fire charred in span 3. Large section missing @ P2. Splits on many sections. '20-no change.							
891	OTHER BRIDGE SIGNING	06-11-2020	1 EA	1	0	0	0
		06-27-2018	1 EA	1	0	0	0
Notes: 891. Horiz clearance X4-4 signs @ all corners-SW post is leaning. No plow up/down X4-5 @ NE. '14-NE X4-4 is twisted slightly from impact. '18-No Trespassing signs on P1 @ E & P2 @ W, deterioration on W. No X4-5 in SE. X4-4 in NE has been repaired. '20-no change.							
892	SLOPES & SLOPE PROTECTION	06-11-2020	1 EA	0	0	0	1
		06-27-2018	1 EA	0	0	0	1
Notes: 892. Severe erosion under bridge on both ends. Hole in front of N abut, between 1st & 2nd stringer from E. Erosion on W side @ spans 6,7 & 8. Living quarters dug out in span 9. Severe erosion @ SW & NE corners. Water pooled under span 1. '16-Living quarters dug out @ N abut. '20-erosion along S abut.							

CSAH 4 (Eden Prairie Rd) Bridge Replacement Project

Attachment 06 | Minnesota Structure Inventory Report

Page No: 4

893	GUARDRAIL	06-11-2020	1 EA	0	1	0	0
		06-27-2018	1 EA	0	1	0	0
Notes: 893. Guardrail attached w/ all ends turned down. '14-far NE corner has minor impact damage. '16-Minor impact damage in all 4 corners. N guardrail extends from intersection N of bridge. New crashworthy end in SE. End in SW is turned down. '18-rust on rail in SW & NE. Mod impact damage in NE. New crashworthy end treatments in all corners. Minor impact damage in SE & NW.							
894	DECK & APPROACH DRAINAGE	06-11-2020	1 EA	0	1	0	0
		06-27-2018	1 EA	0	1	0	0
Notes: 894. '16-Water ponding in NE & @ ends of compression joint. Ponding on walks. '20-SE: min-mod corrosion/rust in many areas, min impact damage. NE: mod corrosion near N end of bridge. 2 loose spacer blocks.							
895	SIDEWALK, CURB, & MEDIAN	06-11-2020	1 EA	0	1	0	0
		06-27-2018	1 EA	0	1	0	0
Notes: 895. Trans cracks in walk. Conc spalled on E curb face. Conc spalled in SE and SW w/ rebar exp @ SE corner. 30' X 6" X 1" spall on E walk. '14-E walk has minor map cracks w/ a few trans cracks. Spall on E curb face is 30'L x 4"H x 4"D. Minor trans cracks in W walk are spaced 5' apart. '16-All cracks sealed. '18-3' x 8" x 3" spall w/ rebar exp in SE corner. '20-spall in the NW curb, scaling on walk. Large spall on curb on the 25' N of the E end.							
899	MISCELLANEOUS ITEMS	06-11-2020	1 EA	1	0	0	0
		06-27-2018	1 EA	1	0	0	0
Notes: 899. RR Communication line @ N side of main span. Telephone fiber optic cable near both bents in main span. Graffiti on most columns. Graffiti on pier caps of piers 1, 2, 9 and 10. '16-Gas markers @ NW & SW.							
900	PROTECTED SPECIES	06-11-2020	2 EA	0	0	1	1
		06-27-2018	2 EA	0	0	1	1
Notes: 900. 16-bird nest in center span. '18-bats in S span on W side btw stringers @ bent 6. Also @ bent 3.							

General *Bridge 27502 CSAH 4 / TC & W RR 6/11/20 MAM, ADT, SMM, HAH, & MJB. 60' snooper over E side only. NOTE: City of Eden Prairie constructed a steel truss trail bridge(Continental Bridge S.N. 93013) on the W side of existing bridge 27502. Flaggers needed for single lane traffic.

Bents and piers are labeled in plans from N to S. Piers are for main span only, P1(N) & P2(S). Bents are from 1(N) to 6(S). Bent 3a is the little half bent just N of P1 on W end. Bent 4a is the little half bent just S of P2 on E end.

Recommended Repairs:

- 12. Patch deck boards at N abut.
- 117. Repair/strengthen steel beam ends in main span.
- 330. Repair cracked posts in metal railing-north end of both.
- 510. Seal deck cracks.
- 822. Patch bit approach roadways.
- 891. Straighten horiz clearance marker in SW & NE.
- 892. Repair severe erosion under bridge @ NE & SW corners.

Superstructure: [5] Section loss of steel beams over bearings.

Substructure: [5] '18-(5)-spalls at north abutment, some w/ rebar exposed. Timber cap on north abutment seat split at east end-no crushing.

CSAH 4 (Eden Prairie Rd) Bridge Replacement Project

Attachment 05 | Potential Concept



CSAH 4 (Eden Prairie Rd) Bridge Replacement Project

List of Attachments

1. Project Narrative
2. Project Location Map
3. Existing Roadway Condition Photos
4. Potential Typical Sections
5. Potential Concept
6. Minnesota Structure Inventory Report
7. Hennepin County Board Resolution 22-0109
8. Alternate Routes Map
9. Socio-Economic Equity Map
10. Affordable Housing Access Map
11. Multimodal Connections Map
12. City of Eden Prairie Support Letter

CSAH 4 (Eden Prairie Rd) Bridge Replacement Project

Attachment 1 | Project Narrative

Project Name

CSAH 4 (Eden Prairie Rd) Bridge Replacement Project

City(ies)

Eden Prairie

Commissioner District(s)

6

Capital Project Number

CP 2181300

Project Category

Bridge Replacement

Scoping Manager

Emily Buell

Scoping Form Revision Dates

4/6/2022

Project Map



Project Summary

Replace Bridge #27502 over the Twin Cities and Western (TC&W) Railroad in the City of Eden Prairie.

Roadway History

The existing bridge (built in 1960) is classified as functionally obsolete based on its geometric constraints. The bridge superstructure consists of steel and timber beams that are in relatively fair condition. However, the bridge recently required the installation of additional beams to avoid introducing weight restrictions. The timber piers are experiencing deterioration, which is typical for a structure of this age, and will continue to degrade without continued maintenance or replacement.

Project Description and Benefits

This project is anticipated to remove the existing bike/ped bridge parallel to Bridge #27502 and include multimodal facilities as part of the new bridge structure. Additional improvements along CSAH 4 (Eden Prairie Rd) between Hillcrest Ln and Baywood Ln may include the addition of a multiuse trail along the east side of the corridor and resurfacing of the existing trail along the west side of the corridor to provide logical connections for the existing trails. Furthermore, the proposed project is anticipated to include striping changes to incorporate dedicated left-turn lanes at the Hillcrest Ln and Baywood Ln intersections that improve user mobility and safety when compared to the existing bypass lanes.

