



Agenda

- Welcome & Introductions
- Project Background & Overview
- Best Practices for Clearing Snow and Ice
- Winter Management Plans
- Developing a Winter Management Plan
- Funding Sidewalk and Bikeway Snow and Ice Clearance
- Customizable Materials for Sidewalk Snow Removal Communication
- Case Study (Guest Speaker)



Source: Michael Shake | AdobeStock





Welcome & Introductions

- Today's Presenters
 - Lee Reis, EIT, RSP1 | Burton Planning Services
 - Senior Transportation Planner
 - Drew Parker | Toole Design Group
 - Senior Transportation Planner









Welcome & Introductions

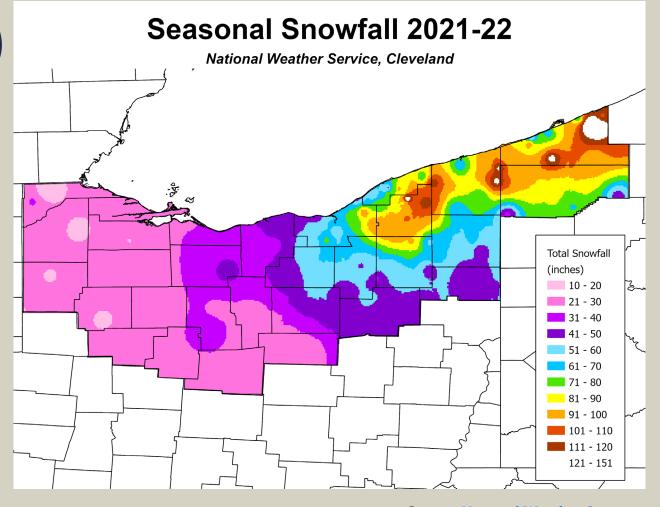
- What is the organization or role that brings you here today?
 - Local government
 - ODOT/State government
 - Industry/consulting
 - Non-profit organization
 - Other





Welcome & Introductions

- How many inches of snow does your municipality receive in a typical year?
 - Less than 12"
 - 12-35"
 - 36-59"
 - 60" or more
 - Don't know



Source: National Weather Service





Question: Why should municipalities ensure snow is cleared from sidewalks?

- A. To provide snow forts for kids for snowball fights.
- B. The Americans with Disabilities Act requires unobstructed sidewalks.
- C. People use sidewalks year-round, including in the winter.
- D. B and C
- E. All of the above



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- Question: How wide should clear space be on sidewalks in the winter?
 - A. Five feet/60 inches
 - B. Four feet/48 inches
 - C. Three feet/36 inches
 - D. The full width of the sidewalk
 - E. C is required, D is preferred





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Why is Clearing Snow and Ice Important?

- People walk, roll, and bike even in the winter.
- Clearing snow and ice supports year-round travel for all.
- The Americans with Disabilities Act requires maintaining walkways in an accessible condition, including reasonable snow removal efforts.



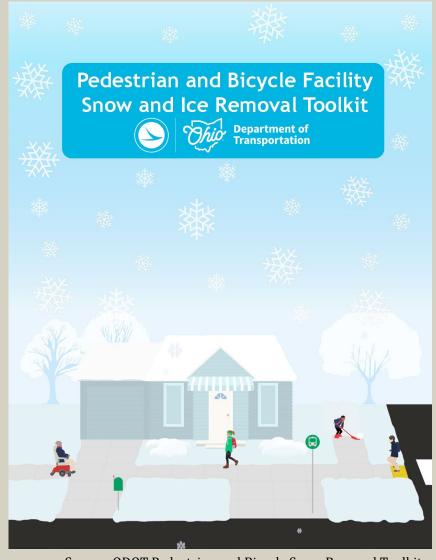
Source: ODOT Pedestrian and Bicycle Snow Removal Toolkit





Project Background & Overview

- Project identified by ODOT based on feedback from cities and organizations.
- Online survey sent to cities in early 2023 to identify specific content needs.
- ODOT and partner committee guided consultant team.
- Toolkit and materials published in February 2023.



