



City of Saint Paul Capital Budget Proposal

Funding years 2022-2023

Thank you for your interest in the Saint Paul Capital Improvement Budget. Through the capital improvement budget process, we strive to reflect and uphold the values of our community. Our funding decisions are guided by the principles of equity and inclusion, strategic investments, and fiscal responsibility.

Please respond to each question listed below as it applies to your project. Please do not submit your proposal until the application is complete.

Before proceeding with the application, please read and indicate your awareness of the following requirements.

ADA requirements available at: <https://www.ada.gov>

I am aware of ADA requirements.

CERT requirements available at: <https://cert.smwbe.com/>

I am aware of CERT requirements.

Saint Paul's public art ordinance available at: <https://www.stpaul.gov/departments/financial-services/public-art-ordinance-program>

I am aware of the City's public art ordinance.



Contact Information

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Project Overview

1. Project Title:

Rehabilitation or Replacement of Randolph Avenue Bridge No. 7272

2. Brief (1-2 sentence) Summary of Project:

This 3-span, 170-foot long bridge over Union Pacific Railroad is in need of major structural rehabilitation to repair age-related deterioration and to restore its load-carrying capacity. The bridge serves a critical transportation function, as it links Shepard Road to multiple facilities on Randolph Avenue (a dead-end road), including Xcel Energy Power Generating Plant (High Bridge Plant) and the (truck freight-dependent) River Bend business park.

3. Project Location:

The project limits are Randolph Avenue from CSAH 37 / MSAS 249 (Shepard Road) east to James Avenue, including 170 feet of existing bridge structure.

4. Affected Ward(s): See the [Saint Paul District Council and Ward Lookup](#)

- Ward 1 Ward 5
- Ward 2 Ward 6
- Ward 3 Ward 7
- Ward 4

5. Affected Neighborhood District Council(s): See the [Saint Paul District Council and Ward Lookup](#)

- District Council 1 District Council 6 District Council 11 District Council 16
- District Council 2 District Council 7 District Council 12 District Council 17
- District Council 3 District Council 8 District Council 13 Citywide
- District Council 4 District Council 9 District Council 14
- District Council 5 District Council 10 District Council 15

6. Estimated Project Completion Date:

11/30/2023

7. Submitting Department:



Public Works

8. Department Priority (numerical priority out of total submitted projects, ex. 3 of 6):

3 of 7

9. Which category best describes your project?

- Buildings
- Streets and Utilities
- Residential and Economic Development
- Parks and Trails
- Other

Project Description

10. Please describe the project including a physical description of the project noting important sub-elements and information on project timing and/or phasing.

This project is for the reconstruction or rehabilitation of Randolph Avenue approach roadway and Bridge No. 7272 over Union Pacific (UP) Railroad. The bridge, built in 1959, is a 170-ft long steel beam structure with 3 spans. The bridge carries two vehicle lanes, road shoulder, median, sidewalk, and the Sam Morgan Regional Trail. The bridge is critical to the City transportation network because it serves as the only access for numerous industrial, commercial, and educational facilities on Randolph Avenue (a dead-end road) east of Shepard Road.

Timing and coordination will be critical components of the project. City bridge engineers have reviewed the existing structure and believe that the bridge can be physically separated into two halves, such that rehabilitation or replacement activities can occur in phases. This strategy, while adding complexity to the project, will enable the City to maintain adequate vehicle service to businesses during the construction process. The overall duration of construction is expected to take approximately 12-18 months.

Purpose and Justification

11. Please provide pertinent information on the purpose and justification for this project. Please consider the following questions in your response:



- Why is this project important? (eg. opportunity for collaboration, condition, significant need, etc.)
- What problem is this project trying to solve?
- What benefits does it provide to residents or users? What is the historical context of this project?
- Is this a new project, an improvement or expansion project, or maintenance on an existing asset?
- Does this project address any specific health and safety concerns?
- Does this project address an inequity or otherwise support diversity and inclusion?

The bridge carries daily truck traffic, and repairs have been made over the years to address age-related deterioration of concrete and corrosion of beams. Historically those load restrictions have placed burden on businesses and affected their ability to perform daily operations. The bridge is load-restricted to vehicles in its current condition and two trucks are not allowed to meet on the bridge. Only a project of this magnitude will restore its capacity to carry common legal truck loads. Total project length is approximately 1000 feet.