Project Risks & Uncertainties

Coordination between Hennepin County, the City of Eden Prairie and TC&W Rail will need to take place as part of this project. Additionally, coordination efforts will include minimizing impacts to the traveling public, especially detours for multimodal users.

Project Timeline

Scoping: Q1 2022 - Q4 2024
 Design: Q1 2025 - Q4 2026
 R/W Acquisition: Q1 2026 - Q4 2026
 Bid Advertisement: Q1 2027
 Construction: Q2 2027 - Q4 2027

Project Delivery Responsibilities

Preliminary Design: Consultant
 Final Design: Consultant
 Construction Services: Consultant

Project Budget -	Project Level
Construction: \$	5,340,000
Cost Estimate Year:	2022
Construction Year:	2027
Annual Inflation Rate:	2.0%
Inflated Construction: \$	5,900,000
Design Services: \$	890,000
R/W Acquisition: \$	110,000
Other (Utility Burial): \$	-
Construction Services: \$	590,000
Contingency: \$	1,770,000
Total Project Budget: \$	9,260,000

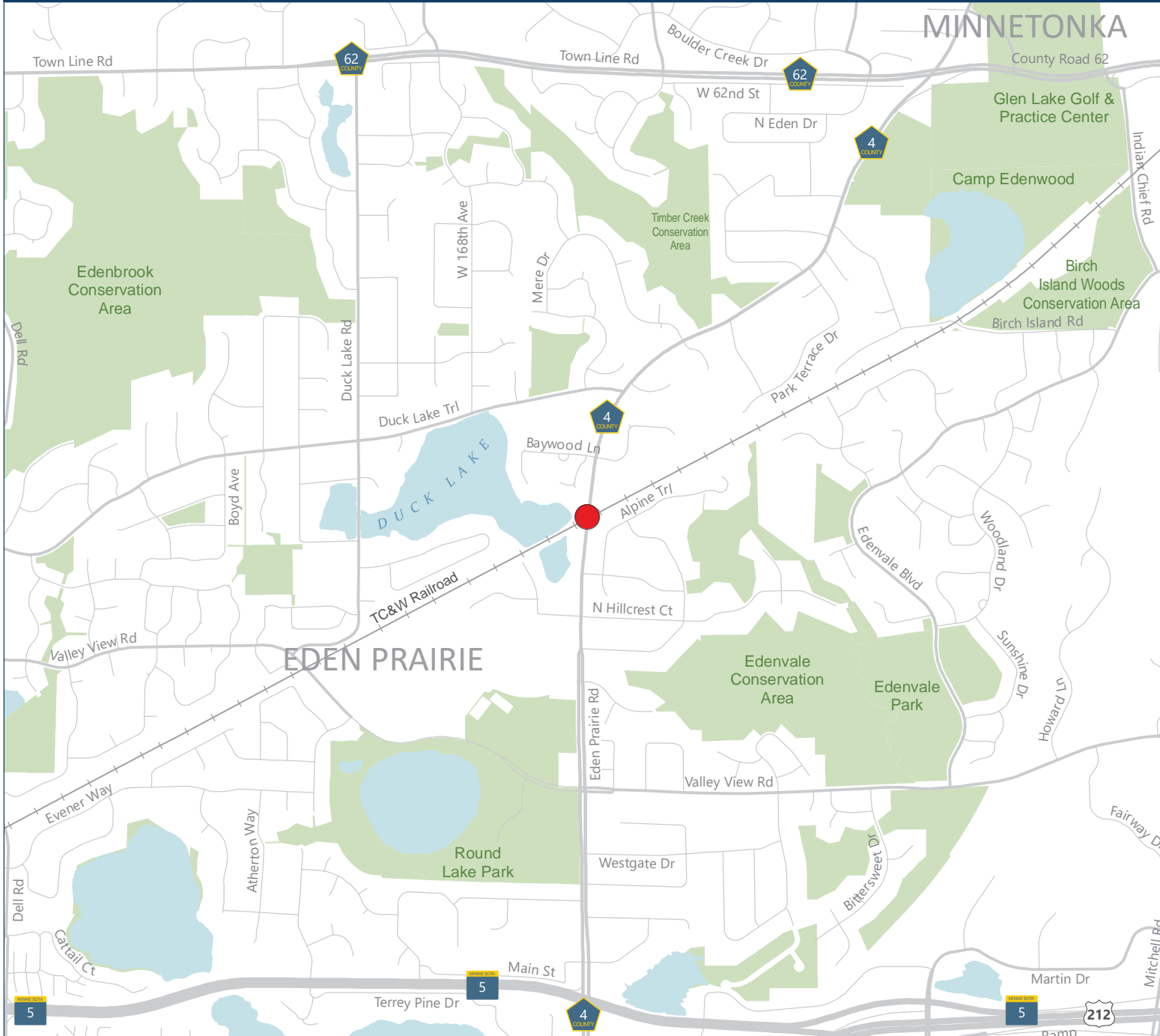
Funding Notes

This project is eligible for federal funding through the Metropolitan Council's Regional Solicitation based on the structure's condition ratings and the roadway's functional classification.

CSAH 4 (Eden Prairie Rd) Bridge Replacement Project

Attachment 02 | Project Location Map

HENNEPIN COUNTY
MINNESOTA



Key

● Project Location



Disclaimer: This map (i) is furnished "AS IS" with no representation as to completeness or accuracy; (ii) is furnished with no warranty of any kind; and (iii) is not suitable for legal, engineering or surveying purposes. Hennepin County shall not be liable for any damage, injury or loss resulting from this map.

Published date: 4/8/2022



CSAH 4 (Eden Prairie Rd) Bridge Replacement Project

Attachment 03 | Existing Bridge Condition Photos



Existing roadway configuration, including separate trail facility and pedestrian bridge.



View of the functionally obsolete timber bridge span and piers over the Twin Cities & Western Railroad.



View of the top of an aging timber pier, including rusting along the steel beam span.



Cracks in the concrete along the existing bridge railing.

