How Saint Paul Supports Walking: Existing Policies and Programs

Revised 5.14.18

Introduction

This memo profiles pedestrian-related policies, practices, plans, and investment programs that support walking in Saint Paul and inform the development of the Saint Paul Pedestrian Plan.

Documents reviewed include:

- Saint Paul Comprehensive Plan (2010)
- Saint Paul Street Design Manual (2016)
- Saint Paul Complete Streets Action Plan (2016)
- Saint Paul Police Department Manual (2017)
- Saint Paul Department of Public Works Traffic and Lighting Division Traffic Engineering Section Policy and Procedure Manual (2015)
- Saint Paul Crosswalk Review Documentation and Evaluation Tool (2017)
- Saint Paul Safe Routes to School Policy Plan (2017)
- Saint Paul Pedestrian Assessment (2015)
- Saint Paul Roadway Safety Plan (2016)
- City of Saint Paul Department of Public Works ADA Transition Plan (Revised 2016)
- Ramsey County Roadway Safety Plan (2013)
- Ramsey County All Abilities Transportation Network Policy (2016)
- Ramsey County Bicycle and Pedestrian Plan (2015)
- Minnesota Manual on Uniform Traffic Control Devices (2015)
- MnDOT Tech Memo 15-01-T-01 Pedestrian Crossing Facilitation (2015)
- MnDOT: Best Practices Synthesis and Guidance in At-Grade Trail-Crossing Treatments (2013)
- MnDOT: Minnesota's Best Practices for Pedestrian/Bicycle Safety (2013)
- Minnesota Local Road Research Board: Pedestrian Crossings: Uncontrolled Locations (2014)

Recommendations, policies and practices distilled from these documents are detailed below in the following sections:

Infrastructure

- Transportation Plans and Policies Relevant to the Pedestrian Plan
- Pedestrian Crossing Policies and Practices
- Pedestrian Infrastructure Funding

Programs Practices and Recommendations

- Enforcement
- Engagement and Communications
- Evaluation and Performance Measures

Challenges to Walking in Saint Paul

Infrastructure

Existing Transportation Plans and Policies Relevant to the Pedestrian Plan

Saint Paul's adopted transportation plans and policies promote walking as a safe, viable form of transportation for all people and support investments to enhance and expand the city's pedestrian infrastructure.

Transportation policies can support pedestrian planning by promoting a focus on providing safe and comfortable walking routes and by requiring accommodation of all types of pedestrians in facility design guidelines.

The Saint Paul Pedestrian Plan is supported by the following plans and policies, which establish the importance of pedestrian safety and access in Saint Paul. Elements of these plans relevant to the Saint Paul Pedestrian Plan are summarized below:

High-Level Direction:

- Saint Paul Comprehensive Plan
- Saint Paul Bicycle Plan
- Ramsey County All Abilities Transportation Network Policy
- Ramsey County Bicycle and Pedestrian Plan

Design Guidance:

Saint Paul Street Design Manual

Detailed Recommendations:

- Saint Paul Complete Streets Action Plan
- Saint Paul Safe Routes to School Policy Plan
- Saint Paul Roadway Safety Plan
- Ramsey County Roadway Safety Plan
- City of Saint Paul Department of Public Works ADA Transition Plan (Revised 2016)

High-Level Direction

SAINT PAUL COMPREHENSIVE PLAN

The Saint Paul Comprehensive Plan provides the following policy direction to support pedestrian comfort and safety.

Transportation Chapter:

- 1.1 Complete the streets.
- 1.2 Examine alternatives to enhance safety through right-of-way design, including narrowing or removing lanes on roads.
- 1.3 Evaluate existing crosswalk striping, design, and pedestrian-scale lighting standards.
- 1.6 Design for improved accommodation of pedestrians and bicycles on bridges.
- 1.7 Minimize and consolidate driveway curb cuts on commercial streets as opportunities arise.
- 1.10 Maintain sidewalks, street crossings, and bikeways year-round.
- 1.11 Raise motorist awareness of pedestrians and bicycles, and raise bicyclist awareness of traffic laws and pedestrian rights.
- 1.12 Partner with schools, nonprofits, other government agencies, and businesses to educate people about bicycling and walking.
- 1.14 Increase pedestrian, bicycle, and motorist safety through effective law enforcement, detailed crash analysis, and engineering improvements to reduce the risk of crashes.

- 1.15 Work with the Saint Paul Police Department to substantially increase enforcement of speed limits and red-light compliance.
- 2.2 Support transit-oriented design through zoning and design guidelines. Compact, street-oriented
 design should be emphasized to promote walkability and transit use, especially in commercial
 corridors. Standards for building placement and design based primarily on the needs of the
 pedestrian should be enforced and expanded.
- 2.4 Develop a strategy for investing in a broad range of infrastructure projects, including, but not limited to, street and traffic improvements to support the growth of existing employment, services, parks, and schools.
- 3.11 Provide safe citywide connections to schools, libraries, parks, and recreation centers, with improved crossings and comfortable pedestrian environments at high demand destinations.
- 4.7 Connect neighborhoods that have poor sidewalks or little access to trails and bike routes, especially east and north of Downtown.
- 4.8 When redevelopment opportunities become available, reinstate the traditional street grid pattern to increase neighborhood connectivity.

