



Application

17063 - 2022 Roadway Modernization

17725 - 7th Street North- 10th Street North to East Lyndale Avenue North

Regional Solicitation - Roadways Including Multimodal Elements

Status: Submitted

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

Organization Information

Name: MINNEAPOLIS,CITY OF

Jurisdictional Agency (if different):			
Organization Type:	City		
Organization Website:	http://www.ci.minneapolis.mn.us/		
Address:	DEPT OF PUBLIC WORKS		
	309 2ND AVE S #300		
	MINNEAPOLIS	Minnesota	55401
	City	State/Province	Postal Code/Zip
County:	Hennepin		
Phone:*	612-673-3884		
		Ext.	
Fax:			
PeopleSoft Vendor Number	0000020971A2		

Project Information

Project Name	7th Street North - 10th Street North to East Lyndale Avenue North
Primary County where the Project is Located	Hennepin
Cities or Townships where the Project is Located:	City of Minneapolis
Jurisdictional Agency (If Different than the Applicant):	City of Minneapolis

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

The proposed project will reconstruct approximately 0.5 miles of 7th St N, an A-minor arterial, between 10th St N and E Lyndale Ave N in the City of Minneapolis. Existing conditions along the corridor include sidewalk on both sides of the street, four travel lanes, striped bike lanes, and a raised median or center turn lanes for some segments. Land use adjacent to the corridor is primarily commercial and multi-family housing. The project is a full reconstruction, involving the entire right-of-way and will include a reduction in travel lanes, new sidewalks, ADA pedestrian ramps, upgraded bicycle accommodations consistent with the City's All Ages and Abilities bicycle network standards, pavement, curb and gutter, and utility improvements. The project will also include signal improvements, new signage, and new pavement markings, as needed. This work will also ultimately support the development of Metro Transit's Blue Line LRT Extension project given the proximity, accommodates the alignment of the METRO C and D Line BRT lines, local and express routes and further incorporates upgraded transit shelters and other transit accommodations.

(Limit 2,800 characters; approximately 400 words)

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

7th Street North (MSA 221) between 10th St N and E Lyndale Ave N: Reconstruct roadway, curb and gutter, sewer, sidewalk, bicycle facilities, traffic signals, and streetscaping.

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)

0.5

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)

n/a

Federal Amount

\$7,000,000.00

Match Amount

\$1,821,250.00

Minimum of 20% of project total

Project Total \$8,821,250.00

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

Match Percentage 20.65%

Minimum of 20%

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

Source of Match Funds City of Minneapolis - Municipal State Aid, Net Debt Bonds,
Special Assessment 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 City of Minneapolis

Functional Class of Road A-Minor Arterial

Road System MSA

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

Road/Route No. 221

i.e., 53 for CSAH 53

Name of Road 7th Street North

Example; 1st ST., MAIN AVE

Zip Code where Majority of Work is Being Performed 55405

(Approximate) Begin Construction Date 04/15/2027

(Approximate) End Construction Date 11/15/2027

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

From:
(Intersection or Address) 7th Street North and 10th Street North

To:
(Intersection or Address) East Lyndale Avenue North

DO NOT INCLUDE LEGAL DESCRIPTION

Or At

Miles of Sidewalk (nearest 0.1 miles) 0.5

Miles of Trail (nearest 0.1 miles) 0.5

**Miles of Trail on the Regional Bicycle Transportation Network
(nearest 0.1 miles)**

0.5

Primary Types of Work

AGG BASE, PAVEMENT, CURB AND GUTTER, SIGNALS,
SIGNS, STORM SEWER, DRIVEWAY APRON, SIDEWALKS,
PED RAMPS, BIKEWAY, LIGHTING, LANDSCAPING

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

BRIDGE/CULVERT PROJECTS (IF APPLICABLE)

Old Bridge/Culvert No.:

New Bridge/Culvert No.:

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

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.

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

Goal A: Transportation System Stewardship-- Sustainable investments in the transportation system are protected by strategically preserving, maintaining, and operating system assets.

Objective A: Efficiently preserve and maintain the regional transportation system in a state of good repair.

Goal B: Safety and Security - The regional transportation system is safe and secure for all users.

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

Strategies B1 and B6.

Goal C: Access to Destinations - People and businesses prosper by using a reliable, affordable, and efficient multimodal transportation system that connects them to destinations throughout the region and beyond.

Objective A: Increase the availability of multimodal travel options, especially in congested highway corridors.

Objective E: Improve the availability of and quality of multimodal travel options for people of all ages and abilities to connect to jobs and other opportunities, particularly for historically under-represented populations.

Strategies C1, C2, and C17.

Goal D: Competitive Economy - The regional transportation system supports the economic competitiveness, vitality, and prosperity of the region and state.

Objective A: Improve multimodal access to regional job concentrations identified in Thrive MSP 2040.

Objective B: Invest in a multimodal transportation system to attract and retain businesses and residents.

Objective C: Support the region's economic competitiveness through the efficient movement of freight.

Strategies D1 and D3.

Goal E: Healthy and Equitable Communities - The regional transportation system advances equity and contributes to communities' livability and sustainability while protecting the natural, cultural, and developed environments.

Objective A: Reduce transportation-related air emissions.

Objective C: Increase the availability and attractiveness of transit, bicycling, and walking to encourage healthy communities through the use of active transportation options.

Objective D: Provide a transportation system that promotes community cohesion and connectivity for people of all ages and abilities, particularly for historically under-represented populations.

Strategies E3, E5, E6, and E7.

Limit 2,800 characters, approximately 400 words

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

1) Minneapolis adopted 2022-2027 capital budget: includes this project in 2027 (page 6 of "Capital Budget Detail for Funded Projects")

2) Minneapolis Transportation Action Plan:

7th Street North is:

-On the existing High Frequency Transit Network (page 104) to be prioritized for capital improvements that support transit (page 117)

-A Pedestrian Priority Network route (page 47)
-An All Ages and Abilities bikeway network "near-term low streets bikeway" route (page 74)

-A truck route (page 156)

-Make safety improvements on High Injury Streets (7th Street N is one) and 4-lane undivided streets (part of 7th ST N is one) (page 180)

3) Minneapolis Vision Zero Action Plan:

-7th Street N is identified as a "High Injury Street" to be prioritized for traffic safety improvements (pages 16-17)

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

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: 03/22/2022

Link to plan: <http://lims.minneapolismn.gov/Download/RCAV2/26538/2022-ADA-Transition-Plan-Update.pdf>

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

Date self-evaluation completed:

Link to plan:

Upload plan or self-evaluation if there is no link

Upload as PDF

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

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

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

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

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

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

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

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

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

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

Roadways Including Multimodal Elements

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

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

Roadway Strategic Capacity and Reconstruction/Modernization and Spot Mobility projects only:

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

Check the box to indicate that the project meets this requirement. 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 MnDOT's Cost Participation for Cooperative Construction Projects and Maintenance Responsibilities manual. In the case of a federally funded trunk highway project, the policy guidelines should be read as if the funded trunk highway route is under local jurisdiction.

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

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.

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

Requirements - Roadways Including Multimodal Elements

Specific Roadway Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Mobilization (approx. 5% of total cost)	\$590,000.00
Removals (approx. 5% of total cost)	\$380,800.00
Roadway (grading, borrow, etc.)	\$1,480,000.00
Roadway (aggregates and paving)	\$964,500.00
Subgrade Correction (muck)	\$0.00
Storm Sewer	\$331,000.00
Ponds	\$500,000.00
Concrete Items (curb & gutter, sidewalks, median barriers)	\$232,000.00
Traffic Control	\$295,000.00
Striping	\$69,100.00
Signing	\$69,100.00
Lighting	\$360,000.00
Turf - Erosion & Landscaping	\$74,000.00
Bridge	\$0.00
Retaining Walls	\$0.00
Noise Wall (not calculated in cost effectiveness measure)	\$0.00
Traffic Signals	\$800,000.00
Wetland Mitigation	\$0.00
Other Natural and Cultural Resource Protection	\$0.00
RR Crossing	\$0.00
Roadway Contingencies	\$1,844,000.00
Other Roadway Elements	\$0.00
Totals	\$7,989,500.00

Specific Bicycle and Pedestrian Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Path/Trail Construction	\$373,750.00
Sidewalk Construction	\$212,800.00
On-Street Bicycle Facility Construction	\$0.00
Right-of-Way	\$0.00
Pedestrian Curb Ramps (ADA)	\$53,200.00

Crossing Aids (e.g., Audible Pedestrian Signals, HAWK)	\$0.00
Pedestrian-scale Lighting	\$0.00
Streetscaping	\$0.00
Wayfinding	\$0.00
Bicycle and Pedestrian Contingencies	\$192,000.00
Other Bicycle and Pedestrian Elements	\$0.00
Totals	\$831,750.00

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	\$8,821,250.00
Construction Cost Total	\$8,821,250.00
Transit Operating Cost Total	\$0.00

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

Existing Employment within 1 Mile:	154425
Existing Manufacturing/Distribution-Related Employment within 1 Mile:	6433
Existing Post-Secondary Students within 1 Mile:	8100
Upload Map	1649863935937_Regional Economy Map 7th St N.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: Yes

None of the tiers:

Measure A: Current Daily Person Throughput

Location 7th Street North North of Olson Memorial Highway

Current AADT Volume 10700

Existing Transit Routes on the Project 5, 9, 22, 721, 755, 923-METRO C Line

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

Upload Transit Connections Map 1649854417874_Transit Connections Map 7th St N.pdf

Please upload attachment in PDF form.

Response: Current Daily Person Throughput

Average Annual Daily Transit Ridership 0

Current Daily Person Throughput 13910.0

Measure B: 2040 Forecast ADT

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

If checked, METC Staff will provide Forecast (2040) ADT volume

OR

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

Forecast (2040) ADT volume

Measure A: Engagement

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

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

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

i. This project will provide positive impacts and will directly benefit BIPOC populations, low-income populations, youth, and older adults within a ½ mile of the proposed project area as follows: BIPOC: 55% (39.6% Minneapolis); Under poverty level: 20% (19.1% Minneapolis); Disabled: 11% (11% Minneapolis); Under 18 y/o: 18.4% (20.3% Minneapolis); Over 65: 6.6% (10.3% Minneapolis). As the data indicates, both BIPOC populations and low-income populations would benefit more on comparative basis to citywide levels. All other data, including persons with disabilities, youth and older adults within a ½ mile of the project extents is comparable to citywide data.

ii/iii. There have been numerous community engagement events that have targeted the broader area in recent years as part of larger transportation initiatives and investments.

Response:

This project is being proposed because of findings and engagement around the Minneapolis Transportation Action Plan (TAP), Vision Zero Action Plan (VZAP), and community feedback from other venues. Those included focused efforts to engage traditionally underrepresented communities. For the TAP and VZAP, engagement included separate dialogues in-language with members from 7 communities and also included 30 direct engagement activities done in partnership with contracted community-based organizations that focused on reaching residents in public housing, East African community members, Latino community members, college students, high school students, and residents of traditionally under representative neighborhoods. Some of the key themes we have heard from equity-focused engagement that represent populations within a ½ mile of the 7th St N corridor include: desire to improve traffic safety, especially for pedestrians; improve transit access and experience; improve

transportation options and make travel easy.

In addition, there has been extensive outreach in the immediate area as part of regional initiatives led by the Metropolitan Council and supported by the City. Specific to recent METRO Blue Line Extension efforts, the project has focused on reaching low-income communities and communities of color. As part of that effort the project contracted with 12 community and cultural organizations to form the Community Engagement Cohort. A variety of efforts were used to connect with the community.

Specific to the 7th St N corridor, City staff have begun engagement with the North Loop Neighborhood Association as well as informed the applicable Ward office. There is support to move forward and improvements to this corridor will provide benefits to all of the aforementioned populations in the area. The City will be building off current and past efforts in the area by implementing activities and approaches that have proven successful.

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

Measure B: Equity Population Benefits and Impacts

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

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

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

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

Response:

This project will provide positive and direct benefits to Black, Indigenous, and People of Color populations, low-income populations, children, people with disabilities, youth, and older adults. The 7th St North corridor as it currently exists has outdated infrastructure and is inherently unsafe, a barrier and hostile in terms of its design. By redesigning the corridor to update the design to current city standards there are numerous elements that will specifically benefit those populations proximate to the corridor improving the community connections/cohesion within the abutting neighborhoods and communities. More specifically, with the elimination of two through vehicle lanes and integration of a median for access control as well as for pedestrian crossing improvements (ADA ramps, striping, etc.) the pedestrian infrastructure will be greatly improved and will encourage walkability. Coupled with these improvements will be enhanced streetscape features including greening/green infrastructure, lighting and wider sidewalks. Bicycle facilities, currently predominantly striped on the corridor will be reconfigured and redesigned to be located at the sidewalk level and separated from vehicle traffic consistent with the City's All Ages and Abilities network standards. 7th Street North is a key transit corridor connecting the downtown core and other areas of the City with the northern wards of the City. The project will continue to provide infrastructure for BRT stations affiliated with both the METRO C and D Lines as well as facilities for underlying local and express services. As previously noted, this segment of 7th Street North will directly intersect with the future METRO Blue Line Extension LRT line as well.

With the proposed redesign and reconstruction of this key corridor, there will be public health benefits given the improvement in multi-modal transportation options and infrastructure, as well as the integration of extensive greening on the

corridor. Further, instead of this corridor being barren and unwelcoming for users, the proposed improvements will encourage use allowing for improved access for residents and other users to destinations including jobs, school, healthcare as well as various dining and entertainment options within the North Loop, downtown and beyond.

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

Measure C: Affordable Housing Access

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

Describe the project's 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:

The 7th St corridor includes a concentration of many affordable, subsidized housing units. Within 1/2 mile of the project area there are approximately 2,153 affordable units including: 1,272 Units at 30% AMI; 273 Units at 50% AMI; 602 Units at 60% AMI; and 6 Units at 80% AMI. The larger area continues to redevelop and changing land uses provide opportunities for additional affordable housing opportunities within the project area. Data indicates that there is a higher proportion of households without access to vehicles in neighborhoods surrounding the downtown core. This is demonstrated within the proposed project area and therefore, populations proximate to the corridor rely on other means of mobility for access to jobs, school, services, etc. The proposed project will provide benefits to current and future affordable housing residents within a 1/2 mile of the project including direct access improvements for residents given the vast improvements proposed to the 7th St N corridor including multimodal infrastructure and design features pertaining to pedestrian and bicycle facilities and transit. Given the corridor's proximity to jobs, schools, childcare facilities, libraries, grocery stores and religious institutions, connectivity, safety and travel will be greatly improved with the reconstruction of this street segment. Further, the proposed improvements will create cohesiveness within the neighborhoods that are effectively separated by the outdated street design that is exhibited on this corridor. As noted, the existing conditions do not encourage or create an environment that is friendly to pedestrians, bicyclists or transit users. There are no amenities or streetscape elements that provide benefits relative to environmental concerns such as runoff or the urban heat island or for beautification purposes. The proposed modifications to this street segment will create a seamless, welcoming transition from the downtown core to the North Loop and neighborhoods in the northern portion of the City.

(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.

1649964228880_Socio-Economic Conditions Map 7th St N.pdf

Measure A: Year of Roadway Construction

Year of Original Roadway Construction or Most Recent Reconstruction	Segment Length	Calculation	Calculation 2
1969	0.25	492.25	984.5
1991	0.25	497.75	995.5
	1	990	1980

Total Project Length

Total Project Length (as entered in "Project Information" form) 0.5

Average Construction Year

Weighted Year 1980

Total Segment Length (Miles)

Total Segment Length 0.5

Measure B: Geometric, Structural, or Infrastructure Improvements

Improved roadway to better accommodate freight movements: Yes

Response:

(Limit 700 characters; approximately 100 words)

Improved clear zones or sight lines:

Response:

(Limit 700 characters; approximately 100 words)

Improved roadway geometrics:

7th Street North is not identified by Met Council's Regional Truck Highway Corridor Study, but provides direct access to the Tier 1 interstate system. Dedicated left-turn lanes and phasing will benefit freight traffic at signalized intersections to improve their level of service. Commercial vehicles will benefit along this urban corridor through the conversion of the 4-lane environment to a 2/3-lane to reduce conflict points among users. Additionally, intersection radii will be designed to accommodate freight deliveries, which occurs frequently given the direction connection to the interstate system.

Yes

Although the surrounding street network generally follows a grid system, 7th Street North is skewed at all intersection approaches. Strategic realignment of intersections with curb extensions, median refuges, truck aprons, and high-visibility pavement markings will assist users in safely navigating these unique intersections. This will improve sight lines, further reinforced through design and encourage safer turning speeds. Conversion to a 2/3-lane will eliminate the potential for dual-threat related crashes. Furthermore, the introduction of a planted boulevard with pedestrian scale lighting will narrow the cross-section, providing improved clear zones and sight distances at intersections.

Yes

Response:

The street width along 7th Street North varies between 60-80' in width and includes 5 vehicle lanes. No vertical design elements exist between the curbs, relying solely on pavement markings and signs to guide users. The user experience will be significantly improved through design strategies, including sidewalks adjacent to planted boulevards that will provide greater separation from vehicles and provide space for snow storage, with improved off-street bicycle facilities. A narrower cross-section with curb extensions, raised medians, and plantings will offer visual cues to encourage safer speeds, slow turning speeds, and encourage high yielding rates.

(Limit 700 characters; approximately 100 words)

Access management enhancements:

Yes

The conversion of the 4-lane to a 2/3-lane street will improve turning movements will allow for a center median to implement access management practices by converting direct driveways to right-in/right-outs. Staff will identify driveway and curb cuts that are not needed and seek opportunities to remove of unnecessary accesses that can result in improved safety through the reduction of conflict points. Potential access changes will be determined during the project development process to align with the city's access spacing guidelines, improve traffic operations, increase safety by reducing conflict points and create opportunities to implement safer non-motorized facilities and crossings.

Response:

(Limit 700 characters; approximately 100 words)

Vertical/horizontal alignment improvements:

Yes

Response:

The street currently has many skewed intersections and a wide cross-section with 5 vehicle lanes, which promotes speeding and limits visibility that are served by bikeways and Metro Transit's C and D Line BRT routes. Intersections with a narrower cross-section, curb extensions, median refuges, truck aprons, and high-visibility pavement markings will assist users in safely navigating these intersections. These features will ensure user safety and promote driver expectation. This project may adjust the vertical alignment to better manage storm water to minimize flood risk for the area. The design will explore opportunities to minimize grade change while tying into existing intersections.

(Limit 700 characters; approximately 100 words)

Improved stormwater mitigation:

Yes

A majority of the project is susceptible to flooding (MC's Localized Flood Map Screening Tool). During design, we will evaluate the feasibility of stormwater mitigation strategies including green stormwater mgmt, streetscaping elements and boulevard areas, to assist in collecting rain. Staff will collaborate to implement BMPs, to improve water quality, and trees to expand the urban tree canopy.

Response:

A majority of the project is also susceptible to extreme heat (MC's Extreme Heat Map Screening Tool). The impervious surface conditions will be reduced and streetscaping elements will be incorporated. Strategies to address extreme heat will be incorporated in parallel with the stormwater design.

(Limit 700 characters; approximately 100 words)

Signals/lighting upgrades:

Yes

Response:

(Limit 700 characters; approximately 100 words)

Other Improvements

Response:

(Limit 700 characters; approximately 100 words)

This project will replace and/or upgrade signals to the latest technologies, such as: dedicated left-turn phasing, signal communications, and ITS components. These improvements will allow for flexible signal operations to accommodate time of day needs. The existing lighting is inconsistent. The installation of new lighting will be consistent with the City's Street Lighting Plan. Pedestrian scale lighting will improve visibility for all users.

Yes

A full reconstruction is needed to modernize aging and deteriorating infrastructure, which will allow for upgraded ADA pedestrian ramps, new signals with APS, crosswalk markings, and countdown timers. The new street will be right sized to encourage multimodal travel with a narrower cross-section to prioritize walking, rolling, and biking to eliminate all severe and fatal traffic crashes. This project will provide a wider boulevard to allow for the proper placement of signs, signal poles, overhead utilities, new green stormwater management facilities, and proper clearance for snow storage to ensure accessibility throughout the entire year.

Measure A: Congestion Reduction/Air Quality

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
0	0	0	6698	6698	0	0	N/A	164990358 0269_Sync hro reports for Section 5.pdf

24.0	25.0	-1	6698	6698	-6698	-6698	N/A
							-6698

164994177
0792_Sync
hro reports
for Section
5.pdf

Vehicle Delay Reduced

Total Peak Hour Delay Reduced	-6698
Total Peak Hour Delay Reduced	-6698

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

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):
8.55	8.74	-0.19
9	9	0

Total

Total Emissions Reduced:	-0.19
Upload Synchro Report	1649904039741_Synchro reports for Section 5.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 Roadway

Emissions Reduced on Parallel Roadways	0
Upload Synchro Report	

New Roadway Portion:

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):	0
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):	0.0

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

Crash Modification Factor Used:

CMF ID 2841 for converting four-lane roadways to three-lane roadways with center turn lane (road diet) was utilized for the 7th Street Corridor.

(Limit 700 Characters; approximately 100 words)

Rationale for Crash Modification Selected:

The project will convert this segment of 7th Street from an existing four-lane cross-section to a two-lane cross-section with turn lanes at intersections. CMF ID 2841 was determined to be the most applicable CMF for the corridor improvements.