Source: ODOT Pedestrian and Bicycle Snow Removal Toolkit





Best Practices for Clearing Snow and Ice

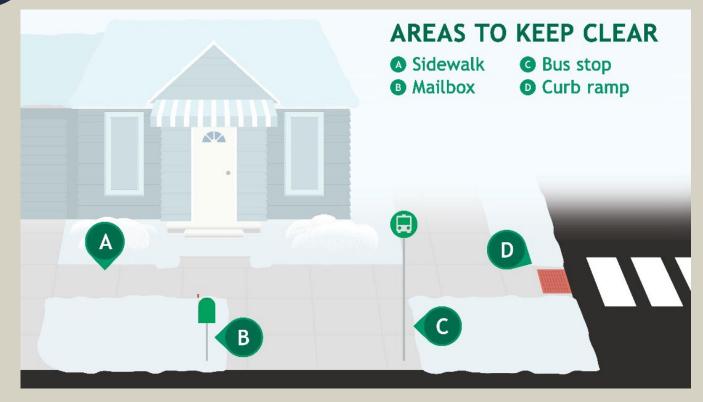




Where to Clear Snow on Sidewalks and Bikeways

- Municipalities can support people walking / biking in the winter by maintaining typical paths of travel
 - Street Corners
 - Ramps
 - Crosswalks

Snow Removal Best Practices



Source: ODOT Pedestrian and Bicycle Snow Removal Toolkit





ABCs of Snow Removal

- Always clear your sidewalk.
- **Be** prepared to move snow away from mailbox.
- Carve out the area around a bus stop.
- **Don't** forget to clear curb ramps at pedestrian crossings.







Width to Clear

- Maintaining the full sidewalk width is preferred, especially in residential areas.
- In downtown and commercial areas, some municipalities define the clearance width narrower than the full sidewalks.
- The Americans with Disabilities Act (ADA) requires maintaining 36 inches of clearance on sidewalks in all conditions.



Source: Toole Design Group





Corners and Ramps

Require whoever has responsibility for sidewalk snow clearance to also clear adjacent corners and curb ramps.



Source: Toole Design Group





Clearing Bus Stops



Clarify responsibility for bus stop and shelter snow clearance in municipal ordinances and local planning.



Consider including bus stop snow clearance in property owner responsibility (when applicable).



Or coordinate with local transit agencies to include in municipal snow clearance or transit agency practices.



Source: Toole Design Group





Equipment to Clear Snow from Sidewalks & Bikeways

Snow removal equipment for sidewalks and bikeways typically includes:

- Hand shovels
- Small tractors
- Bobcats
- ATVs or similar vehicles
- Light-duty pickup truck with plow





Sources: Toole Design Group





Equipment to Clear Snow from Sidewalks & Bikeways



If necessary, identify and acquire appropriate snow removal equipment based on the municipality's snow removal plans.



For longer snow removal routes, consider vehicles designed specifically for snow removal on sidewalks and bikeways.



Use articulated plows for maximum flexibility depending on changing sidewalk or bikeway design widths and buffer areas.



Source: Toole Design Group





Designing Bicycle Facilities for Snow Removal

- Ensure adequate buffer width for snow storage.
- Consider existing grades to determine where ice may form and account for this within bike lane width and design.
- Consult with local maintenance staff during design phase to understand existing winter snow clearing procedures and identify potential design issues.



Source: Toole Design Group





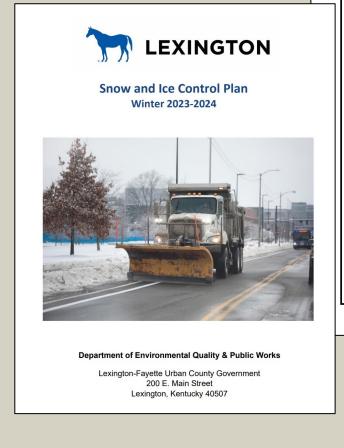
Winter Management Plans

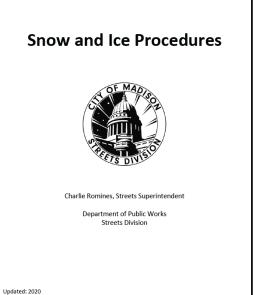




What Are They?

