



Application

17071 - 2022 Roadway Spot Mobility

17577 - 26th and Hiawatha Safety Improvements Project

Regional Solicitation - Roadways Including Multimodal Elements

Status: Submitted
Submitted Date: 04/14/2022 3:23 PM

Primary Contact

Name:* She/her/her Kelsey Fogt
Pronouns First Name Middle Name Last Name

Title: Transportation Planner

Department: Public Works

Email: kelsey.fogt@minneapolismn.gov

Address: 505 4th Avenue South
Room 410

***:** Minneapolis Minnesota 55415
City State/Province Postal Code/Zip

Phone:* 612-673-3885
Phone Ext.

Fax:

What Grant Programs are you most interested in? Regional Solicitation - Bicycle and Pedestrian Facilities

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 26th and Hiawatha Safety Improvements Project
Primary County where the Project is Located Hennepin
Cities or Townships where the Project is Located: Minneapolis
Jurisdictional Agency (If Different than the Applicant):

The proposed project includes the intersection reconstruction of 26th Street East and Hiawatha Avenue (Trunk Highway 55) to improve the safety, accessibility, mobility and travel experience for all intersection users. This intersection provides access to residential, recreational, industrial and commercial areas, and plays an important role in the regional transportation needs for all travel modes.

Hiawatha Avenue is a Principal Arterial and 26th Street East is a local street at Hiawatha Ave that transitions to an Other Arterial at Cedar Ave two blocks to the west of the intersection. The Blue Line Light Rail Transit and Hiawatha LRT trail run adjacent to Hiawatha Ave and cross 26th St E 100 feet to the east. The Little Earth American Indian community and the East Phillips residential neighborhood is located adjacent to the proposed intersection project, and a large urban industrial area with several schools, places of worship and employment opportunities are located to the east of the intersection. Hiawatha Avenue provides vehicular and freight access to downtown Minneapolis and supports multi-modal connections to shopping centers and other destinations to the south. This generates a substantial amount of regional freight and customer traffic through the 26th St and Hiawatha Ave intersection.

Both corridors are part of the pedestrian, bicycle and freight priority networks in the City's Transportation Action Plan, and Hiawatha Avenue is designated as a 10-ton truck route. There is an existing multi-modal trail and sidewalk on both sides of Hiawatha Ave, and sidewalks along 26th St. There is a protected bikeway on 26th Street and an existing bikeway gap between the start of this facility and the Hiawatha LRT trail.

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

This intersection is extremely crash prone and is identified in the City's Vision Zero Crash Study as experiencing the 2nd most vehicle crashes and the most bicycle crashes within city limits. The intersection is the first at-grade intersection for motorists traveling southbound from downtown Minneapolis, I-94 or 35W, and the last at-grade intersection before northbound motorists enter the interstate system.

This project will address the existing and future safety issues through but not limited to the following improvements:

- Slow approaching traffic by bumping out curb lines, removing free right turns and porkchops.
- Providing advanced warning of signal changes for approaching motorists through advanced signage and signal heads over each lane.
- Eliminating a bicycle network gap by constructing a westbound trail connection between the Hiawatha LRT trail and the existing 26th Street protected bikeway.
- Improving pedestrian infrastructure, including accessible pedestrian signals, high visibility crosswalks and improved lighting.

(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.](#)

26th Street E and Hiawatha Ave/TH55, reconstruction of turn lanes, traffic signal, intersection geometry, bicycle improvements, pedestrian improvements, ADA improvements

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)

0.2

to the nearest one-tenth of a mile

Project Funding

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

If yes, please identify the source(s)

Federal Amount \$1,329,600.00

Match Amount \$332,500.00

Minimum of 20% of project total

Project Total \$1,662,100.00

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

Match Percentage 20.0%

Minimum of 20%

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

Source of Match Funds City of Minneapolis

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: 2026

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: Roadway Projects

County, City, or Lead Agency City of Minneapolis

Functional Class of Road Principal Arterial, Other

Road System TH 55 and MSA 239

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

Road/Route No. 55239

i.e., 53 for CSAH 53

Name of Road Hiawatha Ave, 26th St E

Example; 1st ST., MAIN AVE

Zip Code where Majority of Work is Being Performed 55404

(Approximate) Begin Construction Date 04/01/2026

(Approximate) End Construction Date 10/01/2026

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

From:

(Intersection or Address)

To:

(Intersection or Address)

DO NOT INCLUDE LEGAL DESCRIPTION

Or At	26th St E and Hiawatha Ave
Miles of Sidewalk (nearest 0.1 miles)	0.2
Miles of Trail (nearest 0.1 miles)	0.2
Miles of Trail on the Regional Bicycle Transportation Network (nearest 0.1 miles)	0.2
Primary Types of Work	Sidewalk, Signals, Lighting, Storm Sewer, Traffic Control, Signing, Trail, ADA, Crossing Aids

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.

Goal B: Safety and Security - The regional transportation system is safe and secure for all users. (pgs. 2.5-2.8)

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

Strategy B1: Regional transportation partners will incorporate safety and security considerations for all modes and users throughout the processes of planning, funding, construction, and operation.

Strategy B6: Regional transportation partners will use best practice to provide and improve facilities for safe walking and bicycling, since pedestrians and bicyclists are the most vulnerable users of the transportation system.

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

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. (pgs. 2.10-2.24)

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.

Strategy C1: The Metropolitan Council will prioritize regional projects that are multimodal and cost effective and encourage investments to include appropriate provisions for bicycle and pedestrian

travel.

Strategy C2: Local units of government should provide a network of interconnected roadways, bicycle facilities, and pedestrian facilities to meet local travel needs using Complete Streets principles.

Strategy C17: Regional transportation partners will provide or encourage reliable, cost-effective, and accessible transportation choices that provide and enhance access to employment, housing, education, and social connections for pedestrians and people with disabilities.

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. (pgs. 2.30-2.31)

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.

Strategy E3: Regional transportation partners will plan and implement a transportation system that considers the needs of all potential users, including children, senior citizens, and persons with disabilities, and that promotes active lifestyles and cohesive communities. A special emphasis should be placed on promoting the environmental and

health benefits of alternatives to single-occupant vehicle travel.

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.

The project is identified as a priority in the City's Transportation Action Plan, which was adopted by Minneapolis City Council in December 2020. In that plan, it is included in the pedestrian, bicycle and freight priority networks. (Minneapolis Transportation Action Plan, pgs. 46-71, 72-102, 154-174)

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

This intersection is extremely crash prone, and is identified in the City's 2020-2022 Vision Crash Study as experiencing the 2nd most vehicle crashes and the most bicycle crashes within city limits. (Minneapolis Vision Zero Action Plan, pgs. 6-25)

Additionally, the project supports transportation goals and policies from the Minneapolis 2040 Comprehensive Plan, which was adopted in October 2019 (pgs. 137-148, 151-154, 169, 182-183, 228-229, 255).

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: 03/10/2022

Link to plan: <http://lms.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 1649197934410_2022ADATransitionPlanUpdate.pdf

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)	\$106,000.00
Removals (approx. 5% of total cost)	\$83,450.00
Roadway (grading, borrow, etc.)	\$19,500.00
Roadway (aggregates and paving)	\$55,550.00
Subgrade Correction (muck)	\$0.00
Storm Sewer	\$80,800.00
Ponds	\$0.00
Concrete Items (curb & gutter, sidewalks, median barriers)	\$45,500.00
Traffic Control	\$53,000.00
Striping	\$8,000.00
Signing	\$3,800.00
Lighting	\$30,000.00
Turf - Erosion & Landscaping	\$6,000.00
Bridge	\$0.00
Retaining Walls	\$0.00
Noise Wall (not calculated in cost effectiveness measure)	\$0.00
Traffic Signals	\$500,000.00
Wetland Mitigation	\$0.00
Other Natural and Cultural Resource Protection	\$0.00
RR Crossing	\$140,000.00
Roadway Contingencies	\$400,000.00
Other Roadway Elements	\$4,000.00
Totals	\$1,535,600.00

Specific Bicycle and Pedestrian Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Path/Trail Construction	\$0.00
Sidewalk Construction	\$0.00
On-Street Bicycle Facility Construction	\$0.00
Right-of-Way	\$0.00

Pedestrian Curb Ramps (ADA)	\$76,500.00
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	\$50,000.00
Other Bicycle and Pedestrian Elements	\$0.00
Totals	\$126,500.00

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	\$1,662,100.00
Construction Cost Total	\$1,662,100.00
Transit Operating Cost Total	\$0.00

Congestion within Project Area:

Free-Flow Travel Speed:	39
<i>The free-flow travel speed is the black number</i>	
Peak Hour Travel Speed:	22
<i>The peak hour travel speed is the red number</i>	
Percentage Decrease in Travel Speed in Peak Hour Compared to Free-Flow (calculation):	43.59%
Upload the "Level of Congestion" map:	1648148309636_LevelofCongestion.pdf

Congestion on adjacent Parallel Routes:

Adjacent Parallel Corridor	Cedar Ave
Adjacent Parallel Corridor Start and End Points:	
Start Point:	TH55
End Point:	28th St E
Free-Flow Travel Speed:	28
<i>The Free-Flow Travel Speed is black number.</i>	
Peak Hour Travel Speed:	15
<i>The Peak-Hour Travel Speed is red number.</i>	
Percentage Decrease in Travel Speed in Peak Hour Compared to Free-Flow (calculation):	46.43%
Upload the "Level of Congestion" map:	1648148309624_LevelofCongestion_ParallelRoute.pdf

Principal Arterial Intersection Conversion Study:

Proposed at-grade project that reduces delay at a High Priority Intersection:	
<i>(70 Points)</i>	
Proposed at-grade project that reduces delay at a Medium Priority Intersection:	
<i>(65 Points)</i>	
Proposed at-grade project that reduces delay at a Low Priority Intersection:	
<i>(60 Points)</i>	
Not listed as a priority in the study:	Yes
<i>(0 Points)</i>	

Congestion Management and Safety Plan IV:

Proposed at-grade project that reduces delay at a CMSP opportunity area:	Yes
---	-----

(70 Points)

Not listed as a CMSP priority location:

(0 Points)

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: Yes

Miles: 0.1

(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: 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:

Within a ½ mile of the proposed project, 76% of people identified as non-White or of Hispanic/Latinx origin (2020 Census). In comparison, approximately 37% of the population in Minneapolis is non-White. More than a quarter of the population within a half mile (27%) are low-income, 31% of households have no access to a car, and 14% have a disability. This area has a much higher percentage of these populations compared to Minneapolis as whole (18% living in poverty, 16% access to a vehicle, 9% with a disability).

Response:

This project is being proposed because of findings and engagement around the Minneapolis Transportation Action Plan (TAP), Vision Zero Action Plan (VZAP), Southside Green Zone, Minneapolis Safe Routes to School plan, project engagement for the Phillips Traffic Safety Improvements project and the Little Earth Transportation Study, as well as community feedback from other venues. These included focused efforts to engage traditionally underrepresented communities. For the TAP and VZAP, engagement included separate dialogues in-language with members from 7 communities: African American, East African, Latino, Native American, Minneapolis Youth Congress, people with disabilities, and Southeast Asian. It 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.

The Phillips Traffic Safety Improvements project and Little Earth Transportation Study continued additional engagement events with residents and

organizations in the Phillips and Little Earth communities. Several of those engagement activities took place within ½-mile of the project area, including community events with neighborhood associations, Little Earth, and Comunidades Latinas Unidas en Servicio (CLUES). Tabling events with materials in multiple languages (English, Somali and Spanish) were held at Little Earth, Mercado Central, Waite House, the 24th Street Somali Mall, 13th Avenue Mall and Anderson School/Stewart Park.

The most common concerns residents shared were related to speeding or aggressive driving, sight issues around lighting and parked cars making it hard to see approaching traffic and for drivers to see pedestrians and bikers, and unsafe conditions for biking especially regarding turning cars not yielding to bikes crossing the street.

(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.

The 26th Street and Hiawatha Avenue spot mobility project provides safety, access and public health benefits to nearby Black, Indigenous and People of Color populations, low-income populations, children, people with disabilities, youth and older adults.

Safety

The proposed project will slow approaching and turning traffic by adding curb extensions and removing free right turns and porkchops. These improvements will encourage safer travel speeds for all users, thereby creating safer and more comfortable crossings for pedestrians and bicyclists. Additionally, the project will fill an existing bikeway gap between the Hiawatha LRT trail to the east of the intersection and the existing protected bikeway on 26th Street.

Response:

As identified in the Minneapolis Vision Zero Action Plan, this intersection has the 2nd most vehicle crashes and the most bicycle crashes within city limits. This area is also in an area of concentrated poverty and a regional environmental justice area.

Access

The project will improve access across Hiawatha Ave (TH55), connecting people to destinations such as jobs, schools, health care and cultural destinations such as places of worship. The project will provide more comfortable access to these destinations for people walking, rolling and biking. These modes are critical as 31% of households within ½ mile of the project do not have a vehicle. Because of this, the pedestrian and bicycle safety improvements will benefit under-represented populations by improving connections to existing job opportunities, including retail and industrial businesses nearby and in adjacent areas. The

project will also include ADA upgrades, removing barriers for people with disabilities.

Public Health

The proposed intersection improvements will close a gap and improve crossing safety along the All Ages and Abilities biking network and provide safety and comfort improvements for people walking through improved sidewalks, curb extensions and lighting. These improvements will encourage residents to walk and bike for daily transportation needs and recreation. These improvements will provide improved access to existing regional trails, including the Little Earth Trail, the Hiawatha LRT Trail and the Midtown Greenway Trail. The project will also improve community connections to the Cedar Field Park, East Phillips Park Cultural and Community Center, and Steward Park.

Negative Impacts

The proposed project will not have any adverse effects on BIPOC populations, low-income populations, children, people with disabilities or the elderly. During construction, access to housing and businesses will be maintained, detours will be established for all users, and construction nuisances such as noise, dust and traffic will be mitigated to the extent possible.

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

Measure C: Affordable Housing Access

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

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

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

The proposed project will improve access to approximately 843 existing units of affordable housing as shown on the attached project map and affordable housing list. This includes:

-Village in Phillips (18 affordable units; 8 units 50% AMI, 10 units 60% AMI)

-Little Earth (212 affordable units; 78 units 50% AMI, 134 units 60% AMI)

-Mino-Bimaadiziwan (110 affordable units; 6 units 30% AMI, 60 units 50% AMI, 44 units 60% AMI)

-Heltzer Manor (109 affordable units; 109 units 30% AMI)

-Snelling Avenue Apartments (60 affordable units; 60 units 50% AMI)

Response:

-Lake Street Station (64 affordable units; 64 units 60% AMI)

-Snelling Apartments (60 affordable units; 60 units 50% AMI)

-Rising Cedar Apartments (40 affordable units; 20 units 30% AMI, 20 units 50% AMI)

-Milwaukee Townhomes (12 affordable units; 12 units 30% AMI)

-Bii Di Gain Dash Anwebi Elder Housing (47 affordable units; 47 units 50% AMI)

-Matthew Park Cooperative (24 affordable units; 24 units 30% AMI)

-Hiawatha Commons (64 affordable units; 8 units 30% AMI, 17 units 50% AMI, 39 units 60% AMI)

-Cedar28 (5 affordable units; 3 units 50% AMI, 1 unit 60% AMI, 1 unit 80% AMI)

-2904 18th Ave South (12 affordable units; 12 units 60% AMI)

-Seward (6 affordable units; 6 units 60% AMI)

As shown in the attached map, there are many important destinations for residents on either side of Hiawatha Avenue, including schools, childcare facilities, hospitals, grocery stores, libraries and religious institutions. The project will provide safer and more comfortable walking and biking facilities for residents in affordable housing, who are more likely not to own a private vehicle.

Further, the project improves access for affordable housing residents by improving intersection geometry and ADA infrastructure to provide safer travel conditions for pedestrians and bicyclists. This will provide more accessible and safer connections to critical destinations for residents in nearby affordable housing.

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

Measure D: BONUS POINTS

Project is located in an Area of Concentrated Poverty:

Yes

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

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

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

1649860122957_SocioEconomicMap_combined.pdf

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:	EXPLANATION of methodology used to calculate railroad crossing delay, if applicable.	Synchro or HCM Reports
72.0	116.0	-44	6323	6323	-278212	-278212	N/A	164981279 9851_26th _Hiawatha _Synchro.pdf
						-278212		

Vehicle Delay Reduced

Total Peak Hour Delay Reduced	-278212
Total Peak Hour Delay Reduced	-278212

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):
21.06	26.57	-5.51
21	27	-6

Total

Total Emissions Reduced:	-5.51
Upload Synchro Report	1649958688025_26th_Hiawatha_Synchro.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):

0

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

0

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

0

Total Parallel Roadway

Emissions Reduced on Parallel Roadways 0

Upload Synchro Report

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

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: Benefit of Crash Reduction

Crash Modification Factor Used:

(Limit 700 Characters; approximately 100 words)

Rationale for Crash Modification Selected:

(Limit 1400 Characters; approximately 200 words)

Project Benefit (\$) from B/C Ratio	\$18,420,165.00
Total Fatal (K) Crashes:	1
Total Serious Injury (A) Crashes:	1
Total Non-Motorized Fatal and Serious Injury Crashes:	1
Total Crashes:	52
Total Fatal (K) Crashes Reduced by Project:	1
Total Serious Injury (A) Crashes Reduced by Project:	1
Total Non-Motorized Fatal and Serious Injury Crashes Reduced by Project:	1
Total Crashes Reduced by Project:	20
Worksheet Attachment	1649964003487_Hiawatha 26th_CMFworksheet.pdf

CMF ID 1786 for install pedestrian crossing (signed and marked with curb ramps and extensions), and CMF ID 9123 for median treatment for ped/bike safety.

Although this intersection project will include a variety of improvements, CMFs were chosen for two project elements that are anticipated to have the biggest impact on safety. CMF ID 1786 and 9123 were found to be the most applicable CMFs to quantify the safety benefit of constructing curb extensions and pedestrian refuge islands at the intersection, respectively. CMF ID 1786 is applicable to all crash types, not just pedestrian or bicycle crashes, which captures the potential for decreased vehicular speeds in and around the intersection as a result of the improvements. CMF ID 9123 was utilized as it provided the greatest safety benefit despite only applying to the fatal pedestrian crash at the intersection.

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 doesn't 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 key priority for this project. Both Hiawatha Avenue and 26th Street are identified as Pedestrian Priority Network corridors. 26th Street is a Pedestrian Crash Concentration corridor as identified in the Minneapolis Pedestrian Crash Study and both streets are High Injury Streets in the Minneapolis Vision Zero Action Plan. From 2016 to 2021, there were 4 reported pedestrian crashes at this intersection, including 1 pedestrian death and 1 serious injury.

To improve pedestrian safety, the project will include a number of proven pedestrian safety best practices likely including:

Response:

-Removing free right turns from Hiawatha onto 26th Street to reduce right turning speeds and reduce conflicts with pedestrians.

-Installing curb extensions and removing one westbound lane on 26th Street to narrow crossing distances.

-Tightening curb radii to reduce turning speeds.

-Including lighting improvements to improve pedestrian visibility.

-Widening the center medians to be pedestrian refuge islands.

-Including pedestrian countdown timers.

(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:

(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 about 163 feet across Hiawatha Avenue and about 118 feet across 26th Street. This project will reduce the crossing distance and complexity of crossing Hiawatha Avenue and 26th Street. The project also upgrades the existing medians to pedestrian refuge islands. The project eliminates two free right turns to reduce exposure for pedestrians.

Response:

(Limit 1,400 characters; approximately 200 words)

If grade separated pedestrian crossings are being added and increasing crossing time, describe any features that are included that will reduce the detour required of pedestrians and make the separated crossing a more appealing option (e.g., shallow tunnel that 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:

N/A

(Limit 1,400 characters; approximately 200 words)

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

Response:

The current design encourages high speeds through the intersection and high turning speeds. A focus of this project is to better manage turning speeds by removing the free right turns and tightening curb radii. The project will also help manage through speeds by reducing lane widths and removing an unnecessary westbound through lane.

(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:

Hiawatha Avenue has a 40 mph speed limit with likely a higher design speed. 26th Street has a 25 mph speed limit and its design reflects a higher design speed from when the roadway had a higher speed limit. This redesign will seek to lower through speeds on 26th Street to a target speed of 25 mph to match the speed limit.

(Limit 1,400 characters; approximately 200 words)

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

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

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

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

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 Yes

List the AADT 43500

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.)

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

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

If checked, please describe:

(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:

-Little Earth housing complex near the northwest corner of the intersection;

-Little Earth Urban Farm

-Aurora Middle School near the southeast corner of the intersection; and

-Hiawatha LRT biking and walking trail

-Little Earth Trail

(Limit 1,400 characters; approximately 200 words)

Measure A: Multimodal Elements and Existing Connections

Response:

This project will support a variety of pedestrian and bicycle improvements. Currently the intersection includes free right turns and porkchop pedestrian islands and a bikeway gap between the Hiawatha LRT Trail and the start of the 26th Street protected bikeway. The proposed project will remove the free right turns and porkchop islands and provide curb extensions to slow turning vehicles and improve safety for pedestrians and bicyclists crossing Hiawatha Avenue or 26th Street. Curb extensions will increase visibility and simplify crossings for people walking, biking and driving. Existing medians will be extended to provide pedestrian and bicyclist refuge crossing medians on three of the four crossings. The project will also make lighting and ADA improvements to improve the travel experience, safety, security and accessibility for users. The existing bikeway gap between the Hiawatha LRT Trail and the 26th Street protected bikeway will be addressed through this project, providing a bicycle and pedestrian connection to several major trails including the Little Earth Trail, Hiawatha LRT Trail and the Midtown Greenway. This is consistent with the pedestrian and bicycle safety strategies identified in MnDOT's Best Practices for Pedestrian and Bicycle Safety.

The project intersection is part of the City's Pedestrian Priority Network and All Ages and Abilities bikeway network. It is an important connection between the Little Earth American Indian community, East Phillips and Longfellow residential neighborhoods and commercial and industrial areas to the east and south. There are also connections to separated commuter and recreational routes to downtown and south Minneapolis for people walking or biking via the Hiawatha LRT Trail. The Hiawatha LRT Trail also connects people walking and biking to the Blue Line Hiawatha LRT at the Franklin Ave Station and the Lake Street Station. Metro Transit Route 27

provides service to 28th Street two blocks south of 26th Street at Hiawatha Avenue, and Metro Transit Routes 22 and 27 provide service along Cedar Ave and 26th Street approximately 800 feet to the west of the project intersection.

Other pedestrian safety improvements include tighter radii for right-turn movements to create a safer environment for people walking and biking by slowing down motorists traveling through the intersection.

(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.

Yes

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.

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.

The Minneapolis Transportation Action Plan involved three years of public engagement, which included in-person events (community workshops, organization workshops, ward forums and other city-hosted events), online engagement (website, surveys, social media and online open houses), hosted community dialogues with historically underrepresented groups and partnered with community organizations and artists to engage with traditionally underrepresented groups. In the project area, these events included a community dialogue with the Latino community (14 participants), several events and outreach strategies to reach affordable housing residents which reached over 350 residents, four focus groups for Latino families (31 participants) and two discussions with members of the East African community (55 attendees). More information on events and engagement results are available at this website:

<https://go.minneapolismn.gov/get-involved>.

Response:

The Phillips Traffic Safety Improvements project and Little Earth Transportation Study continued additional engagement events with residents and organizations in the Phillips and Little Earth communities. Staff attended existing community events in collaboration with local organizations, such as neighborhood associations, Little Earth, and Comunidades Latinas Unidas en Servicio (CLUES). Additionally, staff held online and in-person engagement events, including community walks, an online open house and in-person meetings. Tabling events with materials in multiple languages (English, Somali and Spanish) were held at Little Earth, Mercado Central, Waite House, the 24th Street Somali Mall, 13th Avenue Mall and Anderson School/Stewart Park. An online survey and map were also used to provide additional opportunities for community members to share concerns and ideas. Overall, Public Works received 351 comments on the project during the first round

of engagement.

Participants in these engagement events shared that safety improvements were needed for people walking and biking to provide more safe, comfortable and accessible transportation options especially at 26th Street and Hiawatha Avenue.

(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):	\$1,662,100.00
Enter Amount of the Noise Walls:	\$0.00
Total Project Cost subtract the amount of the noise walls:	\$1,662,100.00
Enter amount of any outside, competitive funding:	\$0.00
Attach documentation of award:	
Points Awarded in Previous Criteria	
Cost Effectiveness	\$0.00

Other Attachments

File Name	Description	File Size
0_MPLSTAP_Final_v8.pdf	Minneapolis Transportation Action Plan Priority Networks	6.4 MB
0_Round One Engagement Summary.pdf	Engagement Summary	895 KB
0_VisionZeroCrashStudy.pdf	Minneapolis Vision Zero Crash Study	189 KB
0_VZ-Action-Plan-2020-22.pdf	Minneapolis Vision Zero Action Plan	318 KB
1_26th and Hiawatha_safety improvements_onepager.pdf	26th and Hiawatha Safety Improvement Project Summary	323 KB
2_26th_Hiawatha_Photo.pdf	26th and Hiawatha Project Photo	1.7 MB
3_26th and Hiawatha_Project Map.pdf	26th and Hiawatha Project Map	6.0 MB
4_MPLS 2022 Regional Solicitation Letter of Commitment.pdf	26th and Hiawatha Minneapolis Letter of Support	2.7 MB
5_RS MnDOT Letter Minneapolis Hiawatha_55 and 26th.pdf	26th and Hiawatha MnDOT Letter of Support	268 KB



2020-2022 Update

Americans with Disabilities Act (ADA) Transition Plan for Public Works



Table of Contents

Executive Summary	E-1
Legislative Mandate	E-1
Minneapolis Planning Guidance	E-1
Transition Plan Overview	E-3
Plan Recommendations	E-3
Anticipated Schedule	E-6
Chapter 1: ADA Transition Planning in the City of Minneapolis	1-1
ADA Transition Plan: Requirements and Process	1-2
Legislative Mandate	1-2
City of Minneapolis Approach.....	1-4
Minneapolis ADA Plans	1-4
Public Works’ ADA Vision and Approach.....	1-4
Jurisdictional Responsibilities for Building and Repairing ADA Infrastructure	1-6
Update Process	1-9
Chapter 2: Community Engagement	2-1
Engagement Approach.....	2-1
Stakeholder Groups.....	2-1
Public Engagement Opportunities.....	2-2
Engagement Results.....	2-3
Key Themes	2-3
Who Did We Hear From?.....	2-3
What Did Respondents Say?.....	2-6
From Here	2-11
Chapter 3: Self-Evaluation.....	3-1
ADA Criteria and Infrastructure Status	3-3
Data Collection	3-7
Areas for Improvement: Evaluating Pedestrian Curb Ramps	3-8

Traffic Signals	3-9
ADA Criteria and Infrastructure Status	3-10
Data Collection	3-10
Areas for Improvement: Traffic Signal Infrastructure	3-11
Sidewalks	3-11
ADA Criteria and Infrastructure Status	3-14
Data Collection	3-15
Street Crossings	3-16
ADA Criteria and Infrastructure Status	3-16
Data Collection	3-17
Programs, Policies, and Procedures	3-18
Conclusion	3-26
Chapter 4: Infrastructure Prioritization	4-1
Framework for Prioritization	4-1
Quantitative Analysis	4-2
Accessibility Evaluation	4-2
Equity Criteria	4-2
Qualitative Analysis	4-2
Infrastructure Prioritization	4-3
Pedestrian Curb Ramps	4-3
Qualitative Analysis Results	4-6
Equity Criteria Results	4-12
Prioritization Framework for Other Infrastructure	4-17
Traffic Signals	4-17
Sidewalks	4-18
Street Crossings	4-19
From Here	4-19

Chapter 5: Implementation..... 5-1

Overview..... 5-1

 Infrastructure Implementation..... 5-1

 Guidance on Pedestrian Curb Ramp Improvements in Resurfacing Projects. 5-3

 Pedestrian Curb Ramp reconstruction 5-5

 Context Specific Design 5-7

 Plan Recommendations..... 5-8

From Here 5-10

Appendix A A-1

Overview..... A-1

Progress Update..... A-2

Progress Highlights..... A-2

Infrastructure Improvements..... A-6

Implementation Challenges A-7

2022 and Beyond A-7

Summary of Recommendations and Milestone Progress A-8

List of Figures

Executive SummaryE-1

Figure E-1: Signalized intersection with Accessible Pedestrian Signal (APS) and pedestrian pushbuttons E-1

Figure E-2: ADA Planning at the City of Minneapolis chart E-2

Chapter 1: ADA Transition Planning in the City of Minneapolis 1-1

Figure 1-1: ADA Planning at the City of Minneapolis chart 1-1

Figure 1-2: ADA Infrastructure Jurisdiction for Minneapolis Parks and Recreation Board 1-6

Figure 1-3: ADA Infrastructure Jurisdiction for Hennepin County 1-6

Figure 1-4: ADA Infrastructure Jurisdiction for Minnesota Department of Transportation 1-7

Figure 1-5: Jurisdictional Street Responsibility in the City of Minneapolis 1-8

Chapter 2: Community Engagement 2-1

Figure 2-1: Stakeholder Groups 2-1

Figure 2-2: Age of Survey Respondents 2-5

Figure 2-3: Zip Codes of Survey Respondents 2-5

Figure 2-4: Responses to “Where Should the City Prioritize Improvements”? 2-6

Figure 2-5: Responses to “What is your biggest obstacle when walking in the City”? 2-7

Figure 2-6: Pedestrian ramp missing in distance between far sidewalk and existing crossing 2-8

Figure 2-7: Raised panels on sidewalks and broken sidewalks (particularly at driveways) present barrier to safe walking and rolling 2-9

Figure 2-8: Sidewalk closures can present unique challenges to the disability community 2-10

Chapter 3: Self-Evaluation..... 3-1

Figure 3-1: Cross Section of Public Right of Way..... 3-1

Figure 3-2: Combined Directional pedestrian curb ramps provide two separate ramps at each corner. 3-2

Figure 3-3: Fan ramps or Depressed Corner ramps provide one ramp to cross the street in either direction 3-2

Figure 3-4: Typical features of a pedestrian curb ramp at a signalized intersection 3-3

Figure 3-5: Ramp width, length, and slope 3-3

Figure 3-6: Detectable warnings alert users that they are approaching the edge of a facility 3-5

Figure 3-7: Detectable warning surface type 3-6

Figure 3-8: User interface on City’s pedestrian curb ramp information collection application 3-8

Figure 3-9: Push buttons and pedestrian signal heads are components of Accessible Pedestrian Signals (APS)..... 3-9

Figure 3-10: Accessible Pedestrian Signal (APS)..... 3-10

Figure 3-11: Sidewalk Gap Map 3-12

Figure 3-12: Sidewalk Width Map 3-13

Figure 3-13: Sidewalks are the foundation of the pedestrian network 3-14

Figure 3-14: Sidewalk with tree grate 3-14

Figure 3-15: Typical residential sidewalk section with grass boulevard 3-14

Figure 3-16: Vertical fault due to a settled sidewalk panel 3-15

Figure 3-17: Vertical fault due to a heaved panel, likely from tree roots..... 3-15

Figure 3-18: Minneapolis’ standard pattern for sidewalk crosswalk markings is the Minnesota Zebra..... 3-16

Figure 3-19: Parallel Line Crosswalk..... 3-16

Figure 3-20: Unmarked Crosswalk 3-16

Figure 3-21: Street crossings are considered to be extensions of the sidewalk..... 3-17

Figure 3-22: Screenshots of online 311 interfaces..... 3-18

Figure 3-23: Sidewalk with “Sidewalk Closed” signage while sidewalk is being repaired..... 3-20

Figure 3-24: Street crossing during winter..... 3-25

Chapter 4: Infrastructure Prioritization 4-1

Figure 4-1: Prioritization Framework 4-1

Figure 4-2: Fan Ramp 4-3

Figure 4-3: Combined Directional Ramp 4-3

Figure 4-4: Accessibility Evaluation Categories Map *(updated with supplemental data through 2021)*..... 4-11

Figure 4-5: Intersection Score Calculation Example 4-12

Figure 4-6: Map of Non-City Intersections..... 4-14

Figure 4-7: Map of Intersection Priority Tiers *(updated with supplemental data through 2021)*.... 4-16

Figure 4-8: Accessible Pedestrian Signal (APS) Push Button 4-17

Figure 4-9: Pedestrian Signal Head 4-17

Figure 4-10: Tree Grate in Sidewalk 4-18

Figure 4-11: Uneven Sidewalk..... 4-18

Figure 4-12: Zebra “Continental” Marked Crosswalk..... 4-19

Figure 4-13: Unmarked Crosswalk.....4-19

Chapter 5: Implementation..... 5-1

Figure 5-1: Department of Justice Definition on Maintenance versus Alterations for Asphalt and Concrete Resurfacing Projects 5-3

Figure 5-2: Pedestrian Curb Ramp Reconstruction by Funding Source..... 5-6

Appendix A A-1

Figure A-1: Summary of Milestone Progress by Current Status A-2

Figure A-2: Example of Manual Data Collection A-3

Figure A-3: Staff Demonstrating Data Collection Process with Tablet-based Method A-4

Figure A-4: Consultant Staff Demonstrating the GPS/GIS-based Collection Tool..... A-4

Figure A-5: Example of SEGWAY Used to Collect Data A-4

Figure A-6: Example of Data Collection Cart A-5

Figure A-7: GIS Output Showing Processed LIDAR Data Depicting Compliant and Non-Compliant Sections of Sidewalks and Crossings A-5

List of Tables

Executive Summary	E-1
Table E-1: Recommendations.....	E-4
Chapter 1: ADA Transition Planning in the City of Minneapolis	1-1
Table 1-1: ADA Transition Plan Elements	1-2
Chapter 2: Community Engagement	2-1
Table 2-1: Number of Responses and Disability Types.....	2-3
Chapter 3: Self-Evaluation.....	3-1
Table 3-1: Summary of Existing Curb Ramp Trend	3-7
Table 3-2: Data Availability of Pedestrian Curb Ramp Features	3-8
Chapter 4: Infrastructure Prioritization	4-1
Table 4-1: Accessibility Evaluation Framework for Pedestrian Curb Ramps.....	4-4
Table 4-2: Equity Criteria.....	4-5
Table 4-3: Pedestrian Curb Ramp Accessibility Evaluation Distribution (2012-2017 Pedestrian Curb Ramp Inventory with supplemental data through 2021).....	4-6
Table 4-4: Corner-Level Accessibility Evaluation Distribution for Pedestrian Curb Ramps (2012-2017 Pedestrian Curb Ramp Inventory with supplemental data through 2021)	4-8
Table 4-5: Intersection-Level Accessibility Evaluation Distribution for Pedestrian Curb Ramps (2012-2017 Pedestrian Curb Ramp Inventory with supplemental data through 2021)	4-9
Table 4-6: Pedestrian Ramp Data, Prioritization, and Funding Status of Intersections by Jurisdiction.....	4-13
Table 4-7: Intersection Priority Tiers.....	4-15
Chapter 5: Implementation.....	5-1
Table 5-1: Capital Programs Used to Implement Accessible Infrastructure	5-1
Table 5-2: Ramp Types and Desirability	5-7
Table 5-3: Recommendations	5-8
Appendix A: 2022 Update	A-1
Table A-1: Recommendation Progress Summary and Revised Timelines	A-8

Executive Summary

Figure E-1: Signalized intersection with Accessible Pedestrian Signal (APS) and pedestrian pushbuttons



LEGISLATIVE MANDATE

Enacted in 1990, the Americans with Disabilities Act (ADA) is a civil rights law that prohibits discrimination on the basis of disability and mandates equal opportunity for individuals with disabilities. The City of Minneapolis is obligated to observe all requirements of Title II of the ADA in its policies, practices, services, programs and activities. Title II requires state and local governments with 50 or more employees to develop a Transition Plan to “identify physical obstacles in the public entity’s facilities that limit the accessibility of its programs or activities to individuals with disabilities; describe in detail the methods that will be used to make the facilities accessible; and specify the schedule for taking the steps necessary to achieve compliance with this section” ([28 CFR § 35.150](https://www.ada.gov/regs2010/titleII_2010/titleII_2010_regulations.htm))¹.

MINNEAPOLIS PLANNING GUIDANCE

In 1993, the City of Minneapolis completed and published its ADA Self-Evaluation and Transitional Plan with a focus on improving access to owned

¹ https://www.ada.gov/regs2010/titleII_2010/titleII_2010_regulations.htm

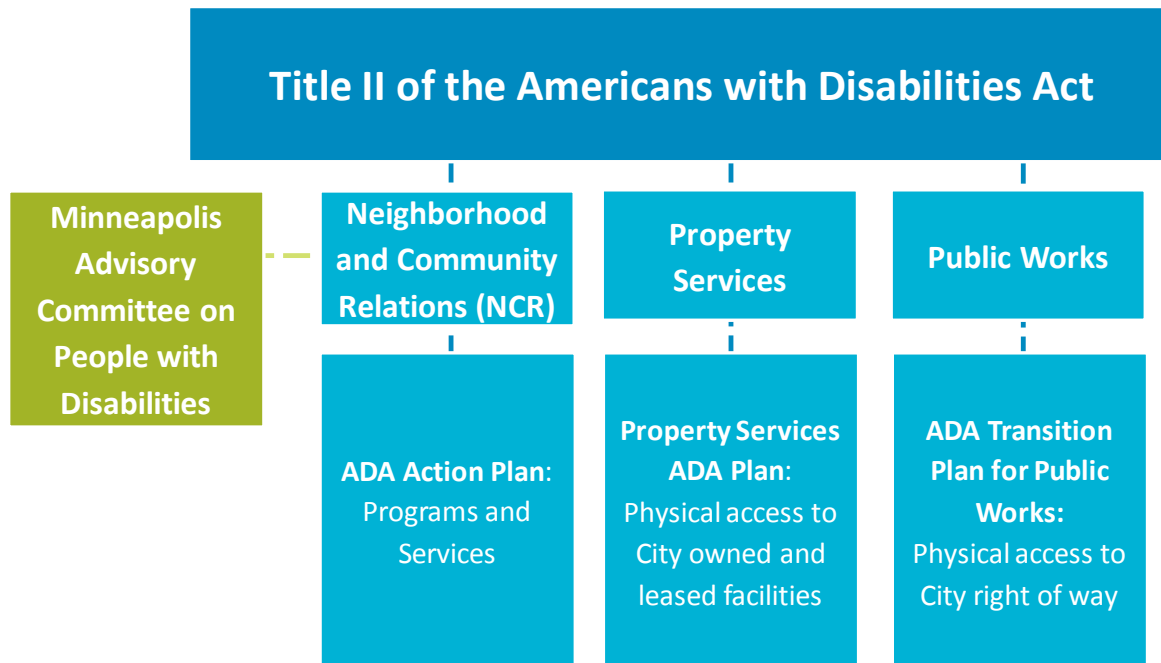
and leased facilities supporting government programs, services and activities. In 2012, Public Works developed the [Draft ADA Transition Plan for Public Works](#)² to address programs, policies, procedures, maintenance practices and infrastructure in the City’s public right of way. The 2012 Transition Plan led the City to complete an inventory of pedestrian curb ramps and to improve access in the public right of way.

In 2015, the City elected to renew its commitment to the ADA through the development of the [ADA Action Plan](#)³, a comprehensive policy document for the City of Minneapolis. The ADA Transition Plan for Public Works (Transition Plan) is one component of the ADA Action Plan and replaces the 2012 Draft ADA Transition Plan for Public Works. The ADA Action Plan also includes the Property Services ADA Plan, which outlines enhancements for spaces that are owned or leased by the City of Minneapolis.

² <http://www.minneapolismn.gov/www/groups/public/@publicworks/documents/images/wcms1p-093904.pdf>

³ <http://www.minneapolismn.gov/ncr/services/WCMSP-183897>

Figure E-2: ADA Planning at the City of Minneapolis



The City of Minneapolis is strongly committed to assuring that City programs, services, information and spaces are accessible to its residents and visitors.

CITY OF MINNEAPOLIS ADA ACTION PLAN

The ADA Transition Plan for Public Works is being updated to further the City’s commitment to the ADA, address emerging demographic and population needs, and support and integrate with other planning efforts.

- **Further the City’s commitment to the ADA:** This Transition Plan works in conjunction with the ADA Action Plan to address accessibility needs and priorities within the City of Minneapolis’ public right of way. The intent of this Transition Plan update is to further the City’s commitment to accessibility by identifying accessibility barriers, establishing priorities for improvements, and developing an implementation plan for removing accessibility barriers in the City’s public right of way.
- **Address emerging demographic needs:** The U.S. Census Bureau estimates that more than 11% of Minneapolis residents have a disability and that more than one in three

Minneapolis residents who are over the age of 65 have a disability⁴. Implementing accessible infrastructure benefits all residents, particularly people with disabilities and an aging population.

- **Support other planning efforts:** This Transition Plan is intended to be a living document that will act as the foundation for other complementary and ongoing planning efforts in the City of Minneapolis. The **development of the Minneapolis Transportation Action Plan will replace the City’s Access Minneapolis plan and will** highlight the needs of pedestrians including people with disabilities. The Vision Zero Action Plan addresses transportation-related safety concerns throughout the city, including those of the disability community and of more vulnerable users such as people walking or biking. Through these and other planning processes, the Public Works Department **will have laid** out a series of priorities, policies, and approaches to address a variety of issues that impact the accessibility of City streets and sidewalks.

⁴ U.S. Census Bureau, 2013-2017 American Community Survey

TRANSITION PLAN OVERVIEW

The following Transition Plan chapters provide a path forward for improving access in the public right of way for residents and visitors:

- **Chapter 1: ADA Transition Planning in the City of Minneapolis.** This chapter describes the federal mandate for ADA Transition Plans and describes how this plan meets that mandate for the City of Minneapolis.
- **Chapter 2: Community Engagement.** This chapter describes the goals, approach, and findings from the community engagement that was conducted for the ADA Transition Plan for Public Works. This engagement influenced the process and recommendations of this and other plans concurrently developed in the City including the Vision Zero Action Plan and the Transportation Action Plan.
- **Chapter 3: Self-Evaluation.** This chapter describes the current programs, policies, and procedures in place to design, implement, and maintain accessible infrastructure. This chapter also describes the collected data and analysis process used to evaluate whether infrastructure meets accessibility standards and guidelines.
- **Chapter 4: Prioritization.** This chapter describes the framework for how infrastructure will be programmed for improvements. Prioritization will be based on accessibility criteria as described in the Self-Evaluation ([Chapter 3](#)) and equity as defined in the [20 Year Street Funding Plan](#)⁵.
- **Chapter 5: Implementation.** This chapter describes how and when the improvements will be made to remove barriers and improve access within the City of Minneapolis public right of way.

Technical documentation supplements the information summarized in the chapters.

- **Supplemental Materials:** Inventory Data. Data on over 18,000 infrastructure features are kept in an electronic format. This data will

be updated periodically as infrastructure is updated and additional data is collected.

PLAN RECOMMENDATIONS

Recommendations for improving access in the public right of way through policies, practices, services, programs and activities are included in the Chapters and summarized in Chapter 5.

The Transition Plan includes twenty recommendations to improve access in the public right of way ([Table E-1](#)). These recommendations are not all-inclusive of improvements made through routine construction projects and other policies, programs and practices. Recommendations summarized here are listed by category and in chronological order within each category. Each recommendation's ID corresponds with the order they are discussed in the previous chapters of the report. They are not listed in order of priority or importance.

⁵ <https://www2.minneapolismn.gov/government/departments/public-works/tpp/20-year-plan/>

Table E-1: Recommendations

CATEGORY	ID	RECOMMENDATION	TIMELINE AND MILESTONES
Pedestrian Curb Ramps	3.1	Modify the pedestrian curb ramp in-field data collection application to holistically collect all necessary information on pedestrian curb ramps	<ul style="list-style-type: none"> Complete updates to the data collection process (2020)
Pedestrian Curb Ramps	4.2	Inventory pedestrian curb ramps at intersections with no ramp data (approx. 50 intersections)	<ul style="list-style-type: none"> Collect inventory on intersections with no pedestrian curb ramp data after new data collection app is finished (2021) and incorporate into prioritization list
Pedestrian Curb Ramps	4.3	Install pedestrian curb ramps where ramps are missing as intersections are programmed and designed for improvement	<ul style="list-style-type: none"> Ongoing
Pedestrian Curb Ramps	5.1	Incorporate pedestrian curb ramp construction in the asphalt resurfacing program (PV056) and concrete rehabilitation program (PV108)	<ul style="list-style-type: none"> Ongoing
Accessible Pedestrian Signals (APS)	3.2	Evaluate Accessible Pedestrian Signals (APS) inventory data and incorporate results into Infrastructure Status section of ADA Transition Plan	<ul style="list-style-type: none"> Digitize and analyze inventory data on Accessible Pedestrian Signals (APS) (2020) Incorporate findings into ADA Plan (2021)
Accessible Pedestrian Signals (APS)	3.3	Compare Accessible Pedestrian Signal (APS) data collected to current ADA and Minnesota Manual on Uniform Traffic Control Devices (MN MUTCD) criteria to identify any additional elements to collect and incorporate results into ADA Transition Plan	<ul style="list-style-type: none"> Identify data collection improvements for Accessible Pedestrian Signals (APS) (2020 2022) Incorporate findings into ADA Plan (2021 2022) Develop approach to collect additional data if needed (2021 2022)
Accessible Pedestrian Signals (APS)	4.4	Prioritize locations in need of improvement for Accessible Pedestrian Signals (APS) and incorporate results into Prioritization chapter of ADA Transition Plan	<ul style="list-style-type: none"> Apply prioritization methodology to Accessible Pedestrian Signal (APS) data and incorporate into Chapter 4 of the ADA Plan (2021 2023)
Accessible Pedestrian Signals (APS)	5.5	Update the timeline and anticipated cost for installing or correcting Accessible Pedestrian Signals (APS)	<ul style="list-style-type: none"> Update intersection cost estimates for signalized intersections in need of Accessible Pedestrian Signal (APS) improvements (2021 2022)
Sidewalks and Street Crossings	3.4	Supplement existing data on sidewalks and street crossings by completing a sidewalk and street crossing inventory	<ul style="list-style-type: none"> Scope data collection and evaluation pilot into capital project development (2020) Pilot data collection process and evaluation methodology and incorporate into Chapter 3 of the ADA Plan (2021 2022) Establish process for collecting data citywide based on results of pilot (2022-2023-2024)

CATEGORY	ID	RECOMMENDATION	TIMELINE AND MILESTONES
Sidewalks and Street Crossings	4.5	Using new data from inventorying sidewalks, prioritize sidewalk and street crossings barriers using the prioritization framework described in Chapter 4	<ul style="list-style-type: none"> ▪ Prioritize identified barriers for improvement (2022 2025-2026)
Sidewalks and Street Crossings	5.6	Establish an anticipated timeline and cost for addressing sidewalk and street crossing barriers	<ul style="list-style-type: none"> ▪ Develop an anticipated timeline and cost estimates for addressing sidewalk and street crossing barriers (2022 2025-2026)
Sidewalks and Street Crossings	5.2	Evaluate sidewalk and street crossing data to guide the development of a funding mechanism and/or approach for addressing sidewalk and street crossing barriers if needed	<ul style="list-style-type: none"> ▪ Update City specifications (annually) ▪ Evaluate need for additional resources (2020-2021 2025-2026)
All Infrastructure	5.3	Improve the mechanism for tracking, inspecting and inventorying pedestrian curb ramps, Accessible Pedestrian Signals (APS) and sidewalks that are built in Minneapolis' public right of way by private developers, utilities, and other agencies and determine whether additional inspection staff or resources are needed to ensure all city-managed or built infrastructure is built according to city specifications, ADA Standards and in alignment with Minneapolis design guidelines	<ul style="list-style-type: none"> ▪ Update City specifications (annually) ▪ Evaluate need for additional resources (2022)
All Infrastructure	5.4	Report on improvements to pedestrian curb ramps, Accessible Pedestrian Signals (APS), sidewalks and street crossings annually and update inventories	<ul style="list-style-type: none"> ▪ Ongoing annually through the "Your City, Your Streets Progress Report" to the Transportation and Public Works and Infrastructure Committee (TPWPWI) and NCR's "ADA Action Plan Report" to the Public Health, Environment, Civil Rights and Engagement and Safety Committee (PECEPHS)
Prioritization	4.1	Update the equity component of infrastructure prioritization as the 20 Year Streets Funding Plan is updated	<ul style="list-style-type: none"> ▪ Ongoing (update starting in 2022)
Programs, Policies and Procedures	3.5	In collaboration with 311 and the Neighborhood and Community Relations Departments, evaluate adding an option on the 311 interface for the public to indicate whether a concern is related to accessibility	<ul style="list-style-type: none"> ▪ Evaluate adding option to indicate access issue (2020 2022) ▪ Update software and user testing (2020-2021 2022)
Programs, Policies and Procedures	3.6	Continue to expand departmental knowledge and expertise of ADA topics by attending trainings and classes	<ul style="list-style-type: none"> ▪ Ongoing
Programs, Policies and Procedures	3.7	Review and update existing policies and practices for pedestrian detour design and enforcement annually in coordination with additional direction in the Transportation Action Plan	<ul style="list-style-type: none"> ▪ Align pedestrian detour design specifications with MNMUTCD standards (annually) ▪ Additional changes proposed in Transportation Action Plan (2020)

CATEGORY	ID	RECOMMENDATION	TIMELINE AND MILESTONES
Programs, Policies and Procedures	3.8	Continue to monitor issues and feedback received on parking and operations for scooter, bike share and/or other micromobility options and evaluate the need for program improvements	<ul style="list-style-type: none"> Designate additional parking locations for scooter, bike share and/or other micromobility options (2020 Ongoing) Increase and simplify communications on where to park and where to ride (2020 Ongoing) Increase enforcement of micromobility businesses and users (2020 Ongoing) Review and make program improvements (annually)
Programs, Policies and Procedures	3.9	Continue to address seasonal barriers such as snow and ice on sidewalks as outlined by Minneapolis Ordinance 445 and the Pedestrian and Bicycle Winter Maintenance Study; explore modifications to improve access to the public right of way through additional direction in the Transportation Action Plan	<ul style="list-style-type: none"> Additional funding allocated for snow and ice corner clearing (2020) Additional improvements proposed in Transportation Action Plan (2020)

ANTICIPATED SCHEDULE

Many process and programmatic improvements are expected to be completed in the next few years, as detailed in [Table E-1](#). Infrastructure improvements to pedestrian curb ramps are expected to be complete within ~~20-30~~18-28 years at an estimated cost of \$~~433~~430 million dollars (~~2019~~2021 dollars). **Note that this cost estimate is based on the work completed since the adoption of the 2020 plan and current material costs.** Additional information on the anticipated costs and schedules for addressing traffic signals, sidewalks and street crossings will be provided as those inventories are updated and evaluated.

