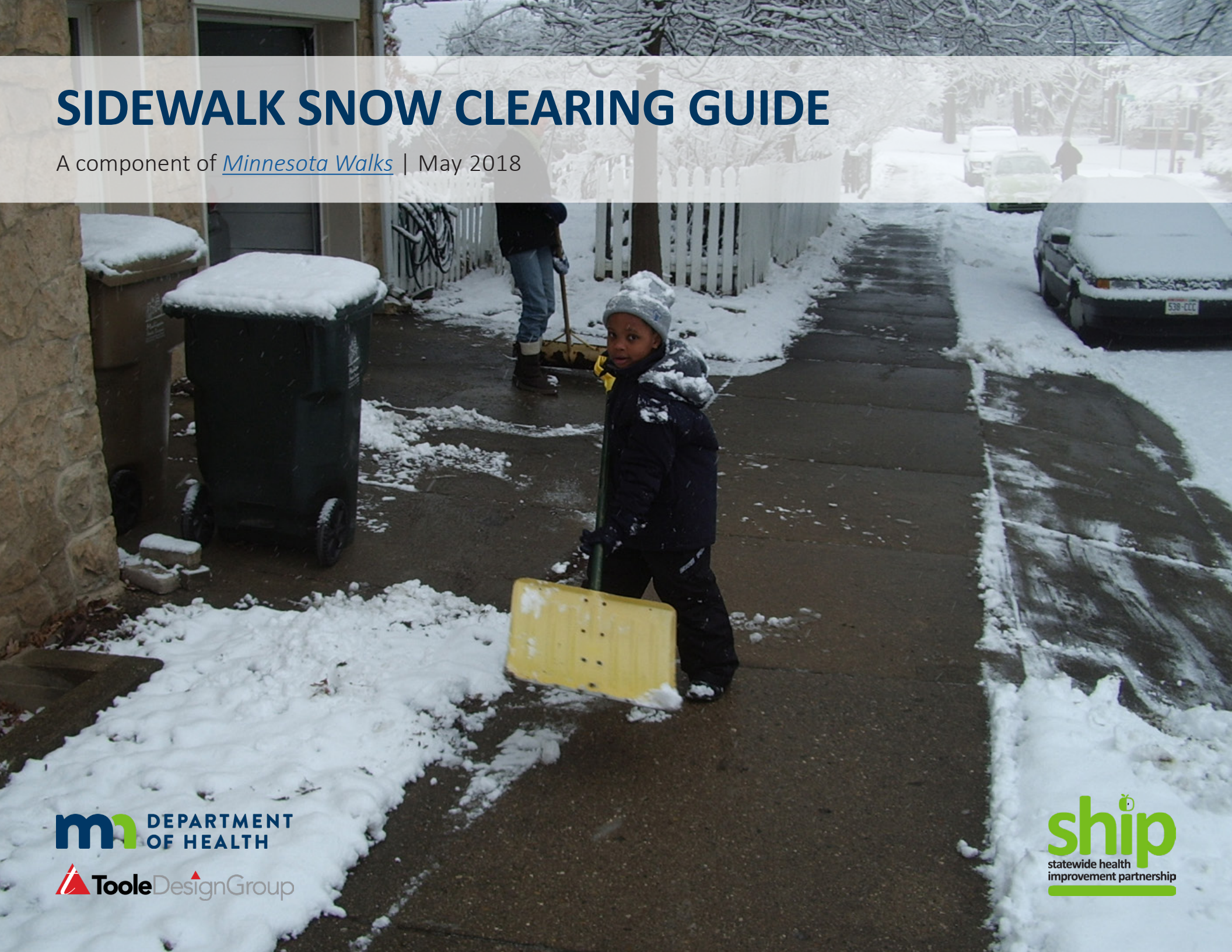


# SIDEWALK SNOW CLEARING GUIDE

A component of [Minnesota Walks](#) | May 2018





## Introduction

In Minnesota, snow and ice on sidewalks and crosswalks can make walking challenging and hazardous during the winter months. Through [Minnesota Walks](#), a collaborative vision for improving walking in Minnesota, residents from around the state reported that sidewalks covered in snow and ice is one of their biggest obstacles to walking in the winter. One of the six major themes identified in Minnesota Walks was “Minnesota winter and year-round upkeep,” which included a goal to “maintain year-round walking infrastructure by ensuring necessary repairs and clearing snow and ice in a timely fashion.”

