

## Application 17063 - 2022 Roadway Modernization 17590 - West 76th St Modernization Regional Solicitation - Roadways Including Multimodal Elements Status: Submitted Submitted Date: 04/14/2022 3:35 PM **Primary Contact** He/him/his Ben Manibog Name:\* Pronouns First Name Middle Name Last Name Title: Transportation Engineer **Department:** Email: bmanibog@richfieldmn.gov 1901 E 66th St Address: Richfield 55423 Minnesota City State/Province Postal Code/Zip 612-861-9792 Phone:\* Phone Ext. Fax: What Grant Programs are you most interested in? Regional Solicitation - Bicycle and Pedestrian Facilities

# **Organization Information**

Name: RICHFIELD,CITY OF

Jurisdictional Agency (if different):

Organization Type: City

Organization Website:

Address: 6700 PORTLAND AVE S

RICHFIELD Minnesota 55423

City State/Province Postal Code/Zip

County: Hennepin

Phone:\* 612-861-9700

Ext.

Fax:

PeopleSoft Vendor Number 0000004028A1

## **Project Information**

Project Name W 76th St Modernization

Primary County where the Project is Located Hennepin

Cities or Townships where the Project is Located: Richfield

Jurisdictional Agency (If Different than the Applicant):

W 76th St (MSAS 361) from Xerxes Ave to Sheridan Ave in Richfield. Full reconstruction of A Minor Reliever including overhead electric undergrounding, signal replacement at Upton Ave, sidewalk with boulevards, pedestrian-scale lighting, and utilities replacement.

(Limit 2,800 characters; approximately 400 words)

class, type of improvement, etc.)

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

Brief Project Description (Include location, road name/functional

MSAS 361 (76TH ST), RICHFIELD, FROM XERXES AVE TO SHERIDAN AVE, 0.3 MILES - RECONSTRUCT, SIGNAL, UTILITIES, SIDEWALK, LIGHTS

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) 0.3

to the nearest one-tenth of a mile

# **Project Funding**

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

No

If yes, please identify the source(s)

**Federal Amount** \$2,230,000.00

Match Amount \$690,000.00

Minimum of 20% of project total

Project Total \$2,920,000.00

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

Match Percentage 23.63%

Minimum of 20%

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

Source of Match Funds General Obligation Bonds

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

**Preferred Program Year** 

Select one: 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 Richfield

Functional Class of Road A Minor Reliever

Road System MSAS

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

Road/Route No. 361

i.e., 53 for CSAH 53

Name of Road W 76th St

Example; 1st ST., MAIN AVE

Zip Code where Majority of Work is Being Performed 55423

(Approximate) Begin Construction Date 04/01/2027

(Approximate) End Construction Date 11/11/2027

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

(Intersection or Address)

76th St & Xerxes Ave

To:

From:

(Intersection or Address) 76th St & Sheridan Ave

DO NOT INCLUDE LEGAL DESCRIPTION

Or At

Miles of Sidewalk (nearest 0.1 miles)

0.3

Miles of Trail (nearest 0.1 miles)

0.3

Miles of Trail on the Regional Bicycle Transportation Network

Primary Types of Work

(nearest 0.1 miles)

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

#### **BRIDGE/CULVERT PROJECTS (IF APPLICABLE)**

Old Bridge/Culvert No.:

BRIDGE, PARK AND RIDE, ETC.

New Bridge/Culvert No.:

Structure is Over/Under (Bridge or culvert name):

RECONSTRUCTION, CURB AND GUTTER, GRADE, SIGNAL, SIGNING, STORM SEWER, SANITARY SEWER, WATER MAIN, SIDEWALK, UTILITY RELOCATION, LIGHTS

## **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.

Goal B (p. 2.5)

?Objective A: Reduce fatal and serious injury crashes (p. 2.5)

?Strategy B1. Incorporate safety and security considerations for all modes and users (p. 2.5)

?Strategy B6. Use best practices for safe walking and bicycling (p. 2.8)

Goal C (p. 2.10)

?Objective A. Increase availability of multimodal travel options (p. 2.10)

?Objective B. Increase travel time reliability and predictability (p. 2.10)

?Objective D. Increase the number and share of trips taken using transit, carpools, bicycling, and walking. (p. 2.10)

?Objective E. Improve availability of multimodal travel options (p. 2.10)

?Strategy C1. Implement transportation systems that are multimodal and provide connections between modes (p. 2.10)

?Strategy C2. Provide a network of interconnected bicycle facilities and pedestrian facilities (p. 2.11)

?Strategy C4. Promote multimodal travel and alternatives to single occupant vehicle travel (p. 2.14)

?Strategy C9. Support investments in A-minor arterials (p. 2.17)

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

?Strategy C17. Provide reliable, cost-effective, and accessible transportation choices (p. 2.24)

Goal D (p. 2.26)

?Objective A. Improve multimodal access to regional job concentrations (p. 2.26)

?Objective B. Invest in a multimodal transportation system (p. 2.26)

?Strategy D3. Invest in regional transit and bicycle and pedestrian facilities (p. 2.27)

Goal E (p. 2.30)

?Objective A. Reduce transportation-related air emissions. (p. 2.30)

?Objective B. Reduce impacts of transportation construction (p. 2.30)

?Objective C. Increase the availability and attractiveness of transit, bicycling, and walking (p. 2.30)

?Objective D. Provide a transportation system that promotes community cohesion and connectivity (p. 2.30)

?Strategy E3. Implement a transportation system that considers the needs of all potential users (p. 2.31)

?Strategy E5. Protect, enhance and mitigate impacts on the cultural and built environments (p. 2.33)

?Strategy E6. Use a variety of communication

methods and eliminate barriers to foster public engagement (p. 2.34)

?Strategy E7. Avoid, minimize and mitigate disproportionately high and adverse impacts of transportation projects to the region's historically underrepresented communities (p. 2.34)

Goal F (p. 2.35)

?Objective A. Focus regional growth in areas that support multimodal travel. (p. 2.35)

?Objective C. Encourage local land use design that integrates highways, streets, transit, walking, and bicycling. (p. 2.35)

?Strategy F5. Adopt policies to support the opportunities and challenges of creating walkable, bikeable, and transit-friendly places. (p. 2.37)

?Strategy F6. Include bicycle and pedestrian elements in local comprehensive plans (p. 2.38)

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.

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

? 2019 Comprehensive Plan 2040 (Transportation pg. 98)

? 2021-2025 Capital Improvement Budget (p. 32, 33, 67)

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: 02/25/2014

Link to plan:

https://www.richfieldmn.gov/departments/public\_works/transportation/bicycle\_\_\_pedestrian\_planning/ada.php

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. Yes

### 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 MnDOTs Cost Participation for Cooperative Construction Projects and Maintenance Responsibilities manual. In the case of a federally funded trunk highway project, the policy guidelines should be read as if the funded trunk highway route is under local jurisdiction.

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

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.

## 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.

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.

#### 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.

# **Requirements - Roadways Including Multimodal Elements**

# **Specific Roadway Elements**

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Mobilization (approx. 5% of total cost)	\$130,000.00
Removals (approx. 5% of total cost)	\$80,000.00
Roadway (grading, borrow, etc.)	\$190,000.00
Roadway (aggregates and paving)	\$355,000.00
Subgrade Correction (muck)	\$0.00
Storm Sewer	\$170,000.00
Ponds	\$0.00
Concrete Items (curb & gutter, sidewalks, median barriers)	\$120,000.00
Traffic Control	\$20,000.00
Striping	\$15,000.00
Signing	\$10,000.00
Lighting	\$0.00
Turf - Erosion & Landscaping	\$7,000.00
Bridge	\$0.00
Retaining Walls	\$30,000.00
Noise Wall (not calculated in cost effectiveness measure)	\$0.00
Traffic Signals	\$350,000.00
Wetland Mitigation	\$0.00
Other Natural and Cultural Resource Protection	\$0.00
RR Crossing	\$0.00
Roadway Contingencies	\$370,000.00
Other Roadway Elements	\$0.00
Totals	\$1,847,000.00

# **Specific Bicycle and Pedestrian Elements**

Path/Trail Construction	\$0.00
Sidewalk Construction	\$110,000.00
On-Street Bicycle Facility Construction	\$0.00
Right-of-Way	\$0.00
Pedestrian Curb Ramps (ADA)	\$63,000.00
Crossing Aids (e.g., Audible Pedestrian Signals, HAWK)	\$0.00
Pedestrian-scale Lighting	\$130,000.00
Streetscaping	\$20,000.00
Wayfinding	\$0.00
Bicycle and Pedestrian Contingencies	\$60,000.00
Other Bicycle and Pedestrian Elements	\$0.00
Totals	\$383,000.00

# **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 \$2,230,000.00

Construction Cost Total \$2,230,000.00

Transit Operating Cost Total \$0.00

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

3732

Existing Employment within 1 Mile: 52486

Existing Manufacturing/Distribution-Related Employment within 1

Mile:

Existing Post-Secondary Students within 1 Mile: 0

**Upload Map** 1647889422244\_76th\_RegEcon.pdf

Please upload attachment in PDF form.

## **Measure C: Current Heavy Commercial Traffic**

RESPONSE: Select one for your project, based on the updated 2021 Regional Truck Corridor Study:

Along Tier 1:

Miles: 0

(to the nearest 0.1 miles)

Along Tier 2:

Miles: 0

(to the nearest 0.1 miles)

Along Tier 3:

Miles: 0

(to the nearest 0.1 miles)

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

None of the tiers: Yes

## **Measure A: Current Daily Person Throughput**

Location W 76th Street (East of Upton Avenue S)

Current AADT Volume 12900

Existing Transit Routes on the Project 537, 538, 540, 578

For New Roadways only, list transit routes that will likely be diverted to the new proposed roadway (if applicable).

Upload Transit Connections Map 1647889712951\_76th\_Transit.pdf

Please upload attachment in PDF form.

## **Response: Current Daily Person Throughput**

Average Annual Daily Transit Ridership

0

**Current Daily Person Throughput** 

16770.0

## Measure B: 2040 Forecast ADT

Use Metropolitan Council model to determine forecast (2040) ADT volume

No

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

Hennepin County Travel Demand Model (via I-494: Airport to Highway 169 project)

Forecast (2040) ADT volume

14600

## 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:

Response:

The neighborhood around 76th St on this project is diverse. 42% of residents identify as Black, Indigenous, or People of Color (6% are Black and 16% are Latino) and 9% of residents have limited English proficiency. 21% of residents are within 185% of the Federal poverty line, and 12% of households don't have a vehicle.

The city uses public engagement to ensure all residents can participate in community planning activities. The most recent examples are the Richfield 2040 Comprehensive Plan (2018) and in Capital Improvement Program (CIP) processes. Ensuring participation from all residents - including those above as well as people with disabilities, older adults, and affordable housing residents - requires deliberate outreach. In Richfield, this includes Spanish-language interpreting and translation and promotion through trusted community partners.

This project was first identified in the 2013 CIP and budget. It was then retained in each subsequent annual CIP. The project was also included in the 2040 Comprehensive Plan in 2018. For the comprehensive plan, all residents were engaged with Spanish-language outreach, Transportation Commission hearings, and open houses. For the CIP development, each year during the budget preparation, every resident, tenant, and property owner is sent a postcard and other engagement materials informing them of the budget process. Each year, the CIP is discussed through Transportation Commission meetings and City Council public hearings. Apart from official city engagements, residents have continuously communicated to the city that W 76th St needed to be reconstructed and made more comfortable for pedestrians and bicyclists.

## **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.

Response:

Enhancing the corridor with boulevard space, widened sidewalks, a narrower street section, and simpler right of way will create a more safe environment for all modes of transportation. Specifically, this will benefit the surrounding residents who live in low, medium, and high density housing and are more racially diverse than the city as a whole (42% BIPOC vs 39%). The nearby middle school, teaches a student body of 74% students of color and 10% of students regularly walk or bike to school.

The proposed enhancements will increase pedestrian safety by creating a buffer between the sidewalk and moving traffic. In some spots, the existing back-of-curb sidewalk is less than six inches above the road surface, blending the road and walking spaces. Other proposed elements include shorter crossing distances and undergrounding of overhead electric lines. The narrower travel lanes and road will increase safety by decreasing vehicle speeds. A new continuous left turn lane will keep turning drivers away from thru traffic and further prevent "double jeopardy" hazards for crossing pedestrians.

Improvements to accessibility are especially important on this corridor; within walking distance is a vocational and life skills school for neurodivergent young adults as well as a school district building that hosts special education and pre-K programs. Currently non-compliant pedestrian ramps on this corridor would be replaced with accessible ramps with truncated domes. The other pedestrian benefits previously mentioned are more heightened for people with motor or ambulatory disabilities.

The more comfortable and safe corridor will more easily connect the area's diverse population to

nearby community resources such as the Edina Urgent Care, the METRO Orange Line BRT, Best Buy Headquarters, the Southdale YMCA, Adams Hill Park, and Donaldson Park.

Potential negative impacts on this project may include:

- smaller traffic gaps to cross as a pedestrian or turn left as a driver from a side street or driveway
- tangential costs to undergrounding electric service, however these are likely to be covered by the city

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

## **Measure C: Affordable Housing Access**

Describe any affordable housing developments 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.

Response:

In addition to the 589 publically subsidized rental housing units in census tracts within a half mile, there are many Naturally Occurring Affordable Housing (NOAH) developments near 76th St project area. These are shown and summarized in the attachment to this application, which includes the number of units on each property. Altogether, there are 30 properties that are NOAH within a half mile of the project area with a total of 620 affordable units. There is also one proposed housing projects within a half mile of the project totaling 70 affordable units. The 76th Street project corridor borders census tract 243 which has a median income below 80% AML Just outside of Richfield's borders and within a half mile of the project are Yorkdale Townhomes and South Haven in Edina. These buildings host an additional 90 units at or below 30% AMI and 100 units for seniors at or below 30% AMI respectively (Edina Comp Plan 2040 p. 4-9).