This plan, including any corresponding appendices and supplemental materials, is a living document and will be updated periodically as additional inventories are collected and deficient infrastructure in the public right of way is addressed. **As part of the Transportation Action Plan ([Walking Action 5.7](#)), Public Works is committed to conducting a review of the ADA Transition Plan on a biennial basis to evaluate progress and suggest plan updates in pursuit of improved compliance.**

CHAPTER 1

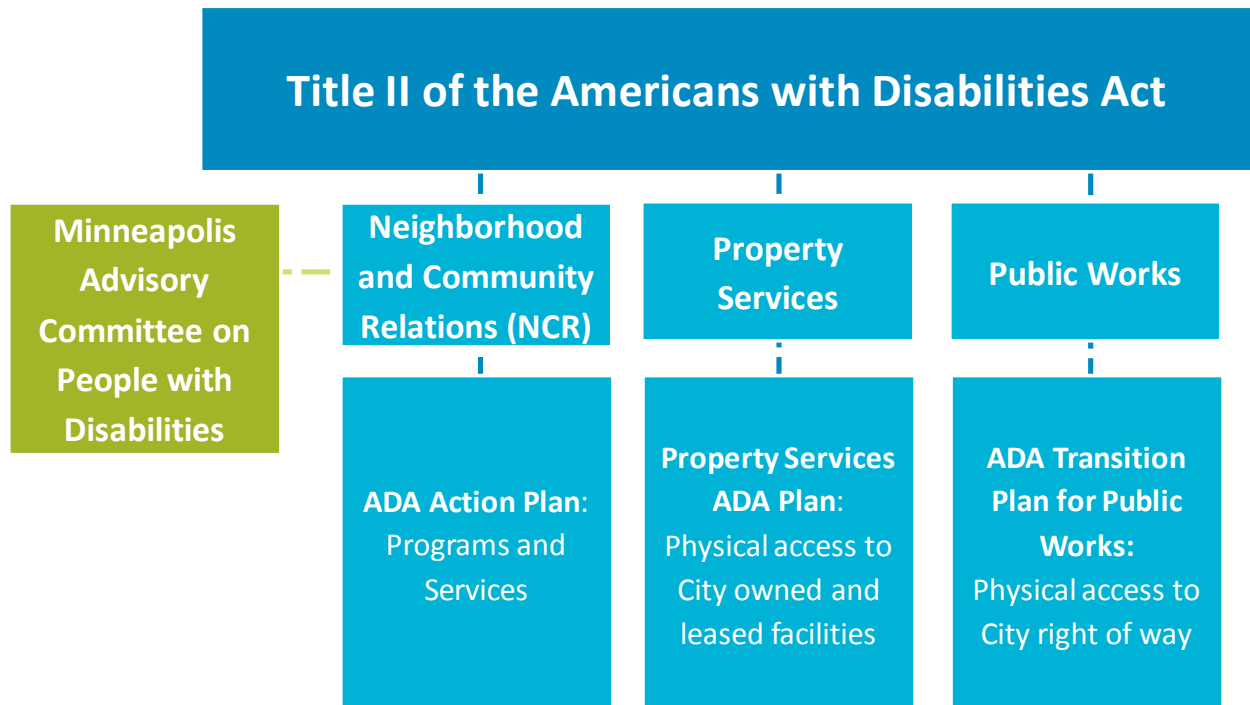
ADA Transition Planning in the City of Minneapolis

The City of Minneapolis is committed to ensuring that City programs, services, information, infrastructure and spaces are accessible to its residents and visitors.

The Americans with Disabilities (ADA) Transition Plan for Public Works (Transition Plan) is a separate, supporting plan that informs the ADA Action Plan. The ADA Action Plan is the City’s comprehensive policy document that addresses citywide programs and services and fulfills Title II legal requirements. The Transition Plan works in conjunction with the ADA Action Plan to address accessibility needs and priorities within the City of Minneapolis’ public right of way. The public right of way typically includes the sidewalk, boulevard and street.

The intent of this Transition Plan is to further the City’s commitment to accessibility *by identifying accessibility barriers, establishing priorities for improvements, and developing an implementation plan* for removing accessibility barriers in the City’s public right of way.

Figure 1-1: ADA Planning at the City of Minneapolis



ADA Transition Plan: Requirements and Process

Over the last five decades, state and federal regulators have enacted increasingly comprehensive protections for people with disabilities. These policies and standards form the foundation for accessibility policies at the local level.

LEGISLATIVE MANDATE

Enacted in 1990, the Americans with Disabilities Act (ADA) is a civil rights law that mandates equal opportunity for individuals with disabilities. Disability is defined by the ADA as a physical or mental impairment that substantially limits one or more major life activities, a person who has a history or record of such an impairment, or a person who is perceived by others as having such an impairment. The ADA prohibits discrimination based on disability in access to jobs, government services, public transportation, public accommodations, and telecommunications. There are five titles of the ADA including:

- Title I: Employment
- Title II: State and Local Government

- Title III: Public Accommodations and Commercial Facilities
- Title IV: Telecommunications Relay Services
- Title V: Miscellaneous Provisions

The City of Minneapolis is obligated to observe all requirements of Title I in its employment practices; Title II in its policies, practices, services, programs, and activities; and any parts of Titles IV and V that may apply to the City. Title III covers activities in places of public accommodations and requires newly constructed or altered places of public accommodations to comply with the ADA Standards.

Title II requires state and local governments with 50 or more employees to identify and remove physical and programmatic barriers in order for people with disabilities to equally access and benefit from an agency’s programs, services and activities. **Table 1-1** lists the federal requirements of every Transition Plan and where each of those elements can be found in this Transition Plan. This document addresses the requirements of Title II of the ADA with respect to accessibility within the public right of way.

Table 1-1: ADA Transition Plan elements

REQUIRED ELEMENT	LOCATION IN THIS TRANSITION PLAN
A designation of at least one (1) person, known as the ADA Coordinator, who is responsible for overseeing Title II compliance	Chapter 1
A component of public outreach	Chapter 2
A Self-Evaluation in which barriers to accessibility are inventoried	Chapter 3
A grievance procedure for documenting and responding to accessibility concerns raised by the public	Chapter 3
A prioritization methodology for the removal of barriers	Chapter 4
A schedule for the implementation of accessibility improvements, including a plan to remove barriers and monitor the progress and schedule of barrier removal	Chapter 5

Key Players in Federal Governance of ADA Regulations

ADA regulations governing state and local government services and public accommodations are federally enforced by the United States Department of Justice (DOJ), while the United

States Department of Transportation (USDOT) is legally obligated to implement compliance procedures relating to transportation. The Federal Highway Administration (FHWA) oversees the USDOT requirements in these areas to ensure pedestrians have the opportunity to use the

transportation system in an accessible and safe manner.

The U.S. Access Board is a federal agency that promotes equality and inclusion of people with disabilities by creating accessibility guidelines and standards for the built environment, transit vehicles, telecommunications equipment, medical diagnostic equipment, and information technology.

Guidance & Criteria in Federal Governance of ADA Regulations

The most recent standard¹ is the 2010 ADA Standards for Accessible Design, which sets the minimum requirements – both scoping and technical – for newly designed and constructed or altered State and local government facilities, public accommodations, and commercial facilities to be readily accessible to and usable by individuals with disabilities. It is effectuated from 28 CFR 35.151 and the 2004 Americans with Disabilities Act Accessibility Guidelines (ADAAG). The Federal Highway Administration (FHWA) and Department of Justice (DOJ) have recommended using the Proposed Guidelines for Pedestrian Facilities in the Public Right of Way (PROWAG) for designing and constructing facilities within the public rights of way as a best practice for accessibility issues in the public right of way not covered by the Department of Justice’s or the Department of Transportation’s currently adopted standards. The Manual on Uniform Traffic Control Devices (MUTCD) is also incorporated by reference within PROWAG. The City of Minneapolis follows the 2010 ADA Standards for Accessible Design and looks to PROWAG for guidance on how to supplement the 2010 ADA Standards.

2010 ADA STANDARDS FOR ACCESSIBLE DESIGN

The Department of Justice’s revised regulations for Titles II and III of the Americans with

Disabilities Act of 1990 (ADA) were published in the Federal Register on September 15, 2010. These regulations adopted revised, enforceable accessibility standards called the 2010 ADA Standards for Accessible Design, “2010 Standards.” On March 15, 2012 compliance with the 2010 Standards was required for new construction and alterations under Titles II and III. March 15, 2012, is also the compliance date for using the 2010 Standards for program accessibility and barrier removal.

PROPOSED GUIDELINES FOR PEDESTRIAN FACILITIES IN THE PUBLIC RIGHT OF WAY (PROWAG)

The U.S. Access Board is developing new guidelines for the public right of way. The Access Board released proposed guidelines for the public right of way in 2002, 2005 and 2011. The 2011 Proposed Guidelines for Pedestrian Facilities in the Public Right of Way (PROWAG) includes guidance on many pedestrian network features, including sidewalks, pedestrian street crossings, pedestrian signals, and other facilities for pedestrian circulation and use within the public right of way. The public comment period for the proposed guidelines closed in 2012. The Board’s aim in developing these guidelines is to ensure that access for persons with disabilities is provided wherever a pedestrian way is newly built or altered. It is expected guidelines for the public right of way will be adopted at some point in the future. Once the Access Board completes its rulemaking, the DOJ and DOT will need to adopt the guidelines into their respective ADA and Section 504 regulations, at which point they will be established as enforceable standards under Title II of the ADA.

MUTCD

PROWAG also references the Manual on Uniform Traffic Control Devices (MUTCD). Traffic control devices are defined as all signs, signals, markings, and other devices used to regulate, warn, or guide

¹ If the start date for construction is on or after March 15, 2012, all newly constructed or altered State and local government facilities must comply with the 2010 ADA Standards for Accessible Design. Before that date, the 1991 Standards (without the elevator exemption), the Uniform Federal Accessibility Guidelines, or the 2010 ADA Standards may be used for such projects when the start of construction commences on or after September 15, 2010.

traffic, placed on, over, or adjacent to a street, highway, pedestrian facility, bikeway, or private road open to public travel by authority of a public agency or official having jurisdiction, or, in the case of a private road, by authority of the private owner or private official having jurisdiction. The Manual on Uniform Traffic Control Devices is incorporated by reference in 23 Code of Federal Regulations (CFR), Part 655, Subpart F and is recognized as the national standard for all traffic control devices installed on any street, highway, bikeway, or private road open to public travel in accordance with 23 U.S.C. 109(d) and 402(a). The policies and procedures of the FHWA to obtain basic uniformity of traffic control devices is described in 23 CFR 655, Subpart F.

City of Minneapolis Approach

MINNEAPOLIS ADA PLANS

In accordance with Title II of the ADA, the City of Minneapolis has undertaken a comprehensive evaluation of its policies, programs, and services to ensure the inclusion of people with disabilities.

- In 1993, the City of Minneapolis completed and published its ADA Self-Evaluation and Transitional Plan. As part of this effort, the City conducted a physical assessment of City-owned buildings and leased spaces for compliance.
- In 2012, the Public Works Department developed the Draft ADA Transition Plan for Public Works that addressed the department's policies, programs, and infrastructure within the public right of way, including pedestrian curb ramps, sidewalks, and Accessible Pedestrian Signals (APS) at traffic signals.
- In 2013, an inventory of pedestrian curb ramps in Minneapolis' public right of way was completed.
- In 2015, the Neighborhood and Community Relations (NCR) Department conducted an evaluation of policies, programs, services and activities. This evaluation identified the Director of the Neighborhood and Community Relations Department (or their designee)

as the City of Minneapolis ADA Title II Coordinator. This coordinator manages ADA Title II enforcement and compliance within the City's operations, policies and procedures. At the same time as that evaluation, the Finance and Property Services Department completed an ADA assessment of City-owned and leased buildings. This plan is called the Property Services ADA Plan.

- In 2016, the NCR Department developed an ADA Action Plan, which is a comprehensive policy document designed to enhance the City of Minneapolis' programs and services and ensure compliance with the ADA. The ADA Action Plan was approved by City Council in December 2016 and included the Finance and Property Services ADA Transition Plan.
- This document – the ADA Transition Plan for Public Works – ~~will~~ focuses on the infrastructure within the public right of way, ~~identifying~~ identifies the improvements needed to that public infrastructure, and ~~outlining~~ outlines the priorities, costs, and schedule for addressing the needed improvements.

All of the described Minneapolis ADA Plans are critical to comprehensive ADA compliance for City facilities, programs, services, and activities.

PUBLIC WORKS' ADA VISION AND APPROACH

The City's vision for accessibility is set by the ADA Action Plan:

The City of Minneapolis is strongly committed to assuring that City programs, services, information and spaces are accessible to its residents and visitors.

CITY OF MINNEAPOLIS ADA ACTION PLAN

This Transition Plan update is a crucial step in creating a more accessible and welcoming environment for users of all ages and abilities on our public streets. The Public Works department, through its nine divisions and in coordination with other City departments, strives to create

an equitable environment for all; removing accessibility barriers in the public right of way is a priority for the City.

In addition to furthering the City’s commitment to the ADA, this Transition Plan is being updated to address emerging demographic and population needs and support and integrate with other planning initiatives.

Address Emerging Demographic Needs

The U.S. Census Bureau estimates that more than 11% of Minneapolis residents – more than one of every ten people – have a disability and that more than one in three Minneapolis residents who are over the age of 65 have a disability (~~2013-2017~~ 2015-2019 American Community Survey). Implementing accessible infrastructure benefits all residents, particularly the disability community and an aging population.

Connection between the Transportation Action Plan and This Transition Plan

This Transition Plan is intended to be a living document that will act as the foundation for other complementary and ongoing planning efforts in the City of Minneapolis.

The City’s Transportation Action Plan development began in 2018 and ~~is expected to continue through early 2020~~ the plan was adopted by City Council in late 2020. The ~~purpose of the~~ Transportation Action Plan ~~is to identify~~ identifies specific actions to undertake ~~within the next ten years through 2030~~ to implement the transportation goals and policies articulated in Minneapolis 2040,² the City’s Comprehensive Plan. Additionally, ~~work on~~ the Transportation Action Plan ~~will be done in support of~~ supports the City’s Complete Streets Policy, Vision Zero Commitment, Climate Action Plan goals, and commitment to equity.

Through this Transition Plan and the Transportation Action Plan, the City ~~will~~ addresses a variety of issues that impact the accessibility

of City streets and sidewalks, and ~~will~~ lays out a series of priorities, policies and approaches to identify and remove barriers in the public right of way.

Other Parallel Initiatives

Additionally, parallel initiatives work in tandem to provide a welcoming space for all residents, employees, and visitors. The following topics related to livability are being addressed in parallel plans within Public Works:

- The City of Minneapolis Street Light Policy:
 - Updated in 2015, the Street Light Policy supports the City’s efforts to provide livable communities and foster urban development. The policy provides clear guidance to elected officials, residents, developers, and the Department of Public Works on all aspects of installation and maintenance for the street lighting system. ~~The Street Lighting Policy is being reviewed as part of the Transportation Action Plan process.~~ Pedestrian lighting is included with all street reconstruction projects as part of the capital project costs. As part of the Transportation Action Plan ([Walking Action 3.1](#)), the Street Lighting Policy is anticipated to be updated by 2023.
- Minneapolis Pedestrian and Bicycling Winter Maintenance Study:
 - Completed in 2018, the goals of the study are to identify alternative winter maintenance options to enhance the quality and consistency of clearing snow and ice from sidewalks and bikeways, to improve safety, accessibility and mobility for people who walk, bike, and use transit facilities in Minneapolis. The study provides a framework for continued conversations with members of the community, interested stakeholders, and policymakers. The study includes information, data and implementation cost considerations for pedestrian and

² <https://minneapolis2040.com>

bicycle winter maintenance practices so the City can determine opportunities for continued improvement. **As part of the Transportation Action Plan (Walking Action 4.11) Public Works is committed to conducting a review and update of the Pedestrian and Bicycling Winter Maintenance Study on a biennial basis.**

- Transit stops, streets and intersections under other jurisdictions:
 - The infrastructure evaluation in this Transition Plan is complemented by ADA Transition Plans from other agencies such as the Metropolitan Council, Hennepin County, and the Minnesota Department of Transportation (MnDOT)³.

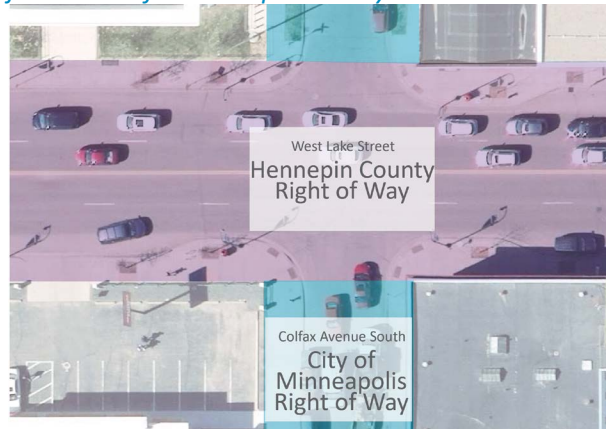
Jurisdictional Responsibilities for Building and Repairing ADA Infrastructure

There are many public pieces of infrastructure in the City of Minneapolis that are built, owned, and repaired by other agencies. Coordination is required when public right of way within another agency’s jurisdiction intersects City streets. **Figure 1-2 through Figure 1-4** provide typical examples of jurisdictional responsibility where another agency’s right of way or land intersects City of Minneapolis right of way. Generally, the higher agency assumes responsibility for the street, including sidewalks, crosswalks, traffic signals and pedestrian curb ramps.

Figure 1-2: ADA infrastructure jurisdiction for Minneapolis Parks and Recreation Board* **



Figure 1-3: ADA infrastructure jurisdiction for Hennepin County* **



*This is a general example and may not be the case for all similar intersections.

**Includes building and repairing ADA infrastructure in the public right of way often including but not limited to pedestrian curb ramps, street crossings, and traffic signals. Sidewalks are the responsibility of the adjacent property owner.

3 Other agency ADA Transition Plans are available at <https://metrocouncil.org/Council-Meetings/Committees/Transportation-Accessibility-Advisory-Committee/2018/TAAC-Meeting-5-02-18/ADA-Self-Evaluation-and-Transition-Planning.aspx>, <https://www.hennepin.us/adaplan>, and <http://www.dot.state.mn.us/ada/pdf/mndotadatransitionplan.pdf>

Figure 1-4: ADA infrastructure jurisdiction for Minnesota Department of Transportation* **



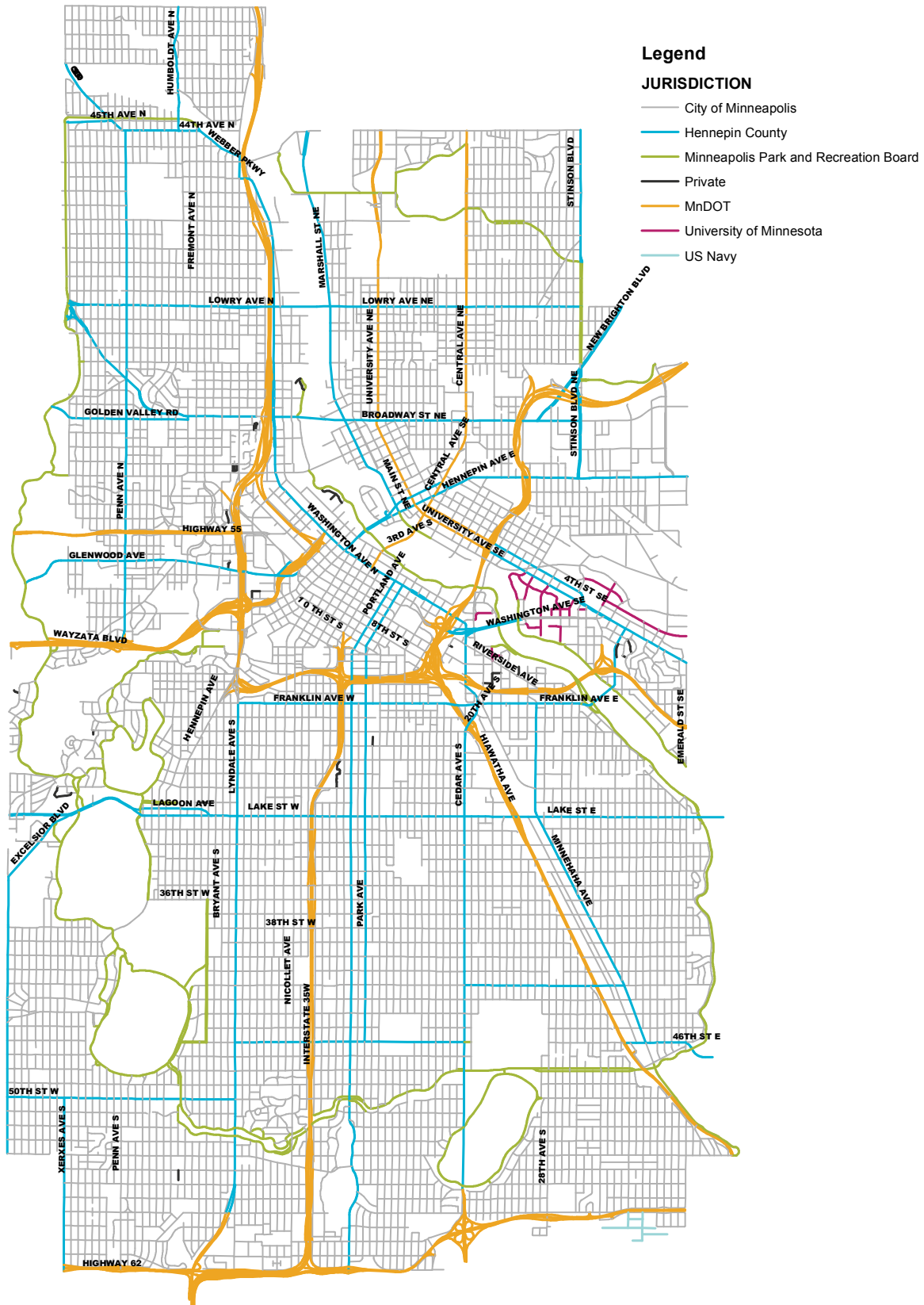
- **Streets:** *Figure 1-5* shows the jurisdiction of streets in the City of Minneapolis as of November 2019. When the right of way of two agencies intersect, the higher agency retains control and jurisdiction of the corresponding intersection. In locations where City of Minneapolis right of way intersects with Minneapolis Parks and Recreation Board streets, trails or parkways, Minneapolis Parks and Recreation Board retains jurisdiction.
- **Pedestrian curb ramps:** Traditionally, all pedestrian curb ramps at an intersection have been built and repaired by the agency that retains control of the intersection.
- **Crosswalks:** Marking and repairing crosswalk areas at street crossings are the responsibility of the controlling agency.
- **Sidewalks:** In Minneapolis, sidewalks are the responsibility of the adjacent property owner ([Minneapolis Ordinance 427.90](#)). This responsibility includes construction, repair and maintenance of sidewalks. The City of Minneapolis inspects and orders repairs for damaged sidewalk across the City including sidewalk within other agencies' right of way. Dictating changes to the sidewalk such as widening or correcting cross slope is the responsibility of the agency who controls the right of way.
- **Traffic Signals:** The traffic signal infrastructure, including accessible pedestrian signals, are

owned by the agency that controls the right of way, but traffic signals in Minneapolis are operated by the City of Minneapolis.

- **Boulevard trees:** Trees in the green space or in tree grates between the sidewalk and the street within the right of way are the responsibility of the Minneapolis Park and Recreation Board.
- **Transit Stops and Stations:** Transit infrastructure in the public right of way, such as bus stops or METRO stations, is owned by the Metropolitan Council.

Although infrastructure not owned, built or repaired by the City of Minneapolis is not evaluated or prioritized in this Transition Plan, coordination with those agencies will be crucial for the successful implementation of improvements and the removal of barriers citywide. The City will use this plan to further coordination opportunities and share best practices between agencies.

Figure 1-5: Jurisdictional street responsibility in the City of Minneapolis



Update Process

This plan, including any corresponding appendices and supplemental materials, is intended to be a living document and will be ~~updated~~ reviewed on a biennial basis to evaluate progress and suggest plan updates in pursuit of improved compliance within the public right of way ([Walking Action 5.7, Transportation Action Plan](#)). ~~periodically as additional inventories are collected and deficient infrastructure in the public right of way is addressed.~~

CHAPTER 2

Community Engagement

Public engagement is a crucial element of ADA Transition Planning. Public Works conducted community engagement over the spring, summer, and fall of 2018 to identify accessibility barriers and develop priorities for improving city-owned infrastructure in the public right of way. Perspectives from people with disabilities were sought after to collect input from those most directly impacted by non-accessible infrastructure. Public Works also met with other agency partners

to share feedback and best practices and to identify opportunities for coordination.

Engagement Approach

STAKEHOLDER GROUPS

Three groups of key stakeholders were identified for the ADA Transition Plan. These groups all had an integral role in guiding the development of the Transition Plan.

Figure 2-1: Stakeholder groups

MINNEAPOLIS ADVISORY COMMITTEES	USER GROUPS AND INDIVIDUALS	PARTNER AGENCIES
<p><i>Minneapolis residents or business owners appointed by City Council to advise the Mayor and City Council on various policies, programs, and actions</i></p>	<p><i>Minneapolis residents, business owners, non-profits, or other advocacy groups with missions pertinent to accessible use of public right of way</i></p>	<p><i>Other governmental agencies with right of way in Minneapolis and parallel Transition Plans</i></p>
<p>Three advisory committees were consulted:</p> <ul style="list-style-type: none"> ▪ Minneapolis Advisory Committee on People with Disabilities (MACOPD) ▪ Minneapolis Pedestrian Advisory Committee (PAC) ▪ Minneapolis Committee on Aging (MACOA) 	<p>Over a dozen user groups were invited to participate in the Plan update:</p> <ul style="list-style-type: none"> ▪ ARC Greater Twin Cities ▪ Autism Society of Minnesota ▪ Blind Inc. ▪ CanDo Canines ▪ Commission of Deaf, DeafBlind & Hard of Hearing Minnesotans ▪ Direct Support Professional Association of Minnesota (DSPAM) ▪ Epilepsy Foundation of Minnesota ▪ Minneapolis Highrise Representative Council ▪ Minneapolis Public Schools ▪ Minnesota Consortium for Citizens with Disabilities ▪ Minnesota Organization on Fetal Alcohol Syndrome ▪ Metropolitan Area on Aging ▪ Our Streets Minneapolis ▪ Project for Pride in Living (PPL) ▪ Twin Cities Adaptive Cycling ▪ Vision Loss Resources 	<p>Key ADA staff from various partner agencies were engaged:</p> <ul style="list-style-type: none"> ▪ Minneapolis Parks and Recreation Board (MPRB) ▪ Metro Transit ▪ Hennepin County ▪ Minnesota Department of Transportation (MnDOT)

Minneapolis Advisory Committee Purpose

and Process: In early 2018, Minneapolis staff introduced the intent to update the Draft 2012 ADA Transition Plan for Public Works to the Advisory Committees and solicited feedback on the scope of the Plan. These committees provided input on barriers and priorities to highlight in the Plan, shared ideas on user groups and individuals to engage during the planning process, and helped promote engagement opportunities during the Transition Plan update process.

Partner Agency Purpose and Process:

Minneapolis staff met individually with partner agencies to learn about their efforts related to ADA infrastructure and programs and to identify opportunities to better coordinate on ADA improvements.

User Groups and Individuals Purpose and

Process: Feedback on mobility challenges from user groups and individuals was captured via in-person meetings as well as through an online survey posted on the Public Works' ADA Transition Plan website. A list-serv collection tool hosted by GovDelivery was also set up to provide an opportunity for interested individuals to sign up for project updates.

PUBLIC ENGAGEMENT OPPORTUNITIES

In addition to the feedback from the three groups of key stakeholders, general public feedback was gathered for this Transition Plan through a survey and through an open house. Both the survey and the open house were promoted through the key Minneapolis Advisory Committees, identified User groups, interested project contacts, Minneapolis social media channels (Facebook, Twitter, and NextDoor), and the City of Minneapolis' news website.

Survey

Process: A survey was developed in May 2018 to solicit input on barriers and priorities. The survey was available on the Public Works' ADA Transition Plan website and could be completed through an online screen-reader friendly version and by downloading to print as a paper version. Survey promotion continued through August 2018 and was available at the open house.

Responses: Between June and August 2018, 313 people responded to the survey and contributed 472 unique comments.

Open house

Process: An open house was held on June 25, 2018 at the Minneapolis Central Library. At the open house, staff presented and had project boards available on the history of the ADA, an overview of Minneapolis' ADA structure, and types of infrastructure in the public right of way. Paper copies and a digital tablet version of the survey were available at the event, and staff led discussions on identifying barriers and priorities for removing barriers in the public right of way.

Attendance: Approximately 20 people attended the open house.

Engagement Results

KEY THEMES

Several key themes emerged from community engagement. While these themes are largely derived from the comments of people who identified as someone with a disability, several themes were reiterated by people who did not identify as someone with a disability.

- Prioritizing improvements where conditions are worst is strongly supported; infrastructure in poor condition should be fixed before infrastructure that is in better condition
- Sidewalks present challenges more frequently than other infrastructure
- Maintenance-related and temporary obstructions were perceived as a common barrier across all infrastructure types, such as snow and ice, overgrown bushes, sidewalk cafes and construction signage and detours
- Sightline issues at pedestrian curb ramps between vehicle drivers and pedestrians were a common barrier for people with disabilities and people without disabilities
- Collaboration with other jurisdictions and agencies to remove accessibility barriers is crucial to providing citywide accessibility
- Street design, especially related to emerging designs require further discussion (e.g., shared streets, tabled intersections, protected bikeway design and integration, roundabouts, and boulevard design)

More information on these themes and on common barriers for each type of infrastructure is described in the following section.

WHO DID WE HEAR FROM?

Survey participants were asked to describe whether they identify as someone with a disability to better understand the needs of people with disabilities. Unless specified, all findings and comments are from people who identified as someone with a disability.

Disability Community Representation

The survey received 313 responses: 178 (61%) participants responded they identified as someone with a disability and 116 (39%) participants identified as someone without a disability. 19 people did not answer this question.

Table 2-1: Number of responses

SURVEY RESPONSES	NUMBER OF RESPONSES	PERCENT OF TOTAL
Person with a disability	178	57%
Person without a disability	116	37%
No answer	19	6%

There are many different types of disabilities. Survey respondents were asked to identify as many categories of disability as was applicable to them so that staff could understand which voices were being heard.

Of those participants who responded as having a disability:

DISABILITY TYPE	PERCENT OF TOTAL
Reported having a physical disability	83%
Reported having a vision-related disability	30%
Reported having a hearing-related disability	17%
Responded that they had a cognitive and/or sensory-related disability	15%
Selected "Other" and provided a description. These descriptions included anxiety, Asperger's, autism, balance, chronic pain, developmental, epilepsy, Post Traumatic Stress Disorder (PTSD), mental health, and not able to walk or difficulties with walking	16%

“Being confined to a wheelchair in Minneapolis is very challenging. It destroys my confidence every day. I feel very confined unless my aide is with me to help with the obstacles. In winter, I’m resigned to staying in the house unless my aide drives me.”

--SURVEY PARTICIPANT

ACCESSIBLE INFRASTRUCTURE IS SUPPORTED AND USED BY ALL

Several respondents who did not identify as having a disability specified that they are related to or can sympathize with the disability community in some way:

- they are a caretaker of someone with a disability
- they are aging and have difficulty with muscle strength and balance
- they are temporarily injured or have had a disability in the past
- they have or had young children and found that pushing a stroller presented new challenges when navigating the public right of way

Accessible infrastructure was important for the majority of participants. Many comments received from outside the disability community strongly supported accessible infrastructure.

“I’m not disabled, but I am aging--with the expected decline in hearing sharpness, muscle strength and balance. Safe sidewalks are critical to me--more so everyday!”

--SURVEY PARTICIPANT

“It would be absolutely impossible to navigate the city during winter in a wheelchair. I have come to realize this fact over the past winter when I was pushing a child in a stroller. Very difficult to maneuver for weeks after a major snowfall. I also have grave concerns about the safety of pushing a stroller through our neighborhood (Corcoran) because of cars which use us to bypass traffic on Hiawatha Avenue. Generally, automobiles are ill prepared to avoid pedestrians and bicyclists because of excessive speed and inattention. The city needs traffic calming measures now”.

--SURVEY PARTICIPANT

“I love this city and am grateful for how responsive it is to issues like the ones this survey is asking about. Thanks for asking! P.S. My adult daughter IS disabled and these issues are even more important to her.”

--SURVEY PARTICIPANT

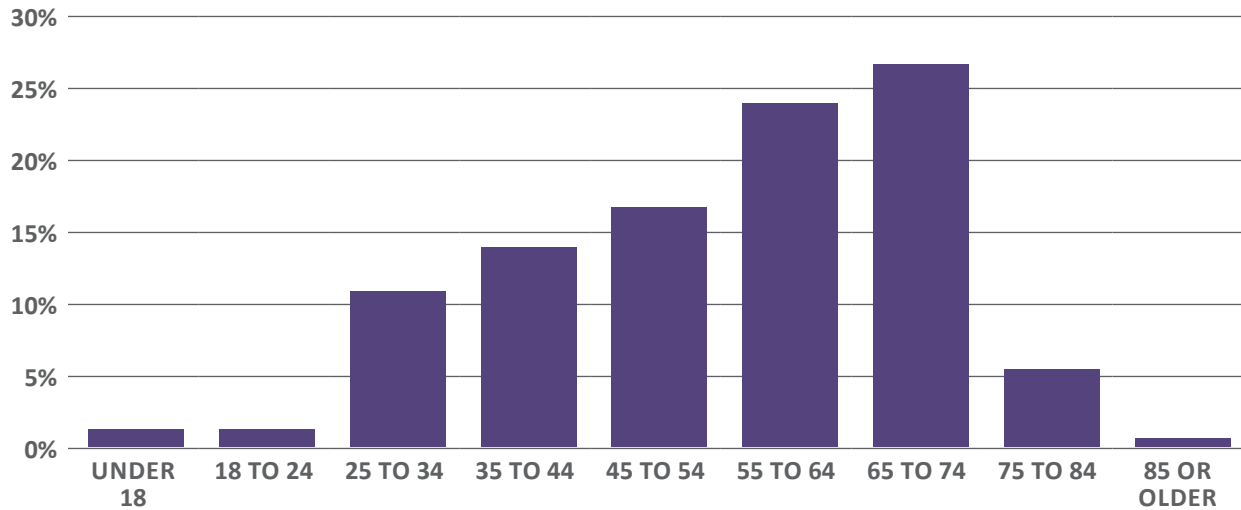
Age

More than half of all respondents (57%) were 55 years or older and 62% of respondents who

identified as having a disability were 55 years or older. The largest age category was 65 to 74 years old (27% of respondents).

Figure 2-2: Age of survey respondents

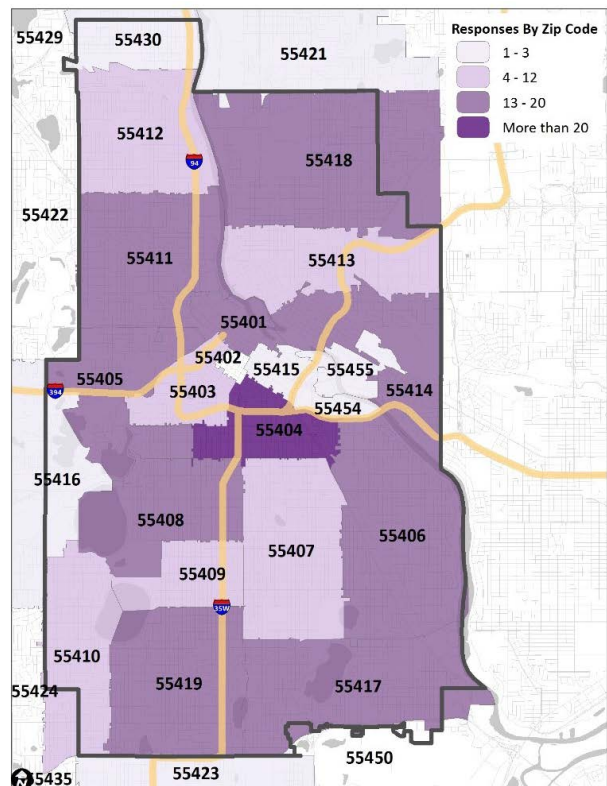
WHAT IS YOUR AGE



Geography

The survey received responses from nearly every ZIP code in Minneapolis and a few responses from participants who live in neighboring cities but likely use infrastructure in Minneapolis.

Figure 2-3: ZIP codes of survey respondents



WHAT DID RESPONDENTS SAY?

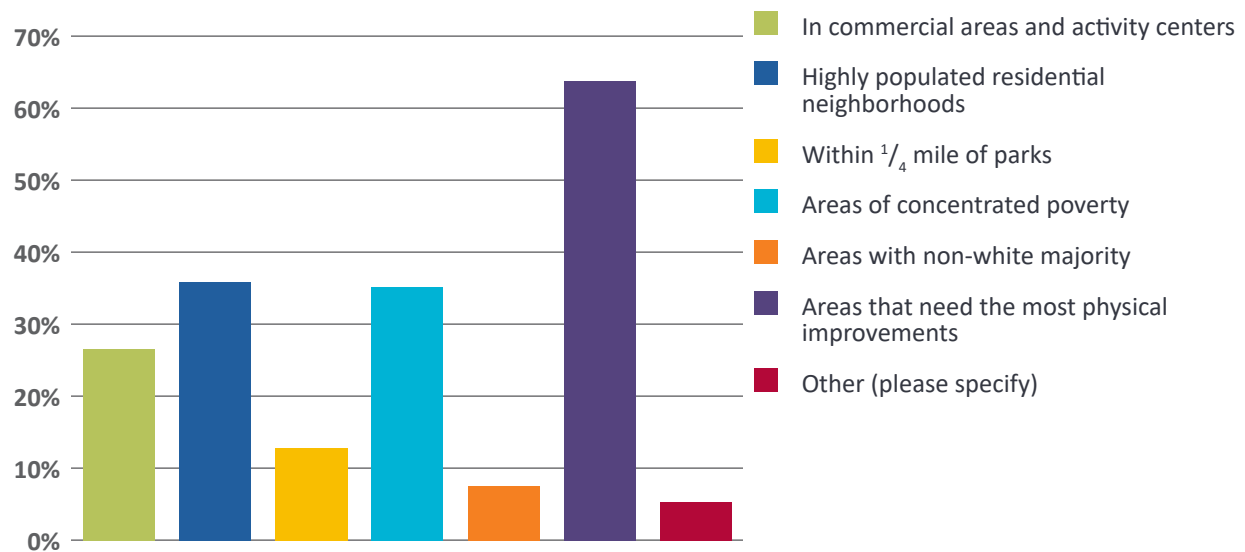
Location Prioritization

Focusing on areas with the most physical need for improvement first when planning improvements was the most strongly supported by survey participants. Other areas that were seen as important to prioritize were in highly populated residential areas, areas of concentrated poverty,

and in commercial areas. *Figure 2-4* shows where people with disabilities indicated that improvements should be prioritized. Because respondents could select more than one option, the total percentages add to more than 100%.

Figure 2-4: Responses to “Where should the City prioritize improvements?”

WHERE SHOULD THE CITY PRIORITIZE IMPROVEMENTS?



Approximately 6% of participants chose “Other”. The responses indicated the need to:

- Prioritize infrastructure in specific locations (“37th Ave NE” or “Downtown Minneapolis, Hennepin Avenue!”)
- Prioritize highly populated and busy areas such as Nicollet Mall or major corridors and arterial streets
- Prioritize areas with concentrations of elderly people, people with disabilities, and low-income neighborhoods
- Prioritize improvements in areas with construction or sidewalk cafes
- Prioritize places that present an opportunity to coordinate with other projects, such as street upgrades or new housing

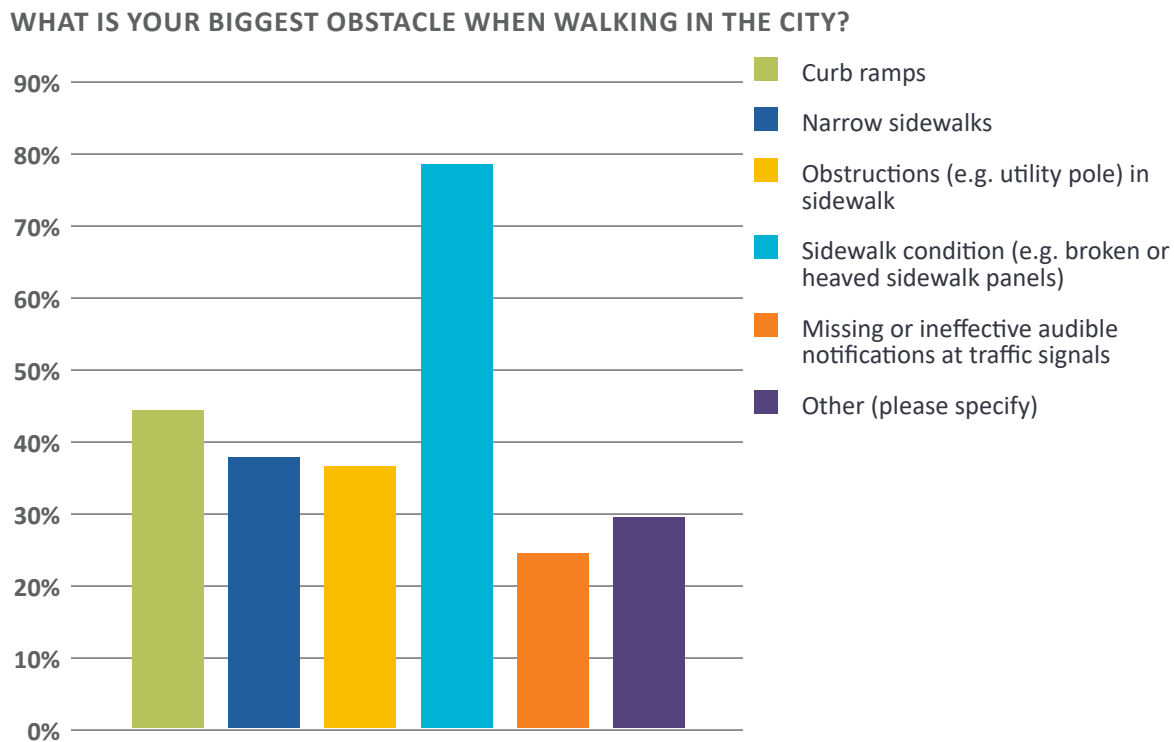
Several respondents questioned the need for making ADA improvements and for prioritizing areas with non-white majorities.

Infrastructure Type Prioritization

Sidewalk conditions presented the largest barrier for people with disabilities (81%) and people without disabilities (69%). Curb ramps (48%), narrow sidewalks (38%) and obstructions in the sidewalk (38%) also presented significant

challenges for people with disabilities. *Figure 2-5* shows the how often each type of infrastructure was selected by people with disabilities. Because respondents could select more than one option, the total percentages add to more than 100%.

Figure 2-5: Responses to “What is your biggest obstacle when walking in the city?”



More than 30% of respondents left a comment by selecting “Other”. The top themes of these comments included:

- Barriers due to snow and ice on sidewalks and at corners (36 responses)
- Drivers failing to yield to pedestrians crossing the street, driving too aggressively or too fast (13 responses)
- Issues with signalized intersections, including not having enough time to cross, needing to push a button to get the walk signal, and having to wait a long time to cross (8 responses)
- Issues with street design, especially wide intersections that are difficult to safely cross (8

responses)

- Overgrown trees or bushes encroaching into the sidewalk space (7 responses)
- Bicyclists riding on the sidewalk in busy areas or needing to share space with bicycles such as on shared use trails (5 responses)

The next set of questions and results provide insight on which features of different types of infrastructure are most challenging.

Pedestrian Curb Ramps

Pedestrian curb ramps, also commonly referred to as “curb cuts,” provide a transition between the sidewalk and the street. The following are key findings related to pedestrian curb ramps.