Parks and Recreation Chapter:

- 1.4. Provide programming and education on biking and walking.
- 1.5 Provide better public information on getting to parks and recreation facilities on foot and bike.
- 6.11 Work to close gaps in the trail system to ensure seamless connections for bicycles and pedestrians across the city of all ages and abilities.
- 6.12 Work toward better pedestrian and bicycle connections between parks, recreation centers, schools, major facilities, and special events.
- 6.13 Build new off-road trails and upgrade existing off-road trails to make cycling and walking more convenient, safe, and pleasant, and add facilities and amenities to improve the experience of using Saint Paul's trails.

SAINT PAUL BICYCLE PLAN

The Saint Paul Bicycle Plan includes several action items relevant to the Pedestrian Plan.

- 8.1.2 Explore opportunities to automate the collection of bicycle and pedestrian count data. Document
 costs associated with automated counting as well as current best practices for ensuring accuracy. To
 the extent feasible, establish a methodology for collecting and publishing automated count data.
- 8.4.1 Develop a policy to guide lighting of bikeways that are not adjacent to roadways, including lighting on bicycle and pedestrian bridges.
- 8.6.1 Consider developing a policy regarding signage or pavement markings to discourage bicyclists from riding on sidewalks in business districts.

RAMSEY COUNTY ALL ABILITIES TRANSPORTATION NETWORK POLICY

The Ramsey County All Abilities Transportation Network Policy establishes a hierarchy of transportation system users. People who walk are identified as the first priority during transportation planning and implementation for the county.

RAMSEY COUNTY BIKE AND PEDESTRIAN PLAN

The goals of the Ramsey County Bike and Pedestrian Plan are all relevant to the Saint Paul Pedestrian Plan:

- Improved Health through Active Mobility for All
- A Complete and Connected Multi-modal Network
- A Safe Transportation System for Pedestrians and Bicyclists of All Ages and Abilities
- Equity and Social Justice in the Transportation System
- A Coordinated Approach to Filling Gaps in the Pedestrian and Bicycle System
- A Transportation System that Contributes to Sustainable and Prosperous Communities

Design Guidance

SAINT PAUL STREET DESIGN MANUAL

Pedestrian-specific design guidance is woven into the design manual as a whole, with the greatest emphasis in the Behind the Curb section and the Intersections section.

The Behind the Curb section includes guidance on the following:

- Sidewalks and the Zone System
- Boulevard Planting
- Street Tree Planting
- Rain Gardens
- Bio-Infiltration Systems
- Driveways
- Wayfinding
- Off-Street Paths
- Stairways

The Intersections section includes guidance on the following:

- Corner Curb Radii
- Bump Outs
- Skewed Intersections
- Roundabouts
- Channelized Right Turn Lanes
- Marked Crosswalks
- Mid-Block Crossings
- Over and Under Crossings
- Pedestrian and Traffic Signals
- Rectangular Rapid Flash Beacon (RRFB)
- Leading Pedestrian Interval (LPI)

Detailed Recommendations

COMPLETE STREETS ACTION PLAN

Recommendations from the Complete Streets Action Plan relevant to the Pedestrian Plan include:

- Review and implement pedestrian-oriented features adjacent to development projects as part of site plan review.
- Modify Transportation Committee report to explicitly include how projects are meeting complete
 streets policies. Developing and using a new complete streets "checklist" to be included in the
 Transportation Committee report is recommended to be an effective way to ensure we are meeting
 intents of our policy without becoming overly laborious. Additionally, this would allow staff to compile
 statistics and report on projects annually.
- Develop a Safe Routes to School program to work towards achieving Comp Plan goal to "provide safe citywide connections to schools, libraries, parks, and recreation centers." This would support and encourage the city's trend towards neighborhood schools.
- Continue inter-departmental collaboration on street projects by continuing project planning coordination meetings and scoping retreats. Collaboration facilitates the implementation of pedestrian improvements as part of street repaving projects.

SAINT PAUL SAFE ROUTES TO SCHOOL POLICY PLAN

Recommendations from the Safe Routes to School Policy Plan relevant to the Pedestrian Plan include:

- Develop and adopt a school speed zone policy to determine priority locations and implement reduced speed limits on city roads.
- Develop guidelines for signage and RRFBs at crosswalks (see Pedestrian Crossing Policies and Practices section and Appendix for details).
- Adopt a policy of painting high-visibility crosswalks at schools and along designated walking routes.
- The Pedestrian Plan could include an "All Ages and Abilities Priority Network" that connects schools, parks, and community centers and identifies recommended improvements to build this network.
- Require that new development has high quality bike and pedestrian accessibility.
- Construct missing sidewalks and upgrade street crossings within school walking zones to provide school children and those who walk with them safe and enjoyable walking routes to school.

SAINT PAUL ROADWAY SAFETY PLAN

The Saint Paul Roadway Safety Plan identifies specific locations as priorities for pedestrian safety improvements, presents the effectiveness of strategies to mitigate crashes, and provides recommendations.