In some Minnesota communities, sidewalks are uncommon in residential areas and only

present in shopping or downtown areas. In others, sidewalks are prevalent in most commercial and residential areas and people rely on them for various uses, including to get to school, work, or for general exercise. This guide describes various options for keeping sidewalks and crosswalks clear year-round, along with case studies on how cities around Minnesota and beyond have turned these options into public policy.

## Importance of Sidewalk Snow Clearing

Clearing snow and ice from all walking infrastructure —not just along sidewalks, but also at crosswalks, curb ramps, and bus stops—is an essential part of making

walking practical, safe, and comfortable in the winter. It promotes and encourages year-round walking and can reduce the risk of injuries from slips and falls.

Approximately one-third of the U.S. population does not drive. This group includes children, people with certain disabilities, seniors, those who cannot afford a personal vehicle, and those who simply choose not to drive. Sidewalks and crosswalks are necessary infrastructure for ensuring that people can walk or use a mobility device to access destinations or public transit. Additionally, Americans with Disabilities Act (ADA) [Title II Regulation §35.133](#) requires maintaining ADA-compliant access to walkways year-round, which includes snow and ice clearing.



Figure 1: A well cleared sidewalk along Main Street in the City of Hutchinson, Minnesota.

# Common Challenges

Keeping our public walkways and crosswalks clear of snow and ice can be a difficult task in Minnesota cities and towns.

## Policies & Responsibilities

### Sidewalk snow clearing is not required by the State of Minnesota

*There is no Minnesota state statute that requires municipalities to establish or enforce a sidewalk snow clearing policy. Municipalities without sidewalk snow clearing policies may experience more unshoveled sidewalks and hazardous winter walking conditions.*

### Municipalities typically require individual property owners to clear snow

*Most municipalities in Minnesota have an ordinance that requires property owners to clear snow and ice from sidewalks abutting their properties. The challenge with property owner sidewalk snow clearing policies is that many municipalities do not enforce them, allowing sidewalks to go unshoveled without consequence. Lack of enforcement means there is no accountability for clearing sidewalks.*

### Bus stop snow clearing

*The responsibility of clearing snow from bus stops is often unclear, as it can fall on the municipality, the transit agency, or property owners. One of the biggest challenges is clearing passageways through snowbanks along bus stops to allow passengers to access buses.*

### Vacant property snow clearing

*Sidewalks abutting vacant properties are often left uncleared, and contacting property owners is a challenge. These may be unoccupied rental properties or foreclosed properties owned by a financial institution.*

## Practices

### Snow windrows left at street corners

*Street corners are challenging to maintain in the winter because of snow windrows—piles of snow left behind by snow plows—that form at intersections near corner curb ramps. Clear intersection corners and curb ramps are especially important for people who use wheelchairs or other mobility devices.*

### Plows pushing snow onto sidewalks

*It can be difficult for snowplows to control exactly where they deposit piles of snow. This may result in snowplows pushing snow onto sidewalks or street corners, sometimes after a sidewalk has already been cleared. This challenge is especially common when sidewalks are placed directly adjacent to the street curb and do not have a buffer or boulevard space for snow storage.*

## Ability

### Many people are unable to clear sidewalks

*It can be difficult or impossible for some people to remove snow and ice from sidewalks adjacent to their property within the timeframe required by local ordinances. The responsibility can be challenging for seniors, people with disabilities, pregnant women, single parents, and people who work multiple jobs to support their families. Other barriers to clearing snow from sidewalks include illness or travelling for work or vacation.*

## Climate

### Fluctuating weather patterns create thaw-freeze cycles and icy sidewalks

*When temperatures rise above freezing, the snow on or along sidewalks melts and flows onto the sidewalk, only to later freeze when temperatures drop below freezing. These temperature fluctuations can result in icy and treacherous sidewalk conditions.*



## Sidewalk Treatment

When sidewalks become icy and hazardous, property owners are often inclined or encouraged to use salt to melt ice and reduce slipperiness. Rock salt (sodium chloride) is commonly used because it is an effective anti-icing and deicing agent. However, rock salt may eventually trickle into lakes, rivers, and other water bodies and cause environmental damage. It can also cause other issues such as accelerating concrete deterioration and harming plants, trees, wildlife, and pets. For those reasons, communities may want to discourage property owners from using too much salt on their sidewalks, or encourage a mixture of salt and sand. Sand is an alternative to salt, but it does not provide the melting effect that salt does. Using too much sand can cause drains to clog and may create dust, especially in the spring when snow has melted.