The south side of the bridge carries the Sam Morgan Regional Trail. This portion of the bridge would need to be rehabilitated or replaced. The work provides opportunities to collaborate with City Parks, neighbors and trail users to improve safety, comfort and aesthetics in the project area.



Funding Request

Anticipated Funding Source*	Prior 5 Years	2022	2023	2024	2025	2026	5-Year Total
2022 CIB Request		765,407					765,407
2021 CIB	1,000,000						1,000,000
2020 CIB Transfer	444,582						444,582
BROS Federal Fund		1,915,609					1,915,609
Bridge Enhancement Fund		400,000					400,000
State Bridge Bonds**		478,902					478,902
Total	1,444,582	3,559,918					5,004,500

Anticipated Expenses*	Prior 5 Years	2022	2023	2024	2025	2026	5-Year Total
Construction		4,103,600					4,103,600
Design	200,000	700,900					900,900
Total	200,000	4,804,500					5,004,500

***Add rows if needed.**

Additional comments regarding funding request:

** State Bridge bonds are made available as match to federal funding. State bridge bond financing depends on budget availability and is typically re-funded every two years by State legislature.

Fiscal Responsibility

12. Have grants or other matching funds for this project been secured?

Yes

No

If yes, please explain:

Federal BROS funds for program year 2022 in the amount of \$1.9M have been secured. This project is also eligible to receive State bridge bonds as match to federal funding. The federal authorization deadline is June 30, 2022. If adequate funding is not obtained in this CIB funding cycle, the City will need to submit for a one-time request to extend the federal program year to 2023. If the request is denied, the City stands to lose the federal and state funds that have been allocated to the project.



13. How does this project further City goals of fiscal responsibility? As applicable, include details such as:

- Status and timing details of grants applied for and/or secured or other non-City funding sources.
- Estimated annual increase or decrease in operating costs for this project.
- How operating cost increases or decreases were determined (include details such as personnel costs, materials, maintenance, contracts, energy savings, etc.).
- If new infrastructure, how the department will pay for the increased operating costs.
- Whether the project is currently underway.
- If/how the project prevents a measurable financial loss or reduces future expenses.
- If/how the project contributes to growth in the City's tax base.

The City applied for and successfully secured federal funding for off-system bridges. The authorization deadline is June 30, 2022. In addition, the bridge is eligible for state bridge bond funds as match to federal funding.

Reconstructing the bridge is key to preventing escalating maintenance and repair costs due to deterioration of the concrete elements and corrosion of the steel beams. The railroad requires that flagging operations be provided during any bridge repair and/or maintenance work, which adds to the overall long-term costs of maintaining the bridge.

Randolph Avenue is a dead-end road and the bridge provides the sole access to nearby businesses and an elementary school. The closure of this bridge will impart significant financial loss to local businesses as employees and students will be unable to reach their destination points. Restoring the structural capacity of the bridge and maintaining the integrity of Randolph Avenue will help preserve the City's existing tax base. It will also promote local redevelopment of the unused industrial sites in the area (for example Island Station) which may further expand the tax base for the City.

Condition

14. Facility/Pavement Condition Index: Pavement Condition Index = 16 out of 100
Bridge Sufficiency Rating = 38.5 out of 100 (based on 2020 routine inspection)

15. Expected useful life of the project: The new bridge will have a design life of 75 years.

16. Please elaborate on any issues relating to condition. Consider things such as:

- Whether/how this project remediates health or safety issues that pose a danger to use
- Whether/how this project addresses code violations or other mandates or legal requirements.

The bridge is currently restricted to loads less than legal highway loads. Significant rehabilitation work was completed in 2018 by City forces to maintain limited serviceability.



Reconstruction will restore full load carrying capacity to the bridge and protect the City's responsibility to provide public vehicle access to tenants on Randolph Avenue and non-motorized use of the Sam Morgan Regional Trail.

Usage

17. Describe the current and potential usage of this project, using the following questions as a guide:

- If this is an existing asset, who currently uses it?
- How is it used?
- Who might use it if this project is funded?
- How will this project/improvement meet the needs of the surrounding community/those who do or will use it?