- Documents that establish goals and priorities for maintenance during snow and ice events
- Operational guides for staff
- A tool to communicate with the public before and during snow and ice events





Sources: City of Lexington, KY, City of Madison, WI





Why Are They Important?

- Ensure preparedness and safety for winter conditions
- Support seasonal and vulnerable sidewalk and bicycle route users
- Foster a sense of responsibility and cooperation



Source: City of Madison, WI, photo by Kent Sweitzer





Key Elements and Best Practices



Clear Responsibilities



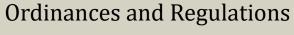












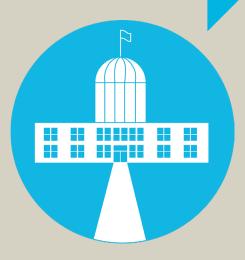


Clear Responsibilities

Private Property
Owner Responsibility

Partial Municipality-Led Responsibility Municipal Responsibility









Communication Strategies

- Before snow and ice events
 - Preparing for winter
 - Property owner responsibilities
- During snow and ice events
 - City activities: Road closures, maintenance operations, alternative routes, etc.
 - Reminders of responsibilities





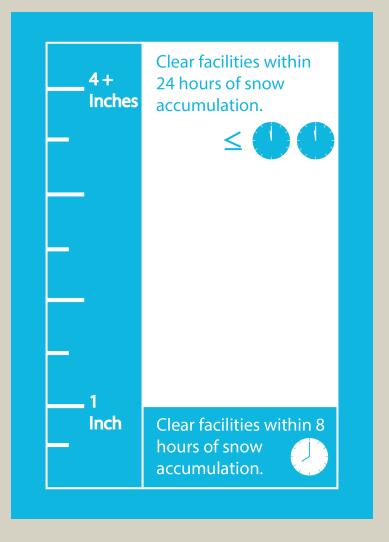






Establish a Level of Service

- Level of Service for snow and ice typically addresses:
 - Snow levels that trigger removal
 - Timeframes for snow removal
- This sets clear expectations for municipal work.
- The Level of Service should be realistic based on municipal capacity.

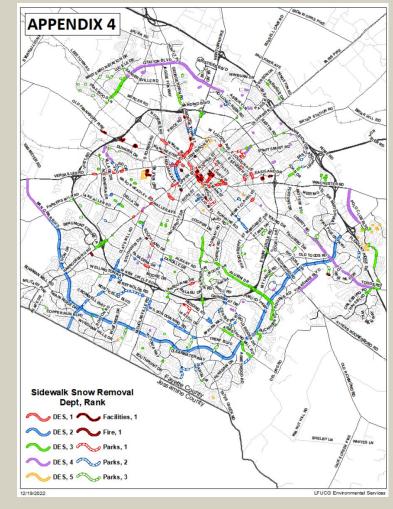






Route Prioritization

- Cities will typically have responsibility for some routes.
- Prioritizing routes ensures a strategic and efficient approach to snow removal.
- Consider factors such as:
 - Anticipated pedestrian traffic
 - Proximity to schools
 - Proximity to hospitals
 - Proximity to bus stops
 - Proximity to municipal buildings



Source: Lexington, KY Snow and Ice Control Plan





Ordinances and Regulations

- The clearest ordinances specify:
 - The amount of snow that triggers the ordinance
 - The required timeframe for snow clearance
 - The required width of snow clearance
 - The enforcement measure or potential fine

DUTY TO KEEP SIDEWALKS IN REPAIR AND CLEAN.

- (a) Every owner...of any tenement building, lot or land fronting any avenue, street, alley or public highway in the City shall remove...snow and ice from a path of at least four feet in width from so much of the sidewalk...as is in front of or abuts such building or lot or land [...]
 - (1) ...[S]now and ice shall be removed from all business districts within the City by 9:00 a.m. of each day.
 - (2) ...[S]now and ice shall be removed from all other sidewalks within the City on the same day as the cessation of any fall of snow, sleet or freezing rail or not later than 8:00 p.m. after the cessation of such fall, whichever period is longer.

