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City Of Worthington Snow Policy



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City of Worthington
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Introduction

The City of Worthington maintains established policies regarding the management of winter snow and ice events to ensure the provision of acceptable service levels for our public highways, streets, multi-use trails and parking lots. Central Ohio experiences an annual average, of twenty-seven inches' seasonal snowfall occurring over eighteen separate days and nights starting in November and ending in April. Snow and ice covered pavement leads to an increase in possible vehicle accidents on city streets, and possible personal injury from falls on slippery parking lots and pedestrian pathways. As with all communities, the level of service by which snow and ice covered surfaces can be properly addressed is dependent on the availability of staffing, equipment and materials to effectively manage winter events. While changes in technology have provided for improvement to the City's snow management operation, the City continues to make adjustments to the practices and policy by which snow and ice management is executed.

There are approximately 160 lane miles of roadway pavement of which the City is responsible for snow and ice removal. Approximately 1500 tons of rock salt is applied annually for winter salting operations. We have the capability to store approximately 2000 tons of stockpiled salt in the salt storage building at 380 Highland Ave. and up to 18,000 gallons of beet heet (agricultural mix of beet sugar and chemicals) and salt brine used for pre-treating pavement and pre-wetting salt before application.

The level of snow clearing service provided depends upon the accumulated amount and rate of snowfall received. For snowfalls at or below two inches (2") of total accumulation, the priority I and II roads can be maintained as passable through a combination of pretreatment applications, salting application and then plowing. Plowing will not typically occur on local Priority III streets until plow operators have completed clearing the higher priority streets. The local streets will be managed with pretreatment and salting applications. For winter storms yielding over three inches of total snowfall, all streets are managed in the same manner. However, significant accumulations generally mean plows will not be able to address the local subdivision streets until all higher priority streets are clear.

Streets are cleared in order of a predetermined prioritization that begins with the highest travelled/highest speed arterial streets first, then the moderately travelled collector streets, and ending with then lowest travelled local streets generally restricted to subdivision side streets, loops streets "eyebrows" and cul-de-sacs. Plows will generally continue on higher order streets until snowfall ends allowing for completed edge to edge clearing of the pavement. Adhering to this prioritization is critical in maintaining emergency service access routes to all business and residential areas throughout the community. Within the subdivisions, plow operators will attempt to clear streets curb to curb, which generally requires making two clearing passes in each direction. Cars parked within the roadway or right-of-way limit the ability to clear some sections of streets to the curb line. Plow operators do not return to areas to check if parked cars have been moved. During this operation, snow is windrowed across driveways and sidewalk ramps, which at times leads to frustration by property owners who have to clear the heavy piled snow. However, the benefits of removing snow edge to edge of pavement include improved safety for passing vehicles, access to mailboxes by mail carriers and to refuse containers as well as open access to curb inlets and storm drains.

During the course of plowing activities, damage to a mailbox could occur from snow pushed off the end of the plow blade. The City will assess damage in accordance with the Mailbox Policy included in the Appendix C of this policy, to determine if the City is liable for making repairs. Mailboxes not sturdy enough to withstand the force of snow plowed against it, or those that were damaged because they protrude over the curb line, will not be repaired by the city.

Government Coordination

Snow and ice management operations require coordination, communication and cooperation between adjacent governmental jurisdictions to assure that efficient and well organized services are provided. The Maintenance Superintendent for the City is responsible for administering all aspects of the City's snow and ice management program. The Superintendent organizes and hosts an annual pre-season meeting with other departments and agencies to review existing winter weather policy and to discuss potential changes to service levels, coverage and route coordination. Decisions made at the meeting are journalized in agreements between the city and other agencies, copies of which are included in Appendix XX at the back of this document. The coordination meeting provides a venue to discuss alternate technologies that various agencies are utilizing in addressing snow and ice management as well as the potential for equipment and material sharing in emergency situations. Agencies included in the coordination meeting are:

Service & Engineering Dept., Police, Fire and Parks Departments
City of Columbus
Franklin County Engineer
The Ohio Department of Transportation District 6 County Garage
Sharon and Perry Townships
Worthington City Schools

Snow Emergency - Level I, II and III Events

In accordance with Ohio law, the City of Worthington recognizes the following snow emergency classifications as declared by the Franklin County Sheriff's Office.