The bridge provides the only access to Randolph Avenue facilities, including Xcel Energy High Bridge Plant, a chemical manufacturing facility, the River Bend business park and an elementary school. There are no alternative routes for access to this area, and reconstructing this bridge is vital to avoiding disruption to the commercial and industrial activities in the area.

Equity and Inclusion

The City of Saint Paul and the Capital Improvement Budget Committee are committed to advancing equity and inclusion in Saint Paul.

Economic Impact

18. Describe the economic development impact of the project, using the following questions as a guide:

- How does this project create jobs?
- How does this project promote business opportunities?
- How does this promote economic development in underserved or underdeveloped neighborhoods?

The project will support construction-industry job opportunities, and it will play a pivotal role in maintaining access to critical utility infrastructure (the Xcel Energy High Bridge Plant, which supplies electricity to thousands of businesses and households in the region). Increased restrictions or bridge closure would negatively impact the local economy as it would cut off public access to the power generation plant and other area businesses. Reconstructing the bridge will restore its load carrying capacity, which supports existing businesses and promotes future business opportunities.

Community Impact

19. Please describe the impact this project will have on the community. As applicable, address issues such as:



- Potential to enhance neighborhood stability or quality of life
- Right fit (supports or enhances the cultural characteristics of the surrounding community)
- Proximity to Area of Concentrated Poverty where 50% or more of residents are people of color (ACP50)
- Art/aesthetics
- Unmet need
- Accessibility
- Transportation
- Potential long term positive/negative effects on community
- Historical or cultural significance of asset
- Public safety
- Equitable and inclusive design

The reconstruction and rehabilitation of the bridge will maintain access to existing businesses and promote future development opportunity. One planned future development on Randolph Avenue includes a proposal to build residential apartment units at the former Island Station coal power plant. The Waterford Bay Apartments are expected to be completed in the fall of 2021 and will consist of apartment-style residential units with community-focused amenities.

The project also offers an opportunity for improved lighting and aesthetics along the Randolph Avenue corridor and the Sam Morgan Regional Trail.

Strategic Investment

20. How does this project further City goals of strategic investment? As applicable, include details such as:

- Collaborative arrangements with outside project partners, including who they are and what their role is with the project.
- Collaborative arrangements with other City departments for this project (example: bundling materials).
- How this project promotes innovation (incorporates new technology, uses resources strategically, etc.).
- How this project takes climate change/environmental sustainability/energy efficiency into account.
- How this project complies with a need or goal identified in an adopted City or neighborhood plan.

This project includes collaboration with City Parks to promote aesthetics, comfort, and safety along Randolph Avenue and the Sam Morgan Regional Trail. The project also leverages external financing sources including federal BROS and state bridge bond funds.

The West 7th Street/Fort Road District 9 Area Plan endorses preservation of businesses and jobs in the area while promoting the additional of housing units. The Brewery/ Ran-View Small Area Plan recognizes the importance of redeveloping aging industrial sites in the area. The Waterford Bay Apartments will be built at the old Island Station coal power plant and they are expected to be completed in the fall of 2021. This project will promote the efficient use of old industrial sites off of Randolph Avenue.



Other

What else you would like to tell us about this project that was not addressed in the questions above?

The bridge is on MnDOT's annual routine inspection list, and the City continues to dedicate staff resources to inspect and assess the condition of the bridge for structural adequacy. Based on the latest inspection report dated July 29, 2020, the concrete for the substructure has deteriorated exposing the rebar at the pier caps, and the west abutment is significantly undermined. Steel beams and diaphragms have extensive corrosion with heavy section loss. Substantial repair measures were completed in 2017 as a stop-gap effort to maintain limited short-term service on the bridge. Bridge rehabilitation and/or reconstruction is essential to reduce ongoing maintenance and repair costs, and to prevent additional restrictions or closure of the bridge and road.



Randolph Bridge @ Xcel

- Bridge rehabilitation project
- Randolph Ave provides only access to businesses east of Shepard Rd, including Xcel power generating plant. Bridge vehicle loads are reduced due to degradation of structure, limiting freight access.
- Project received ~\$2M federal grant for 2022 program year.
- 2022 \$765,407 CIB