In Wisconsin, the City of Madison, along with other county, state, and university partners, are making a concerted effort to reduce salt usage to protect groundwater and local water bodies. The [Wisconsin Salt Wise Partnership](#) aims to educate homeowners, municipal agencies, motorists, and other others who might apply salt on the environmental effects of high salt usage, and to instruct the public on ways to reduce salt usage. Homeowners are encouraged to use sand and salt sparingly and to instead use hand spreaders, pre-treat sidewalks in front of their homes with brine, and remove snow regularly to prevent ice buildup on sidewalks.



## Sidewalk Snow Clearing Responsibilities

The responsibility of sidewalk snow clearing generally falls into three categories of policies:

### Property Owner Responsibility

Property owners are responsible for clearing snow and ice from sidewalks adjacent to their property within a defined timeframe.

### Partially Municipality-Led

The municipality clears snow and ice from priority sidewalks while property owners are responsible for clearing sidewalks in the rest of the municipality.

### Municipality-Led

The municipality takes responsibility for clearing snow and ice from all sidewalks using municipal staff and/or hiring contractors to perform the work.

*More detailed descriptions of each sidewalk snow clearing policy are provided on the following pages.*



# Property Owner Snow Clearing Policies

In most municipalities in Minnesota, municipal code requires property owners to keep sidewalks adjacent to their property safe for public travel, which includes clearing snow and ice that has accumulated on the walkway. There are many variations on the timeframe property owners are given to clear snow and ice, the level of enforcement of the policy, and the sidewalk conditions that are expected. Policies should give property owners a fair amount of time to clear sidewalks, but should also ensure snow removal is completed in a timely manner for equitable travel by those who walk. Municipal code should balance the needs of the property owner with the needs of people traveling on foot. The timeframe established for clearing sidewalks is generally between 24 and 48 hours after a snowfall has stopped.

Enforcement of these policies varies widely. Some municipalities issue warnings for non-compliance, followed by an inspection from municipal staff. If sidewalks are still uncleared, citations may be given to property owners who do not clear sidewalks after a defined time frame following the warning. If sidewalks are still not clear of snow and ice after the warning period, municipalities will either clear the snow themselves or order a contractor to clear the snow, and the resident will be billed for the service. If bills are left unpaid, they are added to the property owner's tax bill at the end of the year. Other municipalities do not provide warnings for non-compliance, and will issue a citation immediately to property owners.

## Ideas for Getting Started

- » If a sidewalk snow clearing policy doesn't exist, begin discussing one with community members, municipal staff, council members, and other stakeholders. Policies should clearly define the responsibilities and timeframe for snow clearing.
- » Develop a public reporting system to allow residents to report uncleared sidewalks. Many communities use software such as See-Click-Fix, or similar.
- » Create an enforcement policy for sidewalk snow clearing non-compliance. Active enforcement from municipal staff may help increase sidewalk snow clearing compliance.
- » Determine if your community should issue citations to non-compliant property owners, and what the appropriate fine for citations might be. Consider developing an equitable, sliding scale fine for citations based on property owner income level or property values.
- » Develop a plan to increase public awareness regarding sidewalk snow clearing responsibilities and requirements, which could include social media outreach, flyers (See Figure 3), or a dedicated webpage to sidewalk snow clearing.
- » Pair new sidewalk clearing policies with a sidewalk snow clearing assistance program (see page 13).

Figure 2: The typical process for sidewalk snow clearing enforcement in municipalities that enforce their policy that requires property owners to clear snow from sidewalks abutting their properties.







## Case Study: Madison, WI population: 252,551

A Madison ordinance requires property owners to clear the entire width of the sidewalk, from edge to edge, by noon on the day after a snow event has stopped. Madison's policy is unique in that it does not issue warnings for non-compliance. If property owners do not clear snow and ice from sidewalks by noon on the day following a snowfall, they can be immediately issued a citation and fine. First time offenders are fined \$124, and repeat offenders are fined \$187.

After the citation is given, the property owner has until about 7 am the next morning to remove snow and ice from the sidewalks, and if they are still uncleared, the City will order crews to clear the snow. The cost for the City to remove snow and ice is added to the fine, and unpaid bills are added to the owner's property tax bill. The City's no-warning policy has been in place for over 30 years.