The project will address existing barriers to pedestrian use along the project corridors by providing more comfortable sidewalks further away from vehicular traffic, safer crossings at select intersections, encouraging slower vehicle speeds, shortening pedestrian crossing distances, and increasing pedestrian visibility. Additionally, crossing for the disabled and elderly will be facilitated by new ADA-compliant curb ramps. Given the area's low vehicle ownership, these improvements to pedestrian access will provide benefits to those who rely on walking to access public transportation, jobs, education and recreation.

North of 76th St, neighborhood amenities include Adams Hill Park, the Southdale YMCA, St. Richard's Catholic Church, and South Education

Center (serves pre-K, special education programs, and the alternative high school). South of 76th St has access to Edina Urgent Care. East of Penn Ave has Richfield Middle School, Minnesota Independence College and Community (a vocational and life skills program for autistic and neurodiverse young adults), two churches, Best Buy headquarters, and the Knox Ave Orange Line BRT stop. Westward into Edina has the Centennial Lakes commercial area 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):

Yes

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

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

1649358349667\_76th\_SocEcon.pdf

## **Measure A: Year of Roadway Construction**

Year of Original Roadway Construction or Most Recent Reconstruction	Segment Length	Calculation	Calculation 2
1997	0.3	599.1	1997.0
	0	599	1997

## **Total Project Length**

Total Project Length (as entered in "Project Information" form) 0.3

## **Average Construction Year**

Weighted Year 1997

Response:

Measure B: Geometric, Structural, or Infrast	ructure Improvements
Improved roadway to better accommodate freight movements:	Yes
Response:	A new continuous left turn lane creates safer and more dependable turning for freight turning onto side streets or mainline driveways. The turn lane creates less congestion as it allows thru freight to safely bypass turning trucks. These benefits are also realized for school buses at the nearby middle school, alternative high school, and vocational and life skills school. Public transit along 76th St will more reliably move past turning vehicles.
(Limit 700 characters; approximately 100 words)	
Improved clear zones or sight lines:	Yes
Response:	The narrowed street section and lane widths increase driver's ability to see pedestrians and bicyclists and vice versa. The three lane section and narrowed lanes improves pedestrian and bicyclists' ability to see "double jeopardy" situations. Proposed undergrounding of overhead electric removes 11 utility poles from the clear zone. The new boulevards provide snow clearing storage, keeping excess snow further away from drive lanes.
(Limit 700 characters; approximately 100 words)	
Improved roadway geometrics:	Yes
Response:	Narrowed street width provides decreased driver speeds on the corridor. Additionally, it provides better driver visibility especially off of side streets or driveways. It also provides better visibility for drivers turning onto driveways and side streets with retaining walls and/or increased grades.
(Limit 700 characters; approximately 100 words)	
Access management enhancements:	

(Limit 700 characters; approximately 100 words) Vertical/horizontal alignment improvements: Response: (Limit 700 characters; approximately 100 words) Improved stormwater mitigation: Yes Proposed stormwater infrastructure replacement will provide better stormwater mitigation in a floodprone area of the city. Increased greenspace on the corridor provides more permeable surfaces for Response: stormwater runoff. New boulevard trees will anchor boulevard soil and further absorb stormwater. Narrowed street section decreases impermeable surface, decreasing stormwater runoff. (Limit 700 characters; approximately 100 words) Signals/lighting upgrades: Yes Installation of pedestrian-level lighting provides a more comfortable and safe experience for pedestrians. Replacement of the traffic signal at Response: Upton Ave (at the end of its usable life) provides reliable right of way allocation to traffic. The existing signal intermittently changes to all-red flash due to faulty or old equipment. (Limit 700 characters; approximately 100 words) Yes **Other Improvements** Proposed undergrounding of overhead utilities provides a more comfortable and aesthetic experience for all road users, especially pedestrians and bicyclists. New boulevard space increases the city's ability to keep sidewalks clear Response: of snow and other debris. Proposed pedestrianlevel lighting gives pedestrians and bicyclists increased feelings of security using the corridor at night. Boulevard space allows for transit platforms to keep waiting riders out of pedestrian traffic. (Limit 700 characters; approximately 100 words)

Total Peak Hour Delay Per Vehicle Without The Project (Seconds/ Vehicle)	Total Peak Hour Delay Per Vehicle With The Project (Seconds/ Vehicle)	Total Peak Hour Delay Per Vehicle Reduced by Project (Seconds/ Vehicle)	Volume without the Project (Vehicles per hour)	Volume with the Project (Vehicles Per Hour):	Total Peak Hour Delay Reduced by the Project:	Total Peak Hour Delay Reduced by the Project:	EXPLANA TION of methodolo gy used to calculate railroad crossing delay, if applicable.	Synchro or HCM Reports
2.0	2.0	0	1169	1169	0	0	N/A	164994952 9665_76th- Upton_Syn chro Reports.pdf

0

## **Vehicle Delay Reduced**

Total Peak Hour Delay Reduced 0

Total Peak Hour Delay Reduced 0

# Measure B:Roadway projects that do not include new roadway segments or railroad grade-separation elements

Total (CO, NOX, and VOC) Total (CO, NOX, and VOC) Total (CO, NOX, and VOC) **Peak Hour Emissions Peak Hour Emissions Peak Hour Emissions with** without the Project Reduced by the Project the Project (Kilograms): (Kilograms): (Kilograms): 1.8 1.8 0 2 2 0

## Total

Total Emissions Reduced:

Upload Synchro Report 1649949646968\_76th-Upton\_Synchro Reports.pdf

Please upload attachment in PDF form. (Save Form, then click 'Edit' in top right to upload file.)

Measure B: Roadway projects that are constructing new roadway segments, but do not include railroad grade-separation elements (for Roadway Expansion applications only):

Total (CO, NOX, and VOC)
Peak Hour Emissions
without the Project
(Kilograms):

Total (CO, NOX, and VOC)
Peak Hour Emissions with
the Project (Kilograms):

Total (CO, NOX, and VOC)
Peak Hour Emissions
Reduced by the Project
(Kilograms):

0 0

0

Total Parallel Road	way	

Upload Synchro Report

Please upload attachment in PDF form. (Save Form, then click 'Edit' in top right to upload file.)

New	Roady	way	Port	ion:

Tatal Danallal Danahusan

**Emissions Reduced on Parallel Roadways** 

Cruise speed in miles per hour with the project:

0
Vehicle miles traveled with the project:

0
Total delay in hours with the project:

0
Total stops in vehicles per hour with the project:

0
Fuel consumption in gallons:

0
Total (CO, NOX, and VOC) Peak Hour Emissions Reduced or Produced on New Roadway (Kilograms):

**EXPLANATION** of methodology and assumptions used:(Limit 1,400 characters; approximately 200 words)

Total (CO, NOX, and VOC) Peak Hour Emissions Reduced by the Project (Kilograms):

# Measure B:Roadway projects that include railroad grade-separation elements

Cruise speed in miles per hour without the project:	0
Vehicle miles traveled without the project:	0
Total delay in hours without the project:	0
Total stops in vehicles per hour without the project:	0
Cruise speed in miles per hour with the project:	0
Vehicle miles traveled with the project:	0
Total delay in hours with the project:	0
Total stops in vehicles per hour with the project:	0
Fuel consumption in gallons (F1)	0
Fuel consumption in gallons (F2)	0
Fuel consumption in gallons (F3)	0

EXPLANATION of methodology and assumptions used:(Limit 1,400 characters; approximately 200 words)

## Measure A: Roadway Projects that do not Include Railroad Grade-Separation Elements

CMF 2841- Converting Four-Lane Roadways to Three-Lane Roadways with Center Turn Lane (Road Diet)

**Crash Modification Factor Used:** 

CMF 11026 - Improve Street Lighting Illuminance and Uniformity

(Limit 700 Characters; approximately 100 words)

76th St for the entire project segment will be converted from a four lane undivided road to a three lane section, constituting a road diet. Richfield in this area resembles suburban and urban characteristics, both covered in CMF 2841.

**Rationale for Crash Modification Selected:** 

The proposed project will underground overhead utilities, giving the opportunity to revise existing street light locations on the project corridor. Furthermore, this project will install pedestrian scale lighting throughout the corridor especially at or near intersections. These changes both add or update the street lighting for uniformity along the roadway, covered in CMF 11026.

(Limit 1400 Characters; approximately 200 words)

Project Benefit (\$) from B/C Ratio \$1,357,679.00

Total Fatal (K) Crashes: 0

Total Serious Injury (A) Crashes: 0

Total Non-Motorized Fatal and Serious Injury Crashes: 0

Total Crashes:

Total Fatal (K) Crashes Reduced by Project: 0

Total Serious Injury (A) Crashes Reduced by Project:	0
Total Non-Motorized Fatal and Serious Injury Crashes Reduced by Project:	0
Total Crashes Reduced by Project:	2
Worksheet Attachment	1649965316073_76th_2022_Benefit-Cost-Worksheet.pdf
Please upload attachment in PDF form.	

## Roadway projects that include railroad grade-separation elements:

Current AADT volume: 0

Average daily trains: 0

Crash Risk Exposure eliminated: 0

## **Measure A: Pedestrian Safety**

**Determine if these measures do not apply to your project.** Does the project match either of the following descriptions? If either of the items are checked yes, then **score for entire pedestrian safety measure is zero**. Applicant does not need to respond to the sub-measures and can proceed to the next section.

Project is primarily a freeway (or transitioning to a freeway) and does not provide safe and comfortable pedestrian facilities and crossings.

Existing location lacks any pedestrian facilities (e.g., sidewalks, marked crossings, wide shoulders in rural contexts) <u>and project</u> does not add pedestrian elements (e.g., reconstruction of a No roadway without sidewalks, that doesnt also add pedestrian crossings and sidewalk or sidepath on one or both sides).

#### SUB-MEASURE 1: Project-Based Pedestrian Safety Enhancements and Risk Elements

To receive maximum points in this category, pedestrian safety countermeasures selected for implementation in projects should be, to the greatest extent feasible, consistent with the countermeasure recommendations in the Regional Pedestrian Safety Action Plan and state and national best practices. Links to resources are provided on the Regional Solicitation Resources web page.

Please answer the following two questions with as much detail as possible based on the known attributes of the proposed design. If any aspect referenced in this section is not yet determined, describe the range of options being considered, to the greatest extent available. If there are project elements that may increase pedestrian risk, describe how these risks are being mitigated.

1. Describe how this project will address the safety needs of people crossing the street at signalized intersections, unsignalized intersections, midblock locations, and roundabouts.

Treatments and countermeasures should be well-matched to the roadways context (e.g., appropriate for the speed, volume, crossing distance, and other location attributes). Refer to the Regional Solicitation Resources web page for guidance links.

All existing pedestrian ramps will be replaced with accessible ramps with truncated domes. The new ramps will help pedestrians transition from the sidewalk to street-level for a safer crossing experience at signalized and unsignalized intersections.

76th St will be narrowed from 45 feet to 37 feet. The narrowed street section decreases the crossing distance for pedestrians at signalized and unsignalized intersections. Narrower streets provide better visibility for pedestrians to see drivers and vice versa when crossing the street. New 6.5 foot wide boulevards provide refuge for pedestrians to retreat back off the road if needed when crossing. The boulevards also provide better visibility for pedestrians. More boulevard space provides more distance between right turning vehicles onto side streets, giving side street crossers more reaction time to see oncoming vehicles.

A new continuous left turn lane, converted from existing drive lanes, will decrease "double jeopardy" situations for pedestrians when trying to cross 76th St.

On the new traffic signal at Upton Ave, leading pedestrian intervals will let pedestrians cross further into the street prior to drivers attempting to turn left.

New pedestrian-level lighting will make pedestrians more visible when trying to cross 76th St or side streets.

Response:

(Limit 2,800 characters; approximately 400 words)

Is the distance in between signalized intersections increasing (e.g., removing a signal)?

No

Select one:

If yes, describe what measures are being used to fill the gap between protected crossing opportunities for pedestrians (e.g., adding High-Intensity Activated Crosswalk beacons to help motorists yield and help pedestrians find a suitable gap for crossing, turning signal into a roundabout to slow motorist speed, etc.).

#### Response:

(Limit 1,400 characters; approximately 200 words)

Will your design increase the crossing distance or crossing time across any leg of an intersection? (e.g., by adding turn or through lanes, widening lanes, using a multi-phase crossing, prohibiting crossing on any leg of an intersection, pedestrian bridge requiring length detour, etc.). This does not include any increases to crossing distances solely due to the addition of bike lanes (i.e., no other through or turn lanes being added or widened).

Select one: No

If yes,

How many intersections will likely be affected?

#### Response:

Describe what measures are being used to reduce exposure and delay for pedestrians (e.g., median crossing islands, curb bulb-outs, etc.)

#### Response:

(Limit 1,400 characters; approximately 200 words)

If grade separated pedestrian crossings are being added and increasing crossing time, describe any features that are included that will reduce the detour required of pedestrians and make the separated crossing a more appealing option (e.g., shallow tunnel that doesnt require much elevation change instead of pedestrian bridge with numerous switchbacks).

#### Response:

(Limit 1,400 characters; approximately 200 words)

If mid-block crossings are restricted or blocked, explain why this is necessary and how pedestrian crossing needs and safety are supported in other ways (e.g., nearest protected or enhanced crossing opportunity).

#### Response:

(Limit 1,400 characters; approximately 200 words)

2. Describe how motorist speed will be managed in the project design, both for through traffic and turning movements. Describe any project-related factors that may affect speed directly or indirectly, even if speed is not the intended outcome (e.g., wider lanes and turning radii to facilitate freight movements, adding turn lanes to alleviate peak hour congestion, etc.). Note any strategies or treatments being considered that are intended to help motorists drive slower (e.g., visual narrowing, narrow lanes, truck aprons to mitigate wide turning radii, etc.) or protect pedestrians if increasing motorist speed (e.g., buffers or other separation from moving vehicles, crossing treatments appropriate for higher speed roadways, etc.).