- **Missing pedestrian curb ramps:** Missing pedestrian curb ramps present a barrier for people with disabilities (68% of participants with disabilities responded that missing pedestrian curb ramps are a barrier). A majority of people with disabilities encountered these a few times a month or less (65%), but some people reported that they encounter these daily (12%) or weekly (24%).
- **Narrow, steep, or ramps with a significant lip:** Pedestrian curb ramps that are too narrow, too steep, or have a significant lip at the bottom or at the top of the ramp are a barrier for people with disabilities (these attributes presented a barrier for 60% of respondents).
- **Obstructed sightlines:** Ramps that are in places where vehicle drivers can't see pedestrians crossing or where pedestrians cannot see oncoming vehicles are a major barrier for people with disabilities (66%) and for people without disabilities (52%).
- **Orientation to street crossing:** Orientation of the pedestrian curb ramp was a barrier for people with disabilities (59%) and for people without disabilities (38%).
- **Most frequent barriers:** People with disabilities faced challenges nearly every day or

several times a week related to sightline issues (46%), curb ramps with a significant lip (41%), curb ramps that do not orient the user into the crosswalk (38%) and missing curb ramps (35%).

Sidewalks

Sidewalks presented challenges more frequently than all other infrastructure types. The following are key findings related to sidewalks.

- **Missing sidewalk:** Missing sidewalks are a barrier for people with disabilities (83%) and people without disabilities (72%).
- **Broken or heaved sidewalks:** Sidewalk condition was a major issue for people with disabilities (82%) and barriers from broken or heaved sidewalks were encountered twice as frequently as barriers caused by missing sidewalks. Broken or heaved sidewalk includes sidewalks that are cracked or broken, as well as sidewalks with raised or uneven panels.

Figure 2-6: *Pedestrian ramp missing in distance between far sidewalk and existing crossing*

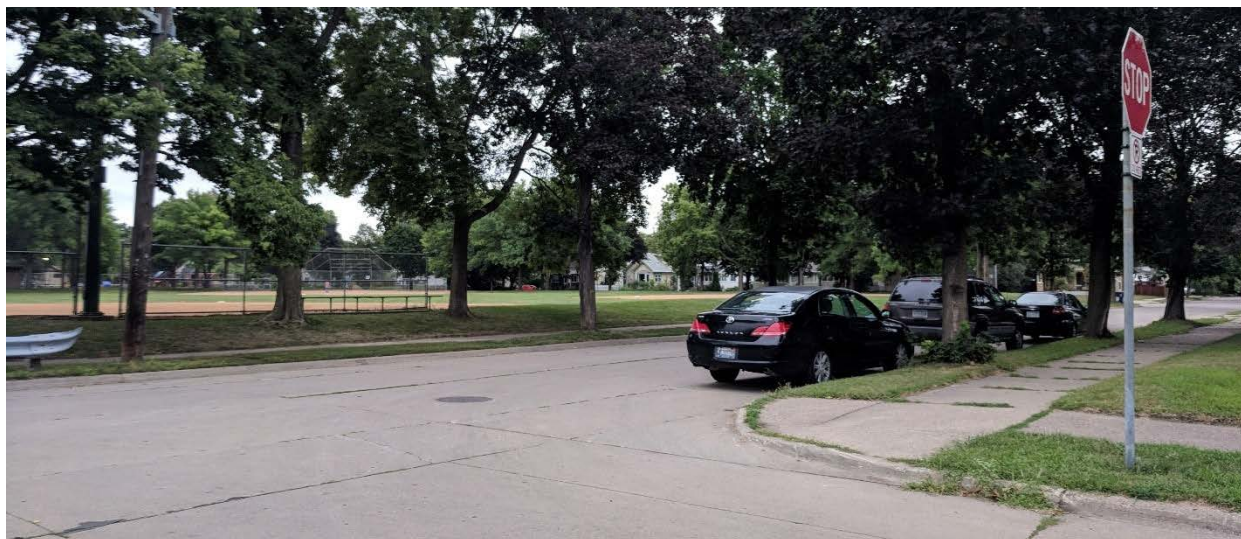


Figure 2-7: Raised panels on sidewalks and broken sidewalks present a barrier to safe walking and rolling



- **Temporary obstructions:** Sidewalks with seasonal obstructions such as overgrown bushes or trees created a barrier for 65% of participants with disabilities. In the comments, more than a third of all respondents specifically noted that winter maintenance is a major barrier (41%), and several mentioned sidewalk cafes or construction detours as frequent obstructions (12%).
- **Narrow or pinched sidewalks:** Sidewalks with fixed obstructions like a utility pole, tree, or bus stop that created a “pinch point” (54%) or sidewalks that were too narrow in general (60%) were a barrier for people with disabilities.
- **Steepness:** Steep sidewalks were a barrier for people with disabilities (61%) but were not as frequent as other barriers (71% of respondents reported that these were encountered a few times a month or less).

Traffic Signals

Barriers at traffic signals were largely related to whether there was enough time allocated to cross intersections. Other key findings regarding intersections with traffic signals are below.

- **Crossing time:** Not enough time to cross the street was listed as the largest issue for people with disabilities (73%) and people without disabilities (53%).
- **Temporary obstructions:** Not being able to access the push button due to a temporary obstruction (e.g., construction sign or snow) was a major barrier for people with disabilities

(61%) and people without disabilities (40%).

- **Missing push button:** Signalized intersections without push buttons were seen as a barrier by over half (53%) of participants with disabilities and nearly half (40%) of participants without disabilities.
- **Lack of clarity on push button function:** Several people responded that they were unsure whether the push button was intended to trigger a walk indicator or whether the walk indicator appears regardless of whether the button is pushed.

Other Conditions

Several questions focused on other concerns related to accessibility that may not apply directly to whether infrastructure in the public right of way is built to be accessible but can still have a significant impact on the accessibility of the public right of way. Below are the key findings from these questions.

- **Winter maintenance:** Snow or other winter maintenance issues was a major barrier for 93% of respondents with disabilities and 80% of respondents without disabilities. The need for improved winter maintenance on sidewalks and crossing streets was mentioned numerous times in the comments for every question, and generated more comments than any other topic.

“The biggest problem that I have is in the winter. It’s not possible for me to do my daily errands and do what I want to do because the snow and the streets have not been cleared.”

--SURVEY PARTICIPANT

- **Construction:** Impacts of construction, especially related to detours and signage in the sidewalk was a major barrier for 80% of people with disabilities and 65% of people without disabilities.

“During construction, temporary walkways, scaffolding, and equipment become obstacles because they are not clearly marked and are difficult to get through.”

--SURVEY PARTICIPANT

- **Behavior and lack of enforcement:** Participants cited behavior, especially driver behavior and the lack of enforcing traffic laws as a major concern when traveling on streets and sidewalks. Common concerns included people driving too quickly, drivers blocking crosswalks and sidewalks, drivers not yielding to pedestrians, and a general need for traffic calming. Bicyclists riding on sidewalks was also mentioned as a concern, though several people with disabilities noted that they use a tricycle as a mobility aid.

“I feel that there is no respect for the person who walks. Regardless of buttons and walk signals, cars go too fast around turns. I have almost been hit multiple times.”

--SURVEY PARTICIPANT

- **Access to the curb and adequate space to lower a ramp:** Several people with disabilities cited the need to access the curb without facing obstructions in the boulevard such as flower beds or shrubs. Conversations with members of the disability community after the completion of the survey indicated that scooters and bicycles parked in the boulevard alongside parked cars or left on the sidewalk can present a barrier to accessing the sidewalk if not parked in an appropriate location.

Figure 2-8: Sidewalk closures can present unique challenges to the disability community



“It would also be really helpful to have more designated drop-off/pick-up zones (where you only stop long enough to let someone in and out) in busy areas so I could safely have enough time to get out of a car if someone is dropping me off downtown to take a bus or get to the skyway. I feel like right now there are pretty much either parking spots that are taken or bus stops, where you can’t stop, so there aren’t many choices in proximity to the major bus thoroughfares. It’s like rich people can use the street frontage downtown for valet drop-off/pick-up for convenience right up alongside major transit routes, but disabled people can’t use public space near there to get out of cars safely with our mobility aids.”

--SURVEY PARTICIPANT

- **Benches:** A need for places to rest such as benches or chairs in the public right of way, especially near bus stops and in the Skyway was mentioned several times.

“I am elderly and request that the places where you wait have heated seating especially bus stops. And to make sure they are safe.”

--SURVEY PARTICIPANT

- **Water pooling on sidewalks or at corners:** Large puddles on sidewalks were a major issue for 64% of people with disabilities.
- **Complex intersections:** Complex intersections were a major issue for people with disabilities (63%).

From Here

Community engagement results were used in developing the Accessibility Evaluations for each piece of infrastructure in [Chapter 4: Prioritization](#). Additionally, process improvements of [Chapter 3: Self Evaluation](#) and the recommendations of [Chapter 5: Implementation](#) highlight the themes and findings from this engagement process.

These results will inform planning efforts beyond this Transition Plan. Future and parallel plans for improving City infrastructure in the City of Minneapolis’ public right of way will incorporate these findings to inform recommendations.

CHAPTER 3

Self-Evaluation

In accordance with the City of Minneapolis ADA Action Plan and Title II requirements, Public Works is required to conduct a self-evaluation of programs, policies, and infrastructure within the City’s public right of way. The public right of way typically includes streets and sidewalks *Figure 3-1*.

Public Works has identified four infrastructure types for which inventories need to be collected and maintained. These infrastructure types in the public right of way include:

- Pedestrian curb ramps
- Traffic signals
- Sidewalks
- Street crossings

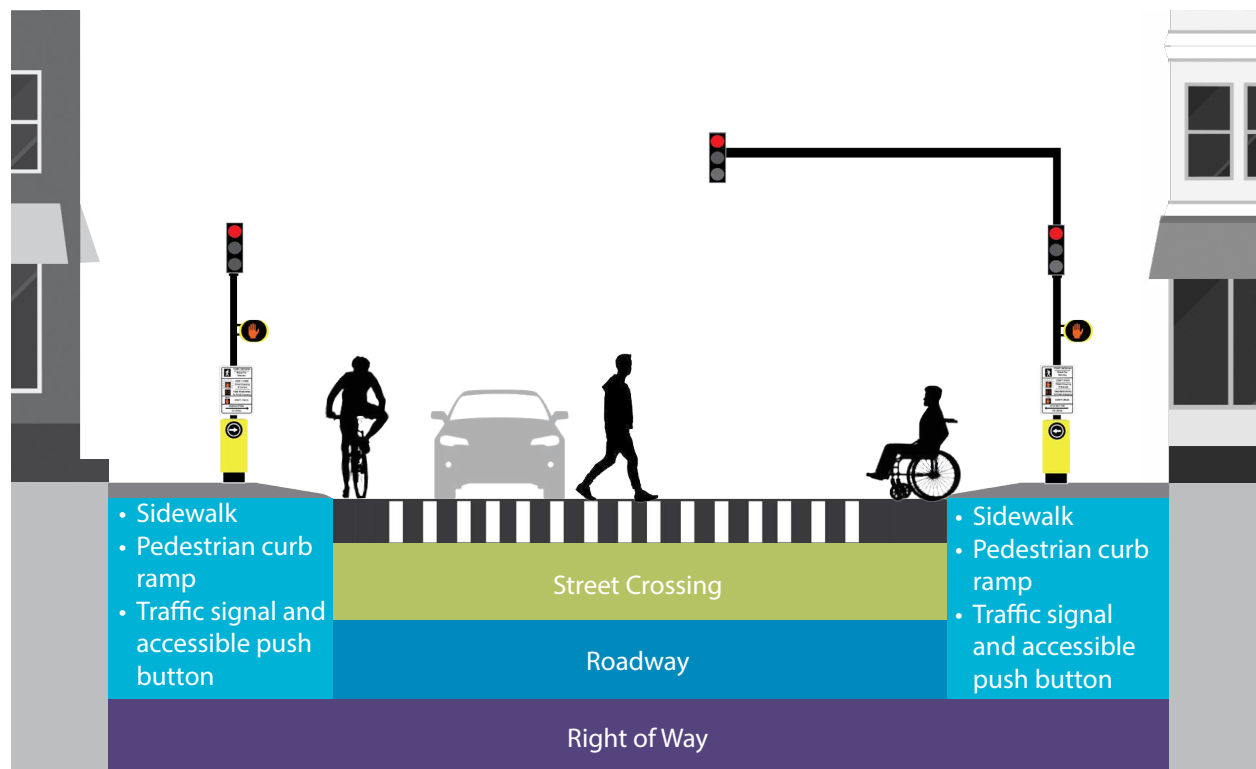
This self-evaluation includes a summary of accessibility features for each infrastructure type, the status, collection, and maintenance plan for

infrastructure inventories, and an evaluation of programs, policies and practices for planning and implementing improvements to deficient infrastructure in Minneapolis’ public right of way. More information on improving infrastructure through capital programs is included in *Chapter 5*.

This self-evaluation serves as an update to the 2012 self-evaluation conducted by Public Works and is a component of the City of Minneapolis’ ADA Action Plan. Recommendations for improvement were developed from input received through the public engagement process outlined in *Chapter 2* and through discussions with technical staff.

This self-evaluation will be updated periodically as infrastructure inventories and improvements are completed.

Figure 3-1: *Public right of way cross-section*



Pedestrian Curb Ramps

Curb ramps are the transitions between the sidewalks and street crossings. Pedestrian curb ramps should be provided at legal intersections where sidewalk connections exist. Two types of pedestrian curb ramps are shown in [Figure 3-2](#) and [Figure 3-3](#). More information on these and other types of pedestrian curb ramps and the considerations when designing or selecting ramp types is included in [Chapter 5](#). A graphic that details the components of pedestrian curb ramp design are shown in [Figure 3-4](#). The City of Minneapolis has over 17,800 pedestrian curb ramps within its jurisdiction. Some corners have more than one curb ramp as shown in [Figure 3-2](#).

- **Inventory Status:** System-wide data was collected in 2012. Data is updated as existing ramps are reconstructed or new ramps are built.
- **Inventory Update Timeline:** Inventory is updated each year for reconstructed or new pedestrian curb ramps.

Figure 3-2: Combined Directional Pedestrian Curb Ramps provide two separate ramps at each corner



Figure 3-3: Fan Ramps or Depressed Corner Ramps provide one ramp to cross the street in either direction



Infrastructure Improvements Background

The City of Minneapolis Public Works Department has been constructing pedestrian curb ramps since 1970. When initially constructed, the pedestrian curb ramps were consistent with the design criteria of that time. However, ongoing modifications to ADA criteria and guidance has resulted in a large number of pedestrian curb ramps that no longer comply with the 2010 Standards or meet best practices for curb ramp design as documented in PROWAG.

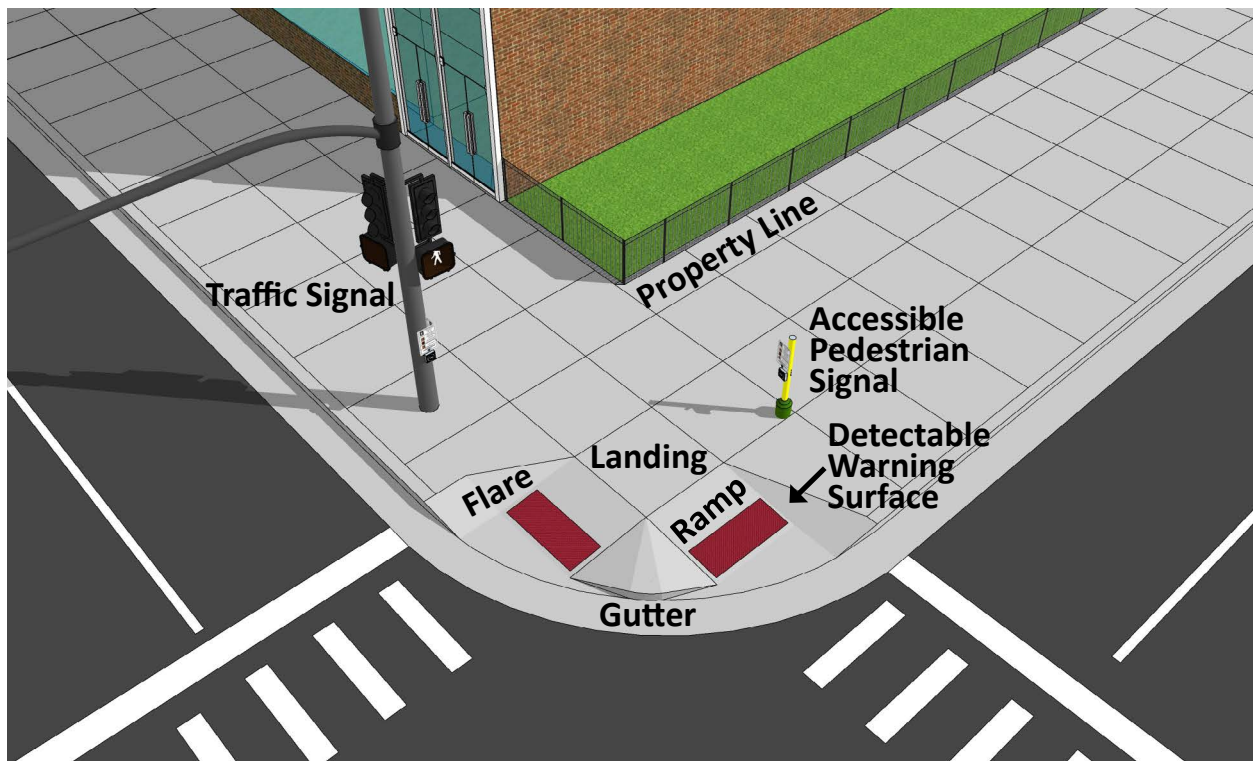
Due to existing site and scope constraints, it may not be feasible to meet all ADA criteria at some locations. Ramps at these locations will be rebuilt to the maximum extent feasible, the constraints will be documented, and the ramps will remain in the ADA Transition Plan until other opportunities to address the deficiency arise.

Progress Since City of Minneapolis Draft ADA Transition Plan for Public Works (2012)

Overall, Minneapolis has jurisdiction over 17,800 ramps and has built more than ~~1,700~~ 2,600 ramps since the 2012 Draft ADA Plan for Public Works was released. Additionally, more than 300 ramps ~~have been were~~ rebuilt by private utilities and through development projects ~~between 2012 and 2018~~. More information on infrastructure implementation is included in [Chapter 5](#).

[Appendix A](#) outlines the progress made since the adoption of the 2020 ADA Transition Plan for Public Works, which includes data from 2019-2020. Public Works also reports out annually on infrastructure improvements through the [Your City, Your Street Progress Report](#).

Figure 3-4: Typical features of a pedestrian curb ramp at a signalized intersection



ADA CRITERIA AND INFRASTRUCTURE STATUS

The following items determine whether pedestrian curb ramps comply with the 2010 ADA Standards for Accessible Design (ADA Standards). Criteria from the 2011 proposed Public Right of Way Accessibility Guidelines (PROWAG) are included for reference when the PROWAG criteria differ from the 2010 ADA Standards.

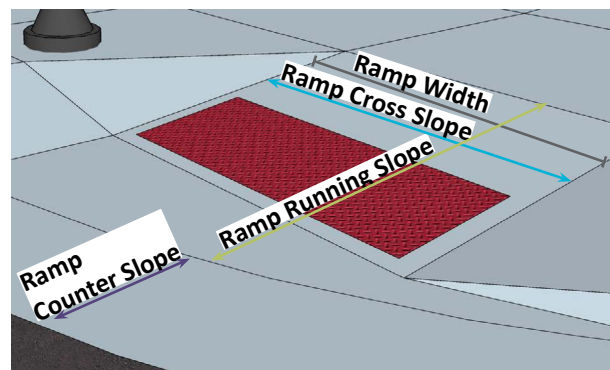
To incorporate best practices for construction, maintenance and to accommodate a range of accessibility needs when designing and constructing pedestrian curb ramps, the City of Minneapolis refers to MnDOT's ADA standards ([MnDOT's Standard Plan 5-297.250](#)).

Public engagement results indicated that ramps that are too steep, too narrow, or that have a significant lip present the largest barriers for people with disabilities. These criteria are emphasized in the prioritization methodology for improving pedestrian curb ramps as described in [Chapter 4](#).

Pedestrian Curb Ramp Geometry

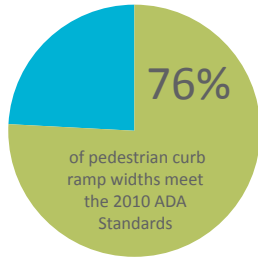
The ramp is the sloped surface creating a transition between the sidewalk and street or crossing. Pedestrians travel along the length of the ramp between the sidewalk and street.

Figure 3-5: Ramp width, length, and slope



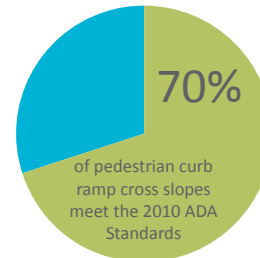
RAMP WIDTH

To adequately serve people who use a wheelchair or other mobility device, ramps need to be three feet wide to meet the 2010 Standards (406.1 and 405.5) and ramps need to be four feet wide to satisfy (PROWAG R304.5.1). Seventy-six (76%) percent of pedestrian curb ramps in Minneapolis meet the 2010 Standards and forty-two (42%) satisfy PROWAG width guidance.



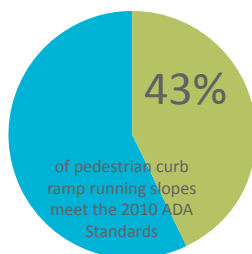
RAMP CROSS SLOPE

Cross slope measures the grade of the surface perpendicular to the direction of travel (the width). To meet the ADA Standards, the ramp cross slope needs to be 2 percent or less (405.3). Seventy (70%) percent of pedestrian curb ramps in Minneapolis meet the 2010 Standards.



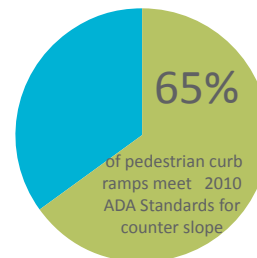
RAMP RUNNING SLOPE

Running slope measures the grade of the surface along the direction of travel (the length). To meet ADA Standards, the ramp running slope needs to be 8.3 percent or less. Forty-three (43%) percent of pedestrian curb ramps in Minneapolis meet the 2010 Standards (405.2).



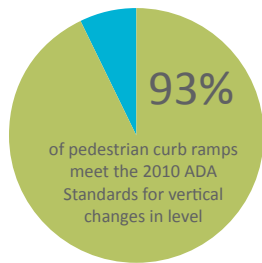
RAMP COUNTER SLOPE

Counter slope measures the grade of the gutter or street surface at the foot of ramp in the direction of travel (the length). To comply with the ADA Standards, the ramp counter slope needs to be 5% or less (406.2). Sixty-five (65%) percent of pedestrian curb ramps in Minneapolis meet the 2010 Standards.



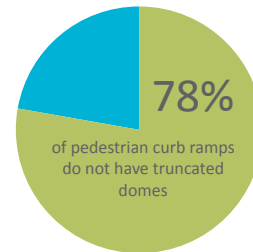
RAMP VERTICAL CHANGES IN LEVEL

Vertical changes in level or vertical discontinuities include any cracks, bumps, or raised lip where the ramp surface is not smooth or flush. To meet the ADA Standards, discontinuities should be 1/4 inch or less (303.2). Discontinuities larger than 1/4 inch but less than 1/2 inch can be beveled if the slope is not greater than 50% (303.3). Ninety-three (93%) percent of pedestrian curb ramps meet the vertical changes in level standards.



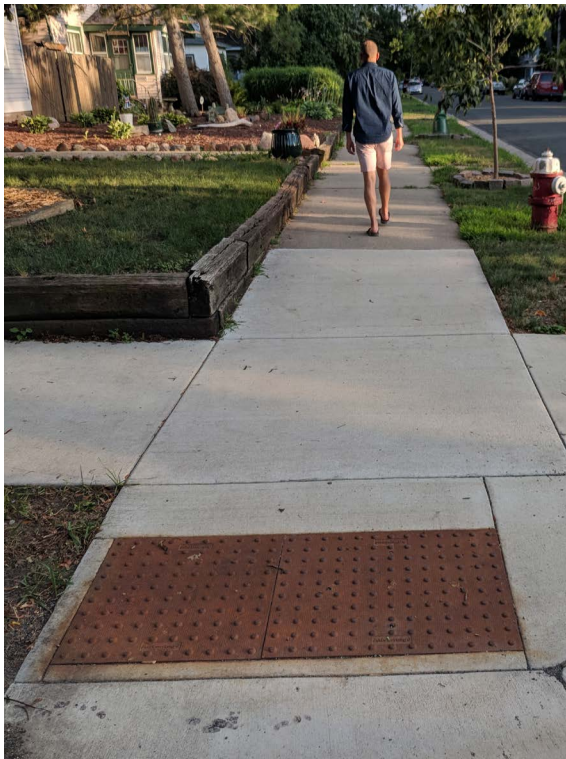
Detectable warning surfaces alert users with visibility impairments that a change or edge is nearby, such as a crosswalk or transit platform edge. To meet the ADA Standards, pedestrian curb ramps need to include a detectable warning surface (705.1).

Newer pedestrian curb ramps have detectable warning surfaces. Most of the older pedestrian curb ramps have exposed aggregate or smoothed concrete instead of truncated domes (78%) and were often constructed before truncated domes were required.



Detectable Warning Surface

Figure 3-6: Detectable warnings alert users that they are approaching the edge of a facility



TYPE

To meet the ADA Standards, detectable warning surfaces need to be made of truncated domes (705.1). For maintenance purposes and to withstand winter conditions, MnDOT has specifically called for the use of cast iron truncated domes.

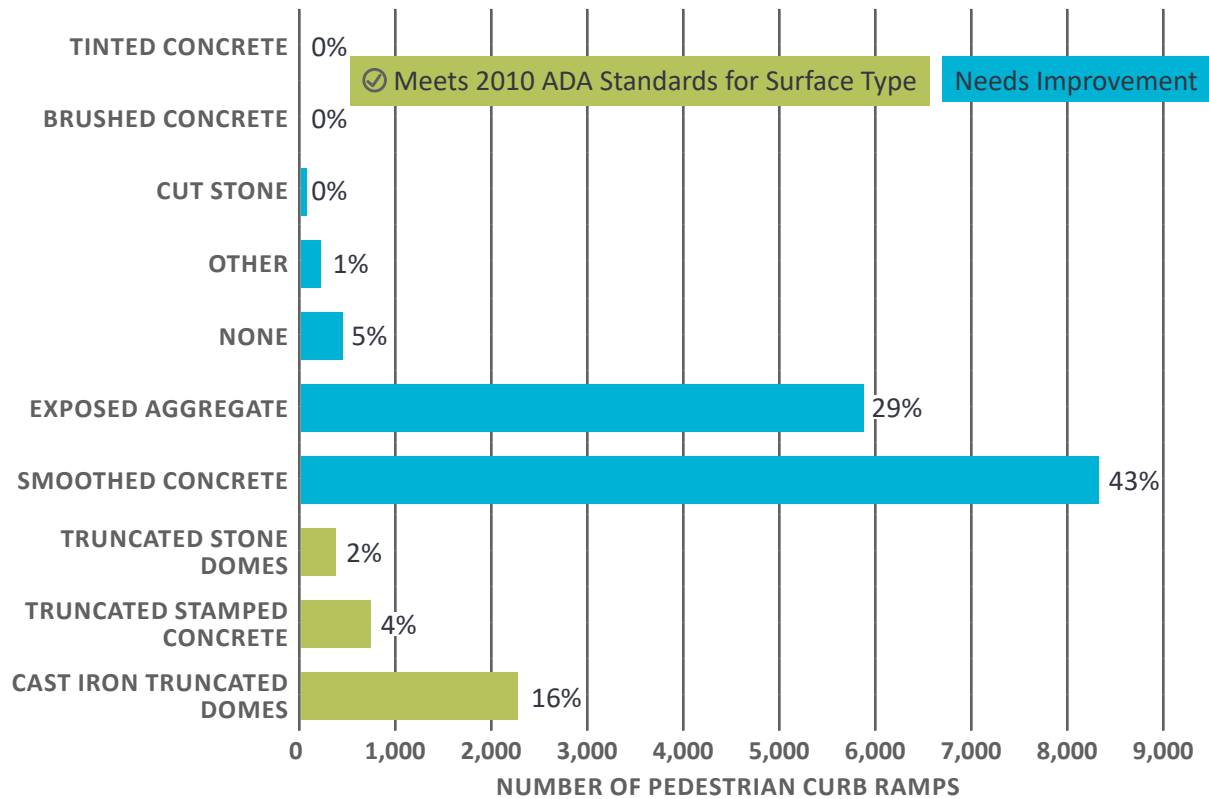
VISIBILITY

To meet the ADA Standards, detectable warning surfaces need to provide a visual contrast from adjacent walking surfaces: either light-on-dark, or dark-on-light (705.1.3).

WIDTH

Detectable warning surfaces that do not cover the full width of the ramp could be missed by pedestrians. To satisfy PROWAG, detectable warning surfaces need to be the full width of the ramp (PROWAG R305.1.4).

Figure 3-7: Detectable warning surface type



Landing and Crossing Area

The flat surface adjacent to the ramp is called the landing area. These areas provide users with a safe space to stop or change their direction of travel. Landings that are too small may make changing direction or adjusting speed challenging for pedestrians using wheelchairs or mobility devices. The 2010 Standards require landings at the top of curb ramps. For ramps without a landing at the top of the ramp, curb ramp flares need to be provided and be no steeper than 8.3% (406.4) in alterations.

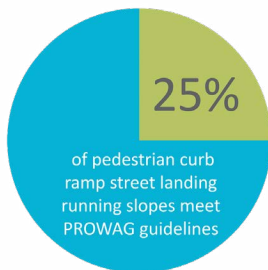
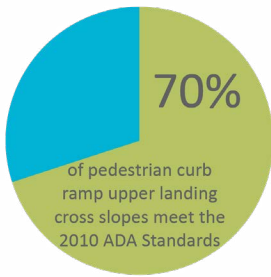
LANDING DIMENSIONS

To meet the ADA Standards, landings need to be as wide as the curb ramp and a minimum of thirty-six inches in length (406.4). To satisfy PROWAG, pedestrian curb ramp landings need to be at least four feet in length and width (PROWAG R304.5.5).

CROSS SLOPE & RUNNING SLOPE

To meet the ADA Standards, the cross slope of pedestrian curb ramp landings need to be two percent or less (405.7.1). Additionally, PROWAG guidelines require a clear space in the street crossing (R304.5.5) with a cross slope and running slope of two percent or less (R304.5.3).

- Cross Slope: Seventy (70) percent of pedestrian curb ramp upper landing cross slopes meet ADA Standards. Seventy-five (75) percent of pedestrian curb ramp street landing cross slopes meet PROWAG guidance.
- Running Slope: Sixteen (16) percent of pedestrian curb ramp upper landing running slopes meet ADA Standards. Twenty-five (25) percent of pedestrian curb ramp street landing running slopes meet PROWAG guidance.



counted as obstructions.

- Manholes or other utilities are not considered obstructions when located:
 - outside of the pedestrian access route
 - within the pedestrian access route but not causing a vertical elevation change of more than ¼ inches

The majority of pedestrian curb ramps in Minneapolis do not have obstructions. Obstructions are present in four percent of pedestrian curb ramps. The most common cause are poles, followed by manholes, hydrants and utility boxes.

Obstructions

Poles, hydrants, and utility cabinets can create an obstruction if located in the ramp or landing area. Manholes within the pedestrian access route that are not flush (defined as more than 1/4 inch) with the surface of the street or sidewalk are also

Table 3-1: Summary of existing curb ramp trend

VARIABLE	MEASURE	% NEEDS IMPROVEMENT
Ramp Geometry	Ramp Width	24%
	Ramp Running Slope	57%
	Ramp Cross Slope	30%
Detectable Warning Surface	Type	78%
Slopes in Waiting & Crossing Areas	Landing Running Slope	84%
	Upper Landing Cross Slope	30%
	Street Running Slopes	75%
	Street Cross Slopes	25%
Obstructions	Obstructions in ramp area	4%

DATA COLLECTION

In 2012, the City of Minneapolis collected pedestrian curb ramp data through an in-field tablet application (shown in *Figure 3-8*). This effort created a citywide database of pedestrian curb ramps. Since that time Public Works has inventoried newly constructed pedestrian curb ramps on an annual basis. That initial effort plus newly constructed ramp data has resulted in a combined database of over 20,000 data points.

AREAS FOR IMPROVEMENT: EVALUATING PEDESTRIAN CURB RAMPS

what information is collected on pedestrian curb ramps using the in-field application and recommendations to collect data points.

Data Collection Process Improvements

The tablet application has been adjusted over time as the design criteria of pedestrian curb ramps have changed. *Table 3-2* shows

Figure 3-8: User interface on City’s pedestrian curb ramp information collection application

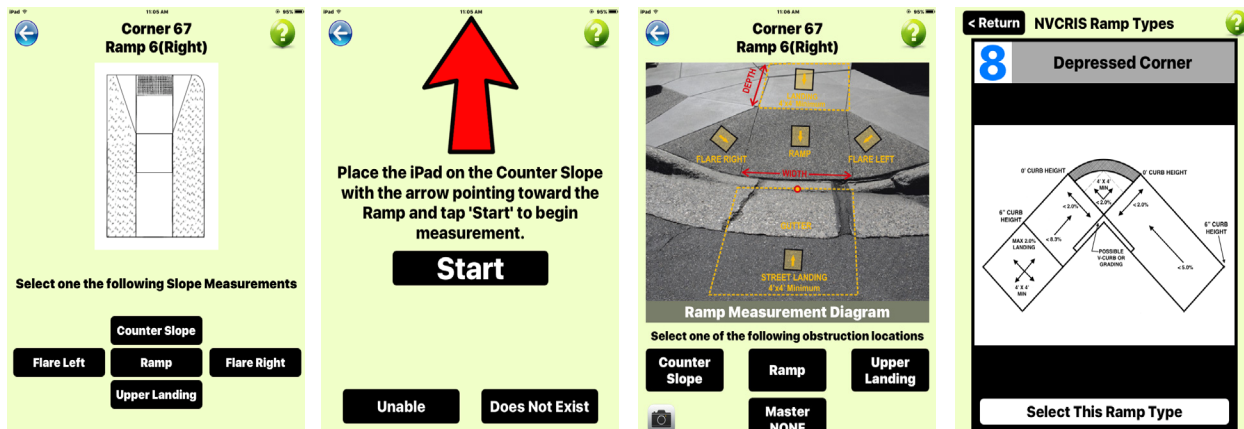


Table 3-2: Data availability of pedestrian curb ramp features

VARIABLE	DESIGN FEATURES OF PEDESTRIAN CURB RAMPS			
	RAMP	DETECTABLE WARNING SURFACE	LANDING	FLARE
Type	●	●	■	■
Length	●	○	○	■
Width	●	○	○	■
Running Slope	●	■	●	●
Cross Slope	●	■	●	■
Counter Slope	●	■	■	■
Obstructions	●	■	●	○

KEY:

- Data not necessary for compliance determination
- Adjustments to data collection process recommended
- Data is being collected (no adjustments recommended)

Recommendation 3.1: Modify the pedestrian curb ramp in-field data collection application to holistically collect all necessary information on pedestrian curb ramps

- Current data denotes the presence (type) of the detectable warning surface at a pedestrian curb ramp, but the data does not contain any detailed placement information – knowing where along the ramp and how much of the ramp is covered by the detectable warning

strip is a factor in evaluating whether a ramp meets accessibility standards and guidelines.

- It is recommended that the city collect landing length and width alongside the ramp length and width. Indications and cracks are noted both in the pedestrian curb ramp and landing, however, obstructions and cracks for flares are also pertinent pieces of information per PROWAG.

These data collection improvements will be implemented through improvements and updates to the in-field data collection application.

A prioritization framework to identify and correct the ramps with the most need first is detailed in [Chapter 4](#).

Traffic Signals

Intersections with pedestrian signals need to have Accessible Pedestrian Signal (APS) equipment including push buttons for accessibility.

A diagram that details the components and features of Accessible Pedestrian Signals (APS) is shown in [Figure 3-10](#). There are over 800 traffic signals in the City of Minneapolis. Some are owned by other agencies and operated by the City of Minneapolis.

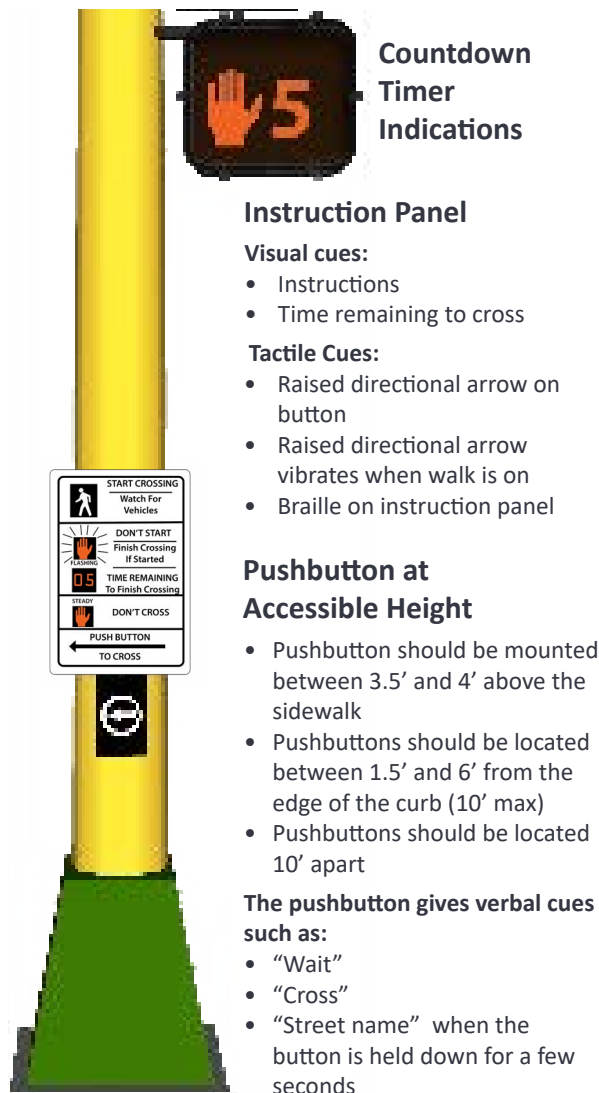
- **Inventory Status:** A ~~digital~~ digital inventory of signals owned or operated by Minneapolis ~~began in~~ was completed in 2018. ~~Data-~~The inventory is currently being updated to reflect 2021 data and is anticipated to be complete mid-2022. ~~processed~~.
- **Inventory Update Timeline:** Inventory on APS features is updated every 5 years or as signal systems are rebuilt.

Figure 3-9: Push buttons and pedestrian signal heads are components of Accessible Pedestrian Signals (APS)



The equipment communicates information about the WALK and DON'T WALK status at signalized intersections in visual and non-visual formats such as audible tones and vibrotactile surfaces. More information on the features of APS systems is detailed in [Figure 3-10](#).

Figure 3-10: Accessible Pedestrian Signal (APS)



ADA CRITERIA AND INFRASTRUCTURE STATUS

The following items determine whether traffic signals with pedestrian signals comply with the Minnesota Manual on Uniform Traffic Control Devices (MNMUTCD) and align with PROWAG guidance.

Due to existing site and scope constraints, it may not be feasible to meet all criteria at some locations. These locations will be tracked through updates to the Transition Plan and infrastructure implemented to the maximum extent feasible considering project scope and site constraints.

Ramp Geometrics & Layout

BUTTON SIDE REACH

So that people who use a wheelchair are able to reach the push button, the distance between the clear waiting space and the push button should be between ten inches and twenty four inches (308.3.2) or be ten inches or less (PROWAG R406.3).

Button Specifics

BUTTON HEIGHT

Pushbuttons should be mounted three and a half feet above the sidewalk but not more than four feet (MNMUTCD 4E.8).

BUTTON SIZE

APS push buttons come in several sizes. Buttons should be two inches in diameter or larger (2005 Draft Version of PROWAG Section R306.3.3 Size and Contrast). The 2010 ADA Standards do not have button size criteria for APS pushbuttons but the 2010 ADA Standards specify that operable parts have to be operable with one hand and cannot require tight grasping, pinching, or twisting of the wrist. Additionally, the force required to activate operable parts cannot be greater than five pounds (309.4).

BUTTON LOCATION

The MNMUTCD recommends that pushbuttons be at least ten feet apart, between eighteen inches and six feet but no more than ten feet from the curb, and within five feet from the edge of the crosswalk (MNMUTCD 4E.8).

Tactile Features

VIBROTACTILE ARROW

The MNMUTCD requires that pedestrian signals be accompanied by a vibrotactile arrow indicating the direction of crossing (MNMUTCD 4E.11).

DATA COLLECTION

Because collecting data on traffic signals was not included in the 2012 pedestrian curb ramp inventory, comprehensive citywide data on APS ~~locations and characteristics~~ **was is** not available during this Transition Plan update. **Public Works is working to improve the data collection process for signals to ensure the collection of APS characteristics (Recommendation 5.3).**

AREAS FOR IMPROVEMENT: TRAFFIC SIGNAL INFRASTRUCTURE

The Traffic and Parking Services Division of Public Works started updating their traffic signal inventory in 2018. This inventory **will** include data on APS equipment information citywide. **Approximately 200 324** of the **800 845** signalized intersections citywide have APS. This includes signals owned by other agencies and operated by the City of Minneapolis.

An overview of capital programs that are used to implement accessible traffic signal infrastructure is detailed in [Chapter 5: Implementation](#).

Recommendation 3.2: Evaluate Accessible Pedestrian Signals (APS) inventory data and incorporate results into Infrastructure Status section of ADA Transition Plan

Recommendation 3.3: Compare Accessible Pedestrian Signal (APS) data collected to current ADA and Minnesota Manual on Uniform Traffic Control Devices (MN MUTCD) criteria to identify any additional elements to collect and incorporate results into ADA Transition Plan

Sidewalks

Sidewalks are the foundation of the pedestrian network. Their integrity affects whether and how easily pedestrians can move about the city.

The City of Minneapolis has over 1,600 linear miles of sidewalks along its streets. Additionally, there are more than 500 linear miles of sidewalk in Minneapolis within other agency right of way. Minneapolis has citywide data on that indicates whether or not a sidewalk exists or whether there is a sidewalk gap on one or both sides of a street. The ADA does not require the provision of sidewalks where there are no existing sidewalks but does include standards on evaluating whether existing sidewalks are accessible. While providing sidewalks is not a requirement of the

ADA, Minneapolis recognizes the importance of sidewalks and establishes the need to provide sidewalks through other planning policies and goals including [Minneapolis 2040](#) and the [Minneapolis Street Design Guide Minneapolis Sidewalk and Street Design Guidelines](#).

Per Minneapolis Ordinance 427.90, adjacent property owners are responsible for the construction and maintenance of sidewalks. Minneapolis enforces this ordinance and orders repairs of sidewalks through their annual sidewalk repair program. More information on the repair program is available in [Chapter 5](#).

In Minneapolis, more than 93% of streets have sidewalks on both sides, nearly 4% have sidewalks on one side, and 3% are missing sidewalks along both sides. The locations of streets that are missing sidewalks on one or both sides is shown in [Figure 3-11](#).

Sidewalks are added to streets during street reconstruction projects and as part of private development or utility projects. Additionally, a sidewalk gap program was developed in 2018 to fill sidewalk gaps along public properties or properties that cannot be assessed for sidewalk projects.

Minneapolis also keeps data on the width of sidewalks. The 2010 ADA Standards require pedestrian access routes to be at least 3' wide and 4' wide where a turn is required. PROWAG guidelines use 4' as the minimum width for sidewalks. See page 3-14 for more information on ADA criteria. According to Minneapolis' sidewalk width data, more than 75% of streets have an average sidewalk width of 4' and the majority of these are 6' or wider. Fewer than 1% of sidewalks are less than 4' wide. Nearly 25% either have no sidewalk on one or both sides or are missing width data.

Minneapolis generally requires sidewalks to be wider than the ADA requirements through City standards [outlined in the Street Design Guide and the Minneapolis Street and Sidewalk Design Guidelines](#). The majority of sidewalks (69%) in Minneapolis meet or exceed the recommended sidewalk width of 6' wide as shown in [Figure 3-12](#).