Figure 3: A cleared sidewalk in Madison.  
Credit: City of Madison





**Minnesota Community Spotlight:**

Red Wing  
population 16,526

Like many municipalities in Minnesota, the City of Red Wing has [an ordinance](#) stating that property owners must remove snow and ice from sidewalks within 24 hours after the snow/ice has stopped accumulating. What makes Red Wing’s policy unique is how the City consistently enforces its ordinance. After the 24 hour window following a snow or ice event, a door hanger is posted on residences and businesses that have not cleared the sidewalks abutting their property. The door hangers are a one-time courtesy reminder for residents out of compliance, and they include information about the additional 24 hours the resident has to bring their sidewalk into compliance with the City’s ordinance. After the additional 24 hours, City crews remove the snow/ice and take a photo of the work completed, and a \$120 fee is charged to the property owner. The City then posts another door hanger with a [Notice of Work completed](#), and the invoice is mailed to the property. Unpaid invoices are added to the property owner’s annual tax assessments. More information on the City of Red Wing’s sidewalk snow clearing policy can be found [here](#).

**Remember to Shovel Your Sidewalk!**

*It's the neighborly thing to do.*

Many people, including children, the elderly, and those using wheelchairs and strollers depend on sidewalks all year long.

**So be Red Wing nice. Clear your snow and ice!**

*(And if you have a neighbor who needs help shoveling, consider lending a hand.)*

To keep Red Wing’s sidewalks safe and pleasant for everyone, Red Wing’s policy states that all property owners must clear their sidewalk within **24 hours of snow or ice**. City crews will inspect and shovel private sidewalks that have not been cleared, and property owners will receive an invoice for \$120.

**Would you consider shoveling sidewalks for those who can't? It's a great way to volunteer or earn money for you or your organization. Email: [walkbikeredwing@gmail.com](mailto:walkbikeredwing@gmail.com) to be added to the Shoveling Resource List.**

The City of Red Wing provides **free sand** at 229 Tyler Road North or 321 Bluff Street.

Policy affects all property owners, including landlords.

Questions? Call Public Works at 651-385-3674.

**City of RED WING**

Figure 4: The City of Red Wing created a flyer to remind property owners of their responsibility to clear sidewalks abutting their properties. Credit: City of Red Wing



## Partial Municipality-Led Sidewalk Snow Clearing Policies

Partial municipality-led sidewalk snow clearing policies typically require property owners to clear sidewalks abutting their property, while municipal staff take responsibility for clearing snow on a select number of priority sidewalk routes. Municipalities with this type of policy develop sidewalk priority routes to determine which sidewalks staff will clear. Most municipalities with partial municipality-led snow clearing policies use their own staff and

equipment to perform the work. Staff may be from the municipal public works department, parks department, or a combination. The percentage of the overall sidewalk network that is categorized as priority routes varies, but priorities typically include routes around schools and routes with intensive land uses or high volumes of people walking.

### Ideas for Getting Started

- » Research the cost and feasibility of a partial municipality-led sidewalk snow clearing policy. Refer to the League of Minnesota Cities model policy for Trail and Sidewalk Removal of Snow and Ice.
- » Develop a sidewalk priority network, divide the network into individual routes, and create a map of the routes. Communities typically divide routes into segments between 10 and 25 miles long.
- » Assign a snow plow unit to each defined sidewalk snow clearing route.
- » Define a snowfall depth threshold to clear sidewalks.
- » Clearly identify sidewalk snow and ice clearing responsibility.
- » Develop a public outreach campaign to notify property owners of any change in policy.



### Minnesota Community Spotlight:

Cloquet  
population 12,111

*The City of Cloquet has developed a priority network of sidewalks that it clears in the winter. The priority routes include about 13 of the City's 40 miles of sidewalks. Parks department staff perform the work using tractors that are converted from grass mowers in the summer months to snow clearing tractors with 5' wide broom attachments. This helped the City launch its sidewalk clearing program with a very small initial investment and no need for additional staff.*

*The first priority routes are sidewalks around schools, and the second priority routes are the heavily travelled pedestrian routes, which are typically the arterial streets. While staff are out clearing sidewalks, they also stop at parks along the routes and clear snow off the local ice skating rinks. The sidewalk crews start snow clearing around 3 am to avoid traffic, and for a snowfall up to four inches they are typically done by around 10 am. Clearing sidewalks after snowfalls greater than four inches takes longer to perform because staff first clear sidewalks with a tractor with a plow attachment (Figure 6), then with a tractor with a broom attachment.*



Figure 6: A tractor with a plow attachment clears a sidewalk in Cloquet. Credit: City of Cloquet

*"The first thing we think about is the safety of the kids. Walking to and from school safely is a top priority."*

*- Les Peterson, Parks Supervisor,  
City of Cloquet*





## Minnesota Community Spotlight:

Duluth  
population 86,293



Figure 7: A City of Duluth employee clears a sidewalk with a Bobcat tractor. Sidewalk snow clearing crews follow street plows to reduce snow that is pushed back and forth between facilities. Credit: Duluth News Tribune