Response:

76th St will be converted from 4 to 3 lanes on the project corridor. It will also be narrowed overall from 45 feet to 37 feet wide. A narrower street section will decrease driver speeds. New six-foot boulevards with trees on each side of the street will give the corridor more of a neighborhood street feel and decrease driver speeds through visual narrowing. These boulevards also further separate pedestrians from vehicular traffic.

A new continuous left turn lane on the corridor will alleviate peak hour congestion and make thru driver speeds more consistent. The decrease in congestion will provide faster and more efficient transit service on 76th St.

(Limit 2,800 characters; approximately 400 words)

If known, what are the existing and proposed design, operation, and posted speeds? Is this an increase or decrease from existing conditions?

Response:

76th St in this area has a posted speed limit of 30 mph. Observed operating speeds have been as high as 42 mph for the 85th percentile. With the proposed changes, driver speeds are expected to decrease.

(Limit 1,400 characters; approximately 200 words)

#### SUB-MEASURE 2: Existing Location-Based Pedestrian Safety Risk Factors

These factors are based on based on trends and patterns observed in pedestrian crash analysis done for the Regional Pedestrian Safety Action Plan. Check off how many of the following factors are present. Applicants receive more points if more risk factors are present.

Existing road configuration is a One-way, 3+ through lanes or

Existing road configuration is a Two-way, 4+ through lanes

Yes

Yes

Existing road has a design speed, posted speed limit, or speed study/data showing 85th percentile travel speeds in excess of 30 MPH or more

Existing road has AADT of greater than 15,000 vehicles per day

List the AADT

## SUB-MEASURE 3: Existing Location-Based Pedestrian Safety Exposure Factors

These factors are based on based on trends and patterns observed in pedestrian crash analysis done for the Regional Pedestrian Safety Action Plan. Check off how many of the following existing location exposure factors are present. Applicants receive more points if more risk factors are present.

Existing road has transit running on or across it with 1+ transit stops in the project area (If flag-stop route with no fixed stops, then 1+ locations in the project area where roadside stops are allowed. Do not count portions of transit routes with no stops, such as non-stop freeway sections of express or limited-stop routes. If service was temporarily reduced for the pandemic but is expected to return to 2019 levels, consider 2019 service for this item.)

Yes

Existing road has high-frequency transit running on or across it and 1+ high-frequency stops in the project area (high-frequency defined as service at least every 15 minutes from 6am to 7pm weekdays and 9am to 6pm Saturdays. If service frequency was temporarily reduced for the pandemic but is expected to return to 2019 levels, consider 2019 frequency for this item.)

Existing road is within 500 of 1+ shopping, dining, or entertainment destinations (e.g., grocery store, restaurant)

If checked, please describe:

Metro Transit Route 540 runs along 76th St and stops in both directions on Washburn Ave, Upton Ave, and Sheridan Ave. The route connects riders to the Normandale Lake area, Edina, Best Buy headquarters, METRO Orange Line, 77th St in Richfield, and Mall of America.

(Limit 1,400 characters; approximately 200 words)

Existing road is within 500 of other known pedestrian generators (e.g., school, civic/community center, senior housing, multifamily Yes housing, regulatorily-designated affordable housing)

If checked, please describe:

Nearby Xerxes Ave, there is a urgent care center, daycare center, medical offices, and the Yorkdale Townhomes complex (90 units of designated affordable housing). Nearby Sheridan Ave is the Concierge Apartments complex, St. Richard's Catholic Church, and Blessed Trinity Catholic School.

(Limit 1,400 characters; approximately 200 words)

## Measure A: Multimodal Elements and Existing Connections

The project proposal includes six foot wide sidewalks on both sides of 76th St separated from the road by a six-foot boulevard. This provides a comfortable area for pedestrians to walk, sufficient width for public works to plow, and separates pedestrians away from vehicular traffic.

The Metro Transit Route 540 bus runs along 76th St for the length of the project connecting riders to the Normandale Lake area, Edina, Best Buy headquarters, METRO Orange Line, and Mall of America. The new boulevards allow space for small concrete transit platforms for waiting transit riders. New pedestrian-scale lighting will better pedestrian's experience through increased safety and visibility at night.

A new continuous left turn lane on the corridor will improve on-street bicyclists' ability to safely turn onto side streets from 76th St. While the new street section is overall narrower and converted from 4 to 3 lanes, the new thru lanes will be slightly wider (12.5 vs 11.5 feet). A narrower street section decreases driver speeds, increasing the safety of pedestrians and bicyclists. The narrower street decreases the crossing distance, making access to the Nine Mile Creek Regional Trail (a Tier 1 Regional Bicycle Transportation Network alignment) more comfortable. Boulevard trees will provide shade to sidewalk users, make the corridor feel like more like a neighborhood street, and decrease driver speeds via traffic calming.

An improved 76th St corridor provides easier pedestrian access to Best Buy headquarters and the METRO Orange Line a half mile east. The project also better connects residents to Route 4 buses on Penn Ave, bus routes on York Ave (537, 538, and 578) connecting to Southdale Mall and

Response:

Transit Center, Normandale Community College, Mall of America, and downtown Minneapolis. The project also connects to the future Johnson/Lyndale Bus Rapid Transit on Penn Ave & 76th St and the future north-south bikeway on Upton Ave.

(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 Yes related to a larger planning effort.

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.

Outreach and interest for this project came through the 2040 Comprehensive Plan and the city's Capital Improvement Program (CIP) processes.

For the comprehensive plan, residents were engaged with Spanish-language outreach, Transportation Commission public hearings and open houses.

#### Response:

For the CIP, each year during budget preparation, every resident, tenant, and property owner is sent a postcard and other engagement materials informing them of the budget and CIP. Each year, the CIP is discussed through Transportation Commission meetings and City Council public hearings. Apart from official city engagements, residents continuously communicate to staff the need for W 76th St to be made more comfortable for pedestrians and bicyclists.

(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 Yes 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, standalone 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.

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** 

1649949239960\_76th\_St.pdf

Yes

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

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 Yes 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

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)

Yes

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.

0%

## **Measure A: Cost Effectiveness**

Total Project Cost (entered in Project Cost Form): \$2,230,000.00

Enter Amount of the Noise Walls: \$0.00

Total Project Cost subtract the amount of the noise walls: \$2,230,000.00

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

Attach documentation of award:

**Points Awarded in Previous Criteria** 

Cost Effectiveness \$0.00

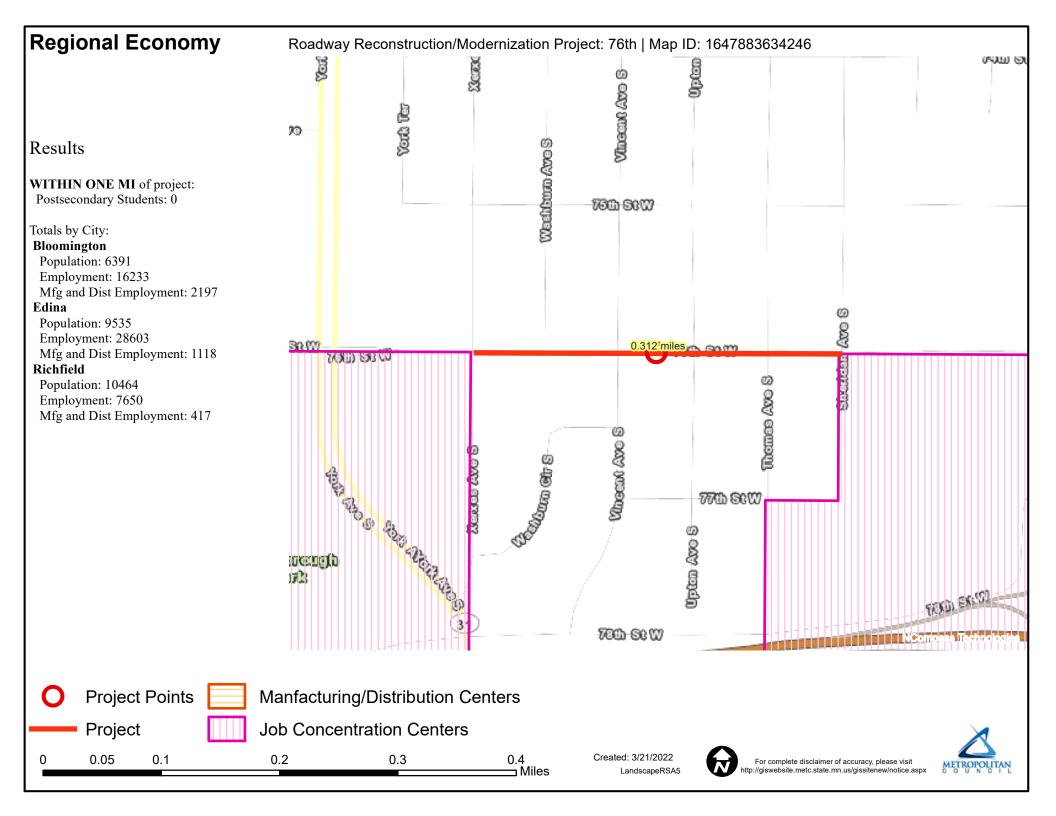
#### Other Attachments

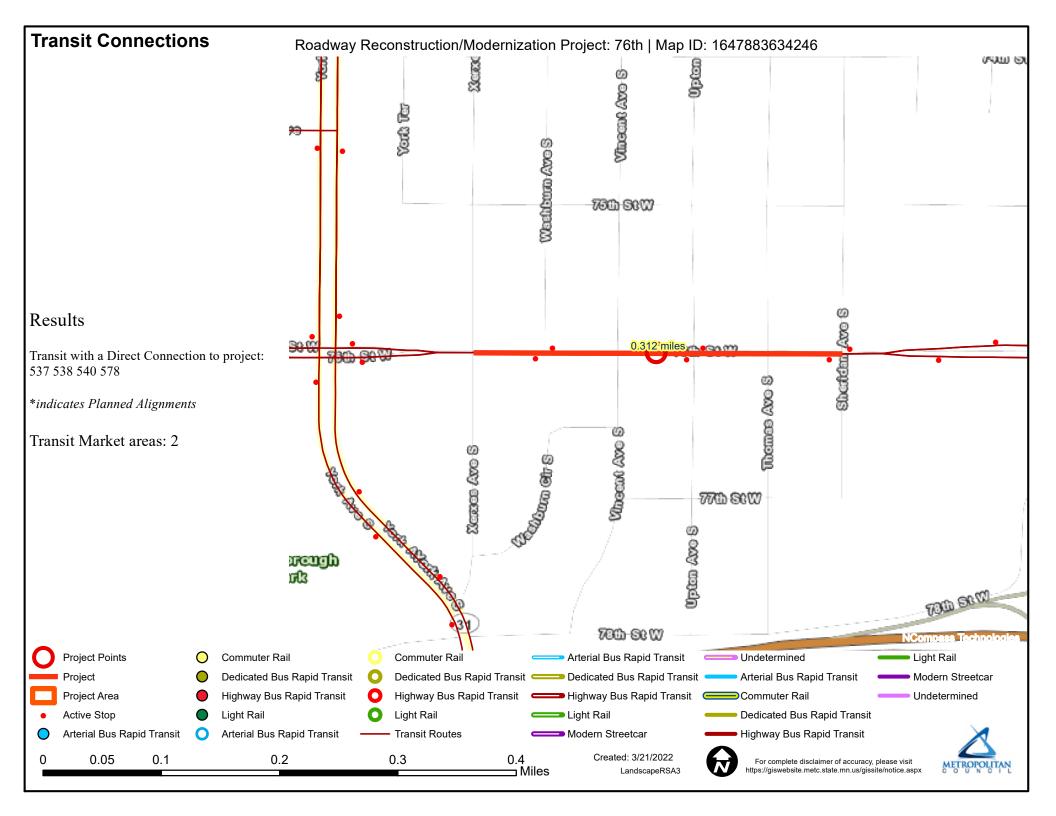


Existing site condition photo

7.0 MB

File Name	Description	File Size
04-12-2022 Resolution No. 11962.pdf	City council resolution of support	474 KB
76th_Bridge_Onepage_Summary.pdf	One-page project summary	296 KB
76th_CMF_Crash_Listing.pdf	Crash listing for CMF	114 KB
76th_CMF_Crash_Summary_Updated.p df	2019 - 2021 crash summary for crash- benefit analysis and CMF	408 KB
76th_Crash_Summary.pdf	Corridor crash summary 2012 - 2021	405 KB
Richfield 76th Maintenance Letter of Support2.pdf	Agency maintenance letter of support	155 KB
Richfield2018SnowandIcePolicy.pdf	Richfield snow and ice removal policy (referenced in agency letter of support)	130 KB
Richfield_Aff_Hous_Acc2.pdf	Richfield Affordable Housing Access Map	1006 KB



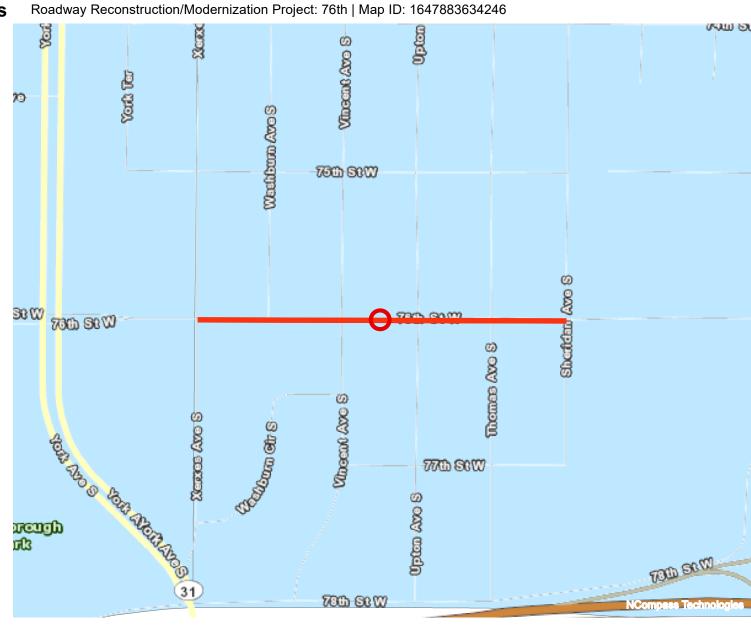


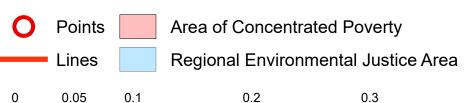
#### **Socio-Economic Conditions**

#### Results

Total of publicly subsidized rental housing units in census tracts within 1/2 mile: 589

Project located in census tract(s) that are ABOVE the regional average for population in poverty or population of color.