Figure 3-11: Sidewalk Gap Map

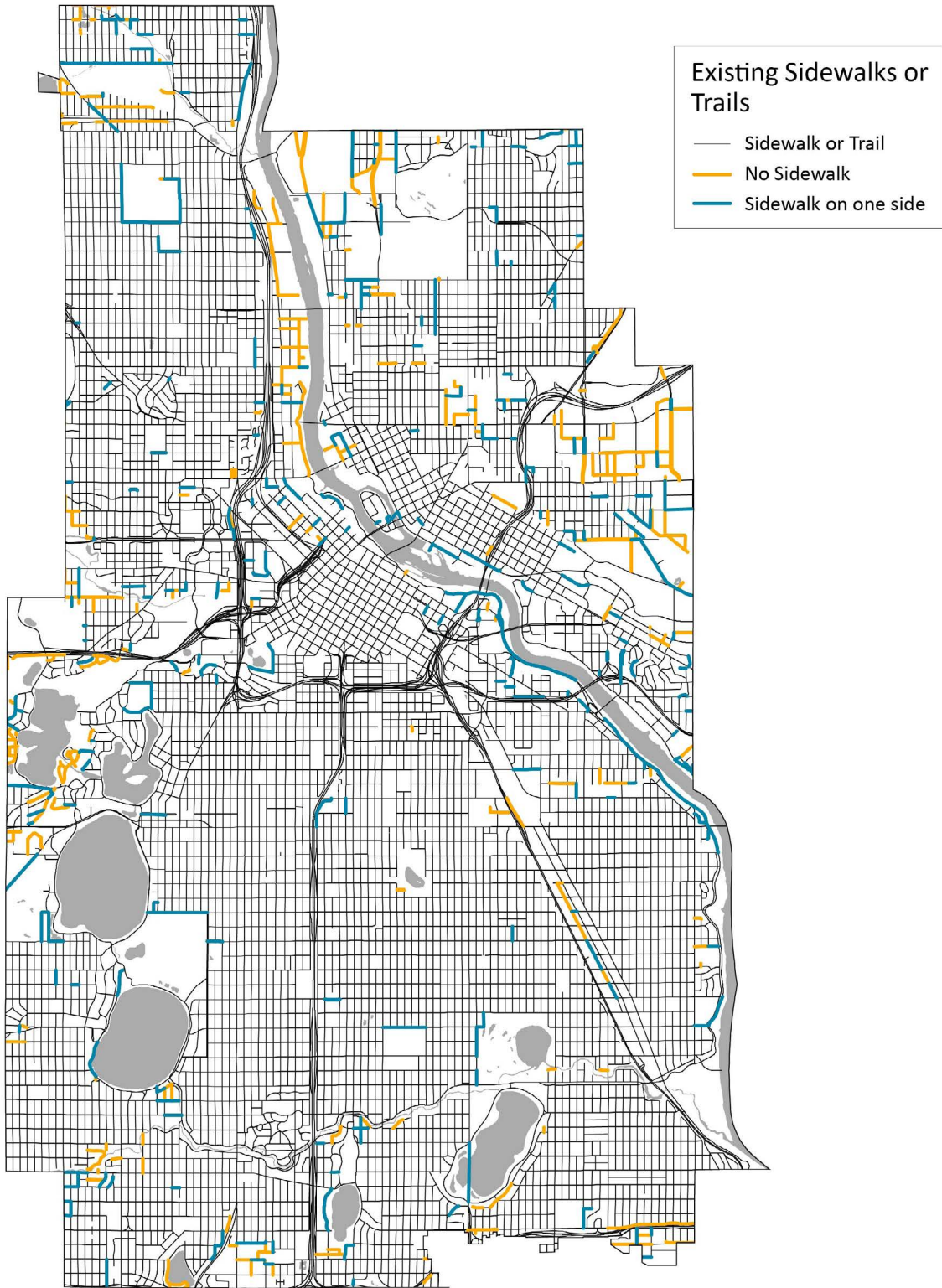
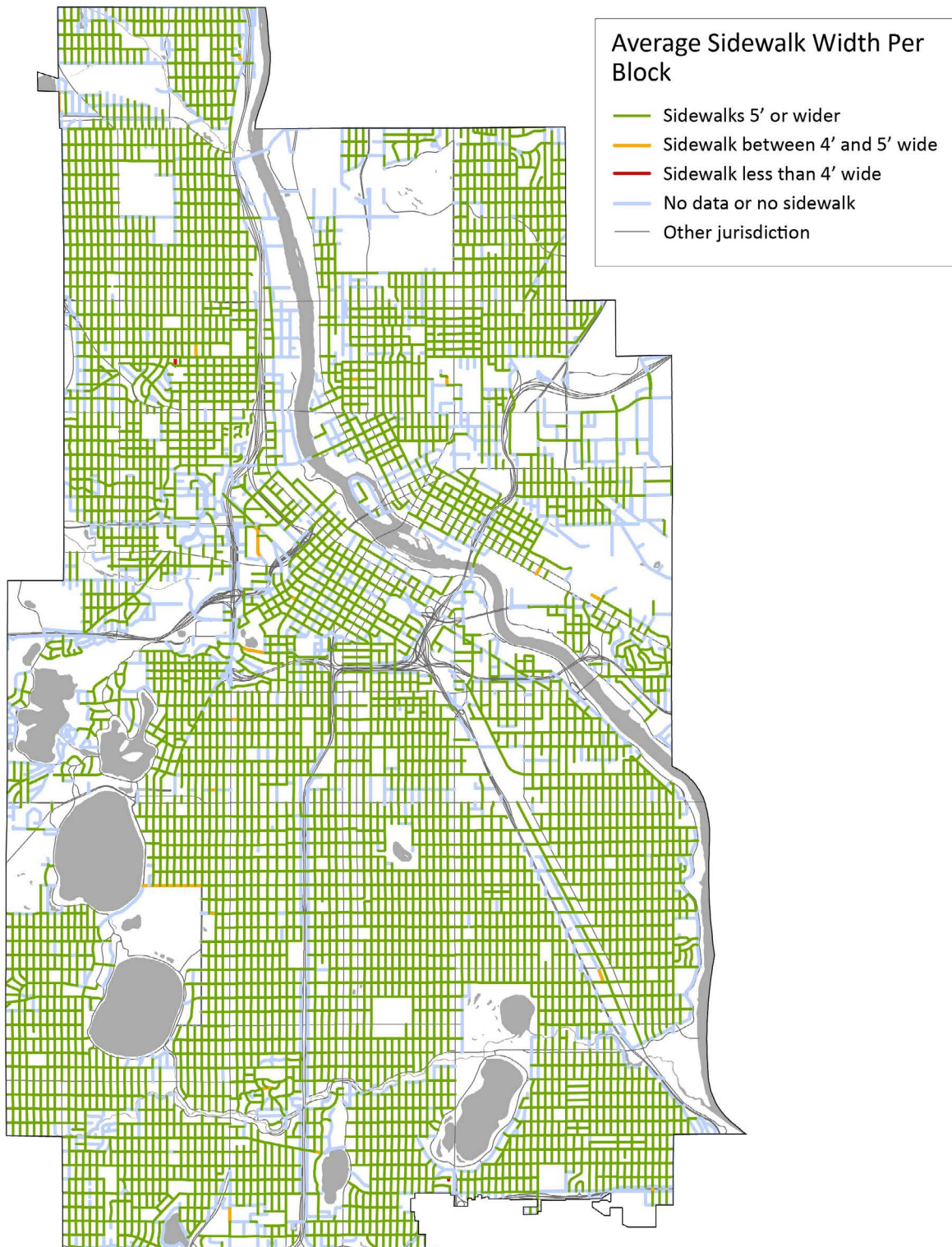


Figure 3-12: Sidewalk Width Map



- **Inventory Status:** Planning for a sidewalk inventory to supplement and confirm existing data sources is underway. After this inventory is completed, this document will be updated to include the location and number of barriers identified through the inventory, priorities for improvement, and an implementation plan for removing barriers.
- **Inventory Update Timeline:** An update timeline will be determined based on results of the inventory.

Figure 3-13: Sidewalks are the foundation of the pedestrian network



Figure 3-14: Sidewalk with tree grate

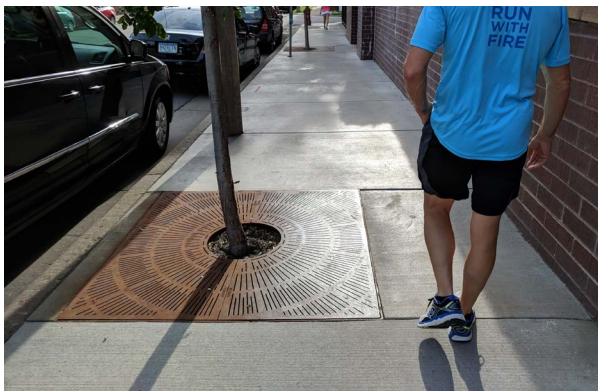


Figure 3-15: Typical residential sidewalk section with grass boulevard



ADA CRITERIA AND INFRASTRUCTURE STATUS

The following items determine whether components of sidewalks comply with the 2010 ADA Standards. Additional guidance is included for PROWAG when the proposed guidance differs from the 2010 ADA Standards.

WIDTH

The 2010 ADA Standards require a clear width of walking surfaces to be a minimum of three feet (403.5.1) and four feet where a turn is required (403.5.2). To satisfy PROWAG, sidewalks need to have a continuous width of at least four feet (PROWAG R302.3). The City of Minneapolis [Street Design Guidelines for Streets and Sidewalks](#) calls for much wider sidewalk widths as outlined in the [Street Design Guide](#). ~~The Design Guidelines for Streets and Sidewalks is being updated as part of the update to the City's Transportation Action Plan.~~

CROSS SLOPE

The 2010 ADA Standards require the cross slope of walking surfaces to be no greater than two percent (403.3). Cross slope is the slope of the sidewalk perpendicular to the direction of travel.

RUNNING SLOPE

Running slope measures the grade of the surface along the direction of travel. The 2010 ADA Standards require that the running slope of walking surfaces be five percent or less (402.2). To

satisfy PROWAG, sidewalk running slopes need to be five percent or less (PROWAG R302.5) or follow the street grade.

VERTICAL FAULTS

Vertical faults or changes in level are points where the surface of the sidewalk is uneven, usually due to heaving or settling of panels. To meet the 2010 ADA Standards, changes in level need to be less than ½ inch, and all changes in level between ¼ inch and ½ inch must be beveled or ground down to remove the fault (303.2). Sidewalks with vertical faults are addressed through the city’s Defective and Hazardous Sidewalk Program (SWK01). Each year, sidewalks are inspected in an area and flagged for replacement. Figure 3-17 shows a sidewalk panel that has been marked for replacement through the Defective and Hazardous Sidewalk Repair Program. More information on the program can be found in [Chapter 5](#).

Figure 3-16: Vertical fault due to a settled sidewalk panel



Figure 3-17: Vertical fault due to a heaved panel, likely from tree roots. This panel is marked for replacement through the city’s Defective and Hazardous Sidewalk Repair Program (SWK01).



OBSTRUCTIONS

The City does not have a citywide sidewalk dataset that includes obstructions where objects such as poles, fire hydrants or utility cabinets narrow the sidewalk to less than three feet wide or where objects such as tree grates, utility covers or manholes are not flush with the sidewalk (defined as raised more than 1/4 inch).

DATA COLLECTION

The City of Minneapolis has a database of where sidewalks exist citywide, whether the sidewalk exists on one or both sides of the street, and sidewalk width. However, the City does not have a citywide sidewalk dataset that includes running slope, cross slope, vertical faults, or obstructions. These characteristics of sidewalks inform whether sidewalks adhere to ADA criteria.

Recommendation 3.4: Supplement existing data on sidewalks and street crossings by completing a sidewalk and street crossing inventory

Street Crossings

Street crossings provide designated locations for pedestrians to cross streets at intersections and mid-block locations. These are commonly called crosswalks. They operate as an extension of the sidewalk across the street at legal pedestrian crossings. There are two types of crosswalks at street crossings in Minneapolis: Zebra (or Continental) and Unmarked.

- **Inventory Status:** Minneapolis collects data on the location of marked crosswalks. Additional street crossing data will be included in the scoping of a sidewalk inventory.
- **Inventory Update Timeline:** An update timeline will be determined based on results of the inventory.

In 2017, Minneapolis adopted the Minneapolis Zebra crosswalk pattern as the new standard for marked crosswalks. The Minneapolis Zebra crosswalk pattern provides a more visible and comfortable crossing compared to parallel line crosswalks.

Figure 3-18: Minneapolis' standard pattern for crosswalk markings is the Minneapolis Zebra



Figure 3-19: Parallel line crosswalk



Figure 3-20: Unmarked crosswalk



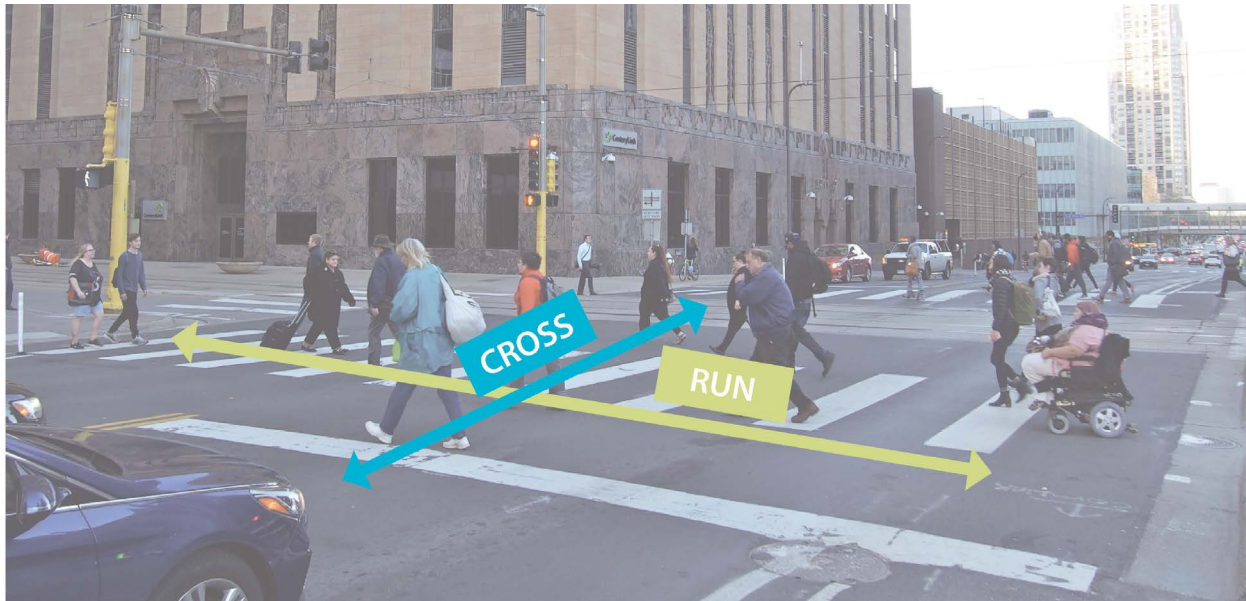
ADA CRITERIA AND INFRASTRUCTURE STATUS

Street crossing width, cross slope, and obstructions inform whether the crossing satisfies ADA criteria.

CROSSWALK WIDTH

Street crossings need to be three feet wide to meet the 2010 ADA Standards (403.5.1) and four feet wide to align with PROWAG guidance (R302.3). Minneapolis standards recommend wider crossings (between six and fifteen feet) depending on the street type.

Figure 3-21: Street crossings are considered to be extensions of the sidewalk



STREET CROSSING GRADE

To meet the 2010 ADA Standards, street crossings need to have a running slope of no greater than five percent and a cross slope no greater than two percent (403.3). To satisfy PROWAG, street crossings at free-flow approaches or at signalized intersections need to have a cross slope of 5 percent or less (PROWAG R302.6.1). Street crossings at yield or stop-controlled intersections need to have a cross-slope of 2 percent or less, except as provided in R302.6.1 and R302.6.2. (PROWAG R302.6.1).

OBSTRUCTIONS

As with pedestrian curb ramps, obstacles in the right of way can make an otherwise navigable street crossing unusable. Manholes that are not flush with the street (defined as more than 1/4 inch) or non-compliant slopes that lead to pooling water at the base of a pedestrian curb ramp can lead to a ramp and street crossing being unusable.

DATA COLLECTION

Currently, the City of Minneapolis does not have a citywide street crossing dataset that identifies street crossing width, grades, and obstructions.

Programs, Policies, and Procedures

There are many programs, policies, and procedures that inform design, implementation, and maintenance of infrastructure for people walking or rolling in the public right of way.

Grievance Procedure

The Public Works Department follows the grievance procedure documented within the City of Minneapolis Americans with Disabilities Act Action Plan (2016-2018):

Disability and accessibility-related grievances are directed to the ADA Title II Coordinator. The coordinator has knowledge and is familiar with the City enterprise infrastructure, operations and leadership. The ADA Title II Coordinator can navigate the system, engage responsible parties overseeing the program, service or policy, and identify a resolution. Grievances can be reported to the ADA Title II Coordinator through 311 and its reporting systems (email, phone call and online) or to the ADA Title II Coordinator directly via mailed letter, email, phone call, or in-person.

The full Grievance Procedure and all application forms are available online¹.

311 Requests

311 is the non-emergency line for access to City services. The public can use 311 to report public infrastructure accessibility issues by calling 311, completing an online form, or through a mobile application.

When using the online form or mobile application, each complaint is organized by topic such as Traffic Signal Issues, Potholes, Street Light Out,

and other items. 311 users can also use 311 to report sidewalk snow and ice complaints. There is currently no category specifically for reporting accessibility issues. Pedestrian curb ramp or push-button complaints would likely be entered by the user under the sidewalk or signal issue topics, as shown in **Figure 3-22**. There is a back-end function for 311 agents to flag any item as ADA related.

Figure 3-22: Screenshots of online 311 user interfaces

Minneapolis
311 Self Service

Traffic Signal Trouble

Request Details

Service Location:
309 2ND AVE S Minneapolis, MN 55401

An asterisk (*) indicates a required field

Any additional location details:

Minneapolis
311 Self Service

Sidewalk Structural Complaint

Request Details

Service Location:
309 2ND AVE S Minneapolis, MN 55401

An asterisk (*) indicates a required field

Are you the Property Owner? *

Yes No

What is the condition of the sidewalk? * (Select all that apply)

Broken

Projecting

SIDEWALK COMPLAINTS

As outlined in **Chapter 1**, sidewalks in the public right of way in Minneapolis are the responsibility of the adjacent property owner. This responsibility includes construction, repair and maintenance of sidewalks including clearing snow and ice

¹ Grievance Procedure and forms available at http://minneapolismn.gov/ncr/services/ncr_disability-services.
<http://www.minneapolismn.gov/www/groups/public/@publicworks/documents/webcontent/wcmsp-210946.pdf>

(Minneapolis Ordinance [427.90²](#) and [445³](#)). The City of Minneapolis inspects and orders repairs for damaged sidewalk across the City including sidewalk within other agencies' right of way. Sidewalk complaints reported through 311 are visited by a Public Works sidewalk inspector and addressed by a street maintenance crew. If deemed an issue, this team can apply an asphalt patch to provide a short-term fix for tripping concerns. Locations of past sidewalk complaints can be queried within the 311 program.

Sidewalk panels that are heaved or broken are replaced through the City's hazardous and defective sidewalk program which cycles through the city on a recurring basis.

Minneapolis Public Works also responds to snow and ice complaints on public sidewalks. Sidewalk snow and ice complaints are routed to the Sidewalks Department. Public Works completed a [Pedestrian and Bicycle Winter Maintenance Study](#) in 2018 to identify issues and opportunities related to winter maintenance and bicycle facilities. More information on the Winter Maintenance Study can be found in the Winter Maintenance section of this report (Page 3-22).

Public feedback received through the ADA Transition Plan indicated that several types of temporary obstructions are difficult to report through 311 due to timing and topics included in the 311 interface. Examples of temporary obstructions include overgrown vegetation, sidewalk café seating and signage that obstructs the sidewalk.

SIGNAL COMPLAINTS

Signal complaints reported through 311 are routed to the Traffic Management Center and are assigned to a signal crew to be addressed. The signal topic area of 311 has an option for users to indicate an issue with a push button.

Recommendation 3.5: In collaboration with 311 and the Neighborhood and Community Relations Departments, evaluate adding an option on the 311 interface for the public to indicate whether a concern is related to accessibility

Communications and Staff Training

Several resources exist for Public Works staff to strengthen their knowledge of the ADA and gain an increased understanding of the challenges and needs of the disability community.

COMMUNICATIONS/PUBLIC INVOLVEMENT STRATEGIES

NCR and the City's Communications Department provide guidance, support, and resources to communicate more effectively with participants that require accessibility accommodations. Principles of public involvement, strategies to ensure innovative and equitable engagement processes, and a commitment to inclusion are detailed in the 2016 Blueprint for Equitable Engagement⁴.

DISABILITY AWARENESS AND ACCESSIBLE CONTENT TRAINING

NCR facilitates training and hosts discussions for communicating effectively with members of the disability community through their Community Connections Learning Lab series.

NCR also offers training on how to create accessible documents and other materials throughout the year.

DEPARTMENT ADA TRAINING

The City of Minneapolis Public Works Department attends ADA trainings led by MnDOT. Topics include policy, mobility needs, design, and construction. Trainings are offered at the introductory and advanced levels.

² https://library.municode.com/mn/minneapolis/codes/code_of_ordinances?nodeId=MICOOR_TIT17STSI_CH427INGE_ARTIGE_427.90OWBURES1

³ https://library.municode.com/mn/minneapolis/codes/code_of_ordinances?nodeId=MICOOR_TIT17STSI_CH445SNICRE

⁴ <http://www.minneapolismn.gov/www/groups/public/@ncr/documents/webcontent/wcmssp-187047.pdf>

Recommendation 3.6: Continue to expand departmental knowledge and expertise of ADA topics by attending trainings and classes

Public Works Operations

There are several temporary or seasonal issues that impact accessibility of infrastructure in the City’s public right of way. These topics require collaboration between many Public Works divisions, private contractors and utilities.

Figure 3-23: Sidewalk with “Sidewalk Closed” signage while sidewalk is being repaired



TEMPORARY SIDEWALK CLOSURES AND OBSTRUCTIONS

When a sidewalk is temporarily closed for construction or other purposes, an alternative pathway with at least the same level of accessibility as the one it replaces needs to be provided, per the Minnesota Manual on Uniform Traffic Control Devices (MN MUTCD Part 6D).

The City requires the party responsible for the sidewalk closure to obtain a permit for any lane or sidewalk closures and may require the responsible party to prepare a traffic control plan that shows how the lane or sidewalk will be closed, the traffic control devices that will be used, and the designated detour depending on the scope of the project.

Sidewalks and streets are sometimes closed for block events, such as National Night Out or other street fair type events. Business Districts and

residential block events are required to obtain a permit to close the street, and must provide a 10-foot clear aisle for emergency access.

Public feedback received through the ADA Transition Plan update process indicated that detours and temporary street or sidewalk closures for events are often not easy to navigate for people with disabilities. There was also concern with not knowing when events were to take place, and how to find an alternate route when streets or sidewalks are closed for events. Participants noted that detour signs are sometimes placed in the pedestrian access route creating a temporary obstruction in the sidewalk.

Recommendation 3.7: Review and update existing policies and practices for pedestrian detour design and enforcement annually in coordination with additional direction in the Transportation Action Plan

~~SCOOTER SHARE AND OTHER MICRO-MOBILITY OPTIONS~~ SHARED MOBILITY - SHARED BIKE AND SCOOTER PROGRAM

The City of Minneapolis has a Shared Bike and Scooter Program (SBSP) that issues licenses to ~~scooter share~~ shared mobility companies. ~~to allow licensed companies to rent scooters~~ License agreements allow companies to rent micromobility vehicles for use in the public right of way. ~~Scooter~~ Shared mobility parking is regulated by license agreements with ~~rental companies as described in the~~ shared mobility partners in compliance with [Minneapolis City Ordinance 492⁵](#). ~~Scooters~~ All vehicles must be locked to allowed infrastructure (public bike rack, parking meter hitch, or street signs: except stop and bus stop signs) or in a designated parking zone, parked upright and stabilized with a kickstand when not in use. ~~Sidewalk parking is limited to allowed areas within the furnishing zone which is the section of sidewalk between the curb and pedestrian access route in which street furnishings and amenities, such as lighting, benches, newspaper kiosks, utility poles, tree grates, and bicycle parking is allowed.~~ ~~Scooters~~ Vehicles must be parked outside of the pedestrian access route or pedestrian path of travel along the sidewalk. ~~Scooters~~ Vehicles must not be parked in any location or manner that will impede normal and reasonable pedestrian traffic and/or access to:

- Pedestrian ramps
- Building/property entrances
- Driveways
- Loading zones
- Disability parking and transfer zones
- Transit stops
- Crosswalks
- Parklets
- Street/sidewalk cafes
- Other street furnishings (benches, parking meters, etc.)
- Underground utility, sewer, or water facilities

- Pedestrian access routes on sidewalks

~~Scooters~~ Vehicles that are parked erroneously can be reported through 311. A City representative will route the issue directly to the appropriate ~~scooter company~~ shared mobility partner. ~~Scooter companies~~ Shared mobility partners that fail to respond quickly can be held responsible for failure to follow the parking rules. ~~Scooters~~ Shared mobility vehicles can be impounded by the City if necessary, the allowed max number of ~~scooters~~ vehicles allowed from a single ~~company~~ partner can be reduced, or ~~companies~~ partners may have their licenses suspended or revoked. ~~City staff are evaluating the use of issuing citations to users for illegal riding and parking behaviors.~~ Each licensed shared mobility partner is responsible for obtaining permits and approvals to install shared mobility parking infrastructure.

BIKE SHARE

~~The City of Minneapolis contracts with Nice Ride Minnesota to operate a bicycle sharing system in Minneapolis. Through this agreement, Nice Ride Minnesota is responsible for obtaining permits and approvals to install docked and dockless stations and relocating improperly parked bicycles. The City of Minneapolis retains the authority to cite or impound Nice Ride Minnesota bikes based on improper parking, and requires that Nice Ride Minnesota pay all costs associated with enforcement and the impoundment of bikes covered by the agreement.~~

Recommendation 3.8: Continue to monitor issues and feedback received on parking and operations for scooter, bike share and/or other micromobility options and evaluate the need for program improvements

WINTER MAINTENANCE

Ice, slippery conditions and winter maintenance of infrastructure was noted by the public as a key challenge to walking and rolling through the city during the engagement process for this Transition

⁵ https://library.municode.com/mn/minneapolis/codes/code_of_ordinances?nodeId=MICOOR_TIT18TRCO_CH492LOPOVE

Plan. The ADA states that “A public entity shall maintain in operable working condition those features of facilities and equipment that are required to be readily accessible to and usable by persons with disabilities by the Act or this part. This section does not prohibit isolated or temporary interruptions in service or access due to maintenance or repairs” ([28 CFR §35.133](#)).

The Federal Highway Administration (FHWA) has interpreted this to require that “A public agency must maintain its walkways in an accessible condition, with only isolated or temporary interruptions in accessibility. Part of this maintenance obligation includes reasonable snow removal efforts.”⁶

Recognizing the importance of winter maintenance and as a part of the City’s ongoing commitment to safe and accessible year-round walking and bicycling, Minneapolis has undertaken a separate effort focused exclusively on winter maintenance to identify issues and opportunities related to winter maintenance of sidewalks and bicycle facilities. In April 2018, Public Works released the [Pedestrian and Bicycle Winter Maintenance Study](#)⁷. The Winter Maintenance Study calls for close collaboration between agencies and property owners, especially where bicycle and pedestrian facilities are concerned. **As part of the Transportation Action Plan (Walking Action 4.11), Public Works is committed to conducting a review and update of the Pedestrian and Bicycling Winter Maintenance Study on a biennial basis.**

The study outlines existing policies, practices and guidance for winter maintenance of pedestrian facilities, including:

- Minneapolis Planning Guidance
 - The Minneapolis Pedestrian Master Plan establishes a goal of a well-maintained pedestrian system, including Objective 5.1 on page 62: “Ensure effective snow and ice clearing for pedestrians”. The plan describes several implementation options to achieve

that objective including establishing priorities for sidewalk snow clearing, improving enforcement and monitoring of private property owner responsibilities for snow clearing, and supporting property owners with snow and ice clearing assistance options. Since the Minneapolis Pedestrian Master Plan was completed in 2009, the City has implemented measures to resolve 311 sidewalk shoveling complaints, refine the corner clearing program, address transit stops along with corner clearing, and increase communication around the importance of sidewalk snow clearing. The Minneapolis Pedestrian Master Plan establishes a goal of a well-maintained pedestrian system, including Objective 5.1 on page 62: “Ensure effective snow and ice clearing for pedestrians”. The plan describes several implementation options to achieve that objective including establishing priorities for sidewalk snow clearing, improving enforcement and monitoring of private property owner responsibilities for snow clearing, and supporting property owners with snow and ice clearing assistance options. Since the Minneapolis Pedestrian Master Plan was completed in 2009, the City has implemented measures to resolve 311 sidewalk shoveling complaints, refine the corner clearing program, address transit stops along with corner clearing, and increase communication around the importance of sidewalk snow clearing.

- Responsibilities for clearing snow and ice from sidewalks

Throughout the city, property owners are responsible for clearing snow and ice from sidewalks that are adjacent to the properties they own. Single family homes and duplexes are given 24 hours after a snowfall has ended to clear snow and ice, while all other properties have four hours after a snowfall has ended to clear snow and ice. City ordinance 445 establishes this time frame.

6 Questions and Answers About ADA/Section 504, https://www.fhwa.dot.gov/civilrights/programs/ada/ada_sect504qa.cfm#q31

7 <http://www.minneapolismn.gov/pedestrian/data/WCMSP-210947>

- Agency agreements

There are many MnDOT or Hennepin County roads that are maintained by the City of Minneapolis through respective inter-agency agreements. Agreements are the tool for assigning responsibility for work completion from one agency to another, which often includes some amount of compensation. In cases where sidewalks along these roads are adjacent to private properties, City ordinance 445 still pertains and the private property owners are responsible for clearing the sidewalk. The City clears all sidewalks on bridges and overpasses as part of these agreements.

- Corner Clearing Program

The City started a deliberate sidewalk corner clearing program in 1995. The budget at the time provided for some funding to cover the expenses. Over the years, **due to financial strains on the budget**, the program was operationally refined by re-prioritizing resources, without any additional funding to address the growing desire for more aggressive corner clearing. In 2015, Public Works proposed and was granted funding to enhance the corner clearing program, focusing on **corners along** a network of pre-defined, high priority pedestrian **corners corridors**. Corner clearing is prioritized based on **a previously established network identified as** the Pedestrian Street Lighting Corridor (PLSC). **This network was adopted and rebranded as the, formerly known as Pedestrian Priority Corridor (PPC) network, assuming that the lighting corridors also suggested high pedestrian traffic.** There are two circumstances that will trigger the initiation of corner clearing activities: an accumulation of 4" or more of snow or a declared Snow Emergency. Corner clearing commences at the completion of the Snow Emergency; this allows the City to remove the windrows left in place after street plowing is completed. If another Snow Emergency is declared before all the corners are cleared, the City resumes corner clearing at the end

of the new Snow Emergency, starting with the predefined high pedestrian corridors, as defined by the **PLSC established Pedestrian Priority Corridors. There is a new Pedestrian Priority Network (PPN) that was developed as part of the TAP, but it has not been adopted for corner clearing yet.** Once the priority corners are cleared, crews continue operations until another snow event or until all corners are cleared. Public Works received additional funding in 2020 to address windrows at corners more quickly.

- Special Service Districts

A Special Service District is one way for commercial property owners to fulfill their responsibility for sidewalk snow and ice control. In 2017, six of the sixteen Special Service Districts (SSDs) in the City chose to pay contractors for sidewalk snow and ice control, which sometimes includes the removal of snow windrows along the curb, as part of their SSD operating plans. The Downtown Improvement District Special Service District (DID) also provides snow and ice control on Nicollet Mall sidewalks. These districts must meet City ordinance requirements. Public Works contracts for, and directs the work. The costs of these services are recovered by Public Works through special assessments to the affected SSD property owners.

- Transit Stop Facilities

There are approximately 2,860 transit facilities in Minneapolis, including bus stops whether they have shelters or not, transit centers and rail platforms. Clearing snow from bus stops and any adjacent facilities is a shared responsibility of Metro Transit, US Bench Corporation, and adjacent property owners. Metro Transit prioritizes snow removal based on ridership numbers, route locations, and travel routes of people who are disabled. They strive to clear of snow and ice within the first 24 hours after a snow event with accumulation of 1" or more. They perform overnight snow removal activities at

light rail stations in downtown only. Adjacent property owners are responsible to clear bus stops that do not have a shelter or a bench, which is approximately 58% of all bus facilities. Property owners clear sidewalks adjacent to their property, and later the City of Minneapolis will create an opening in the snow windrow during its corner clearing program to provide access to the bus stop area. The benches at bus stops without a shelter are owned and maintained by US Bench Corporation. They have their own crew of maintenance workers that clear snow and ice from 700 benches across the city per City ordinance '283.210 – Maintenance of benches' which states "ice and snow shall be removed from the benches and vicinity thereof in such a manner that each bench shall be accessible at all times".

- Sidewalk Snow and Ice Clearing Non-Compliance

If sidewalks are not shoveled within the time frame defined in City ordinance 445, the process for enforcing the snow and ice clearing ordinance may commence. Currently, while the City does proactively conduct some inspections, the enforcement process is primarily complaint driven and relies on the public to report issues through 311. In rare circumstances, when temperatures remain extremely cold for extended periods of time and ice is tightly bonded to pavements, it becomes impossible to remove, in keeping with provisions of City Ordinance 445, and inspectors will issue an order to sand the sidewalk in order to provide temporary traction rather than issue a Notice of Violation (NOV). In 2019, the NOV was renamed an Order to Correct (OTC) to match the nomenclature of notices sent to property owners by Regulatory Services.

When a contractor completes a work order, the property owner is billed for the work and unpaid bills are added to the property tax bill as a special assessment. Property owners are allowed to appeal their bills through an Administrative Hearing or Public Hearing process, and ultimately to District Court.

There are occasions that a property owner will clear their sidewalk after a work order is issued but prior to the contractor completing the work order. In this case, the City will compensate the contractor at a rate of 10% of the contractor's bid price; the private property owner is not billed for this cost. In total, the complaint driven process can take anywhere from 6 to 8 or more working days. The timeline resets if another snow event occurs during this timeline. This process was streamlined in 2016 to eliminate an initial physical inspection that would have occurred prior to an NOV (now OTC) being issued. The streamlining has reduced the amount of time between receipt of a 311 complaint and a contractor clearing the sidewalk by two to three working days. Public Works is currently evaluating the benefits of this process, including identifying challenges to foregoing the initial inspection or eliminating the step of issuing an OTC.

- Freeze-Thaw Cycles

When temperatures rise above freezing, snow and ice on or adjacent to sidewalks will melt and often flows onto or across the sidewalk. When temperatures drop back below freezing, the remaining water on the sidewalk refreezes and results in icy sidewalk conditions. Similar conditions will result after a freezing rain event. It is estimated that during the winter of 2016- 2017, approximately 60-70% of the contractor work orders were due to ice, not snow. Therefore, even without a precipitation event, property owners need to address their sidewalks. City Ordinance 445 allows that if ice cannot be removed due to extreme temperatures, sand may be sprinkled to provide temporary traction until conditions allow for the ice to be removed.

The Pedestrian and Bicycle Winter Maintenance Study provides a framework for continued conversation with the community, interested stakeholders and policy makers. Several short-term options for augmenting or replacing existing winter maintenance practices are detailed in the report, including:

- Designate a Winter Pedestrian Priority Network
- Implement Sidewalk Clearing Inspection & Enforcement Process Improvements
- Implement Snow and Ice Clearing Assistance Programs for Select Populations
- Develop an Expanded Sidewalk Winter Maintenance Awareness Campaign
- Update and Improve the City's Winter Maintenance Webpage
- Enhance Winter Maintenance Data Collection

In October 2018, staff presented an update to the Winter Maintenance Study on the feasibility, level of service (LOS) expectations, and cost estimates for City-led sidewalk snow plowing. Based on the study findings, staff initiated an expanded winter maintenance awareness campaign, updated the City's Winter Maintenance webpage, and launched the 2018-2019 Proactive Sidewalk Inspection Pilot Project. The Proactive Sidewalk Inspection Pilot Program aimed to collect data on compliance with Minneapolis Ordinance 445 and improve winter maintenance by piloting proactive enforcement of shoveling laws for homeowners and businesses.

In 2019, staff returned with an update on the results of proactive enforcement and recommended continuing educational campaigns on winter sidewalk snow shoveling rules and responsibilities and continuing proactive enforcement during winter of 2019-2020. To further address community concerns, Public Works received additional budget to accelerate clearing snow and ice at intersection corners.

The Transportation Action Plan **which is underway** **will** includes additional engagement and evaluation of winter maintenance strategies.

The Street Design Guide provides additional guidance surrounding winter maintenance.

Figure 3-24: *Street crossing during winter*



Recommendation 3.9: Continue to address seasonal barriers such as snow and ice on sidewalks as outlined by Minneapolis Ordinance 445 and the Pedestrian and Bicycle Winter Maintenance Study; explore modifications to improve access to the public right of way through additional direction in the Transportation Action Plan

Other Plans and Policies

The City of Minneapolis Public Works has a number of plans and policies in addition to the ADA Transition Plan that support accessibility in the public right of way. The following plans and policies outline aspects of design, maintenance or funding that support accessibility in the public right of way:

- Complete Streets Policy (~~2016~~Updated 2021)⁸
- Street Design Guide (2021)⁹
- Transportation Action Plan (~~ongoing~~2020)¹⁰
- 20 Year Streets Funding Plan (Updated 2018)¹¹
- Vision Zero Action Plan (2019)¹²
- Vision Zero Resolution (2017)¹³
- Pedestrian Crash Study (2017)¹⁴

⁸ <https://www2.minneapolismn.gov/government/departments/public-works/tpp/complete-streets-policy/>

⁹ <https://sdg.minneapolismn.gov/>

¹⁰ <http://go.minneapolismn.gov/>

¹¹ <https://www2.minneapolismn.gov/government/departments/public-works/tpp/20-year-plan/an>

¹² <https://www.minneapolismn.gov/government/programs-initiatives/visionzero/vz-action-plan/>

¹³ https://lims.minneapolismn.gov/Download/FileV2/18705/18_Vision-Zero_RES-AMENDED.pdf

¹⁴ https://lims.minneapolismn.gov/Download/RCA/2877/Minneapolis-Pedestrian-Crash-Study_2017.pdf

Conclusion

The results from this Self-Evaluation will be used to prioritize infrastructure for improvement based on accessibility findings and equity. The following chapter (*Chapter 4: Prioritization*) describes the framework, methods, and results from that process. All recommendations are summarized in *Table 5-3: Recommendations*.

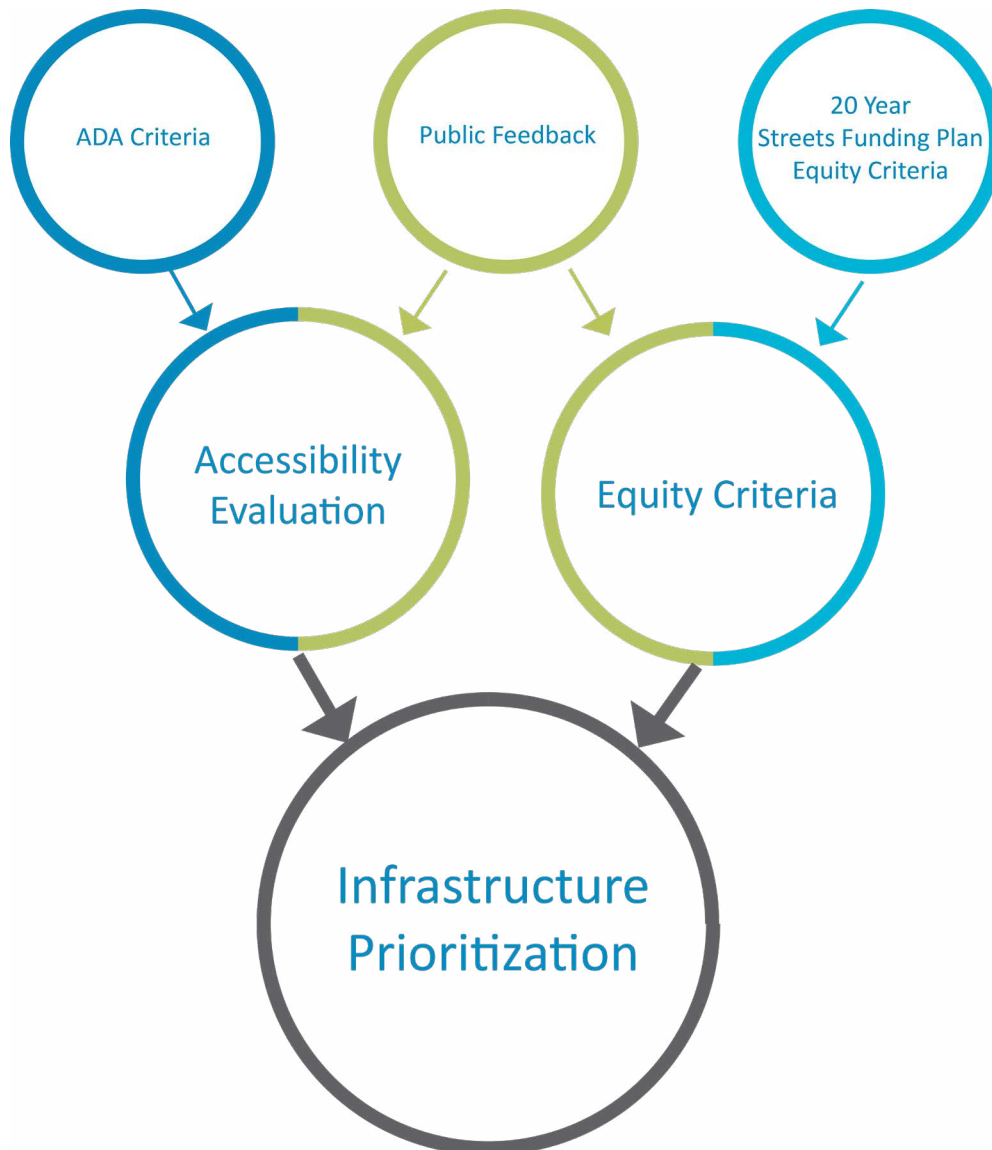
Infrastructure Prioritization

Identified deficiencies in the City’s right of way will need to be corrected over time. Due to fiscal and feasibility constraints, not all identified deficiencies can be corrected immediately. A prioritization scheme identifies which types of infrastructure and which locations should be improved first to best serve the needs of Minneapolis residents and visitors.

Framework for Prioritization

Infrastructure prioritization will be a combination of its Accessibility Evaluation and Equity Criteria.

Figure 4-1: *Prioritization framework*



Quantitative Analysis

The quantitative analysis provides an objective data-driven basis for prioritizing infrastructure improvements citywide. Public input informed the data incorporated into the Accessibility Evaluation and the Equity Criteria.

- Feedback on which infrastructure elements create the largest barriers for users was incorporated into the Accessibility Evaluation
- Engagement conducted as a part of the [20-Year Streets Funding Plan](#)¹ guided the Equity Criteria that this ADA Transition Plan used to prioritize intersections

The full engagement process and themes heard are covered in detail in [Chapter 2](#).

ACCESSIBILITY EVALUATION

The 2010 ADA Standards, Minnesota Manual on Uniform Traffic Control Devices (MN MUTCD), and the proposed Public Right of Way Accessibility Guidelines (PROWAG) provide criteria and guidance for evaluating whether infrastructure is accessible. The subset of measures used to prioritize infrastructure in this Transition Plan are those which:

- Most greatly affect the usability of the infrastructure
- Present the greatest challenges for people with disabilities as indicated by community engagement

EQUITY CRITERIA

Variables outside of the 2010 ADA Standards, MN MUTCD criteria and PROWAG guidance, such as infrastructure location and context, can help prioritize infrastructure improvements. The 20 Year Streets Funding Plan criteria related to pedestrian mobility and safety and community demographics were utilized to quantify infrastructure equity in this Transition Plan. These criteria were formulated through the public engagement for that planning process and confirmed by the public engagement completed for this Transition Plan.

Recommendation 4.1: Update the equity component of infrastructure prioritization as the 20 Year Streets Funding Plan is updated

Qualitative Analysis

The criteria-based analysis is supplemented by qualitative screening as detailed by the 20 Year Streets Funding Plan. This ensures that infrastructure improvements are coordinated with other projects and opportunities and that available funding is used efficiently and appropriately. Qualitative screening occurs annually.

- Are there other nearby projects that will also be under construction?
- Can projects be combined to reduce disruption or cost?
- Is this the right fix at the right time?
- How does the project fit with known city priorities and goals?

More detail on this process is included in the [20 Year Streets Funding Plan](#)²

¹ <http://www.minneapolismn.gov/publicworks/20yearplan>

² <http://www.minneapolismn.gov/publicworks/20yearplan>

Infrastructure Prioritization

Pedestrian curb ramps have been inventoried, so they can be prioritized using data. Other infrastructure will be prioritized in a similar method once they've been inventoried. The anticipated data collection and evaluation process for traffic signals, crosswalks, and sidewalks, is outlined in [Chapter 3: Self-Evaluation](#). The framework for prioritizing that infrastructure suggested in this Transition Plan should be revisited once data is available.

PEDESTRIAN CURB RAMPS

Different styles of pedestrian curb ramps can meet accessibility criteria. Both the combined directional ramp in [Figure 4-3](#) and fan ramp in [Figure 4-2](#) can meet ADA criteria and satisfy PROWAG guidelines. More information on common types of pedestrian curb ramps can be found in [Chapter 5](#).

Figure 4-2: Fan Ramp



Figure 4-3: Combined Directional Ramp



Accessibility Evaluation

The pedestrian ramp criteria, measures, and points that were used to evaluate accessibility for pedestrian ramps are summarized in [Table 4-1](#). The criteria thresholds quantify how closely the pedestrian ramp meets the 2010 ADA Standards and aligns with best practices for pedestrian curb ramp design as outlined in PROWAG. Region-specific guidance from MnDOT is also incorporated in the criteria, such as using truncated domes made of cast iron for maintenance purposes and to withstand winter conditions. Points awarded are reflective of the feedback heard during public engagement: features indicated as the most important such as ramp width, ramp running slope, and whether there is a significant lip at the gutter transition are eligible for more points than other features. Ultimately, pedestrian ramps with the lowest Accessibility Evaluation score have the greatest need for improvement.

Recommendation 4.2: Inventory pedestrian curb ramps at intersections with no ramp data (approx. 50 intersections)

Table 4-1: Accessibility evaluation framework for pedestrian curb ramps

CRITERIA	WHAT IS MEASURED	THRESHOLD	POINTS AWARDED
Ramp Geometry	Ramp Width	48" or More	400
		47 - 36"	50
		Less than 36"	0
	Ramp Running Slope	8.3% or Less	400
		8.4 - 15%	50
		Greater than 15%	0
	Ramp Cross Slope	2% or Less	100
		2.1 - 5%	50
		5.1% or Greater	0
Detectable Warning Surface	Type	Cast Iron Truncated Dome	100
		Truncated Dome (not Cast Iron)	70
		No Detectable Warning	0
Slopes in Waiting & Crossing Areas	Landing Running Slope	2% or Less	100
		2.1%-5%	50
		Greater than 5%	0
	Landing Cross Slope	2% or Less	100
		2.1 - 5%	50
		5.1% or Greater	0
	Street Running Slopes	2% or Less	100
		2.1 - 5%	50
		Greater than 5%	0
	Street Cross Slopes	2% or Less	100
		2.1 - 5%	50
		5.1% or Greater	0
Obstructions	Ramp Obstructions	None Present	100
		Obstruction Exists	0
	Landing Obstructions	None Present	100
		Obstruction Exists	0
	Street Obstructions	None Present	100
		Obstruction Exists	0
	Lip at Flow Line	Vertical lip at gutter transition is less than or equal to 1/4"	300
		Lip is greater than 1/4"	0
TOTAL POSSIBLE			2,000

Equity Criteria

Table 4-2 describes the criteria and measurement thresholds that are utilized to derive equity scoring in this Transition Plan. This same framework could be applied to each piece of

accessible infrastructure but is only being applied as part of this Transition Plan to pedestrian curb ramps because of availability of data.

Table 4-2: Equity criteria

CRITERIA	WHAT IS MEASURED	THRESHOLD	POINTS AWARDED
Safety	Street Average Crash Rate	>5 crashes per million users per year	12
		2.5 – 4.9 crashes per million users per year	8
		1.0 – 2.5 crashes per million users per year	4
		0-0.9 crashes per million users per year	0
Non-White Majority	Percent of residents that identify as a person of color	>50% of residents are people of color	12
		> or = to 30% and < or = 50% of residents are people of color	4
		<30% of residents are people of color	0
Low-Income Population	Percent of residents below federal poverty level	>40% of residents have family income <185% of the federal poverty level	16
		> or = to 30% or less than or equal to 40% of residents have family income <185% of federal poverty level	5
		<30% of residents have family income <185% of the federal poverty level	0
Vehicle Availability	Number of household vehicles per resident over age 16	Street in area with vehicle availability <0.5 household vehicles per driver-age resident	8
		Street in area with vehicle availability 0.51-0.75 household vehicles per driver-age resident	4
		Street in area with vehicle availability > 0.76 household vehicles per driver-age resident	0
Potential Users	Population density	Street in area with over 20 housing units per acre	6
		Street in area with 10.1 - 20 housing units per acre	4
		Street in area with 5.1 - 10 housing units per acre	2
		Street in area with 0-5 housing units per acre	0
	Designated activity centers	Street in regional activity center	6
		Street in Access Minneapolis designated areas	3
Pedestrian Needs	Pedestrian needs identified and mapped in the Pedestrian Master Plan (non-ADA)	Street with sidewalk gap	4
		Street with complex intersection or bridge needs	4
		Street with other pedestrian needs	4
Transit Needs	Existing transit routes and improvements identified in the Pedestrian Master Plan and the Service Improvement Plan	Street with High Frequency Route	2
		Street on Primary Transit Network	2
		Street in Service Improvement Plan	4
TOTAL POSSIBLE			80

QUANTITATIVE ANALYSIS RESULTS

Ramp-Level Accessibility Evaluation Results



Based on the Accessibility Evaluation framework in [Table 4-1](#), the average Accessibility Evaluation citywide for pedestrian curb ramps is 68% (Pedestrian Curb Ramp Inventory 2012-2017 [with supplemental data through 2021](#)). A score higher than 60% means that for the most part, the intersection has the critical elements of a pedestrian curb ramps in place: pedestrian curb ramps exist, many ramps have widths greater than 48”, there are landing areas, and the ramps are free from obstructions. However, many ramps are missing features that weren’t required at time of initial construction, such as detectable warning surfaces and refined grade requirements, which bring their scores down to less than ideal. [Table 4-3](#) divides ramps with different scores into Accessibility Evaluation Categories, details the

distribution of pedestrian curb ramp Accessibility Evaluation scores citywide, and recommends actions for each category. **The total number of ramps in [table 4-3](#) increased due to the 2021 inventory of previously missing intersection data.**

POTENTIAL MISSING RAMPS

The 2012 inventory collected data on existing ramps. It did not include data on where ramps should be installed, such as at the receiving ramps for T-intersections. An approximate number of locations where ramps may be missing was calculated from the number of ramp data points and the estimated minimum number of ramps based on intersection legs. These intersections will need to be inventoried to determine whether additional pedestrian curb ramps are needed.