In the City of Duluth, City staff clear snow from approximately 80 miles of select sidewalk routes while the remaining sidewalks (approximately 370 miles) are the responsibility of abutting property owners. City staff from the parks and recreation department clear snow from routes that are designated on the [City's sidewalk priority route map](#). The City began by only clearing sidewalks around the perimeter of park facilities, but eventually assembled a small task force to determine sidewalk priority routes that are also cleared by parks and maintenance staff. The priority routes, which are intended to be reevaluated on an ongoing basis, are designated in the following order:

- » Safe Routes to School sidewalks
- » High pedestrian traffic areas
- » Sidewalks along public transit routes
- » Mid-level pedestrian traffic area
- » Park facilities

"High" and "mid-level" pedestrian traffic areas are based on pedestrian counts collected by the Duluth-Superior Metropolitan Interstate Council (MIC). The City of Duluth has a core group of six employees in the parks and maintenance departments that are tasked with clearing sidewalks when it snows, and they are deployed to begin clearing after snowfalls have reached a depth of 2-3 inches. Sidewalk snowplow crews always follow the street plows to reduce pushing snow back-and-forth between the sidewalks and streets. It takes them about 3-4 days to clear the 80 miles of priority sidewalks following a snowfall. Sidewalk plowing is performed with Trackless tractors with 48" wide plow attachments, and each tractor costs about \$150,000. Duluth's priority sidewalk clearing program is funded through tax dollars from the City's general fund.



### Minnesota Community Spotlight:

Rochester  
population 114,011

The City of Rochester has a partial municipality-led sidewalk and trail snow clearing policy in which the City's priority sidewalks and trails are cleared by municipal staff, and all other sidewalks are the responsibility of abutting property owners. The City's [pedestrian path winter snow removal map](#) shows which sidewalks and trails that are cleared by City staff, and which are the responsibility of property owners.

After a snow event, City staff plow sidewalks concurrently with City streets. Then, after 1-2 days staff will return with plowing equipment to ensure sidewalk routes remain clear of snow after Public Works staff have finished plowing streets. Staff will also clear sidewalks if snow has drifted or blown onto them, regardless of a new snow event. City staff use a variety of equipment to clear sidewalks, including Trackless machines (Figure 8), Bobcat Toolcat tractors, Gators, and/or pickup trucks with plows.

Rochester [City Ordinance 72.02](#) requires owners of properties adjacent to a public sidewalk to remove snow and ice within 24-hours after a snowfall. Sidewalks in business districts are inspected daily after snowstorms, and businesses that have not cleared their sidewalk will get a warning. If a business already received a public complaint against them, they will not receive a warning and will be ticketed immediately. Areas outside of business districts are only inspected if a complaint is received. After a complaint is received, the Public Works Department will send an inspector to the property to confirm the sidewalk is not cleared, and then order a private contractor to clear the sidewalk.