The Saint Paul Roadway Safety Plan lists the following as the top five segments as priorities for pedestrian safety improvements, based on the number of severe pedestrian/bicycle crashes over the five-year period between 2009-2013:

- Rice Street John Ireland Boulevard to University Avenue (2 severe crashes/8 total)
- 3rd Street East Earl Street to McKnight Road (4 severe crashes/7 total)
- Grand Avenue Cretin Avenue to Dale Street (3 severe/37 total)
- Como Avenue Eustis Street to Raymond Avenue (2 severe/10 total)
- Front Avenue Dale Street to Rice Street (2 severe/10 total)

The Saint Paul Roadway Safety Plan provided a list of strategies that have proven effective in mitigating the types of severe crashes that are over-represented in Saint Paul; pedestrian/bike, right angle and head-on (Table 1).

Table 1: Urban Infrastructure-based Safety Strategies, Saint Paul Roadway Safety Plan

STRATEGY	CRASH REDUCTION FACTOR	TYPLICAL INSTALLATION COST
Road Diet (Convert to three lanes)	30 to 50%	\$160,000/Mile
Access Management	5 to 30%	\$360,000/Mile
Traffic Signal Confirmation Lights	25 to 85% (violations)	\$2,500/Intersection
Pedestrian/Bike – Countdown Timer	25%	\$12,000/Intersection
Pedestrian/Bike – Leading Pedestrian Interval	30 to 45%	\$600/Intersection
Pedestrian/Bike – Curb Extensions	40 to 45%	\$36,000/Corner
Pedestrian/Bike – Median Refuge Island	40 to 45%	\$25,000/Approach

The Saint Paul Roadway Safety Plan recommends the following based on its analysis of crash data:

- The City's safety priorities should be addressing higher speed (35 mph and higher), higher volume (over 10,000 vehicles per day) collectors and arterials.
- The most common types of severe crashes are those involving pedestrians/bicyclists and right-angle collisions.
- Identify candidates for safety investment using a two-step process: 1) Develop lists of locations with multiple severe crashes. 2) Supplement that list with additional segments that have roadway and traffic characteristics similar to the segments with multiple severe crashes, as identified through a systemic risk assessment.
- To mitigate the most common types of severe crashes, focus safety improvements at intersections and at signal controlled intersections in particular.

RAMSEY COUNTY ROADWAY SAFETY PLAN

Highest priority intersections established in the Ramsey County Roadway Safety Plan were those with the following characteristics:

- Daily volume of entering vehicles over 17,500
- Four of more lanes of approach including turn lanes
- 40 mph or less speed limit
- Bus stop presence
- Pedestrian generator located in quadrant
- Parking presence
- Previous severe pedestrian/bicycle crash

Four of the six intersections identified as highest priority for pedestrians and bicyclists in the Ramsey County Roadway Safety Plan are in Saint Paul. All four are on University Ave W, at the intersections with Snelling Ave, Marion St, Fairview Ave N, and Raymond Ave. It should be noted that the Ramsey County Roadway Safety Plan was completed in 2013, prior to the construction and opening of the Green Line LRT on University Avenue. Roadway conditions along University Avenue have changed significantly since 2013 and updated crash analysis is not available. The street still has four travel lanes, carries higher traffic volumes today than in 2013, and attracts larger numbers of pedestrians due to the LRT, so these intersections are still considered important for pedestrian safety and access.

The Ramsey County Roadway Safety Plan recommends proactive strategies to reduce crashes, including red light confirmation lights and access management, pedestrian improvements, conversion to two-way left turn lane, and adding turn lanes at intersections.

CITY OF SAINT PAUL DEPARTMENT OF PUBLIC WORKS ADA TRANSITION PLAN

The City of Saint Paul Department of Public Works ADA Transition Plan includes a self-evaluation of public infrastructure and identifies steps that will be taken to achieve ADA compliance among the city's curb ramps, traffic signals, and stairways by 2050.

Curb ramps

According to the plan's self-assessment, all corners in Saint Paul have curb ramps. The plan states that any corner quadrant that is discovered without a curb ramp will be replaced within two construction seasons of this finding. Many corner curb ramps do not meet current design standards for accessibility. The plan states that the city will replace all curb ramps that do not meet current ADA standards by 2030 on arterial streets and by 2050 on residential streets, in conjunction with street reconstruction and maintenance projects.

Accessible pedestrian signals

The plan states that accessible pedestrian signals (APS) are replaced in conjunction with traffic signal replacement projects and/or curb ramp reconstruction. At a minimum, traffic signals are upgraded to be "APS ready" on curb ramp reconstruction projects where traffic signal work is programmed for a future date.

Pedestrian Crossing Policies and Practices

Existing Policies and Practices

Existing pedestrian crossing practices were reviewed in-depth as part of the Saint Paul SRTS Policy Plan *Technical Memo 3: Criteria for Pedestrian Crossing Improvements*, which is included as an appendix to this memorandum.