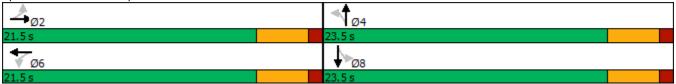
 Created: 3/21/2022

LandscapeRSA2





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Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Configurations		<b>€Î</b> }		<b>€1</b> }	4	4
Traffic Volume (vph)	1	208	5	335	0	0
Future Volume (vph)	1	208	5	335	0	0
Turn Type	Perm	NA	Perm	NA	NA	NA
Protected Phases		2		6	4	8
Permitted Phases	2		6			
Detector Phase	2	2	6	6	4	8
Switch Phase						
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	5.0
Minimum Split (s)	20.5	20.5	20.5	20.5	23.5	23.5
Total Split (s)	21.5	21.5	21.5	21.5	23.5	23.5
Total Split (%)	47.8%	47.8%	47.8%	47.8%	52.2%	52.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0
Total Lost Time (s)		4.5		4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	Min	Min	Min	Min	None	None
Act Effct Green (s)		29.5		29.5	5.6	5.6
Actuated g/C Ratio		0.93		0.93	0.18	0.18
v/c Ratio		0.07		0.12	0.01	0.01
Control Delay		1.1		1.1	0.0	0.0
Queue Delay		0.0		0.0	0.0	0.0
Total Delay		1.1		1.1	0.0	0.0
LOS		Α		Α	A	A
Approach Delay		1.1		1.1		
Approach LOS		Α		Α		
Intersection Summary						
Cycle Length: 45						
Actuated Cycle Length: 31.8						
Natural Cycle: 45						
Control Type: Actuated-Unco	ordinator	I				
Maximum v/c Ratio: 0.12	orumated	I				
Intersection Signal Delay: 1.1				l.	ntersectio	n I OS· A
Intersection Capacity Utilizati						of Service
Analysis Period (min) 15	011 24.0%				OO Level	or service i
miaiyaia reliou (IIIIII) 13						
Splits and Phases: 3: Upto	n Avenue	e & 76th S	Street			
					<b>≪</b> ∱_	
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Direction	EB	WB	NB	SB	All	
Future Volume (vph)	209	343	8	6	566	
Control Delay / Veh (s/v)	1	1	0	0	1	
Queue Delay / Veh (s/v)	0	0	0	0	0	
Total Delay / Veh (s/v)	1	1	0	0	1	
Total Delay (hr)	0	0	0	0	0	
Stops / Veh	0.11	0.11	0.00	0.00	0.11	
Stops (#)	24	39	0	0	63	
Average Speed (mph)	29	29	30	30	29	
Total Travel Time (hr)	2	4	0	0	7	
Distance Traveled (mi)	72	124	2	1	199	
Fuel Consumed (gal)	3	5	0	0	9	
Fuel Economy (mpg)	22.9	23.0	NA	NA	23.0	
CO Emissions (kg)	0.22	0.38	0.00	0.00	0.61	
NOx Emissions (kg)	0.04	0.07	0.00	0.00	0.12	
VOC Emissions (kg)	0.05	0.09	0.00	0.00	0.14	
Unserved Vehicles (#)	0	0	0	0	0	
Vehicles in dilemma zone (#)	0	0	0	0	0	

### **Network Totals**

Number of Intersections	1
Control Delay / Veh (s/v)	1
Queue Delay / Veh (s/v)	0
Total Delay / Veh (s/v)	1
Total Delay (hr)	0
Stops / Veh	0.11
Stops (#)	63
Average Speed (mph)	29
Total Travel Time (hr)	7
Distance Traveled (mi)	199
Fuel Consumed (gal)	9
Fuel Economy (mpg)	23.0
CO Emissions (kg)	0.61
NOx Emissions (kg)	0.12
VOC Emissions (kg)	0.14
Unserved Vehicles (#)	0
Vehicles in dilemma zone (#)	0
Performance Index	0.3

	•	<b>→</b>	•	<b>←</b>	•	<b>†</b>	<b>\</b>	ţ	
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	
Lane Configurations		र्सी		414		4		4	
Traffic Volume (vph)	15	711	2	410	2	3	3	1	
Future Volume (vph)	15	711	2	410	2	3	3	1	
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA	
Protected Phases		2		6		4		8	
Permitted Phases	2		6		4		8		
Detector Phase	2	2	6	6	4	4	8	8	
Switch Phase									
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	20.5	20.5	20.5	20.5	23.5	23.5	23.5	23.5	
Total Split (s)	21.5	21.5	21.5	21.5	23.5	23.5	23.5	23.5	
Total Split (%)	47.8%	47.8%	47.8%	47.8%	52.2%	52.2%	52.2%	52.2%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0		0.0		0.0		0.0	
Total Lost Time (s)		4.5		4.5		4.5		4.5	
Lead/Lag									
Lead-Lag Optimize?									
Recall Mode	Min	Min	Min	Min	None	None	None	None	
Act Effct Green (s)		31.2		31.2		5.8		5.8	
Actuated g/C Ratio		0.92		0.92		0.17		0.17	
v/c Ratio		0.26		0.15		0.03		0.04	
Control Delay		1.5		1.2		11.6		10.6	
Queue Delay		0.0		0.0		0.0		0.0	
Total Delay		1.5		1.2		11.6		10.6	
LOS		Α		Α		В		В	
Approach Delay		1.5		1.2		11.6		10.6	
Approach LOS		Α		Α		В		В	
Intersection Summary									

Cycle Length: 45

Actuated Cycle Length: 33.8

Natural Cycle: 45

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.26

Intersection Signal Delay: 1.5 Intersection Capacity Utilization 42.1% Intersection LOS: A ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 3: Upton Avenue & 76th Street



Direction	EB	WB	NB	SB	All	
Future Volume (vph)	727	422	9	11	1169	
Control Delay / Veh (s/v)	1	1	12	11	2	
Queue Delay / Veh (s/v)	0	0	0	0	0	
Total Delay / Veh (s/v)	1	1	12	11	2	
Total Delay (hr)	0	0	0	0	1	
Stops / Veh	0.13	0.12	1.11	0.91	0.14	
Stops (#)	96	51	10	10	167	
Average Speed (mph)	29	29	21	20	29	
Total Travel Time (hr)	9	5	0	0	14	
Distance Traveled (mi)	252	152	2	2	408	
Fuel Consumed (gal)	11	7	0	0	18	
Fuel Economy (mpg)	22.7	22.9	NA	NA	22.6	
CO Emissions (kg)	0.78	0.47	0.01	0.01	1.26	
NOx Emissions (kg)	0.15	0.09	0.00	0.00	0.25	
VOC Emissions (kg)	0.18	0.11	0.00	0.00	0.29	
Unserved Vehicles (#)	0	0	0	0	0	
Vehicles in dilemma zone (#)	0	0	0	0	0	

### **Network Totals**

Number of Intersections	1
Control Delay / Veh (s/v)	2
Queue Delay / Veh (s/v)	0
Total Delay / Veh (s/v)	2
Total Delay (hr)	1
Stops / Veh	0.14
Stops (#)	167
Average Speed (mph)	29
Total Travel Time (hr)	14
Distance Traveled (mi)	408
Fuel Consumed (gal)	18
Fuel Economy (mpg)	22.6
CO Emissions (kg)	1.26
NOx Emissions (kg)	0.25
VOC Emissions (kg)	0.29
Unserved Vehicles (#)	0
Vehicles in dilemma zone (#)	0
Performance Index	1.0

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Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Configurations	ሻ	f)	ሻ	ą.	4	4
Traffic Volume (vph)	1	208	5	335	0	0
Future Volume (vph)	1	208	5	335	0	0
Turn Type	Perm	NA	Perm	NA	NA	NA
Protected Phases		2		6	4	8
Permitted Phases	2		6			
Detector Phase	2	2	6	6	4	8
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	Min	Min	Min	Min	None	None
Act Effct Green (s)	28.3	28.3	28.3	28.3	5.7	5.7
Actuated g/C Ratio	0.93	0.93	0.93	0.93	0.19	0.19
v/c Ratio	0.00	0.13	0.00	0.21	0.01	0.01
Control Delay	2.0	1.2	1.4	1.4	0.0	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	2.0	1.2	1.4	1.4	0.0	0.0
LOS	Α	Α	Α	Α	Α	Α
Approach Delay		1.2		1.4		
Approach LOS		Α		Α		
Intersection Summary						
Cycle Length: 15						

Cycle Length: 45

Actuated Cycle Length: 30.3

Natural Cycle: 45

Control Type: Actuated-Uncoordinated

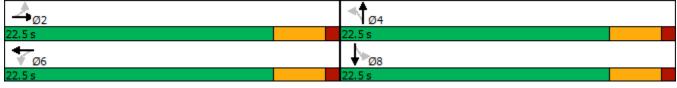
Maximum v/c Ratio: 0.21

Intersection Signal Delay: 1.3
Intersection Capacity Utilization 29.5%

Intersection LOS: A ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 3: Upton Avenue & 76th Street



Direction	EB	WB	NB	SB	All	
Future Volume (vph)	209	344	8	6	567	
Control Delay / Veh (s/v)	1	1	0	0	1	
Queue Delay / Veh (s/v)	0	0	0	0	0	
Total Delay / Veh (s/v)	1	1	0	0	1	
Total Delay (hr)	0	0	0	0	0	
Stops / Veh	0.12	0.13	0.00	0.00	0.12	
Stops (#)	26	44	0	0	70	
Average Speed (mph)	29	29	30	30	29	
Total Travel Time (hr)	2	4	0	0	7	
Distance Traveled (mi)	72	124	2	1	199	
Fuel Consumed (gal)	3	5	0	0	9	
Fuel Economy (mpg)	22.8	22.8	NA	NA	22.8	
CO Emissions (kg)	0.22	0.38	0.00	0.00	0.61	
NOx Emissions (kg)	0.04	0.07	0.00	0.00	0.12	
VOC Emissions (kg)	0.05	0.09	0.00	0.00	0.14	
Unserved Vehicles (#)	0	0	0	0	0	
Vehicles in dilemma zone (#)	0	0	0	0	0	

### **Network Totals**

Number of Intersections	1
Control Delay / Veh (s/v)	1
Queue Delay / Veh (s/v)	0
Total Delay / Veh (s/v)	1
Total Delay (hr)	0
Stops / Veh	0.12
Stops (#)	70
Average Speed (mph)	29
Total Travel Time (hr)	7
Distance Traveled (mi)	199
Fuel Consumed (gal)	9
Fuel Economy (mpg)	22.8
CO Emissions (kg)	0.61
NOx Emissions (kg)	0.12
VOC Emissions (kg)	0.14
Unserved Vehicles (#)	0
Vehicles in dilemma zone (#)	0
Performance Index	0.4

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Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	
Lane Configurations	7	ĵ»	7	f)		4		4	
Traffic Volume (vph)	15	711	2	410	2	3	3	1	
Future Volume (vph)	15	711	2	410	2	3	3	1	
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA	
Protected Phases		2		6		4		8	
Permitted Phases	2		6		4		8		
Detector Phase	2	2	6	6	4	4	8	8	
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	
Total Split (s)	37.5	37.5	37.5	37.5	22.5	22.5	22.5	22.5	
Total Split (%)	62.5%	62.5%	62.5%	62.5%	37.5%	37.5%	37.5%	37.5%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5		4.5		4.5	
Lead/Lag									
Lead-Lag Optimize?									
Recall Mode	Min	Min	Min	Min	None	None	None	None	
Act Effct Green (s)	37.2	37.2	37.2	37.2		6.2		6.2	
Actuated g/C Ratio	0.95	0.95	0.95	0.95		0.16		0.16	
v/c Ratio	0.02	0.44	0.00	0.26		0.04		0.04	
Control Delay	1.1	2.0	1.0	1.3		16.6		15.2	
Queue Delay	0.0	0.0	0.0	0.0		0.0		0.0	
Total Delay	1.1	2.0	1.0	1.3		16.6		15.2	
LOS	Α	Α	Α	Α		В		В	
Approach Delay		2.0		1.3		16.6		15.2	
Approach LOS		Α		Α		В		В	
1.1									

#### Intersection Summary

Cycle Length: 60

Actuated Cycle Length: 39.1

Natural Cycle: 60

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.44 Intersection Signal Delay: 2.0 Intersection Capacity Utilization 49.1%

Intersection LOS: A ICU Level of Service A

Analysis Period (min) 15

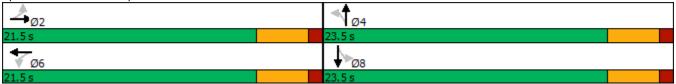
Splits and Phases: 3: Upton Avenue & 76th Street



Direction	EB	WB	NB	SB	All	
Future Volume (vph)	727	422	9	11	1169	
Control Delay / Veh (s/v)	2	1	17	15	2	
Queue Delay / Veh (s/v)	0	0	0	0	0	
Total Delay / Veh (s/v)	2	1	17	15	2	
Total Delay (hr)	0	0	0	0	1	
Stops / Veh	0.13	0.09	1.00	0.82	0.13	
Stops (#)	91	40	9	9	149	
Average Speed (mph)	29	29	18	18	29	
Total Travel Time (hr)	9	5	0	0	14	
Distance Traveled (mi)	252	152	2	2	408	
Fuel Consumed (gal)	11	7	0	0	18	
Fuel Economy (mpg)	22.6	23.1	NA	NA	22.6	
CO Emissions (kg)	0.78	0.46	0.01	0.01	1.26	
NOx Emissions (kg)	0.15	0.09	0.00	0.00	0.25	
VOC Emissions (kg)	0.18	0.11	0.00	0.00	0.29	
Unserved Vehicles (#)	0	0	0	0	0	
Vehicles in dilemma zone (#)	0	0	0	0	0	