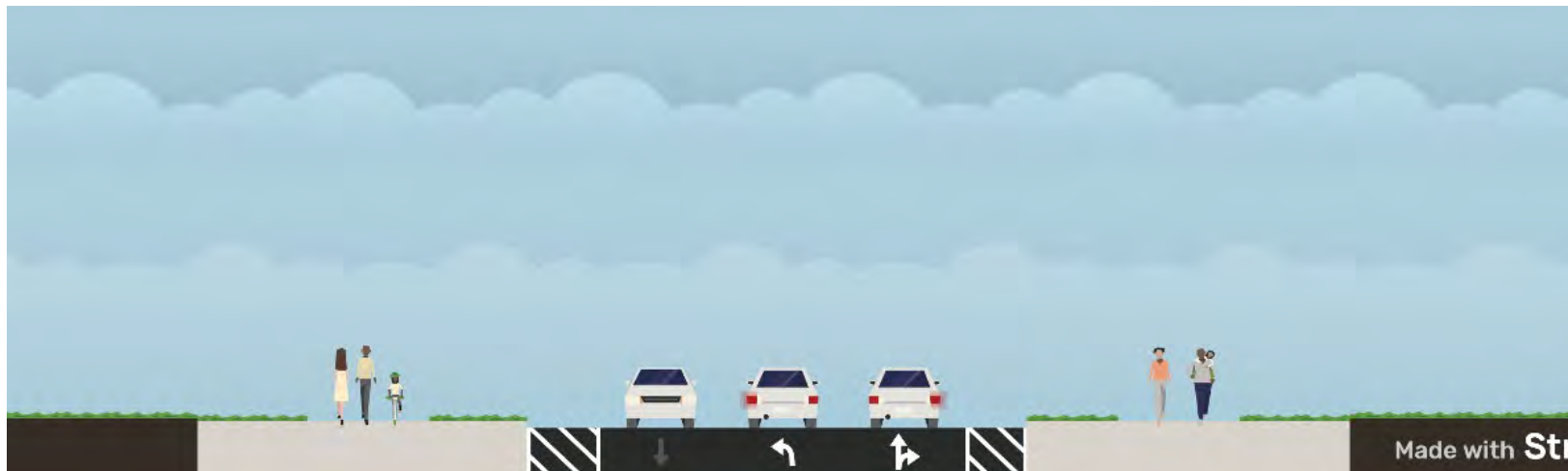
CSAH 4 (Eden Prairie Rd) Bridge Replacement Project

Attachment 04 | Potential Typical Sections

At bridge:



At intersection:



CSAH 4 (Eden Prairie Rd) Bridge Replacement Project

Attachment 05 | Potential Concept



CSAH 4 (Eden Prairie Rd) Bridge Replacement Project

Attachment 06 | Minnesota Structure Inventory Report

Bridge ID: 27502

EDEN PRAIRIE RD over TC;W RR

Date: 04/06/2022

+ GENERAL +	+ ROADWAY ON BRIDGE +	+ INSPECTION +
Agency Br. No. Crew District METRO Maint. Area County 27 - HENNEPIN City EDEN PRAIRIE Township Desc. Loc. 1.1 MI N OF JCT TH 5 Sect., Twp., Range 05 - 116N - 22W Latitude 44d 52m 39.65s Longitude 93d 29m 07.60s Custodian COUNTY Owner COUNTY Insp Responsibility HENNEPIN COUNTY Year Built 1960 Date Opened to Traffic 10-01-1960 MN Year Remodeled FHWA Year Reconstructed Bridge Plan Location COUNTY Potential ABC N.A.	Facility CSAH 4 Functional Class URB/MINOR ART ADT (YEAR) 7,200 (2016) HCADT National Highway System N Route Sys/Nbr (TIS) CSAH 4 Ref. Point (TIS) 004+00.470 Detour Length 5 mi. Lanes 2 Lanes ON Bridge Control Section (TH Only) Function MAINLINE Type 2 WAY TRAF Bridge Match ID 1 Roadway Key 1-ON + RDWY DIMENSIONS ON BRIDGE + If Divided NB-EB SB-WB Roadway Width 30.0 ft Vertical Clearance Max. Vert. Clear. Horizontal Clear. 29.9 ft Appr. Surface Width 48.0 ft Bridge Roadway Width 30.0 ft Median Width on Bridge NA + MISC. BRIDGE DATA + Structure Flared NO Parallel Structure NONE Field Conn. ID Cantilever ID Foundations Abut. CONC - FTG PILE Pier TIMBER - PILE BENT Historic Status NOT ELIGIBLE On - Off System ON + PAINT + Year Painted 1960 Painted Area 2,640 sf Primer Type LEAD Finish Type ALKYD IRON OXIDE + BRIDGE SIGNS + Posted Load NOT REQUIRED Traffic NOT REQUIRED Horizontal OBJECT MARKERS Vertical NOT APPLICABLE	Deficient Status F.O. Local Planning Index 60 Last Routine Insp Date 06-11-2020 Routine Insp Frequency 24 Inspector Name HENNEPIN COUNTY Status A-OPEN + NBI CONDITION RATINGS + Deck 6 Superstructure 5 Substructure 5 Channel N Culvert N + NBI APPRAISAL RATINGS + Structure Evaluation 5 Deck Geometry 3 Underclearances 4 Waterway Adequacy N Approach Alignment 6 + SAFETY FEATURES + Bridge Railing 0-SUBSTANDARD GR Transition 0-SUBSTANDARD Appr. Guardrail 1-MEETS STANDARDS GR Termini 0-SUBSTANDARD + SPECIAL INSPECTIONS + Frac. Critical N Underwater N Pinned Asbly. N + WATERWAY + Drainage Area Waterway Opening Navigation Control NOT APPL Pier Protection Nav. Vert./Horz. Clr. Nav. Vert. Lift Bridge Clear. MN Scour Code A-NON WATERWAY Scour Evaluation Year 1991 + CAPACITY RATINGS + Design Load H 20 Operating Rating HS 26.20 Inventory Rating HS 15.70 Posting Rating Date 03-29-2013 Overweight Permit Codes A: N B: N C: N
+ STRUCTURE +		
Service On HWY;PED Service Under RAILROAD Main Span Type STEEL BM SPAN Main Span Detail Appr. Span Type TIMB BEAM SPAN Appr. Span Detail Skew 35L Culvert Type Barrel Length Number of Spans MAIN: 1 APPR: 8 TOTAL: 9 Main Span Length 48.0 ft Structure Length 178.1 ft Deck Width 38.5 ft Deck Material C-I-P CONCRETE Wear Surf Type LOW SLUMP CONC Wear Surf Install Year 1981 Wear Course/Fill Depth 0.25 ft Deck Membrane NONE Deck Rebars NONE Deck Rebars Install Year Structure Area 6,857 sq ft Roadway Area 5,339 sq ft Sidewalk Width - L/R 3.0 ft 3.0 ft Curb Height - L/R 0.75 ft 0.75 ft Rail Codes - L/R 19 19		