The City and County regularly consider pedestrian crossing improvements as part of larger resurfacing and reconstruction projects. Both the City and the County tend to use a request-based system to determine where to make stand-alone pedestrian crossing improvements, but would like to move towards a more systematic and proactive approach to crossing improvements. The current processes include:

- When a marked crossing is requested at an unsignalized location, City staff refer to the Saint Paul Department of Public Works Traffic and Lighting Division Traffic Engineering Section Policy and Procedure Manual. City staff consider factors such as average daily traffic, roadway width, and crash history, among others.
- County staff evaluate a marked crossing request with guidance from the MnDOT Pedestrian Crossings on Minnesota State Highways decision flowchart, (published in 2005 and updated in a Technical Memorandum released in 2015) which considers elements such as average daily traffic and number of students crossing. Staff are flexible on the guidelines within school areas, and will consult the school's SRTS plan, if available.
- Both City and County staff noted that the lack of clear communication tools for pedestrian
 crossing decisions creates challenges for their work. They also lack formal processes and
 identified funding sources for implementing school speed zones, High Intensity Activated
 Crosswalk (HAWK) beacons, and Rectangular Rapid Flashing Beacons (RRFBs).
- The Traffic Engineering Division of Saint Paul Public Works is in the process of evaluating and adjusting the city's 385 traffic signals to include Leading Pedestrian Intervals. Staff follow the "Implementation of Leading Pedestrian Interval at Signalized Intersections" policy in determining locations where LPI is implemented. LPIs are signal adjustments that make crossing pedestrians more visible to turning drivers, reducing a common cause of crashes. LPIs give pedestrians a walk sign 4 to 5 seconds before cars are given a green light. This allows pedestrians a "head start" through an intersection, so that are more visible to turning vehicles once the vehicles receive a green light. These signal timing adjustments are made in Saint Paul by city staff; no capital funding is needed. Since 2015, at least one crossing phase of approximately 150 intersections have been upgraded to include this feature. LPI is not installed at intersections with leading left turn permissive phasing. Staff continue to evaluate crossing phases at remaining intersections for LPI improvements as time allows.

Recommended Policies and Practices

The Saint Paul SRTS Policy Plan includes detailed recommendations for updating pedestrian crossing policy and practice. These recommendations are included below, and will be addressed in detail as part of the Pedestrian Plan.

- In coordination with the County, create a simplified unsignalized crossing guidelines flowchart, with a
 design guideline matrix to identify specific recommended treatments if the flowchart indicates
 pedestrian crossing improvements are appropriate.
- In coordination with the County, create a crossing evaluation flowchart and design treatment matrix specific to school crossings. This would help establish consistency in school crossing treatments and help City staff prioritize school crossing improvements.
- Develop guidelines for signage and RRFBs at crosswalks in school zones and guidelines for school speed zones in coordination with the County.
- Adopt a policy for installation of refuge medians, RRFBs, and HAWK signals similar to the existing curb extension and traffic circle policies.

- Adopt a specific policy for pedestrian crossings at signalized intersections. It is recommended that the policy include the following:
 - All legs of a signalized intersection should have marked high-visibility crosswalks. Where space allows, consider curb extensions to reduce crossing distances for pedestrians.
 - A policy preference for short signal cycles (a current practice among Saint Paul staff that is not codified).
 - A policy that forbids pedestrian signal timings that result in multi-stage pedestrian crossings.
 - Restrict left-turning movements, create left-turn bays, or install left-turning signals at intersections near schools.
 - Implement automatic leading pedestrian intervals at signals within a half-mile of schools.

Saint Paul Pedestrian Infrastructure Funding

Information in Table 2: Existing Pedestrian Infrastructure Policies and Practices comes from the Saint Paul Pedestrian Assessment, the Saint Paul Public Works Five-Year Capital Plan, and additional supplemental information provided by Saint Paul staff. Additional information about each funding program follows the table.

Table 2: Existing Pedestrian Infrastructure Funding Sources

	Funding Source	Use	Five Year Capital Plan Budget (2018-2022)
1.	Sidewalk Reconstruction Program	Reconstruct deteriorating sidewalks.	\$500,000 City general funds in 2018; future budget unknown
2.	Sidewalk Infill	Construct infill sidewalk where gaps exist.	Funded 100% by property owner assessments.
3.	Bicycle, Pedestrian	Install new crosswalk markings and	\$350,000 in 2018 ¹
Program pedestrian sig improvements		signage, bike lane markings, centerline pedestrian signs; add signal improvements, add temporary pedestrian improvements	\$250,000 2019-2022
4.	Safe Routes to School Install infrastructure around schools to support safe walking and bicycling.	Install infrastructure around schools to	2018-2019: \$0
		support sare walking and bicycling.	2020-2022: \$125,000.
5.	Street Reconstruction Projects	Construct new sidewalk where none exists; reconstruct curb ramps to ADA standards. Other crossing improvements (medians and bumpouts) at discretion of city engineer.	Pedestrian elements are included in the total project cost for street reconstruction projects.
6.	Mill and Overlay Program	Reconstruct curb ramps to ADA standards.	Varies annually by program size.
7.	Capital Improvement Budget Process	Prepared bi-annually. Projects submitted to the CIB process must finance the acquisition, betterment, physical	Varies annually. Corridor pedestrian improvements and sidewalk infill

¹ In 2018, this program's \$350,000 annual budget has been allocated toward specific projects in lieu of routine programmatic expenses. These projects include local match for a federal Transportation Alternatives Program grant to construct missing sidewalks near Expo Elementary and a traffic study contemplating the permanent closure of East 6th Street between Mounds Boulevard and Maria Avenue.

development, redevelopment and other improvement of City-owned land and buildings, and have a useful life of at least ten years.	projects are planned in 2018 and 2020.
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1. The Sidewalk Reconstruction Program has a 2018 budget of \$500,000. In past years, including 2012-2016, the program's annual budget was \$1,000,000.