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Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Configurations		<b>€Î</b> }		<b>€1</b> }	4	4
Traffic Volume (vph)	1	208	5	335	0	0
Future Volume (vph)	1	208	5	335	0	0
Turn Type	Perm	NA	Perm	NA	NA	NA
Protected Phases		2		6	4	8
Permitted Phases	2		6			
Detector Phase	2	2	6	6	4	8
Switch Phase						
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	5.0
Minimum Split (s)	20.5	20.5	20.5	20.5	23.5	23.5
Total Split (s)	21.5	21.5	21.5	21.5	23.5	23.5
Total Split (%)	47.8%	47.8%	47.8%	47.8%	52.2%	52.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0
Total Lost Time (s)		4.5		4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	Min	Min	Min	Min	None	None
Act Effct Green (s)		29.5		29.5	5.6	5.6
Actuated g/C Ratio		0.93		0.93	0.18	0.18
v/c Ratio		0.07		0.12	0.01	0.01
Control Delay		1.1		1.1	0.0	0.0
Queue Delay		0.0		0.0	0.0	0.0
Total Delay		1.1		1.1	0.0	0.0
LOS		Α		Α	A	A
Approach Delay		1.1		1.1		
Approach LOS		Α		Α		
Intersection Summary						
Cycle Length: 45						
Actuated Cycle Length: 31.8						
Natural Cycle: 45						
Control Type: Actuated-Unco	ordinator	I				
Maximum v/c Ratio: 0.12	orumated	I				
Intersection Signal Delay: 1.1				l.	ntersectio	n I OS· A
Intersection Capacity Utilizati						of Service
Analysis Period (min) 15	011 24.0%				OO Level	or service i
miaiyaia reliou (IIIIII) 13						
Splits and Phases: 3: Upto	n Avenue	e & 76th S	Street			
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Direction	EB	WB	NB	SB	All	
Future Volume (vph)	209	343	8	6	566	
Control Delay / Veh (s/v)	1	1	0	0	1	
Queue Delay / Veh (s/v)	0	0	0	0	0	
Total Delay / Veh (s/v)	1	1	0	0	1	
Total Delay (hr)	0	0	0	0	0	
Stops / Veh	0.11	0.11	0.00	0.00	0.11	
Stops (#)	24	39	0	0	63	
Average Speed (mph)	29	29	30	30	29	
Total Travel Time (hr)	2	4	0	0	7	
Distance Traveled (mi)	72	124	2	1	199	
Fuel Consumed (gal)	3	5	0	0	9	
Fuel Economy (mpg)	22.9	23.0	NA	NA	23.0	
CO Emissions (kg)	0.22	0.38	0.00	0.00	0.61	
NOx Emissions (kg)	0.04	0.07	0.00	0.00	0.12	
VOC Emissions (kg)	0.05	0.09	0.00	0.00	0.14	
Unserved Vehicles (#)	0	0	0	0	0	
Vehicles in dilemma zone (#)	0	0	0	0	0	

### **Network Totals**

Number of Intersections	1
Control Delay / Veh (s/v)	1
Queue Delay / Veh (s/v)	0
Total Delay / Veh (s/v)	1
Total Delay (hr)	0
Stops / Veh	0.11
Stops (#)	63
Average Speed (mph)	29
Total Travel Time (hr)	7
Distance Traveled (mi)	199
Fuel Consumed (gal)	9
Fuel Economy (mpg)	23.0
CO Emissions (kg)	0.61
NOx Emissions (kg)	0.12
VOC Emissions (kg)	0.14
Unserved Vehicles (#)	0
Vehicles in dilemma zone (#)	0
Performance Index	0.3

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Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	
Lane Configurations		र्सी		414		4		4	
Traffic Volume (vph)	15	711	2	410	2	3	3	1	
Future Volume (vph)	15	711	2	410	2	3	3	1	
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA	
Protected Phases		2		6		4		8	
Permitted Phases	2		6		4		8		
Detector Phase	2	2	6	6	4	4	8	8	
Switch Phase									
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	20.5	20.5	20.5	20.5	23.5	23.5	23.5	23.5	
Total Split (s)	21.5	21.5	21.5	21.5	23.5	23.5	23.5	23.5	
Total Split (%)	47.8%	47.8%	47.8%	47.8%	52.2%	52.2%	52.2%	52.2%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0		0.0		0.0		0.0	
Total Lost Time (s)		4.5		4.5		4.5		4.5	
Lead/Lag									
Lead-Lag Optimize?									
Recall Mode	Min	Min	Min	Min	None	None	None	None	
Act Effct Green (s)		31.2		31.2		5.8		5.8	
Actuated g/C Ratio		0.92		0.92		0.17		0.17	
v/c Ratio		0.26		0.15		0.03		0.04	
Control Delay		1.5		1.2		11.6		10.6	
Queue Delay		0.0		0.0		0.0		0.0	
Total Delay		1.5		1.2		11.6		10.6	
LOS		Α		Α		В		В	
Approach Delay		1.5		1.2		11.6		10.6	
Approach LOS		Α		Α		В		В	
Intersection Summary									

Cycle Length: 45

Actuated Cycle Length: 33.8

Natural Cycle: 45

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.26

Intersection Signal Delay: 1.5 Intersection Capacity Utilization 42.1% Intersection LOS: A ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 3: Upton Avenue & 76th Street



Direction	EB	WB	NB	SB	All	
Future Volume (vph)	727	422	9	11	1169	
Control Delay / Veh (s/v)	1	1	12	11	2	
Queue Delay / Veh (s/v)	0	0	0	0	0	
Total Delay / Veh (s/v)	1	1	12	11	2	
Total Delay (hr)	0	0	0	0	1	
Stops / Veh	0.13	0.12	1.11	0.91	0.14	
Stops (#)	96	51	10	10	167	
Average Speed (mph)	29	29	21	20	29	
Total Travel Time (hr)	9	5	0	0	14	
Distance Traveled (mi)	252	152	2	2	408	
Fuel Consumed (gal)	11	7	0	0	18	
Fuel Economy (mpg)	22.7	22.9	NA	NA	22.6	
CO Emissions (kg)	0.78	0.47	0.01	0.01	1.26	
NOx Emissions (kg)	0.15	0.09	0.00	0.00	0.25	
VOC Emissions (kg)	0.18	0.11	0.00	0.00	0.29	
Unserved Vehicles (#)	0	0	0	0	0	
Vehicles in dilemma zone (#)	0	0	0	0	0	

### **Network Totals**

Number of Intersections	1
Control Delay / Veh (s/v)	2
Queue Delay / Veh (s/v)	0
Total Delay / Veh (s/v)	2
Total Delay (hr)	1
Stops / Veh	0.14
Stops (#)	167
Average Speed (mph)	29
Total Travel Time (hr)	14
Distance Traveled (mi)	408
Fuel Consumed (gal)	18
Fuel Economy (mpg)	22.6
CO Emissions (kg)	1.26
NOx Emissions (kg)	0.25
VOC Emissions (kg)	0.29
Unserved Vehicles (#)	0
Vehicles in dilemma zone (#)	0
Performance Index	1.0

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Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Configurations	ሻ	f)	ሻ	ą.	4	4
Traffic Volume (vph)	1	208	5	335	0	0
Future Volume (vph)	1	208	5	335	0	0
Turn Type	Perm	NA	Perm	NA	NA	NA
Protected Phases		2		6	4	8
Permitted Phases	2		6			
Detector Phase	2	2	6	6	4	8
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	Min	Min	Min	Min	None	None
Act Effct Green (s)	28.3	28.3	28.3	28.3	5.7	5.7
Actuated g/C Ratio	0.93	0.93	0.93	0.93	0.19	0.19
v/c Ratio	0.00	0.13	0.00	0.21	0.01	0.01
Control Delay	2.0	1.2	1.4	1.4	0.0	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	2.0	1.2	1.4	1.4	0.0	0.0
LOS	Α	Α	Α	Α	Α	Α
Approach Delay		1.2		1.4		
Approach LOS		Α		Α		
Intersection Summary						
Cycle Length: 15						

Cycle Length: 45

Actuated Cycle Length: 30.3

Natural Cycle: 45

Control Type: Actuated-Uncoordinated

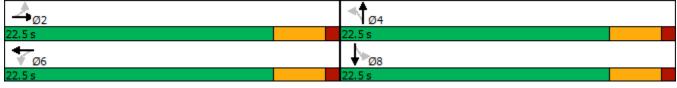
Maximum v/c Ratio: 0.21

Intersection Signal Delay: 1.3
Intersection Capacity Utilization 29.5%

Intersection LOS: A ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 3: Upton Avenue & 76th Street



Direction	EB	WB	NB	SB	All	
Future Volume (vph)	209	344	8	6	567	
Control Delay / Veh (s/v)	1	1	0	0	1	
Queue Delay / Veh (s/v)	0	0	0	0	0	
Total Delay / Veh (s/v)	1	1	0	0	1	
Total Delay (hr)	0	0	0	0	0	
Stops / Veh	0.12	0.13	0.00	0.00	0.12	
Stops (#)	26	44	0	0	70	
Average Speed (mph)	29	29	30	30	29	
Total Travel Time (hr)	2	4	0	0	7	
Distance Traveled (mi)	72	124	2	1	199	
Fuel Consumed (gal)	3	5	0	0	9	
Fuel Economy (mpg)	22.8	22.8	NA	NA	22.8	
CO Emissions (kg)	0.22	0.38	0.00	0.00	0.61	
NOx Emissions (kg)	0.04	0.07	0.00	0.00	0.12	
VOC Emissions (kg)	0.05	0.09	0.00	0.00	0.14	
Unserved Vehicles (#)	0	0	0	0	0	
Vehicles in dilemma zone (#)	0	0	0	0	0	

### **Network Totals**

Number of Intersections	1
Control Delay / Veh (s/v)	1
Queue Delay / Veh (s/v)	0
Total Delay / Veh (s/v)	1
Total Delay (hr)	0
Stops / Veh	0.12
Stops (#)	70
Average Speed (mph)	29
Total Travel Time (hr)	7
Distance Traveled (mi)	199
Fuel Consumed (gal)	9
Fuel Economy (mpg)	22.8
CO Emissions (kg)	0.61
NOx Emissions (kg)	0.12
VOC Emissions (kg)	0.14
Unserved Vehicles (#)	0
Vehicles in dilemma zone (#)	0
Performance Index	0.4

	۶	<b>→</b>	•	<b>←</b>	4	<b>†</b>	<b>&gt;</b>	ļ	
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	
Lane Configurations	7	ĵ»	7	f)		4		4	
Traffic Volume (vph)	15	711	2	410	2	3	3	1	
Future Volume (vph)	15	711	2	410	2	3	3	1	
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA	
Protected Phases		2		6		4		8	
Permitted Phases	2		6		4		8		
Detector Phase	2	2	6	6	4	4	8	8	
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	
Total Split (s)	37.5	37.5	37.5	37.5	22.5	22.5	22.5	22.5	
Total Split (%)	62.5%	62.5%	62.5%	62.5%	37.5%	37.5%	37.5%	37.5%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5		4.5		4.5	
Lead/Lag									
Lead-Lag Optimize?									
Recall Mode	Min	Min	Min	Min	None	None	None	None	
Act Effct Green (s)	37.2	37.2	37.2	37.2		6.2		6.2	
Actuated g/C Ratio	0.95	0.95	0.95	0.95		0.16		0.16	
v/c Ratio	0.02	0.44	0.00	0.26		0.04		0.04	
Control Delay	1.1	2.0	1.0	1.3		16.6		15.2	
Queue Delay	0.0	0.0	0.0	0.0		0.0		0.0	
Total Delay	1.1	2.0	1.0	1.3		16.6		15.2	
LOS	Α	Α	Α	Α		В		В	
Approach Delay		2.0		1.3		16.6		15.2	
Approach LOS		Α		Α		В		В	
1.1									

#### Intersection Summary

Cycle Length: 60

Actuated Cycle Length: 39.1

Natural Cycle: 60

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.44 Intersection Signal Delay: 2.0 Intersection Capacity Utilization 49.1%

Intersection LOS: A ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 3: Upton Avenue & 76th Street



Direction	EB	WB	NB	SB	All	
Future Volume (vph)	727	422	9	11	1169	
Control Delay / Veh (s/v)	2	1	17	15	2	
Queue Delay / Veh (s/v)	0	0	0	0	0	
Total Delay / Veh (s/v)	2	1	17	15	2	
Total Delay (hr)	0	0	0	0	1	
Stops / Veh	0.13	0.09	1.00	0.82	0.13	
Stops (#)	91	40	9	9	149	
Average Speed (mph)	29	29	18	18	29	
Total Travel Time (hr)	9	5	0	0	14	
Distance Traveled (mi)	252	152	2	2	408	
Fuel Consumed (gal)	11	7	0	0	18	
Fuel Economy (mpg)	22.6	23.1	NA	NA	22.6	
CO Emissions (kg)	0.78	0.46	0.01	0.01	1.26	
NOx Emissions (kg)	0.15	0.09	0.00	0.00	0.25	
VOC Emissions (kg)	0.18	0.11	0.00	0.00	0.29	
Unserved Vehicles (#)	0	0	0	0	0	
Vehicles in dilemma zone (#)	0	0	0	0	0	

Kimley-Horn Page 2

### **Traffic Safety Benefit-Cost Calculation**





A. Roadway Description											
Route	76th St	District	Metro	County	Hennepin						
Begin RP		End RP		Miles	0.300						
Location	on Richfield, 76th St from Xerxes Ave to Sheridan Ave										

B. Project Description											
Proposed Work	Full road recon, 4-3 lane conversion	n, signal replacement, u	pdated road lighting, new pedestriar								
Project Cost*	\$2,230,000	Installation Year	2027								
Project Service Life	40 years	Traffic Growth Factor	1.0%								
* exclude Right of Way from Project Cost											

C. Cras	C. Crash Modification Factor								
0.53	Fatal (K) Crashes	Reference	CMF 2841						
0.53	Serious Injury (A) Crashes								
0.53	Moderate Injury (B) Crashes	Crash Type	Type K/A/B/C, Type PDO						
0.53	Possible Injury (C) Crashes								
0.53	Property Damage Only Crashes		www.CM	Fclearinghouse.org					

D. Crash Modification Factor (optional second CMF)								
0.6	58	Fatal (K) Crashes	Reference	CMF 11026				
0.6	58	Serious Injury (A) Crashes						
0.6	58	Moderate Injury (B) Crashes	Crash Type	Type K/A/B/C, Type PDO				
0.6	58	Possible Injury (C) Crashes						
0.6	58	Property Damage Only Crashes			www.CMFclearinghouse.org			

E. Crash Data									
Begin Date 1/1/2019		End Date	12/31/2021	3 years					
Data Source	MnCMAT2								
Cra	sh Severity	Type K/A/B/C, Type PDO	Type K/A/B/C, Type PDO						
K cr	ashes	0	0						
A cı	ashes	0	0						
B crashes		0	0						
C crashes		1	1						
PDO	O crashes	3	3						

#### F. Benefit-Cost Calculation

\$1,357,679 Benefit (present value) \$2,230,000 Cost

**B/C Ratio = 0.61** 

Proposed project expected to reduce 2 crashes annually, o of which involving fatality or serious injury.