CSAH 4 (Eden Prairie Rd) Bridge Replacement Project

Attachment 06 | Minnesota Structure Inventory Report

Page No: 2

04/06/2022

MINNESOTA BRIDGE INSPECTION REPORT

Crew:
Insp Responsibility: HENNEPIN COUNTY

BRIDGE 27502 EDEN PRAIRIE RD OVER TC;W RR

INSP. DATE: 06-11-2020

County: HENNEPIN	Location: 1.1 MI N OF JCT TH 5	Length: 178.1 ft
City: EDEN PRAIRIE	Route (TIS): CSAH 4 Ref Pt (TIS): 004+00.470	Deck Width: 38.5 ft
Township:	Control Section: Maint. Area:	Rdwy. Area 5,339 sq ft
Section: 05 Township: 116N Range: 22W	Local Agency Bridge Nbr:	Paint Area 2,640 sq ft
Main Span Type: STEEL BM SPAN		Culvert: N/A

NBI Deck: 6 Super: 5 Sub: 5 Chan: N Culv: N	Open, Posted, Closed: OPEN
Appraisal Ratings - Approach: 6 Waterway: N	MN Scour Code: A-NON WATERWAY Def. Stat: F.O. Suff. Rate: 55.5
Required Bridge Signs - Load Posting: NOT REQUIRED	Traffic: NOT REQUIRED
Horizontal: OBJECT MARKERS	Vertical: NOT APPLICABLE

ELEM NBR	ELEMENT NAME	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
800	CRITICAL DEFS OR SAFETY HAZARDS	06-11-2020	1 EA	1	0	0	0
		06-27-2018	1 EA	1	0	0	0

Notes: 800. No critical structural deficiencies or serious safety hazards are present on this structure.

12	REINFORCED CONCRETE DECK	06-11-2020	6,857 SF	6,208	572	77	0
		06-27-2018	6,857 SF	6,208	576	73	0

Notes: 12. Wood stay in place forms under concrete in approach spans. A few cracks w/ efflor on bottom of steel span. Haunch is spalled @ E fascia stringer near S abut. 2nd & 4th bays from W in timber span 8, 2nd bay from E in timber span 9 & N 2 spans have cracked & deteriorated form boards. Rust spots @ several cracks. Cracks & efflor on cantilever @ rail base columns. Some large spall & cracks on coping. 4 spalls in coping @ span 1 on E side. Large (2' X 1') spall in SE cantilever w/ rebar exposed. 2 large spalls (2' X 1') @ E coping @ piers 4 & 5. Patches over bents on both sides of RR. Some delams. Few small spalls w/ rebar exp. Large spall in coping @ SW corner. Deck is patched @ both ends of main span. '14-main span-spalls-2 SF & 1 SF w/ rebar exp; 10 SF of delam; 22 SF of conc patches; 400 LF of random cracks & 14 LF of cracks w/ efflor. Some small areas of unconsolidated conc. '16-8' section of leakage through deck @ W end of P1. Decks misaligned horizontally 5/8" @ N compression joint & @ W end vertically 1/2". Approach spans are concrete over wood deck. Some of this deck at N abut has decayed boards & concrete debris on abut seat. 16 SF of spalls & 3 SF of spalls w/ rebar exp. 52' of cracks w/ efflor & rust. '18-most deterioration in W 2 bays, water stained timber forms. Scale, efflor & spalls w/ rebar exp in main span. '20-3' spall with exposed rebar E fascia @ N pier. Failed patch.

510 WEARING SURFACE	06-11-2020	5,339 SF	4,785	552	2	0
	06-27-2018	5,339 SF	4,819	450	45	25

Notes: 510. Numerous cracks and several large trans cracks in wearing surface. '14-map cracking in NB gutter. '16-Sealed trans, long, & map cracks, w/ 1'-3' spacing. '18-25 SF heavy density (1'-3') & 25 SF severe density (<1') map cracks, minor in size. Minor abrasion in wheel path of both lanes. '20-new map cracking. 421 SF of map cracking. 98 SF sealed cracks. 33 SF unsealed cracks.

302	COMPRESSION DECK JOINT	06-11-2020	85 LF	0	0	0	85
		06-27-2018	85 LF	0	0	0	85

Notes: 302. Joints are filled w/ sand. '14-joints are partially filled w/ debris. '16-Joint closed tight. Monitor for substructure settlement. S gutter filled with debris.

330	METAL BRIDGE RAILING	06-11-2020	358 LF	357	1	0	0
		06-27-2018	358 LF	333	3	4	18

Notes: 330. '20-metal railing in good condition. 1st post E rail cracked & lose, some bolts slightly rusted.

515 STEEL PROTECTIVE COATING	06-11-2020	623 SF	0	623	0	0
	06-27-2018	623 SF	0	623	0	0

Notes: 515. '16-Paint chalking and fading. '20-no change.

331	REINFORCED CONC BRIDGE RAILING	06-11-2020	358 LF	0	315	41	2
		06-27-2018	358 LF	0	340	18	0

Notes: 331. H.C. Operations repaired delams, spalls and rebar section loss @ both concrete rails. H.C. Operations widened rail and added rebar in '03. See file. New bridge railing repair has many vert cracks. One spall w/ rebar exposed @ joint in W rail. Spalls w/ rebar exposed in several spots on E rail. '14-2 spalls w/ rebar exp(1 SF) @ W rail joint. Cracks are spaced +/- 3' apart. '16-Openings @ bottom of rail filled w/ concrete on one side. Some spalling & deterioration of these patches. Some spalls have been repaired. Cracks on top of E rail sealed. Very minor vert cracks spaced 2'. Spall w/ rebar outside of E rail over tracks & in other locations on both rails. '18-some spalls on outside both rails have been patched. '20-heavy spalls exposed rebar outside both rails.

822	BITUMINOUS APPROACH ROADWAY	06-11-2020	2 EA	0	0	2	0
		06-27-2018	2 EA	0	0	2	0

CSAH 4 (Eden Prairie Rd) Bridge Replacement Project

Notes: 822. Deteriorated, settled, cracked and spalled @ bridge ends. South-bit spalls patched. North-SBL O/L extends 5' onto deck. Bit settled in NBL and raised in SBL. Spalls patched. '14-new O/L on both approaches this year. '16-S approach has large map cracks & spalls for width of bridge. N approach has large map cracks in NBL. '18-spall in SBL of N app. '20-N & S app has extensive deterioration, settlement, cracking & patching. N app NBL settled.