The table below provides a snapshot of sidewalk reconstruction over the last five years in Saint Paul. The city reconstructs approximately six to eight of its 1,100 miles of sidewalk annually. Saint Paul Public Works uses engineering judgment to determine locations where sidewalk replacement is most needed.

Year	Mileage Replaced (Excludes Curb Ramps)
2012	6.7
2013	8.3
2014	5.8
2015	5.8
2016	6.2

Sidewalks are currently replaced at a width of five feet. In the past, sidewalks were installed at six feet wide. The City of Saint Paul began replacing sidewalks with the narrower five-foot width several decades ago to reduce the cost of creating sidewalks and to increase boulevard space and rooting space for trees. As a result, some blocks in the city have both five-feet and six-feet wide sidewalks sections on the same side of the block.

When Ramsey County reconstructs roads in Saint Paul, infill sidewalks are paid for by the county at 50 percent of the cost. Local municipalities must fund the remaining 50 percent of the cost. For replacement sidewalks along county roads, existing sidewalks are evaluated by the County. If they are deemed in serviceable condition, the County pays 100 percent of the cost of replacing these sidewalks. If they are not deemed serviceable, the County pays 50 percent of the cost of replacing the sidewalks and municipalities bear the remaining 50 percent of the cost.

On County mill and overlay projects, the county does not fund any sidewalk work aside from replacement of pedestrian curb ramps. Cities can apply for a cooperative agreement project through the County for replacement of sidewalks on County roads that are not being reconstructed, and the County participates at the same levels noted above.

Saint Paul operates an innovative Sidewalk Poetry program to incorporate public art into the pedestrian realm. Poems written by residents are imprinted in sidewalks during reconstruction.

- 2. The City of Saint Paul addresses gaps in the sidewalk network through four primary funding sources. Sidewalk infill is completed on a project by project basis; no stand-alone program exists to fund new sidewalk construction in areas where none currently exists.
 - Property owner assessments. When new sidewalk is added to a property, the property owner
 is assessed the full cost of the sidewalk. In the past, the city has chosen to only assess the
 cost of sidewalk panels; sidewalk elements such as retaining walls and curb ramps are paid
 for from city funds allocated on a case-by-case basis. These projects are initiated by property
 owner request or in cases with strongly demonstrated community and political support.

- Via county, federal and state grants. City staff seek to complete sidewalks on arterials and in locations that connect existing sidewalks. The City has successfully applied for county and federal funding to address some sidewalk gaps in the city. These are identified as individual programs in the City's Capital Improvement Budget, which provides local match for these funds. In these instances, no costs are assessed to adjacent property owners.
- Site Plan Review. The City's Comprehensive Plan identifies a goal of a connected sidewalk network. The City may require sidewalk construction as a condition of approval on properties that submit redevelopment plans for site plan review where no sidewalk currently exists.
- Street reconstruction. See below.
- 3. The Bicycle, Pedestrian, and Traffic Safety and the Signalized Intersection Safety Improvement funds are annual programs intended to fund small requests or issues that arise each year related to street safety. Both programs are typically budgeted at \$250,000 annually. The Traffic Engineering Division of Saint Paul Public Works prioritizes uses of these funds accordingly:

First commitments for funding are:

- Centerline pedestrian sign program (replacement signs as needed)
- Dynamic speed display rotation program (replacement signs as needed)
- Addition of bike facilities in coordination with overlays

The second target area is enhancements to other street projects. Examples include:

- Vehicle detection at traffic signals on mill and overlay projects,
- ADA pedestrian signal installation and countdown timers
- High visibility crosswalk markings

The third target area for funds are projects that leverage other funds. Examples include:

- RRFBs where property owners or public partners fund portions of the cost
- Dynamic speed signs where property owners or public partners fund portions of the cost
- Materials for temporary pedestrian crossing improvements (bumpouts and islands)
- Matching funds for Safe Routes to School projects

In 2018, this program's \$350,000 annual budget has been allocated in full toward projects and will not be used toward the routine programmatic expenses noted above. These projects include local match for a federal Transportation Alternatives Program grant to construct missing sidewalks near Expo Elementary and a traffic study contemplating the permanent closure of East 6th Street between Mounds Boulevard and Maria Avenue.

- 4. The Safe Routes to School capital program is intended to fund new infrastructure around schools that have completed Safe Routes to School plans. In 2017, this program was funded at \$125,000 and used to mark crosswalks and build temporary and permanent bump-outs near three Saint Paul schools. This program is not funded in 2018 or 2019. The Department of Public Works' Five-Year Capital Plan budgets \$125,000 annually for this program from 2020 through 2022.
- 5. In 2017, the City adopted the Sidewalk Infill Policy to support new sidewalk construction during road reconstruction projects. The policy states:

Sidewalk construction costs are included in the overall cost of roadway construction projects. Assessments will be made based upon the benefits to the properties included in the overall project.

This policy applies only to construction of new sidewalk where no sidewalk currently exists on streets with roadway construction taking place. This policy will not apply to mill and overlay projects or to other street rehab projects.