(Limit 1400 Characters; approximately 200 words)

Project Benefit (\$) from B/C Ratio \$27,852,200.00

Total Fatal (K) Crashes: 1

Total Serious Injury (A) Crashes: 2

Total Non-Motorized Fatal and Serious Injury Crashes: 1

Total Crashes: 70

Total Fatal (K) Crashes Reduced by Project: 0

Total Serious Injury (A) Crashes Reduced by Project: 1

Total Non-Motorized Fatal and Serious Injury Crashes Reduced by Project: 0

Total Crashes Reduced by Project: 33

Worksheet Attachment

1649904531348_CMFs and the benefitcost worksheet Section 6.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. No

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

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.

Improving pedestrian safety is a priority for this project. This is an identified Pedestrian Priority Network corridor. A portion of this project is an identified High Injury Street and there were 4 pedestrians injured (2 severely) on this section from 2017-2021.

To improve pedestrian safety, the project will include a number of proven pedestrian safety best practices. The final layout is still to be developed, but we anticipate including:

Reducing pedestrian crossing distances as much as possible throughout the corridor. Existing crossing distances are 80'-120'. After this project, the crossing distances likely will end up as narrow as 13' on each side of pedestrian refuge island. Narrower crossings will be achieved by a variety of steps likely including:

- o Right-sizing the number of traffic lanes here from the current 5 lanes to 3 lanes at intersections and 2 lanes outside of intersections.
- o Narrowing overly wide traffic lanes to 10'-11' from the current 12.5'-13'.

- o Including a sidewalk-level protected bikeway rather than the existing in-street unprotected bike lanes along with curb extensions at intersections.

- o Tightening curb radii as much as possible.

- o Adding pedestrian refuge medians at most or all pedestrian crossings.

Designing to support the 25 mph speed limit throughout the corridor. The current design encourages significant speeding. Safer speeds will be achieved by a variety of steps likely including:

- o Having 1 general traffic lane in each direction and right-sizing lane widths.

Response:

- o Adding a curb median for most of the project.

- o Raised crosswalks with a 25 mph target speed may be considered at one or more locations.

Eliminating 'double threat' crash potential. The existing roadway has 2 general purpose lanes in each direction often without a center median. We likely will end up with 1 general purpose traffic lane in each direction after the project, eliminating 'double threat' risk.

Adding pedestrian scale lighting throughout the corridor to ensure good nighttime visibility. The corridor does not currently have pedestrian scale lighting.

Adding pedestrian safety improvements to the 5th Ave N intersection. This is in a long section without a signal. Improvements are likely to include a pedestrian refuge island along with greatly narrowed crossing distances and potentially high visibility marked crosswalk and State Law: Stop for Pedestrians in Crosswalk signage.

Adding traffic signal improvements, including countdown pedestrian timers, dedicated left-turn phasing, and likely actuated leading pedestrian intervals.

(Limit 2,800 characters; approximately 400 words)

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

Select one:

No

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:

N/A

(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.)

Existing crossing distances are 80'-120'. This project will transform this to a much more pedestrian friendly environment. After this project, the crossing distances likely will end up as narrow as 13' on each side of pedestrian refuge island. Narrower crossings will be achieved by a variety of steps likely including:

- o Right-sizing the number of traffic lanes here from the current 5 lanes to 2 or 3 lanes at intersections and 2 lanes outside of intersections.
- o Narrowing overly wide traffic lanes to 10'-11' from the current 12.5'-13'.

Response:

- o Including a sidewalk-level protected bikeway rather than the existing in-street unprotected bike lanes along with curb extensions at intersections.
- o Tightening curb radii as much as possible.
- o Adding pedestrian refuge medians at most or all pedestrian crossings.

We also will add dedicated left-turn phasing and actuated leading pedestrian interval at most or all signalized intersections to reduce exposure.

(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 doesn't require much elevation change instead of pedestrian bridge with numerous switchbacks).

Response:

N/A

(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:

Mid-block crossings will not be blocked. Crossing at midblock locations will become much safer after this project given the improvements already discussed, although we will encourage crossing at locations with pedestrian crossing improvements. We plan to add pedestrian crossing improvements at the 5th Avenue N intersection to provide another enhanced pedestrian location. That will mean it is about 580 feet between that and the Olson Memorial Highway crossing. It is about 490 feet between Olson Memorial Highway crossing and the Oak Lake Avenue crossing. We will also evaluate a midblock crossing with safety improvements between the Oak Lake Avenue and East Lyndale Avenue intersections as this is 760 feet between pedestrian crossings.

(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.).*

The current design encourages significant speeding. We will design this project to achieve a target speed of 25 mph, which matches the posted speed limit. As such, we plan for the corridor to look very different after reconstruction. Safer speeds will be achieved by a variety of steps likely including:

Having 1 general traffic lane in each direction and right-sizing lane widths.

Adding a curb median for most of the project.

Response:

Raised crosswalks with a 25 mph target speed may be considered at one or more locations.

Tightening curb radii as much as possible, including potentially including truck aprons. This will include protected intersection elements to support pedestrian and bicycle safety.

We also plan to add a boulevard between the sidewalk and the roadway to add further protection and comfort for people walking and rolling.

(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:

This street is currently posted with a 25 mph speed limit. The current roadway design is outdated and reflects a much higher target and design speed. As such, existing speeds far exceed the 25 mph speed limit. This redesign will have a target speed of 25 mph to match the speed limit and much lower than the existing design speed.

(Limit 1,400 characters; approximately 200 words)

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

These factors are 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

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

Yes

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

List the AADT

10700

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.)

Yes

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

Yes

If checked, please describe:

Target Field is on 7th Street with a gate 300? from this project area.

(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 housing, regulatorily-designated affordable housing)

Yes

There are several additional pedestrian generators near the project, including:
Sharing and Caring Hands family shelter, service center, and transitional apartments.

If checked, please describe:

Metro Schools College Prep charter middle and high school.
C Line BRT Station and forthcoming D Line BRT Station.

Metro Transit lost and found

(Limit 1,400 characters; approximately 200 words)

Measure A: Multimodal Elements and Existing Connections

This reconstruction project would positively affect and impact the multimodal transportation system in the City of Minneapolis. As noted, a portion of 7th St N supports the METRO C and D Line alignments, as well as local and express routes and further accommodates enhanced BRT stations. Further, given the future alignment of the METRO Blue Line Extension and the existing Target Field Station transit hub which is located within a ½ mile of the corridor the improvements proposed for this corridor will provide connectivity to and through the City, and beyond. 7th St N infrastructure improvements will clearly improve the overall connectivity, safety, multimodal transportation options and greening along this barren, outdated, urban corridor consistent with City policies including the 10-year Transportation Action Plan (TAP), Vision Zero Initiative and our Complete Streets Policy. The overbuilt 4 lane street section will be reduced to 2 lanes with dedicated turn lanes as needed creating slower vehicular travel speeds consistent with the posted speed limit. Improved pedestrian facilities will be incorporated that include upgraded ADA ramps, high visibility crosswalks, signal upgrades, wider facilities, median refuges associated with improved pedestrian crossing opportunities at various locations, as well as streetscape improvements that currently do not exist including street trees and green infrastructure elements compliant with recent city ordinances that serve multiple function including beautification. Further, creating sidewalk level, separated and protected bicycle facilities will be a tremendous improvement relative to the on-street, unprotected striped facilities that exist today. With the proposed improvements to the multimodal facilities along the corridor, it will positively affect the identified alignments in the RBTN. 7th Street is identified in the RBTN and the facility itself will see a significant upgrade as previously described. Further, the other improvements described both in terms of transit

Response:

and pedestrian upgrades will certainly allow for and promote better connectivity and usage of the network as a whole. The proposed project will vastly improve the travel experience, safety, and security for all users of the corridor.

(Limit 2,800 characters; approximately 400 words)

Transit Projects Not Requiring Construction

If the applicant is completing a transit application that is operations only, check the box and do not complete the remainder of the form. These projects will receive full points for the Risk Assessment.

Park-and-Ride and other transit construction projects require completion of the Risk Assessment below.

Check Here if Your Transit Project Does Not Require Construction

Measure A: Risk Assessment - Construction Projects

1. Public Involvement (20 Percent of Points)

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

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

100%

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

50%

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

50%

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

25%

No outreach has led to the selection of this project.

0%

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

Response:

This project is being proposed because of findings and engagement around the Minneapolis Transportation Action Plan (TAP), Vision Zero Action Plan (VZAP), and community feedback from other venues. Those included focused efforts to engage traditionally underrepresented communities. For the TAP and VZAP, engagement included separate dialogues in-language with members from 7 communities and also included 30 direct engagement activities done in partnership with contracted community-based organizations that focused on reaching residents in public housing, East African community members, Latino community members, college students, high school students, and residents of traditionally under representative neighborhoods. Some of the key themes we have heard from equity-focused engagement that represent populations within a ½ mile of the 7th St N corridor include: desire to improve traffic safety, especially for pedestrians; improve transit access and experience; improve transportation options and make travel easy.

In addition, there has been extensive outreach in the immediate area as part of regional initiatives led by the Metropolitan Council and supported by the City. Specific to recent METRO Blue Line Extension efforts, the project has focused on reaching low-income communities and communities of color. As part of that effort the project contracted with 12 community and cultural organizations to form the Community Engagement Cohort. A variety of efforts were used to connect with the community.

Specific to the 7th St N corridor, City staff have begun engagement with the North Loop Neighborhood Association as well as informed the applicable Ward office. There is support to move forward and improvements to this corridor will provide benefits to all of the aforementioned populations in the area. The City will be building off

current and past efforts in the area by implementing activities and approaches that have proven successful.

(Limit 2,800 characters; approximately 400 words)

2.Layout (25 Percent of Points)

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

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

100%

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

100%

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

75%

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

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

Yes

0%

Attach Layout

Please upload attachment in PDF form.

Additional Attachments

Please upload attachment in PDF form.

3.Review of Section 106 Historic Resources (15 Percent of Points)

No known historic properties eligible for or listed in the National Register of Historic Places are located in the project area, and project is not located on an identified historic bridge Yes

100%

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

100%

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

80%

Historic/archeological property impacted; determination of adverse effect anticipated

40%

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

0%

Project is located on an identified historic bridge

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

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

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):	\$8,821,250.00
Enter Amount of the Noise Walls:	\$0.00
Total Project Cost subtract the amount of the noise walls:	\$8,821,250.00
Enter amount of any outside, competitive funding:	\$0.00
Attach documentation of award:	
Points Awarded in Previous Criteria	
Cost Effectiveness	\$0.00

Other Attachments



A photograph showing the existing conditions within the project area

2.4 MB

File Name	Description	File Size
2022 Regional Solicitation Letter of Commitment.pdf	Letter of support	2.7 MB
7th St Roadway Reconstruction.pdf	Affordable housing and destinations map	695 KB
7th street N from 10th to lyndale _Project Location Map copy.pdf	A map of the project area	367 KB
7th St_1 pager_Final.pdf	One-page project summary	338 KB
Level of Congestion Map 7th St N.pdf	Project information map	4.5 MB
Regional Economy Map 7th St N.pdf	Project information map	4.0 MB
Socio-Economic Conditions Map 7th St N.pdf	Project information map	4.3 MB
Socio-Economic Conditions Map 7th St N.pdf	Project information map	4.3 MB
Transit Connections Map 7th St N.pdf	Project information map	4.0 MB

Regional Economy

Roadway Reconstruction/Modernization Project: 7th Street North Minneapolis | Map ID: 1649854024301

Results

WITHIN ONE MI of project:
Postsecondary Students: 8100

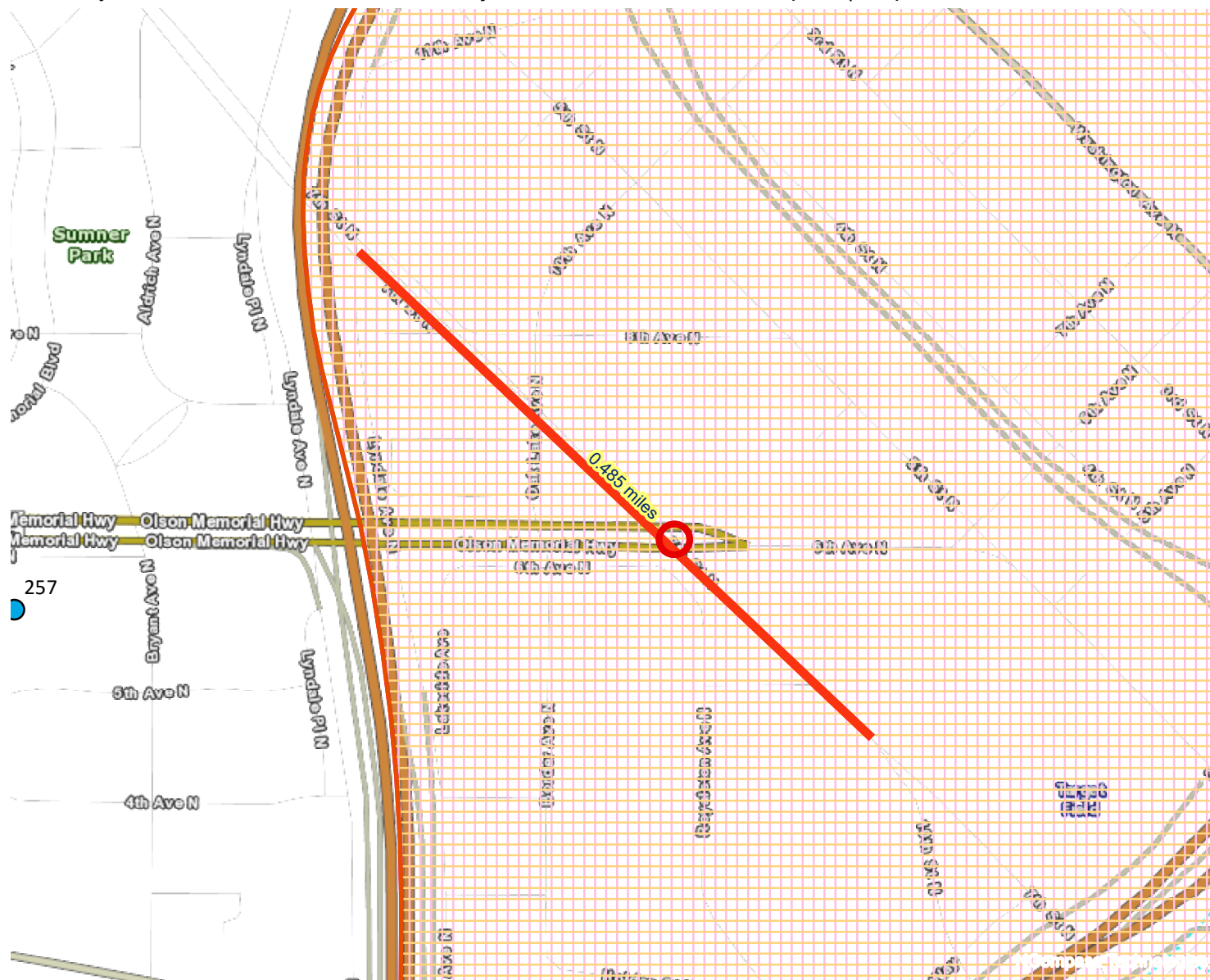
Totals by City:

Minneapolis

Population: 32039

Employment: 157538

Mfg and Dist Employment: 6460



Project Points



Postsecondary Education Centers



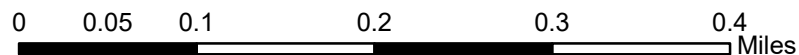
Job Concentration Centers



Project



Manufacturing/Distribution Centers



Created: 4/13/2022
LandscapeRSA5



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



Transit Connections

Roadway Reconstruction/Modernization Project: 7th Street North Minneapolis | Map ID: 1649854024301

Results

Transit with a Direct Connection to project:

22 5 721 755 9 901 902 923

*Blue Line Extension

*D Line

*Green Line Extension

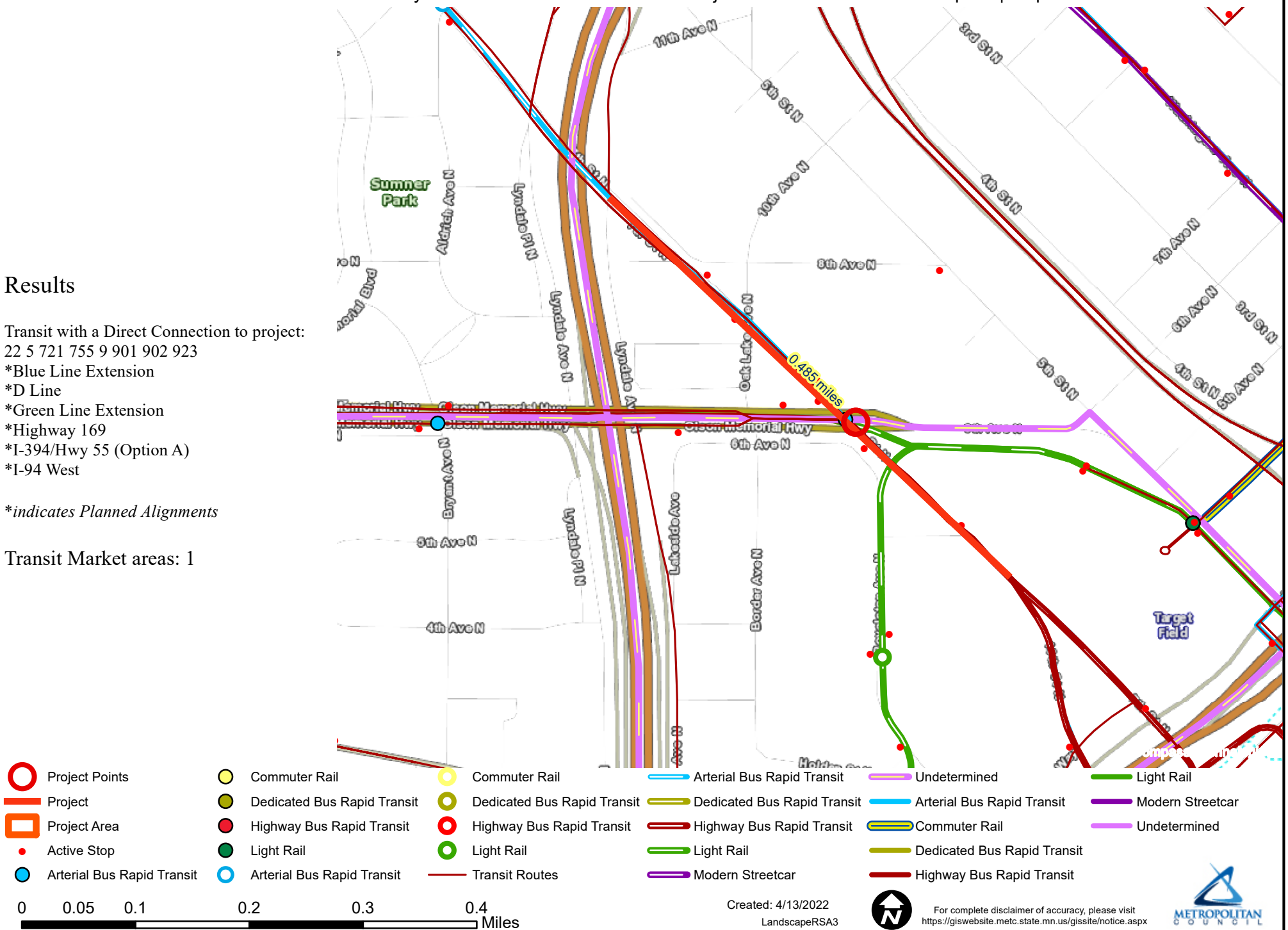
*Highway 169

*I-394/Hwy 55 (Option A)

