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 a 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.

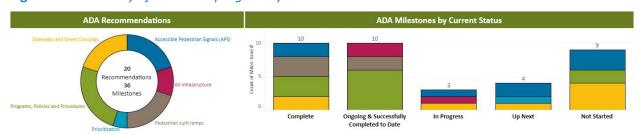


Figure A-1: Summary of milestone progress by current status

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 <u>Pedestrian Priority Corridors</u>.

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 propriety 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

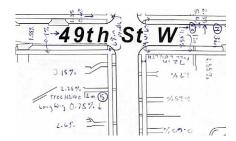
City staff collect sidewalk attributes in-field and enter into database.

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 webbased 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











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

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

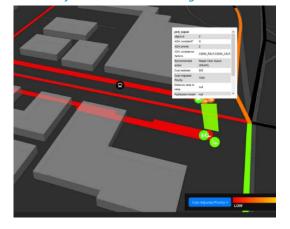
Limitations:

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

Figure A-6: Example of data collection cart



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.

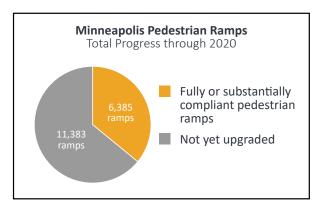
The data outlined below includes improvements completed by the City; however, it does not includes improvements made by private developers, utilities, and other agencies. Per *Recommendation 5.3*, the City is taking steps to improve the mechanism for tracking, inspecting, and inventorying pedestrian 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

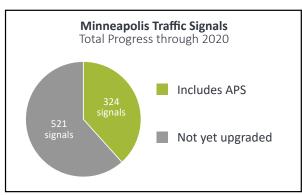


*This does not include ADA pedestrian curb ramps built by other agencies, private developments, or utilities.

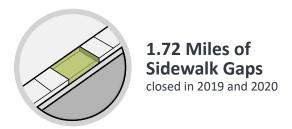


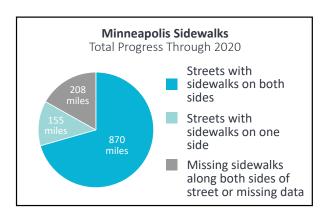
TRAFFIC SIGNALS





SIDEWALKS







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 <u>Walking action 5.7</u>, 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	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)	 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		
			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	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)	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 Appendix A
Accessible Pedestrian Signals (APS)	3.3	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	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	 Scope data collection and evaluation pilot into capital project development (2020) 	Complete	-	Pilot project scoped early 2021
			 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
			 Incorporate process and evaluation methodology into Chapter 3 of the ADA Plan (2021) 	Complete	-	Pilot data collection process and methods are included in Appendix A
			 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	 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	 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	5.2 Evaluate sidewalk and street crossing data to guide the development of a funding	 Update City specifications (annually) 	Not Started	Annually	Not started; Dependent on the completion of Recommendation 3.4
		mechanism and/or approach for addressing sidewalk and street crossing barriers if needed	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	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	
			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	 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	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	Evaluate adding option to indicate access issue (2020)	Not Started	2022	Not started	
		adding an option on the 311 interface for the public to indicate whether a concern is related to accessibility	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	 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	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	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
		Action Plan	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	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
			 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
			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
			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	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.
		Winter Maintenance Study; explore modifications to improve access to the public right of way through additional direction in the Transportation Action Plan				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.
			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)