Whenever new sidewalks are included in a road construction project, new sidewalk will be constructed on or added to both sides of the street, unless one of the following applies:

- a. The street is a dead-end street or cul-de-sac, and has no abutting multi-family buildings, commercial property, park, play ground or transit stops.
- b. Retaining walls are needed that are estimated to double the cost of the sidewalk. In such cases, reasonable efforts will be made to maintain a sidewalk on one side of the street. A "V" curb will be utilized whenever possible up to 24" high in place of a retaining wall. More than 24" in height will require the construction of retaining walls.
- c. There is not adequate existing ROW to install a sidewalk and boulevard along with other desired roadway elements in accordance with the City Street Design Manual. In such cases, reasonable efforts will be made to maintain a sidewalk on one side of the street.

Generally, sidewalk construction will be prioritized over tree preservation. Sidewalk alignment will be coordinated in consultation with the City Forester to preserve existing trees, where feasible.

All sidewalk construction will meet current ADA standards. Street reconstruction projects also include new curb ramps, and pedestrian safety features such as curb extensions and medians at the discretion of the design engineer.

Street reconstruction projects are completed as part of the city's annual SPS program, or as stand-alone projects with Metro State Aid funds. SPS projects are typically funded via a combination of street improvement bonds and assessments to adjoining property owners of approximately 20 to 25 percent. Metro State Aid projects are paid for from state funding for designated MSA routes.

- 6. All street maintenance projects (mill and overlays) in Saint Paul include improvements to curb ramps that do not meet ADA standards. Improvements to adjacent sidewalks are not included in mill and overlay projects. As part of the mill and overlay project, city traffic engineers review existing signing and striping on the street and make recommendations to add or remove crosswalk markings.
- 7. Stand-alone bicycle and pedestrian improvement projects are identified in the city's Capital Improvement Budget. The city's bi-annual budgeting process allows both city staff and citizens to request projects for consideration in the Capital Improvement Budget. Projects are presented to the Streets and Utilities Task Force for ranking and recommendation to the Capital Improvement Budget Committee, which selects projects for inclusion in the city's budget.

Programs, Practices and Recommendations

The City has existing policy support for pedestrian safety programming and enforcement. The City has also established some programs to support pedestrian safety and engage residents around pedestrian issues. Previous plans have identified additional opportunities for the City to support walking through enforcement, engagement and evaluation. Existing programs and staff initiatives as well as recommended program enhancements for enforcement, engagement and communications, and evaluation and performance measures are summarized below.

Enforcement

Existing programs and staff initiatives

STOP FOR ME CAMPAIGN

- The Stop for Me campaign is an initiative of the Saint Paul Police, the Saint Paul District Councils, and community groups to reinforce the message that motorists must stop for pedestrians at every intersection, even when no crosswalk is marked. The campaign conducted 107 pedestrian safety events in 2017.
- It is funded via annual grants from the Toward Zero Deaths initiative and one-time allocation from the City of Saint Paul to support enforcement around schools in 2016-2017.
- Grants pay for officer overtime at enforcement events; additional costs include on-duty time for
 program administration and enforcement during regular shifts that are absorbed by officer salaries.
 Community volunteers are important to support the events.

SAINT PAUL POLICE DEPARTMENT

- SPPD Manual 370.00 School Police Patrol Coordinator: Police department will staff a school police
 patrol coordinator who is responsible for school patrol operations. This person will conduct training on
 safety and safe routes to school, coordinate with related stakeholders, and enforce regulations that
 are in place.
- SPPD Manual 190.01 Traffic Enforcement Objective: Police department seeks to use education and enforcement to reduce crashes and injuries, including to pedestrians. Enforcement may include warning, citation, application for complaint, or physical arrest.
- School Patrol Training: Comprehensive training on how to be a school crossing guard at Saint Paul schools that includes information about what to do in an emergency.

SAINT PAUL POLICE- RAMSEY COUNTY TRAFFIC SAFETY INITIATIVE, ACTIVE UNTIL SEPTEMBER 30, 2017

The mission of the Ramsey County Traffic Safety Initiative (RCTSI) is to create safer roadways
throughout Ramsey County collaboratively by raising public awareness and enforcing all traffic
regulations. Media and enforcement targeting: Impaired Drivers, Distracted Driving, Seatbelt Use and
Speed Compliance.

Recommended program enhancements

SAINT PAUL SAFE ROUTES TO SCHOOL POLICY PLAN

 Support an adult crossing guard program with police officers and/or paid adults for SPPS in collaboration with Ramsey County, Saint Paul Police Department, and SPPS. Currently Saint Paul police officers receive some training about helping students cross the road, but there is not a program.

- Advance equity in enforcement by working with the Saint Paul Police Department to adopt a policy of
 warnings and education for all but the most egregious traffic violations potentially in parallel with a
 promotional campaign that connects youth bicyclists with bike helmets and lights and provides safety
 education in lieu of citations.
- Start a Vision Zero program to promote policies that complement SRTS by working to eliminate traffic
 fatalities and prioritizing engineering improvements and outreach activities near schools, where some
 of the most vulnerable populations travel.

SAINT PAUL ROADWAY SAFETY PLAN

- Publicize and support high-visibility enforcement efforts, with a focus on belt use, inattentive driving, speeding, and impaired driving.
- Conduct additional media and public outreach campaigns that communicate new information, are targeted and part of a sustained campaign, and utilize social media.
- Provide enhanced enforcement of red light running at corridors using confirmation lights.
- Strengthen local liquor establishments selling and serving practices.