Source: City of Lakewood, Ohio. Section 521.06





Clear Enforcement Practices

- Consider:
 - Who will enforce
 - Enforcement capacity following snow and ice events
 - Number of warnings, if any
 - Time to address warning
- Also keep in mind:
 - Hardship situations
 - Vacant properties







Developing a Winter Management Plan





Process for Developing a Winter Management Plan



Leadership Identification and Public Engagement





Needs Assessment





Goal Setting



Plan Adoption



Data Collection and Analysis



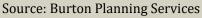




Leadership Identification and Public Engagement

- Consider stakeholders such as:
 - Municipal leadership
 - Residents and community leaders
 - Disability commissions or advocates
 - Relevant municipal staff
 - Emergency services
 - School districts
 - Parks districts
 - Local businesses
 - Public transit agencies









Needs Assessment

- Evaluate available resources
 - Funding
 - Personnel
 - Equipment
- Review Laws
 - Federal laws and ADA
 - State and Interagency Agreements
 - Municipal statutes, charters, and ordinances
 - Internal policies



Source: Toole Design Group





Goal Setting

• Define goals that are specific, measurable, and achievable.



Source: Alina Matveycheva/Pexels





Data Collection and Analysis

- Data collection could include:
 - Public input
 - Historical weather
 - Travel data, etc.
- Analysis goals:
 - Understand existing conditions and challenges
 - Identify high priority areas



Source: C. Muza/<u>Unsplash</u>





Route Planning

- Connect route planning to any identified prioritization, such as:
 - High pedestrian traffic routes
 - School zones
 - Emergency routes
- Provide maps to indicate:
 - Municipal responsibility routes
 - Levels of priority

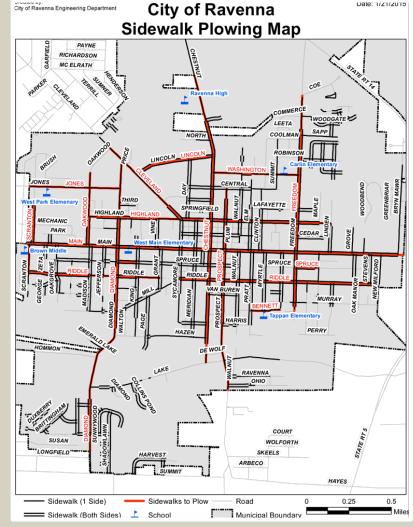


Image Source: City of Ravena, OH





Operational Planning

- Establish clear operations plan for winter snow removal on sidewalks and bikeways.
- Coordinate leadership roles and communication plans.
- Incorporate into emergency plans and protocols



Source: S. Law/Flickr





Plan Adoption

• Present plan to the appropriate set of elected officials for adoption.



Source: Burton Planning Services





Community Education

- Educate the community on safe winter practices.
- Collaborate with schools, media partnerships, and embark on public awareness campaigns.



Source: Burton Planning Services





Funding Sidewalk and Bikeway Snow and Ice Clearance





Funding Sidewalk and Bikeway Snow and Ice Clearance

- Most municipalities fund snow removal with general fund revenue.
- Alternative funding sources:
 - Recreational Trails Program, for eligible activities
 - Special property tax assessments
 - Snow removal districts
 - Donations to nonprofit organizations



Source: Rafal Olechowski | AdobeStock





Recreational Trails Program

- Through the Ohio Department of Natural Resources
- For trail maintenance activities and purchase or rental of trail maintenance equipment
- 20% match required
- Maximum award of \$150,000 (2023)
- More information: https://ohiodnr.gov/buy-and-apply/apply-for-grants/grants/recreational-trails-program











Special Property Tax Assessments

- More appropriate in areas with high levels of snowfall
- In known example, assessment based on linear feet of frontage
- Example: Rochester, NY
 - Approximately \$36 per residential property per year
 - Contractors provide supplemental snow plowing with more than 4 inches of snow.



Source: **Unsplash**





Snow Removal Districts

- A type of Special Improvement District focused on snow removal
- Could be implemented in residential or commercial areas
- Participating property owners fund snow clearance.
- Example: Brighton, NY
 - Property owners can petition to establish a snow removal district.
 - City removes snow in these neighborhoods.



Source: ChiccoDodiFC | AdobeStock





Donations

- Time or money
- Example: Toledo, OH
 - City coordinates a Snow Angels program for people to help neighbors.
 - Matches prioritize people who wouldn't be able to shovel otherwise.
- Example: Ann Arbor, MI
 - Nonprofit <u>SnowBuddy</u> founded by residents in a neighborhood.
 - Donations fund a sidewalk snowplow.