#### F. Analysis Assumptions

Crash Severity	Crash Cost
K crashes	\$1,500,000
A crashes	\$750,000
B crashes	\$230,000
C crashes	\$120,000
PDO crashes	\$13,000

Link: mndot.gov/planning/program/appendix a.html

Real Discount Rate: 0.7% Default

Traffic Growth Rate: 1.0% Revised

Project Service Life: 40 years Revised

#### G. Annual Benefit

Crash Severity	<b>Crash Reduction</b>	<b>Annual Reduction</b>	<b>Annual Benefit</b>
K crashes	0.00	0.00	<b>\$0</b>
A crashes	0.00	0.00	<b>\$</b> 0
B crashes	0.00	0.00	\$O
C crashes	0.79	0.26	\$31,600
PDO crashes	2.37	0.79	\$10,270

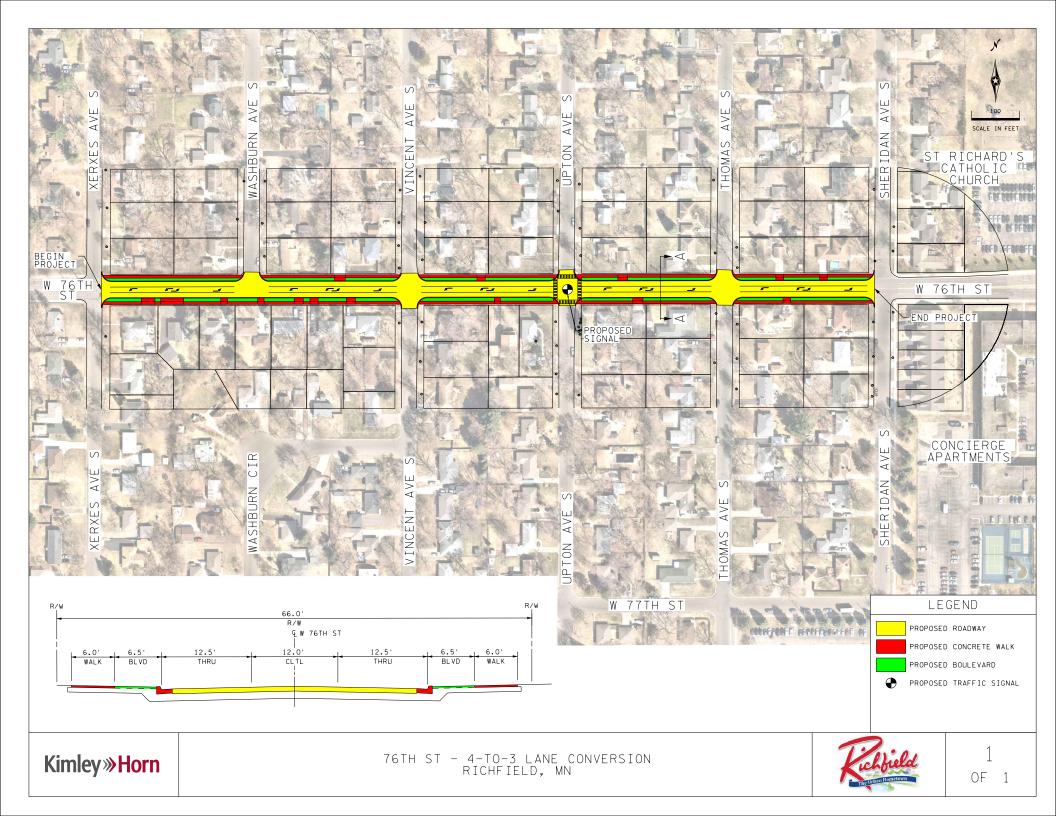
\$41,870

#### H. Amortized Benefit

<u>Year</u>	Crash Benefits	Present Value
2027	\$41,870	\$41,870
2028	\$42,289	\$41,995
2029	\$42,712	\$42,120
2030	\$43,139	\$42,245
2031	\$43,570	\$42,371
2032	\$44,006	\$42,497
2033	\$44,446	\$42,624
2034	\$44,890	\$42,751
2035	\$45,339	\$42,878
2036	\$45,793	\$43,006
2037	\$46,251	\$43,134
2038	\$46,713	\$43,263
2039	\$47,180	\$43,392
2040	\$47,652	\$43,521
2041	\$48,128	\$43,651
2042	\$48,610	\$43,781
2043	\$49,096	\$43,911
2044	\$49,587	\$44,042
2045	\$50,083	\$44,173
2046	\$50,584	\$44,305
2047	\$51,089	\$44,437
2048	\$51,600	\$44,569
2049	\$52,116	\$44,702

Total = \$1,357,679

2050	\$52,637	\$44,835	
2051	\$53,164	\$44,969	
2052	\$53,695	\$45,102	
2053	\$54,232	\$45,237	
2054	\$54,775	\$45,372	NOTE:
2055	\$55,322	\$45,507	This calculation relies on the real discount rate, which accounts
2056	\$55,876	\$45,642	for inflation. No further discounting is necessary.
2057	\$56,434	\$45,778	



#### **RESOLUTION NO. 11962**

### RESOLUTION OF SUPPORT FOR W 76TH ST MODERNIZATION REGIONAL SOLICITATION APPLICATION

**WHEREAS**, the Metropolitan Council's regional solicitation is a competitive federal funding allocation process available to local governments in the Twin Cities region; and

**WHEREAS**, the regional solicitation's Roadway Reconstruction/Modernization category's purpose is to fund roadway preservation projects that improve infrastructure condition, reduce crashes, and enhance multimodal travel options; and

**WHEREAS**, W 76th St from Xerxes Ave to Sheridan Ave is a four lane undivided road; and

**WHEREAS**, converting four lane undivided roads to three lanes reduces rear-end, right angle, and head-on crashes; and

**WHEREAS**, W 76th St connects low, medium, and high density housing with the Centennial Lakes commercial area, Best Buy Headquarters, and public transit; and

**WHEREAS**, a 20% local government match funding is required if the project is selected; and

**WHEREAS,** if the above project is selected, construction is tentatively scheduled for 2027; and

**WHEREAS**, the City of Richfield invests in infrastructure to best serve today's and tomorrow's residents, businesses, and visitors; and

**WHEREAS**, the City of Richfield ensures that City services are accessible to people of all races, ethnicities, incomes, and abilities.

**NOW, THEREFORE, BE IT RESOLVED**, that the City Council of the City of Richfield supports Public Works' 2022 regional solicitation application for W 76th St modernization.

Adopted by the City Council of the City of Richfield, Minnesota this 12th day of April, 2022.

Maria Regan Gonzalez, Mayor

ATTEST:

Kari Sinning, City Clerk



**Project name: W 76th St Modernization** 

**Applicant**: City of Richfield

Project location: W 76th St (MSAS 361) from Xerxes Ave to Sheridan Ave

Total project cost: \$2,292,000

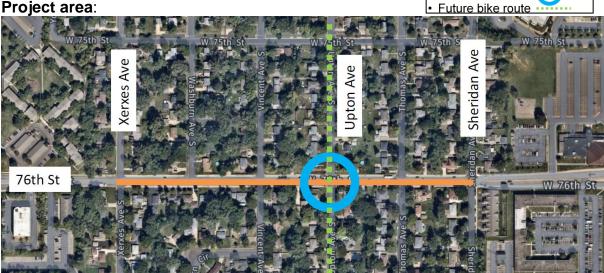
Requested federal amount: \$2,230,000 **Local match**: \$690,000 (23.6% local match)

#### Project description:

The City of Richfield is proposing to reconstruct 76th St from Xerxes Ave to Sheridan Ave and replace the existing traffic signal at Upton Ave. 76th St will be converted from a 4 to 3 lane section with a continuous left turn lane. The road will be narrowed from 45 feet to 37 feet and will include two new 6.5 foot boulevards and updated 6foot sidewalks. Along the corridor, new pedestrian-level lights will be installed and existing overhead electric lines buried. The new traffic signal will include leading pedestrian intervals and video bike detection. The project will create a more comfortable and safer experience for all road users, especially pedestrians, bicyclists and transit users.

#### **Project benefits:**

- Continuous left turn lane for safer vehicle turning
- Narrower road for traffic calming and shorter crossing distances
- Buried overhead electric lines
- New boulevards for trees, snow storage, and transit platforms
- New traffic signal with pedestrian and bike features
  - 4 to 3 lane conversion
  - New traffic signal
  - Future bike route





## **Crash Case Listing**W 76th CMF Crash Listing

Route System	Route Number	Measure	Со	City	Incident Number	Date	Time Day of Week	Basic Type	Num Veh	Sev
05-MSAS	136	2.343	27	Edina	00931808	08/02/21	1535 MON	SSS	2	С
05-MSAS	361	0.166	27	Richfield	00741647	08/20/19	0732 TUE	SVROR	1	N
05-MSAS	361	0.197	27	Richfield	00770774	12/12/19	1636 THU	Rear End	2	N
10-MUN	254	0.195	27	Edina	00773428	12/21/19	1332 SAT	Angle	2	N

#### Selection Filter:

WORK AREA: County('659472') - FILTER: Year('2019','2020','2021'), City('2394621','2396362') - SPATIAL FILTER APPLIED

Analyst:	Notes:
Ben Manibog	



# Crash Summary 76th St CMF Crash Summary

Crash Severity/Crash Year												
Crash Severity	Total	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
K - Fatal	0	0	0	0	0	0	0	0	0	0	0	0
A - Serious Injury	0	0	0	0	0	0	0	0	0	0	0	0
B - Minor Injury	0	0	0	0	0	0	0	0	0	0	0	0
C - Possible Injury	1	0	0	0	0	0	0	0	0	0	1	0
N - Prop Dmg Only	3	0	0	0	0	0	0	0	3	0	0	0
U - Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Total	4	0	0	0	0	0	0	0	3	0	1	0

Crash Severity/Number of Vehicles								
Crash Severity	Total	0	1	2	3+			
K - Fatal	0	0	0	0	0			
A - Serious Injury	0	0	0	0	0			
B - Minor Injury	0	0	0	0	0			
C - Possible Injury	1	0	0	1	0			
N - Prop Dmg Only	3	0	1	2	0			
U - Unknown	0	0	0	0	0			
Total	4	0	1	3	0			

Basic Type Summary	Total	%
Pedestrian	0	0.0
Bike	0	0.0
Single Vehicle Run Off Road	1	25.0
Single Vehicle Other	0	0.0
Sideswipe Same Direction	1	25.0
Sideswipe Opposing	0	0.0
Rear End	1	25.0
Head On	0	0.0
Left Turn	0	0.0
Angle	1	25.0
Other	0	0.0
Total	4	100.0

First Harmful Event Summary	Total	%
Pedestrian	0	0.0
Bicyclist	0	0.0
Motor Vehicle In Transport	3	75.0
Parked Motor Vehicle	0	0.0
Train	0	0.0
Deer/Animal	0	0.0
Other - Non Fixed Object	0	0.0
Collision Fixed Object	1	25.0
Non-Collision Harmful Events	0	0.0
Non-Harmful Events	0	0.0
Other/Unknown	0	0.0
Total	4	100.0

Relationship to Intersection Summary	Total	%
Not at Intersection/Interchange	2	50.0
Four-Way Intersection	2	50.0
T or Y Intersection	0	0.0
Five-Way Intersection or More	0	0.0
Roundabout	0	0.0
Intersection Related	0	0.0
Driveway Access Related	0	0.0
At School Crossing	0	0.0
Railway Grade Crossing	0	0.0
Shared Use Path or Trail	0	0.0
Interchange or Ramp	0	0.0
Crossover Related	0	0.0
Acceleration/Deceleration Lane	0	0.0
Other/Unknown	0	0.0
Total	4	100.0

Weather 1 Summary	Total	%
Clear	3	75.0
Cloudy	1	25.0
Rain	0	0.0
Snow	0	0.0
Sleet, Hail (Freezing Rain/Drizzle)	0	0.0
Fog/Smog/Smoke	0	0.0
Blowing Sand/Soil/Dirt/Snow	0	0.0
Severe Crosswinds	0	0.0
Other/Unknown	0	0.0
Total	4	100.0

Light Condition Summary	Total	%
Daylight	3	75.0
Sunrise	0	0.0
Sunset	0	0.0
Dark (Str Lights On)	1	25.0
Dark (Str Lights Off)	0	0.0
Dark (No Str Lights)	0	0.0
Dark (Unknown Light)	0	0.0
Other/Unknown	0	0.0
Total	4	100.0