RAMSEY COUNTY ROADWAY SAFETY PLAN

• Traffic crashes can be prevented by a combination of education and enforcement focused on belt use, inattentive driving, speeding, and impaired driving.

Engagement and Communications

Existing programs and staff initiatives

PEDESTRIAN SAFETY ADVOCATE

 In 2017, Saint Paul created a new full-time position: Pedestrian Safety Advocate. The Pedestrian Safety advocate is tasked with developing the pedestrian plan and identifying policies and strategies for investment in pedestrian infrastructure.

HUMAN RIGHTS AND EQUAL ECONOMIC OPPORTUNITY DEPARTMENT

The Human Rights and Equal Economic Opportunity (HREEO) department works to promote justice
and equity by confronting issues of discrimination and providing avenues for accessibility and
economic opportunities for all residents and businesses. HREEO responds to complaints regarding
safety and accessibility issues for members of the disability community, and provides training for city
staff on how best to meet ADA requirements.

SAINT PAUL SAFE ROUTES TO SCHOOL

 The City and SPPS currently have a SRTS steering committee, made up of key individuals involved with SRTS activities. The SRTS Steering Committee provides staff support to SRTS efforts.

SAINT PAUL CONNECT

• Saint Paul Connect is a web form that allows citizens to identify issues in their areas and report incidents for investigation by city staff. This is accessed via stpaul.gov/connect.

WALKING GROUPS

Walk with a Doc' is a partnership between St Paul Public Housing Agency, Allina Health United Hospital and St Paul Ramsey County Statewide Health Improvement Partnership to improve community health and social wellbeing by organizing monthly group walks for St Paul PHA residents. A guest healthcare provider joins each month to chat about a current health topic and walk with the group. These thirty minute walks are for all ages and all abilities; participants use feet, strollers, canes, wheelchairs, and other walking aids to move through the neighborhood. The event rotates to a different public housing site each month. After the walk, the group gathers for healthy snacks and socializing.

Recommended program enhancements

SAINT PAUL PEDESTRIAN ASSESSMENT

- Examine the implementation of innovative community engagement strategies. Creating online surveys, hosting pop-up meetings at community events, or coordinating walking audits of specific neighborhoods could increase participation by residents and stakeholders. Partner with local pedestrian advocacy groups or work with the district councils to get people throughout Saint Paul involved.
- Share data with the community as it is collected. Identify opportunities for departments to work together to improve data collection. Use data to generate prioritization criteria to identify the areas with the greatest need for safety improvements.
- Investigate more options for snow removal and sidewalk maintenance. These options could include increased educational or enforcement campaigns, or the identification of priority pedestrian connections to clear first in the event of significant snowfall.
- Clarify how residents should report issues with sidewalk infrastructure as well as make requests for improvements.
- Identify opportunities for collaboration. Pedestrian Advocacy groups can provide support for pedestrian-oriented projects and help to encourage resident participation in planning processes.
- Expand the Safe Routes to School program in Saint Paul.
- Work with the Minnesota Toward Zero Deaths campaign to implement pedestrian safety improvements focused on education, enforcement, encouragement, evaluation, and engineering.

SAINT PAUL SAFE ROUTES TO SCHOOL POLICY PLAN

- A paid City SRTS Coordinator with an SRTS workplan, an SPPS SRTS Coordinator, and a County SRTS Coordinator would be valuable positions to provide consistency and synchronize messaging and outreach between the City, County, SPPS, families, and individual schools.
- The City provides information about SRTS on its website. However, it could include a more robust set
 of resources. Additional resources to include on the pages are existing local and best practice SRTS
 resources, upcoming events and information for interested parents seeking to establish SRTS
 activities and events.
- Staff working on SRTS activities should work with the City's communications staff to distribute information and invitations to SRTS events via social media.
- The SRTS steering committee should establish a regular meeting schedule, such as monthly or quarterly, to share experiences and talk through challenges group members encounter.
- Tie the "Stop for Me" campaign to the City's other SRTS efforts, highlighting how the campaign is one of several efforts to make the school commute safer.
- Expand the Stop for Me campaign to focus on school travel during back-to-school times and when Daylight Savings time ends.
- Develop a transportation safety campaign or a neighborhood yard sign campaign with messaging such as "Drive Like your Kids Live Here," MnDOT's Share the Road campaign, Vision Zero, StreetSmarts, or similar messaging.

- Work with SPPS to develop Suggested Route Maps for each school and publicize the recommended walking and bicycling routes to school, as well as safety tips and contact information for the SRTS program.
- Provide information and handouts to the public about safe walking, bicycling, and driving behaviors through libraries and community centers.
- Develop a clear process for informing relevant SPPS staff about upcoming transportation improvement projects.
- Clarify the point-of-contact for families providing school transportation safety concerns.
- Invite parents and members of the school community to participate in walk audits/assessments to evaluate the traffic conditions around the school and to identify necessary improvements.
- Engage with youth and families in city transportation planning and projects by inviting students to
 participate in walk audits and mapping exercises, and by inviting students to speak at council and
 community meetings.
- Engage community members in SRTS through neighborhood beautification projects like intersection painting and clean ups.