Source: City of Toledo





Customizable Materials for Sidewalk Snow Removal Communication





Overview of Materials

- Intended for the general public, could go out with utility bills or be included in other promotional materials
- Most customizable with Microsoft Word
- 6 types of materials
 - 1. Brochure
 - 2. Flyer
 - 3. Mailer
 - 4. Door hangers
 - 5. Social media graphics
 - 6. Videos







Brochure

- Double-sided 8.5x11 trifold including:
 - Who is responsible for clearing snow?
 - When do you need to clear snow?
 - Where should you clear?
 - Includes diagram of typical residential property
 - Where do you put the snow?
 - What is the local ordinance?
 - Why should you clear the snow?
 - What if I can't clear the snow in front of my property?

Where should you clear?

Property owners or occupants should clear all of the following, if they touch your property:

- · The entire width of the sidewalk
- Curb ramps at corners
- . Bus stops, including clearing a path to the road so people can reach the bus
- Mailboxes

It is important to clear snow and ice down to the pavement to prevent slips or trips and ensure the accessibility of sidewalks:

- · Apply salt if ice forms on the sidewalk.
- · Apply sand if it is too cold for salt to melt the snow (below 12° F) to create a higher friction surface.

AREAS TO KEEP CLEAR

- Sidewalk Mailbox
- O Curb ramp



Who is responsible for clearing snow?

Probably you! The responsibility for clearing snow on sidewalks falls on the property owner

When do you need to clear snow?

When there is significant snowfall that stays on the ground, clearing snow from the sidewalks is the neighborly thing to do.

In our community, we ask you to clear snow when it reaches [X] inches.

Where do you put the snow?

Place cleared snow on your own property, either in the front yard or in the buffer/treelawn between the sidewalk and street. Avoid blocking:

- Sidewalks, curb ramps, bus stops, mailboxes
- Fire hydrants
- · Your neighbor's driveway
- Streets



How can I report sidewalks that have not been cleared?

Contact the [organization] or visit [website].

Remember, by being proactive and fulfilling your responsibility as a sidewalk superhero, you play a vital role in maintaining a safe and accessible community for all. Let's work together to keep our sidewalks clear and our neighborhood thriving in the winter months!

Reminder-It's the Law

It is not only the neighborly thing to clear your sidewalk; it is also the law. In our community, the law states:

[insert regulations here]





Flyer

- One-sided 8.5x11 including:
 - Who is responsible for clearing snow?
 - When do you need to clear snow?
 - Where should you clear?
 - Includes diagram of typical residential property
 - Where do you put the snow?







Mailer

- Double-sided 4x6 postcard including:
 - Who is responsible for clearing snow?
 - When do you need to clear snow?
 - Where should you clear?
 - Includes diagram of typical residential property
 - Where do you put the snow?







Door Hangers

- Four different 3.5x8.5 hangers:
 - 1. Informative (2-sided)
 - 2. Celebration (1-sided)
 - 3. Reminder (1-sided)
 - 4. School route reminder (1-sided)





We noticed you cleared your sidewalk after this past snow

help people continue to walk safely through the winter months.



If you would like assistance clearing snow from your sidewalk, there is help available from the

[insert organization here]

It's important to clear snow from your sidewalks to maintain a safe walking environment for everyone—especially kids, seniors, and people with disabilities

The following companies offer sidewalk snow clearing services: [insert services here

Scan here for more information:

QR code placeholder Kids are relying on you...

BE A SIDEWALK SUPERHERO!

Your property is on a highly-traveled route.

Your neighbors rely on walking in the winter to get places they

Here is a list of people who are outside every day, regardless of the

- weather, who are counting on you to be a Sidewalk Superhero. Children walking to school
 People without a car who
- Letter carriers and delivery rely on walking, biking to
 - get to work · Emergency personne

When do you need to clear snow?