# Crash Summary 76th St CMF Crash Summary

Time of Da	ay/Day of	Week												
From To	00:00 01:59	02:00 03:59	04:00 05:59	06:00 07:59	08:00 09:59	10:00 11:59	12:00 13:59	14:00 15:59	16:00 17:59	18:00 19:59	20:00 21:59	22:00 23:59	Total	%
SUN	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
MON	0	0	0	0	0	0	0	1	0	0	0	0	1	25.0
TUE	0	0	0	1	0	0	0	0	0	0	0	0	1	25.0
WED	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
THU	0	0	0	0	0	0	0	0	1	0	0	0	1	25.0
FRI	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
SAT	0	0	0	0	0	0	1	0	0	0	0	0	1	25.0
Total	0	0	0	1	0	0	1	1	1	0	0	0	4	100.0
%	0.0	0.0	0.0	25.0	0.0	0.0	25.0	25.0	25.0	0.0	0.0	0.0	100.0	100.0

ļ <u> </u>						
Driver & Non-Motorist Age/Gender Summary						
Age	M	F	NR	No Value	Total	%
<14	0	0	0	0	0	0.0
14	0	0	0	0	0	0.0
15	0	0	0	0	0	0.0
16	1	0	0	0	1	14.3
17	0	0	0	0	0	0.0
18	0	0	0	0	0	0.0
19	0	0	0	0	0	0.0
20	0	0	0	0	0	0.0
21-24	1	1	0	0	2	28.6
25-29	0	0	0	0	0	0.0
30-34	2	0	0	0	2	28.6
35-39	0	0	0	0	0	0.0
40-44	0	0	0	0	0	0.0
45-49	0	0	0	0	0	0.0
50-54	0	0	0	0	0	0.0
55-59	1	0	0	0	1	14.3
60-64	0	0	0	0	0	0.0
65-69	0	0	0	0	0	0.0
70-74	0	0	0	0	0	0.0
75-79	0	0	0	0	0	0.0
80-84	0	1	0	0	1	14.3
85-89	0	0	0	0	0	0.0
90-94	0	0	0	0	0	0.0
95+	0	0	0	0	0	0.0
No Value	0	0	0	0	0	0.0
Total	5	2	0	0	7	100.0
%	71.4	28.6	0.0	0.0	100.0	100.0

Month Summary	Total	%
January	0	0.0
February	0	0.0
March	0	0.0
April	0	0.0
May	0	0.0
June	0	0.0
July	0	0.0
August	2	50.0
September	0	0.0
October	0	0.0
November	0	0.0
December	2	50.0
Total	4	100.0

Physical Condition Summary	Total	%
Apparently Normal (Including No Drugs/Alcohol)	7	100.0
Physical Disability (Short Term or Long Term)	0	0.0
Medical Issue (III, Sick or Fainted)	0	0.0
Emotional (Depression, Angry, Disturbed, etc.)	0	0.0
Asleep or Fatigued	0	0.0
Has Been Drinking Alcohol	0	0.0
Has Been Taking Illicit Drugs	0	0.0
Has Been Taking Medications	0	0.0
Other/Unknown	0	0.0
Not Applicable	0	0.0
Total	7	100.0

Sel	ection	Filter
-----	--------	--------

394621','2396362') - SPATIAL FILTER APPLIED
City('2394621','2396362') -
Year('2019','2020','2021')
County('659472') - FILTER: Y
WORK AREA:

Analyst:	Notes:
Ben Manibog	



# Crash Summary W 76th Stacks Summary

Crash Severity/Crash Year											
Crash Severity	Total	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
K - Fatal	0	0	0	0	0	0	0	0	0	0	0
A - Serious Injury	0	0	0	0	0	0	0	0	0	0	0
B - Minor Injury	2	0	0	0	0	1	1	0	0	0	0
C - Possible Injury	4	0	1	2	0	1	0	0	0	0	0
N - Prop Dmg Only	13	5	2	2	0	0	1	1	2	0	0
U - Unknown	0	0	0	0	0	0	0	0	0	0	0
Total	19	5	3	4	0	2	2	1	2	0	0

Crash Severity/Number of Vehicles					
Crash Severity	Total	0	1	2	3+
K - Fatal	0	0	0	0	0
A - Serious Injury	0	0	0	0	0
B - Minor Injury	2	0	2	0	0
C - Possible Injury	4	0	1	1	2
N - Prop Dmg Only	13	0	3	10	0
U - Unknown	0	0	0	0	0
Total	19	0	6	11	2

Basic Type Summary	Total	%
Pedestrian	0	0.0
Bike	2	10.5
Single Vehicle Run Off Road	4	21.1
Single Vehicle Other	0	0.0
Sideswipe Same Direction	0	0.0
Sideswipe Opposing	0	0.0
Rear End	9	47.4
Head On	0	0.0
Left Turn	1	5.3
Angle	3	15.8
Other	0	0.0
Total	19	100.0

First Harmful Event Summary	Total	%
Pedestrian	0	0.0
Bicyclist	2	10.5
Motor Vehicle In Transport	12	63.2
Parked Motor Vehicle	1	5.3
Train	0	0.0
Deer/Animal	0	0.0
Other - Non Fixed Object	0	0.0
Collision Fixed Object	4	21.1
Non-Collision Harmful Events	0	0.0
Non-Harmful Events	0	0.0
Other/Unknown	0	0.0
Total	19	100.0

Relationship to Intersection Summary	Total	%
Not at Intersection/Interchange	6	31.6
Four-Way Intersection	10	52.6
T or Y Intersection	1	5.3
Five-Way Intersection or More	0	0.0
Roundabout	0	0.0
Intersection Related	1	5.3
Driveway Access Related	0	0.0
At School Crossing	0	0.0
Railway Grade Crossing	0	0.0
Shared Use Path or Trail	0	0.0
Interchange or Ramp	0	0.0
Crossover Related	0	0.0
Acceleration/Deceleration Lane	0	0.0
Other/Unknown	1	5.3
Total	19	100.0

Weather 1 Summary	Total	%
Clear	11	57.9
Cloudy	4	21.1
Rain	0	0.0
Snow	4	21.1
Sleet, Hail (Freezing Rain/Drizzle)	0	0.0
Fog/Smog/Smoke	0	0.0
Blowing Sand/Soil/Dirt/Snow	0	0.0
Severe Crosswinds	0	0.0
Other/Unknown	0	0.0
Total	19	100.0

Light Condition Summary	Total	%
Daylight	13	68.4
Sunrise	0	0.0
Sunset	0	0.0
Dark (Str Lights On)	6	31.6
Dark (Str Lights Off)	0	0.0
Dark (No Str Lights)	0	0.0
Dark (Unknown Light)	0	0.0
Other/Unknown	0	0.0
Total	19	100.0



## Crash Summary W 76th Stacks Summary

Time of Da	y/Day of	Week												
From To	00:00 01:59	02:00 03:59	04:00 05:59	06:00 07:59	08:00 09:59	10:00 11:59	12:00 13:59	14:00 15:59	16:00 17:59	18:00 19:59	20:00 21:59	22:00 23:59	Total	%
SUN	0	0	0	0	0	0	0	1	0	0	0	0	1	5.3
MON	0	0	0	0	1	0	0	0	1	0	0	1	3	15.8
TUE	0	0	0	1	0	1	0	0	0	0	0	0	2	10.5
WED	0	0	0	2	0	0	0	0	1	0	0	0	3	15.8
THU	0	0	0	0	0	0	0	1	2	1	0	0	4	21.1
FRI	0	0	0	0	1	0	1	0	2	1	0	0	5	26.3
SAT	0	0	0	0	0	0	0	1	0	0	0	0	1	5.3
Total	0	0	0	3	2	1	1	3	6	2	0	1	19	100.0
%	0.0	0.0	0.0	15.8	10.5	5.3	5.3	15.8	31.6	10.5	0.0	5.3	100.0	100.0

Driver & N	lon-Motor	ist Age/0	Sender S	Summary		
Age	M	F	NR	No Value	Total	%
<14	0	0	0	0	0	0.0
14	0	0	0	0	0	0.0
15	0	0	0	0	0	0.0
16	0	0	0	0	0	0.0
17	0	0	0	0	0	0.0
18	0	0	0	0	0	0.0
19	0	0	0	0	0	0.0
20	1	1	0	0	2	5.6
21-24	3	3	0	0	6	16.7
25-29	3	3	0	0	6	16.7
30-34	3	2	0	0	5	13.9
35-39	2	0	0	0	2	5.6
40-44	2	0	0	0	2	5.6
45-49	1	0	0	0	1	2.8
50-54	1	2	0	0	3	8.3
55-59	0	0	0	0	0	0.0
60-64	1	2	0	0	3	8.3
65-69	1	0	0	0	1	2.8
70-74	0	0	0	0	0	0.0
75-79	0	0	0	0	0	0.0
80-84	0	1	0	0	1	2.8
85-89	0	1	0	0	1	2.8
90-94	1	0	0	0	1	2.8
95+	0	0	0	0	0	0.0
No Value	0	0	0	2	2	5.6
Total	19	15	0	2	36	100.0
%	52.8	41.7	0.0	5.6	100.0	100.0

Month Summary	Total	%
January	2	10.5
February	3	15.8
March	2	10.5
April	0	0.0
Мау	1	5.3
June	0	0.0
July	0	0.0
August	2	10.5
September	3	15.8
October	2	10.5
November	1	5.3
December	3	15.8
Total	19	100.0

<b>Physical Condition Summary</b>	Total	%
Apparently Normal (Including No Drugs/Alcohol)	31	96.9
Physical Disability (Short Term or Long Term)	0	0.0
Medical Issue (III, Sick or Fainted)	0	0.0
Emotional (Depression, Angry, Disturbed, etc.)	0	0.0
Asleep or Fatigued	0	0.0
Has Been Drinking Alcohol	0	0.0
Has Been Taking Illicit Drugs	0	0.0
Has Been Taking Medications	0	0.0
Other/Unknown	1	3.1
Not Applicable	0	0.0
Total	32	100.0

Selection Filter:

WORK AREA: County('659472') - FILTER: Year('2012','2013','2014','2015','2016','2017','2018','2019','2020','2021'), City('2396362') - SPATIAL FILTER APPLIED

Analyst:	Notes:
Ben Manibog	



#### **Public Works Department**

April 13, 2022

MAYOR

MARIA REGAN GONZALEZ Metropolitan Council
Regional solicitation scoring committee

CITY COUNCIL

SEAN HAYFORD OLEARY

MARY SUPPLE

SIMON TRAUTMANN

BEN WHALEN

CITY MANAGER
KATIE RODRIGUEZ

To whom this may concern,

The City of Richfield Public Works Department acknowledges the Engineering Division is applying for a Metropolitan Council regional solicitation grant to fund reconstruction of 76th St between Xerxes Ave and Sheridan Ave under the "Roadway Modernization" category. This project includes a reconstructed road, traffic signal, ADA ramps, and pedestrian infrastructure.

Public Works supports this application as it provides a safer corridor and more comfortable pedestrian and bicyclist experience. The City also supports this application as seen through the attached City Council resolution of support.

Public Works commits to operate and maintain these facilities such that they are usable for all transportation modes in all seasons for its full design life. This is consistent with the city's Snow Removal and Ice Control Policy dated 10/23/18 and attached to the application.

We hope that this application is awarded for tentative construction in 2027. Improving this corridor will fulfill years of planning through the Comprehensive Plan 2040 (2018) and other efforts.

Respectfully,

Kristin Asher

Public Works Director

### PUBLIC WORKS DEPARTMENT CITY OF RICHFIELD

DATE: 10/23/2018

SUBJECT: Snow Removal and Ice Control Policy

#### **Purpose**

The purpose of this Snow Removal and Ice Control Policy ("Policy") is to define and outline snow removal and ice control objectives and procedures as established by the City of Richfield ("City") and the Public Works Department ("Department").

#### Introduction

The City assumes basic responsibility for snow removal on City streets, City sidewalks/trails/cycle tracks, and City-owned public parking lots. The City assumes basic responsibility for ice control and mitigation on City streets and City-owned public parking lots, but does not salt or sand City sidewalks/trails/cycle tracks. Reasonable snow removal and ice control is necessary for routine travel and emergency services. The City strives to provide this service in a timely, safe, and cost-effective manner while keeping in mind safety, budget, personnel, equipment, and environmental concerns. The City will primarily use its own personnel and equipment to provide this service, but may also use private contractors when necessary.

The Policy supersedes written or unwritten policies of the City and Department regarding snow removal and ice control. This Policy does not relieve the operators of private vehicles, pedestrians, property owners, residents, and all others that may be using public streets, sidewalks, and trails or that may otherwise be affected by snow/ice removal operations, of their responsibility to act in a reasonable, prudent, and cautious manner given the prevailing weather and street conditions.

#### **Policy**

The Operations Superintendent, under the direction of the Public Works Director, will make decisions as to time, method, and materials used on snow removal and ice control operations. The Operations Superintendent is responsible for coordinating equipment and personnel, and assigning work based on the need for snow removal and ice control within the City. The Operations Superintendent maintains the authority to delegate any of the responsibilities laid out in this policy to appropriate Department staff.

The Department will only conduct snow and ice control operations when weather conditions do not endanger the safety of employees or equipment and operations are effective. Factors that may delay snow and ice control operations include:

- Severe cold
- Significant winds
- Limited visibility
- Rapid accumulation of snow and/or ice
- Traffic conditions (e.g., rush hour)

The Department continuously monitors forecasts and weather conditions to aid in mobilization decisions. The Department will use multiple sources for storm warning preparedness, including, but not limited to the following:

- National Weather Service (<u>www.weather.gov</u>)
- Hennepin County Emergency Management
- Local News Weather Reports
- Various weather-related web sites

#### Planning and Scheduling

Snow removal and ice control operations may occur during assigned work shifts or, in some situations, on a call back of workers. When conditions allow, work schedules will be arranged to keep overtime at a minimum, with overtime scheduling being approved by the Operations Superintendent. The Operations Superintendent will notify the Public Works Director of any unusual amount of overtime to be performed and the reasons for the overtime.