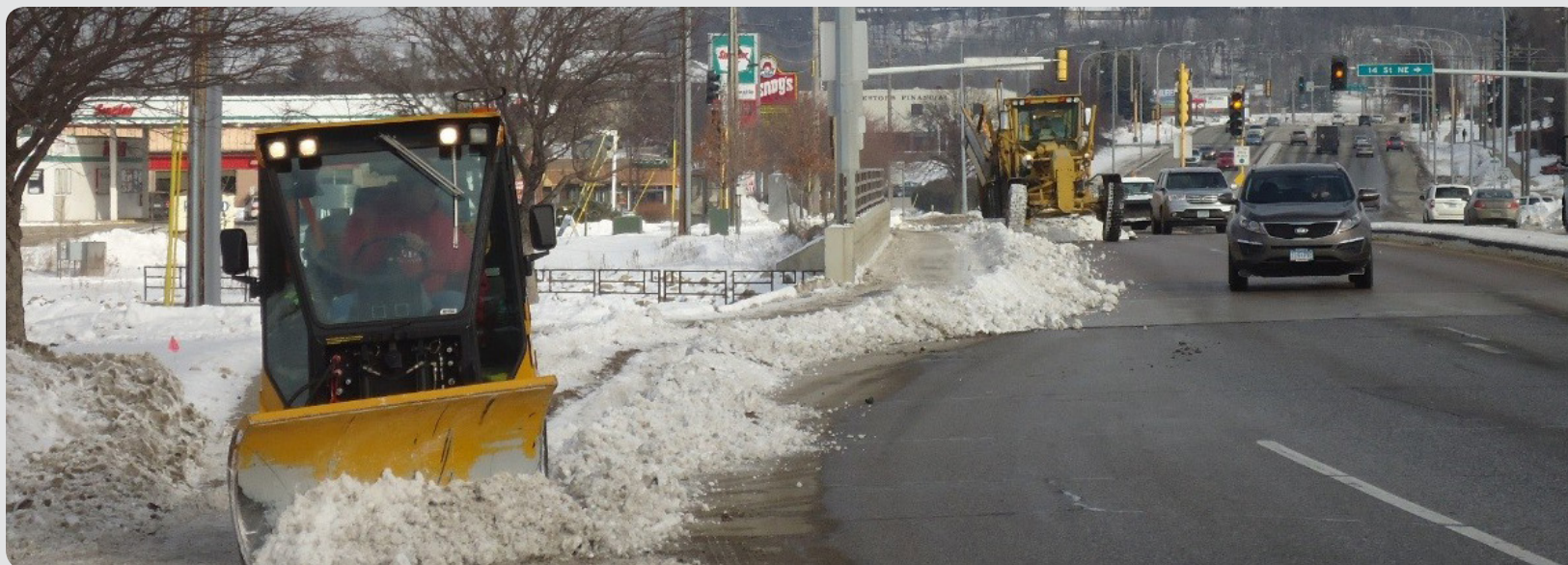


Figure 8: A City of Rochester employee clears a sidewalk with a Trackless tractor (left). Credit: City of Rochester



# Municipality-Led Sidewalk Snow Clearing Policies

Municipality-led sidewalk snow and ice clearing policies use municipal staff or hired contractors to clear the entire public sidewalk network. Municipality-led sidewalk snow and ice clearing policies are less common, primarily due to the cost of implementation (labor and equipment), the mileage of sidewalks within municipal boundaries, and the perception that municipality-led efforts are less timely than property owner led efforts. These policies usually go into effect after a snowfall reaches a certain depth threshold.

Municipality-led sidewalk clearing practices can be effective in clearing snow from sidewalks in a consistent manner, though it does not always happen as quickly as it does with policies that put the responsibility on property owners. These practices are beneficial to property owners who cannot physically clear sidewalks due to age or disability. Cities or towns with these policies generally fund the service through property taxes or additional fees.

Most smaller municipalities with municipality-led policies use their own staff and equipment to perform the work. Staff may be from the municipal public works department, parks department, or a combination. There are some municipalities that hire private contractors to clear defined routes. Hiring contractors to perform the work is more common in larger cities where it would be inefficient or impossible for City staff to clear all sidewalks

in a timely manner. In these cases, the contract will define the terms, responsibilities, compensation, and duration of services.

## Ideas for Getting Started

- » Research the cost and feasibility of a municipality-led sidewalk snow clearing policy and program.
- » If determined to be feasible, analyze whether the sidewalk snow clearing should be performed by municipal staff or private contractors.
- » Develop a map of the entire sidewalk network in the community and divide the entire sidewalk network into individual routes. Communities typically divide routes into segments between 10 and 25 miles long.
- » Assign a snow plow unit to each defined sidewalk snow clearing route.
- » Define a snowfall depth threshold to clear sidewalks.
- » Clearly identify sidewalk snow and ice clearing responsibilities.
- » Develop a public outreach campaign to notify property owners of any change in policy.
- » Communicate with County staff about whether the County is involved in clearing snow from some roadways. Coordinate snow clearing to reduce the amount of snow that is pushed back and forth between the street and sidewalk networks.





### Minnesota Community Spotlight:

Bloomington  
population 85,319



Figure 5: A sidewalk snowplow operator in the City of Bloomington. Credit: Richard Sennott, Star Tribune

The City of Bloomington takes responsibility for clearing all 250 miles of its municipality-owned sidewalks. Bloomington Park Maintenance staff have five sidewalk snow removal units that clear 11 designated routes, each route about 20-25 miles in length. The crews use a variety of equipment depending on the facility, including Trackless tractors, Bobcat “Toolcats,” Maclean MV tractors, and pickup trucks with plow attachments. Sidewalk snow clearing crews typically begin clearing about two hours after crews begin clearing streets to reduce pushing snow back and forth between facilities. Park Maintenance staff will clear sidewalks after any snowfall, even if it is a small depth of snow. Sidewalk snow clearing following a snowfall of 3-5 inches takes approximately four days to complete, but it can take less time for smaller snowfalls.