Table 4-3: Pedestrian curb ramp accessibility evaluation distribution (2012-2017 Pedestrian Curb Ramp Inventory [with supplemental data through 2021](#))

ACCESSIBILITY EVALUATION CATEGORY	DESCRIPTION OF A TYPICAL RAMP	PEDESTRIAN CURB RAMP ACCESSIBILITY EVALUATION RANGE	NUMBER OF PEDESTRIAN CURB RAMPS	PERCENT OF PEDESTRIAN CURB RAMPS	ACTION
Category 1: Meets or exceeds accessibility criteria 	Recently reconstructed. Has truncated domes.	100%	259,364	1% 2%	Monitor for declining condition.
Category 2: Good condition 	Reconstructed recently or built in an area with few slope or obstruction issues. May or may not have truncated domes.	75-99%	5,955,601	34%	Re-inventory to confirm data. Due to inconsistencies in the data collection process and tool since 2012, many of these ramps are expected to meet or exceed ADA accessibility criteria.

<p>Category 3: Fair condition</p> 	<p>Several minor issues or one more significant issue.</p>	<p>60-75%</p>	<p>5,710 5,771</p>	<p>33%</p>	<p>Prioritize for replacement.</p>
<p>Category 4: Poor condition</p> 	<p>Several issues, typically steep with little to no landing space.</p>	<p>50-60%</p>	<p>4,331 4,352</p>	<p>25%</p>	<p>Prioritize for replacement.</p>
<p>Category 5: Very poor condition</p> 	<p>Significant lip at curb, narrow opening and often steep</p>	<p>Less than 50%</p>	<p>1,241 1,260</p>	<p>7%</p>	<p>Prioritize for replacement.</p>
<p>Category 6: Missing ramp or ramp data point</p>	<p>Curb at sidewalk intersection has no pedestrian curb ramp</p>	<p>0%</p>	<p>Potentially 4,592 Potentially 4,119</p>		<p>Inventory intersections with potentially missing ramps. Prioritize locations with missing ramps for improvement.</p>
<p>Total</p> <p>*Does not include unconfirmed missing ramps</p>			<p>17,496* 17,768*</p>		






Recommendation 4.3: Install pedestrian curb ramps where ramps are missing as intersections are programmed and designed for improvement

Corner-Level Accessibility Evaluation Results

The Accessibility Evaluation framework provides a way to quantitatively compare individual pedestrian ramps. Many corners in Minneapolis

have two ramps. When one ramp is rebuilt, the geometry of the adjacent ramp is often impacted; rebuilding one ramp often necessitates rebuilding the corner. To better inform how many corners would likely need to be addressed in order to address deficient ramps, the accessibility evaluation results for pedestrian curb ramps were also summarized by corner. *Table 4-4* details the distribution of Corner-Level Accessibility Evaluations citywide. **The total number of corners in *table 4-4* increased due to the 2021 inventory of previously missing intersection data.**

Table 4-4: Corner-level accessibility evaluation distribution for pedestrian curb ramps (2012-2017 Pedestrian Curb Ramp Inventory *with supplemental data through 2021*)

ACCESSIBILITY EVALUATION CATEGORY	DESCRIPTION OF A TYPICAL RAMP	CORNER-LEVEL ACCESSIBILITY EVALUATION RANGE	NUMBER OF CORNERS	PERCENT OF CORNERS	ACTION
<p>Category 1: Meets or exceeds accessibility criteria</p> 	Recently reconstructed. Has truncated domes.	100%	1,311 520	1% 3%	Monitor for declining condition.
<p>Category 2: Good condition</p> 	Reconstructed recently or built in an area with few slope or obstruction issues. May or may not have truncated domes.	75-99%	4,568 4,924	30% 32%	Re-inventory to confirm data. Due to inconsistencies in the data collection process and tool since 2012, many of these ramps are expected to meet or exceed ADA accessibility criteria.
<p>Category 3: Fair condition</p> 	Several minor issues or one more significant issue.	60-75%	5,052 5,153	34% 33%	Prioritize for replacement.
<p>Category 4: Poor condition</p> 	Several issues, typically steep with little to no landing space.	50-60%	4,034 3,713	27% 24%	Prioritize for replacement.
<p>Category 5: Very poor condition</p> 	Significant lip at curb, narrow opening and often steep	Less than 50%	1,207 1,153	8% 7%	Prioritize for replacement.

Category 6: Missing ramp or ramp data point	Curb at sidewalk intersection has no pedestrian curb ramp	0%	Potentially 4,592 Potentially 4,119		Inventory intersections with potentially missing ramps. Prioritize locations with missing ramps for improvement.
Total *Does not include unconfirmed missing ramps			14,992* 15,463*		

Intersection-Level Accessibility Evaluation Results

Public Works generally seeks to address all deficient or missing curb ramps when addressing an intersection with deficient or missing curb ramps. Additionally, to combine and compare the Accessibility Evaluation at the ramp level with an Equity Criteria score at the intersection level, scores for all ramps at an intersection were averaged to calculate priority by intersection.

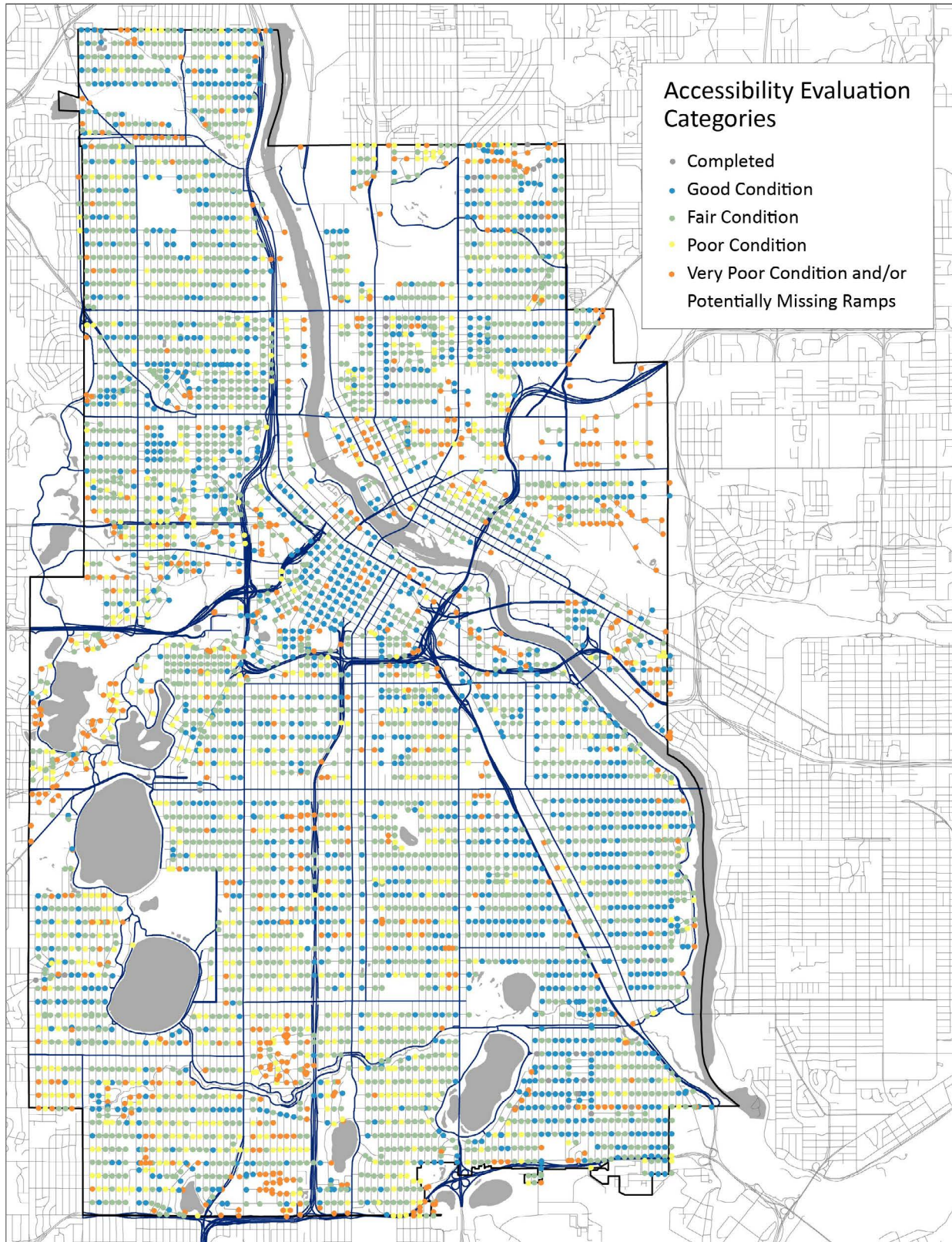
Intersections that potentially have missing ramps as detailed in Table 4-3 received a 0% Accessibility Evaluation score in addition to the other ramp scores. These scores were averaged together to calculate an overall intersection Accessibility Evaluation score. *Table 4-5* details the distribution of Intersection-Level Accessibility Evaluations citywide. *Figure 4-4* shows the distribution of Accessible Evaluation Categories. **The total number of intersections in *table 4-5* increased due to the 2021 inventory of previously missing intersection data.**

Table 4-5: Intersection-level accessibility evaluation distribution for pedestrian curb ramps (2012-2017 Pedestrian Curb Ramp Inventory with supplemental data through 2021)

ACCESSIBILITY EVALUATION CATEGORY	DESCRIPTION OF A TYPICAL INTERSECTION	INTERSECTION EVALUATION RANGE	NUMBER OF INTERSECTIONS	PERCENT OF INTERSECTIONS	ACTION
Category 1: Complete intersection	Recently reconstructed. Has truncated domes.	100%	4 33	0% 1%	Monitor for deteriorating conditions.
Category 2: Good condition	Majority of intersection reconstructed recently or built in an area with few slope or obstruction issues. May or may not have truncated domes.	75-99%	752 1,376	15% 26%	Prioritize for improvement via Intersection Priority Tiers and complete inventory if needed.

Category 3: Fair condition	Intersection has several minor issues or one more significant issue.	60-75%	1,666 2,370	32% 45%	Prioritize for improvement via Intersection Priority Tiers and complete inventory if needed.
Category 4: Poor condition	Several issues, typically steep with little to no landing space.	50-60%	543 763	11% 15%	Prioritize for improvement via Intersection Priority Tiers and complete inventory if needed.
Category 5: Very Poor and/or Potentially Missing Ramps	Intersection either has some ramps in poor condition or a combination of poor ramps and potentially missing ramps.	Less than 50%	2,179 688	42% 13%	Prioritize for improvement via Intersection Priority Tiers and complete inventory if needed.
Total			5,144 5,230		

Figure 4-4: Accessibility evaluation categories map (updated with supplemental data through 2021)



EQUITY CRITERIA RESULTS

Equity Criteria scores are used to help prioritize improvements through a racial and economic equity lens. Equity scores were calculated at the intersection level. According to the 20 Year Streets Funding Plan prioritization, a higher Equity score means there is a higher need for improvement. Accessibility scores are the opposite – a low score indicates there is a higher need for improvement. To combine the equity scores and Intersection

Accessibility Evaluation, the equity scores (in percent) were subtracted from 100. The resulting scores for the Accessibility Evaluation and the Equity Criteria were assigned relative weights of 75% and 25%, respectively. This prioritizes locations where ramps are potentially missing or are in poor condition and aligns with the feedback received priorities indicated through public engagement. An example is shown in [Figure 4-5](#).

Figure 4-5: Intersection score calculation example

INTERSECTION 1 <i>(Int-12258: 35th St E and 13th Ave S)</i>	INTERSECTION 2 <i>(Int-14759 56th St W and Newton Ave S)</i>
Accessibility Evaluation Score = 32.6%	Accessibility Evaluation Score = 45.4%
Equity Score = 42.5%	Equity Score = 5%
Prioritization Score = $(0.75 * 32.6) + 0.25 (100 - 42.5) = 38.8\%$	Prioritization Score = $(0.75 * 45.4) + 0.25 (100 - 5) = 57.8\%$
RESULT: INTERSECTION 1 SCORES LOWER, AND THEREFORE IS RANKED ABOVE INTERSECTION 2 FOR IMPROVEMENTS.	

Intersection Jurisdiction

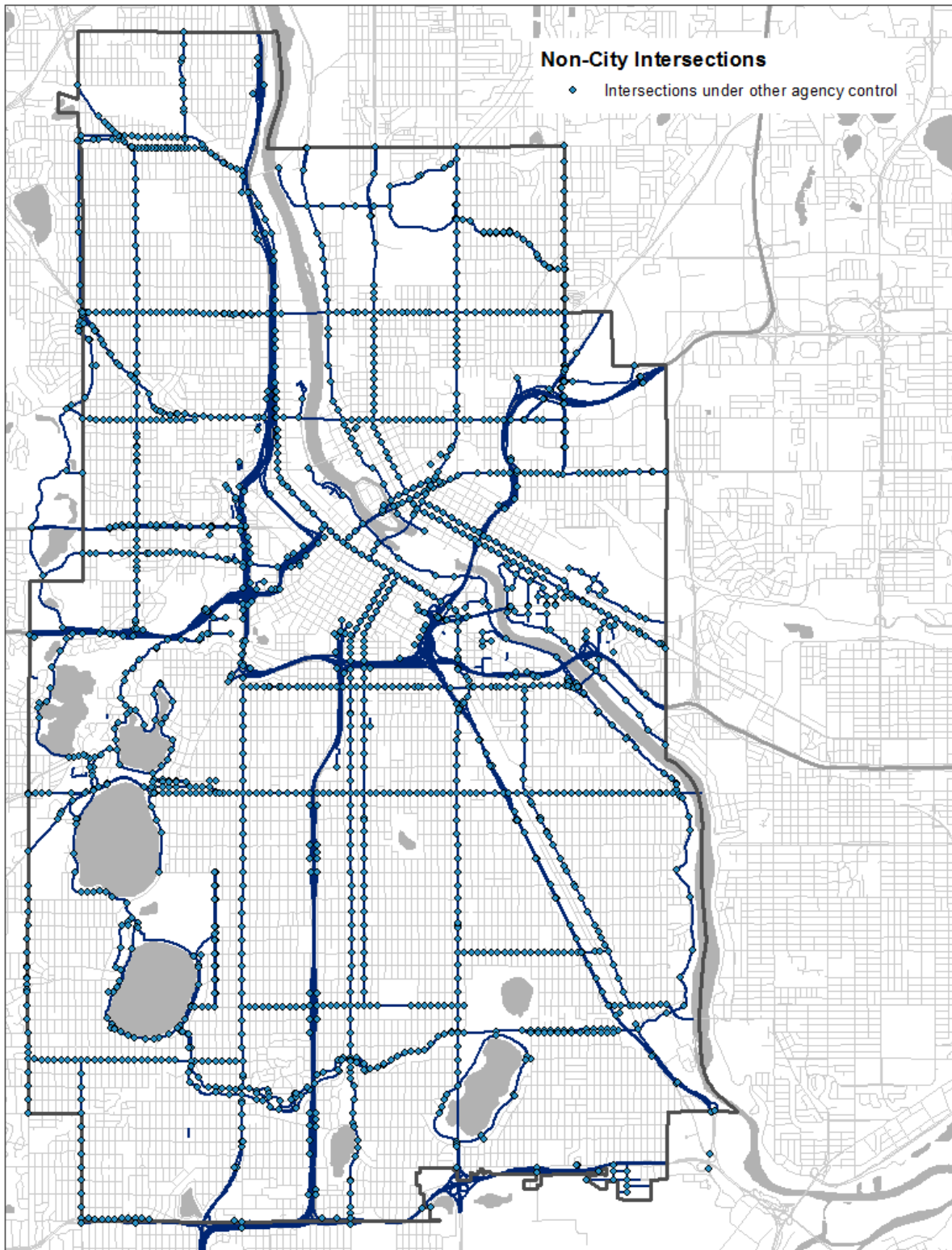
Jurisdiction informs whether the intersection would be programmed by the City of Minneapolis or needs to be addressed by another agency (e.g., MnDOT, Hennepin County, or MPRB). [Table 4-6](#) describes the intersection jurisdiction groupings in this Transition Plan. More information on jurisdictional responsibilities is included in [Chapter 1](#).

Many non-city intersections play an important role in providing access to destinations for pedestrians. Though Minneapolis does not have control over these intersections, the City will continue to coordinate and support accessibility improvements at non-city intersections in accordance with City priorities and goals. [Figure 4-6](#) shows where non-city intersections are generally.

Table 4-6: Pedestrian ramp data, prioritization, and funding status of intersections by jurisdiction

INTERSECTION JURISDICTION	PEDESTRIAN CURB RAMP DATA STATUS	PRIORITIZATION STATUS	ASSUMED FUNDING STATUS
<p>City Intersections The City of Minneapolis controls all legs of the intersection</p>	<p>Most intersections have complete pedestrian curb ramp data; some intersections have incomplete pedestrian curb ramp data & need to be inventoried.</p>	<p>Prioritization Framework informs intersection prioritization</p>	<p>Included in <i>Chapter 5: Implementation</i> program and project selection</p>
<p>Non-City Intersections Another agency controls the intersection</p>	<p>Pedestrian curb ramp data being collected by other jurisdictions</p>	<p>Not included in Accessibility Evaluations & excluded from prioritization</p>	<p>Partial intersection cost is included in <i>Funding Scenarios & Chapter 5 Implementation</i> based on current maintenance and/or cost share agreements between the agencies. This primarily applies to signalized intersections.</p>

Figure 4-6: Map of non-city intersections



Intersection Priority Tiers

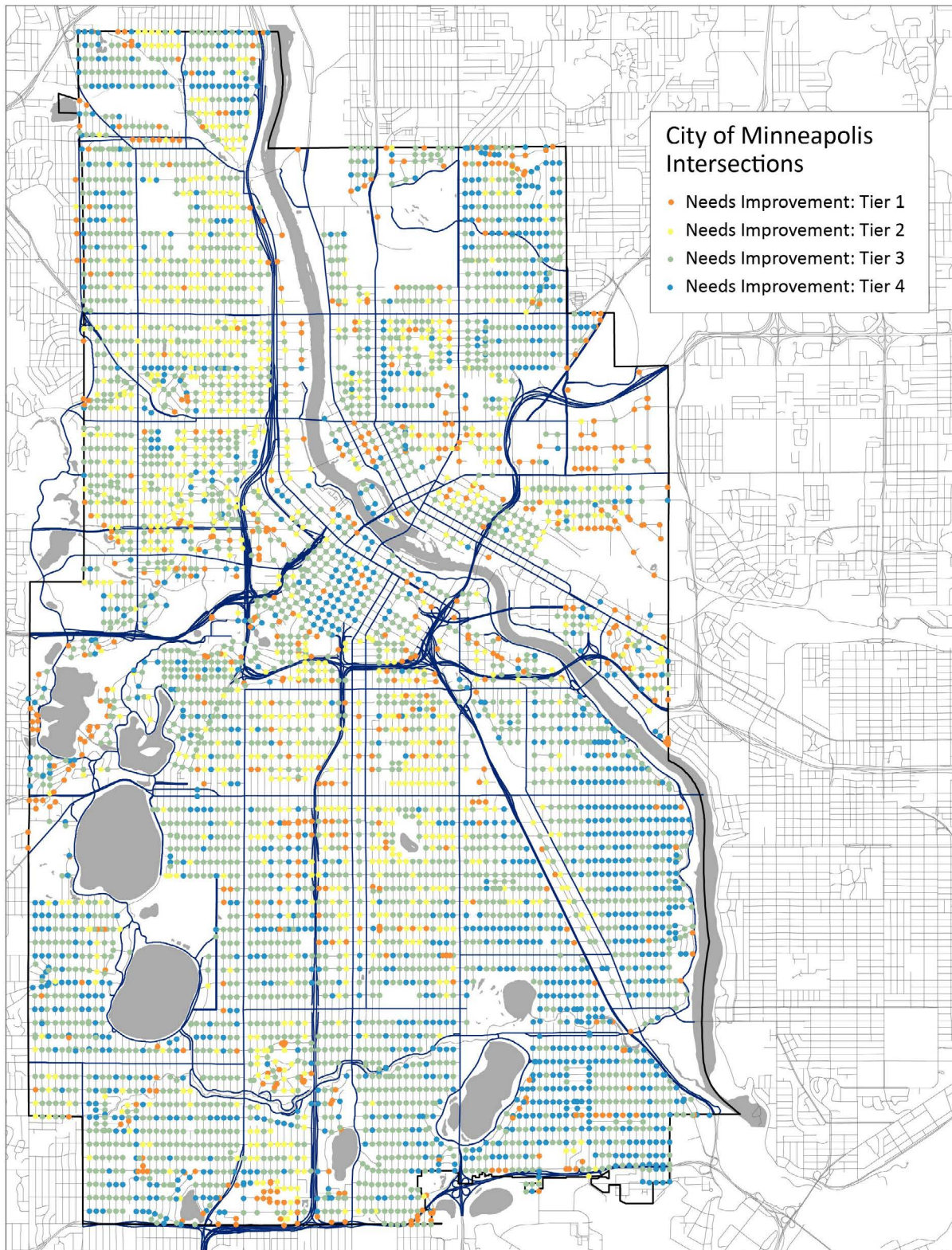
The Intersection Accessibility Evaluation and Equity Criteria scores for City intersections were combined to get Intersection Prioritization scores as detailed in [Figure 4-5](#). The highest priority intersections are those with the lowest average score. The intersections under City of Minneapolis jurisdiction were divided into five Tiers. These Tiers correspond to relative needs of the intersection as determined by the Intersection

Prioritization score. Tier 1 intersections have the most need and will generally be prioritized first for improvement. ~~There are approximately fifty (50) intersections that have no pedestrian curb ramp data points associated with them. These intersections were likely missed in the 2012 Pedestrian Curb Inventory and will need inventoried.~~ All Tiers are shown in [Table 4-7](#).

Table 4-7: Intersection priority tiers

TIER	INTERSECTION NEED	NUMBER OF INTERSECTIONS	DESCRIPTION	CITY ACTION
Intersections with no ramp data	Needs Inventory and/or Improvement	490	City intersections missing a ramp inventory. <i>Prioritization Scores are not available.</i>	City to inventory ramps and prioritize into Tiers.
Tier 1	Needs Improvement	1,807 605	City intersections with the most need: <i>Prioritization Scores are the lowest citywide.</i>	City to program these intersections for improvement first or as opportunities arise.
Tier 2	Needs Improvement	802 864	City intersections with medium need: <i>Prioritization Scores are between 50% and 60%.</i>	City to program these intersections for improvement once Tier 1 is complete or as opportunities arise.
Tier 3	Needs Improvement	1,818 2,547	City intersections with some need: <i>Prioritization Scores are between 60% and 75%.</i>	City to program these intersections for improvement once Tier 1 & 2 are complete or as opportunities arise.
Tier 4	Needs Improvement	664 1,214	City intersections with the least amount of need: <i>Prioritization Scores are higher than 75%.</i>	City to program these intersections for improvement once Tier 1, 2, and 3 are complete or as opportunities arise.

Figure 4-7: Intersection priority tiers (updated with supplemental data through 2021)



Prioritization Framework for Other Infrastructure

Other infrastructure elements must be evaluated for accessibility and prioritized for improvements when data becomes available. The following sections present frameworks for evaluation and prioritization for traffic signals, crosswalks, and sidewalks.

TRAFFIC SIGNALS

Traffic signals with pedestrian signals must have accessible pedestrian signal (APS) equipment to be fully accessible. APS equipment includes audible push buttons and pedestrian signal heads. The equipment functions to communicate information about the WALK and DON'T WALK status at signalized intersections in visual and non-visual formats such as audible tones and vibrotactile surfaces to enable all users to safely cross the street.

Figure 4-8: Accessible Pedestrian Signal (APS) push button



Figure 4-9: Pedestrian signal head



The City of Minneapolis Public Works ~~is-~~ **conducting** has conducted an inventory of traffic signals and accessible pedestrian signal (APS) equipment to determine where improvements are needed. **Of the approximate 845 signalized intersections within Minneapolis, 324 have APS.**

Recommendation 4.4: Prioritize locations in need of improvement for Accessible Pedestrian Signals (APS) and incorporate results into Prioritization chapter of ADA Transition Plan

SIDEWALKS

Sidewalks are the foundation of the pedestrian network, and their integrity affects whether and how easily pedestrians can move about the city. There are over 1,600 miles of sidewalk within Minneapolis right of way and more than 500 miles within other agency right of way.

Although the City of Minneapolis Public Works Department maintains an inventory of which street segments have sidewalks, whether sidewalks exist on one or both sides of the street and sidewalk widths, the City does not have a citywide dataset that identifies cross slope, vertical faults or obstructions. The City of Minneapolis Public Works Department is determining an approach to build a more comprehensive sidewalk dataset for tracking and planning improvements.

Figure 4-10: *Tree grate in sidewalk*

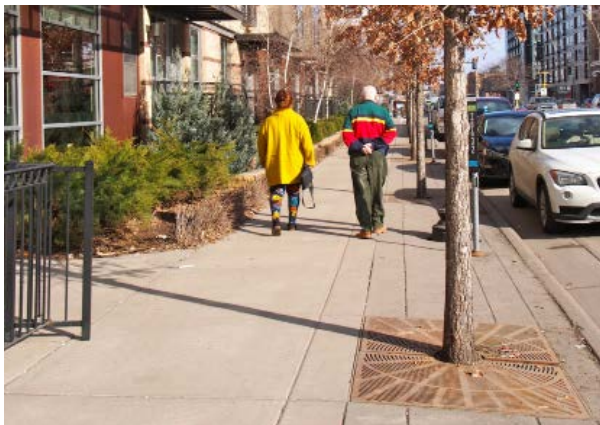


Figure 4-11: *Uneven sidewalk*



Prioritization Framework

The prioritization framework used to prioritize pedestrian curb ramp improvements could also be applied to sidewalk improvements. Sidewalks with identified deficiencies could then be prioritized according to a combined Accessibility Evaluation score and an Equity Criteria score. Public feedback received through this Transition Plan update indicated that sidewalk issues such as vertical faults and broken panels created the most challenges for users. Sidewalks with these deficiencies will be prioritized for improvement through an Accessibility Evaluation score, similar to the prioritization methodology for pedestrian curb ramps.

STREET CROSSINGS

Street crossings provide designated pedestrian crossing locations at street intersections and mid-block locations. In this plan, the term “street crossings” refer to both marked and unmarked street crossing locations.

Figure 4-12: *Minneapolis Zebra marked crosswalk*



Figure 4-13: *Unmarked crosswalk*



Currently, the City of Minneapolis does not have a citywide crosswalk inventory of crosswalk width, running slope, and obstructions.

Recommendation 4.5: Using new data from inventorying sidewalks, prioritize sidewalk and street crossing barriers using the prioritization framework described in Chapter 4

From Here

Together, pedestrian curb ramps, traffic signals, sidewalks and street crossings allow pedestrians of all abilities to navigate the city independently. The pieces of infrastructure that have an identified accessibility need will require reconstruction or correction.

The Implementation chapter of this ADA Transition Plan (**Chapter 5**) details existing capital programs for addressing these types of infrastructure.

CHAPTER 5

Implementation

Overview

Based on the pedestrian curb ramp inventory and evaluation criteria described in *Chapters 3 and 4*, there are more than 4,700 unsignalized intersections and approximately 350 signalized intersections within the City of Minneapolis’ jurisdiction that need improvement to meet the criteria in the 2010 ADA Standards, and/or satisfy PROWAG guidance for pedestrian curb ramps. Additionally, approximately 500 signalized intersections are within another agency’s right of way but are partially funded by Minneapolis. These intersections are tracked in other agency’s ADA Transition Plans as described in *Chapter 1*.

This chapter describes how infrastructure improvements are made in the City of Minneapolis public right of way.

INFRASTRUCTURE IMPLEMENTATION

Several capital programs are used to implement accessible infrastructure within the public right of way. Some capital programs are geared toward signalized intersections, some capital programs are for pedestrian curb ramps or traffic signals, and some capital programs can be applied in a variety of ways. The City is systematically removing barriers in the public right of way by strategically applying each program to the accessible infrastructure within its scope. This balancing act of how each program is used to implement accessible infrastructure is detailed in *Table 5-1* and each program is discussed in detail in the following section.

This document serves as the Americans with Disabilities Act (ADA) Transition Plan within the City of Minneapolis. In developing this Plan, a self-evaluation was conducted on Minneapolis Public Works programs, policies, procedures, and infrastructure in the public right of way and were reviewed for compliance with ADA standards and guidelines.

Table 5-1: Capital programs used to implement accessible infrastructure

CAPITAL PROGRAM	NAME	PEDESTRIAN CURB RAMPS	TRAFFIC SIGNALS	STREET CROSSINGS	SIDEWALKS
PV104	ADA Ramp Replacement Program	●		●**	●*
PV###	Specific Street Reconstruction Projects	●	●	●	●
PV056	Asphalt Pavement Resurfacing Program	●		●	
PV108	Concrete Streets Rehabilitation Program	●		●	

TR021	Traffic Signals	●	●	●**	●*
TR022	Traffic Safety Improvements	●	●	●**	●*
SWK01	Defective Hazardous Sidewalks	●			●
SWK02	Sidewalk Gap Programs	●		●**	●
BP001	Safe Routes to School Program	●	●	●**	●
BP004	Pedestrian Safety Program	●	●	●**	●
n/a	Utilities	●		●	●
n/a	Private Development	●	●	●	●

*At ramp approaches to correct grade

**At gutter pan to correct grade

1 The numeric code following the infrastructure program refers to the code used in the city's Capital Improvement Program (CIP), as listed in the Minneapolis Capital Budget. <http://www.minneapolismn.gov/budget/index.htm>

ADA Ramp Replacement Program (PV104)

The City's ADA Ramp Replacement program (PV104) funds the systematic replacement of pedestrian curb ramps to satisfy ADA requirements.

While PV104 has historically been used to reconstruct pedestrian curb ramps at both signalized and unsignalized intersections, the program has shifted to focus on improving unsignalized intersections and helping to fund ramp improvements in coordination with other capital projects. Focusing on non-signalized intersections allows the program to respond to community requests for ramp improvements, and address more locations each year than if signalized intersections were included in the program -- rebuilding signalized intersections without accessible push buttons often requires extensive design plans, geometrical changes and electrical work to construct new ramps and add accessible push button pedestals. Improving signalized intersections costs significantly more than improving non-signalized intersections due to the more extensive scope of work. Several capital programs focus on providing

improvements at signalized intersections (TR021, TR022 and street reconstruction projects) as detailed below.

Street Reconstruction

Street Reconstruction projects are identified by various PV numbers in the city's Capital Improvement Program (CIP) (e.g., PV095 4th St N and S Reconstruction). Street reconstruction typically includes replacing all street pavement, correcting curb and gutter and drainage, and replacing sidewalks that are impacted by street construction. Street reconstruction is a large-scale improvement that can address sidewalk needs, pedestrian curb ramps, and crossing and traffic signal improvements.

Asphalt Pavement Resurfacing Program (PV056)

The asphalt pavement resurfacing program (PV056) is responsible for resurfacing approximately 30 miles of residential and Municipal State Aid (MSA) streets per year. Municipal State Aid (MSA) streets is a network of streets within Minneapolis' right of way that typically carry higher traffic volumes and are eligible for additional funding. Street resurfacing

involves milling off the top inches of pavement and applying a new layer of asphalt.

The PV056 program maintains pavement condition, replaces non-functional curb and gutter, improves deficient pedestrian curb ramps and installs pedestrian curb ramps where needed.

Concrete Streets Rehabilitation Program (PV108)

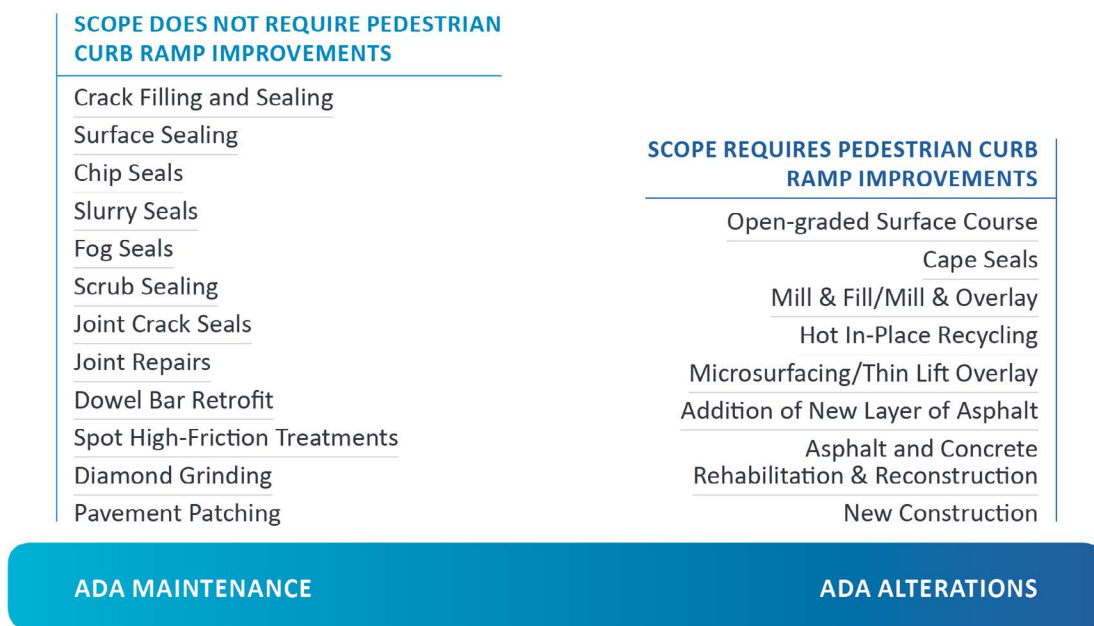
The Concrete Rehabilitation Program (PV108) started in 2017. The Concrete Rehabilitation Program extends the life of concrete streets through pavement maintenance by repairing and sealing joints, repairing cracks, performing grinding of the pavement surface similar to resurfacing, replacing non-functioning curb and gutter, improving deficient pedestrian curb ramps and installing new pedestrian curb ramps where needed.

GUIDANCE ON PEDESTRIAN CURB RAMP IMPROVEMENTS IN RESURFACING PROJECTS

In partnership with the Federal Highway Administration (FHWA), the United States Department of Justice (DOJ) has issued a technical memorandum clarifying the Title II of the Americans with Disabilities Act requirement to provide pedestrian curb ramps when streets are resurfaced¹. That memo states that “projects deemed to be alterations must include curb ramps within the scope of the project”, but asphalt and concrete-pavement repair treatments considered to be maintenance do not require pedestrian curb ramps at the time of the improvement. **Figure 5-1** details what scope the DOJ considers to be maintenance and what scope the DOJ considers to be alterations.

¹ [http://www.azmag.gov/Portals/0/Documents/SC_2014-11-19_Americans-with-Disabilities-\(ADA\)-Resurfacing-Guidance-Clarification-for-Streets-Roads-and-Highways.pdf?ver=2017-04-06-111715-680](http://www.azmag.gov/Portals/0/Documents/SC_2014-11-19_Americans-with-Disabilities-(ADA)-Resurfacing-Guidance-Clarification-for-Streets-Roads-and-Highways.pdf?ver=2017-04-06-111715-680)

Figure 5-1: Department of Justice definition on maintenance versus alterations for asphalt and concrete resurfacing projects



Source: DOJ Briefing Memorandum on Maintenance versus Alteration Projects, 2014.

The DOJ and FHWA did not set a deadline for agencies to comply with this information, but the published DOJ briefing directed agencies to “establish a plan to implement this single Federal policy as soon as practical”.

Recommendation 5.1: Incorporate pedestrian curb ramp construction in the asphalt resurfacing program (PV056) and concrete rehabilitation program (PV108)

Traffic Signal Funding Program (TR021)

The Traffic Signals Program (TR021) replaces aging and obsolete traffic signal equipment and pedestrian curb ramps at signalized intersections. Intersections are chosen for improvements based on signal age and condition. The City’s practice has been that when a signal is rebuilt, pedestrian curb ramps are replaced and APS push buttons are installed.

In 2007, the City evaluated and prioritized all signalized intersections in Minneapolis for accessible pedestrian signals (APS) and began installing APS at the highest priority intersections. The intersection rankings were used to install APS at a few intersections each year. In 2014, when the TR021 program expanded, APS were installed as standard practice on all signal improvements requiring underground work, and therefore standalone APS installations were no longer conducted. The City began an APS inventory in 2018 that will provide data for an assessment of traffic signal accessibility in the city.

Traffic Safety Improvement Program (TR022)

The Traffic Safety Improvements Program (TR022) funds improvements at both signalized and unsignalized intersections. The primary purpose of these funds is to address specific safety issues, but several types of accessible infrastructure improvements may also be included such as enhanced crossings, signal upgrades (including APS equipment), or pedestrian curb ramps.

Sidewalk & Street Crossing Improvement Funding

There are several other programs in the City’s CIP that can include accessibility improvements to street crossings, pedestrian curb ramps, and sidewalks. The sidewalk and street crossing improvement programs are focused on some key elements of accessible infrastructure: addressing trip hazards, replacing broken panels, and making new connections.

The current relevant sidewalk and crossing improvement programs in the City’s CIP include:

- **Defective and Hazardous Sidewalk Program (SWK01)** – This program replaces sidewalk panels on all streets in the city, including County and State streets, based on annual sidewalk inspections that cycle through the city. This program includes inspections for broken and hazardous sidewalk panels and orders repairs for broken and heaved panels. Additional funds are allocated to upgrade some pedestrian curb ramps in the repair area.
- **Sidewalk Gap Program (SWK02)** – This program fills sidewalk gaps by installing public sidewalks where they are missing on one or both sides of the street and can include installation of pedestrian curb ramps at the new sidewalk connections.
- **Safe Routes to School Program (BP001)** – This program encourages bicycling and walking for trips to and from school by making traffic calming improvements near schools. In addition to focusing on trips to school, the program also looks to improve the bicycle and pedestrian network in coordination with schools to better connect schools to parks, libraries, and other neighborhood destinations. These improvements have included bicycle boulevards, bike trails, curb extensions, pedestrian curb ramps, durable crosswalks, school crossing signage, pedestrian flashers, traffic diverters, and pedestrian accessible signal upgrades.

- **Intersection and Crossing Improvement Program (BP004)** – This program encourages walking by improving street crossings, with a focus on unsignalized intersections. This program focuses on implementing pedestrian bumpouts, center median refuge islands, and intersection realignments. The program also includes other crossing improvements such as pedestrian curb ramps, curb extensions, pedestrian refuge medians, and accessible pedestrian signal upgrades.

Recommendation 5.2: Evaluate sidewalk and street crossing data to guide the development of a funding mechanism and/or approach for addressing sidewalk and street crossing barriers

Projects by Others

Other government agencies manage right of way within Minneapolis and construct accessible infrastructure. These agencies include Hennepin County, the Minnesota Department of Transportation (MnDOT), and the Minneapolis Parks and Recreation Board. These agencies often coordinate improvements with the City of Minneapolis but ultimately the design, construction, maintenance, operations, and repair of infrastructure is the responsibility of the agency that has jurisdiction unless otherwise determined through inter-agency agreements. The agency with jurisdiction is responsible for tracking and maintaining infrastructure status within their own ADA Transition Plans.

PARTNER AGENCY PROJECTS WITHIN CITY RIGHT OF WAY

Public agency projects sometimes involve improvements in Minneapolis right of way. These improvements are inventoried and tracked with Minneapolis’ data inventory tool.

PRIVATE DEVELOPMENT AND UTILITY PROJECTS

Public Works plays a significant role in reviewing construction and detour plans within the public right of way for private development projects

in Minneapolis. Through the Preliminary Development Review (PDR) process, Public Works requires all developers to design and reconstruct impacted public right of way to the standards established in the Minneapolis Street and Sidewalk Design Guidelines. This includes reconstruction of public sidewalks to the minimum (at least) dimensions established for the pedestrian accessible route (PAR), the reconstruction of impacted pedestrian ramps to current ADA standards, and the installation of Accessible Pedestrian Signal (APS) systems. Minneapolis’ Street and Sidewalk Design Guidelines often require developers to design and construct public sidewalks with widths well beyond minimum ADA requirements.

Private development projects and private and public utilities that impact the public right of way are required to restore sidewalk, pedestrian curb ramps, street crossings, and traffic signal infrastructure and any other City-owned infrastructure so that the infrastructure complies with current ADA and City standards and functions as a complete system.

Construction by private developers, utilities, and public agency partners has increased in recent years. Tracking the construction and inventorying rebuilt infrastructure built by these entities has been difficult due to challenges with available resources and existing mechanisms.

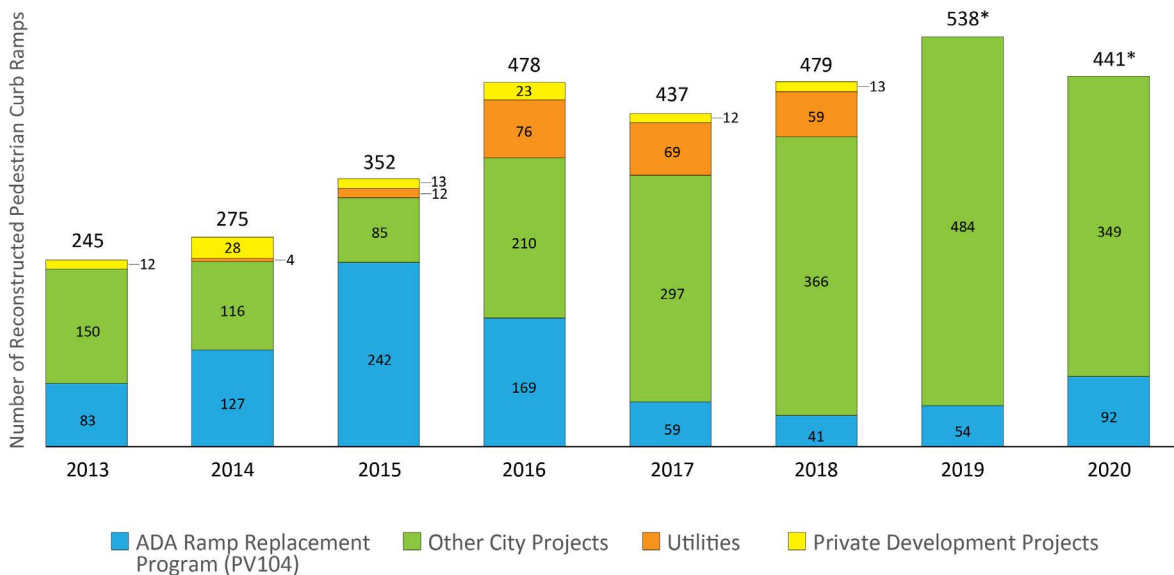
Recommendation 5.3: Improve the mechanism for tracking, inspecting and inventorying pedestrian curb ramps, Accessible Pedestrian Signals (APS) and sidewalks that are built in Minneapolis’ public right of way by private developers, utilities, and other agencies and determine whether additional inspection staff or resources are needed to ensure all city-managed or built infrastructure is built according to city specifications, ADA Standards and in alignment with Minneapolis design guidelines

PEDESTRIAN CURB RAMP RECONSTRUCTION

Pedestrian curb ramp reconstruction has increased since 2013. Nearly 400 pedestrian curb ramps are reconstructed each year using a variety of funding sources (Figure 5-2). Assuming that funding levels remain constant, deficient pedestrian curb ramps and locations that may be missing ramps will be addressed within 20-30 years. This estimate includes adding Accessible Pedestrian Signal systems at signalized

intersections as well as upgrading pedestrian curb ramps. The estimated cost to correct the deficient and potentially deficient locations is \$433,430 million based on average bid tabulations from recent pedestrian curb ramp construction (2019-2021 dollars). Note that this cost estimate is based on the work completed since the adoption of the 2020 plan and current material costs. Locations will be prioritized based on the prioritization framework outlined in Chapter 4.

Figure 5-2: Pedestrian curb ramp reconstruction by funding source



*2019 and 2020 data does not include pedestrian curb ramps built by utilities and private development projects

Recommendation 5.4: Report on improvements to pedestrian curb ramps, Accessible Pedestrian Signals (APS), sidewalks and street crossings annually and update inventories

Recommendation 5.6: Establish an anticipated timeline and cost for addressing sidewalk and street crossing barriers

Recommendation 5.5: Update the timeline and anticipated cost for installing or correcting Accessible Pedestrian Signals (APS)

CONTEXT SPECIFIC DESIGN

Each intersection is unique, and therefore each pedestrian curb ramp, signal, sidewalk, and street crossing solution is unique. Space constraints, drainage considerations, and the long-term intersection configuration should all be considered when designing accessible infrastructure. Pedestrian curb ramps in particular

need a high level of consideration given for a proper design.

The following table describes several pedestrian curb ramp designs and indicates in general when each design might be used. This table does not encompass all of the options for pedestrian curb ramps, but instead outlines the pros and cons of the most common designs.

Table 5-2: Ramp types and desirability

RAMP TYPE	RAMP IMAGE	DESIRABILITY	PROS	CONS
1. Combined Directional		Very Desirable	<ul style="list-style-type: none"> Provides directionality Aids in snow clearing Can be placed next to vertical obstructions Wayfinding for visually impaired 	<ul style="list-style-type: none"> Requires a lot of ROW (needs boulevard), i.e. a small curb radius and/or large pedestrian zone
2. Parallel Ramps		Acceptable	<ul style="list-style-type: none"> Fits in constrained conditions 	<ul style="list-style-type: none"> Typically not aligned with direction of travel Multiple grade changes required in through walk zone
3. Blended Transition / Depressed Corner/ Fan Ramp		Acceptable , less desirable than bi-directional ramps	<ul style="list-style-type: none"> Fits in constrained conditions (little ROW) Ramp is in line with through walk zone 	<ul style="list-style-type: none"> Not good in low elevations (drainage concerns) Plows leave snow at front of ramp Easier for vehicles to drive on
4. Single Diagonal Ramp		Undesirable but acceptable if no other ramp type will work	<ul style="list-style-type: none"> Fits in constrained conditions 	<ul style="list-style-type: none"> Not aligned with direction of travel, requires wheeled users to redirect in road Plows leave snow at front of ramp No space for pedestrian signals

PLAN RECOMMENDATIONS

The Transition Plan includes twenty recommendations to improve access in the public right of way (Table 5-3). These recommendations are not all-inclusive of improvements made through routine construction projects and other policies, programs and practices.

Recommendations summarized here are listed by category and in chronological order within each category. Each recommendation’s ID corresponds with the order they are discussed in the previous chapters of the report. They are not listed in order of priority or importance.