107	STEEL GIRDER OR BEAM	06-11-2020	341 LF	0	196	128	17
		06-27-2018	341 LF	0	196	128	17
Notes: 107. Center span girders: 7 girders total. Fascia stringer is rusted on end & bottom flange. 2" x 1" and 3" x 3" hole from section loss in web of W fascia girder of main span @ S end over pier. 2" x 3" and 2" x 1" hole from section loss in web of E fascia girder of main span @ N end. Several interior stringers are rusted along bottom flange. Some minor rust on top & bottom flange of center stringer. Some sheet rust on S end. Sheet rust on the top flanges of the 3rd beam from E @ the N end. Some sheet rust on main span girders @ S end over pier-3rd and 6th from E. '14-section loss holes in E fascia @ N end: 2.5" x 2.5", 1" x .5" and 1" x 2". +/-2' of beam ends @ N pier have minor section loss. Load ratings by BJJ show no posting or reduction in capacity necessary-moved qty from CS5 to CS4. '16-All beams have bottom flange surface rust. 5' of all beam ends have flaking rust & 6' have some section loss, up to 100%. '18-17' of beams, mainly fascia girders, have section loss. More extensive areas of flaking rust on all beams. '20-no change.							
515	STEEL PROTECTIVE COATING	06-11-2020	2,640 SF	0	0	1,584	1,056
		06-27-2018	2,640 SF	0	0	1,584	1,056
Notes: 515. '16-Majority of paint close to failure w/ spot rust showing through. Approx 25% of paint has failed. '18-est approx 40% of paint failed. Remainder is flaked, peeled. '20-no change.							
215	REINFORCED CONCRETE ABUTMENT	06-11-2020	105 LF	56	32	17	0
		06-27-2018	105 LF	56	32	17	0
Notes: 215. SOUTH-Water leakage behind S. '18-no change. NORTH-5' x 1' spall w/ rebar exp in NE. '14-5' minor crack in NW corner. '16-No change. '18-timber cap is split @ E end. 4' x 1' x 3" spall in parapet near center. Spall between 4th & 5th beams from E. Water leakage. '20-N parapet spalls exposing rebar. Wingwall notes: Some spalling, 3' x 1' on NE wing. '14-1 SF spall in SW. '16-wings 5' each. '18-spall in NE has exp rebar.							
117	TIMBER STRINGER	06-11-2020	1,558 LF	1,111	285	162	0
		06-27-2018	1,558 LF	1,111	285	162	0
Notes: 117. Numerous stringers have horiz cracks. 3 stringers have shear cracks - 5th from W S of bent 3; 5th from W N of bent 6; 4th from W N of bent 2. All shear cracked stringers were repaired by placing glue laminated beams adj to them. 2nd stringer from E @ bent 2 end in span 2 is partially split, but not a major structural flaw. 2nd, 7th, 8th & 9th from W in span 2 are horiz cracked & checked. '14-no change. '16-3' section of beam laying on ground @ W end of P1. '20-2 1/4" deep surface check 10' long @ bent 1, 6th from E. 15' surface check 1 1/2" deep @ the 7th stringer from the E @ bent 1. 15' surface check 2 3/4" deep @ the 10th stringer from the E @ bent 1.							
228	TIMBER PILING	06-11-2020	112 EA	34	68	10	0
		06-27-2018	112 EA	39	68	5	0
Notes: 228. OK. '14-many columns have checks up to 1/2" wide. Minor fire damage to bents @ B1. Minor fire damage @ all @ P3 & W 2 pile on B3. '18-corrected notes from '16-mislabeled directions. B6, 2nd from W is off 1-1/2"; 3rd from W is off 3-1/2". B5, 2nd from E is off 2". '20-B2 end cracking.							
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		06-27-2018	367 LF	295	64	8	0
Notes: 235. Several caps have horiz checks. '14-some checks are up to 1/2" wide. '18-large crack in to of B2 @ W end. '20-no change.							
855	SECONDARY MEMBERS (SUPER)	06-11-2020	1 EA	0	1	0	0
		06-27-2018	1 EA	0	1	0	0
Notes: 855. 24 steel bolted diaphragms on center span. 1 brace broken off @ E side of N main span. Stiffeners @ ends of main span generally sheet rusted, section loss. '14-no change. '20-no change.							
856	SECONDARY MEMBERS (SUB)	06-11-2020	1 EA	0	1	0	0
		06-27-2018	1 EA	0	1	0	0
Notes: 856. X-bracing between piles. '18-fire charred in span 3. Large section missing @ P2. Splits on many sections. '20-no change.							
891	OTHER BRIDGE SIGNING	06-11-2020	1 EA	1	0	0	0
		06-27-2018	1 EA	1	0	0	0
Notes: 891. Horiz clearance X4-4 signs @ all corners-SW post is leaning. No plow up/down X4-5 @ NE. '14-NE X4-4 is twisted slightly from impact. '18-No Trespassing signs on P1 @ E & P2 @ W, deterioration on W. No X4-5 in SE. X4-4 in NE has been repaired. '20-no change.							
892	SLOPES & SLOPE PROTECTION	06-11-2020	1 EA	0	0	0	1
		06-27-2018	1 EA	0	0	0	1
Notes: 892. Severe erosion under bridge on both ends. Hole in front of N abut, between 1st & 2nd stringer from E. Erosion on W side @ spans 6,7 & 8. Living quarters dug out in span 9. Severe erosion @ SW & NE corners. Water pooled under span 1. '16-Living quarters dug out @ N abut. '20-erosion along S abut.							