Sidewalk snow removal is prioritized as follows:

- » First priority: School walking areas, areas heavily used by people with assisted mobility devices, and high use areas by main roads.
- » Second priority: Sidewalks expanding out from schools and along major roads.
- » Third priority: Residential and industrial areas.

If snow falls over a long time period, the City may return to priority one areas before clearing lesser used areas. Residents are asked to be patient in such situations. Crews will complete the job, but it may take two to three weeks, depending on weather conditions. More information on Bloomington’s sidewalk snow clearing program can be found [here](#).



## Bus Stop Snow Clearing Responsibility

All bus passengers are pedestrians before they board and after they alight a bus, so clearing snow at bus stops is critical for ensuring safe access to public transportation. Snow accumulation at and around bus stops can make them difficult or impossible to reach safely, and can cause riders to wait for the bus in dangerous areas such as the street.

The responsibility for bus stop snow removal can be confusing and complicated. In many communities, bus stop snow clearing responsibilities are the same as for the sidewalks where bus stops are located.



Figure 9: Clearing snow around bus stops and shelters ensures adequate access for bus passengers.

That generally means that property owners are responsible for clearing snow around bus stops, but community members may be unaware of this and may not maintain the bus stop appropriately. In other communities, either the municipality or the local transit agency takes responsibility. Some municipalities will organize volunteer-led programs where people can “adopt” a bus stop and commit to clearing snow and ice around the stop throughout the winter. Snow clearing responsibility can also vary depending on what type of bus stop it is – a bus shelter (Figure 8) or a bus stop indicated by a sign. Regardless of policy, it is important for bus stops and ADA boarding pads to be cleared of snow and ice routinely and regularly.

### Case Study: Traverse City, MI population: 15,479

The Bay Area Transportation Authority (BATA) in Traverse City, Michigan collaborates with businesses near bus stops to clear snow and maintain the stops to ensure bus facilities are accessible all winter. BATA is working to get bus stop maintenance agreements from local businesses and is documenting bus stop sponsorship for individual stops on their website. This program helps transit riders know who is responsible for clearing the snow and ice from each stop. BATA is using its website to post photographs and accessibility information about each bus stop so customers can plan their routes and know ahead of time whether a stop is accessible.

### Case Study: Portland, ME population: 66,937

There are over 600 bus stops in greater Portland, Maine, and fewer than 100 receive snow clearing services from municipal public works departments or bus operators. Snow drifts and icy conditions hinder access to bus stops in the winter, which is especially challenging for seniors, people with physical disabilities, and families using strollers. It costs too much for the City to clear all bus stops, so it developed a program called Adopt-a-Stop that organizes volunteers to commit to clearing snow at an “adopted” bus stop throughout the winter. When a stop is adopted, signs at the stop highlight that it is part of the Adopt-A-Stop program.

The program’s goal at each selected stop is to:

- » Use City staff, bus company employees, and volunteers to clear snow and ice from stops during the winter and remove debris on a year-round basis.
- » Provide safe access to primary bus stops within 12 hours of completion of municipal snow plowing.
- » Guarantee a safe place for at least two bus patrons to stand while waiting for a bus.

The program website also includes an online interactive bus stop map that shows adopted stops and unadopted stops, a list of bus stops in the area, and advice for volunteers who clear bus stops.

## Sidewalk Snow Clearing Assistance Programs

Some municipalities will organize and develop volunteer programs that assist people with shoveling their sidewalks. These programs are typically limited to assisting seniors and homeowners with physical disabilities, but could be expanded to assist pregnant women, single parents, or others with barriers to clearing their sidewalks. These programs, sometimes called “snow angels” or “snow buddies”, mobilize volunteers to help shovel snow and scrape ice, which helps keep people safe from falls on snow or ice during the winter. Volunteer-led programs may be organized by the municipality or by neighborhood groups, non-profits, or other organizations.

### Ideas for Getting Started

- » Designate a staff person to develop and promote a sidewalk snow clearing assistance program.
- » Find people in need of assistance and solicit volunteers by advertising the program through social media, flyers, or public service announcements.
- » Create a public outreach campaign to notify seniors or homeowners with physical disabilities of the program.
- » Pair a sidewalk snow clearing assistance program with new sidewalk clearing policies.