Evaluation and Performance Measures

Existing programs and staff initiatives

DATA COLLECTION

- The Transportation Planning and Safety Division of Saint Paul Public Works collects data annually to
 measure pedestrian and bicycle traffic at selected intersections. City staff began collecting this data in
 2013; the total number of intersections has increased over time as volunteer capacity to conduct
 counts permits. This information allows the city to evaluate how use of the bicycling and pedestrian
 network changes over time.
- The Saint Paul Police Department has been tracking bicyclist and pedestrian crashes since 2015.
 This allows the city to track detailed information related to pedestrian and bicyclists crashes and measure progress toward reducing these crashes over time.
- Some Saint Paul public schools collect school transportation tallies from students. Often, these are
 initiated through Safe Routes to School planning grants, though a few schools collect these counts
 independently. As more schools begin or continue to collect counts, this data can be used to track
 progress toward promoting bicycling and walking to school over time.

Recommended program enhancements

SAINT PAUL STREET DESIGN MANUAL

- Examples of measures that should be considered:
 - The length of new sidewalks and bicycle facilities in the city
 - The number of children who travel to school by walking or bicycling
 - The mode share of transit, walking, and bicycling
 - Traffic morbidity and mortality decreases for all modes and age groups
 - Residents' feelings of safety and comfort increase

COMPLETE STREETS ACTION PLAN

- Develop a complete streets checklist to track how projects meet complete streets policies.
- Establish a bicycle and pedestrian counting program.

SAINT PAUL SAFE ROUTES TO SCHOOL POLICY PLAN

- Add policy language requiring annual evaluation of the Street Design Guide's performance measure: the number of students who walk and bike to school in the City of Saint Paul.
- Adopt a Comprehensive Plan goal for bicycle and pedestrian mode share, and reference it in updates to the SRTS Plan, Bicycle Plan, Pedestrian Plan, and Street Design Guide.

Challenges to Walking in Saint Paul

This section presents ten of the greatest challenges to achieving safe walking in Saint Paul. These challenges were identified through review of the policies and programs in this document, and discussions with Saint Paul Public Works staff.

Funding

Saint Paul has a wide gap between infrastructure needs and available funding. Investment in the city's sidewalk system has stayed the same over time, while inflation, evolving requirements to serve people with disabilities, and aging of the network have increased the cost of repairing sidewalks. The city does not have a dedicated funding source for improvements that make crosswalks safer, such as signing, striping, curb extensions or medians.

Equity in Prioritization and Decision-Making Processes

Saint Paul's current approach to distributing limited funding for crosswalk improvements and sidewalk repairs is not perceived to be equitable or transparent by community members. Some funding is budgeted each year to respond to known safety concerns. However, some of the city's high-need areas may be left without improvements because there is not a defined process for evaluating and prioritizing needs.

Programs

The city does not have full-time staff to promote education, encouragement, enforcement, or evaluation programs to support safe walking. Existing programs, such as Stop for Me, rely on grant funding and volunteers, and are not permanently part of any department's work program.

Attitudes and Norms

Drivers in the Twin Cities do not routinely stop for pedestrians, even though it is required by state law. A recent study of St. Paul crosswalks found that fewer than two in ten drivers stop for pedestrians at some intersections. People who walk are less safe and feel less comfortable crossing the street. In addition, this behavior creates more pressure to provide costly engineering solutions to help people cross safely.

Internal Coordination

Saint Paul does not have a formal coordination process between divisions that design, construct, maintain, and review projects with pedestrian improvements. This can result in differing standards or lost opportunities to implement best practices to improve sidewalks and crosswalks.

Creative Design Solutions

Saint Paul does not routinely implement creative design solutions to address pedestrian challenges. The city does not typically use low-cost, temporary, or alternative treatments and designs for pedestrian infrastructure. This limits the city's flexibility and slows the pace of improving the walking environment in Saint Paul.

Maintenance and Reporting

Saint Paul's existing pedestrian infrastructure is not well-maintained everywhere. At the same time, there is limited data collected on pedestrian infrastructure, which can make it difficult for the city to monitor where improvements are needed and quantify the condition of the system as a whole.

Pedestrian Policies and Procedures

Saint Paul has few procedures and limited guidance for engaging residents about walkability, prioritizing pedestrian needs in street projects, and measuring progress. Existing policies and procedures are often difficult to find and can be challenging for the public to understand. Residents often contact multiple staff members with pedestrian-related questions. This can result in residents receiving multiple answers to the same question and inefficient staff time.

Arterial Roadway Jurisdiction

Ramsey County and the Minnesota Department of Transportation make decisions about county and state highways in Saint Paul. These streets are typically designed to carry more traffic and move cars at higher speeds than roads owned by Saint Paul. These streets see higher rates of pedestrian crashes, but the City of Saint Paul has limited control over changes that would make these streets safer for walking.

Winter Maintenance

Saint Paul is a winter city. Snow, ice, and long nights create additional challenges for pedestrians. Snow plowing causes snow to build up on curb ramps or in medians. Meanwhile, individual property owners are responsible for clearing sidewalks, creating a patchwork of conditions. Travel in winter can be especially challenging for the very old, very young and those with mobility impairments.