The Operations Superintendent retains the authority to alter assignments based on weather conditions, equipment and personnel availability, and other conditions related to snow removal and ice control.

#### Mobilization

Mobilization of employees is the responsibility of the Operations Superintendent. The Operations Superintendent will determine the dispatching of equipment for City streets, City sidewalks/trails, and City-owned public parking lots.

The Operations Superintendent will keep the Public Works Director informed of the start, progress, and completion of full-scale snow removal and ice control operations.

#### **Initiating Operations**

The start of snow removal and ice control operations depends upon current and anticipated conditions. The Operations Superintendent will decide when to initiate snow removal and ice control operations. Snow removal and ice control operations may be initiated any time they are deemed to be beneficial to the City. Some criteria for the decision are:

- Snow accumulation of two (2) or more inches
- Drifting of snow that causes travel problems
- Icy conditions which seriously impact travel
- Timing of snowfall in relation to heavy use of streets (e.g., rush hour)
- Forecasted and anticipated changes in weather conditions

#### **Snow Route Assignment and Planning**

Each year, the Department prepares a map of the street system, sidewalk/trail system, and public properties serviced by the City. These maps identify route areas that identify personnel, equipment, and, if necessary, the private contractors used to provide the

services. Annually, the Department revises route areas to correspond with budget, equipment, personnel, and other resources available to the City.

The Department identifies priority routes and hazards within each route area. These route areas are generally assigned to individuals and are used for planning and executing routine snow removal and ice control operations.

#### **Street Snow Removal Routes**

The Department has classified City streets based on the street function, traffic volume, and importance to the welfare of the community. The priority of snow removal routes are as follows:

- 1. Minor arterial roads: high-volume routes that connect the urban service area to cities inside and outside of the region
- 2. Collector streets: streets providing access between neighborhoods, minor business concentrations, and schools
- 3. Low-volume local streets
- 4. City parking lots, alleys, sidewalks, and trails

Emergency services officers may contact the Department to dispatch workers and equipment to provide services for emergency vehicles (i.e. police, fire, ambulance, equipment needed for electrical outages, gas leaks, etc.) responding to emergencies within the City. The Department will dispatch necessary workers and equipment as soon as possible.

#### Sidewalk/Trail/Cycle Tracks Snow Removal Routes

Priorities for snow removal on sidewalks are set to accommodate the needs of the mass transit public. Priority for plowing is as follows:

- 1. HUB area
- 2. Arterial roads
- 3. Collector streets
- 4. Residential neighborhoods

In the event of a major snow event (six (6) inches or more) one side of each arterial street will be plowed, until all arterial roads are cleared. Typically, two machines will be available for snow removal from sidewalks.

Cycle tracks will be cleared of snow at the discretion of the Operations Superintendent

#### Sidewalk/Trail/Cycle Tracks Ice Policy

In effort to best utilize the City's finite resources and prioritize snow and ice removal in high-impact areas as outlined throughout this Policy, the Department will not apply salt, sand, or other de-icing chemicals to sidewalks/trails/cycle tracks. Due to the everchanging nature of the Minnesota climate, the physical and financial cost of keeping all sidewalks/trails/cycle tracks free of ice at all times would substantially outweigh the benefit to the community. In addition, salt, sand, and other de-icing agents have adverse effects on the local environment. Application of these substances is imprecise and may result in negative effects to adjacent green space and/or infiltration into ground water. Residents and business owners are encouraged to make sure sidewalks adjacent to their properties are ice free or otherwise safe for passage.

#### **Transit Accommodations**

In addition to plowing sidewalks in the most heavily used areas first, the Department employs a Sentencing to Service crew four days per week, whose primary task in the winter months is to clear bus stops of snow and ice for mass transit users. The Sentencing to Service crew works a defined schedule so it can take up to three days before some transit stops are cleared, depending on the timing of snowfall in relation to the schedule.

#### **Equipment Inspection**

The Department mechanics conduct a thorough inspection of all snow and ice related vehicles and equipment prior to the start of the snow season. In addition, all trucks are annually certified through the Minnesota State Patrol Mandatory Inspection Program.

The Department also conducts daily inspections of snow and ice related vehicles and equipment during the snow season. Operators of the vehicles and equipment record their daily inspections and the status of the vehicle.

#### **Equipment Calibration**

The Department calibrates all salting vehicles prior to the start of the snow season to ensure efficient and effective application. Calibration will also occur if there is a major hydraulic repair or service needed on the vehicle.

#### Other Responsible Entities

Other governmental entities maintain certain streets within the City, which includes snow and ice removal. The Minnesota Department of Transportation (MnDOT) and the Hennepin County Highway Department maintain separate maintenance policies for streets they maintain within the City. From time to time, entities may contract with each other to perform snow removal services. The ultimate responsibility for snow removal services rests with the controlling entity.

Hennepin County maintains streets on Penn Ave, Nicollet Ave, and Portland Ave from Trunk Highway 62 to Interstate 494 in Richfield, as well as the entirety of 66<sup>th</sup> Street in Richfield and into Edina.

**MnDOT** is responsible for all freeway on/off ramps on Trunk Highways 62 and 77 and Interstates 35W and 494 in Richfield.

Responsibility varies between **Richfield**, **Hennepin County**, and **Bloomington** for sidewalks along interstate/trunk highway overpasses and underpasses.

The table below summarizes the entity responsible for clearing sidewalks.

Sidewalks on overpasses	Entity
494/Penn	Hennepin County
494/Portland	Hennepin County
494/Nicollet	Hennepin County
62/Penn	Hennepin County

62/Portland	Hennepin County
77/66 <sup>th</sup> Street	Hennepin County
494/Lyndale	Bloomington
494/12 <sup>th</sup> Ave	Bloomington
76 <sup>th</sup> Street/35W	Richfield
Sidewalks on underpasses	Entity
62/Lyndale	Richfield
62/Nicollet	Richfield
66 <sup>th</sup> Street/35W	Richfield

#### **Private Contractors Providing Snow Removal Services**

Richfield City Code, Subsection 930.17, limits the operation of vehicles for snow plowing on private property in residential districts and within fifty (50) feet of such districts to the period between 6:00AM and 10:00PM any day of the week.

#### **Post-Snowfall Events**

Operators conduct follow-up plowing as needed. Generally, further clearing takes place where cars were parked, at intersections, etc. Additional salting of intersections may occur at this time as well.

#### **Snow and Ice Control Materials**

The City <u>does not</u> have a "bare pavement" policy. The Department will wait for snowfall to cease or accumulate sufficiently before initiating snow removal. General snow pack will remain on City streets and sidewalks in many cases.

The Department will use snow and ice control materials when there are hazardous ice or slippery conditions on streets. The Department may use other minerals, chemicals, and mixtures to assist in ice control provided they have an equivalent or lesser effect on the environment than salting and are economically feasible. The Department is concerned with the effect of chemicals on the environment; therefore, it will limit its use of such chemicals.

The Department initiates salting operations to melt ice on City streets. The Department will apply snow and ice control materials at times and rates that maximize effectiveness and generally limit application to:

- Intersections
- Hazardous areas
- Isolated, slippery areas

The Department may order use of additional salt if pavement, air temperatures, or precipitation type warrant. The Department has adopted salt application best practices as stated in the Minnesota Snow and Ice Control Handbook.

The City does not employ salt or other ice control measures on sidewalks/trails/cycle tracks in the City.

#### **Refreeze Conditions**

It is not possible or practical for snow and ice to be completely removed from all sidewalks or prevent melting snow or ice from refreezing on sidewalks. Users of sidewalk and trail facilities are expected at all times to be mindful of current conditions and avoid hazards to remain safe.

#### **Material Handling and Storage**

Salt stockpiles are stored off-site at a nearby Minnesota Department of Transportation (MnDOT) facility with the exception of approximately 300 tons being stored in an enclosed structure at the Public Works maintenance facility. During the off-season, salt at the Public Works maintenance facility is tarped and stored inside a covered structure. No other materials or supplies are stored in the structure containing the salt.

#### **Spreading and Plowing Procedures**

The Department will plow snow in a manner that minimizes traffic obstructions. The center of the roadway will be plowed first, and then the snow will be plowed from left to right so the snow discharges onto the boulevard. When plowing on bridges, operators will adjust their speed to reduce or eliminate a snow wake from going over the side of the bridge. Snow on dead-end streets will generally be plowed to the end of the roadway and snow on cul-de-sacs will be plowed to the middle of the cul-de-sac.

As necessitated by available resources, snow is plowed to the edge of the street without regard for sidewalks, driveways, and other structures located in the right-of-way. Sidewalks will be cleared after roadways are cleared. The City recognizes the inconvenience that comes from snow piling up on driveways due to plowing activities, but the City is not responsible for removing this accumulated snow.

Snowplow operators are exempt from traffic regulations set forth in Minnesota Statutes, Chapter 169 while actually engaged in work on streets, except for regulations related to driving while impaired and the safety of school children. Pursuant to this authority, snowplow operators have discretion to disregard standard traffic laws, when, in their judgement, it is safe to disregard such laws.

#### Hauling of Snow and Snow Storage

From time to time, the Department will remove snow where space does not allow for snow to be pushed or piled outside the driving lanes by hauling to another location. The Operations Superintendent will determine when snow will be removed by truck from the boulevard area. Snow hauling operations will not commence until other snow/ice removal operations have been completed. Snow hauling operations may also be delayed depending on weather conditions, personnel, and budget availability. The snow will be removed and hauled to a snow storage area. The snow storage zone will be located in an area that minimizes environmental impact.

#### **Snow Emergencies**

#### **Snow Emergency Procedures**

Concurrent with the above policy, the following are additional City practices employed during a declared snow emergency (see City Code, Subsection 1305.13).

#### **Snow Emergency Notifications**

A snow emergency is declared by the Operations Superintendent, or designee. Declaration of a snow emergency can be found at the following:

- a. Contact the Snow Emergency Line at 612-861-9178
- b. Visit the City Website at www.richfieldmn.gov
- c. Sign up for e-update on the City website at www.richfieldmn.gov/residents/e-notification
- d. Local news channels
  - i. WCCO
  - ii. KMSP
  - iii. KSTP
  - iv. KARE 11
- e. Social Media (Facebook, Twitter)

#### **Parking Limitations**

Vehicles parked on the roadway during a snow or ice event may impair the effectiveness of snow and ice control and removal. Richfield City Code, Subsection 1305.13, prohibits on-street parking during a snow emergency. A snow emergency is in effect after a snowfall of two (2) or more inches and/or upon the declaration of a snow emergency by the City Manager, or designee, and continues until the street has been plowed curb-to-curb.

Richfield City Code, Section 1315, permits certain vehicles to park in the front yard areas of residential districts of the City during a snow emergency, subject to the following conditions:

- a. The vehicle must be parked as close as possible to the established driveway area serving the property on which, or in front of which, it is parked;
- b. Permission of the property owner must be obtained;
- c. The vehicle must be parked at least eight (8) feet back from the curbline, and five (5) feet back from any public sidewalk;
- d. The vehicle may not be parked off of an established driveway within the area bounded by the street curblines abutting said corner lot and a line connecting points on the abutting curblines of fifty (50) feet from the point of intersection of the extensions of the curblines; and
- e. Movement to and from the parking area must be over the established driveway rather than over the curb.

The owner of the property shall repair any damage to the adjacent boulevard area caused by parking in the front yard areas of residential districts.

#### **Private Property**

#### **Snow Removal on Private Properties**

It is a public nuisance and violation of City Code, Subsection 830.41, to shovel, plow, or cast snow or ice from private property onto a public street, alley, sidewalk, boulevard, or public parking lot. It is allowable to remove snow or ice from a private driveway or walkway and deposit the snow or ice on the portion of the boulevard immediately adjacent to the private property. Pushing, piling, or storing snow in or across the street is prohibited.

#### **Service to Private Property**

City personnel and any personnel contracted by the City do not provide snow removal and ice control services to private properties. Services may, however, be provided with the permission of the property owners in situations where City operations directly benefit from operations on private property. Snow removal operations may be conducted on any private property when emergency vehicles responding to a call for service require access to private property. Any operations on or services provided to private property are authorized by the Department, or are provided at the request of any emergency services officer responding to a call.

#### **Snow Operation Damages**

Snow removal and ice control operations can cause damage to property, even under the best circumstances and care by vehicle and equipment operators. Most often, damage occurs to property improvements in the City right-of-way, which generally extends eight (8) to twelve (12) feet beyond the edge of street pavement.

The City is not responsible for damage to vegetation caused by plowing or the application of sand and salt mixtures. However, the City will make its best effort to repair damaged grass along curb lines and sidewalk edges using black dirt and seeding.

Personal property in the City's right-of-way damaged by snow being deposited from an accumulation on the blade of a snowplow will not be considered for compensation. Any property damage claims allegedly resulting from City snow plowing activities must be filed with the City's insurance through the Human Resources Department

When disagreement about the responsibility for the damage occurs, the Department will investigate and decide responsibility.

Equipment operators and contractors are directed to immediately contact their supervisor and the supervisor will contact the Department and Police Department whenever an incident involves damage to vehicles, significant structures, or involves any injury to a person.

Equipment operators and contractors also report existing damage they observe to avoid any potential future claim the damage was caused by snow removal or ice control operations.

#### **Service Requests and Complaints**

The Department will take service requests and complaints regarding snow removal and ice control operations during normal working hours. The Department will prioritize service requests and provide resolution at their discretion, in keeping with available personnel, equipment, and materials. The Operations Superintendent will receive and respond to service requests or complaints that the administrative staff is unable to answer.

#### **Policy Review**

The Department will review this policy annually. The Department will keep on file written comments and complaints received regarding this policy. Any review will consider comments or complaints received since the last review. The review will also consider

input from City employees and contractors, members of the public, and other affected parties.

## Socio-Economic Conditions: Affordable Housing Access