*I-94 West

**indicates Planned Alignments*

Transit Market areas: 1



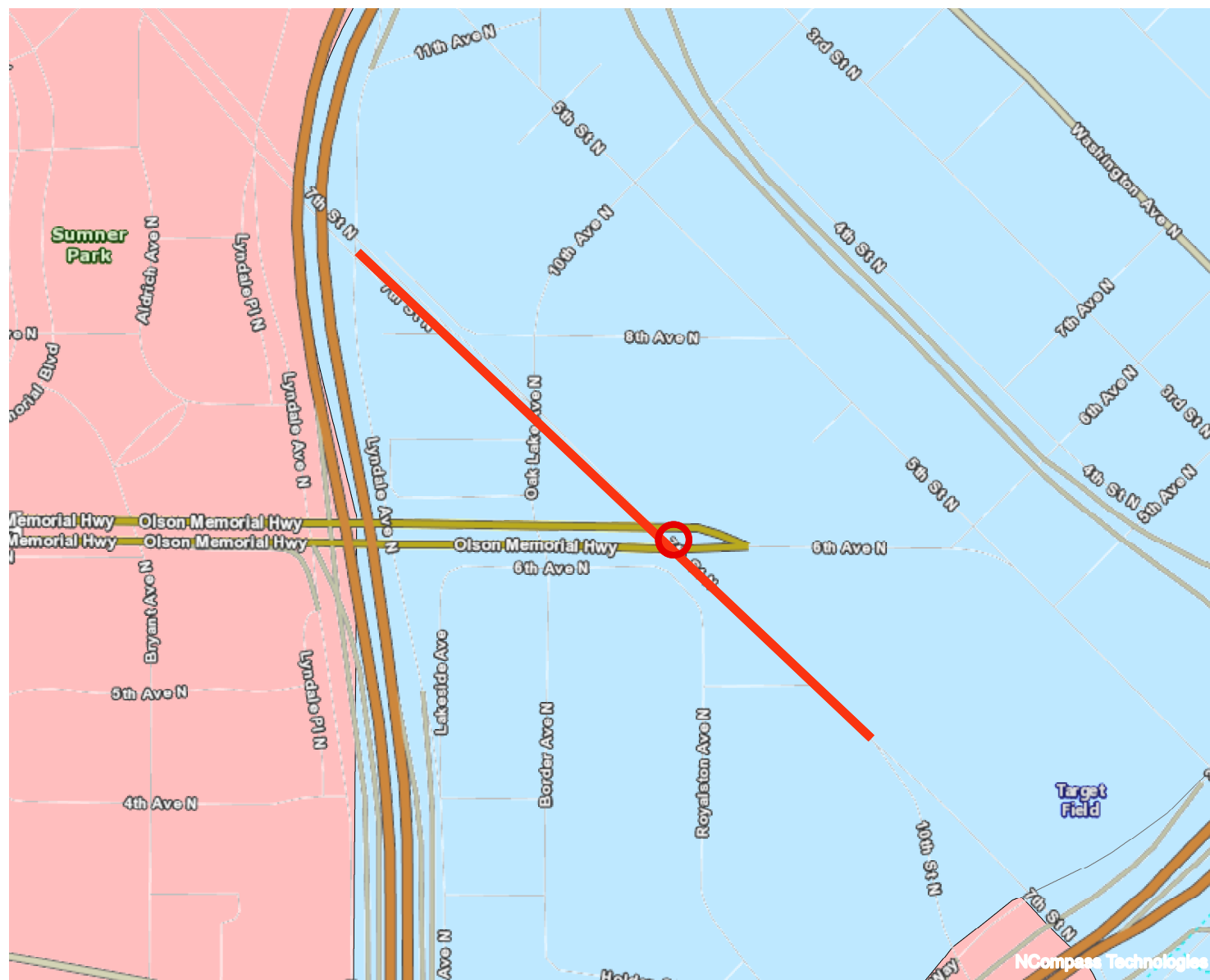
Socio-Economic Conditions

Roadway Reconstruction/Modernization Project: 7th Street North Minneapolis | Map ID: 1649854024301

Results

Total of publicly subsidized rental housing units in census tracts within 1/2 mile: 3839

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



Points



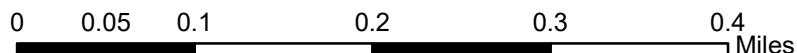
Area of Concentrated Poverty



Lines



Regional Environmental Justice Area



Created: 4/13/2022
LandscapeRSA2



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



Timings

416: Lyndale Av N E & 7th St N

04/13/2022



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	113	287	260	275	219	634	16
Future Volume (vph)	113	287	260	275	219	634	16
Lane Group Flow (vph)	138	322	329	367	313	704	23
Turn Type	Perm	NA	NA	Perm	Perm	NA	Perm
Protected Phases		2	2			4	
Permitted Phases	2			2	4		4
Detector Phase	2	2	2	2	4	4	4
Switch Phase							
Minimum Initial (s)	15.0	15.0	15.0	15.0	20.0	20.0	20.0
Minimum Split (s)	34.7	34.7	34.7	34.7	41.8	41.8	41.8
Total Split (s)	35.0	35.0	35.0	35.0	45.0	45.0	45.0
Total Split (%)	43.8%	43.8%	43.8%	43.8%	56.3%	56.3%	56.3%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	3.7	3.7	3.7	3.7	3.8	3.8	3.8
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.7	7.7	7.7	7.7	7.8	7.8	7.8
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	C-Max	C-Max	C-Max	C-Max	Min	Min	Min
Act Effct Green (s)	33.9	33.9	33.9	33.9	30.6	30.6	30.6
Actuated g/C Ratio	0.42	0.42	0.42	0.42	0.38	0.38	0.38
v/c Ratio	0.31	0.22	0.24	0.54	0.48	0.43	0.04
Control Delay	19.3	15.1	13.8	11.4	20.0	18.0	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	19.3	15.1	13.8	11.4	20.0	18.0	0.3
LOS	B	B	B	B	C	B	A
Approach Delay		16.3	12.5			18.2	
Approach LOS		B	B			B	
Stops (vph)	79	178	107	97	182	492	0
Fuel Used(gal)	1	3	3	3	4	10	0
CO Emissions (g/hr)	91	207	214	212	247	688	10
NOx Emissions (g/hr)	18	40	42	41	48	134	2
VOC Emissions (g/hr)	21	48	50	49	57	159	2
Dilemma Vehicles (#)	0	0	0	0	0	0	0

Intersection Summary

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 36 (45%), Referenced to phase 2:EBWB, Start of 1st Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.54

Intersection Signal Delay: 16.0

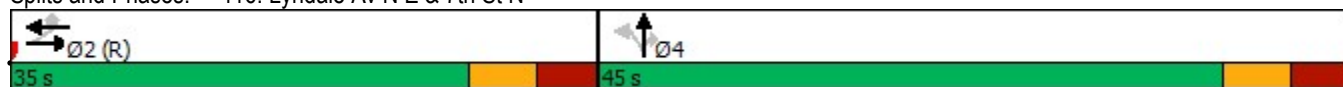
Intersection LOS: B

Intersection Capacity Utilization 71.0%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 416: Lyndale Av N E & 7th St N



Scenario 1 Minneapolis - 7th Street N 3:30 pm 04/10/2013

Synchro 11 Report

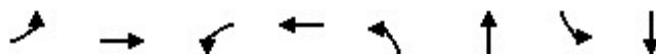
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Timings

599: Oak Lake Av/Oak Lake Av N & 7th St N

04/13/2022



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations		↔↔		↔↔	↔	↔	↔	↔
Traffic Volume (vph)	44	219	12	425	61	178	51	266
Future Volume (vph)	44	219	12	425	61	178	51	266
Lane Group Flow (vph)	0	380	0	620	75	205	53	429
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		2		2		4		4
Permitted Phases	2		2		4		4	
Detector Phase	2	2	2	2	4	4	4	4
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	31.0	31.0	31.0	31.0	39.0	39.0	39.0	39.0
Total Split (s)	37.0	37.0	37.0	37.0	43.0	43.0	43.0	43.0
Total Split (%)	46.3%	46.3%	46.3%	46.3%	53.8%	53.8%	53.8%	53.8%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	3.5	3.5	3.5	3.5	4.6	4.6	4.6	4.6
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.5		6.5	7.6	7.6	7.6	7.6
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max
Act Effect Green (s)		30.5		30.5	35.4	35.4	35.4	35.4
Actuated g/C Ratio		0.38		0.38	0.44	0.44	0.44	0.44
v/c Ratio		0.42		0.57	0.21	0.27	0.11	0.58
Control Delay		33.9		13.1	17.6	16.6	14.0	19.5
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		33.9		13.1	17.6	16.6	14.0	19.5
LOS		C		B	B	B	B	B
Approach Delay		33.9		13.1		16.9		18.9
Approach LOS		C		B		B		B
Stops (vph)		247		200	39	160	31	218
Fuel Used(gal)		5		5	1	2	0	3
CO Emissions (g/hr)		369		339	43	136	34	240
NOx Emissions (g/hr)		72		66	8	26	7	47
VOC Emissions (g/hr)		85		79	10	32	8	56
Dilemma Vehicles (#)		0		0	0	0	0	0

Intersection Summary

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 21 (26%), Referenced to phase 2:EBWB, Start of 1st Green

Natural Cycle: 70

Control Type: Pretimed

Maximum v/c Ratio: 0.58

Intersection Signal Delay: 19.8

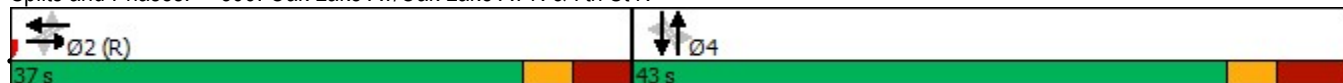
Intersection LOS: B

Intersection Capacity Utilization 93.7%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 599: Oak Lake Av/Oak Lake Av N & 7th St N



Scenario 1 Minneapolis - 7th Street N 3:30 pm 04/10/2013

Synchro 11 Report

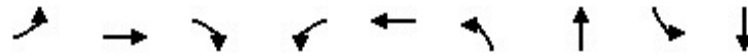
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Timings

816: 7th St N & Olson Memorial Hwy N/6th Av N

04/13/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations		↑↑	↑↑		↑↑	↑	↑↑		↑↑
Traffic Volume (vph)	1	199	181	60	533	340	454	26	230
Future Volume (vph)	1	199	181	60	533	340	454	26	230
Lane Group Flow (vph)	0	220	193	0	840	618	581	0	326
Turn Type	Perm	NA	Perm	Perm	NA	pm+pt	NA	Perm	NA
Protected Phases		2			6	3	8		4
Permitted Phases	2		2	6		8		4	
Detector Phase	2	2	2	6	6	3	8	4	4
Switch Phase									
Minimum Initial (s)	25.0	25.0	25.0	25.0	25.0	9.0	15.0	15.0	15.0
Minimum Split (s)	43.0	43.0	43.0	42.0	42.0	19.8	36.0	44.0	44.0
Total Split (s)	68.0	68.0	68.0	68.0	68.0	46.0	92.0	46.0	46.0
Total Split (%)	42.5%	42.5%	42.5%	42.5%	42.5%	28.8%	57.5%	28.8%	28.8%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	4.7	4.7	4.7	4.7	4.7	7.3	7.5	7.5	7.5
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0		0.0
Total Lost Time (s)		7.7	7.7		7.7	10.3	10.5		10.5
Lead/Lag						Lead		Lag	Lag
Lead-Lag Optimize?									
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	None	Max	Max	Max
Act Effct Green (s)		60.3	60.3		60.3	81.7	81.5		35.5
Actuated g/C Ratio		0.38	0.38		0.38	0.51	0.51		0.22
v/c Ratio		0.18	0.17		0.78	1.12	0.36		0.55
Control Delay		42.0	13.0		48.1	105.0	23.9		56.7
Queue Delay		0.0	0.0		0.4	0.0	0.0		0.0
Total Delay		42.0	13.0		48.5	105.0	23.9		56.7
LOS		D	B		D	F	C		E
Approach Delay		28.4			48.5		65.7		56.7
Approach LOS		C			D		E		E
Stops (vph)		102	48		579	216	289		240
Fuel Used(gal)		3	1		12	10	7		6
CO Emissions (g/hr)		199	94		834	715	469		395
NOx Emissions (g/hr)		39	18		162	139	91		77
VOC Emissions (g/hr)		46	22		193	166	109		92
Dilemma Vehicles (#)		0	0		0	0	0		0

Intersection Summary

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 22 (14%), Referenced to phase 2:EBTL and 6:WBTL, Start of 1st Green

Natural Cycle: 130

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.12

Intersection Signal Delay: 53.9

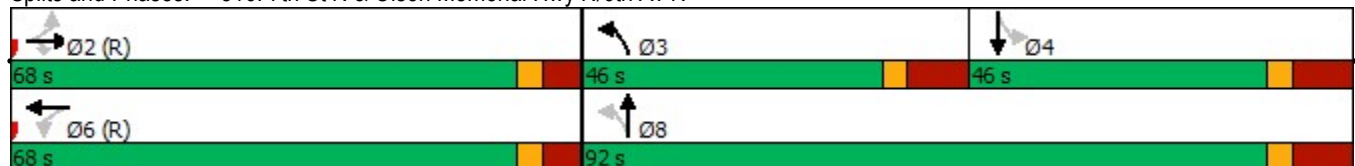
Intersection LOS: D

Intersection Capacity Utilization 110.8%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 816: 7th St N & Olson Memorial Hwy N/6th Av N



Timings

416: Lyndale Av N E & 7th St N

04/13/2022



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	113	287	260	275	219	634	16
Future Volume (vph)	113	287	260	275	219	634	16
Lane Group Flow (vph)	138	322	329	367	313	704	23
Turn Type	Perm	NA	NA	Perm	Perm	NA	Perm
Protected Phases		2	2			4	
Permitted Phases	2			2	4		4
Detector Phase	2	2	2	2	4	4	4
Switch Phase							
Minimum Initial (s)	15.0	15.0	15.0	15.0	20.0	20.0	20.0
Minimum Split (s)	34.7	34.7	34.7	34.7	41.8	41.8	41.8
Total Split (s)	38.0	38.0	38.0	38.0	42.0	42.0	42.0
Total Split (%)	47.5%	47.5%	47.5%	47.5%	52.5%	52.5%	52.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	3.7	3.7	3.7	3.7	3.8	3.8	3.8
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.7	7.7	7.7	7.7	7.8	7.8	7.8
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	C-Max	C-Max	C-Max	C-Max	Min	Min	Min
Act Effct Green (s)	35.1	35.1	35.1	35.1	29.4	29.4	29.4
Actuated g/C Ratio	0.44	0.44	0.44	0.44	0.37	0.37	0.37
v/c Ratio	0.30	0.21	0.23	0.54	0.50	0.44	0.04
Control Delay	18.3	14.4	13.1	11.2	22.6	20.1	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.3	14.4	13.1	11.2	22.6	20.1	0.4
LOS	B	B	B	B	C	C	A
Approach Delay		15.6	12.1			20.4	
Approach LOS		B	B			C	
Stops (vph)	82	180	107	106	192	526	1
Fuel Used(gal)	1	3	3	3	4	10	0
CO Emissions (g/hr)	90	205	211	214	258	716	10
NOx Emissions (g/hr)	17	40	41	42	50	139	2
VOC Emissions (g/hr)	21	47	49	50	60	166	2
Dilemma Vehicles (#)	0	0	0	0	0	0	0

Intersection Summary

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 36 (45%), Referenced to phase 2:EBWB, Start of 1st Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.54

Intersection Signal Delay: 16.8

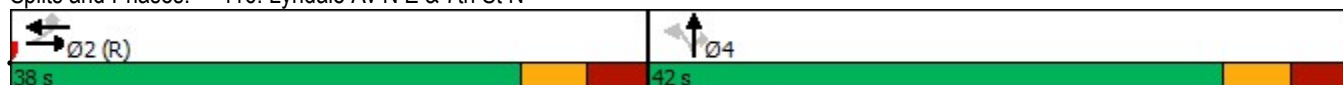
Intersection LOS: B

Intersection Capacity Utilization 71.0%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 416: Lyndale Av N E & 7th St N



Scenario 1 Minneapolis - 7th Street N 3:30 pm 04/10/2013 Build

Synchro 11 Report

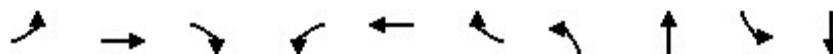
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Timings

599: Oak Lake Av/Oak Lake Av N & 7th St N

04/13/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	44	219	40	12	425	53	61	178	51	266
Future Volume (vph)	44	219	40	12	425	53	61	178	51	266
Lane Group Flow (vph)	77	255	48	24	512	84	75	205	53	429
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA
Protected Phases		2			2			4		4
Permitted Phases	2		2	2		2	4		4	
Detector Phase	2	2	2	2	2	2	4	4	4	4
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	31.0	31.0	31.0	31.0	31.0	31.0	39.0	39.0	39.0	39.0
Total Split (s)	41.0	41.0	41.0	41.0	41.0	41.0	39.0	39.0	39.0	39.0
Total Split (%)	51.3%	51.3%	51.3%	51.3%	51.3%	51.3%	48.8%	48.8%	48.8%	48.8%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	4.6	4.6	4.6	4.6
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.5	6.5	6.5	6.5	6.5	7.6	7.6	7.6	7.6
Lead/Lag										
Lead-Lag Optimize?										
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	34.5	34.5	34.5	34.5	34.5	34.5	31.4	31.4	31.4	31.4
Actuated g/C Ratio	0.43	0.43	0.43	0.43	0.43	0.43	0.39	0.39	0.39	0.39
v/c Ratio	0.32	0.33	0.07	0.05	0.73	0.14	0.26	0.31	0.13	0.65
Control Delay	36.0	31.3	18.1	9.7	20.9	2.2	21.6	19.9	16.7	24.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.0	31.3	18.1	9.7	20.9	2.2	21.6	19.9	16.7	24.4
LOS	D	C	B	A	C	A	C	B	B	C
Approach Delay		30.6			17.9			20.4		23.5
Approach LOS		C			B			C		C
Stops (vph)	38	177	22	5	371	3	44	163	33	242
Fuel Used(gal)	1	4	1	0	6	0	1	2	1	4
CO Emissions (g/hr)	55	258	37	8	394	23	47	145	36	268
NOx Emissions (g/hr)	11	50	7	2	77	5	9	28	7	52
VOC Emissions (g/hr)	13	60	9	2	91	5	11	34	8	62
Dilemma Vehicles (#)	0	0	0	0	0	0	0	0	0	0

Intersection Summary

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 21 (26%), Referenced to phase 2:EBWB, Start of 1st Green

Natural Cycle: 70

Control Type: Pretimed

Maximum v/c Ratio: 0.73

Intersection Signal Delay: 22.6

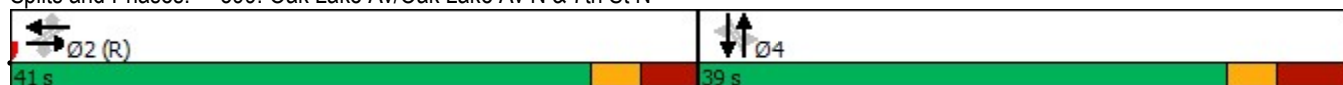
Intersection LOS: C

Intersection Capacity Utilization 88.4%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 599: Oak Lake Av/Oak Lake Av N & 7th St N



Scenario 1 Minneapolis - 7th Street N 3:30 pm 04/10/2013 Build

Synchro 11 Report

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Timings

816: 7th St N & Olson Memorial Hwy N/6th Av N

04/13/2022

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	1	199	181	60	533	340	454	50	26	230	18
Future Volume (vph)	1	199	181	60	533	340	454	50	26	230	18
Lane Group Flow (vph)	0	220	193	0	840	618	522	59	39	256	31
Turn Type	Perm	NA	Perm	Perm	NA	pm+pt	NA	Perm	Perm	NA	Perm
Protected Phases		2			6	3	8			4	
Permitted Phases	2		2	6		8		8	4		4
Detector Phase	2	2	2	6	6	3	8	8	4	4	4
Switch Phase											
Minimum Initial (s)	25.0	25.0	25.0	25.0	25.0	9.0	15.0	15.0	15.0	15.0	15.0
Minimum Split (s)	43.0	43.0	43.0	42.0	42.0	19.8	36.0	36.0	44.0	44.0	44.0
Total Split (s)	58.0	58.0	58.0	58.0	58.0	58.0	102.0	102.0	44.0	44.0	44.0
Total Split (%)	36.3%	36.3%	36.3%	36.3%	36.3%	36.3%	63.8%	63.8%	27.5%	27.5%	27.5%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	4.7	4.7	4.7	4.7	4.7	7.3	7.5	7.5	7.5	7.5	7.5
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		7.7	7.7		7.7	10.3	10.5	10.5	10.5	10.5	10.5
Lead/Lag						Lead			Lag	Lag	Lag
Lead-Lag Optimize?											
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	None	Max	Max	Max	Max	Max
Act Effct Green (s)		50.3	50.3		50.3	91.7	91.5	91.5	33.5	33.5	33.5
Actuated g/C Ratio		0.31	0.31		0.31	0.57	0.57	0.57	0.21	0.21	0.21
v/c Ratio		0.21	0.20		0.93	0.99	0.54	0.07	0.25	0.66	0.07
Control Delay		59.0	21.2		61.5	61.3	23.9	3.5	57.6	65.1	5.2
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		59.0	21.2		61.5	61.3	23.9	3.5	57.6	65.1	5.2
LOS		E	C		E	E	C	A	E	E	A
Approach Delay		41.3			61.5		42.2			58.5	
Approach LOS		D			E		D			E	
Stops (vph)		133	65		573	222	276	5	23	208	5
Fuel Used(gal)		4	2		14	7	6	0	1	5	0
CO Emissions (g/hr)		256	119		952	505	427	26	38	360	10
NOx Emissions (g/hr)		50	23		185	98	83	5	7	70	2
VOC Emissions (g/hr)		59	28		221	117	99	6	9	83	2
Dilemma Vehicles (#)		0	0		0	0	0	0	0	0	0

Intersection Summary

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 22 (14%), Referenced to phase 2:EBTL and 6:WBTL, Start of 1st Green

Natural Cycle: 130

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.99

Intersection Signal Delay: 49.8

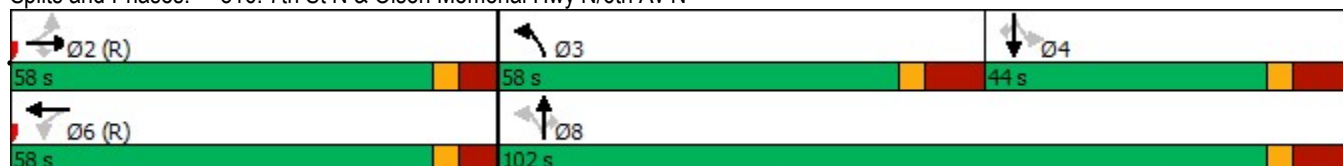
Intersection LOS: D

Intersection Capacity Utilization 115.9%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 816: 7th St N & Olson Memorial Hwy N/6th Av N