CSAH 4 (Eden Prairie Rd) Bridge Replacement Project

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Page No: 4

893	GUARDRAIL	06-11-2020	1 EA	0	1	0	0
		06-27-2018	1 EA	0	1	0	0
Notes: 893. Guardrail attached w/ all ends turned down. '14-far NE corner has minor impact damage. '16-Minor impact damage in all 4 corners. N guardrail extends from intersection N of bridge. New crashworthy end in SE. End in SW is turned down. '18-rust on rail in SW & NE. Mod impact damage in NE. New crashworthy end treatments in all corners. Minor impact damage in SE & NW.							
894	DECK & APPROACH DRAINAGE	06-11-2020	1 EA	0	1	0	0
		06-27-2018	1 EA	0	1	0	0
Notes: 894. '16-Water ponding in NE & @ ends of compression joint. Ponding on walks. '20-SE: min-mod corrosion/rust in many areas, min impact damage. NE: mod corrosion near N end of bridge. 2 loose spacer blocks.							
895	SIDEWALK, CURB, & MEDIAN	06-11-2020	1 EA	0	1	0	0
		06-27-2018	1 EA	0	1	0	0
Notes: 895. Trans cracks in walk. Conc spalled on E curb face. Conc spalled in SE and SW w/ rebar exp @ SE corner. 30' X 6" X 1" spall on E walk. '14-E walk has minor map cracks w/ a few trans cracks. Spall on E curb face is 30'L x 4"H x 4"D. Minor trans cracks in W walk are spaced 5' apart. '16-All cracks sealed. '18-3' x 8" x 3" spall w/ rebar exp in SE corner. '20-spall in the NW curb, scaling on walk. Large spall on curb on the 25' N of the E end.							
899	MISCELLANEOUS ITEMS	06-11-2020	1 EA	1	0	0	0
		06-27-2018	1 EA	1	0	0	0
Notes: 899. RR Communication line @ N side of main span. Telephone fiber optic cable near both bents in main span. Graffiti on most columns. Graffiti on pier caps of piers 1, 2, 9 and 10. '16-Gas markers @ NW & SW.							
900	PROTECTED SPECIES	06-11-2020	2 EA	0	0	1	1
		06-27-2018	2 EA	0	0	1	1
Notes: 900. 16-bird nest in center span. '18-bats in S span on W side btw stringers @ bent 6. Also @ bent 3.							

General *Bridge 27502 CSAH 4 / TC & W RR 6/11/20 MAM, ADT, SMM, HAH, & MJB. 60' snooper over E side only. NOTE: City of Eden Prairie constructed a steel truss trail bridge(Continental Bridge S.N. 93013) on the W side of existing bridge 27502. Flaggers needed for single lane traffic.

Bents and piers are labeled in plans from N to S. Piers are for main span only, P1(N) & P2(S). Bents are from 1(N) to 6(S). Bent 3a is the little half bent just N of P1 on W end. Bent 4a is the little half bent just S of P2 on E end.

Recommended Repairs:

- 12. Patch deck boards at N abut.
- 117. Repair/strengthen steel beam ends in main span.
- 330. Repair cracked posts in metal railing-north end of both.
- 510. Seal deck cracks.
- 822. Patch bit approach roadways.
- 891. Straighten horiz clearance marker in SW & NE.
- 892. Repair severe erosion under bridge @ NE & SW corners.

Superstructure: [5] Section loss of steel beams over bearings.

Substructure: [5] '18-(5)-spalls at north abutment, some w/ rebar exposed. Timber cap on north abutment seat split at east end-no crushing.

CSAH 4 (Eden Prairie Rd) Bridge Replacement Project

Attachment 07 | Hennepin County Board Resolution 22-0109



Hennepin County, Board of Commissioners

RESOLUTION 22-0109

2022

The following resolution was moved by Commissioner Angela Conley and seconded by Commissioner Debbie Goettel:

BE IT RESOLVED, that Hennepin County be authorized to apply for federal funding through the Regional Solicitation for the following projects (separated by category) on various County State Aid Highways (CSAHs) throughout the county:

Roadway Reconstruction/Modernization

Projects programmed in the 2022-2026 CIP:

- Franklin Avenue (CSAH 5) from Lyndale Avenue (CSAH 22) to Blaisdell Avenue in Minneapolis
- Dayton River Road (CSAH 12) from Colburn Street to North Diamond Lake Road (CSAH 144) in Dayton and Champlin
- Lyndale Avenue (CSAH 22) from the Hennepin County Regional Railroad Authority (HCRRA) bridge to Franklin Avenue (CSAH 5) in Minneapolis

Projects identified in the county's 10-year work-plan, but not programmed in the 2022-2026 CIP:

- Penn Avenue (CSAH 32) from 75th Street to the Trunk Highway 62 South Ramp in Richfield
- Cedar Avenue (CSAH 152) from Lake Street (CSAH 3) to 24th Street in Minneapolis

Bridge Rehabilitation/Replacement

Project programmed in the 2022-2026 CIP:

- Bass Lake Road (CSAH 10) bridge over the Twin Lakes Inlet in Brooklyn Center and Crystal

Projects identified in the county's 10-year work-plan, but not programmed in the 2022-2026 CIP:

- Pioneer Trail (CSAH 1) bridge over the HCRRA corridor in Eden Prairie
- Eden Prairie Road (CSAH 4) bridge over Twin Cities and Western Railroad in Eden Prairie

Multiuse Trails/Bicycle and Pedestrian Facilities (sidewalks, streetscaping and improved accessibility)

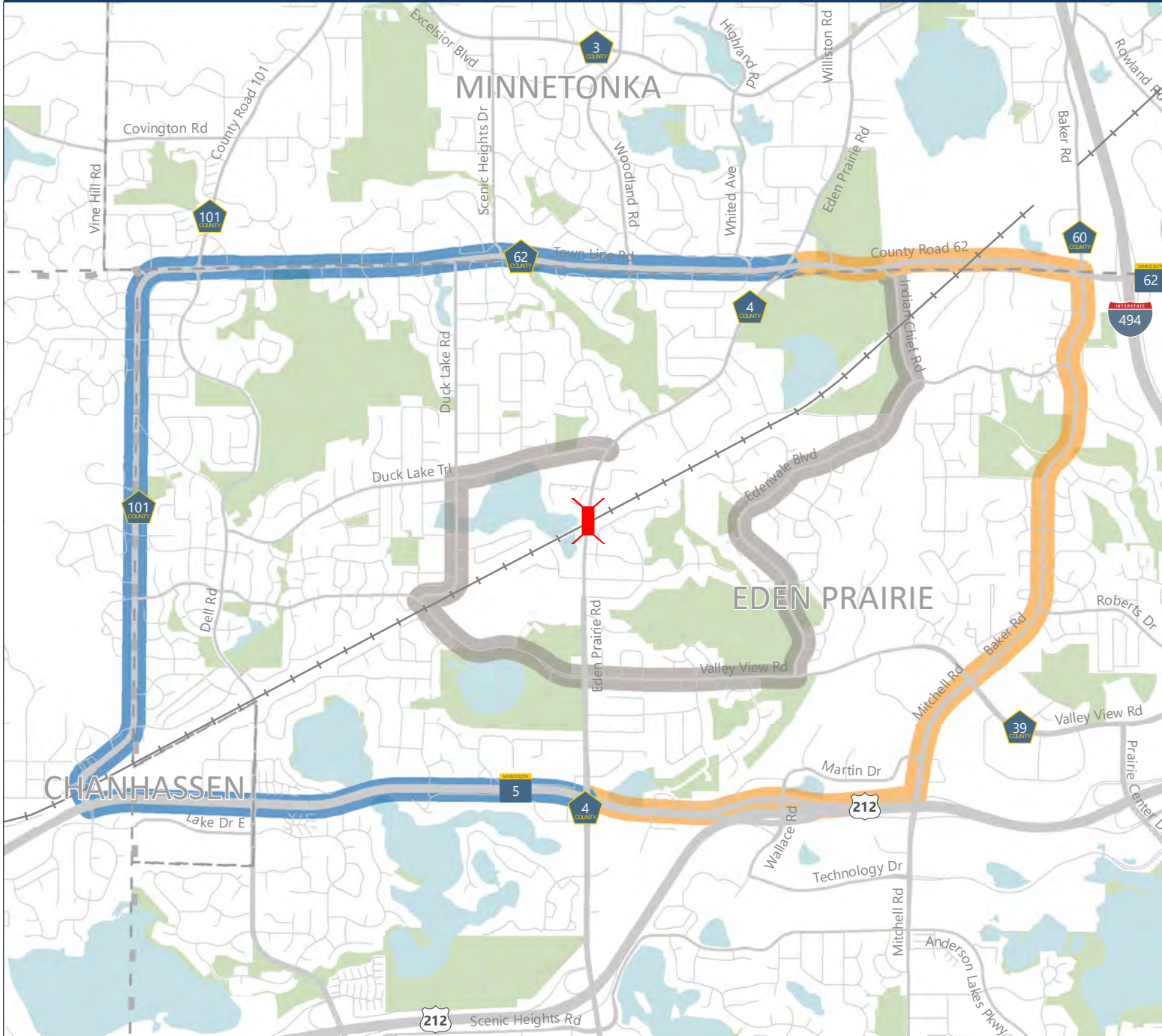
Project partially programmed in the 2022-2026 CIP:

- Lake Street (CSAH 3) from Dupont Avenue to the Mississippi River





CSAH 4 (Eden Prairie Rd) Bridge Replacement Project

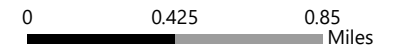
Attachment 08 | Alternate Routes Map

HENNEPIN COUNTY
MINNESOTA



Key

-  Project Location
-  Baker Rd Route
-  County Rd 101 Route
-  Collector Routes



Disclaimer: This map (i) is furnished "AS IS" with no representation as to completeness or accuracy; (ii) is furnished with no warranty of any kind; and (iii) is not suitable for legal, engineering or surveying purposes. Hennepin County shall not be liable for any damage, injury or loss resulting from this map.

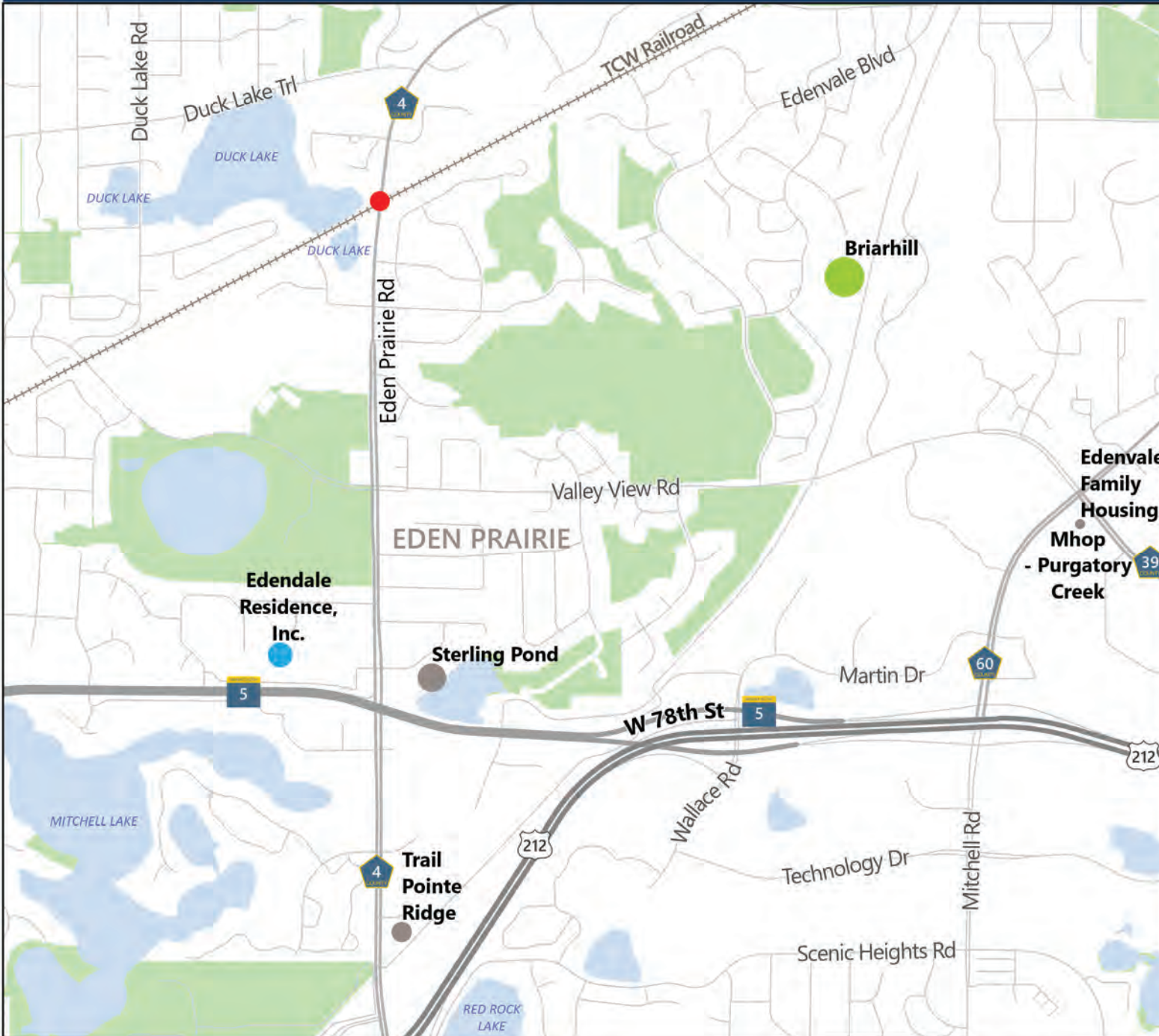
Published date: 3/31/2022



CSAH 4 (Eden Prairie Rd) Bridge Replacement Project

Attachment 10 | Affordable Housing Access Map

HENNEPIN COUNTY
MINNESOTA



Key	
●	Project Location
Population Served	
■	Family
■	Elderly
■	People with Disabilities
■	Multiple
■	Homeless
■	No Information
Affordable Units	
●	1-30
●	31-50
●	51-70
●	71-90
Construction Status	
●	Existing Affordable Housing
+	Proposed or Under Construction
<div style="display: flex; align-items: center;"> <div style="width: 100px; border-bottom: 1px solid black; margin-right: 5px;"></div> <div style="display: flex; flex-direction: column; align-items: center; margin-right: 5px;"> 0 0.23 0.45 </div> Miles </div>	