Table 5-3: Recommendations

CATEGORY	ID	RECOMMENDATION	TIMELINE AND MILESTONES
Pedestrian Curb Ramps	3.1	Modify the pedestrian curb ramp in-field data collection application to holistically collect all necessary information on pedestrian curb ramps	<ul style="list-style-type: none"> Complete updates to the data collection process (2020)
Pedestrian Curb Ramps	4.2	Inventory pedestrian curb ramps at intersections with no ramp data (approx. 50 intersections)	<ul style="list-style-type: none"> Collect inventory on intersections with no pedestrian curb ramp data after new data collection app is finished (2021) and incorporate into prioritization list
Pedestrian Curb Ramps	4.3	Install pedestrian curb ramps where ramps are missing as intersections are programmed and designed for improvement	<ul style="list-style-type: none"> Ongoing
Pedestrian Curb Ramps	5.1	Incorporate pedestrian curb ramp construction in the asphalt resurfacing program (PV056) and concrete rehabilitation program (PV108)	<ul style="list-style-type: none"> Ongoing
Accessible Pedestrian Signals (APS)	3.2	Evaluate Accessible Pedestrian Signals (APS) inventory data and incorporate results into Infrastructure Status section of ADA Transition Plan	<ul style="list-style-type: none"> Digitize and analyze inventory data on Accessible Pedestrian Signals (APS) (2020) Incorporate findings into ADA Plan (2021)
Accessible Pedestrian Signals (APS)	3.3	Compare Accessible Pedestrian Signal (APS) data collected to current ADA and Minnesota Manual on Uniform Traffic Control Devices (MN MUTCD) criteria to identify any additional elements to collect and incorporate results into ADA Transition Plan	<ul style="list-style-type: none"> Identify data collection improvements for Accessible Pedestrian Signals (APS) (2020 2022) Incorporate findings into ADA Plan (2021 2022) Develop approach to collect additional data if needed (2021 2022)
Accessible Pedestrian Signals (APS)	4.4	Prioritize locations in need of improvement for Accessible Pedestrian Signals (APS) and incorporate results into Prioritization chapter of ADA Transition Plan	<ul style="list-style-type: none"> Apply prioritization methodology to Accessible Pedestrian Signal (APS) data and incorporate into Chapter 4 of the ADA Plan (2021 2022)
Accessible Pedestrian Signals (APS)	5.5	Update the timeline and anticipated cost for installing or correcting Accessible Pedestrian Signals (APS)	<ul style="list-style-type: none"> Update intersection cost estimates for signalized intersections in need of Accessible Pedestrian Signal (APS) improvements (2021 2022)

CATEGORY	ID	RECOMMENDATION	TIMELINE AND MILESTONES
Sidewalks and Street Crossings	3.4	Supplement existing data on sidewalks and street crossings by completing a sidewalk and street crossing inventory	<ul style="list-style-type: none"> Scope data collection and evaluation pilot into capital project development (2020) Pilot data collection process and evaluation methodology and incorporate into Chapter 3 of the ADA Plan (2021 2022) Establish process for collecting data citywide based on results of pilot (2022 2023-2024)
Sidewalks and Street Crossings	4.5	Using new data from inventorying sidewalks, prioritize sidewalk and street crossings barriers using the prioritization framework described in Chapter 4	<ul style="list-style-type: none"> Prioritize identified barriers for improvement (2022 2025-2026)
Sidewalks and Street Crossings	5.6	Establish an anticipated timeline and cost for addressing sidewalk and street crossing barriers if needed	<ul style="list-style-type: none"> Develop an anticipated timeline and cost estimates for addressing sidewalk and street crossing barriers (2022 2025-2026)
Sidewalks and Street Crossings	5.2	Evaluate sidewalk and street crossing data to guide the development of a funding mechanism and/or approach for addressing sidewalk and street crossing barriers	<ul style="list-style-type: none"> Update City specifications (annually) Evaluate need for additional resources (2022 2025-2026)
All Infrastructure	5.3	Improve the mechanism for tracking, inspecting and inventorying pedestrian curb ramps, Accessible Pedestrian Signals (APS) and sidewalks that are built in Minneapolis' public right of way by private developers, utilities, and other agencies and determine whether additional inspection staff or resources are needed to ensure all city-managed or built infrastructure is built according to city specifications, ADA Standards and in alignment with Minneapolis design guidelines	<ul style="list-style-type: none"> Update City specifications (annually) Evaluate need for additional resources (2020-2021 2022)
All Infrastructure	5.4	Report on improvements to pedestrian curb ramps, Accessible Pedestrian Signals (APS), sidewalks and street crossings annually and update inventories	<ul style="list-style-type: none"> Ongoing annually through the "Your City, Your Streets Progress Report" to the Transportation and Public Works and Infrastructure Committee (TPWPWI) and NCR's "ADA Action Plan Report" to the Public Health, Environment, Civil Rights and Engagement and Safety Committee (PECEPHS)
Prioritization	4.1	Update the equity component of infrastructure prioritization as the 20 Year Streets Funding Plan is updated	<ul style="list-style-type: none"> Ongoing (update starting in 2022)
Programs, Policies and Procedures	3.5	In collaboration with 311 and the Neighborhood and Community Relations Departments, evaluate adding an option on the 311 interface for the public to indicate whether a concern is related to accessibility	<ul style="list-style-type: none"> Evaluate adding option to indicate access issue (2020 2022) Update software and user testing (2020-2021 2022)

CATEGORY	ID	RECOMMENDATION	TIMELINE AND MILESTONES
Programs, Policies and Procedures	3.6	Continue to expand departmental knowledge and expertise of ADA topics by attending trainings and classes	<ul style="list-style-type: none"> ▪ Ongoing
Programs, Policies and Procedures	3.7	Review and update existing policies and practices for pedestrian detour design and enforcement annually in coordination with additional direction in the Transportation Action Plan	<ul style="list-style-type: none"> ▪ Align pedestrian detour design specifications with MNMUTCD standards (annually) ▪ Additional changes proposed in Transportation Action Plan (2020)
Programs, Policies and Procedures	3.8	Continue to monitor issues and feedback received on parking and operations for scooter, bike share and/or other micromobility options and evaluate the need for program improvements	<ul style="list-style-type: none"> ▪ Designate additional parking locations for scooter, bike share and/or other micromobility options (2020 Ongoing) ▪ Increase and simplify communications on where to park and where to ride (2020 Ongoing) ▪ Increase enforcement of micromobility businesses and users (2020 Ongoing) ▪ Review and make program improvements (annually)
Programs, Policies and Procedures	3.9	Continue to address seasonal barriers such as snow and ice on sidewalks as outlined by Minneapolis Ordinance 445 and the pedestrian and Bicycle Winter Study; explore modifications to improve access to the public right of way through the Transportation Action Plan	<ul style="list-style-type: none"> ▪ Additional funding allocated for snow and ice corner clearing (2020) ▪ Additional improvements proposed in Transportation Action Plan (2020)

From Here

The City of Minneapolis is committed to removing barriers to accessibility in the city’s public right of way and will continue to address deficient infrastructure and other barriers.

The recommended improvements were prioritized and an implementation plan was developed to provide guidance for the City’s improvement projects in the coming years. Public outreach was also conducted to aid in the development of the plan.

This Transition Plan is intended to be a living document and will be updated as additional inventory data is collected, infrastructure is prioritized, and barriers are addressed. **As part of the Transportation Action Plan, Public Works is committed to conducting a review of the ADA Transition Plan on a biennial basis to evaluate progress and suggest plan updates in pursuit of improved compliance.**

This Transition Plan is focused on a portion of City of Minneapolis infrastructure and is not intended to be a comprehensive ADA Transition Plan for all City facilities. For more information on other City facilities, programs and policies, please refer to the City of Minneapolis ADA Action Plan and the Property Services ADA Transition Plan on the [City of Minneapolis ADA Action Plan webpage](#).

APPENDIX A: 2022 Evaluation and Update

OVERVIEW

The ADA Transition Plan for Public Works was adopted in February 2020 and the work to complete the important actions in the plan is ongoing. The 2022 ADA Transition Plan update represents a moment in time to evaluate the ongoing progress and highlight next steps. The goal of this evaluation and update is to:

- Understand the progress made to date on the recommendations outlined in the plan
- Ensure that Public Works is making progress on the recommendations outlined in the plan
- Identify any roadblocks preventing progress, ways to improve workflows, or adjustments that need to be made to the recommendations

Since the adoption of the 2020 ADA Transition Plan for Public Works the Transportation Action Plan (TAP) was approved and adopted by City Council (December 2020). The TAP supports the work outlined in this Plan by addressing a variety of issues that impact the accessibility of streets and sidewalks in Minneapolis and laying out a series of priorities, policies and approaches to identify and remove barriers in the public right of way. As part of the TAP, Public Works has committed to conducting a review of the ADA Transition Plan on a biennial basis ([Walking Action 5.7](#)) to evaluate progress and suggest plan updates in pursuit of improved compliance.

There are two primary elements of the 2022 ADA Transition Plan for Public Works update: a redlined version of the 2020 ADA Transition Plan for Public Works and Appendix A, which highlights progress made to date and includes a summary update of all the recommendations and milestones identified in the 2020 plan.

The 2020 ADA Transition Plan for Public Works has been redlined to reflect policy updates that have occurred since the plan was adopted. Along with the redlined document, this appendix provides an overview of the progress made to date on the recommendations and milestones within the plan, highlights some of the key work currently in progress, identifies challenges within this work, and outlines anticipated milestones in the coming years.

This appendix includes a summary table with a progress update for each of the recommendations put forth in the 2020 ADA Transition Plan for Public Works and includes revised timelines for ongoing and upcoming milestones.

PROCESS AND ENGAGEMENT

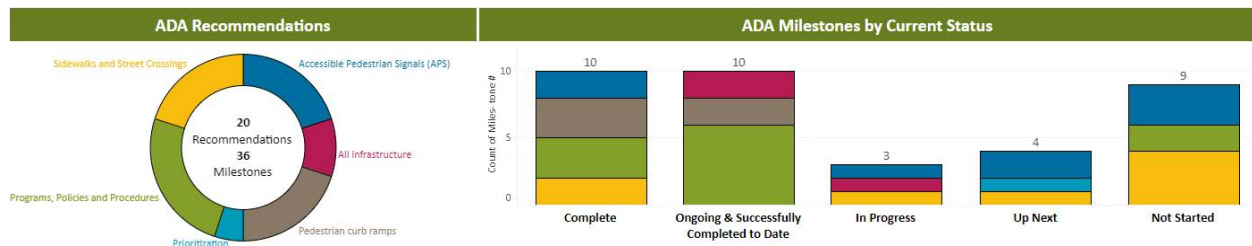
Public Works created a cross-divisional core team to evaluate the progress made on the recommendations and milestones outlined in the 2020 plan and to identify any challenges faced within this work. A progress update was provided to Public Works leadership through the TAP Steering Committee.

Public Works connected with City advisory committees that were key stakeholders in the development of the 2020 plan including the Pedestrian Advisory Committee (PAC), Minneapolis Advisory Committee on People with Disabilities (MACOPD), and the Minneapolis Advisory Committee on Aging (MACOA) to share key highlights of the ongoing work and an overview of progress since 2020. Since the content of the plan was not dramatically altered, engagement was limited and aimed to inform on progress made to date. Feedback from these groups was received and integrated where possible as part of this update.

PROGRESS UPDATE

The ADA Transition Plan for Public Works outlines 20 recommendations to help identify and remove barriers within the public right of way. Within these 20 recommendations, there are a total of 36 milestones that provide action items needed to complete the recommendations. *Figure A-1*, below, provides a quick glance at the milestone progress as of December 2021. There are a number of milestones that are “not started” yet - this is due primarily to the fact that much of this work is linear and dependent on “in progress” steps to be completed before moving onto the next action steps. *Table A-1*, at the end of this document, includes a full summary of the progress made to date on the 2020 ADA Transition Plan for Public Works recommendations.

Figure A-1: Summary of milestone progress by current status



PROGRESS HIGHLIGHTS

Public Works is continuously making progress on the recommendations and milestones outlined in the 2020 ADA Transition Plan for Public Works. Below are three highlights of ongoing work to reduce and remove barriers within the public right of way that have had significant progress since the adoption of the 2020 ADA Transition Plan for Public Works. The progress highlights include:

- Dedicated ADA and Right of Way Staff
- Snow and Ice Corner Clearing
- Sidewalk and Street Crossing Inventory Pilot

Dedicated ADA and Right of Way Staff

Recommendation 5.3: Improve the mechanism for tracking, inspecting and inventorying pedestrian curb ramps, Accessible Pedestrian Signals (APS) and sidewalks that are built in Minneapolis’ public right of way by private developers, utilities, and other agencies and determine whether additional inspection staff or resources are needed to ensure all city managed or built infrastructure is built according to city specifications, ADA Standards and in alignment with Minneapolis design guidelines.

To help support the goals and recommendations of the ADA Transition Plan for Public Works, Public Works is looking to develop an ADA and Right of Way Administrative team. The goal of this team is for increased capacity to manage the use of the right of way to match City goals for equity, safety, and mobility, as well as improve overall coordination between agencies, utilities, private developers and advancing actions contained in the ADA Transition Plan. This includes pedestrian curb ramps, audible pedestrian signals (APS), and proactive inspection of permitted right of way.

As part of the 2022 Mayor’s adopted budget, \$120,000 has been identified for staffing resources related to ADA inspection and right of way management.

Snow and Ice Corner Clearing

Recommendation 3.9: Continue to address seasonal barriers such as snow and ice on sidewalks as outlined by Minneapolis Ordinance 445 and the Pedestrian and Bicycle Winter Maintenance Study; explore modifications to improve access to the public right of way through additional direction in the Transportation Action Plan.

Minneapolis has roughly 2,000 miles of sidewalks within the public right of way. City ordinance requires that property owners are responsible for shoveling their public sidewalks. The City enforces the rules by responding to complaints to our 311 system and performs some proactive inspections. Property owners are responsible for clearing snow from the sidewalk and around the corner. The City has acknowledged that Public Works is responsible for clearing the snow that blocks the corners along [Pedestrian Priority Corridors](#).

In 2020, an additional \$300,000 was appropriated by the City Council to further enhance the level of service of corner clearing. These additional, ongoing funds increased the corner clearing completion time on Pedestrian Priority Corridors to two days (down from four or five days) following a Snow Emergency.

Sidewalk and Street Crossing Inventory Pilot

Recommendation 3.4: Supplement existing data on sidewalks and street crossings by completing a sidewalk and street crossing inventory; Milestone: Pilot data collection process and evaluation methodology

During the development of the 2020 ADA Transition Plan for Public Works, Public Works identified a need to update and supplement existing data on public sidewalks within Minneapolis public right of way. In response to this, Public Works conducted a sidewalk inventory pilot from 2020-2021 to explore data collection and analysis methods for evaluating the condition and design of public sidewalks and street crossings in Minneapolis as outlined by [Recommendation 3.4](#).

PROJECT SCOPE

There are several different methods for collecting and measuring sidewalk data and no common method is widely accepted as the recommended approach for data collection. Some public agencies deploy staff or interns to collect data, while others rely on contractors and proprietary data collection devices. At a minimum, sidewalk data collection should include:

- Non-compliant sidewalk slopes (cross slope and longitudinal)
- Sidewalk widths and obstructions in the pedestrian access route
- Vertical displacements (e.g. raised panels and tripping hazards)
- Sidewalk condition

To better assess and compare the benefits and challenges of several data collection methods, Public Works staff and consultants went into the field to test six different data collection methods.

1. MANUAL DATA COLLECTION

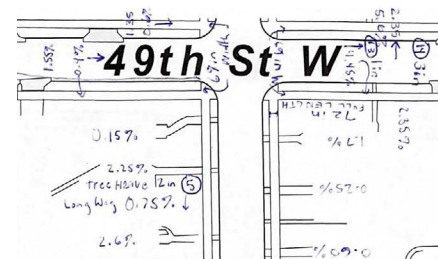
City staff collect sidewalk attributes in-field and enter into database.

Benefits: Low initial costs.

Limitations:

- Data collection and entry is time intensive
- High amount of data susceptible to location and reporting errors
- Difficulty converting analog field measurements into a digital GIS platform

Figure A-2: Example of manual data collection



2. TABLET-BASED COLLECTION

City staff collect sidewalk attributes using a tablet-based system. Data is updated to a cloud-based data management system.

Benefits:

- Low initial costs for equipment and setting up tablet
- Data can be collected by staff and updated as needed
- Can include collecting inventory for other attributes of the public right of way (e.g. pedestrian curb ramps, bus stops, and street crossings)
- Data processing can be done internally

Limitations:

- Data entry and collection is time intensive
- Requires substantial training to ensure staff are collecting data in the same way
- Tablet software still in development

3. GPS/GIS-BASED COLLECTION

Consultant or City staff collect sidewalk data using GPS-based system. Data is updated to a cloud based data management system.

Benefits:

- Data can be collected by staff or consultant team
- Consultant would provide staff training, data analysis and web-based map application for viewing results
- Similar data collection method used by other agency partners such as MnDOT and Hennepin County
- Consultant can include modules for collecting inventory data on other attributes of the public right of way (e.g. pedestrian curb ramps, bus stops, and street crossings)

Limitations:

- High cost for using consultant team to collect data
- Requires some training to ensure staff are collecting data in the same way
- Data entry and collection is time-intensive
- Would still require post-processing work by consultant

4. SEGWAY-BASED DATA COLLECTION

Consultant or city staff collect sidewalk data using three-wheeled SEGWAY.

Benefits:

- Data can be collected much quicker than options 1, 2, and 3 above.
- Minimal post-processing required
- Width of SEGWAY closely imitates width of wheelchair

Limitations:

- Some-what high upfront cost for equipment if purchased
- Will require consultant support for data analysis

Figure A-3: Staff demonstrating data collection process with tablet-based method



Figure A-5: Consultant staff demonstrating the GPS/GIS based collection tool



Figure A-4: Example of SEGWAY used to collect data



5. TERRESTRIAL LIDAR-BASED DATA COLLECTION

Sidewalk attributes are collected with a push-cart outfitted with sensors, including laser scanner, camera, and GPS sensors. Data is collected by walking the cart along the sidewalks. Data is post-processed into sidewalk attributes by the consultant

Benefits:

- Scalable data collection at walking speed and automated processing reduces individual bias
- Width of data collection cart closely imitates the width of a wheelchair
- Offers a process to update sidewalk inventory in the future by either consultant or city staff
- Collecting data is faster than options 1, 2, and 3

Limitations:

- Commitment to City-wide mapping necessary to justify scalable service
- Dependent on consultant data processing

Figure A-6: Example of data collection cart



6. AERIAL LIDAR-BASED DATA COLLECTION

Consultant staff collect sidewalk data with 360 degree light detection and ranging instrument (LIDAR). This process creates a highly detailed 3-D model called a "point cloud". Sidewalk attributes and other data can be measured manually using the point cloud. Software to automate the data analysis is available which creates a mapped infrastructure summary (shown to the right)

Benefits:

- Captures highly accurate information of the built environment
- Street crossing data can be collected in addition to sidewalk data
- Collecting data is faster than options 1, 2, and 3

Limitations:

- Collecting point cloud data is very expensive and labor intensive
- Data analysis is an additional cost

Figure A-7: GIS output showing processed LIDAR data depicting compliant and non-compliant sections of sidewalks and crossings



NEXT STEPS

Public Works is currently evaluating the scalability, cost and accuracy of the six data collection methods outlined above. This evaluation will inform additional discussion related to conducting a citywide supplementary sidewalk and street crossing inventory (Recommendation 3.4).

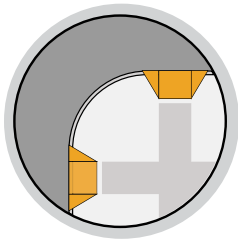
INFRASTRUCTURE IMPROVEMENTS

The 2020 ADA Transition Plan included sidewalk and pedestrian ramp data through 2018. The information below summarizes the most up to date infrastructure improvement data available today - 2019 and 2020. The information below also includes data on Accessible Pedestrian Signals (APS) which was not available during the development of the 2020 Plan.

The data outlined below includes improvements completed by the City; however, it does not include improvements made by private developers, utilities, and other agencies. Per **Recommendation 5.3**, the City is taking steps to improve the mechanism for tracking, inspecting, and inventorying pedestrian curb ramps, APS, and sidewalks built in Minneapolis' public right of way by all agencies, private developers, and utilities to ensure that all built infrastructure is built according to city specifications, ADA standards and in alignment with Minneapolis design guidelines. The data will continue to be updated as new data becomes available.

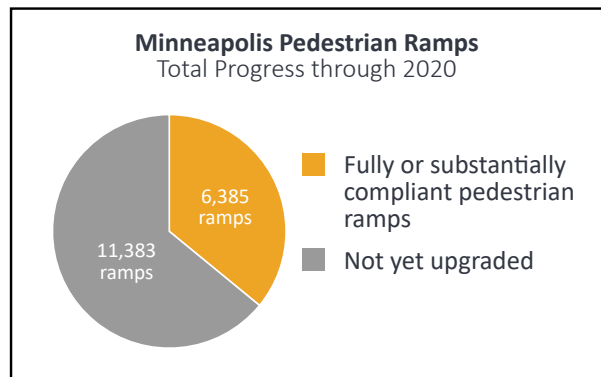
Infrastructure Improvements since the 2020 ADA Transition Plan

PEDESTRIAN CURB RAMPS

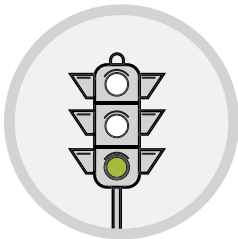


979 ADA Ramps*
built in 2019 and 2020

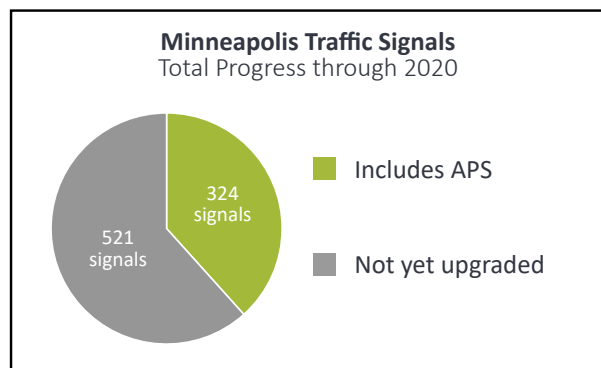
*This does not include ADA pedestrian curb ramps built by other agencies, private developments, or utilities.



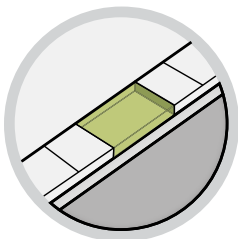
TRAFFIC SIGNALS



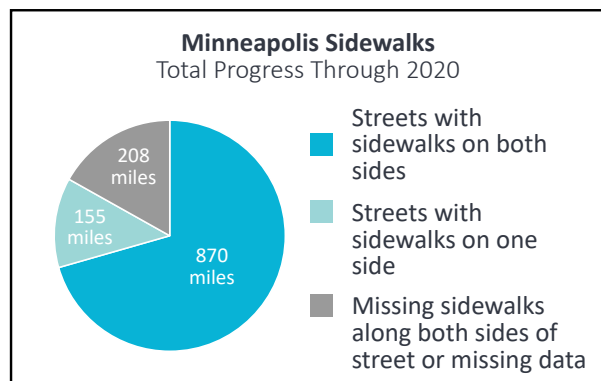
38 APS Upgrades
in 2019 and 2020



SIDEWALKS



1.72 Miles of Sidewalk Gaps
closed in 2019 and 2020



Anticipated Cost and Timeline

Infrastructure improvements are expected to be complete within 18-28 years at an estimated cost of \$430 million (2021 dollars). Note that this cost estimate is based on current funding levels, the work completed since the adoption of the 2020 plan and current material costs. Additional information on the anticipated costs and schedules will be provided as infrastructure inventories are updated and evaluated including pedestrian ramps, traffic signals, sidewalks and street crossings.

IMPLEMENTATION CHALLENGES

The ADA Transition Plan was adopted by City Council in February 2020, only a month before COVID-19 impacts began. The year to follow was unprecedented and included challenges related to the pandemic, the death of George Floyd, and staffing and budget impacts. The events of 2020 and 2021 have impacted progress made on the ADA Transition Plan, however, the City is committed to removing barriers to accessibility in the city's public right of way and will continue to address deficient infrastructure and other barriers as we continue forward.

2022 AND BEYOND

Public Works remains committed to addressing and removing barriers in the public right of way through the recommendations outlined in the 2020 ADA Transition Plan for Public Works and beyond. **Table A-1** below provides a summary of the recommendation and milestone progress made to date and includes proposed new timelines for several recommendations. Public Works will continue to review the ADA Transition Plan on a biennial basis, per TAP [Walking action 5.7](#), to evaluate progress and suggest plan updates in pursuit of improved compliance.

SUMMARY OF RECOMMENDATIONS AND MILESTONE PROGRESS

Table A-1: Recommendation progress summary and revised timelines

2020 ADA TRANSITION PLAN				2022 ADA TRANSITION PLAN UPDATE		
CATEGORY	ID	RECOMMENDATION	MILESTONES & TIMELINE	CURRENT STATUS	PROPOSED NEW TIMELINE	MILESTONE PROGRESS: CURRENT AND PAST
Pedestrian Curb Ramps	3.1	Modify the pedestrian curb ramp in-field data collection application to holistically collect all necessary information on pedestrian curb ramps	<ul style="list-style-type: none"> Complete updates to the data collection process (2020) 	Complete	-	In-field data collection tool updated and testing completed spring 2021
Pedestrian Curb Ramps	4.2	Inventory pedestrian curb ramps at intersections with no ramp data (approx. 50 intersections)	<ul style="list-style-type: none"> Collect inventory on intersections with no pedestrian curb ramp data after new data collection app is finished (2021) 	Complete	-	Data collection of missing curb ramp data completed November 2021
			<ul style="list-style-type: none"> Incorporate into prioritization list (2021) 	Complete	-	Missing curb ramp data integrated into Chapter 4: Infrastructure Prioritization
Pedestrian Curb Ramps	4.3	Install pedestrian curb ramps where ramps are missing as intersections are programmed and designed for improvement	<ul style="list-style-type: none"> Ongoing 	Ongoing & Successfully Completed to Date	Ongoing	All projects are incorporating as needed
Pedestrian Curb Ramps	5.1	Incorporate pedestrian curb ramp construction in the asphalt resurfacing program (PV056) and concrete rehabilitation program (PV108)	<ul style="list-style-type: none"> Ongoing 	Ongoing & Successfully Completed to Date	Ongoing	Public Works has been expanding efforts to bring more funding for pedestrian curb ramp construction through various capital programs; pedestrian curb ramps recently integrated in the Dight Standish and Corcoran neighborhood 2022 resurfacing projects

2020 ADA TRANSITION PLAN				2022 ADA TRANSITION PLAN UPDATE		
CATEGORY	ID	RECOMMENDATION	MILESTONES & TIMELINE	CURRENT STATUS	PROPOSED NEW TIMELINE	MILESTONE PROGRESS: CURRENT AND PAST
Accessible Pedestrian Signals (APS)	3.2	Evaluate Accessible Pedestrian Signals (APS) inventory data and incorporate results into Infrastructure Status section of ADA Transition Plan	Digitize and analyze inventory data on Accessible Pedestrian Signals (APS) (2020)	Complete	-	APS data has been digitized and includes data through 2018. City staff is in the process of updating the inventory with 2021 data, expected to be complete mid-2022
			Incorporate findings into ADA Plan (2021)	Complete	-	APS data has been included in <i>Appendix A</i>
Accessible Pedestrian Signals (APS)	3.3	Compare Accessible Pedestrian Signal (APS) data collected to current ADA and Minnesota Manual on Uniform Traffic Control Devices (MN MUTCD) criteria to identify any additional elements to collect and incorporate results into ADA Transition Plan	Identify data collection improvements for Accessible Pedestrian Signals (APS) (2020)	In Progress	2022	Discussions ongoing for data collection improvements related to APS
			Incorporate findings into ADA Plan (2021)	Up Next	2022	Not started; dependent on above action to be completed
			Develop approach to collect additional data if needed (2021)	Up Next	2022	Not started; dependent on above action to be completed
Accessible Pedestrian Signals (APS)	4.4	Prioritize locations in need of improvement for Accessible Pedestrian Signals (APS) and incorporate results into Prioritization chapter of ADA Transition Plan	Apply prioritization methodology to Accessible Pedestrian Signal (APS) data	Not Started	2022	Not started; dependent on Recommendation 3.3.
			Incorporate findings into Chapter 4 of the ADA Plan (2021)	Not Started	2023	Not started; dependent on above action to be completed
Accessible Pedestrian Signals (APS)	5.5	Update the timeline and anticipated cost for installing or correcting Accessible Pedestrian Signals (APS)	Update intersection cost estimates for signalized intersections in need of Accessible Pedestrian Signal (APS) improvements (2021)	Not started	2022	Not started; dependent on Recommendation 3.2

2020 ADA TRANSITION PLAN				2022 ADA TRANSITION PLAN UPDATE		
CATEGORY	ID	RECOMMENDATION	MILESTONES & TIMELINE	CURRENT STATUS	PROPOSED NEW TIMELINE	MILESTONE PROGRESS: CURRENT AND PAST
Sidewalks and Street Crossings	3.4	Supplement existing data on sidewalks and street crossings by completing a sidewalk and street crossing inventory	<ul style="list-style-type: none"> Scope data collection and evaluation pilot into capital project development (2020) 	Complete	-	Pilot project scoped early 2021
			<ul style="list-style-type: none"> Pilot data collection process and evaluation methodology (2021) 	In Progress	2022	Data collection process has been completed. City staff is currently evaluating the data collection methods to inform future conversations related to conducting a citywide sidewalk and street crossing inventory
			<ul style="list-style-type: none"> Incorporate process and evaluation methodology into Chapter 3 of the ADA Plan (2021) 	Complete	-	Pilot data collection process and methods are included in <i>Appendix A</i>
			<ul style="list-style-type: none"> Establish process for collecting data citywide based on results of pilot (2022) 	Up Next	2023-2024	Not started; dependent on findings from the pilot data collection process
Sidewalks and Street Crossings	4.5	Using new data from inventorying sidewalks, prioritize sidewalk and street crossings barriers using the prioritization framework described in Chapter 4	<ul style="list-style-type: none"> Prioritize identified barriers for improvement (2022) 	Not started	2025-2026	Not started; Dependent on the completion of Recommendation 3.4
Sidewalks and Street Crossings	5.6	Establish an anticipated timeline and cost for addressing sidewalk and street crossing barriers	<ul style="list-style-type: none"> Develop an anticipated timeline and cost estimates for addressing sidewalk and street crossing barriers (2022) 	Not started	2025-2026	Not started; Dependent on the completion of Recommendation 3.4
Sidewalks and Street Crossings	5.2	Evaluate sidewalk and street crossing data to guide the development of a funding mechanism and/or approach for addressing sidewalk and street crossing barriers if needed	<ul style="list-style-type: none"> Update City specifications (annually) 	Not Started	Annually	Not started; Dependent on the completion of Recommendation 3.4
			<ul style="list-style-type: none"> Evaluate need for additional resources (2020-2021) 	Not Started	2025-2026	Not started; Dependent on the completion of Recommendation 3.4

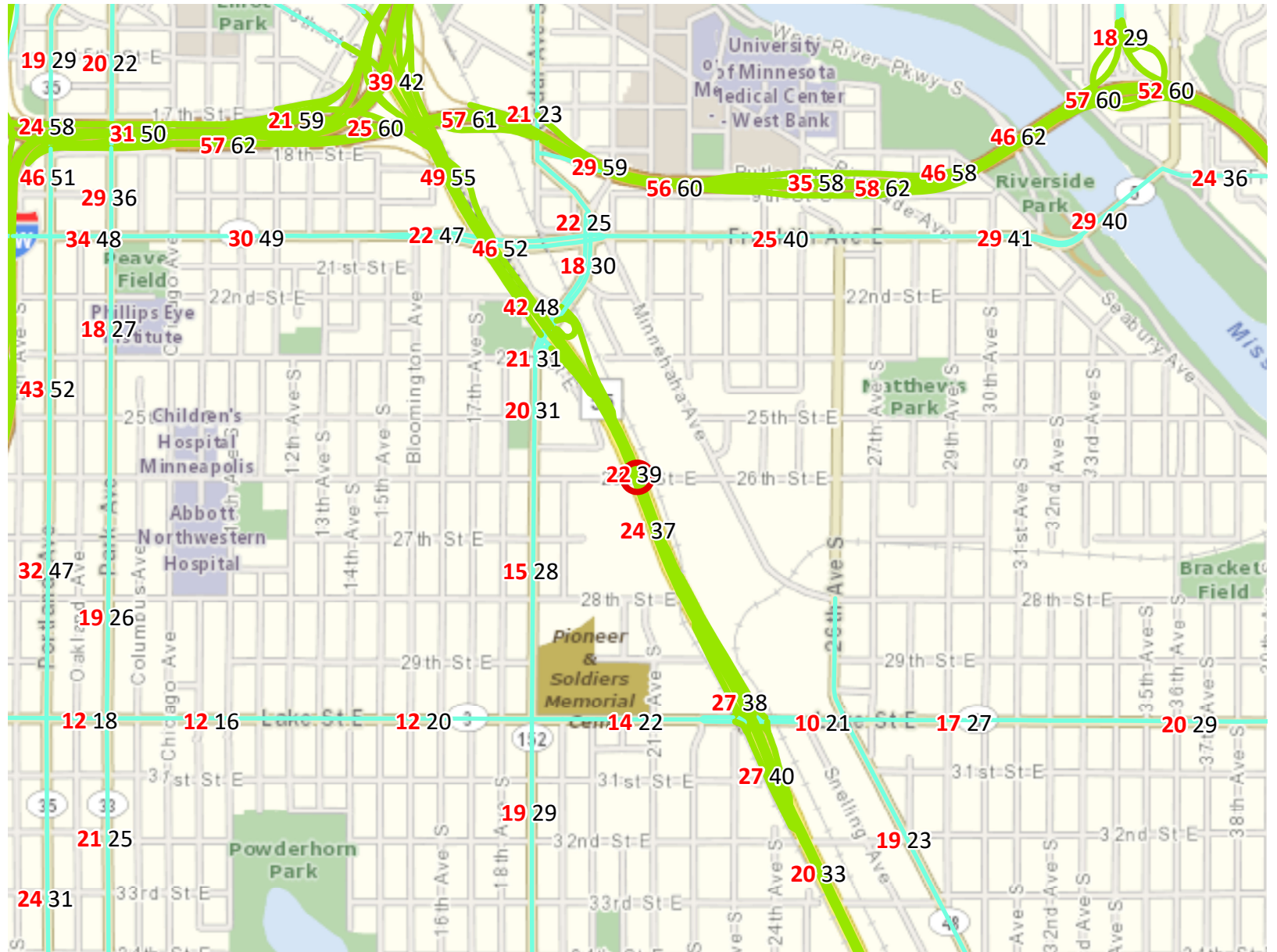
2020 ADA TRANSITION PLAN				2022 ADA TRANSITION PLAN UPDATE		
CATEGORY	ID	RECOMMENDATION	MILESTONES & TIMELINE	CURRENT STATUS	PROPOSED NEW TIMELINE	MILESTONE PROGRESS: CURRENT AND PAST
All Infrastructure	5.3	Improve the mechanism for tracking, inspecting, and inventorying pedestrian curb ramps, Accessible Pedestrian Signals (APS) and sidewalks that are built in Minneapolis' public right of way by private developers, utilities, and other agencies and determine whether additional inspection staff or resources are needed to ensure all city-managed or built infrastructure is built according to city specifications, ADA standards and in alignment with Minneapolis design guidelines	<ul style="list-style-type: none"> Update City specifications (annually) 	Ongoing & Successfully Completed to Date	Annually	Language has been updated in the City specifications to include additional information and data collection on pedestrian curb ramps and APS
			<ul style="list-style-type: none"> Evaluate need for additional resources (2022) 	In Progress	2022	2022 budget includes \$120,000 for staffing resources related to ADA inspection and right of way management
All Infrastructure	5.4	Report on improvements to pedestrian curb ramps, Accessible Pedestrian Signals (APS), sidewalks and street crossings annually and update inventories	<ul style="list-style-type: none"> Ongoing annually through the "Your City, Your Streets Progress Report" to the Public Works and Infrastructure Committee (PWI) and NCR's "ADA Action Plan Report" to the Public Health and Safety Committee (PHS) 	Ongoing & Successfully Completed to Date	Annually	Your City, Your Streets progress reports submitted to City Council annually
Prioritization	4.1	Update the equity component of infrastructure prioritization as the 20 Year Streets Funding Plan is updated	<ul style="list-style-type: none"> Ongoing (update starting in 2022) 	Up Next	2022	20 Year Streets Funding Plan update to begin in 2022
Programs, Policies and Procedures	3.5	In collaboration with 311 and the Neighborhood and Community Relations Departments, evaluate adding an option on the 311 interface for the public to indicate whether a concern is related to accessibility	<ul style="list-style-type: none"> Evaluate adding option to indicate access issue (2020) 	Not Started	2022	Not started
			<ul style="list-style-type: none"> Update software and user testing (2020-2021) 	Not Started	2022	Not started; dependent on above action to be completed

2020 ADA TRANSITION PLAN				2022 ADA TRANSITION PLAN UPDATE		
CATEGORY	ID	RECOMMENDATION	MILESTONES & TIMELINE	CURRENT STATUS	PROPOSED NEW TIMELINE	MILESTONE PROGRESS: CURRENT AND PAST
Programs, Policies and Procedures	3.6	Continue to expand departmental knowledge and expertise of ADA topics by attending trainings and classes	<ul style="list-style-type: none"> Ongoing 	Ongoing & Successfully Completed to Date	Ongoing	Public Works staff from all transportation divisions attend trainings and classes as available; Fall 2021 several staff from various Public Works division attended an ADA training focused on ADA compliance, engineering and design, and policy guidance
Programs, Policies and Procedures	3.7	Review and update existing policies and practices for pedestrian detour design and enforcement annually in coordination with additional direction in the Transportation Action Plan	<ul style="list-style-type: none"> Align pedestrian detour design specifications with MNMUTCD standards (annually) 	Ongoing & Successfully Completed to Date	Annually	Design specifications are updated to align with MNMUTCD standards as needed
			<ul style="list-style-type: none"> Additional changes proposed in Transportation Action Plan (2020) 	Complete	-	The Transportation Action Plan was adopted in December 2020 which provides additional direction (Street Operations Strategy 9)

2020 ADA TRANSITION PLAN				2022 ADA TRANSITION PLAN UPDATE		
CATEGORY	ID	RECOMMENDATION	MILESTONES & TIMELINE	CURRENT STATUS	PROPOSED NEW TIMELINE	MILESTONE PROGRESS: CURRENT AND PAST
Programs, Policies and Procedures	3.8	Continue to monitor issues and feedback received on parking and operations for scooter, bike share and/or other micromobility options and evaluate the need for program improvements	<ul style="list-style-type: none"> Designate additional parking locations for scooter, bike share and/or other micromobility options (2020) 	Ongoing & Successfully Completed to Date	Ongoing	1500 meter hitches for bicycle and scooter parking installed in 2020; On street corrals expansion postponed due to budget cuts; funding requested through ARPA
			<ul style="list-style-type: none"> Increase and simplify communications on where to park and where to ride (2020) 	Ongoing & Successfully Completed to Date	Ongoing	Tracking 311 data, public dashboard created; beginning social media campaign to improve education
			<ul style="list-style-type: none"> Increase enforcement of micromobility businesses and users (2020) 	Ongoing & Successfully Completed to Date	Ongoing	Actively managing and tracking operators to improve compliance in the right of way
			<ul style="list-style-type: none"> Review and make program improvements (annually) 	Ongoing & Successfully Completed to Date	Annually	Review of existing program ongoing; possible program improvements incorporated into RFP for 2022 program and license agreement
Programs, Policies and Procedures	3.9	Continue to address seasonal barriers such as snow and ice on sidewalks as outlined by Minneapolis Ordinance 445 and the Pedestrian and Bicycle Winter Maintenance Study; explore modifications to improve access to the public right of way through additional direction in the Transportation Action Plan	<ul style="list-style-type: none"> Additional funding allocated for snow and ice corner clearing (2020) 	Complete	-	In 2020, \$300,000 in additional funds was allocated to help speed up snow and ice corner clearing during snow emergencies. These funds remain in place today. The 2018 Pedestrian and Bicycle Winter Maintenance Study is anticipated to begin being updated in 2022 and will help inform additional progress on this recommendation.
			<ul style="list-style-type: none"> Additional improvements proposed in Transportation Action Plan (2020) 	Complete	-	The Transportation Action Plan was adopted in December 2020 which supports this work (Walking Strategy 4)

Level of Congestion

Roadway Spot Mobility & Safety Project: 26th and Hiawatha Safety Improvements | Map ID: 1648146494395



- Project Points
- A Minor Arterials
- Principal Arterials
- A Minor Arterials Planned
- Principal Arterials Planned



Created: 3/24/2022
LandscapeRSA1

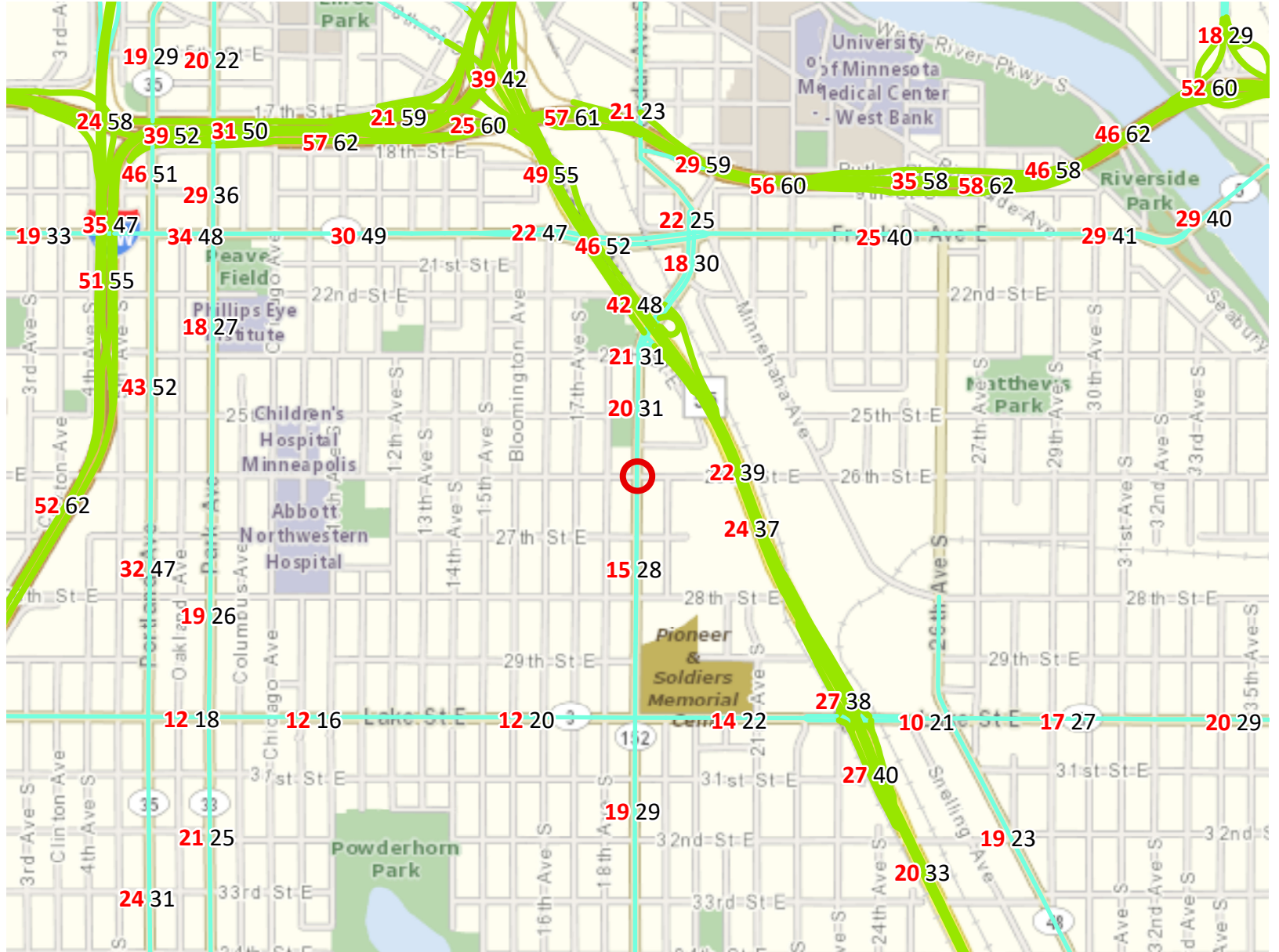


For complete disclaimer of accuracy, please visit <https://giswebsite.metc.state.mn.us/gis/site/notice.aspx>



Level of Congestion

Roadway Spot Mobility & Safety Project: 26th and Hiawatha Safety Improvements | Map ID: 1648147179043



- Project Points
- A Minor Arterials
- Principal Arterials
- - - Principal Arterials Planned
- - - A Minor Arterials Planned



Created: 3/24/2022
LandscapeRSA1



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

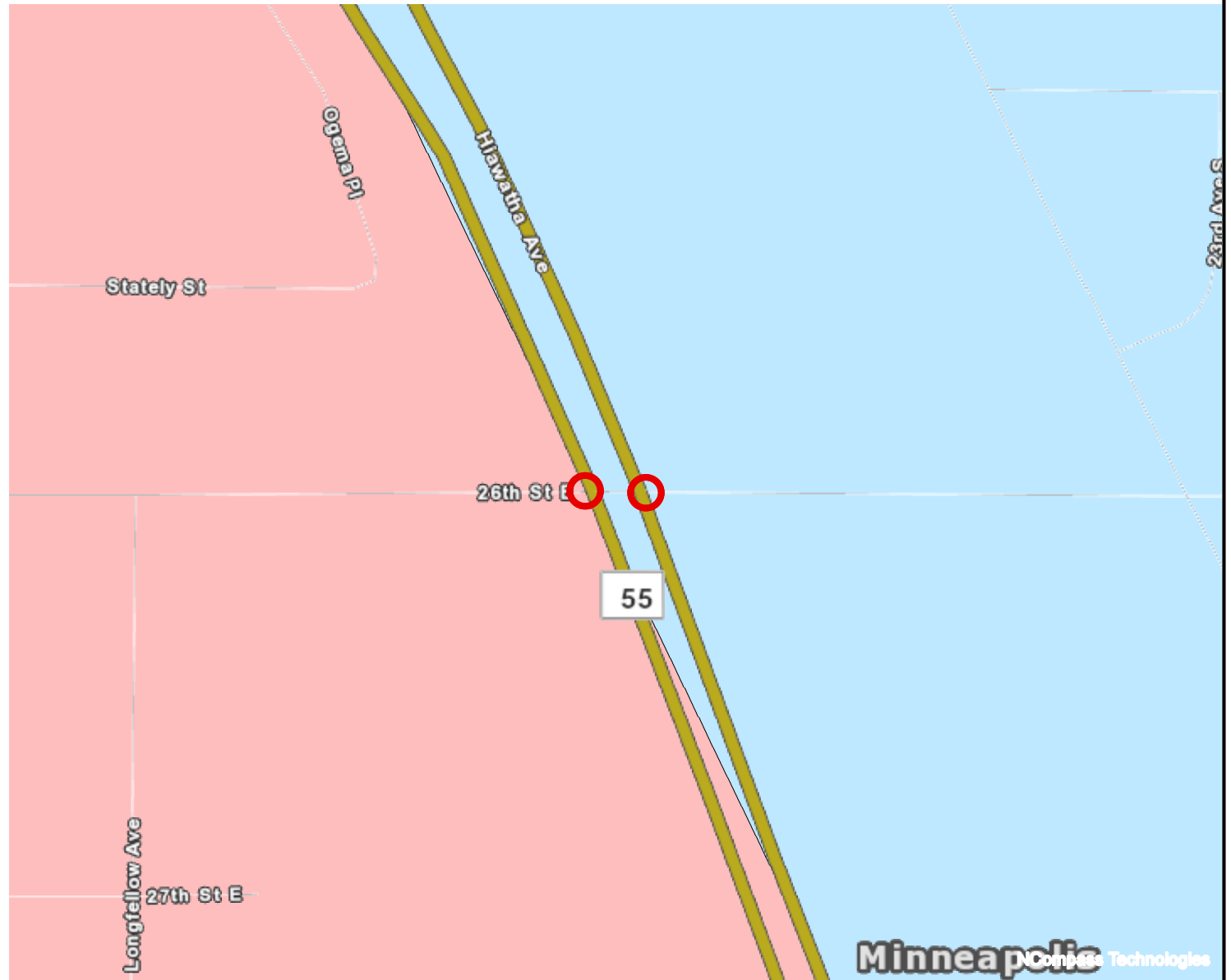


Socio-Economic Conditions

Results

Total of publicly subsidized rental housing units in census tracts within 1/2 mile: 2885

Project located IN an Area of Concentrated Poverty.