Timings

416: Lyndale Av N E & 7th St N

04/13/2022



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	113	287	260	275	219	634	16
Future Volume (vph)	113	287	260	275	219	634	16
Lane Group Flow (vph)	138	322	329	367	313	704	23
Turn Type	Perm	NA	NA	Perm	Perm	NA	Perm
Protected Phases		2	2			4	
Permitted Phases	2			2	4		4
Detector Phase	2	2	2	2	4	4	4
Switch Phase							
Minimum Initial (s)	15.0	15.0	15.0	15.0	20.0	20.0	20.0
Minimum Split (s)	34.7	34.7	34.7	34.7	41.8	41.8	41.8
Total Split (s)	35.0	35.0	35.0	35.0	45.0	45.0	45.0
Total Split (%)	43.8%	43.8%	43.8%	43.8%	56.3%	56.3%	56.3%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	3.7	3.7	3.7	3.7	3.8	3.8	3.8
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.7	7.7	7.7	7.7	7.8	7.8	7.8
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	C-Max	C-Max	C-Max	C-Max	Min	Min	Min
Act Effct Green (s)	33.9	33.9	33.9	33.9	30.6	30.6	30.6
Actuated g/C Ratio	0.42	0.42	0.42	0.42	0.38	0.38	0.38
v/c Ratio	0.31	0.22	0.24	0.54	0.48	0.43	0.04
Control Delay	19.3	15.1	13.8	11.4	20.0	18.0	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	19.3	15.1	13.8	11.4	20.0	18.0	0.3
LOS	B	B	B	B	C	B	A
Approach Delay		16.3	12.5			18.2	
Approach LOS		B	B			B	
Stops (vph)	79	178	107	97	182	492	0
Fuel Used(gal)	1	3	3	3	4	10	0
CO Emissions (g/hr)	91	207	214	212	247	688	10
NOx Emissions (g/hr)	18	40	42	41	48	134	2
VOC Emissions (g/hr)	21	48	50	49	57	159	2
Dilemma Vehicles (#)	0	0	0	0	0	0	0

Intersection Summary

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 36 (45%), Referenced to phase 2:EBWB, Start of 1st Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.54

Intersection Signal Delay: 16.0

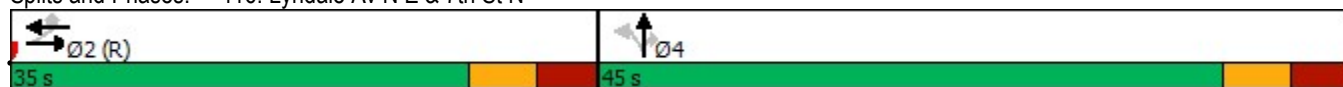
Intersection LOS: B

Intersection Capacity Utilization 71.0%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 416: Lyndale Av N E & 7th St N



Scenario 1 Minneapolis - 7th Street N 3:30 pm 04/10/2013

Synchro 11 Report

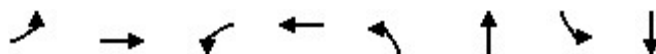
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Timings

599: Oak Lake Av/Oak Lake Av N & 7th St N

04/13/2022



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations		↔↔		↔↔	↔	↔	↔	↔
Traffic Volume (vph)	44	219	12	425	61	178	51	266
Future Volume (vph)	44	219	12	425	61	178	51	266
Lane Group Flow (vph)	0	380	0	620	75	205	53	429
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		2		2		4		4
Permitted Phases	2		2		4		4	
Detector Phase	2	2	2	2	4	4	4	4
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	31.0	31.0	31.0	31.0	39.0	39.0	39.0	39.0
Total Split (s)	37.0	37.0	37.0	37.0	43.0	43.0	43.0	43.0
Total Split (%)	46.3%	46.3%	46.3%	46.3%	53.8%	53.8%	53.8%	53.8%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	3.5	3.5	3.5	3.5	4.6	4.6	4.6	4.6
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.5		6.5	7.6	7.6	7.6	7.6
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max
Act Effect Green (s)		30.5		30.5	35.4	35.4	35.4	35.4
Actuated g/C Ratio		0.38		0.38	0.44	0.44	0.44	0.44
v/c Ratio		0.42		0.57	0.21	0.27	0.11	0.58
Control Delay		33.9		13.1	17.6	16.6	14.0	19.5
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		33.9		13.1	17.6	16.6	14.0	19.5
LOS		C		B	B	B	B	B
Approach Delay		33.9		13.1		16.9		18.9
Approach LOS		C		B		B		B
Stops (vph)		247		200	39	160	31	218
Fuel Used(gal)		5		5	1	2	0	3
CO Emissions (g/hr)		369		339	43	136	34	240
NOx Emissions (g/hr)		72		66	8	26	7	47
VOC Emissions (g/hr)		85		79	10	32	8	56
Dilemma Vehicles (#)		0		0	0	0	0	0

Intersection Summary

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 21 (26%), Referenced to phase 2:EBWB, Start of 1st Green

Natural Cycle: 70

Control Type: Pretimed

Maximum v/c Ratio: 0.58

Intersection Signal Delay: 19.8

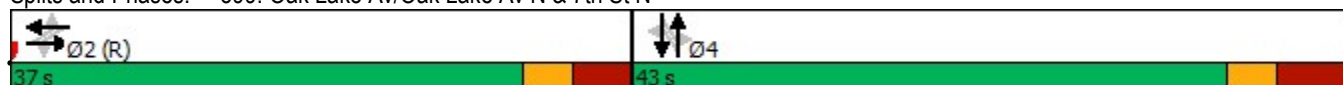
Intersection LOS: B

Intersection Capacity Utilization 93.7%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 599: Oak Lake Av/Oak Lake Av N & 7th St N



Scenario 1 Minneapolis - 7th Street N 3:30 pm 04/10/2013

Synchro 11 Report

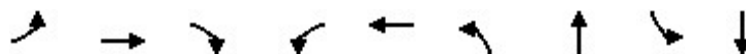
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Timings

816: 7th St N & Olson Memorial Hwy N/6th Av N

04/13/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations		↔↔	↔↔		↔↔	↔	↔↔		↔↔
Traffic Volume (vph)	1	199	181	60	533	340	454	26	230
Future Volume (vph)	1	199	181	60	533	340	454	26	230
Lane Group Flow (vph)	0	220	193	0	840	618	581	0	326
Turn Type	Perm	NA	Perm	Perm	NA	pm+pt	NA	Perm	NA
Protected Phases		2			6	3	8		4
Permitted Phases	2		2	6		8		4	
Detector Phase	2	2	2	6	6	3	8	4	4
Switch Phase									
Minimum Initial (s)	25.0	25.0	25.0	25.0	25.0	9.0	15.0	15.0	15.0
Minimum Split (s)	43.0	43.0	43.0	42.0	42.0	19.8	36.0	44.0	44.0
Total Split (s)	68.0	68.0	68.0	68.0	68.0	46.0	92.0	46.0	46.0
Total Split (%)	42.5%	42.5%	42.5%	42.5%	42.5%	28.8%	57.5%	28.8%	28.8%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	4.7	4.7	4.7	4.7	4.7	7.3	7.5	7.5	7.5
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0		0.0
Total Lost Time (s)		7.7	7.7		7.7	10.3	10.5		10.5
Lead/Lag						Lead		Lag	Lag
Lead-Lag Optimize?									
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	None	Max	Max	Max
Act Effct Green (s)		60.3	60.3		60.3	81.7	81.5		35.5
Actuated g/C Ratio		0.38	0.38		0.38	0.51	0.51		0.22
v/c Ratio		0.18	0.17		0.78	1.12	0.36		0.55
Control Delay		42.0	13.0		48.1	105.0	23.9		56.7
Queue Delay		0.0	0.0		0.4	0.0	0.0		0.0
Total Delay		42.0	13.0		48.5	105.0	23.9		56.7
LOS		D	B		D	F	C		E
Approach Delay		28.4			48.5		65.7		56.7
Approach LOS		C			D		E		E
Stops (vph)		102	48		579	216	289		240
Fuel Used(gal)		3	1		12	10	7		6
CO Emissions (g/hr)		199	94		834	715	469		395
NOx Emissions (g/hr)		39	18		162	139	91		77
VOC Emissions (g/hr)		46	22		193	166	109		92
Dilemma Vehicles (#)		0	0		0	0	0		0

Intersection Summary

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 22 (14%), Referenced to phase 2:EBTL and 6:WBTL, Start of 1st Green

Natural Cycle: 130

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.12

Intersection Signal Delay: 53.9

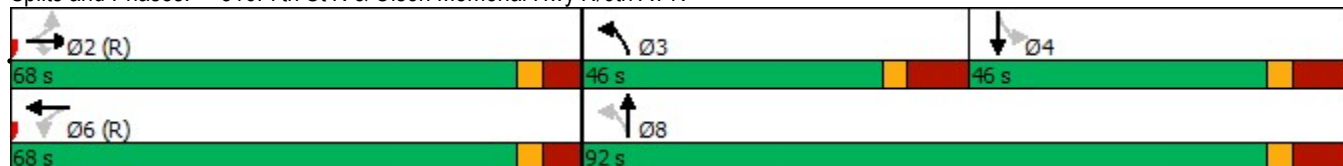
Intersection LOS: D

Intersection Capacity Utilization 110.8%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 816: 7th St N & Olson Memorial Hwy N/6th Av N



Timings

416: Lyndale Av N E & 7th St N

04/13/2022



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	113	287	260	275	219	634	16
Future Volume (vph)	113	287	260	275	219	634	16
Lane Group Flow (vph)	138	322	329	367	313	704	23
Turn Type	Perm	NA	NA	Perm	Perm	NA	Perm
Protected Phases		2	2			4	
Permitted Phases	2			2	4		4
Detector Phase	2	2	2	2	4	4	4
Switch Phase							
Minimum Initial (s)	15.0	15.0	15.0	15.0	20.0	20.0	20.0
Minimum Split (s)	34.7	34.7	34.7	34.7	41.8	41.8	41.8
Total Split (s)	38.0	38.0	38.0	38.0	42.0	42.0	42.0
Total Split (%)	47.5%	47.5%	47.5%	47.5%	52.5%	52.5%	52.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	3.7	3.7	3.7	3.7	3.8	3.8	3.8
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.7	7.7	7.7	7.7	7.8	7.8	7.8
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	C-Max	C-Max	C-Max	C-Max	Min	Min	Min
Act Effct Green (s)	35.1	35.1	35.1	35.1	29.4	29.4	29.4
Actuated g/C Ratio	0.44	0.44	0.44	0.44	0.37	0.37	0.37
v/c Ratio	0.30	0.21	0.23	0.54	0.50	0.44	0.04
Control Delay	18.3	14.4	13.1	11.2	22.6	20.1	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.3	14.4	13.1	11.2	22.6	20.1	0.4
LOS	B	B	B	B	C	C	A
Approach Delay		15.6	12.1			20.4	
Approach LOS		B	B			C	
Stops (vph)	82	180	107	106	192	526	1
Fuel Used(gal)	1	3	3	3	4	10	0
CO Emissions (g/hr)	90	205	211	214	258	716	10
NOx Emissions (g/hr)	17	40	41	42	50	139	2
VOC Emissions (g/hr)	21	47	49	50	60	166	2
Dilemma Vehicles (#)	0	0	0	0	0	0	0

Intersection Summary

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 36 (45%), Referenced to phase 2:EBWB, Start of 1st Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.54

Intersection Signal Delay: 16.8

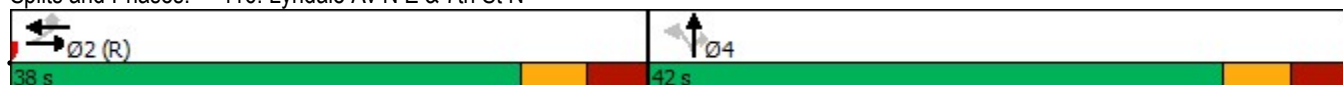
Intersection LOS: B

Intersection Capacity Utilization 71.0%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 416: Lyndale Av N E & 7th St N



Scenario 1 Minneapolis - 7th Street N 3:30 pm 04/10/2013 Build

Synchro 11 Report

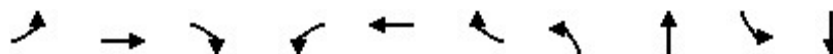
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Timings

599: Oak Lake Av/Oak Lake Av N & 7th St N

04/13/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	44	219	40	12	425	53	61	178	51	266
Future Volume (vph)	44	219	40	12	425	53	61	178	51	266
Lane Group Flow (vph)	77	255	48	24	512	84	75	205	53	429
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA
Protected Phases		2			2			4		4
Permitted Phases	2		2	2		2	4		4	
Detector Phase	2	2	2	2	2	2	4	4	4	4
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	31.0	31.0	31.0	31.0	31.0	31.0	39.0	39.0	39.0	39.0
Total Split (s)	41.0	41.0	41.0	41.0	41.0	41.0	39.0	39.0	39.0	39.0
Total Split (%)	51.3%	51.3%	51.3%	51.3%	51.3%	51.3%	48.8%	48.8%	48.8%	48.8%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	4.6	4.6	4.6	4.6
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.5	6.5	6.5	6.5	6.5	7.6	7.6	7.6	7.6
Lead/Lag										
Lead-Lag Optimize?										
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	34.5	34.5	34.5	34.5	34.5	34.5	31.4	31.4	31.4	31.4
Actuated g/C Ratio	0.43	0.43	0.43	0.43	0.43	0.43	0.39	0.39	0.39	0.39
v/c Ratio	0.32	0.33	0.07	0.05	0.73	0.14	0.26	0.31	0.13	0.65
Control Delay	36.0	31.3	18.1	9.7	20.9	2.2	21.6	19.9	16.7	24.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.0	31.3	18.1	9.7	20.9	2.2	21.6	19.9	16.7	24.4
LOS	D	C	B	A	C	A	C	B	B	C
Approach Delay		30.6			17.9			20.4		23.5
Approach LOS		C			B			C		C
Stops (vph)	38	177	22	5	371	3	44	163	33	242
Fuel Used(gal)	1	4	1	0	6	0	1	2	1	4
CO Emissions (g/hr)	55	258	37	8	394	23	47	145	36	268
NOx Emissions (g/hr)	11	50	7	2	77	5	9	28	7	52
VOC Emissions (g/hr)	13	60	9	2	91	5	11	34	8	62
Dilemma Vehicles (#)	0	0	0	0	0	0	0	0	0	0

Intersection Summary

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 21 (26%), Referenced to phase 2:EBWB, Start of 1st Green

Natural Cycle: 70

Control Type: Pretimed

Maximum v/c Ratio: 0.73

Intersection Signal Delay: 22.6

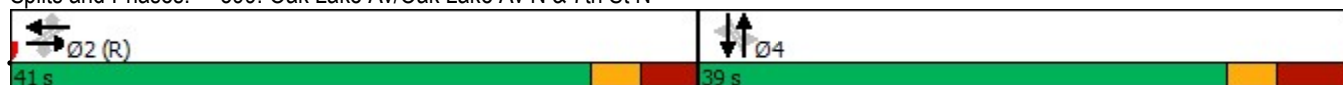
Intersection LOS: C

Intersection Capacity Utilization 88.4%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 599: Oak Lake Av/Oak Lake Av N & 7th St N



Scenario 1 Minneapolis - 7th Street N 3:30 pm 04/10/2013 Build

Synchro 11 Report

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Timings

816: 7th St N & Olson Memorial Hwy N/6th Av N

04/13/2022

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	1	199	181	60	533	340	454	50	26	230	18
Future Volume (vph)	1	199	181	60	533	340	454	50	26	230	18
Lane Group Flow (vph)	0	220	193	0	840	618	522	59	39	256	31
Turn Type	Perm	NA	Perm	Perm	NA	pm+pt	NA	Perm	Perm	NA	Perm
Protected Phases		2			6	3	8			4	
Permitted Phases	2		2	6		8		8	4		4
Detector Phase	2	2	2	6	6	3	8	8	4	4	4
Switch Phase											
Minimum Initial (s)	25.0	25.0	25.0	25.0	25.0	9.0	15.0	15.0	15.0	15.0	15.0
Minimum Split (s)	43.0	43.0	43.0	42.0	42.0	19.8	36.0	36.0	44.0	44.0	44.0
Total Split (s)	58.0	58.0	58.0	58.0	58.0	58.0	102.0	102.0	44.0	44.0	44.0
Total Split (%)	36.3%	36.3%	36.3%	36.3%	36.3%	36.3%	63.8%	63.8%	27.5%	27.5%	27.5%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	4.7	4.7	4.7	4.7	4.7	7.3	7.5	7.5	7.5	7.5	7.5
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		7.7	7.7		7.7	10.3	10.5	10.5	10.5	10.5	10.5
Lead/Lag						Lead			Lag	Lag	Lag
Lead-Lag Optimize?											
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	None	Max	Max	Max	Max	Max
Act Effct Green (s)		50.3	50.3		50.3	91.7	91.5	91.5	33.5	33.5	33.5
Actuated g/C Ratio		0.31	0.31		0.31	0.57	0.57	0.57	0.21	0.21	0.21
v/c Ratio		0.21	0.20		0.93	0.99	0.54	0.07	0.25	0.66	0.07
Control Delay		59.0	21.2		61.5	61.3	23.9	3.5	57.6	65.1	5.2
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		59.0	21.2		61.5	61.3	23.9	3.5	57.6	65.1	5.2
LOS		E	C		E	E	C	A	E	E	A
Approach Delay		41.3			61.5		42.2			58.5	
Approach LOS		D			E		D			E	
Stops (vph)		133	65		573	222	276	5	23	208	5
Fuel Used(gal)		4	2		14	7	6	0	1	5	0
CO Emissions (g/hr)		256	119		952	505	427	26	38	360	10
NOx Emissions (g/hr)		50	23		185	98	83	5	7	70	2
VOC Emissions (g/hr)		59	28		221	117	99	6	9	83	2
Dilemma Vehicles (#)		0	0		0	0	0	0	0	0	0

Intersection Summary

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 22 (14%), Referenced to phase 2:EBTL and 6:WBTL, Start of 1st Green

Natural Cycle: 130

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.99

Intersection Signal Delay: 49.8

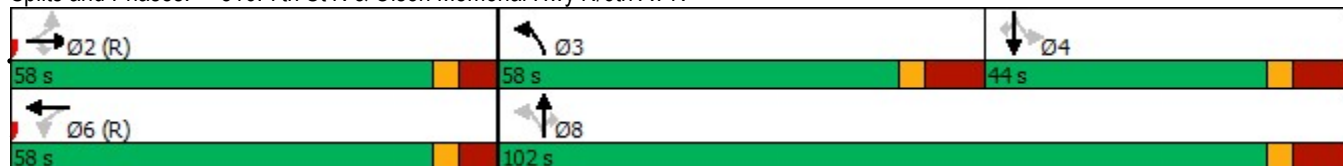
Intersection LOS: D

Intersection Capacity Utilization 115.9%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 816: 7th St N & Olson Memorial Hwy N/6th Av N



Timings

416: Lyndale Av N E & 7th St N

04/13/2022



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	113	287	260	275	219	634	16
Future Volume (vph)	113	287	260	275	219	634	16
Lane Group Flow (vph)	138	322	329	367	313	704	23
Turn Type	Perm	NA	NA	Perm	Perm	NA	Perm
Protected Phases		2	2			4	
Permitted Phases	2			2	4		4
Detector Phase	2	2	2	2	4	4	4
Switch Phase							
Minimum Initial (s)	15.0	15.0	15.0	15.0	20.0	20.0	20.0
Minimum Split (s)	34.7	34.7	34.7	34.7	41.8	41.8	41.8
Total Split (s)	35.0	35.0	35.0	35.0	45.0	45.0	45.0
Total Split (%)	43.8%	43.8%	43.8%	43.8%	56.3%	56.3%	56.3%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	3.7	3.7	3.7	3.7	3.8	3.8	3.8
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.7	7.7	7.7	7.7	7.8	7.8	7.8
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	C-Max	C-Max	C-Max	C-Max	Min	Min	Min
Act Effct Green (s)	33.9	33.9	33.9	33.9	30.6	30.6	30.6
Actuated g/C Ratio	0.42	0.42	0.42	0.42	0.38	0.38	0.38
v/c Ratio	0.31	0.22	0.24	0.54	0.48	0.43	0.04
Control Delay	19.3	15.1	13.8	11.4	20.0	18.0	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	19.3	15.1	13.8	11.4	20.0	18.0	0.3
LOS	B	B	B	B	C	B	A
Approach Delay		16.3	12.5			18.2	
Approach LOS		B	B			B	
Stops (vph)	79	178	107	97	182	492	0
Fuel Used(gal)	1	3	3	3	4	10	0
CO Emissions (g/hr)	91	207	214	212	247	688	10
NOx Emissions (g/hr)	18	40	42	41	48	134	2
VOC Emissions (g/hr)	21	48	50	49	57	159	2
Dilemma Vehicles (#)	0	0	0	0	0	0	0

Intersection Summary

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 36 (45%), Referenced to phase 2:EBWB, Start of 1st Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.54