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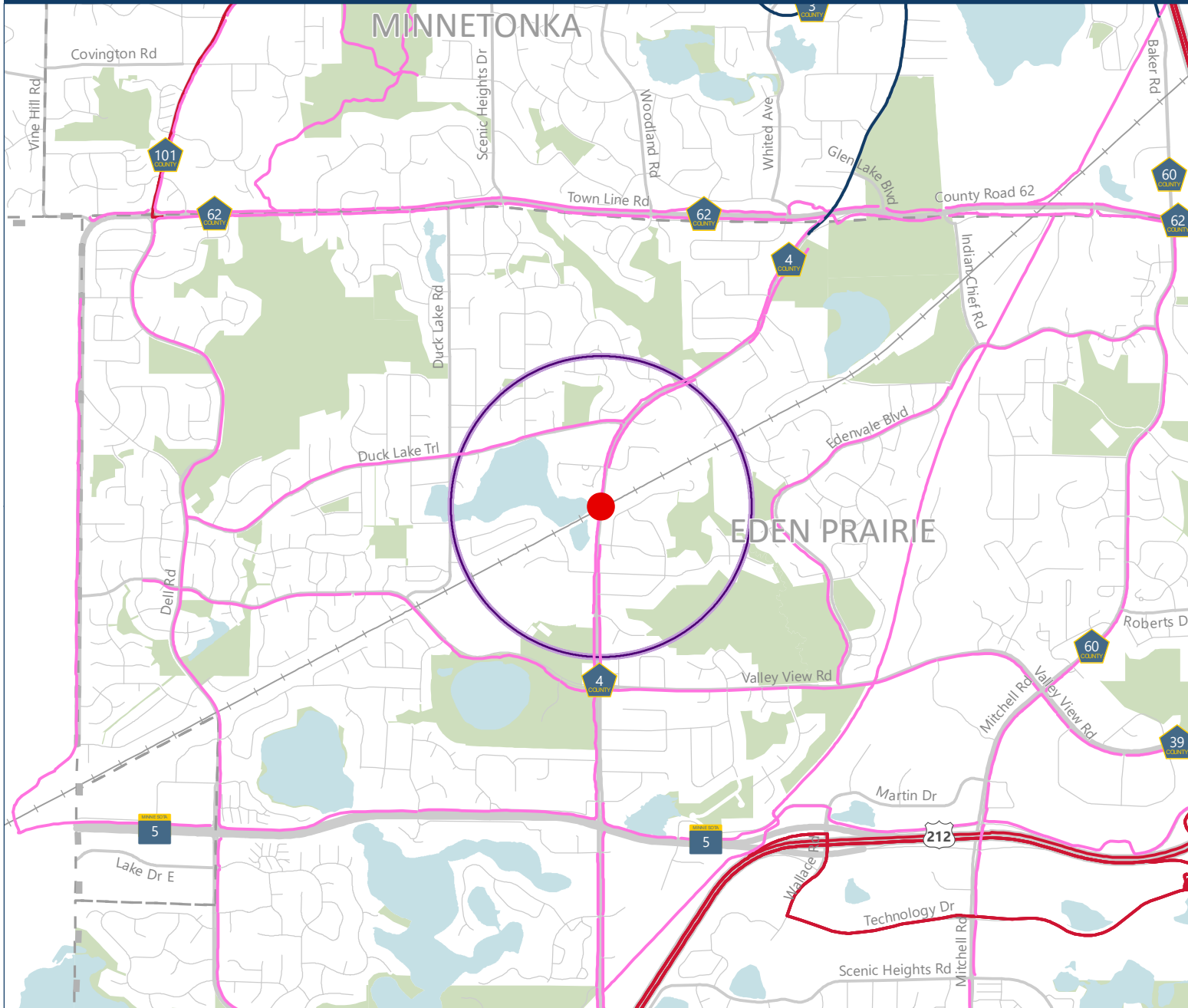
Published date: 3/7/2022



CSAH 4 (Eden Prairie Rd) Bridge Replacement Project

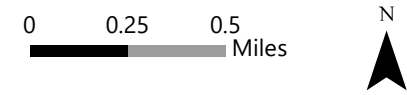
Attachment 11 | Multimodal Connections Map

HENNEPIN COUNTY
MINNESOTA



Key

- Project Location
- 1/2 mi Buffer
- Railroad
- Bikeways**
 - Off-Street
 - On-Street
- Transitway Alignments**
 - Planned Green Line LRT
 - Transit Routes

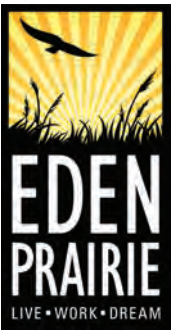


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CSAH 4 (Eden Prairie Rd) Bridge Replacement Project

Attachment 12 | City of Eden Prairie Support Letter



OFC 952 949 8300
FAX 952 949 8390
TDD 952 949 8399

8080 Mitchell Rd
Eden Prairie, MN
55344-4485

edenprairie.org

March 23, 2022

Carla Stueve, P.E.
Director and County Highway Engineer
Hennepin County Transportation Project Delivery
1600 Prairie Drive
Medina, MN 55340

Dear Ms. Stueve:

The City of Eden Prairie expresses its support for Hennepin County's Regional Solicitation federal funding application for the replacement of Bridge #27502 along CSAH 4 (Eden Prairie Road) over the TC&W Railroad in Eden Prairie.

This project will involve the replacement of Bridge #27502 over the TC&W Railroad that is nearing the end of its useful life. This project presents an opportunity to preserve a critical asset, and introduces a new bridge section that provides better accommodations for walking, biking, and driving through the area; thereby enhancing the livability and quality of life for Eden Prairie and Hennepin County residents.

The City of Eden Prairie acknowledges that the city will likely be required to participate in a portion of the costs for this project as outlined in the county's cost participation policy and based on the value received from the bridge replacement. However, at this time we cannot support the estimated city contribution of \$997,000 as provided. Specific details regarding cost participation and maintenance responsibilities are anticipated to be determined during the design process as project development is advanced.

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

Sincerely,

Rodney W. Rue, P.E.
City Engineer

C: Robert Ellis, P.E., P.T.O.E.
Director of Public Works