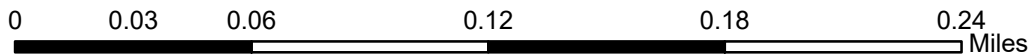
Points



Regional Environmental Justice Area



Area of Concentrated Poverty



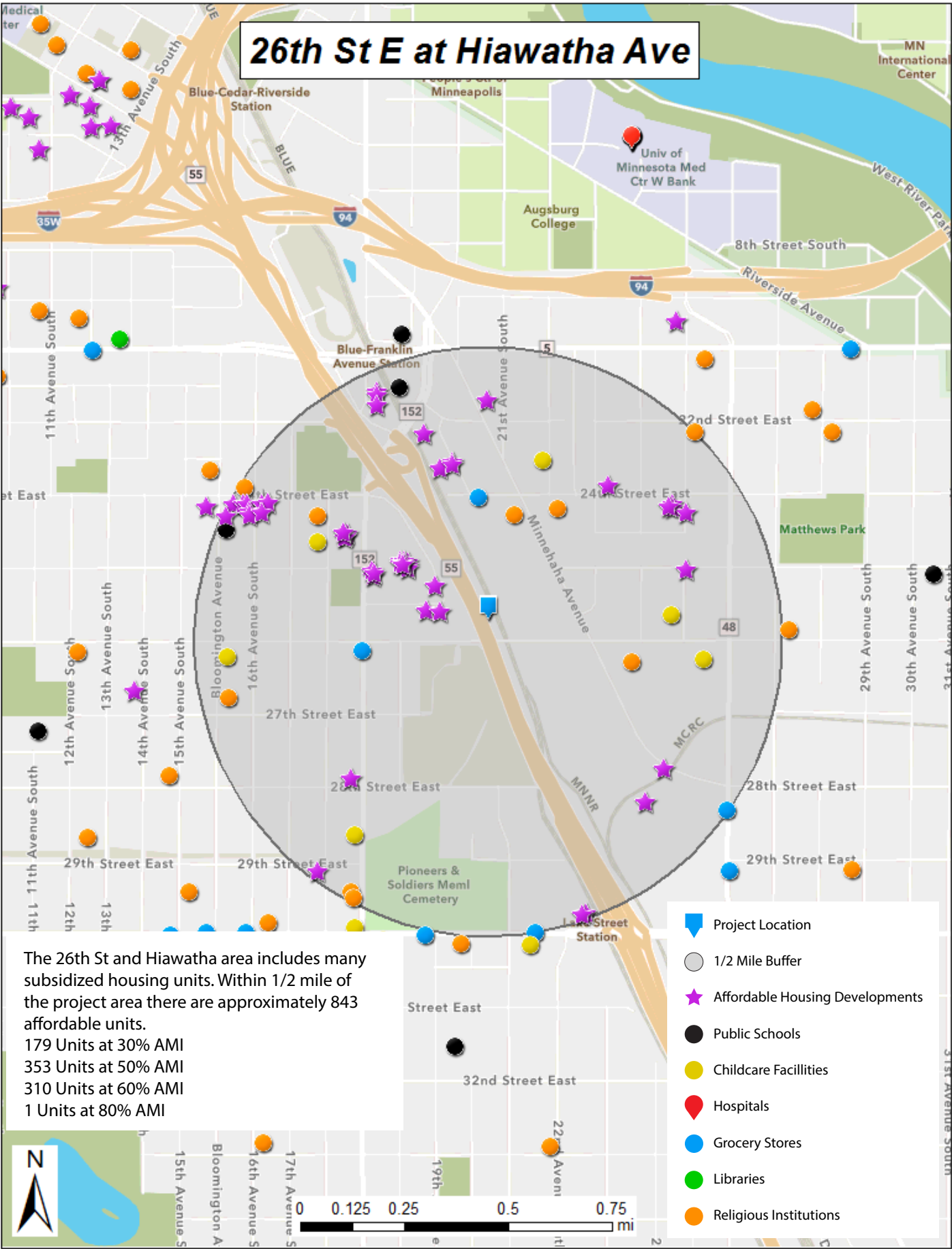
Created: 3/24/2022
LandscapeRSA2



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



26th St E at Hiawatha Ave



The 26th St and Hiawatha area includes many subsidized housing units. Within 1/2 mile of the project area there are approximately 843 affordable units.

- 179 Units at 30% AMI
- 353 Units at 50% AMI
- 310 Units at 60% AMI
- 1 Units at 80% AMI

- Project Location
- 1/2 Mile Buffer
- Affordable Housing Developments
- Public Schools
- Childcare Facilities
- Hospitals
- Grocery Stores
- Libraries
- Religious Institutions



Affordable Housing Map Key Information

* Red text denotes addresses outside the 1/2 mile project buffer

Property Name	Address	Development Stage	# affordable units	OBR	1BR	2BR	3BR	4BR	Total units	# Units 30% AMI	# Units 50% AMI	# Units 60% AMI	# Units 80% AMI	% affordable	Funding Category
Village in Phillips	1529 E 24th St 1535 E 24th St 1539 E 24th St 1601 E 24th St 1619 E 24th St 2406 16th Ave S 2408 16th Ave S 2409 16th Ave S	Complete	18			4	14		28		8	10		64%	Tax Credit Subsidized-Other
Little Earth	1900 EM Stately St 1918 EM Stately St 2400 Ogema Pl 2401 18th Ave S 2430 Ogema Pl 2432 Ogema Pl 2434 Ogema Pl 2435 18th Ave S 2437 18th Ave S 2438 Ogema Pl 2472 Ogema Pl 2483 18th Ave S 2499 18th Ave S 2499 Ogema Pl 2501 Cedar Ave 2503 Cedar Ave 2517 Cedar Ave 2518 Ogema Pl 2558 Ogema Pl	Complete	212	20	28	30	88	18	212		78	134		100%	Project-Based Subsidy Subsidized-Other
Mino-Bimaadiziwan	2105 Cedar Ave 2109 Cedar Ave 2113 Cedar Ave	Complete	110	10	15	55	30		110	6	60	44		100%	Tax Credit Subsidized-Other Tax Credit (LIHTC 9%)
Heltzer Manor	2121 Minnehaha Ave	Complete	109		109				109	109				100%	Public Housing
Snelling Avenue Apts	2200 Snelling Ave	Complete	60		60				128		60			47%	Project-Based Subsidy Tax Credit Subsidized Other Tax Credit (LIHTC 4%) Tax Credit (LIHTC 9%)
Lake Street Station	2220 E Lake St 2230 E Lake St	Complete	64		53	11			64			64		100%	Tax Credit Subsidized Other Tax Credit (LIHTC 4%) Tax Credit (LIHTC 9%)
Snelling Apts	2304 Snelling Ave	Complete	60		60				60		60			100%	Tax Credit Subsidized-Other Tax Credit (LIHTC 4%)
Rising Cedar Apts	2308 Snelling Ave 2310 Snelling Ave	Complete	40		40				40	20	20			100%	Tax Credit Subsidized-Other Tax Credit (LIHTC 4%) Tax Credit (LIHTC 9%)
Milwaukee Townhomes	2317 23rd Ave S	Complete	12						12	12				100%	Project-Based Subsidy
Bii Di Gain Dash Anwebi Elder Housing	2400 Bloomington Ave 2415 Bloomington Ave	Complete	47		47				47		47			100%	Project-Based Subsidy Tax Credit Subsidized-Other
Matthew Park Cooperative	2406 25th Ave S 2410 25th Ave S 2413 25th Ave S 2415 E 24th St 2431 25th Ave S	Complete	24		3	8	12	1	24	24				100%	Project-Based Subsidy Subsidized-Other
Hiawatha Commons	2740 Minnehaha Ave 2744 Minnehaha Ave	Complete	64	32	25	7			80	8	17	39		80%	Project-Based Subsidy Tax Credit Subsidized-Other Tax Credit (LIHTC 9%)
Cedar28	2750 Cedar Ave S	Complete	5		2	3			15		3	1	1	33%	Subsidized-Other
2904 18th Avenue South	2904 18th Ave S	Complete	12		2	10			12			12		100%	Subsidized-Other
Seward	Seward	Complete	6						6			6		100%	Subsidized-Other
		Total	843	62	444	128	144	19	947	179	353	310	1		

Timings

288: 26th St & Hiawatha

04/05/2022



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	17	71	65	772	507	87	1840	122	304	2149	381
Future Volume (vph)	17	71	65	772	507	87	1840	122	304	2149	381
Lane Group Flow (vph)	18	86	0	910	551	95	2000	133	330	2336	414
Turn Type	pm+pt	NA	pm+pt	NA	custom	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2		1	6	
Permitted Phases	4		8		1 8			2			6
Detector Phase	7	4	3	8	1 8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	10.0	20.0	10.0	20.0		10.0	26.0	26.0	20.0	26.0	26.0
Minimum Split (s)	17.6	27.6	17.6	27.6		16.4	32.4	32.4	26.4	32.4	32.4
Total Split (s)	21.0	21.0	74.0	74.0		50.0	112.0	112.0	50.0	112.0	112.0
Total Split (%)	8.2%	8.2%	28.8%	28.8%		19.5%	43.6%	43.6%	19.5%	43.6%	43.6%
Yellow Time (s)	3.5	3.5	3.5	3.5		3.9	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	4.1	4.1	4.1	4.1		2.5	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	-3.6	-3.6		-3.6		-2.4	-2.4	-2.4	-2.4	-2.4	-2.4
Total Lost Time (s)	4.0	4.0		4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lag	Lag	Lead	Lead		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None		None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	86.2	80.7		70.0	126.3	21.6	109.6	109.6	54.7	142.7	142.7
Actuated g/C Ratio	0.34	0.31		0.27	0.49	0.08	0.43	0.43	0.21	0.56	0.56
v/c Ratio	0.15	0.15		1.07	0.67	0.64	0.92	0.18	0.88	0.83	0.44
Control Delay	79.4	61.0		136.3	38.4	132.6	77.8	19.0	119.0	52.0	23.1
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	79.4	61.0		136.3	38.4	132.6	77.8	19.0	119.0	52.0	23.1
LOS	E	E		F	D	F	E	B	F	D	C
Approach Delay		64.1		99.4			76.6			55.3	
Approach LOS		E		F			E			E	
Stops (vph)	10	54		755	330	83	1696	32	271	1747	147
Fuel Used(gal)	1	2		34	10	4	62	2	15	74	8
CO Emissions (g/hr)	36	148		2357	672	275	4331	130	1049	5185	588
NOx Emissions (g/hr)	7	29		459	131	53	843	25	204	1009	114
VOC Emissions (g/hr)	8	34		546	156	64	1004	30	243	1202	136
Dilemma Vehicles (#)	0	0		0	0	0	36	0	0	42	0

Intersection Summary

Cycle Length: 257

Actuated Cycle Length: 257

Offset: 112 (44%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 145

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.07

Intersection Signal Delay: 71.7

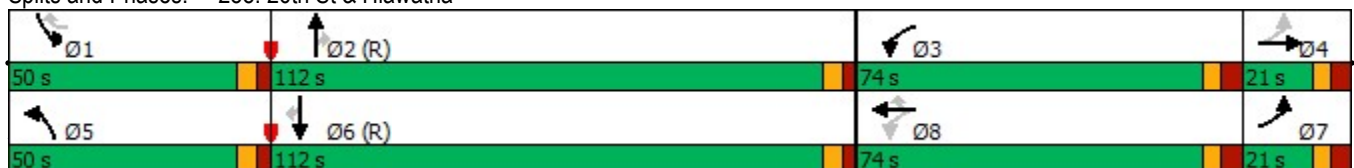
Intersection LOS: E

Intersection Capacity Utilization 93.6%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 288: 26th St & Hiawatha



Timings

288: 26th St & Hiawatha

04/05/2022



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	17	71	65	772	507	87	1840	122	304	2149	381
Future Volume (vph)	17	71	65	772	507	87	1840	122	304	2149	381
Lane Group Flow (vph)	18	86	0	910	551	95	2000	133	330	2336	414
Turn Type	pm+pt	NA	pm+pt	NA	custom	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2		1	6	
Permitted Phases	4		8		1 8			2			6
Detector Phase	7	4	3	8	1 8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	10.0	20.0	10.0	20.0		10.0	26.0	26.0	20.0	26.0	26.0
Minimum Split (s)	17.6	27.6	17.6	27.6		16.4	32.4	32.4	26.4	32.4	32.4
Total Split (s)	21.0	21.0	74.0	74.0		50.0	112.0	112.0	50.0	112.0	112.0
Total Split (%)	8.2%	8.2%	28.8%	28.8%		19.5%	43.6%	43.6%	19.5%	43.6%	43.6%
Yellow Time (s)	3.5	3.5	3.5	3.5		3.9	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	4.1	4.1	4.1	4.1		2.5	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	-3.6	-3.6		-3.6		-2.4	-2.4	-2.4	-2.4	-2.4	-2.4
Total Lost Time (s)	4.0	4.0		4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lag	Lag	Lead	Lead		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None		None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	86.2	80.7		70.0	126.3	21.6	109.6	109.6	54.7	142.7	142.7
Actuated g/C Ratio	0.34	0.31		0.27	0.49	0.08	0.43	0.43	0.21	0.56	0.56
v/c Ratio	0.15	0.15		1.07	0.67	0.64	0.92	0.18	0.88	0.83	0.44
Control Delay	79.4	61.0		136.3	38.4	132.6	77.8	19.0	119.0	52.0	23.1
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	79.4	61.0		136.3	38.4	132.6	77.8	19.0	119.0	52.0	23.1
LOS	E	E		F	D	F	E	B	F	D	C
Approach Delay		64.1		99.4			76.6			55.3	
Approach LOS		E		F			E			E	
Stops (vph)	10	54		755	330	83	1696	32	271	1747	147
Fuel Used(gal)	1	2		34	10	4	62	2	15	74	8
CO Emissions (g/hr)	36	148		2357	672	275	4331	130	1049	5185	588
NOx Emissions (g/hr)	7	29		459	131	53	843	25	204	1009	114
VOC Emissions (g/hr)	8	34		546	156	64	1004	30	243	1202	136
Dilemma Vehicles (#)	0	0		0	0	0	36	0	0	42	0

Intersection Summary

Cycle Length: 257

Actuated Cycle Length: 257

Offset: 112 (44%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 145

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.07

Intersection Signal Delay: 71.7

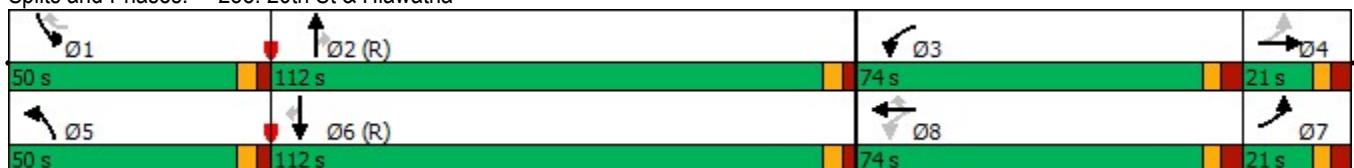
Intersection LOS: E

Intersection Capacity Utilization 93.6%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 288: 26th St & Hiawatha



Timings

288: 26th St & Hiawatha

04/05/2022



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	17	71	65	772	507	87	1840	122	304	2149	381
Future Volume (vph)	17	71	65	772	507	87	1840	122	304	2149	381
Lane Group Flow (vph)	18	86	0	910	551	95	2000	133	330	2336	414
Turn Type	pm+pt	NA	pm+pt	NA	custom	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2		1	6	
Permitted Phases	4		8		1 8			2			6
Detector Phase	7	4	3	8	1 8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	10.0	20.0	10.0	20.0		10.0	26.0	26.0	20.0	26.0	26.0
Minimum Split (s)	17.6	27.6	17.6	27.6		16.4	32.4	32.4	26.4	32.4	32.4
Total Split (s)	21.0	21.0	74.0	74.0		50.0	112.0	112.0	50.0	112.0	112.0
Total Split (%)	8.2%	8.2%	28.8%	28.8%		19.5%	43.6%	43.6%	19.5%	43.6%	43.6%
Yellow Time (s)	3.5	3.5	3.5	3.5		3.9	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	4.1	4.1	4.1	4.1		2.5	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	-3.6	-3.6		-3.6		-2.4	-2.4	-2.4	-2.4	-2.4	-2.4
Total Lost Time (s)	4.0	4.0		4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lag	Lag	Lead	Lead		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None		None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	86.2	80.7		70.0	126.3	21.6	109.6	109.6	54.7	142.7	142.7
Actuated g/C Ratio	0.34	0.31		0.27	0.49	0.08	0.43	0.43	0.21	0.56	0.56
v/c Ratio	0.15	0.15		1.07	0.67	0.64	0.92	0.18	0.88	0.83	0.44
Control Delay	79.4	61.0		136.3	38.4	132.6	77.8	19.0	119.0	52.0	23.1
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	79.4	61.0		136.3	38.4	132.6	77.8	19.0	119.0	52.0	23.1
LOS	E	E		F	D	F	E	B	F	D	C
Approach Delay		64.1		99.4			76.6			55.3	
Approach LOS		E		F			E			E	
Stops (vph)	10	54		755	330	83	1696	32	271	1747	147
Fuel Used(gal)	1	2		34	10	4	62	2	15	74	8
CO Emissions (g/hr)	36	148		2357	672	275	4331	130	1049	5185	588
NOx Emissions (g/hr)	7	29		459	131	53	843	25	204	1009	114
VOC Emissions (g/hr)	8	34		546	156	64	1004	30	243	1202	136
Dilemma Vehicles (#)	0	0		0	0	0	36	0	0	42	0

Intersection Summary

Cycle Length: 257

Actuated Cycle Length: 257

Offset: 112 (44%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 145

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.07

Intersection Signal Delay: 71.7

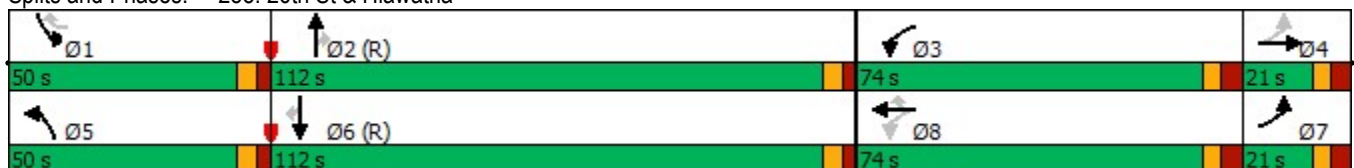
Intersection LOS: E

Intersection Capacity Utilization 93.6%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 288: 26th St & Hiawatha



Timings

288: 26th St & Hiawatha

04/05/2022



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	17	71	65	772	507	87	1840	122	304	2149	381
Future Volume (vph)	17	71	65	772	507	87	1840	122	304	2149	381
Lane Group Flow (vph)	18	86	0	910	551	95	2000	133	330	2336	414
Turn Type	pm+pt	NA	pm+pt	NA	custom	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2		1	6	
Permitted Phases	4		8		1 8			2			6
Detector Phase	7	4	3	8	1 8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	10.0	20.0	10.0	20.0		10.0	26.0	26.0	20.0	26.0	26.0
Minimum Split (s)	17.6	27.6	17.6	27.6		16.4	32.4	32.4	26.4	32.4	32.4
Total Split (s)	21.0	21.0	74.0	74.0		50.0	112.0	112.0	50.0	112.0	112.0
Total Split (%)	8.2%	8.2%	28.8%	28.8%		19.5%	43.6%	43.6%	19.5%	43.6%	43.6%
Yellow Time (s)	3.5	3.5	3.5	3.5		3.9	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	4.1	4.1	4.1	4.1		2.5	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	-3.6	-3.6		-3.6		-2.4	-2.4	-2.4	-2.4	-2.4	-2.4
Total Lost Time (s)	4.0	4.0		4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lag	Lag	Lead	Lead		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None		None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	86.2	80.7		70.0	126.3	21.6	109.6	109.6	54.7	142.7	142.7
Actuated g/C Ratio	0.34	0.31		0.27	0.49	0.08	0.43	0.43	0.21	0.56	0.56
v/c Ratio	0.15	0.15		1.07	0.67	0.64	0.92	0.18	0.88	0.83	0.44
Control Delay	79.4	61.0		136.3	38.4	132.6	77.8	19.0	119.0	52.0	23.1
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	79.4	61.0		136.3	38.4	132.6	77.8	19.0	119.0	52.0	23.1
LOS	E	E		F	D	F	E	B	F	D	C
Approach Delay		64.1		99.4			76.6			55.3	
Approach LOS		E		F			E			E	
Stops (vph)	10	54		755	330	83	1696	32	271	1747	147
Fuel Used(gal)	1	2		34	10	4	62	2	15	74	8
CO Emissions (g/hr)	36	148		2357	672	275	4331	130	1049	5185	588
NOx Emissions (g/hr)	7	29		459	131	53	843	25	204	1009	114
VOC Emissions (g/hr)	8	34		546	156	64	1004	30	243	1202	136
Dilemma Vehicles (#)	0	0		0	0	0	36	0	0	42	0

Intersection Summary

Cycle Length: 257

Actuated Cycle Length: 257

Offset: 112 (44%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 145

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.07

Intersection Signal Delay: 71.7

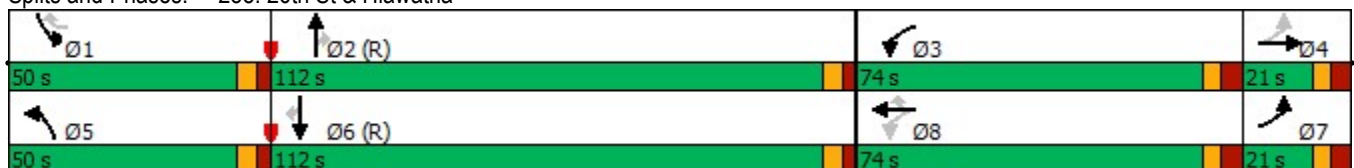
Intersection LOS: E

Intersection Capacity Utilization 93.6%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 288: 26th St & Hiawatha





CMF / CRF Details

CMF ID: 1786

Install pedestrian crossing (signed and marked with curb ramps and extensions)

Description:

Prior Condition: *No Prior Condition(s)*

Category: Pedestrians

Study: [Toolbox of Countermeasures and Their Potential Effectiveness to Make Intersections Safer, ITE, 2004](#)

Star Quality Rating:	
Star Quality Rating:	<u>Cannot Be Rated</u>

Crash Modification Factor (CMF)	
Value:	0.63
Adjusted Standard Error:	
Unadjusted Standard Error:	

Crash Reduction Factor (CRF)	
Value:	37 (This value indicates a decrease in crashes)
Adjusted Standard Error:	

Unadjusted Standard Error:

Applicability

Crash Type:

All

Crash Severity:

All

Roadway Types:

Not specified

Number of Lanes:

Road Division Type:

Speed Limit:

Area Type:

Traffic Volume:

Time of Day:

If countermeasure is intersection-based

Intersection Type:

Intersection Geometry:

Traffic Control:

Major Road Traffic Volume:

Minor Road Traffic Volume:

Development Details

Date Range of Data Used:

Municipality:

State:

Country:	
Type of Methodology Used:	
Sample Size Used:	

Other Details	
Included in Highway Safety Manual?	No
Date Added to Clearinghouse:	Dec-01-2009
Comments:	

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.



CMF / CRF Details

CMF ID: 9123

Median treatment for ped/bike safety

Description: Install various median treatment: median fencing, sidewalk fencing, median brick planters, pedestrian islands

Prior Condition: *No Prior Condition(s)*

Category: Roadside

Study: [Analyzing the Impact of Median Treatments on Pedestrian/Bicyclist Safety, Zhang et al., 2017](#)

Star Quality Rating:	
<input type="checkbox"/> Stars	[View score details]

Crash Modification Factor (CMF)	
Value:	0.14
Adjusted Standard Error:	
Unadjusted Standard Error:	0.07

Crash Reduction Factor (CRF)	
Value:	86 (This value indicates a decrease in crashes)
Adjusted Standard Error:	
Unadjusted Standard Error:	7

Applicability

Crash Type:	Vehicle/bicycle,Vehicle/pedestrian
Crash Severity:	K (fatal)
Roadway Types:	Not specified
Number of Lanes:	
Road Division Type:	Divided by Median
Speed Limit:	
Area Type:	Urban
Traffic Volume:	
Time of Day:	All

If countermeasure is intersection-based

Intersection Type:	
Intersection Geometry:	
Traffic Control:	
Major Road Traffic Volume:	
Minor Road Traffic Volume:	

Development Details

Date Range of Data Used:	1998 to 2016
Municipality:	
State:	MD
Country:	USA

Type of Methodology Used:	2
Sample Size Used:	

Other Details	
Included in Highway Safety Manual?	No
Date Added to Clearinghouse:	Jan-17-2018
Comments:	For fatal ped/bike related crashes

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	TH 55 (Hiawatha Avenue)	District	M	County	Hennepin
Begin RP	192.75	End RP	192.75	Miles	N/A
Location	TH 55 (Hiawatha Avenue) & 26th Street Intersection				

B. Project Description

Proposed Work	Curb extensions, pedestrian refuge islands, protected bikeways, remove channelized right-turns, lighting and signal improvements				
Project Cost*	\$1,662,080	Installation Year	2024		
Project Service Life	20 years	Traffic Growth Factor	1.0%		
* exclude Right of Way from Project Cost					

C. Crash Modification Factor

0.63	Fatal (K) Crashes	Reference	CMF ID 1786 for install pedestrian crossing (signed and marked with curb ramps and extensions)		
0.63	Serious Injury (A) Crashes				
0.63	Moderate Injury (B) Crashes	Crash Type	All Types and Severities		
0.63	Possible Injury (C) Crashes				
0.63	Property Damage Only Crashes		www.CMFclearinghouse.org		

D. Crash Modification Factor (optional second CMF)

0.14	Fatal (K) Crashes	Reference	CMF ID 9123 for median treatment for ped/bike safety		
	Serious Injury (A) Crashes				
	Moderate Injury (B) Crashes	Crash Type	Vehicle/bicycle and vehicle/pedestrian fatal crashes		
	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	MnCMAT			
Crash Severity	All Types and Severities	Vehicle/bicycle and vehicle/pedestrian fatal crashes		
K crashes	0	1		
A crashes	1			
B crashes	6			
C crashes	10			
PDO crashes	34			

F. Benefit-Cost Calculation

\$18,420,165	Benefit (present value)	B/C Ratio = 11.09
\$1,662,080	Cost	
Proposed project expected to reduce 7 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	0.86	0.29	\$430,000
A crashes	0.37	0.12	\$92,500
B crashes	2.22	0.74	\$170,200
C crashes	3.70	1.23	\$148,000
PDO crashes	12.58	4.19	\$54,513

\$895,213

H. Amortized Benefit

Year	Crash Benefits	Present Value
2024	\$895,213	\$895,213
2025	\$904,165	\$897,880
2026	\$913,207	\$900,555
2027	\$922,339	\$903,238
2028	\$931,563	\$905,929
2029	\$940,878	\$908,628
2030	\$950,287	\$911,335
2031	\$959,790	\$914,050
2032	\$969,388	\$916,773
2033	\$979,082	\$919,504
2034	\$988,872	\$922,243
2035	\$998,761	\$924,991
2036	\$1,008,749	\$927,747
2037	\$1,018,836	\$930,511
2038	\$1,029,025	\$933,283
2039	\$1,039,315	\$936,063
2040	\$1,049,708	\$938,852
2041	\$1,060,205	\$941,649
2042	\$1,070,807	\$944,454
2043	\$1,081,515	\$947,268
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
0	\$0	\$0
0	\$0	\$0
0	\$0	\$0

Total = \$18,420,165

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

INCIDENTID	NOTES	SEVERITY	MANNER OF COLLISION	SION - ALL	DIRECTION 1	CRASH MANUEVER 1	DIRECTION 2	CRASH MANUEVER 2	DIRECTION 3	CRASH MANUEVER 3	UTM X	UTM Y	LATITUDE	LONGITUDE	DATE & TIME	COLLISION DIAGRAM
676774		A	Front to Rear	Rear End	Northbound	Slowing	Northbound	Vehicle Stopped or Stalled in Roadway	-	-	480848.3814	4978027.44	44.95543358	-93.24281323	2019/01/17-18:20	2019/01/17-18:20-DI-C-D
912722		B	Front to Rear	Rear End	Southbound	Moving Forward	Southbound	Vehicle Stopped or Stalled in Roadway	-	-	480797.0784	4978062.801	44.95574253	-93.24345725	2021/06/17-10:57	2021/06/17-10:57-L-C-D
731549		B	Angle	Left-Turn	Southbound	Moving Forward	Northbound	Turning Left	-	-	480809.7004	4978038.529	44.95552437	-93.2432963	2019/07/04-15:55	2019/07/04-15:55-L-C-D
838122		B	Angle	Angle	Eastbound	Moving Forward	Southbound	Moving Forward	-	-	480810.4399	4978030.559	44.95545264	-93.24328663	2020/08/31-08:25	2020/08/31-08:25-L-R-W
702157		B	Front to Rear	Rear End	Northbound	Moving Forward	Northbound	Vehicle Stopped or Stalled in Roadway	-	-	480830.6095	4978072.194	44.95583598	-93.24304024	2019/04/07-14:43	2019/04/07-14:43-L-C-W
812547		B	Front to Front	Angle	Eastbound	Moving Forward	Eastbound	Moving Forward	Eastbound	Moving Forward	480832.6873	4978067.111	44.95579028	-93.24301371	2020/06/02-18:25	2020/06/02-18:25-L-C-W
935820		B	Angle	Angle	Southbound	Moving Forward	Eastbound	Turning Left	Westbound	Vehicle Stopped or Stalled in Roadway	480837.2039	4978040.15	44.9555477	-93.24295542	2021/08/22-11:17	2021/08/22-11:17-L-C-D
841614		C	Front to Rear	Rear End	Eastbound	Vehicle Stopped or Stalled in Roadway	Eastbound	Moving Forward	-	-	480808.1534	4978061.477	44.9557309	-93.24331679	2020/09/12-13:44	2020/09/12-13:44-L-C-D
766407		C	Front to Front	Head On	Southbound	Moving Forward	Southbound	Swerved to Avoid Object in Roadway	-	-	480807.4223	4978050.223	44.95562957	-93.24332563	2019/11/30-02:41	2019/11/30-02:41-DI-S-S
756146		C	Front to Rear	Rear End	Eastbound	Moving Forward	Eastbound	Vehicle Stopped or Stalled in Roadway	Eastbound	Vehicle Stopped or Stalled in Roadway	480807.0078	4978045.138	44.95558379	-93.24333069	2019/10/21-16:35	2019/10/21-16:35-L-C-W
752141		C	Front to Rear	Rear End	Northbound	Moving Forward	Northbound	Moving Forward	Northbound	Moving Forward	480829.1714	4978075.712	44.95586761	-93.24305861	2019/10/04-14:40	2019/10/04-14:40-L-C-D
843158		C	Front to Rear	Rear End	Northbound	Moving Forward	Northbound	Vehicle Stopped or Stalled in Roadway	-	-	480832.2159	4978068.264	44.95580065	-93.24301973	2020/09/27-19:55	2020/09/27-19:55-DI-R-W
895506		C	Front to Rear	Rear End	Northbound	Moving Forward	Northbound	Vehicle Stopped or Stalled in Roadway	-	-	480842.6283	4978040.344	44.95554959	-93.24288666	2021/03/13-09:22	2021/03/13-09:22-L-C-D
817639	bicycle crash	C	Front to Front	Other	Eastbound	Moving Forward	-	-	-	-	480855.8725	4978040.534	44.95555166	-93.24271875	2020/07/02-21:45	2020/07/02-21:45-DI-C-D
726110	bicycle crash	C	-	Other	Westbound	Moving Forward	-	-	-	-	480872.505	4978040.745	44.955554	-93.2425079	2019/06/09-00:30	2019/06/09-00:30-L-C-D
728388	bicycle crash	C	-	Other	Westbound	Moving Forward	-	-	-	-	480877.4788	4978040.808	44.9555547	-93.24244484	2019/06/21-09:50	2019/06/21-09:50-L-C-D
777190		C	Sideswipe - Same Direction	Rear End	Northbound	Moving Forward	Northbound	Turning Right	-	-	480877.5593	4978040.809	44.95555471	-93.24244382	2020/01/05-09:31	2020/01/05-09:31-L-R-W
785554	pedestrian crash	K	-	Other	Southbound	Moving Forward	-	-	-	-	480809.9635	4978037.412	44.95551432	-93.24329293	2020/02/05-03:10	2020/02/05-03:10-DI-C-D
785557	SAME CRASH AS ABOVE	K	-	Other	Southbound	Moving Forward	-	-	-	-	480810.5732	4978035.136	44.95549385	-93.24328511	2020/02/05-03:10	2020/02/05-03:10-DI-C-D
785513		PDO	Front to Rear	Rear End	Southbound	Moving Forward	Southbound	Moving Forward	-	-	480773.9273	4978135.509	44.95639641	-93.24375353	2020/02/04-15:19	2020/02/04-15:19-L-C-D
721971		PDO	Front to Rear	Rear End	Eastbound	Vehicle Stopped or Stalled in Roadway	Eastbound	Moving Forward	-	-	480784.87	4978114.393	44.95620662	-93.24361399	2019/04/20-21:01	2019/04/20-21:01-DI-C-D
905889		PDO	Front to Rear	Rear End	Southbound	Moving Forward	Southbound	Vehicle Stopped or Stalled in Roadway	Southbound	Vehicle Stopped or Stalled in Roadway	480789.5378	4978089.681	44.95598429	-93.24355387	2021/05/15-23:49	2021/05/15-23:49-DI-C-D
734764		PDO	Front to Rear	Rear End	Southbound	Moving Forward	Southbound	Moving Forward	Southbound	Moving Forward	480789.8024	4978082.899	44.95592324	-93.24355026	2019/07/19-15:45	2019/07/19-15:45-L-C-D
939780	collision with stalled vehicle	PDO	-	Sideswipe	Southbound	Moving Forward	Southbound	Vehicle Stopped or Stalled in Roadway	-	-	480810.4777	4978121.442	44.95627876	-93.24329735	2021/09/10-16:05	2021/09/10-16:05-L-C-D
677626		PDO	Front to Rear	Rear End	Southbound	Moving Forward	Southbound	Vehicle Stopped or Stalled in Roadway	-	-	480799.0571	4978066.237	44.9557815	-93.24344004	2019/01/21-11:15	2019/01/21-11:15-L-C-D
866569		PDO	Front to Rear	Rear End	Southbound	Moving Forward	Southbound	Vehicle Stopped or Stalled in Roadway	Southbound	Vehicle Stopped or Stalled in Roadway	480802.5024	4978057.15	44.9556918	-93.24338827	2020/12/04-23:25	2020/12/04-23:25-DI-C-D
797644		PDO	Front to Rear	Rear End	Southbound	Moving Forward	Southbound	Vehicle Stopped or Stalled in Roadway	Southbound	Vehicle Stopped or Stalled in Roadway	480803.0316	4978053.578	44.95565966	-93.24338142	2020/02/13-21:50	2020/02/13-21:50-DI-C-D
675572		PDO	Front to Rear	Rear End	Southbound	Moving Forward	Southbound	Vehicle Stopped or Stalled in Roadway	-	-	480806.012	4978047.98	44.95561734	-93.24335117	2019/01/12-10:25	2019/01/12-10:25-L-C-D
678259		PDO	Angle	Angle	Southbound	Moving Forward	Eastbound	Moving Forward	-	-	480806.954	4978045.508	44.95559511	-93.24333913	2019/01/23-09:45	2019/01/23-09:45-L-C-W
903657		PDO	Angle	Rear End	Southbound	Changing Lanes	Southbound	Vehicle Stopped or Stalled in Roadway	Southbound	Vehicle Stopped or Stalled in Roadway	480808.0586	4978046.133	44.95559277	-93.24331741	2021/05/03-16:56	2021/05/03-16:56-L-C-D
676745		PDO	Front to Rear	Rear End	Southbound	Vehicle Stopped or Stalled in Roadway	Southbound	Moving Forward	-	-	480808.608	4978041.166	44.95555607	-93.243318	2019/01/17-17:45	2019/01/17-17:45-DI-C-D
982222		PDO	Angle	Left-Turn	Southbound	Moving Forward	Northbound	Turning Left	-	-	480810.1753	4978038.592	44.95552495	-93.24329029	2021/12/21-00:25	2021/12/21-00:25-DI-C-D
836190		PDO	Front to Front	Rear End	Southbound	Turning Left	Southbound	Moving Forward	-	-	480813.6149	4978035.454	44.9554968	-93.24324656	2020/08/19-18:47	2020/08/19-18:47-L-C-D
771808		PDO	Angle	Angle	Northbound	Moving Forward	Westbound	Moving Forward	Westbound	Moving Forward	480829.8593	4978074.029	44.95585248	-93.24304982	2019/12/16-07:25	2019/12/16-07:25-X-C-W
816070		PDO	Sideswipe - Same Direction	Rear End	Northbound	Moving Forward	Northbound	Moving Forward	-	-	480831.313	4978070.473	44.95582051	-93.24303126	2020/06/23-20:07	2020/06/23-20:07-L-C-W
907965		PDO	Front to Rear	Rear End	Northbound	Moving Forward	Northbound	Slowing	-	-	480830.9431	4978071.378	44.95582864	-93.24303598	2021/05/26-14:00	2021/05/26-14:00-L-C-D
896447		PDO	Angle	Rear End	Southbound	Moving Forward	Southbound	Vehicle Stopped or Stalled in Roadway	-	-	480814.9365	4978023.845	44.95539232	-93.24322936	2021/03/17-23:48	2021/03/17-23:48-DI-C-D
673591		PDO	Angle	Right-Turn	Westbound	Turning Right	Northbound	Turning Right	-	-	480838.5209	4978052.841	44.95566197	-93.2429392	2019/01/03-10:40	2019/01/03-10:40-L-C-W
679143		PDO	Front to Rear	Rear End	Northbound	Moving Forward	Northbound	Moving Forward	Northbound	Moving Forward	480851.8699	4978017.969	44.95534842	-93.24276864	2019/01/26-00:25	2019/01/26-00:25-DI-C-D
932813		PDO	Front to Rear	Rear End	Northbound	Moving Forward	Northbound	Vehicle Stopped or Stalled in Roadway	-	-	480849.4036	4977938.753	44.95463526	-93.2427969	2021/08/07-15:15	2021/08/07-15:15-L-C-W
740666		PDO	Front to Rear	Rear End	Southbound	Moving Forward	Southbound	Moving Forward	-	-	480867.6462	4977975.141	44.95496331	-93.24256701	2019/08/16-06:38	2019/08/16-06:38-Dn-C-D
785848		PDO	Front to Rear	Rear End	Northbound	Changing Lanes	Northbound	Moving Forward	-	-	480869.1824	4977970.97	44.95492581	-93.24254737	2020/02/06-13:30	2020/02/06-13:30-L-C-D
866227		PDO	Sideswipe - Same Direction	Sideswipe	Northbound	Moving Forward	Northbound	Slowing	-	-	480884.8924	4977928.322	44.95454232	-93.24234659	2020/12/02-17:35	2020/12/02-17:35-DI-C-D
849853		PDO	Sideswipe - Same Direction	Sideswipe	Northbound	Moving Forward	Northbound	Moving Forward	-	-	480890.21	4977913.886	44.95441251	-93.24227863	2020/10/28-09:18	2020/10/28-09:18-L-C-D
815216		PDO	Angle	Left-Turn	Eastbound	Moving Forward	Eastbound	Turning Left	-	-	480796.3306	4978039.392	44.95553977	-93.24347358	2020/06/18-00:20	2020/06/18-00:20-DI-C-D
916175		PDO	Angle	Sideswipe	Eastbound	Turning Left	Eastbound	Turning Left	-	-	480799.7835	4978039.329	44.9555393	-93.2434298	2021/07/04-23:28	2021/07/04-23:28-DI-C-D
751749		PDO	Front to Rear	Rear End	Southbound	Moving Forward	Southbound	Moving Forward	Southbound	Moving Forward	480827.6862	4978039.81	44.95554438	-93.24307607	2019/10/02-22:21	2019/10/02-22:21-DI-R-W
895990		PDO	Sideswipe - Same Direction	Sideswipe	Northbound	Moving Forward	Northbound	Turning Left	-	-	480841.5538	4978040.305	44.95554921	-93.24290028	2021/03/15-22:33	2021/03/15-22:33-DI-X-S
805844		PDO	Front to Rear	Rear End	Westbound	Moving Forward	Westbound	Moving Forward	-	-	480845.1139	4978040.398	44.95555014	-93.24285515	2020/04/01-20:18	2020/04/01-20:18-DI-C-D
916839		PDO	Angle	Other	Eastbound	Moving Forward	Westbound	-	-	-	480844.7927	4978040.394	44.9555501	-93.24285922	2021/07/02-06:35	2021/07/02-06:35-L-C-D
736243		PDO	Front to Rear	Rear End	Southbound	Slowing	Southbound	Vehicle Stopped or Stalled in Roadway	-	-	480850.5828	4978040.467	44.95555091	-93.24278581	2019/07/16-08:00	2019/07/16-08:00-X-X-X
889384		PDO	-	Sideswipe	Northbound	Moving Forward	Northbound	Moving Forward	Northbound	Moving Forward	480850.8608	4978040.471	44.95555095	-93.24278229	2021/02/09-23:30	2021/02/09-23:30-DI-C-S
771156		PDO	Front to Rear	Rear End	Westbound	Vehicle Stopped or Stalled in Roadway	Westbound	Unknown	-	-	480853.309	4978040.502	44.9555513	-93.24275125	2019/12/12-10:50	2019/12/12-10:50-L-S-S