Intersection Signal Delay: 16.0

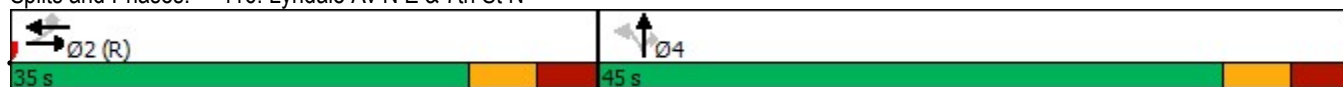
Intersection LOS: B

Intersection Capacity Utilization 71.0%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 416: Lyndale Av N E & 7th St N



Scenario 1 Minneapolis - 7th Street N 3:30 pm 04/10/2013

Synchro 11 Report

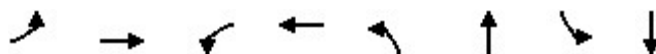
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Timings

599: Oak Lake Av/Oak Lake Av N & 7th St N

04/13/2022



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations		↔↔		↔↔	↔	↔	↔	↔
Traffic Volume (vph)	44	219	12	425	61	178	51	266
Future Volume (vph)	44	219	12	425	61	178	51	266
Lane Group Flow (vph)	0	380	0	620	75	205	53	429
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		2		2		4		4
Permitted Phases	2		2		4		4	
Detector Phase	2	2	2	2	4	4	4	4
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	31.0	31.0	31.0	31.0	39.0	39.0	39.0	39.0
Total Split (s)	37.0	37.0	37.0	37.0	43.0	43.0	43.0	43.0
Total Split (%)	46.3%	46.3%	46.3%	46.3%	53.8%	53.8%	53.8%	53.8%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	3.5	3.5	3.5	3.5	4.6	4.6	4.6	4.6
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.5		6.5	7.6	7.6	7.6	7.6
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max
Act Effect Green (s)		30.5		30.5	35.4	35.4	35.4	35.4
Actuated g/C Ratio		0.38		0.38	0.44	0.44	0.44	0.44
v/c Ratio		0.42		0.57	0.21	0.27	0.11	0.58
Control Delay		33.9		13.1	17.6	16.6	14.0	19.5
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		33.9		13.1	17.6	16.6	14.0	19.5
LOS		C		B	B	B	B	B
Approach Delay		33.9		13.1		16.9		18.9
Approach LOS		C		B		B		B
Stops (vph)		247		200	39	160	31	218
Fuel Used(gal)		5		5	1	2	0	3
CO Emissions (g/hr)		369		339	43	136	34	240
NOx Emissions (g/hr)		72		66	8	26	7	47
VOC Emissions (g/hr)		85		79	10	32	8	56
Dilemma Vehicles (#)		0		0	0	0	0	0

Intersection Summary

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 21 (26%), Referenced to phase 2:EBWB, Start of 1st Green

Natural Cycle: 70

Control Type: Pretimed

Maximum v/c Ratio: 0.58

Intersection Signal Delay: 19.8

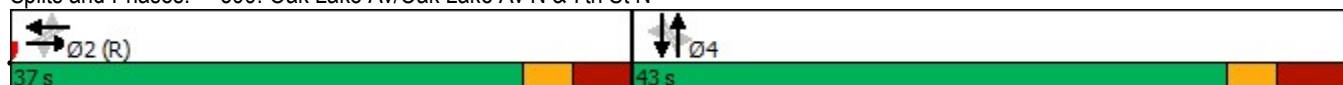
Intersection LOS: B

Intersection Capacity Utilization 93.7%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 599: Oak Lake Av/Oak Lake Av N & 7th St N



Scenario 1 Minneapolis - 7th Street N 3:30 pm 04/10/2013

Synchro 11 Report

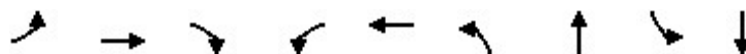
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Timings

816: 7th St N & Olson Memorial Hwy N/6th Av N

04/13/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations		↔↔	↔↔		↔↔	↔	↔↔		↔↔
Traffic Volume (vph)	1	199	181	60	533	340	454	26	230
Future Volume (vph)	1	199	181	60	533	340	454	26	230
Lane Group Flow (vph)	0	220	193	0	840	618	581	0	326
Turn Type	Perm	NA	Perm	Perm	NA	pm+pt	NA	Perm	NA
Protected Phases		2			6	3	8		4
Permitted Phases	2		2	6		8		4	
Detector Phase	2	2	2	6	6	3	8	4	4
Switch Phase									
Minimum Initial (s)	25.0	25.0	25.0	25.0	25.0	9.0	15.0	15.0	15.0
Minimum Split (s)	43.0	43.0	43.0	42.0	42.0	19.8	36.0	44.0	44.0
Total Split (s)	68.0	68.0	68.0	68.0	68.0	46.0	92.0	46.0	46.0
Total Split (%)	42.5%	42.5%	42.5%	42.5%	42.5%	28.8%	57.5%	28.8%	28.8%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	4.7	4.7	4.7	4.7	4.7	7.3	7.5	7.5	7.5
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0		0.0
Total Lost Time (s)		7.7	7.7		7.7	10.3	10.5		10.5
Lead/Lag						Lead		Lag	Lag
Lead-Lag Optimize?									
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	None	Max	Max	Max
Act Effct Green (s)		60.3	60.3		60.3	81.7	81.5		35.5
Actuated g/C Ratio		0.38	0.38		0.38	0.51	0.51		0.22
v/c Ratio		0.18	0.17		0.78	1.12	0.36		0.55
Control Delay		42.0	13.0		48.1	105.0	23.9		56.7
Queue Delay		0.0	0.0		0.4	0.0	0.0		0.0
Total Delay		42.0	13.0		48.5	105.0	23.9		56.7
LOS		D	B		D	F	C		E
Approach Delay		28.4			48.5		65.7		56.7
Approach LOS		C			D		E		E
Stops (vph)		102	48		579	216	289		240
Fuel Used(gal)		3	1		12	10	7		6
CO Emissions (g/hr)		199	94		834	715	469		395
NOx Emissions (g/hr)		39	18		162	139	91		77
VOC Emissions (g/hr)		46	22		193	166	109		92
Dilemma Vehicles (#)		0	0		0	0	0		0

Intersection Summary

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 22 (14%), Referenced to phase 2:EBTL and 6:WBTL, Start of 1st Green

Natural Cycle: 130

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.12

Intersection Signal Delay: 53.9

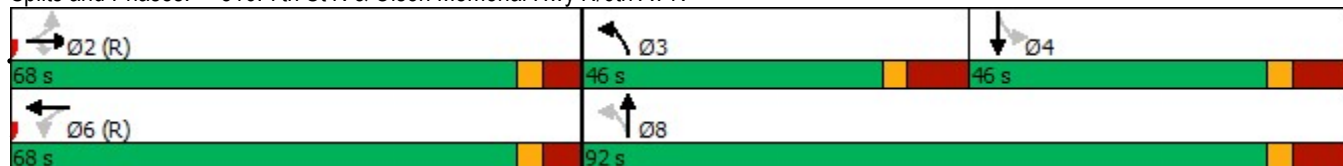
Intersection LOS: D

Intersection Capacity Utilization 110.8%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 816: 7th St N & Olson Memorial Hwy N/6th Av N



Timings

416: Lyndale Av N E & 7th St N

04/13/2022



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	113	287	260	275	219	634	16
Future Volume (vph)	113	287	260	275	219	634	16
Lane Group Flow (vph)	138	322	329	367	313	704	23
Turn Type	Perm	NA	NA	Perm	Perm	NA	Perm
Protected Phases		2	2			4	
Permitted Phases	2			2	4		4
Detector Phase	2	2	2	2	4	4	4
Switch Phase							
Minimum Initial (s)	15.0	15.0	15.0	15.0	20.0	20.0	20.0
Minimum Split (s)	34.7	34.7	34.7	34.7	41.8	41.8	41.8
Total Split (s)	38.0	38.0	38.0	38.0	42.0	42.0	42.0
Total Split (%)	47.5%	47.5%	47.5%	47.5%	52.5%	52.5%	52.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	3.7	3.7	3.7	3.7	3.8	3.8	3.8
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.7	7.7	7.7	7.7	7.8	7.8	7.8
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	C-Max	C-Max	C-Max	C-Max	Min	Min	Min
Act Effct Green (s)	35.1	35.1	35.1	35.1	29.4	29.4	29.4
Actuated g/C Ratio	0.44	0.44	0.44	0.44	0.37	0.37	0.37
v/c Ratio	0.30	0.21	0.23	0.54	0.50	0.44	0.04
Control Delay	18.3	14.4	13.1	11.2	22.6	20.1	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.3	14.4	13.1	11.2	22.6	20.1	0.4
LOS	B	B	B	B	C	C	A
Approach Delay		15.6	12.1			20.4	
Approach LOS		B	B			C	
Stops (vph)	82	180	107	106	192	526	1
Fuel Used(gal)	1	3	3	3	4	10	0
CO Emissions (g/hr)	90	205	211	214	258	716	10
NOx Emissions (g/hr)	17	40	41	42	50	139	2
VOC Emissions (g/hr)	21	47	49	50	60	166	2
Dilemma Vehicles (#)	0	0	0	0	0	0	0

Intersection Summary

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 36 (45%), Referenced to phase 2:EBWB, Start of 1st Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.54

Intersection Signal Delay: 16.8

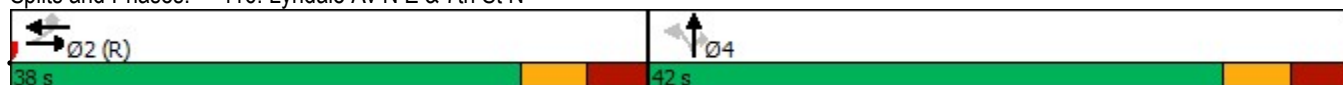
Intersection LOS: B

Intersection Capacity Utilization 71.0%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 416: Lyndale Av N E & 7th St N



Scenario 1 Minneapolis - 7th Street N 3:30 pm 04/10/2013 Build

Synchro 11 Report

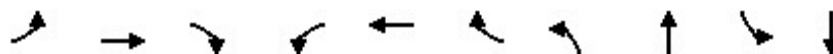
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Timings

599: Oak Lake Av/Oak Lake Av N & 7th St N

04/13/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	44	219	40	12	425	53	61	178	51	266
Future Volume (vph)	44	219	40	12	425	53	61	178	51	266
Lane Group Flow (vph)	77	255	48	24	512	84	75	205	53	429
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA
Protected Phases		2			2			4		4
Permitted Phases	2		2	2		2	4		4	
Detector Phase	2	2	2	2	2	2	4	4	4	4
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	31.0	31.0	31.0	31.0	31.0	31.0	39.0	39.0	39.0	39.0
Total Split (s)	41.0	41.0	41.0	41.0	41.0	41.0	39.0	39.0	39.0	39.0
Total Split (%)	51.3%	51.3%	51.3%	51.3%	51.3%	51.3%	48.8%	48.8%	48.8%	48.8%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	4.6	4.6	4.6	4.6
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.5	6.5	6.5	6.5	6.5	7.6	7.6	7.6	7.6
Lead/Lag										
Lead-Lag Optimize?										
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	34.5	34.5	34.5	34.5	34.5	34.5	31.4	31.4	31.4	31.4
Actuated g/C Ratio	0.43	0.43	0.43	0.43	0.43	0.43	0.39	0.39	0.39	0.39
v/c Ratio	0.32	0.33	0.07	0.05	0.73	0.14	0.26	0.31	0.13	0.65
Control Delay	36.0	31.3	18.1	9.7	20.9	2.2	21.6	19.9	16.7	24.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.0	31.3	18.1	9.7	20.9	2.2	21.6	19.9	16.7	24.4
LOS	D	C	B	A	C	A	C	B	B	C
Approach Delay		30.6			17.9			20.4		23.5
Approach LOS		C			B			C		C
Stops (vph)	38	177	22	5	371	3	44	163	33	242
Fuel Used(gal)	1	4	1	0	6	0	1	2	1	4
CO Emissions (g/hr)	55	258	37	8	394	23	47	145	36	268
NOx Emissions (g/hr)	11	50	7	2	77	5	9	28	7	52
VOC Emissions (g/hr)	13	60	9	2	91	5	11	34	8	62
Dilemma Vehicles (#)	0	0	0	0	0	0	0	0	0	0

Intersection Summary

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 21 (26%), Referenced to phase 2:EBWB, Start of 1st Green

Natural Cycle: 70

Control Type: Pretimed

Maximum v/c Ratio: 0.73

Intersection Signal Delay: 22.6

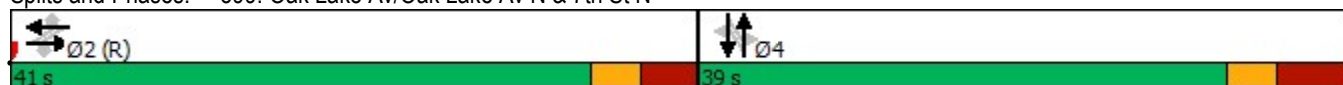
Intersection LOS: C

Intersection Capacity Utilization 88.4%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 599: Oak Lake Av/Oak Lake Av N & 7th St N



Scenario 1 Minneapolis - 7th Street N 3:30 pm 04/10/2013 Build

Synchro 11 Report

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Timings

816: 7th St N & Olson Memorial Hwy N/6th Av N

04/13/2022

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	1	199	181	60	533	340	454	50	26	230	18
Future Volume (vph)	1	199	181	60	533	340	454	50	26	230	18
Lane Group Flow (vph)	0	220	193	0	840	618	522	59	39	256	31
Turn Type	Perm	NA	Perm	Perm	NA	pm+pt	NA	Perm	Perm	NA	Perm
Protected Phases		2			6	3	8			4	
Permitted Phases	2		2	6		8		8	4		4
Detector Phase	2	2	2	6	6	3	8	8	4	4	4
Switch Phase											
Minimum Initial (s)	25.0	25.0	25.0	25.0	25.0	9.0	15.0	15.0	15.0	15.0	15.0
Minimum Split (s)	43.0	43.0	43.0	42.0	42.0	19.8	36.0	36.0	44.0	44.0	44.0
Total Split (s)	58.0	58.0	58.0	58.0	58.0	58.0	102.0	102.0	44.0	44.0	44.0
Total Split (%)	36.3%	36.3%	36.3%	36.3%	36.3%	36.3%	63.8%	63.8%	27.5%	27.5%	27.5%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	4.7	4.7	4.7	4.7	4.7	7.3	7.5	7.5	7.5	7.5	7.5
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		7.7	7.7		7.7	10.3	10.5	10.5	10.5	10.5	10.5
Lead/Lag						Lead			Lag	Lag	Lag
Lead-Lag Optimize?											
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	None	Max	Max	Max	Max	Max
Act Effct Green (s)		50.3	50.3		50.3	91.7	91.5	91.5	33.5	33.5	33.5
Actuated g/C Ratio		0.31	0.31		0.31	0.57	0.57	0.57	0.21	0.21	0.21
v/c Ratio		0.21	0.20		0.93	0.99	0.54	0.07	0.25	0.66	0.07
Control Delay		59.0	21.2		61.5	61.3	23.9	3.5	57.6	65.1	5.2
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		59.0	21.2		61.5	61.3	23.9	3.5	57.6	65.1	5.2
LOS		E	C		E	E	C	A	E	E	A
Approach Delay		41.3			61.5		42.2			58.5	
Approach LOS		D			E		D			E	
Stops (vph)		133	65		573	222	276	5	23	208	5
Fuel Used(gal)		4	2		14	7	6	0	1	5	0
CO Emissions (g/hr)		256	119		952	505	427	26	38	360	10
NOx Emissions (g/hr)		50	23		185	98	83	5	7	70	2
VOC Emissions (g/hr)		59	28		221	117	99	6	9	83	2
Dilemma Vehicles (#)		0	0		0	0	0	0	0	0	0

Intersection Summary

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 22 (14%), Referenced to phase 2:EBTL and 6:WBTL, Start of 1st Green

Natural Cycle: 130

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.99

Intersection Signal Delay: 49.8

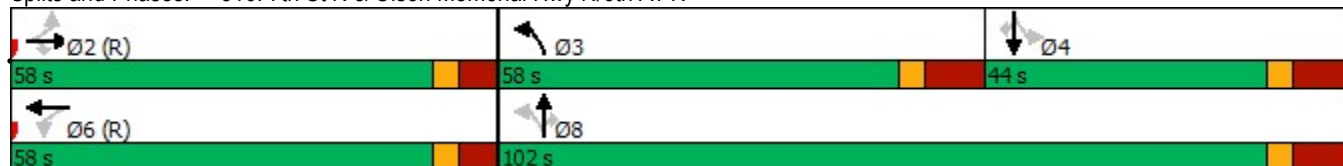
Intersection LOS: D

Intersection Capacity Utilization 115.9%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 816: 7th St N & Olson Memorial Hwy N/6th Av N