### Minnesota Community Spotlight:

**Dilworth**  
population 4,397

*In 2015, the City of Dilworth, Minnesota GreenCorps, and PartnerSHIP 4 Health began a campaign called “Shovel Dilworth”, which encourages shoveling sidewalks, being physically active in the wintertime, and Good Samaritan behavior. The program urges volunteers in Dilworth to shovel neighbor’s sidewalks, sidewalks used by youth to get to school, around local bus stops, around fire hydrants, or any sidewalk that has been neglected from snow shoveling. The campaign rewards volunteers by giving them a chance to enter a drawing to win a \$25 gift card courtesy of the local Lions Club and Park Board.*

*“It is a way to not only help out your neighbors sidewalk but help the greater community, in terms of allowing students a safer route to get to school.”*

*- Chad Olson, Mayor of Dilworth*



## Crosswalk and Street Corner Snow Clearing

One of the most challenging issues facing people walking in the winter is crossing streets at intersections, whether they are marked with crosswalks or not. Crosswalks are usually maintained to the same level of service as the roads they are on because snowplows pass through crosswalks as they are plowing the streets. The issue is snow windrows—the piles of snow that are left behind by snowplows—found at the corner of intersections where people walking need to traverse to cross the street.

Snow windrows are especially troubling for people with disabilities, seniors, guardians with baby strollers, or pregnant women, as walking or rolling over piles of snow can be extremely difficult or impossible.

Some municipalities make their best effort to clear snow windrows at corners as part of their regular plowing operations. Plow drivers push snow through an intersection, past the intersection corner, and then leave it in an area away from the crosswalk. Other communities have programs dedicated to corner snow clearing, where municipal crews go back and clear corners after snowplows have cleared the streets.

## Ideas for Getting Started

- » Create a public outreach campaign to encourage property owners to clear their sidewalks up to the corner where the sidewalk intersects with the street.
- » Created a dedicated corner snow clearing program where municipal crews go back and clear corners after snowplows have gone through and cleared the streets.
- » Encourage municipal staff to avoid leaving snow windrows at intersection corners by depositing it at locations past the intersection.



### Minnesota Community Spotlight:

Minneapolis  
population 413,651

*City of Minneapolis staff clear all corners citywide, and begin by prioritizing corners that are on the City's Pedestrian Street Lighting Corridors. After the priority routes are cleared, staff continue clearing the remaining corners citywide. The City started its corner clearing program in 1995, and the budget at the time provided some funding to cover expenses. In 2015, Public Works was granted increased funding of \$200,000 per year to enhance the corner clearing program.*

*Corner clearing activities are initiated when snow accumulation reaches over 4 inches or the City declares a Snow Emergency. Corner clearing begins when the Snow Emergency is over, allowing 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 pauses corner clearing activities and resumes corner clearing at the end of the new Snow Emergency.*





## More Information

- » Federal Highway Administration, A Guide for Maintaining Pedestrian Facilities for Enhanced Safety, October 2013  
[https://safety.fhwa.dot.gov/ped\\_bike/tools\\_solve/fhwasa13037/fhwasa13037.pdf](https://safety.fhwa.dot.gov/ped_bike/tools_solve/fhwasa13037/fhwasa13037.pdf)
- » Scott, Marcia and Rudd, Brandon. Winter Maintenance of Pedestrian Facilities in Delaware: A Guide for Local Governments” University of Delaware, February 2012  
<http://www.ipa.udel.edu/publications/SnowRemoval.pdf>
- » National Aging and Disability Transportation Center, Effective Snow Removal for Pathways and Transit Stops, March 2016  
<http://www.nadtc.org/wp-content/uploads/NADTC-Effective-Snow-Removal-for-Pathways-Transit-Stops.pdf>
- » Chicago Department of Transportation Sidewalk Snow Removal Guidance for Chicago Residents and Businesses  
[https://www.cityofchicago.org/content/dam/city/depts/cdot/pedestrian/sidewalksnowremoval/Sidewalk\\_Snow\\_Removal\\_Guidance.pdf](https://www.cityofchicago.org/content/dam/city/depts/cdot/pedestrian/sidewalksnowremoval/Sidewalk_Snow_Removal_Guidance.pdf)

## Acknowledgements

Special thanks to staff from communities across Minnesota who shared insight and information about sidewalk snow clearing policies and practices in their home communities, including:

- » Les Peterson, City of Cloquet
- » Jennifer Moses, City of Duluth
- » John Kelley, City of Duluth
- » Dale Sellner, City of Duluth
- » Dave Hanson, City of Bloomington
- » Dan Plizga, City of Rochester
- » Lynn Nardinger, City of Red Wing

Consultant:







**m** MINNESOTA

*Minnesota Walks* is a collaborative effort between the Minnesota Department of Health and the Minnesota Department of Transportation.