As soon as possible after a snowfall, and no later than the

Dog walkers







Social Media Collateral

- 5 social media images, sized for Facebook/X (Twitter) and Instagram:
 - 1. Winter is Coming Plan Now
 - 2. Skip the gym, shovel your sidewalk in the morning!
 - 3. The north wind doth blow, and we will have snow!
 - 4. Remember to Clear Snow From Your Sidewalks This Winter. You Can Be A Sidewalk Superhero!
 - 5. Clear the way for kids today!







Videos

- Two fun 60 second videos:
 - SRTS-focused
 - General sidewalk clearance focus









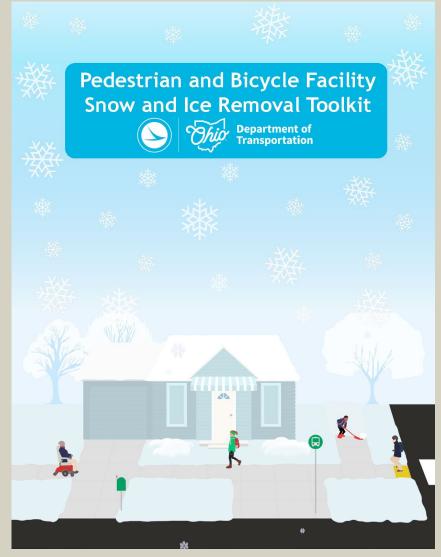






Key Takeaways

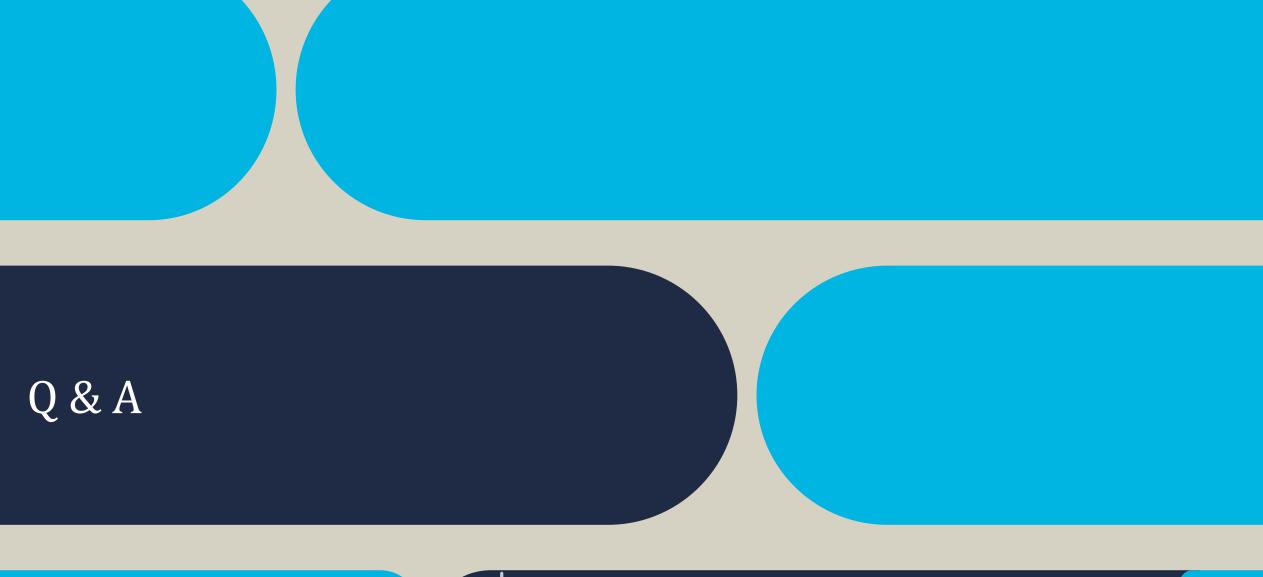
- Remember that people use sidewalks and bicycle facilities year-round.
- Consider your community's snow removal needs.
- Develop or update a snow management plan for your community.
- Use the customizable materials to communicate with residents and businesses.
- Visit the <u>Sidewalk and Bicycle Facility Snow and Ice</u>
 Removal <u>Toolkit page</u> on the ODOT website for the document and other resources!



Source: ODOT Pedestrian and Bicycle Snow Removal Toolkit











Case Study Guest Speaker: Harry Stark; Aurora, Ohio







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Thank you!

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