INCIDENT ID	INTERSECTION	MI	NOTES	SEVERITY	MANNER OF COLLISION	DIRECTION 1	CRASH MANUEVER 1	DIRECTION 2	CRASH MANUEVER 2	UTM X	UTM Y	LATITUDE	LONGITUDE	DATE & TIME	COLLISION DIAGRAM	
943326	INT 2			A	Front to Front	Angle	Southbound	Moving Forward	Northbound	Moving Forward	477645.2772	4981234.988	44.98421395	-93.28356418	2021/09/27-20:30	2021/09/27-20:30-DI-C-D
675197	INT 4		pedestrian	A	-	Other	Southbound	Moving Forward	-	-	477803.6463	4981083.817	44.98285809	-93.28154873	2019/01/10-09:58	2019/01/10-09:58-L-C-D
745521	INT 1		bicycle crash	B	-	Other	Northbound	Moving Forward	-	-	477492.3189	4981395.153	44.98565089	-93.28551115	2019/09/06-20:15	2019/09/06-20:15-DI-C-D
812636	INT 3			B	Front to Rear	Rear End	Westbound	Moving Forward	Westbound	Vehicle Stopped or Stalled in Roadway	477627.4145	4981265.612	44.98448905	-93.28379212	2020/06/03-14:32	2020/06/03-14:32-L-C-D
896655	INT 2			B	Angle	Angle	Southbound	Turning Left	Northbound	Moving Forward	477646.6206	4981235.02	44.98421428	-93.28354714	2021/03/19-09:55	2021/03/19-09:55-L-C-D
931927	INT 3		scooter (possibly ROR?)	B	-	Other	Eastbound	Moving Forward	-	-	477314.7766	4981532.079	44.98687782	-93.28776971	2021/08/03-09:10	2021/08/03-09:10-L-C-W
866376	INT 3			B	Angle	Angle	Eastbound	Moving Forward	Northbound	Moving Forward	477304.7088	4981540.458	44.98695293	-93.2878978	2020/12/03-14:40	2020/12/03-14:40-L-C-D
724785	INT 3		bicycle crash	B	-	Other	Northbound	Moving Forward	-	-	477295.8067	4981548.062	44.9870211	-93.28801107	2019/06/06-00:35	2019/06/06-00:35-DI-C-D
765484	INT 2			B	Front to Rear	Rear End	Northbound	Moving Forward	Northbound	Vehicle Stopped or Stalled in Roadway	477606.901	4981282.103	44.98463685	-93.28405305	2019/11/26-23:50	2019/11/26-23:50-DI-S-S
749644	SEG A			B	Front to Rear	Rear End	Eastbound	Moving Forward	Eastbound	Vehicle Stopped or Stalled in Roadway	477491.7455	4981390.43	44.98560836	-93.28551856	2019/09/24-09:18	2019/09/24-09:18-L-C-D
846828	INT 3			B	Angle	Angle	Northbound	Moving Forward	Eastbound	Moving Forward	477282.2451	4981599.154	44.98748058	-93.2881854	2020/10/16-21:30	2020/10/16-21:30-DI-C-D
973949	INT 4			B	Angle	Angle	Eastbound	Moving Forward	Northbound	Turning Left	477788.0984	4981088.715	44.98728937	-93.28173839	2021/11/16-12:55	2021/11/16-12:55-L-C-D
699733	INT 3			B	Front to Rear	Rear End	Northbound	Moving Forward	Northbound	Vehicle Stopped or Stalled in Roadway	477296.6271	4981538.202	44.98693236	-93.28800021	2019/03/23-17:15	2019/03/23-17:15-L-C-D
746061	INT 3			B	Angle	Angle	Northbound	Moving Forward	Eastbound	Moving Forward	477296.1843	4981551.594	44.98705289	-93.28800643	2019/09/09-13:00	2019/09/09-13:00-L-R-W
814201	INT 3			B	Angle	Angle	Eastbound	Moving Forward	Northbound	Turning Left	477293.8454	4981571.728	44.98723406	-93.28803701	2020/06/12-18:40	2020/06/12-18:40-L-C-D
977395	INT 3			B	Front to Rear	Rear End	Northbound	Moving Forward	Northbound	Vehicle Stopped or Stalled in Roadway	477290.6808	4981594.07	44.98742709	-93.2880704	2021/12/04-17:07	2021/12/04-17:07-Du-C-D
678603	INT 3			B	swipe - Same Direction	Sideswipe	Northbound	Moving Forward	Northbound	Moving Forward	477292.2629	4981615.257	44.98762585	-93.28805905	2019/01/24-09:24	2019/01/24-09:24-L-C-W
731068	INT 2			C	Front to Rear	Rear End	Westbound	Moving Forward	Westbound	Vehicle Stopped or Stalled in Roadway	477616.2846	4981266.739	44.98449885	-93.28393334	2019/07/02-16:28	2019/07/02-16:28-L-C-D
765923	INT 2			C	Angle	Left-Turn	Northbound	Moving Forward	Southbound	Turning Left	477608.1915	4981268.816	44.98451729	-93.28403609	2019/11/28-03:22	2019/11/28-03:22-DI-C-S
895733	INT 3			C	Angle	Angle	Northbound	Moving Forward	Northbound	Moving Forward	477296.5408	4981547.291	44.98701418	-93.28800172	2021/03/15-10:36	2021/03/15-10:36-L-C-D
967571	INT 3			C	Front to Rear	Rear End	Eastbound	Moving Forward	Eastbound	Vehicle Stopped or Stalled in Roadway	477293.6213	4981550.358	44.98704169	-93.28803889	2021/10/18-09:06	2021/10/18-09:06-L-C-D
935979	INT 3			C	Angle	Angle	Eastbound	Moving Forward	Northbound	Turning Left	477286.0644	4981558.294	44.98711289	-93.28813511	2021/08/23-11:49	2021/08/23-11:49-L-C-D
939372	INT 2			C	Front to Rear	Rear End	Southbound	Vehicle Stopped or Stalled in Roadway	Southbound	Moving Forward	477710.3568	4981175.516	44.98368063	-93.28273606	2021/09/08-13:30	2021/09/08-13:30-L-C-D
867559	INT 2			C	Angle	Angle	Northbound	Turning Left	Westbound	Moving Forward	477652.3696	4981228.863	44.98415903	-93.28347395	2020/12/08-17:44	2020/12/08-17:44-DI-X-D
894813	INT 2			C	Angle	Angle	Southbound	Moving Forward	Westbound	Moving Forward	477631.9521	4981248.712	44.98433707	-93.28373381	2021/03/08-19:00	2021/03/08-19:00-DI-C-D
967594	INT 2			C	ideswipe - Opposite	Left-Turn	Westbound	Turning Left	Southbound	Moving Forward	477632.1197	4981248.544	44.98433556	-93.28373168	2021/10/18-10:36	2021/10/18-10:36-L-C-D
803520	INT 2			C	Front to Rear	Rear End	Southbound	Moving Forward	Southbound	Vehicle Stopped or Stalled in Roadway	477608.2034	4981280.811	44.98462527	-93.28403647	2020/03/07-19:50	2020/03/07-19:50-DI-C-D
685301	INT 1			C	Front to Rear	Rear End	Westbound	Moving Forward	Westbound	Vehicle Stopped or Stalled in Roadway	477510.8996	4981370.713	44.98543148	-93.28527472	2019/02/08-12:15	2019/02/08-12:15-L-S-S
739921	INT 3			C	Front to Rear	Rear End	Westbound	Moving Forward	Westbound	Vehicle Stopped or Stalled in Roadway	477299.1049	4981582.767	44.98733361	-93.28797079	2019/08/13-00:03	2019/08/13-00:03-DI-C-D
741764	INT 3			C	Angle	Right-Turn	Northbound	Moving Forward	Southbound	Turning Left	477294.3938	4981586.913	44.98737078	-93.28803074	2019/08/20-21:42	2019/08/20-21:42-DI-C-D
719750	INT 3			C	Angle	Angle	Northbound	Moving Forward	Eastbound	Moving Forward	477296.6618	4981542.227	44.98696859	-93.28799996	2019/05/13-12:44	2019/05/13-12:44-L-C-D
776907	INT 3			C	Angle	Angle	Northbound	Moving Forward	Eastbound	Moving Forward	477296.5988	4981548.026	44.98702079	-93.28800102	2020/01/03-19:45	2020/01/03-19:45-DI-X-X
681438	INT 3			C	Front to Rear	Rear End	Eastbound	Vehicle Stopped or Stalled in Roadway	Eastbound	Moving Forward	477293.5313	4981574.431	44.98725839	-93.28804112	2019/01/31-08:20	2019/01/31-08:20-Dn-C-S
683682	INT 3			C	Front to Rear	Rear End	Northbound	Moving Forward	Northbound	Vehicle Stopped or Stalled in Roadway	477291.8458	4981588.94	44.98738895	-93.28806315	2019/02/05-12:49	2019/02/05-12:49-L-S-S
725236	INT 3			C	Angle	Angle	Westbound	Moving Forward	Northbound	Moving Forward	477291.8204	4981589.319	44.98739236	-93.28806349	2019/06/07-14:00	2019/06/07-14:00-L-C-D
702492	INT 3			C	Front to Rear	Rear End	Westbound	Moving Forward	Westbound	Turning Right	477291.8728	4981592.39	44.98742	-93.28806296	2019/04/09-11:25	2019/04/09-11:25-L-C-D
729021	INT 2			K	Angle	Angle	Southbound	Moving Forward	Westbound	Moving Forward	477615.6762	4981266.801	44.98449938	-93.28394106	2019/06/24-13:03	2019/06/24-13:03-L-C-D
812395	INT 1			PDO	Front to Front	Head On	Northbound	Moving Forward	Southbound	-	477492.395	4981380.488	44.98551888	-93.28550988	2020/06/01-20:04	2020/06/01-20:04-L-C-D
809640	INT 2			PDO	Angle	Angle	Eastbound	Moving Forward	Northbound	Moving Forward	477633.3646	4981235.158	44.9842151	-93.28371529	2020/05/09-09:35	2020/05/09-09:35-L-C-D
936916	INT 2			PDO	Angle	Left-Turn	Eastbound	Moving Forward	Westbound	Turning Left	477641.6582	4981235.04	44.98421429	-93.28361009	2021/08/26-20:30	2021/08/26-20:30-DI-R-W
756470	INT 2			PDO	Front to Rear	Rear End	Eastbound	Moving Forward	Eastbound	Turning Left	477644.6266	4981234.997	44.98421401	-93.28357243	2019/10/22-18:45	2019/10/22-18:45-Du-C-D
767304	INT 2			PDO	swipe - Same Direction	Sideswipe	Eastbound	Moving Forward	Eastbound	Moving Forward	477644.7439	4981234.996	44.984214	-93.28357095	2019/12/02-09:14	2019/12/02-09:14-L-C-S
868500	INT 2			PDO	Front to Front	Angle	Southbound	Unknown	Eastbound	Unknown	477644.1144	4981235.005	44.98421406	-93.28357893	2020/12/16-21:25	2020/12/16-21:25-DI-C-D
974002	INT 2			PDO	Angle	Angle	Northbound	Moving Forward	Southbound	Moving Forward	477647.0752	4981236.353	44.98421829	-93.28353368	2021/11/16-04:08	2021/11/16-04:08-L-C-D
727065	INT 2			PDO	Angle	Angle	Northbound	Moving Forward	Southbound	Turning Left	477659.2403	4981235.501	44.984219	-93.28338709	2019/06/15-12:44	2019/06/15-12:44-L-C-D
783334	INT 2			PDO	Angle	Left-Turn	Eastbound	Moving Forward	Westbound	Turning Left	477672.6466	4981236.012	44.98422402	-93.28321707	2020/01/25-07:30	2020/01/25-07:30-Dn-C-W
689786	INT 2			PDO	Angle	Angle	Northbound	Moving Forward	Northbound	Moving Forward	477611.6669	4981267.674	44.98450711	-93.28399196	2019/02/19-18:50	2019/02/19-18:50-DI-C-D
939637	INT 2			PDO	-	Sideswipe	Southbound	Vehicle Stopped or Stalled in Roadway	Southbound	Moving Forward	477597.4712	4981278.009	44.9845997	-93.28417248	2021/09/08-06:10	2021/09/08-06:10-Dn-C-D
751646	INT 3			PDO	Front to Rear	Rear End	Eastbound	Moving Forward	Eastbound	Vehicle Stopped or Stalled in Roadway	477295.9365	4981547.926	44.98701987	-93.28800941	2019/10/02-15:00	2019/10/02-15:00-L-C-W
774725	SEG A			PDO	-	Run Off Road	Eastbound	Moving Forward	-	-	477292.0635	4981551.994	44.98705637	-93.28805872	2019/12/28-07:30	2019/12/28-07:30-L-C-S
759059	INT 3			PDO	-	Angle	Eastbound	Slowing	Eastbound	Slowing	477281.672	4981562.908	44.98715428	-93.28819103	2019/11/02-09:30	2019/11/02-09:30-L-C-S
968570	INT 3			PDO	Front to Rear	Rear End	Eastbound	Moving Forward	Eastbound	Vehicle Stopped or Stalled in Roadway	477258.3234	4981587.429	44.98737426	-93.28848831	2021/10/22-18:15	2021/10/22-18:15-Du-C-D
724790	SEG A			PDO	swipe - Same Direction	Sideswipe	Westbound	Moving Forward	Westbound	Moving Forward	477823.6677	4981067.409	44.98271102	-93.28129405	2019/06/06-01:55	2019/06/06-01:55-DI-C-D
912818	INT 2			PDO	Angle	Angle	Southbound	Moving Forward	Eastbound	Moving Forward	477645.5698	4981235.081	44.98420679	-93.28355272	2021/06/18-01:29	2021/06/18-01:29-DI-C-D
896539	INT 2			PDO	Front to Rear	Rear End	Southbound	Vehicle Stopped or Stalled in Roadway	Southbound	Unknown	477632.4834	4981248.18	44.98433229	-93.28372705	2021/03/18-10:09	2021/03/18-10:09-L-C-D
911256	INT 3			PDO	Angle	Angle	Westbound	Moving Forward	Westbound	Unknown	477631.246	4981249.421	44.98434342	-93.2837428	2021/05/11-00:15	2021/05/11-00:15-DI-C-D
750469	INT 2			PDO	Front to Front	Angle	Southbound	Turning Left	Eastbound	Moving Forward	477625.0981	4981255.586	44.98439873	-93.28382105	2019/09/27-14:30	2019/09/27-14:30-L-C-D
843474	INT 2			PDO	swipe - Same Direction	Sideswipe	Northbound	Moving Forward	Northbound	Changing Lanes	477617.7335	4981262.972	44.98446498	-93.2839148	2020/09/29-13:10	2020/09/29-13:10-L-C-D
685184	INT 1			PDO	Front to Rear	Rear End	Northbound	Other	Northbound	Moving Forward	477514.6097	4981366.971	44.9853979	-93.28522749	2019/02/08-10:50	2019/02/08-10:50-L-C-D
739788	INT 1			PDO	Front to Rear	Rear End	Northbound	Moving Forward	Northbound	Vehicle Stopped or Stalled in Roadway	477503.8623	4981377.812	44.98549515	-93.2853643	2019/08/06-14:50	2019/08/06-14:50-L-C-D
835652	INT 3			PDO	Angle	Angle	Eastbound	Moving Forward	Northbound	Moving Forward	477384.5286	4981507.588	44.98665959	-93.28688382	2020/08/16-20:17	2020/08/16-20:17-L-C-D
729266	INT 2			PDO	Angle	Angle	Eastbound	Moving Forward	Eastbound	Moving Forward	477302.9226	4981579.407	44.98730348	-93.28792221	2019/06/25-13:00	2019/06/25-13:00-L-C-D
916357	INT 3			PDO	Front to Rear	Angle	Northbound	Moving Forward	Northbound	-						



CMF / CRF Details

CMF ID: 2841

Converting four-lane roadways to three-lane roadways with center turn lane (road diet)

Description: Conversion of road segments from a four-lane to a three-lane cross-section with two-way left-turn lanes (also known as road diets).

Prior Condition: Four-lane undivided roadway

Category: Roadway

Study: [Comparison of empirical Bayes and full Bayes approaches for before-after road safety evaluations, Persaud et. al, 2010](#)

Star Quality Rating:	☐ Star

Crash Modification Factor (CMF)	
Value:	0.53
Adjusted Standard Error:	
Unadjusted Standard Error:	0.02

Crash Reduction Factor (CRF)	
Value:	47 (This value indicates a decrease in crashes)
Adjusted Standard Error:	
Unadjusted Standard Error:	2

Applicability	
Crash Type:	All
Crash Severity:	All
Roadway Types:	Not Specified
Number of Lanes:	4
Road Division Type:	Undivided
Speed Limit:	
Area Type:	Urban and suburban
Traffic Volume:	
Time of Day:	All
<i>If countermeasure is intersection-based</i>	
Intersection Type:	
Intersection Geometry:	
Traffic Control:	
Major Road Traffic Volume:	
Minor Road Traffic Volume:	

Development Details	
Date Range of Data Used:	1982 to 2004
Municipality:	
State:	
Country:	

Type of Methodology Used:	2
Sample Size Used:	
Before Sample Size Used:	263
After Sample Size Used:	67

Other Details	
Included in Highway Safety Manual?	No
Date Added to Clearinghouse:	Mar-21-2011
Comments:	When this CMF was initially entered in the Clearinghouse, it was incorrectly entered as a CMF of 0.47. In March 2015, this was corrected to be 0.53, as presented in the original paper. In February 2021, the area type for this CMF was changed from suburban to urban/suburban to account for the fact that the treatment sites were largely located in small urban areas.

This site is funded by the U.S. Department of Transportation Federal Highway Administration and maintained by the University of North Carolina Highway Safety Research Center

The information contained in the Crash Modification Factors (CMF) Clearinghouse is disseminated under the sponsorship of the U.S. Department of Transportation in the interest of information exchange. The U.S. Government assumes no liability for the use of the information contained in the CMF Clearinghouse. The information contained in the CMF Clearinghouse does not constitute a standard, specification, or regulation, nor is it a substitute for sound engineering judgment.

Traffic Safety Benefit-Cost Calculation

Highway Safety Improvement Program (HSIP) Reactive Project

**A. Roadway Description**

Route	7th Street	District	M	County	Hennepin
Begin RP	N/A	End RP	N/A	Miles	0.5
Location	7th Street between Cedar Lake Trail and East Lyndale Ave				

B. Project Description

Proposed Work	Convert from four-lane roadway to three-lane roadway with center left turn lane				
Project Cost*	\$7,764,750	Installation Year	2027		
Project Service Life	20 years	Traffic Growth Factor	1.0%		

* exclude Right of Way from Project Cost

C. Crash Modification Factor

0.53	Fatal (K) Crashes	Reference	CMF ID 2841 for Converting four-lane roadways to three-lane roadways with center turn lane (road diet)
0.53	Serious Injury (A) Crashes		
0.53	Moderate Injury (B) Crashes	Crash Type	All
0.53	Possible Injury (C) Crashes		
0.53	Property Damage Only Crashes		

www.CMFClearinghouse.org

D. Crash Modification Factor (optional second CMF)

	Fatal (K) Crashes	Reference	
	Serious Injury (A) Crashes		
	Moderate Injury (B) Crashes	Crash Type	
	Possible Injury (C) Crashes		
	Property Damage Only Crashes		www.CMFclearinghouse.org

E. Crash Data

Begin Date	1/1/2019	End Date	12/31/2021	3 years
Data Source				
Crash Severity	All	< optional 2nd CMF >		
K crashes	1			
A crashes	2			
B crashes	15			
C crashes	19			
PDO crashes	33			

F. Benefit-Cost Calculation

\$29,525,118	Benefit (present value)	B/C Ratio = 3.81
\$7,764,750	Cost	

Proposed project expected to reduce 11 crashes annually, 1 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: 20 years Revised

G. Annual Benefit

Crash Severity	Crash Reduction	Annual Reduction	Annual Benefit
K crashes	0.47	0.16	\$235,000
A crashes	0.94	0.31	\$235,000
B crashes	7.05	2.35	\$540,500
C crashes	8.93	2.98	\$357,200
PDO crashes	15.51	5.17	\$67,210

\$1,434,910

H. Amortized Benefit

Year	Crash Benefits	Present Value
2027	\$1,434,910	\$1,434,910
2028	\$1,449,259	\$1,439,185
2029	\$1,463,752	\$1,443,472
2030	\$1,478,389	\$1,447,773
2031	\$1,493,173	\$1,452,086
2032	\$1,508,105	\$1,456,412
2033	\$1,523,186	\$1,460,751
2034	\$1,538,418	\$1,465,102
2035	\$1,553,802	\$1,469,467
2036	\$1,569,340	\$1,473,845
2037	\$1,585,033	\$1,478,236
2038	\$1,600,884	\$1,482,640
2039	\$1,616,893	\$1,487,057
2040	\$1,633,061	\$1,491,487
2041	\$1,649,392	\$1,495,930
2042	\$1,665,886	\$1,500,387
2043	\$1,682,545	\$1,504,857
2044	\$1,699,370	\$1,509,340
2045	\$1,716,364	\$1,513,836
2046	\$1,733,528	\$1,518,346
0	\$0	\$0
0	\$0	\$0
0	\$0	\$0
0	\$0	\$0
0	\$0	\$0
0	\$0	\$0
0	\$0	\$0
0	\$0	\$0
0	\$0	\$0
0	\$0	\$0
0	\$0	\$0
0	\$0	\$0

Total = \$29,525,118

NOTE:

This calculation relies on the real discount rate, which accounts for inflation. No further discounting is necessary.



Public Works
 350 S. Fifth St. - Room 239
 Minneapolis, MN 55415
 612.673.3000
www.minneapolismn.gov

April 1, 2022

Ms. Elaine Koutsoukos
 Metropolitan Council
 390 North Robert Street
 St. Paul, Minnesota 55101

Re: 2022 Regional Solicitation Applications

Dear Ms. Koutsoukos,

The City of Minneapolis Department of Public Works is submitting a series of applications for the 2022 Regional Solicitation for Federal Transportation Funds. The applications and the required matching funds have been authorized by the Minneapolis City Council as described in the Official Proceedings of the Council meetings on March 24, 2022. The City is submitting applications for 14 projects, as listed in the table below, and commits to operate and maintain these facilities through their design life.

Project Name	Regional Solicitation Category
7th Street N from 10th Street to Lyndale Avenue	Roadway Reconstruction/ Modernization
35th Street E and 36th Street E from Nicollet Avenue to Park Avenue	Roadway Reconstruction/ Modernization
26th Street E and Hiawatha Avenue intersection	Spot Mobility and Safety
Intelligent Transportation System Upgrades and Enhancements	Traffic Management Technologies
Nicollet Avenue S Bridge over Minnehaha Creek	Bridge Rehabilitation/Replacement
5th Street Transit Center	Transit Modernization
Northside Greenway (Humboldt/Irving Avenue N from 26th Avenue N to 44th Avenue N)	Multiuse Trails and Bicycle Facilities
2nd Street N protected bikeway from Plymouth Avenue N to Dowling Avenue N	Multiuse Trails and Bicycle Facilities
9th Street S and 10th Street S protected bikeway from Park Avenue to Hennepin Avenue	Multiuse Trails and Bicycle Facilities
42nd Street E pedestrian safety improvements	Pedestrian Facilities
1st Avenue N from Washington Avenue to 8th Street N pedestrian improvements	Pedestrian Facilities
Elliot Park neighborhood pedestrian improvements	Pedestrian Facilities
21st Avenue S - Safe Routes to School	Safe Routes to School
Whittier International Elementary – Safe Routes to School	Safe Routes to School

The specific applications are described in the attached "Request for City Council Committee Action." Thank you for the opportunity to submit these applications.

Sincerely,

DocuSigned by:

Margaret Anderson Kelliher

B599A2DA0E77408...

Margaret Anderson Kelliher
Director of Public Works



Council Action No. 2022A-0248

City of Minneapolis

File No. 2022-00268

Committee: PWI

Public Hearing: None

Passage: Mar 24, 2022

Publication:

APR 01, 2022

RECORD OF COUNCIL VOTE				
COUNCIL MEMBER	AYE	NAY	ABSTAIN	ABSENT
Payne	X			
Wonsley Worlobah	X			
Rainville	X			
Vetaw	X			
Ellison	X			
Osman	X			
Goodman	X			
Jenkins	X			
Chavez	X			
Chughtai	X			
Koski	X			
Johnson	X			
Palmisano	X			

MAYOR ACTION

☒ APPROVED☐ VETOED

MAYOR

MAR 28 2022

DATE

Certified an official action of the City Council

ATTEST:

CITY CLERK

Presented to Mayor:

MAR 24 2022

Received from Mayor:

MAR 30 2022

The Minneapolis City Council hereby:

1. Authorizes the submittal of a series of grant applications for federal transportation funds through Metropolitan Council's 2022 Regional Solicitation Program.
2. Authorizes the commitment of local funds to provide the required local match for the federal funding.

Grant applications for 2022 Metropolitan Council Regional Solicitation for federal transportation funds (RCA-2022-00256)

Home > Legislative File 2022-00268 > RCA

ORIGINATING DEPARTMENT

Public Works Department

To Committee(s)

#	Committee Name	Meeting Date
1	Public Works & Infrastructure Committee	Mar 17, 2022

LEAD Ethan Fawley, Vision Zero Program Coordinator, **PRESENTED BY:** Ethan Fawley, Vision Zero Program
STAFF: Transportation Planning and Programming Coordinator, Transportation Planning and Programming

Action Item(s)

#	File Type	Subcategory	Item Description
1	Action	Grant	Authorizing the submittal of a series of grant applications for federal transportation funds through Metropolitan Council's 2022 Regional Solicitation Program.
2	Action	Grant	Authorizing the commitment of local funds to provide the required local match for the federal funding.