Figure 29: Pedestrian Priority Network

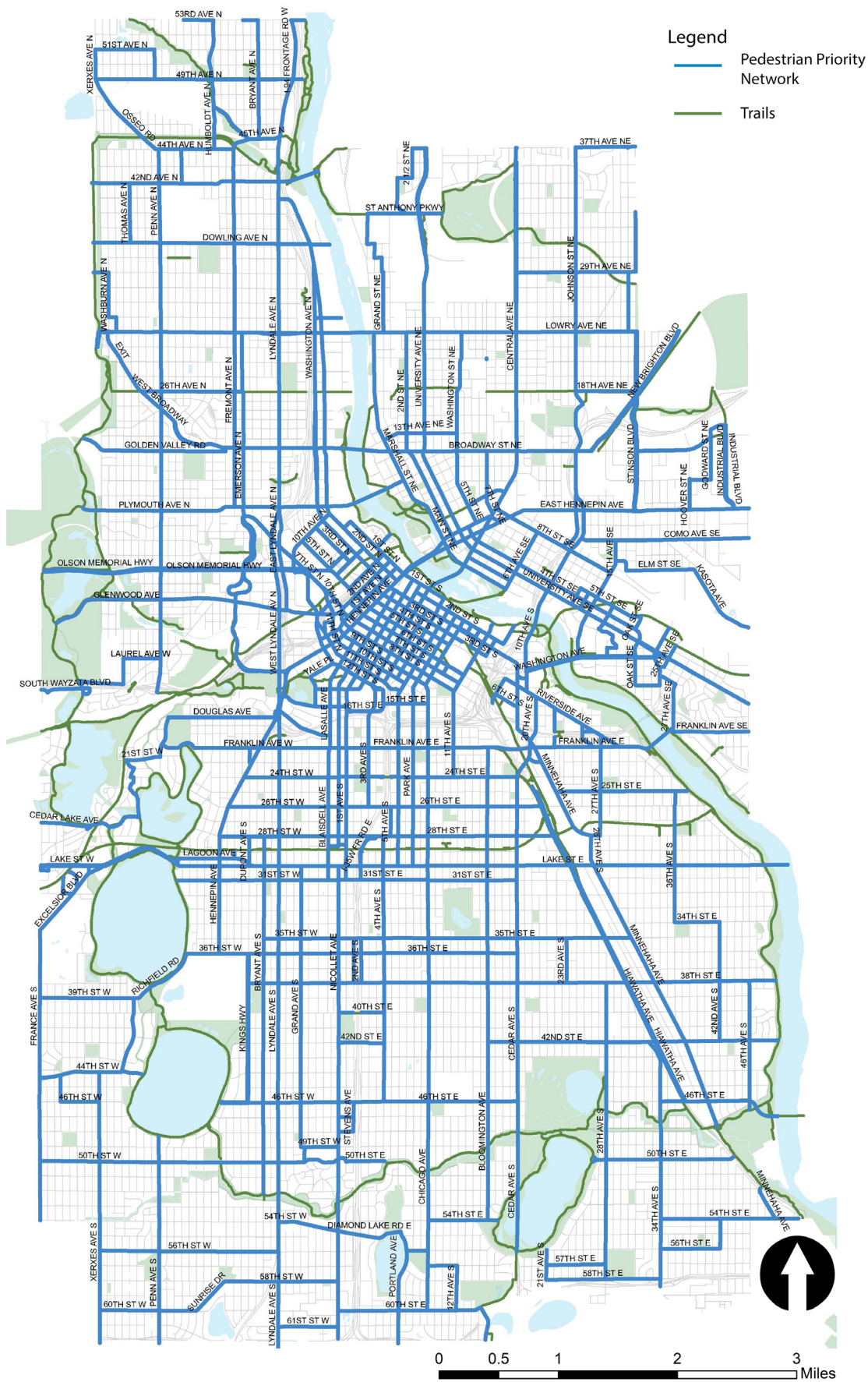




Figure 50: All Ages and Abilities Network

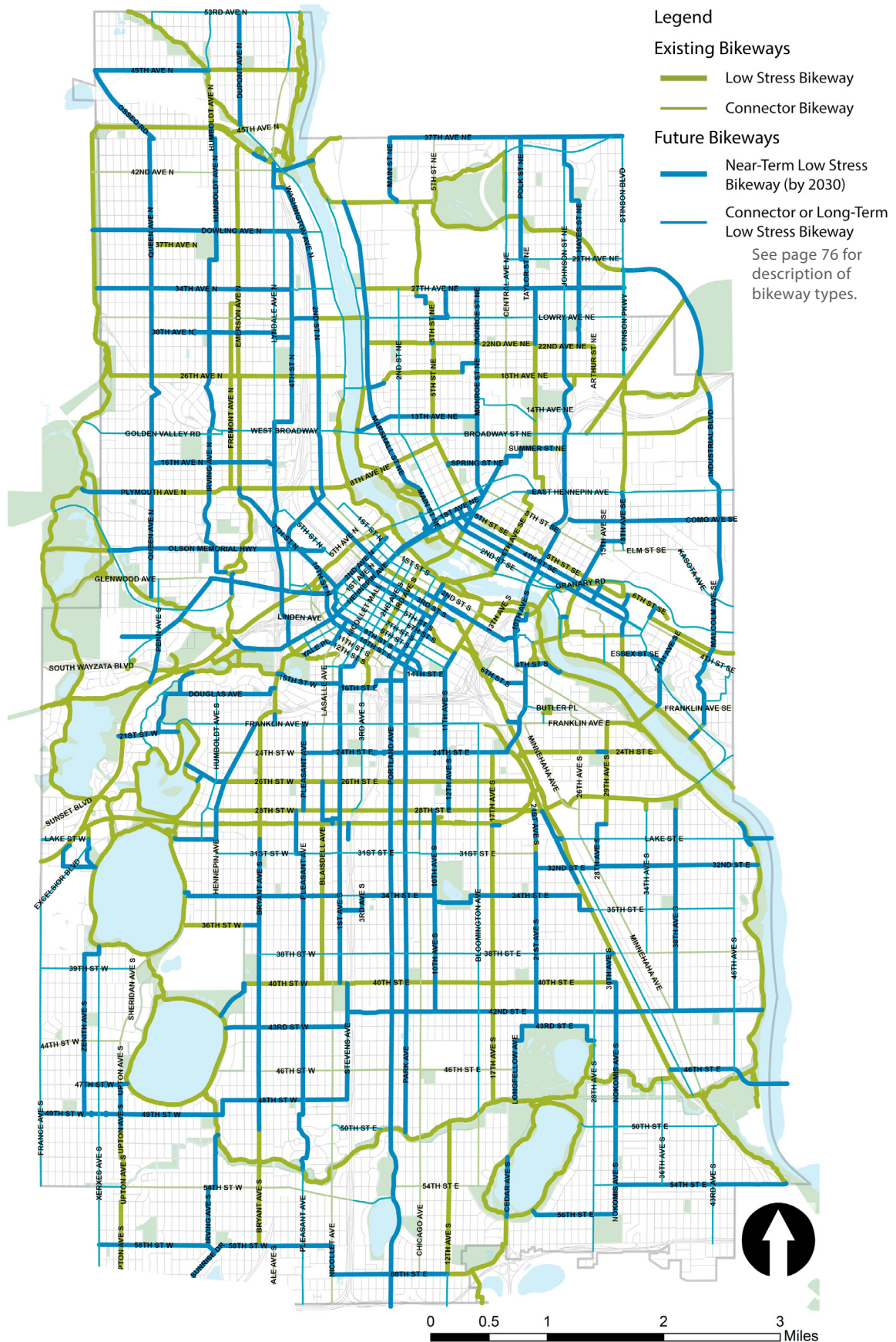




Figure 58: Regional network

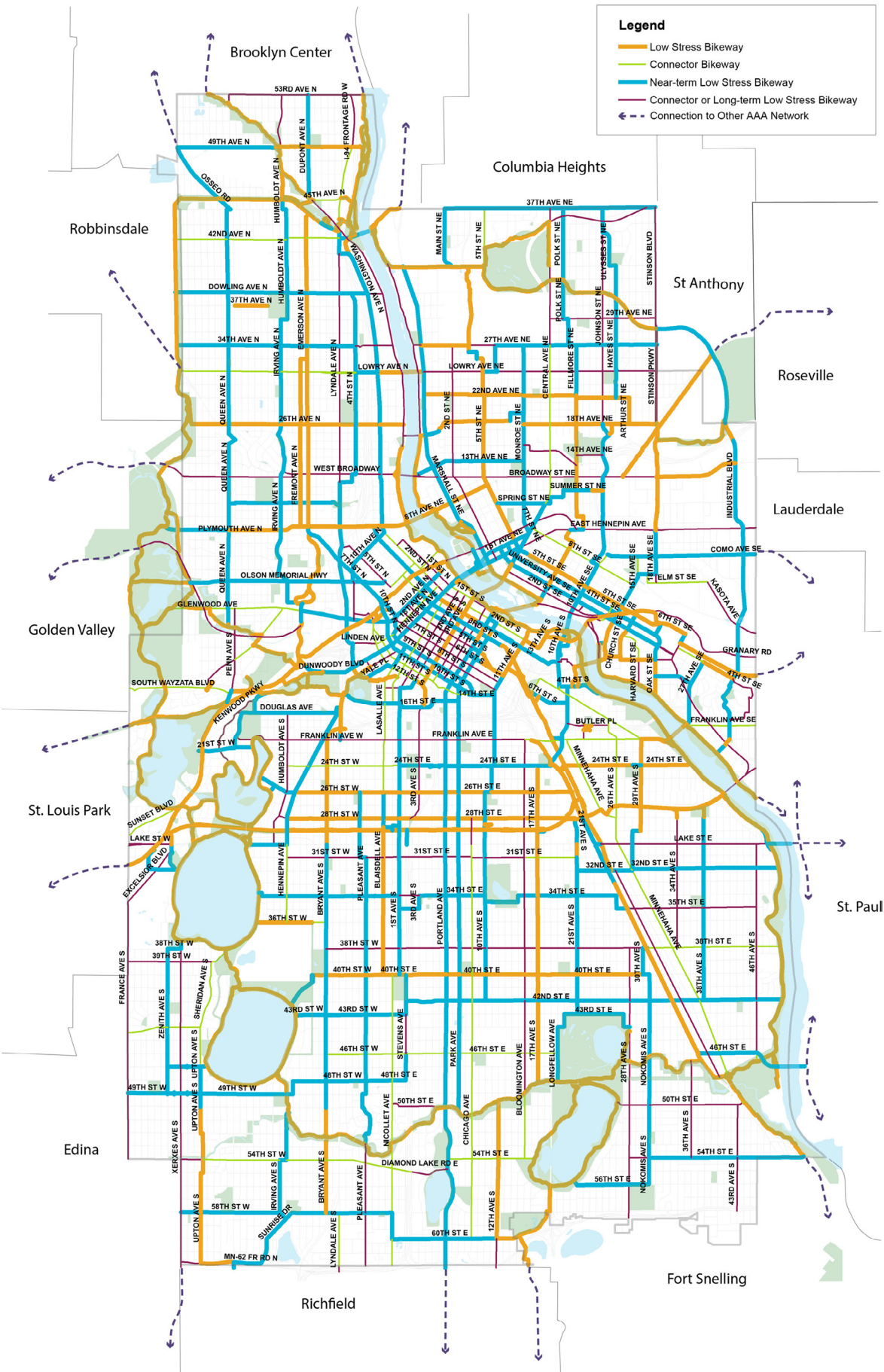




Figure 76: Existing and planned high frequency transit routes

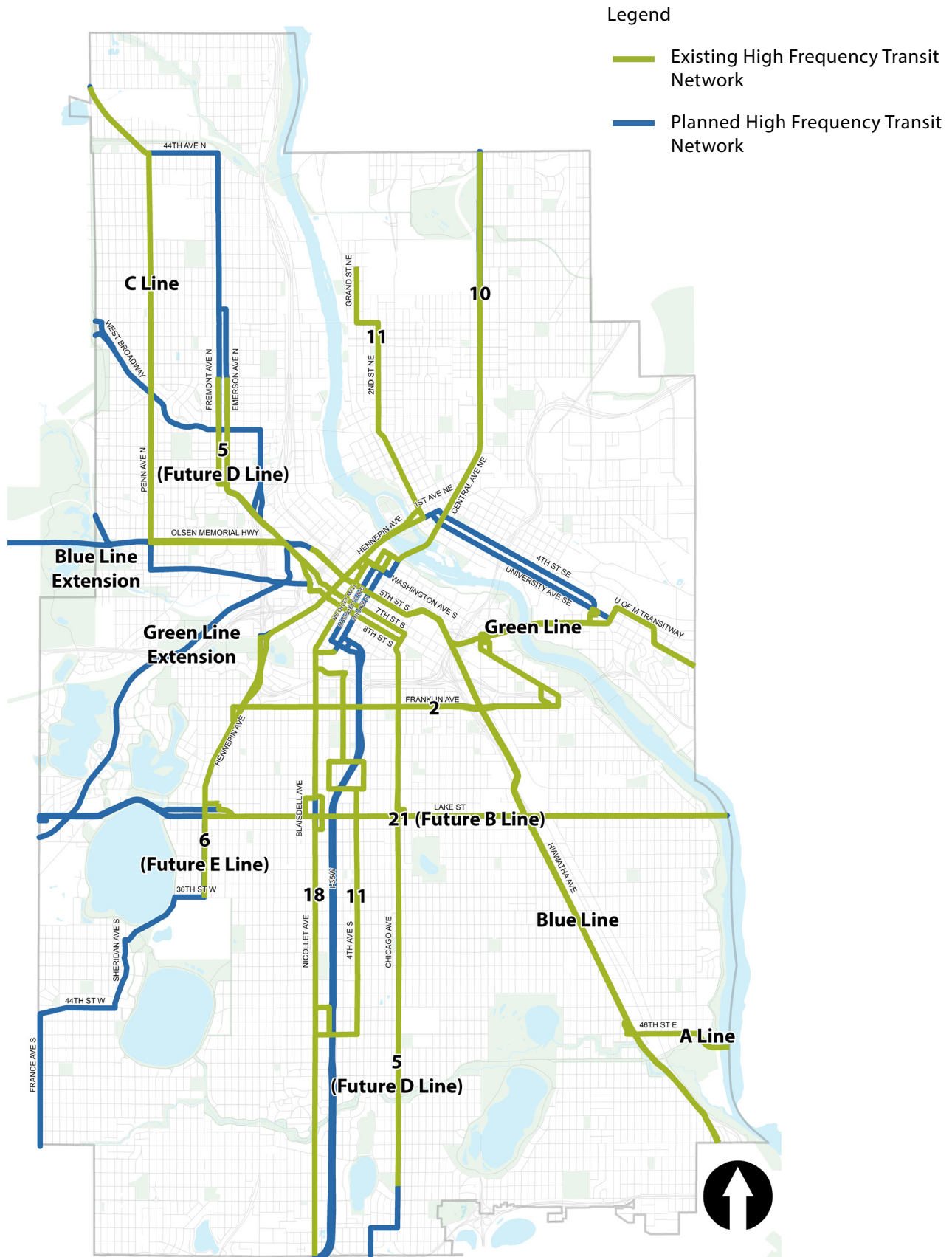




Figure 77: 5- and 10-minute walksheds to existing high frequency transit

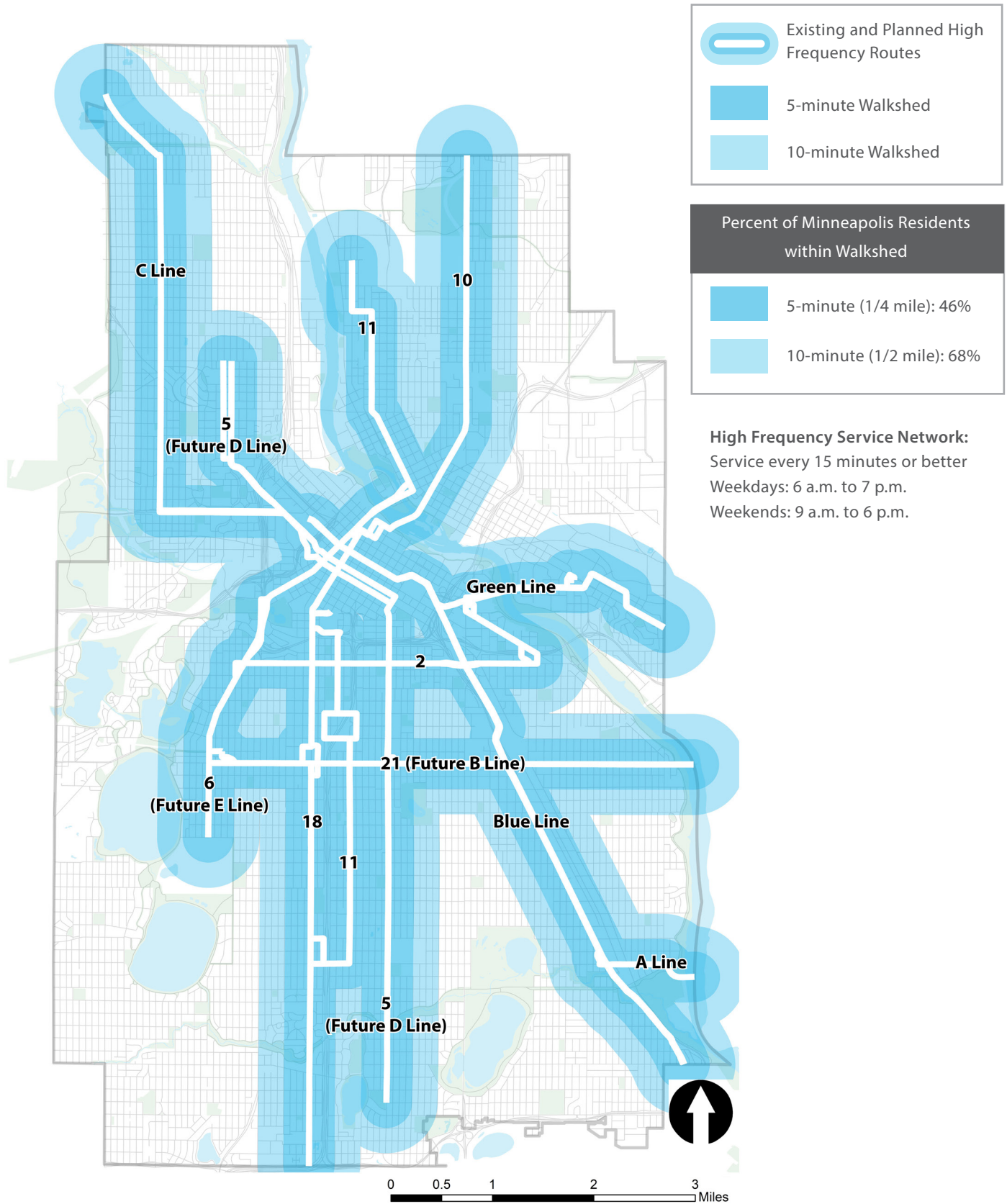
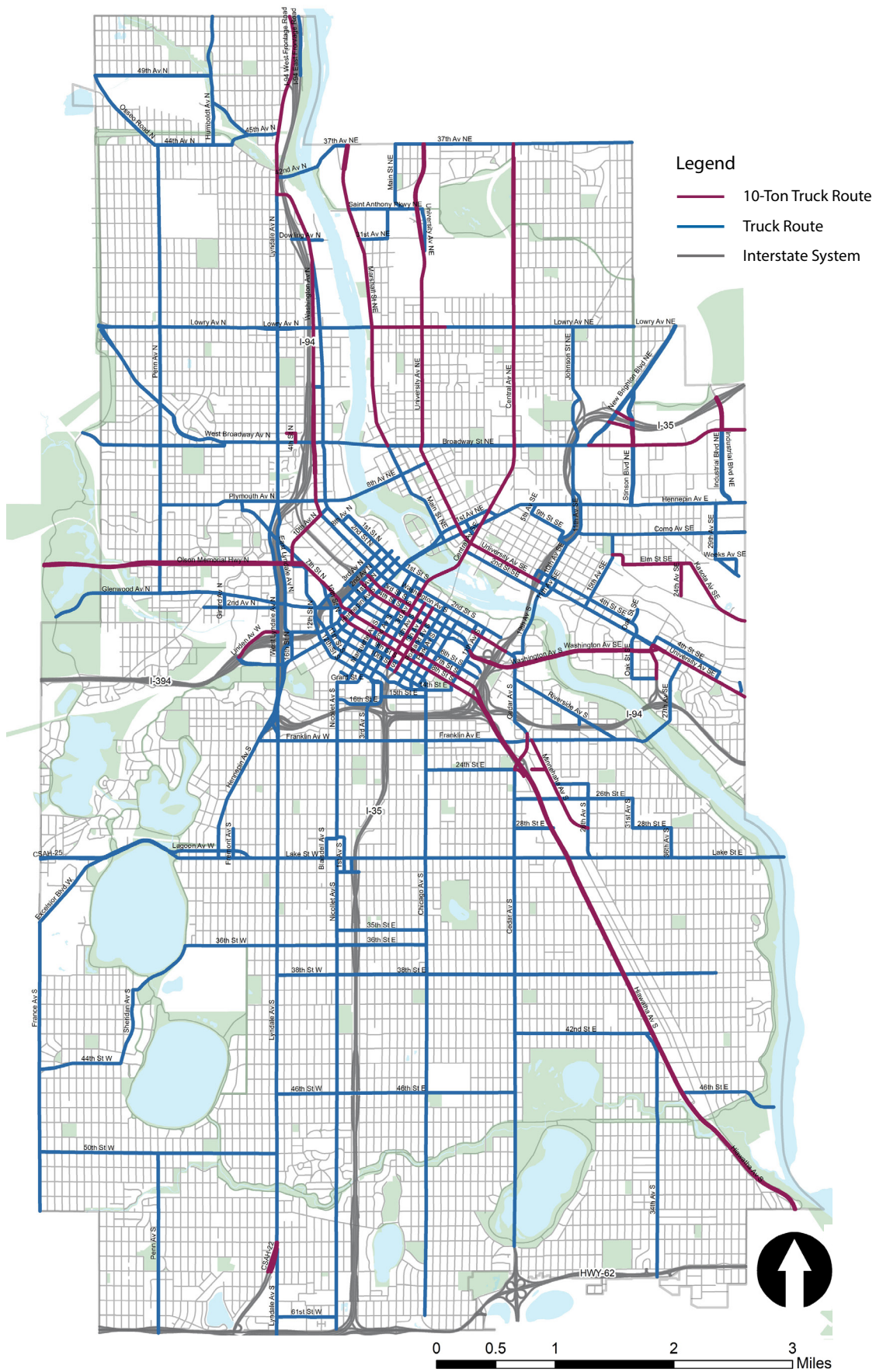




Figure 110: Truck route network



Phillips Traffic Safety Improvements

Summary of Engagement in summer and fall of 2021

The City of Minneapolis held the first round of community engagement for the Phillips Traffic Safety Project in the summer and fall of 2021. Staff collected information via tabling at community events, online surveys, holding in person and online meetings, and various other community outreach.

More general information about the project is available at: <https://www.minneapolismn.gov/projects/phillips/>

Engagement Approach

Public Works staff used several methods for collecting information from stakeholders:

- **Participating in community events and meetings:** Public Works staff attended existing community events in collaboration with local organizations, such as neighborhood associations, Waite House, Little Earth, and Comunidades Latinas Unidas en Servicio (CLUES). Staff collected comments about specific intersections as well as general comments on traffic safety in the neighborhood.
- **Holding Community Events:** Public Works staff held online and in-person engagement events, including community walks, an online open house, and in-person meetings.
- **Online Survey and Mapping Tool:** Public Works used an online survey and mapping tool where respondents could share concerns and ideas.

Inclusivity and Equity Measures

The Phillips neighborhood has a large population of non-English speaking residents. Given these circumstances, staff took measures to reduce barriers to engagement, including printing materials in multiple languages (English, Somali, and Spanish), presentations in multiple languages, and tabling at events and locations that cater to certain communities. Areas and events included tabling/meetings at Little Earth, Mercado Central, Waite House, the 24th Street Mall, 13th Avenue Mall and Anderson School/Stewart Park.



Summary of Findings

- Public Works received 351 comments on the project during the first round of engagement. Of these comments, 286 were about existing concerns and 65 were requests for various traffic safety improvements.
- Most of the comments, 257, were received during in-person events, while 94 comments were received via online sources.
- The most common concerns residents shared were related to speeding (47 comments), sight issues (33 comments), and unsafe conditions for biking (32 comments)
- The locations with the most common comments were 26th Street/Cedar Ave (22 comments), 28th Street/Cedar Ave (13 comments), and 24th Street/Cedar Ave (12 comments)
- The most frequent requests around treatments were for changes to signage or street striping (15 comments), additional bike separation from vehicles (13 comments), and changes to traffic patterns (nine comments).

Phillips Traffic Safety Improvements

Summary of Engagement in summer and fall of 2021

Next Steps

The project schedule is shown below. Public Works staff will be developing initial project concepts in late 20221 and early 2022, and will share those concepts with the community through another round of engagement in 2022.



Engagement Findings

Three themes emerged through this round of engagement: reckless driving, bicycle/pedestrian issues, and request for street improvements. Below is more information about each theme.

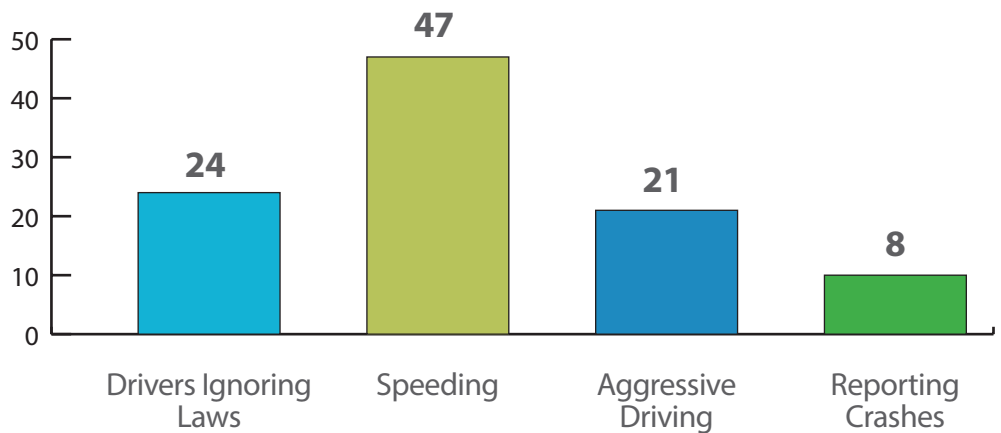
Reckless Driving

Aggressive driving was mentioned by many of the people who left comments. Reckless driving was divided into four sub-categories: drivers ignoring laws, speeding, aggressive driving, and reporting crashes.

Aggressive driving includes comments such as drivers tailgating, purposely driving against 1-ways to reach areas more quickly, and turning without regards to other drivers, pedestrians, and cyclists.

Reporting crashes refers to people commenting about crash history at certain locations.

Reckless Driving Comments by Type



For reasonable accommodations or alternative formats, please contact:

Trey Joiner, Minneapolis Public Works Department at 612 - 271 -8684 or Phillips.Traffic@minneapolismn.gov

People who are deaf or hard of hearing can use a relay service to call 311 at 612-673-3000. TTY users call 612-673-2157.

Para asistencia 612-673-2700 - Rau kev pab 612-673-2800 - Hadii aad Caawimaad u baahantahay 612-673-3500.

Phillips Traffic Safety Improvements

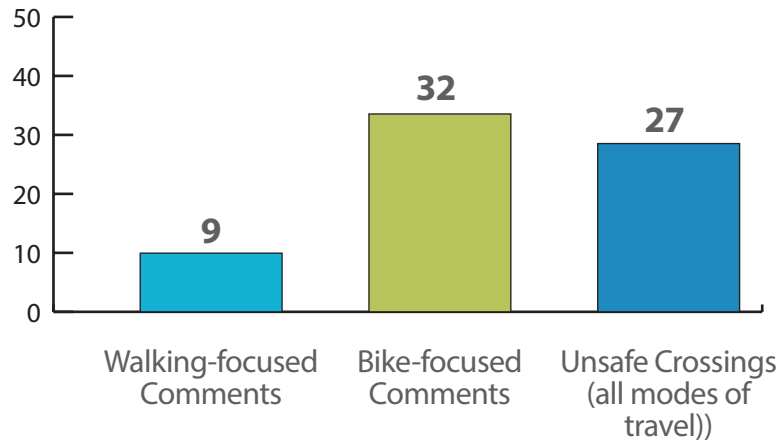
Summary of Engagement in summer and fall of 2021

Biking and Walking

There were many comments from community members about biking and walking in the neighborhood. Common themes included people feeling uncomfortable due to speeding, issues crossing, difficulty walking during winter, and concerns about children walking. Comments about biking included cars driving and parking in the bike lane, and turning cars not yielding to those bikes crossing the street.

Comments about unsafe crossing refer to all modes of travel.

Biking and Walking Comments by Type



Street Improvements

There were a number of comments focused on concerns about street design elements such as parking, lighting, signage, and street striping. Here's some examples of how these comments were categorized:

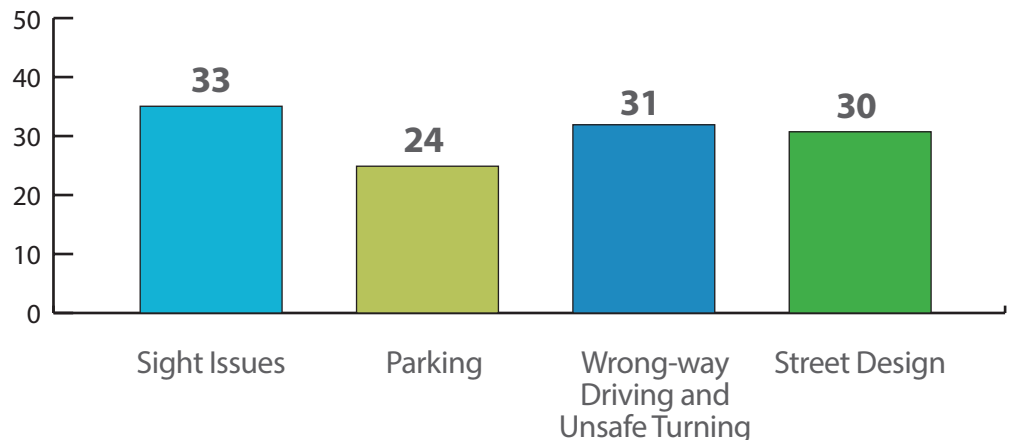
Sight Issues includes comments about lighting and parked cars making it hard to see approaching traffic.

Parking Issues includes illegal, cars double parking, trouble finding and parking near businesses.

Wrong-way driving and unsafe turning refers to vehicles traveling in the wrong direction on one-way streets and cars not yielding to people biking or walking when the car is turning.

Street Design comments included requests for more stop signs, calls to change 26th and 28th Streets to two-way travel for vehicles, and requests for various traffic safety improvements like bump outs, medians, and signage/striping improvements.

Street Improvement Comments by Type



For reasonable accommodations or alternative formats, please contact:

Trey Joiner, Minneapolis Public Works Department at 612 - 271 -8684 or Phillips.Traffic@minneapolismn.gov

People who are deaf or hard of hearing can use a relay service to call 311 at 612-673-3000. TTY users call 612-673-2157.

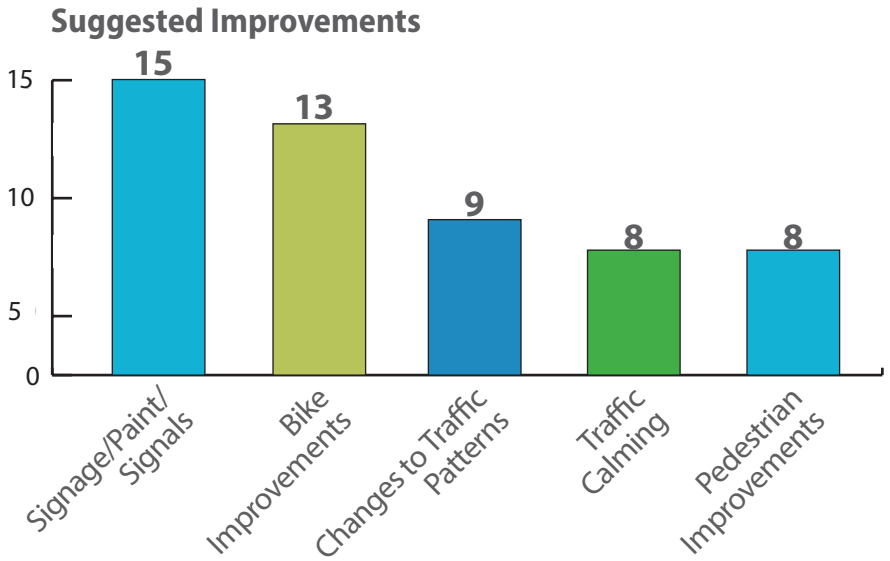
Para asistencia 612-673-2700 - Rau kev pab 612-673-2800 - Hadii aad Caawimaad u baahantahay 612-673-3500.

Phillips Traffic Safety Improvements

Summary of Engagement in summer and fall of 2021

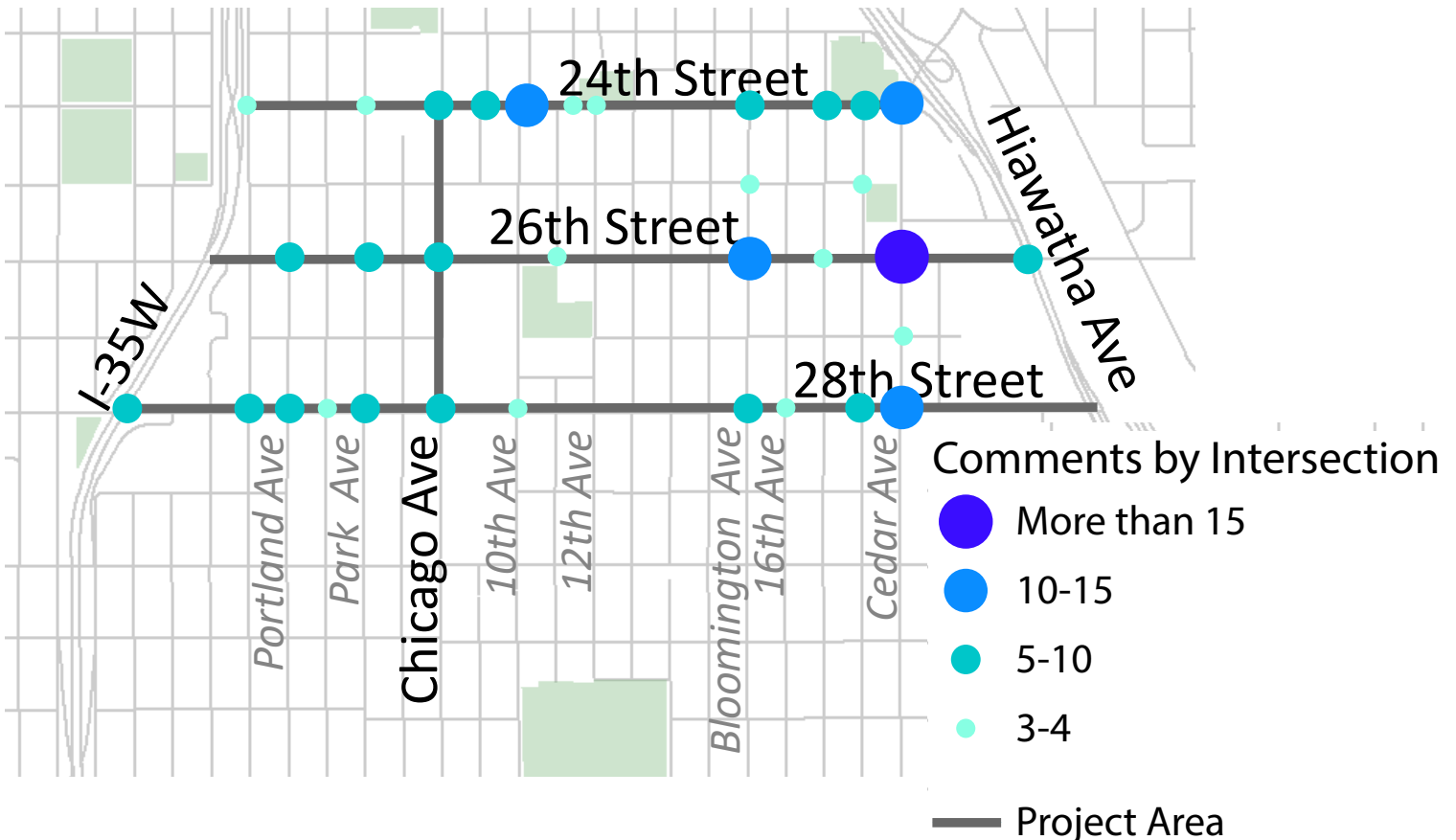
Suggested Improvements

The graph to the right shows the types of improvements suggested by residents. While most of the comments are related to traffic safety, there were also a number of comments about beautification.



Location of Comments

The map below shows comments by intersection. Many comments did not include information about specific locations, and so were not mapped. In addition, locations with fewer than three comments are not shown. Signalized intersections (such as along Cedar Ave, Bloomington Ave, and Chicago Ave) generally received the most comments. Several of the streets with high numbers of comments - Cedar Ave, Park Ave, and Portland Ave - are owned by Hennepin County. Minneapolis Public Works will share these comments with staff from Hennepin County.



For reasonable accommodations or alternative formats, please contact:

Trey Joiner, Minneapolis Public Works Department at 612 - 271 -8684 or Phillips.Traffic@minneapolismn.gov

People who are deaf or hard of hearing can use a relay service to call 311 at 612-673-3000. TTY users call 612-673-2157.

Para asistencia 612-673-2700 - Rau kev pab 612-673-2800 - Hadii aad Caawimaad u baahantahay 612-673-3500.

Intersections with the Most Bicycle Crashes

Table 5-2 shows the intersections with the most bicycle crashes over ten years. Many of the intersections that have the most bicycle crashes also have significant percentages of fatal and severe injury bicycle crashes.

Rank	Street On	Cross Street	Total Bicycle Crashes	% Fatal and Severe Injury Crashes	Intersection Control	Intersection Jurisdictions
1	26th St E	Hiawatha Av S	18	6%	Signalized	City, State
2	Franklin Av W	Nicollet Av S	15	7%	Signalized	County, City
3	Lake St W	Lyndale Av S	15	7%	Signalized	County
4	3rd St N	Hennepin Av S	14	14%	Signalized	City
5	Franklin Av E	Chicago Av S	14	0%	Signalized	County, City
6	Franklin Av E	Cedar Av S	13	8%	Signalized	County
7	7th St N	Hennepin Av S	12	0%	Signalized	City
8	Franklin Av E	3rd Av S	12	0%	Signalized	County, City
9	Franklin Av E	Portland Av S	12	0%	Signalized	County
10	28th St E	Hiawatha Av S	11	0%	Signalized	City, State
11	Grant St W	Nicollet Mall S	11	0%	Signalized	City
12	Groveland Terrace W	Hennepin Av S	10	0%	Signalized	City
13	Lake St E	Snelling Av S	10	10%	Signalized	County, City
14	Vineland Place W	Lyndale Av S	10	10%	Signalized	City
15	26th St W	Nicollet Av S	9	0%	Signalized	City
16	Franklin Av W	Lyndale Av S	9	0%	Signalized	County, City
17	4th St SE	8th Av SE	8	0%	Stop-Controlled	State, City
18	5th St SE	15th Av SE	8	0%	Signalized	City
19	8th St N	Hennepin Av S	8	0%	Signalized	City
20	Franklin Av E	11th Av S	8	0%	Signalized	County, City
21	Franklin Av E	Park Av S	8	0%	Signalized	County
22	Lake St W	Bryant Av S	8	0%	Signalized	County, City
23	University Av SE	10th Av SE	8	25%	Signalized	County, City
24	Washington Av N	Hennepin Av S	8	13%	Signalized	County, City

Table 5-2 Intersections with the Most Bicycle Crashes

Source for Crash Data: Vision Zero 10-Year Dataset



Intersections with the Most Vehicle Crashes

Table 5-3 shows the intersections with the most vehicle crashes from 2007 to 2015.

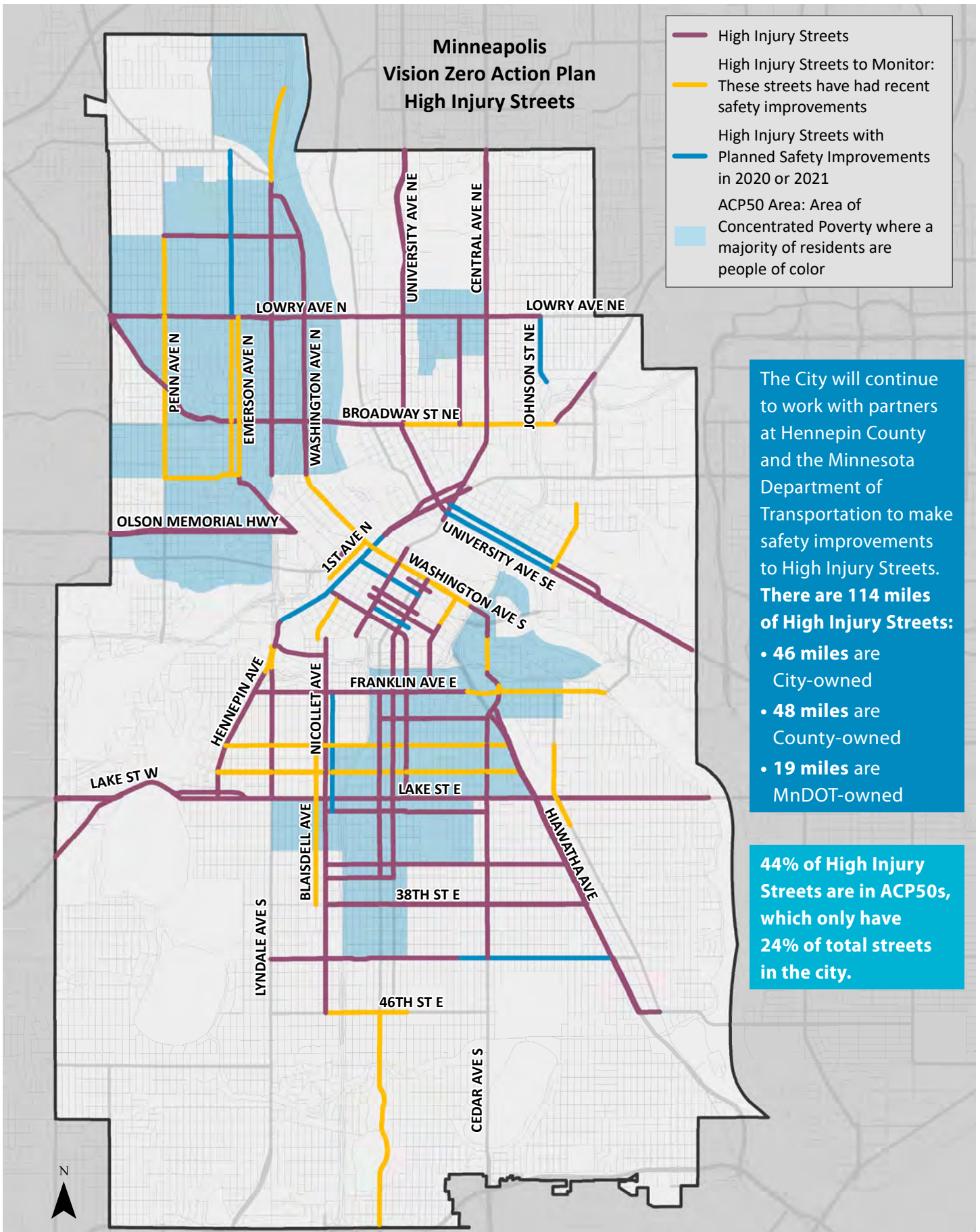
Rank	Street On	Cross Street	Total Vehicle Crashes	% Fatal and Severe Injury Crashes	Intersection Control	Jurisdictional Responsibility
1	Olson Memorial Hwy N	West Lyndale Av N	206	1%	Signalized	State
2	26th St E	Hiawatha Av S	166	2%	Signalized	City, State
3	West Broadway Av N	Washington Av N	163	0%	Signalized	County
4	Lake St E	Cedar Av S	162	0%	Signalized	County
5	Olson Memorial Hwy N	East Lyndale Av N	159	2%	Signalized	State, City
6	35th St E	Stevens Av S	145	0%	Signalized	City
7	Vineland Place W	Lyndale Av S	143	1%	Signalized	City
8	Lowry Av NE	University Av NE	131	0%	Signalized	County, State
9	9th St S	4th Av S	129	1%	Signalized	City
10	Broadway St NE	University Av NE	129	1%	Signalized	County, State
11	Franklin Av W	Lyndale Av S	125	1%	Signalized	County
12	Lake St W	Lyndale Av S	123	0%	Signalized	County
13	West Broadway Av N	Lyndale Av N	115	0%	Signalized	County
14	Broadway St NE	Johnson St NE	111	2%	Signalized	County, City
15	Franklin Av E	Cedar Av S	106	1%	Signalized	County
16	Franklin Av E	3rd Av S	101	0%	Signalized	County, City
17	Franklin Av E	5th Av S	101	0%	Signalized	County, City
18	Franklin Av E	Portland Av S	101	0%	Signalized	County
19	Lake St E	Chicago Av S	99	0%	Signalized	County, City
20	Washington Av S	3rd Av S	99	0%	Signalized	County, State, City
21	31st St E	2nd Av S	98	1%	Signalized	City
22	Lake St E	Portland Av S	97	2%	Signalized	County
23	Lake St E	2nd Av S	96	0%	Signalized	County, City
24	Hennepin Av E	Johnson St NE	95	0%	Signalized	County, City
25	22nd St W	Lyndale Av S	94	0%	Signalized	City, County

Table 5-3 Intersections with the Most Vehicle Crashes

Source for Crash Data: Vision Zero 10-Year Dataset



Figure 10: High Injury Streets



26th and Hiawatha Safety Improvements

26th St E and Hiawatha Ave (TH55)

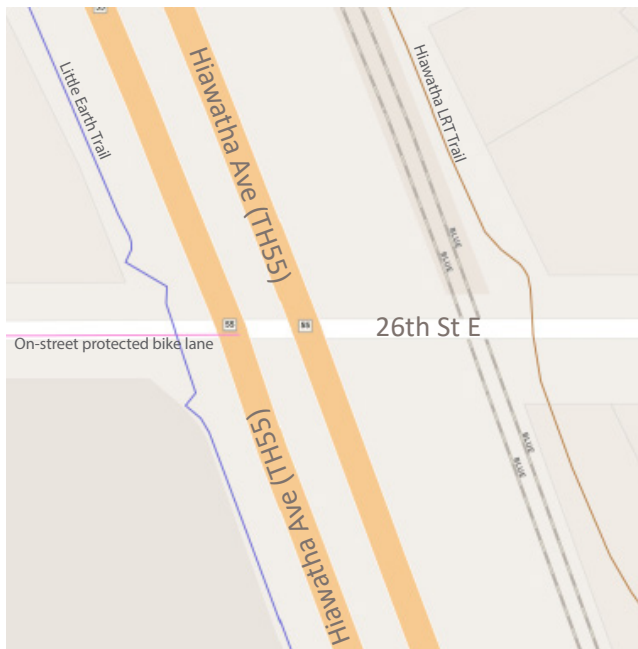
Project Description

The proposed project includes the intersection reconstruction of 26th Street East and Hiawatha Avenue (Trunk Highway 55) to improve the safety, accessibility, mobility and travel experience for all users. This intersection provides access to residential, recreational, industrial and commercial areas, and plays an important role in the regional transportation needs for all travel modes.

Both corridors are part of the pedestrian, bicycle and freight priority networks in the City's Transportation Action Plan, and Hiawatha Avenue is designated as a 10-ton truck route. There is an existing multi-modal trail and sidewalk on both sides of Hiawatha Ave, and sidewalks along 26th Street. There is a protected bikeway on 26th Street and an existing bikeway gap between the start of this facility and the Hiawatha LRT trail.

This intersection is extremely crash prone and is identified in the City's Vision Zero Crash Study as experiencing the 2nd most vehicle crashes and the most bicycle crashes within city limits. The intersection is the first at-grade intersection for motorists traveling southbound from downtown Minneapolis, I-94 or 35W, and the last at-grade intersection before northbound motorists enter the interstate system.

Project Area



Project Benefits





This project will address the existing and future safety issues through but not limited to the following improvements:

- Slow approaching traffic by bumping out curb lines, removing free right turns and porkchops.
- Providing advanced warning of signal changes for approaching motorists through advanced signage and signal heads over each lane.
- Eliminating a bicycle network gap by constructing a westbound trail connection between the Hiawatha LRT trail and the existing 26th Street protected bikeway.
- Improve pedestrian infrastructure, including accessible pedestrian signals, high visibility crosswalks and improved lighting.



Existing Conditions

Average Number of Daily Users

26th and Bloomington (2015) Sabo Bridge over Hiawatha (2018)


 390 pedestrians	 40 pedestrians
 160 bicyclists	 2670 bicyclists

Hiawatha Trail east of Hiawatha/28th (2017)

 110 pedestrians
 1060 bicyclists

Source: Minneapolis Bicycle & Pedestrian Counts and Minneapolis Public Works, Metro Transit.

Average Number of Daily Vehicles

 36,000 - 43,500 motor vehicles (Hiawatha 2020)
7,200 - 8,400 on (26th St E 2020)

Source: MNDOT



Image of intersection



NO RIGHT TURN ON RED

E 26th St

77

W 10th St

W 11th St

W 12th St

W 13th St

W 14th St

W 15th St

W 16th St

W 17th St

W 18th St

W 19th St

W 20th St

W 21st St

W 22nd St

W 23rd St

W 24th St

W 25th St

W 26th St

W 27th St

W 28th St

W 29th St

W 30th St

W 31st St

W 32nd St

W 33rd St

W 34th St

W 35th St

W 36th St

W 37th St

26th and Hiawatha Spot Mobility and Safety Improvements

26th St E and Hiawatha Ave (TH55)



Legend

-  Project area
-  Neighborhood destinations
-  Walking and biking trails
-  Protected bike lane
-  Connector route (on-street bike lane)
-  Hiawatha Blue Line Light Rail Transit



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



**MnDOT Metro District
1500 West County Road B-2
Roseville, MN 55113**

April 12, 2022

Kelsey Fogt
Transportation Planner
City of Minneapolis

**Re: MnDOT Letter for City of Minneapolis's Metropolitan Council/Transportation Advisory Board
2022 Regional Solicitation Funding Request for improvements to Hiawatha Avenue (TH 55) and 26th
Street**

Kelsey Fogt,

This letter documents MnDOT Metro District's recognition for City of Minneapolis to pursue funding for the Metropolitan Council/Transportation Advisory Board's (TAB) 2022 Regional Solicitation for a project at Hiawatha Avenue (TH 55) and 26th Street.

As proposed, this project impacts MnDOT right-of-way on TH 55 in Minneapolis. As the agency with jurisdiction over TH 55, MnDOT will allow the City to seek improvements proposed in the application. Details of any future maintenance agreement will need to be determined during project development to define how the improvements will be maintained for the project's useful life if the project receives funding.

There is no funding from MnDOT currently planned or programmed for this improvement. If your project receives funding, continue to work with MnDOT Area staff to coordinate needs and opportunities for cooperation.

MnDOT Metro District looks forward to continued cooperation with Minneapolis as this project moves forward and as we work together to improve safety and travel options within the Metro Area.

If you have questions or require additional information at this time, please reach out to West Area Manager April Crockett at April.crockett@state.mn.us.

Sincerely,

Michael Barnes, PE
Metro District Engineer

CC: April Crockett, Metro District Area Manager; Dan Erickson, Metro State Aid Engineer; Molly McCartney, Metro Program Director