Ward / Neighborhood / Address

#	Ward	Neighborhood	Address
1.	All Wards		

Background Analysis

Public Works will prepare a series of applications for the 2022 Regional Solicitation for Federal Transportation Funds in response to the current Metropolitan Council solicitation. This request includes a summary of the eligible project areas, a brief description of proposed city projects, estimate of requested amounts, and the minimum local match. Each project requires a minimum 20% local match for construction in addition to the costs for design, engineering, administration, any right-of-way acquisition, and any additional construction costs to fully fund the project. These applications will maximize the use of federal funding. The funding is for projects to be constructed in federal fiscal years 2026 and 2027. Grant awards for these projects are expected to be announced in early 2023.

Public Works identifies projects that meet the eligibility requirements for federal funding and closely evaluates which applications to submit in a manner that is consistent with the equity-based approach used to select and prioritize projects as a part of the Capital Improvement Program (CIP). Additional consideration is given to the criteria used in application scoring, such as: role in the regional transportation system and economy, equity, affordable housing, asset condition, safety, connectivity, cost-benefit, operational benefits, number of users and multimodal elements. Public Works also considers project readiness, cost, deliverability, and alignment with adopted plans, policies, and initiatives (e.g., *Minneapolis 2040*, *20 Year Street Funding Plan*, the Transportation Action Plan, Complete Streets Policy and Vision Zero).

The 2022 Regional Solicitation for federal transportation funding is part of Metropolitan Council's federally-required continuing, comprehensive, and cooperative transportation planning process for the Twin Cities Metropolitan Area. The funding program and related rules and requirements are established by the U.S. Department of Transportation and administered locally through collaboration with the Federal Highway Administration, the Federal Transit Administration, and the Minnesota Department of Transportation.

Applications are grouped into three primary modal evaluation categories; each category includes several sub-categories as detailed below.

1. Roadways Including Multimodal Elements
 - Strategic Capacity (Roadway Expansion)
 - Roadway Reconstruction/Modernization
 - Traffic Management Technologies (Roadway System Management)
 - Bridge Rehabilitation/Replacement
 - Spot Mobility and Safety
2. Transit and Travel Demand Management (TDM) Projects
 - Arterial Bus Rapid Transit Project
 - Transit Expansion
 - Transit Modernization
 - Travel Demand Management
3. Bicycle and Pedestrian Facilities
 - Multiuse Trails and Bicycle Facilities
 - Pedestrian Facilities
 - Safe Routes to School (Infrastructure Projects)
4. Unique Projects

Public Works is recommending the submittal of up to 15 applications, which are summarized below. See attachment for specific project locations. Public Works is not planning to submit in categories that don't align with our goals (Road Expansion) or where partner agencies will be submitting projects as the project sponsor (Transit and TDM).

Project Name	Category	Maximum Federal Amount (not every project will seek max)	Minimum Local Match Required for Maximum Award (20%)*
*Amounts shown indicate minimums only. Total project cost and local match anticipated to be higher for many projects.			
7th Street N from 10th Street to Lyndale Avenue	Roadway Reconstruction/ Modernization	\$7,000,000	\$1,400,000
35th Street E and 36th Street E from Nicollet Avenue to Park Avenue	Roadway Reconstruction/ Modernization	\$7,000,000	\$1,400,000
26th Street E and Hiawatha Avenue intersection	Spot Mobility and Safety	\$3,500,000	\$700,000
Intelligent Transportation System Upgrades and Enhancements	Traffic Management Technologies	\$3,500,000	\$700,000
Nicollet Avenue S Bridge over Minnehaha Creek	Bridge Rehabilitation/Replacement	\$7,000,000	\$1,400,000
5th Street Transit Center (still being finalized)	Transit Modernization	\$7,000,000	\$1,400,000 (match provided by MnDOT)
Northside Greenway (Humboldt/Irving Avenue N from 26th Avenue N to 44th Avenue N)	Multiuse Trails and Bicycle Facilities	\$5,500,000	\$1,100,000
2nd Street N protected bikeway from Plymouth Avenue N to Dowling Avenue N	Multiuse Trails and Bicycle Facilities	\$5,500,000	\$1,100,000
9th Street S and 10th Street S protected bikeway from Park Avenue to Hennepin Avenue	Multiuse Trails and Bicycle Facilities	\$5,500,000	\$1,100,000
42nd Street E pedestrian safety improvements	Pedestrian Facilities	\$2,000,000	\$400,000
1st Avenue N from Washington Avenue to 8th Street N pedestrian improvements	Pedestrian Facilities	\$2,000,000	\$400,000
Elliot Park neighborhood pedestrian improvements	Pedestrian Facilities	\$2,000,000	\$400,000
21st Avenue S - Safe Routes to School	Safe Routes to School	\$1,000,000	\$200,000
Whittier International Elementary – Safe Routes to School	Safe Routes to School	\$1,000,000	\$200,000
Mobility Hubs	Unique Projects	\$2,500,000	\$500,000 (half of match will be provided by Metro Transit)
Totals		\$62,000,000	\$12,400,000

Details of the proposed applications are described below.

7th Street North from 10th Street North to Lyndale Avenue

The proposed project is a complete reconstruction of 7th Street North from 10th Street N to Lyndale Avenue N, approximately 0.5 miles. 7th Street North has been identified as a future reconstruction candidate, driven primarily by deteriorating and aging infrastructure conditions. This is also a High Injury Street, on the Pedestrian Priority Network, a Transit Priority Project, and an All Ages and Abilities bikeway. This project will be coordinated with planned Blue Line Extension Light Rail Transit project work in the area. This segment is programmed in the City's Capital Improvement Program (CIP) for reconstruction in 2027. The proposed project will reconstruct the pavement surface, curb and gutter, signage, storm drains, driveway approaches, traffic signals, striping, lighting, street trees, sidewalks, and ADA ramps. The project will also provide an opportunity for safety enhancements along the street, improvements to the pedestrian realm, upgrading the existing bicycle facility to provide separation between vehicles and bicycles, and infrastructure to support transit.

Program Category: Roadway Reconstruction/Modernization

35th Street East and 36th Street East from Nicollet Avenue to Park Avenue

The proposed project is a complete reconstruction of 35th Street E and 36th Street E from Nicollet Avenue to Park Avenue, approximately 1.2 miles total. Both streets have been identified as future reconstruction candidates, driven primarily by deteriorating and aging infrastructure conditions. Both streets are High Injury Streets and on the Pedestrian Priority Network; a portion of 35th Street is on the All Ages and Ability bikeway network. The proposed project will reconstruct the pavement surface, curb and gutter, traffic signals, lighting, ADA ramps, some sidewalks, as well as construct a bicycle facility and safety improvements. The 35th Street E segment is programmed in the City's Capital Improvement Program (CIP) for reconstruction in 2026 and the 36th Street segment is programmed for 2027.

Program Category: Roadway Reconstruction/Modernization

26th Street East and Hiawatha Avenue intersection

This project proposes safety improvements at the intersection on 26th Street East and Hiawatha Avenue. The intersection is one of the 10 highest crash intersections in the city. The existing intersection currently features slip lanes on two approaches, wide turning radii, long pedestrian crossing distances, and no bikeway connection between the Hiawatha trail and bikeway on 26th Street west of the intersection. The project would work with MnDOT to improve safety for all modes of travel and create a dedicated bike connection on 26th Street East. This intersection improvement project was identified during planning for MnDOT's Hiawatha Avenue rehabilitation project, which will be implemented in 2022.

Program Category: Spot Mobility and Safety.

Intelligent Transportation System Upgrades & Enhancements

The purpose of the project is to upgrade the City's traffic management systems. Key features of the project include installing fiber optic cable to create a higher bandwidth and more reliable traffic communication network, deploying additional Closed Circuit Television cameras, upgrading detection systems, and installing infrastructure for advancements in connected vehicle to infrastructure technology in locations throughout the city. The City is collaborating with Hennepin County on the project.

Program Category: Traffic Management Technologies

Nicollet Avenue South Bridge over Minnehaha Creek

This project proposes the major repair and renovation of the Nicollet Avenue South Bridge over Minnehaha Parkway and Minnehaha Creek. Although the bridge does not need to be replaced, numerous bridge components are significantly deteriorated, in poor condition and should be repaired or replaced in order to extend the useful life of the structure. This project is programmed in the City's CIP for 2026.

Program Category: Bridge Rehabilitation/Replacement

5th St Transit Center (Ramp B)

The proposed project is a remodel of the Transit spaces in Ramp B. Key features of the project include new transit platforms, accessibility improvement, raised walkways, updated passenger waiting areas with new railing, lighting, and signage. Modernization of the interior lobby with new finishes, lighting and safety enhancements, and updates to the exterior with an improved pedestrian landmark, wayfinding finishes, enhanced lighting, and safety/visibility improvements.

Ramp B, the first of three State-owned ABC ramps to be built, was completed over 30 years ago in 1989. The State and City have a long-term contractual relationship for the City to manage, operate and maintain the ABC Ramps. As such the City (Public Works) would lead this proposed remodel project similar to current arrangements for other repair and construction projects for the ABC ramps. The State (MnDOT) will provide the required local match.

*Program Category: Transit Modernization*Northside Greenway Phase 1

The proposed project will create a Neighborhood Greenway along Humboldt/Irving Avenue N for approximately 2.5 miles in North Minneapolis, extending from 44th Avenue N to 26th Avenue N. This segment is currently a low volume residential street that connects several schools and parks. The corridor will receive a range of different neighborhood greenway treatments (as identified in the City's Street Design Guide) from block to block, including bicycle boulevard treatments, intersection improvements, and trail segments. The project will also include some ADA improvements to intersections. The project is programmed in the City's CIP in 2026.

*Program Category: Multiuse Trails and Bicycle Facilities*2nd Street North protected bikeway from Plymouth Avenue North to Dowling Avenue North

The proposed project will upgrade the existing unprotected bike lanes on 2nd Street North to protected bikeways and add pedestrian and intersection safety improvements. The 2.2-mile segment will improve connections to the riverfront at Plymouth Avenue North, 26th Avenue North, Lowry Avenue North, and the new public infrastructure associated with the Upper Harbor Terminal project. The project will also include ADA upgrades and potentially signal upgrades at some intersections.

*Program Category: Multiuse Trails and Bicycle Facilities*9th Street South and 10th Street South protected bikeway from Park Avenue to Hennepin Avenue

The proposed project will upgrade the existing unprotected bike lanes on 9th Street and 10th Street to protected bikeways and add pedestrian and intersection safety improvements. This is also a High Injury Street, on the Pedestrian Priority Network, and an All Ages and Abilities bikeway. Together the connections are 1.5 miles and address important east-west bikeway connections in downtown as well as a connection to the 7th Street bikeway heading to North Minneapolis.

*Program Category: Multiuse Trails and Bicycle Facilities*42nd Street East pedestrian safety improvements

The proposed project would include the implementation of pedestrian focused safety improvements at select intersections along 42nd Street between Nicollet Avenue and 18th Avenue S. 42nd Street is a High Injury Street and the improvements will build on 2022 Vision Zero capital program investments. Intersection improvements may include signal upgrades, ADA-compliant curb ramps, bump outs, medians, signage, traffic control devices, and pavement markings at select locations. Complimentary bikeway improvements may be considered as well. The improvements will be coordinated with a planned street resurfacing project.

*Program Category: Pedestrian Facilities*1st Avenue North from Washington Avenue to 8th Street pedestrian improvements

The proposed project would improve pedestrian safety and access along 1st Avenue North for 0.5 miles between Washington Avenue and 8th Street. 1st Avenue North is a High Injury Street with a narrow pedestrian realm in an area with high pedestrian demand. Improvements may include wider sidewalks, signal upgrades, ADA-compliant curb ramps, bump outs, signage, and greening.

*Program Category: Pedestrian Facilities*Elliot Park neighborhood pedestrian improvements

The proposed project would improve pedestrian safety and access at select intersections in the Elliot Park neighborhood such as along Chicago Avenue, 11th Avenue S, and 8th Street S. Chicago Avenue and 11th Avenue S are High Injury Streets. Intersection improvements may include signal upgrades, ADA-compliant curb ramps, bump outs, medians, signage, traffic control devices, and pavement markings at select locations.

*Program Category: Pedestrian Facilities*21st Avenue South - Safe Routes to School

The proposed project would include pedestrian and bicycle-related improvements along 21st Avenue South between 28th Street East/Midtown Greenway and 43rd Street East. The project will connect to South High School and Folwell Community School. Pedestrian and bicycle improvements may include ADA-compliant curb ramps, traffic circles, speed humps, speed tables, bump outs, medians, diverters, signage, traffic control devices, protected bikeways, and pavement markings at select locations.

*Program Category: Safe Routes to School*Whittier International Elementary - Safe Routes to School

The proposed project would include pedestrian and bicycle-related improvements near Whittier International Elementary School along 26th Street W, 27th Street W, and/or 28th Street W to provide a safer connection to the school for people walking or rolling. 26th Street and 28th Street are High Injury Streets and on the Pedestrian Priority Network and All Ages and Abilities bikeway network. Pedestrian and bicycle improvements may include ADA-compliant curb ramps, traffic circles, speed bumps, speed tables, bump outs, medians, diverters, signage, traffic control devices, protected bikeways, and pavement markings at select locations.

Program Category: Safe Routes to School

Mobility Hubs

The City is partnering with Metro Transit, the lead applicant, to submit an application to develop Mobility Hubs. The Metropolitan Council encouraged the City to apply jointly with Metro Transit, in response to each of our Letters of Interest previously submitted, to further enhance our projects and lead the region in this work. This funding for the Unique Projects category is for 2024 implementation. Since 2019, the City has piloted over two dozen safe, comfortable, and accessible locations that increase access to convenient low and no-carbon transportation options such as transit, bike, and scooter sharing. The City pilot also uses a community partnership model and ambassadors to engage and educate users on mobility hubs and new mobility options. The project will permanentize existing and popular mobility hub locations and install dedicated infrastructure such as micromobility parking areas, seating and other street furniture, lighting, mode finding, and other digital transportation signage. The project will also include development of branding, processes, and standards for mobility hub development to ensure consistency between cities across the region. The City and Metro Transit will each provide half of the required local match for this project.

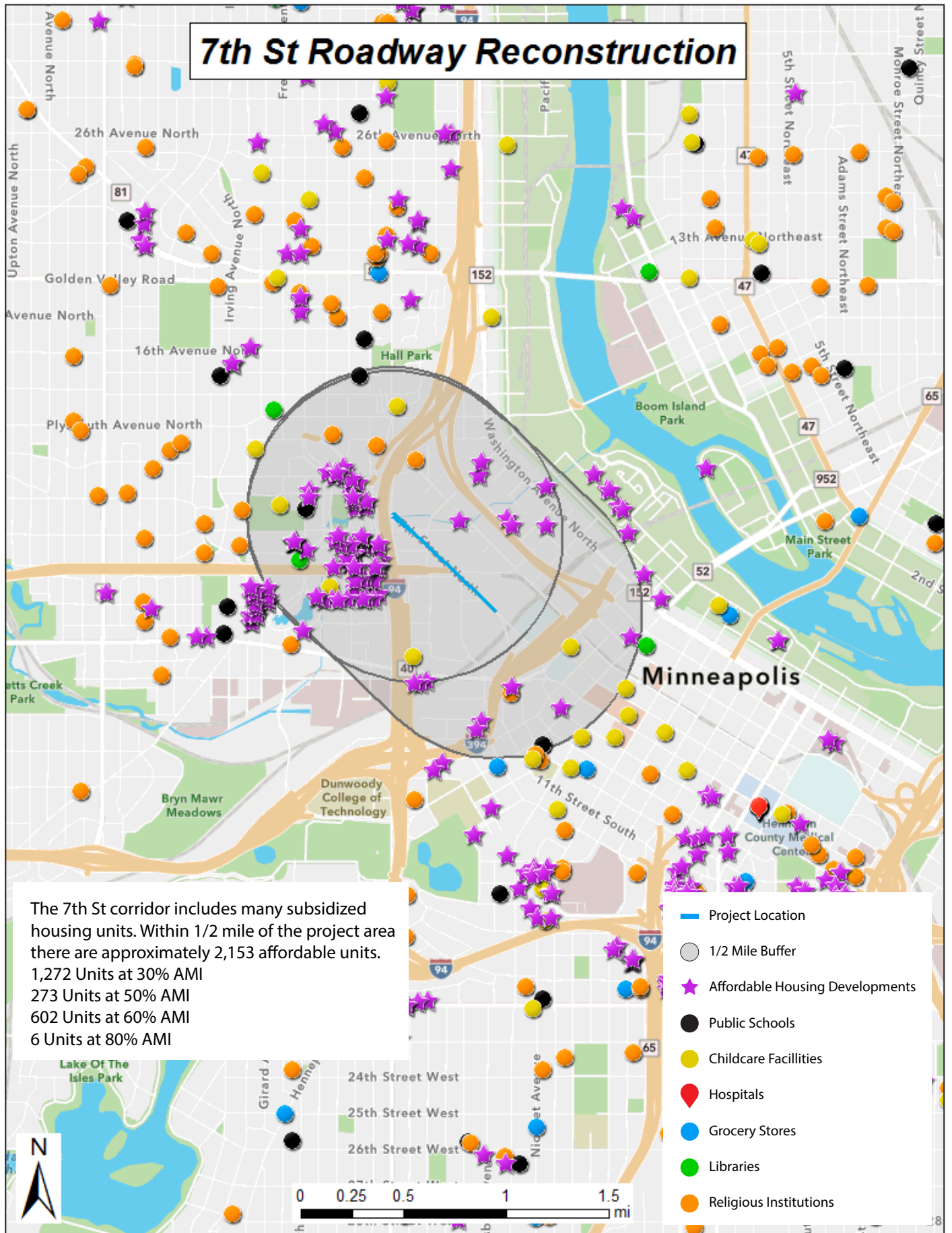
FISCAL NOTE

- Grant applications for 2022 Metropolitan Council Regional Solicitation for federal transportation funds - Fiscal Note

Attachments

2022 Regional Solicitation Project Map

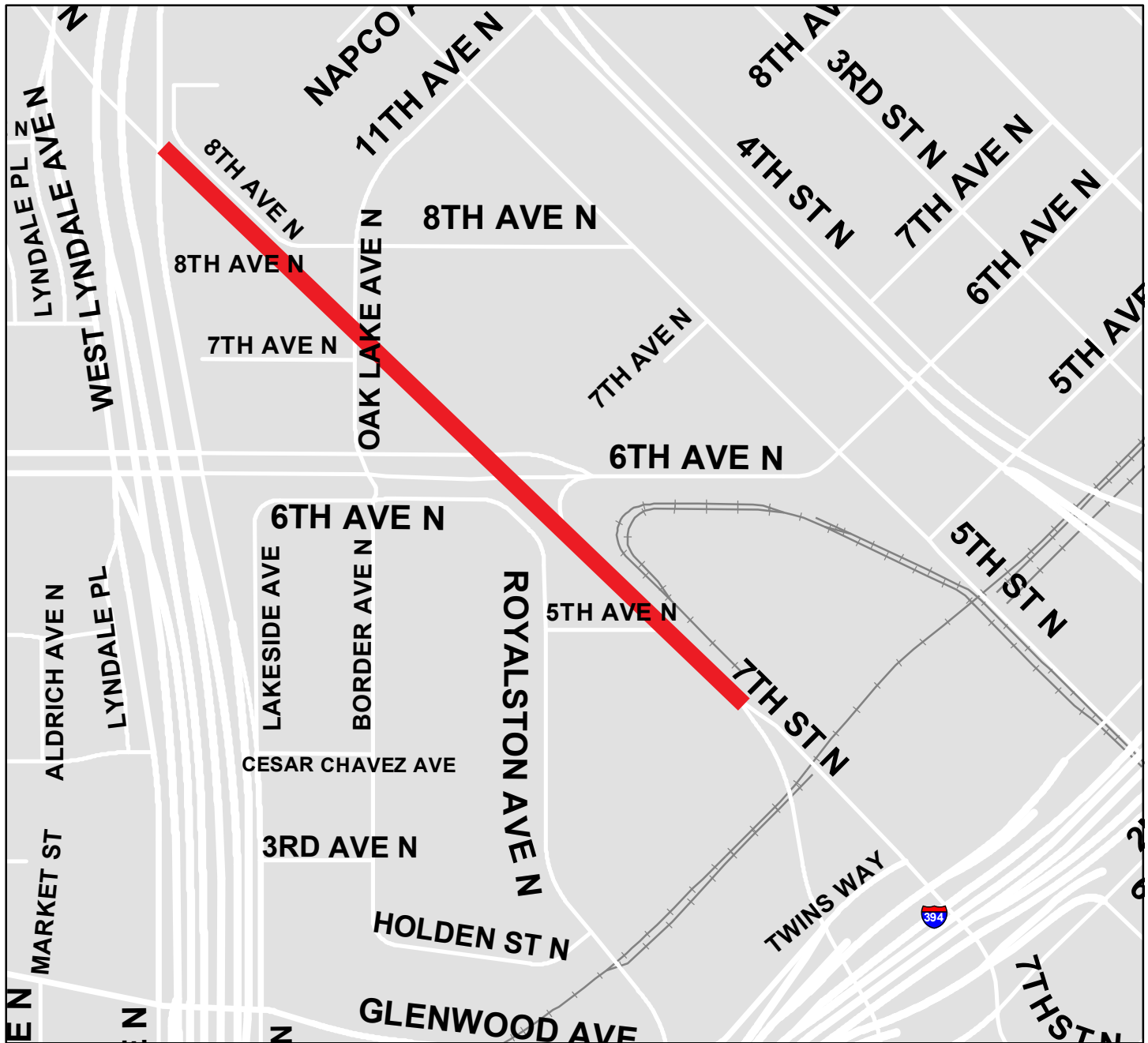
7th St Roadway Reconstruction



2022 TAB Regional Solicitation for Federal Funding in FFYs 2026 and 2027



Minneapolis
City of Lakes



 Project location



7th Street North Improvements

2022 TAB Regional Solicitation for Federal Funding in FFYs 2026 and 2027

Project Overview

The City of Minneapolis has identified 7th Street North, between 10th Street North and East Lyndale Avenue North, as a future reconstruction candidate, driven primarily by pavement condition, multimodal connections, number of daily users, as well as an opportunity to better plan for Metro Transit's future METRO Blue Line Extension and the METRO D Line, and accommodate the METRO C Line, local and express routes.

The Transportation Action Plan (2020), Complete Street Policy (2021), and the City's commitment to Vision Zero (2017) provide guidance for the redesign of 7th Street North. The reconstruction project provides an opportunity for geometric changes with a design that addresses current and future needs. Improvements may include the following elements:

- Reduce the number of travel lanes from 4 lanes to 2 lanes
- Make sidewalk and intersections accessible for all users, install durable pavement markings and crosswalks, support pedestrian activities with space for planting and furnishing zones where feasible
- Incorporate an improved bicycle facility consistent with All Ages and Abilities (AAA) standards
- Provide space for enhanced transit stops compatible with future METRO D Line BRT service
- Replace aging traffic signal and stormwater infrastructure
- Maintain mobility and circulation for motor vehicles

Requested Federal Amount: \$7,000,000

Total Project Cost: \$8,821,250

Project Schedule

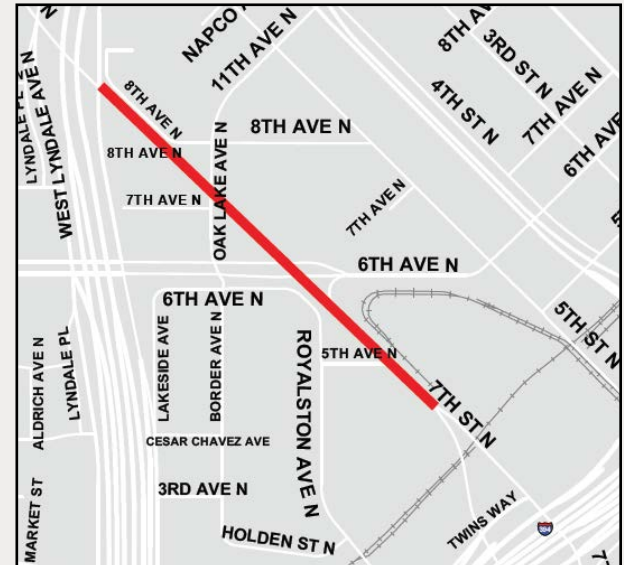


7th Street North is programmed in the City's Capital Improvement Program for reconstruction in 2027.

Contact

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Transportation Planning and Programming - Public Works
City of Minneapolis
612-673-3594
Rebecca.Hughes@minneapolismn.gov

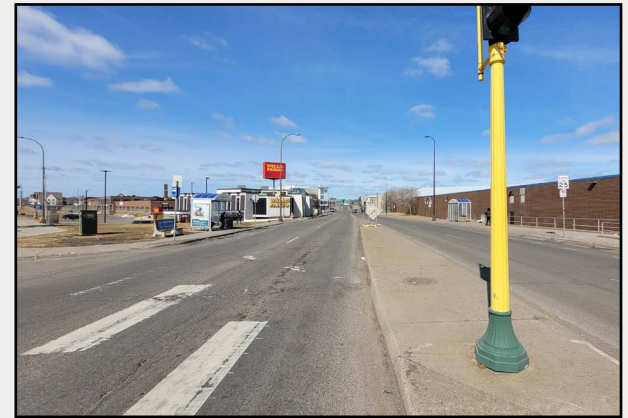
Project Area



— Project Location

Existing Conditions

7th Street North currently includes sidewalks on both sides of the street, four travel lanes, bike lanes, and a raised median or center turn lanes for select segments.



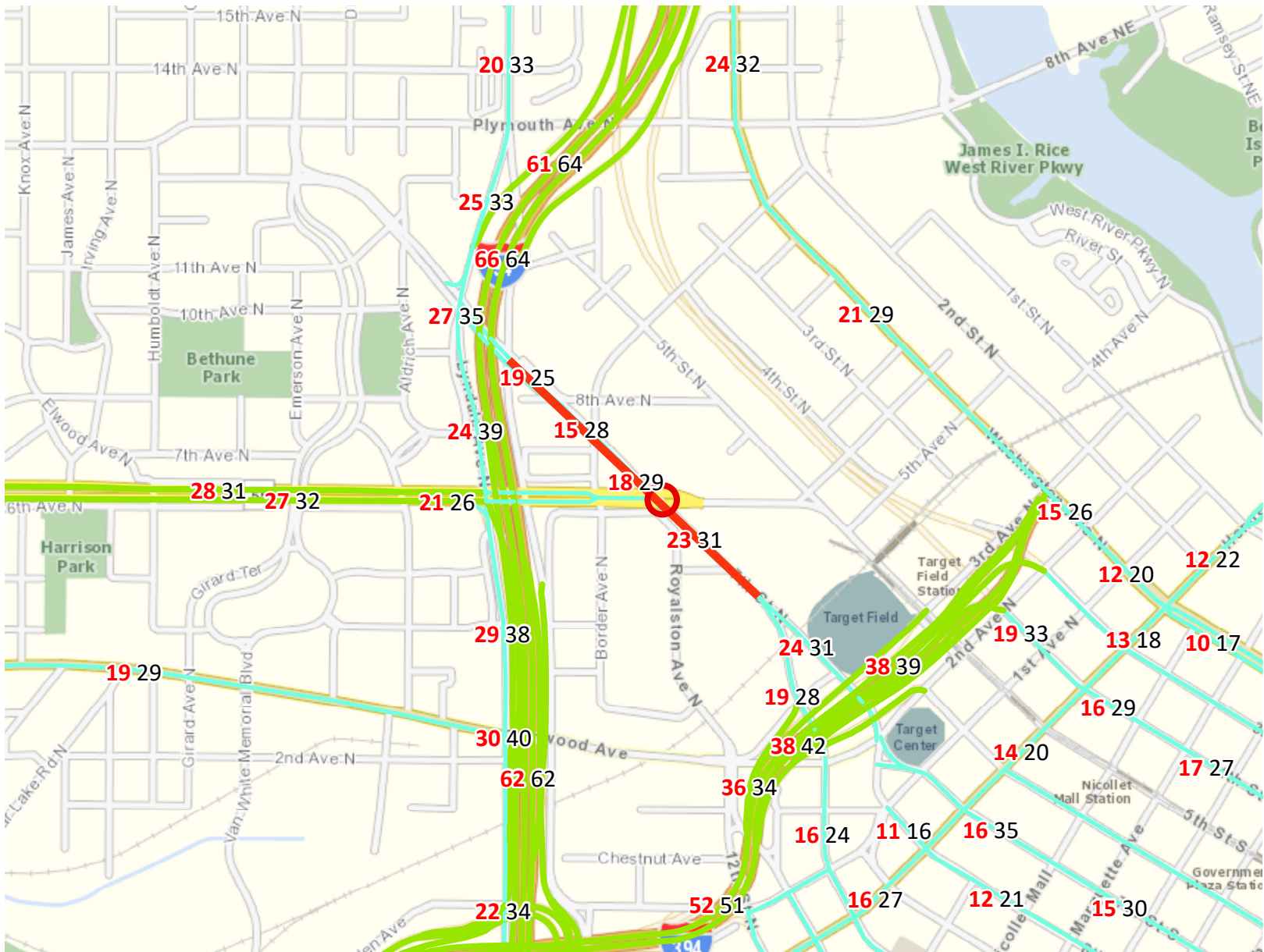
Daily Users

-  60 - 140 Pedestrians
-  110 - 160 Bicyclists
-  8,225 - 10,650 Vehicles

Source: Minneapolis Bicycle & pedestrian Counts and Minneapolis Public Works, Metro Transit and MNDOT

Level of Congestion

Roadway Reconstruction/Modernization Project: 7th Street North Minneapolis | Map ID: 1649854024301



○ Project Points Principal Arterials Principal Arterials Planned

Project A Minor Arterials A Minor Arterials Planned

0 0.125 0.25 0.5 0.75 1 Miles

Created: 4/13/2022
LandscapeRSA1



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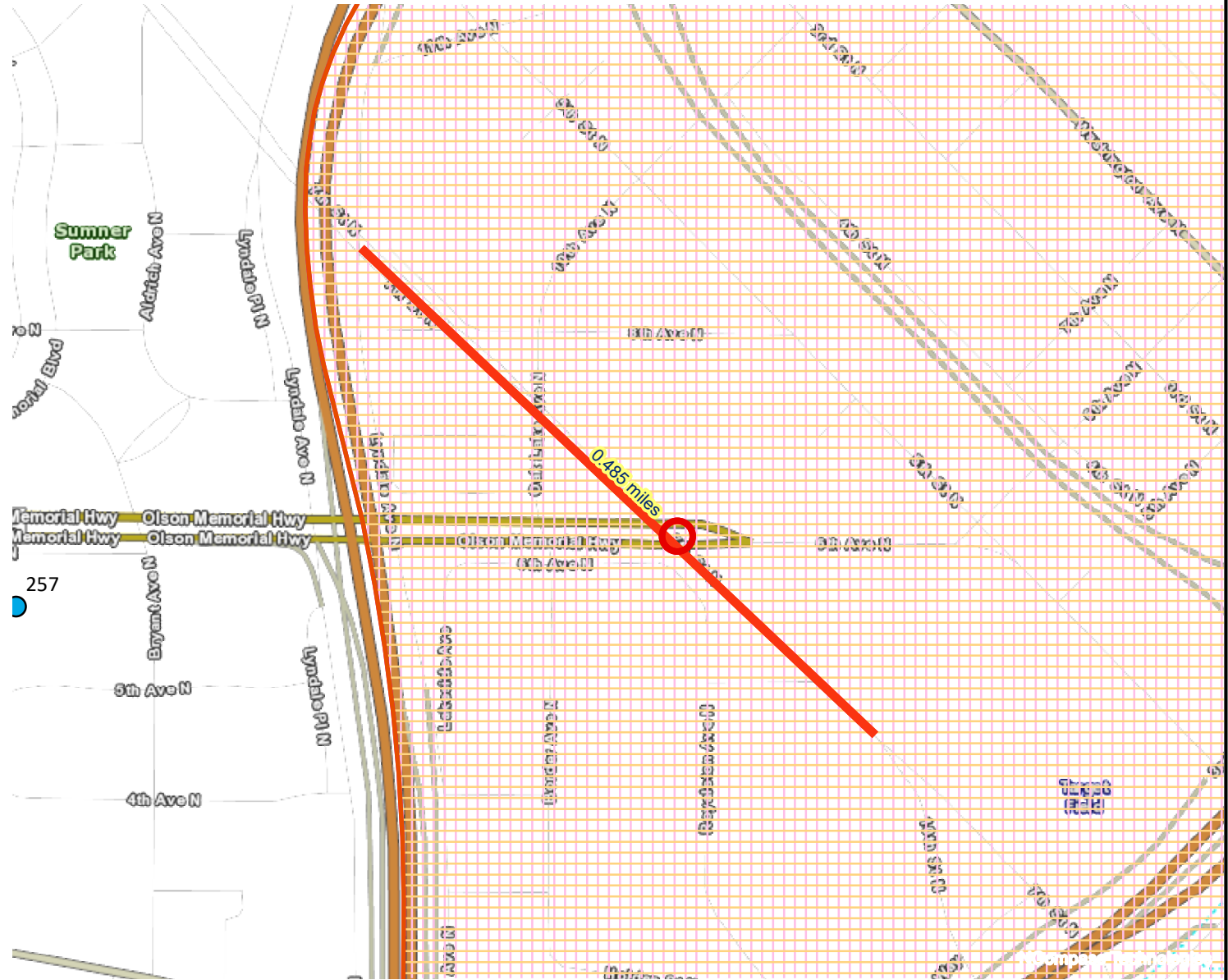
Regional Economy

Roadway Reconstruction/Modernization Project: 7th Street North Minneapolis | Map ID: 1649854024301

Results

WITHIN ONE MI of project:
Postsecondary Students: 8100

Totals by City:
Minneapolis
Population: 32039
Employment: 157538
Mfg and Dist Employment: 6460



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

0 0.05 0.1 0.2 0.3 0.4 Miles

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LandscapeRSA5



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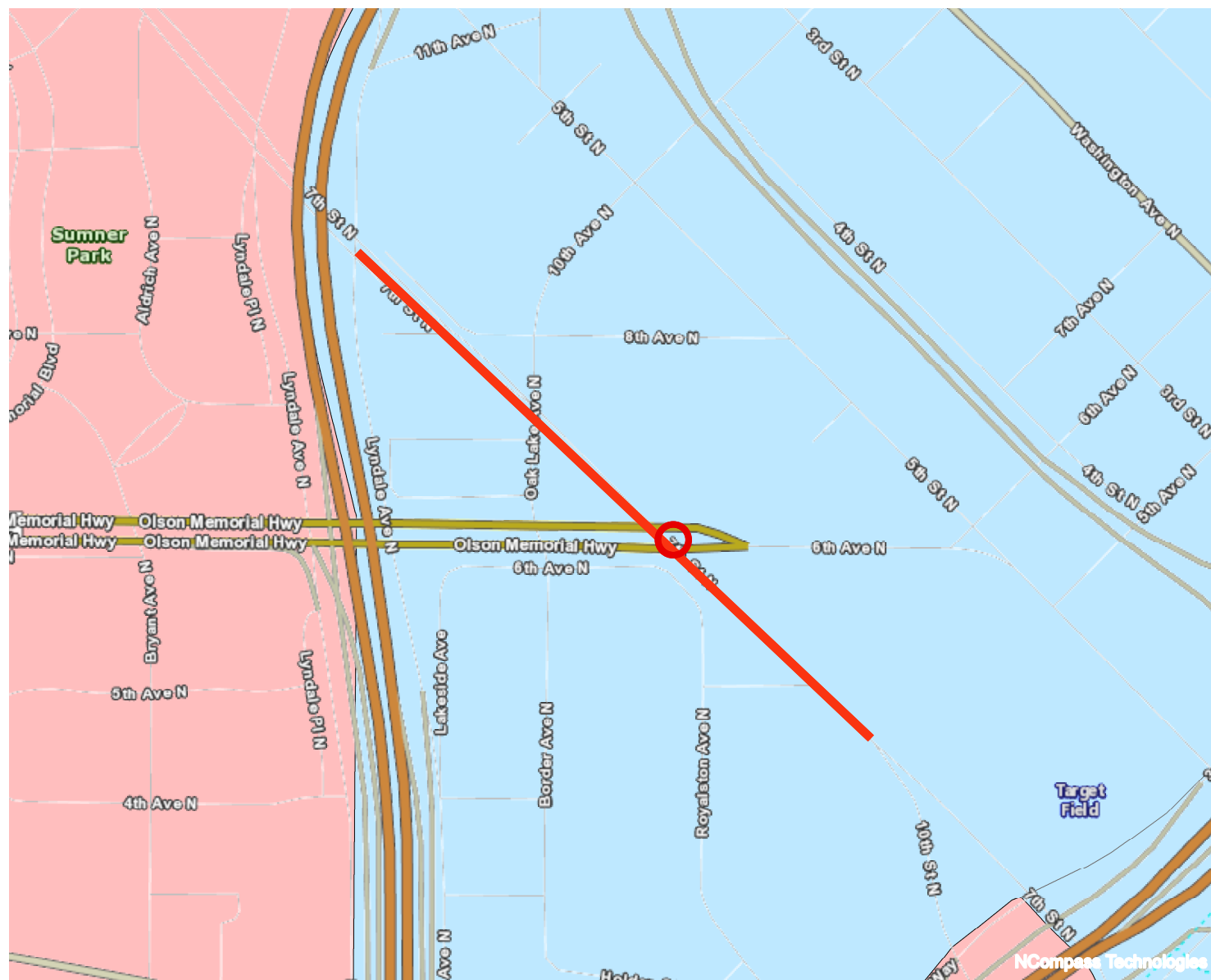
Socio-Economic Conditions

Roadway Reconstruction/Modernization Project: 7th Street North Minneapolis | Map ID: 1649854024301

Results

Total of publicly subsidized rental housing units in census tracts within 1/2 mile: 3839

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



Points



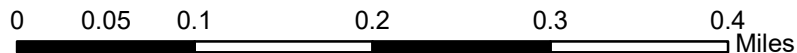
Area of Concentrated Poverty



Lines



Regional Environmental Justice Area



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LandscapeRSA2



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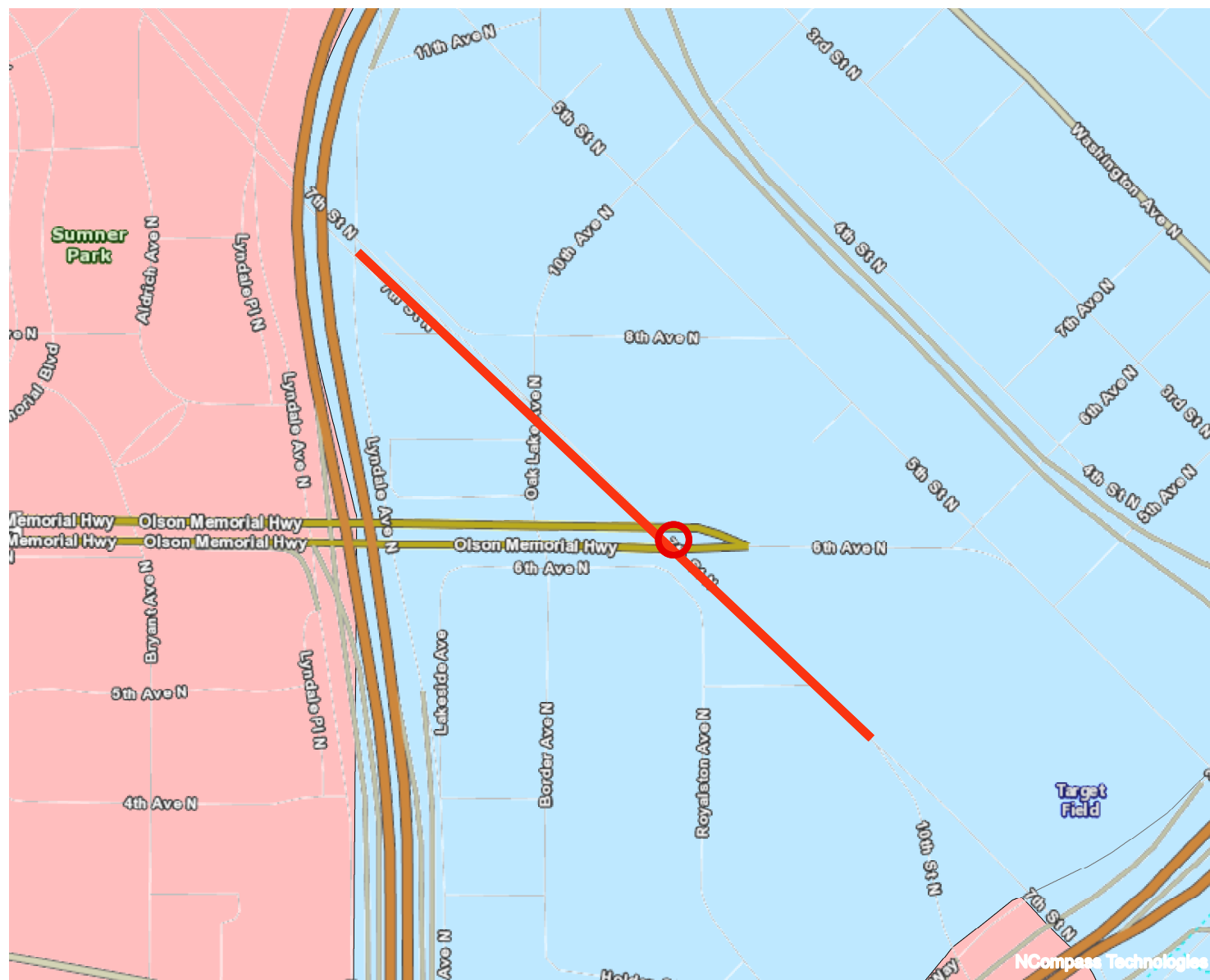
Socio-Economic Conditions

Roadway Reconstruction/Modernization Project: 7th Street North Minneapolis | Map ID: 1649854024301

Results

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Points



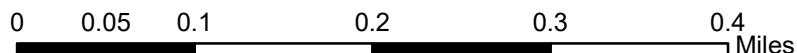
Area of Concentrated Poverty



Lines



Regional Environmental Justice Area



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LandscapeRSA2



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Transit Connections

Roadway Reconstruction/Modernization Project: 7th Street North Minneapolis | Map ID: 1649854024301

Results

Transit with a Direct Connection to project:

22 5 721 755 9 901 902 923

*Blue Line Extension

*D Line

*Green Line Extension

*Highway 169

*I-394/Hwy 55 (Option A)

*I-94 West

**indicates Planned Alignments*

Transit Market areas: 1