Level 1 - Conditions are hazardous; Motorists should drive carefully.

Level 2 - People should only drive if absolutely necessary.

Level 3 - Roads are closed to non-emergency travel. Police may arrest motorists who are on the road unnecessarily.

Treatment Options

A variety of snow and ice management materials and techniques are available to address roadway safety during a winter storm event. Conditions can vary from nearly invisible coatings of black ice, to white out conditions during a major winter blizzard. Temperatures also play a critical role in determining the best application of snow and ice management materials utilized alone or in combination. Rock salt is the primary material utilized by the City in de-icing roadway surfaces. Rock salt is typically spread on a roadway surface directly over accumulated snow

of up to 2-inches to aid in melting. A pre-wetting solution of Brine and Beet Heet (sugar beet extract) mixture is sprayed on the salt before it leaves the salt spreader unit on the back of the truck to expedite the activation of the salt in combining with the frozen material on the pavement to make brine. When salt is combined with water, the freezing point of the resultant brine is reduced allowing for melting and clearing of snow covered pavements. Subsequent plowing becomes more effective once the salt brine breaks up the snow cover on the pavement

The city will begin to utilize Brine: a mixture of salt, tap water, beet sugars, calcium chloride and magnesium to pretreat pavement surfaces in advance of pending snow or ice precipitation. After application, the water evaporates leaving behind a coating of salt on the pavement that stays in place for several days in advance of a storm. In contrast, 75% of rock salt applied directly to the pavement surface is scattered to the pavement edge by exposure to traffic, thus reducing the efficacy of this application. Both rock salt and salt brine becomes less effective in temperatures below twenty degrees. Agricultural additives such as the sugar beet molasses that the city has been using can be added to salt at the spinner to improve effectiveness at lower temperatures. By pretreating pavement with salt brine, the snow and ice bond to pavement is significantly reduced allowing for improved clearing when plows pass through.

Pretreating operations will occur on Priority I and II streets in advance of a storm. Priority III streets may be pretreated to aid in snow removal if temperatures are anticipated to drop below freezing when accumulated snow presents a hazard to traffic. Pretreatment should occur on all streets when snow fall accumulations are anticipated to be greater than 3-inches requiring plowing.

Plowing occurs when the snow cover must be removed to establish safe passage of vehicles. The city plows all Priority I, II and III streets to bare pavement for all storms.

Snow Removal - Prioritization of Services

The city's snow and ice management policy places emphasis on maintaining clear passage for those roadways which carry the highest volume of daily traffic and at higher speeds. The city has five primary snow management routes serviced by two to six dedicated plow trucks depending on the severity of the snow event. Maps delineating the primary Priority I & II Snow Routes and associated streets are included in Appendix A. To maximize plowing efficiency, windrows may be temporarily developed through intersections of cross streets as plows pass through. Once the mainline pavement is cleared, the plows can return to intersections and remove the windrowed snow. This practice allows plows to clear the maximum miles of main line street in the least amount of time.

Priority I roads are the most critical for emergency vehicle routing, daily commuter traffic, industrial and business transport, and for school busing. In addition, Priority I locations include specific "Hotspots" that become dangerous in icy conditions such as steep hills, dangerous curves, rail crossings, and intersections prone to heavy traffic volumes, congestion, or pedestrian crossings. During an active winter event, Priority I roads and locations will be maintained in passable condition at all times and will be cleared curb to curb, within 12 hours of the conclusion of the event.

Priority II locations include designated major and minor collector roadways within the city that serve schools, business centers and residential areas. All Priority II roadways will be cleared curb to curb, within 12 hours following completion of Priority I roads and locations.

Priority III roadways generally include all remaining neighborhood streets, alleys, eyebrows and cul-de-sacs. Priority III streets are divided into five quadrants with the dividing lines High St. and Dublin-Granville Rd. and roads west of SR 315. Quadrants are cleared from south to north, south of Dublin-Granville Rd. and north to south, north of Dublin-Granville Rd. until all streets are cleared. Once Priority I & II streets have been addressed, all plows are diverted to address the Priority III streets. All residential roadways will be cleared curb to curb, within 24 hours following the conclusion of the snow event.

There are also several "Hot Spot" locations that tend to be problematic during storm events including steep hills, sharp curves, snow drifts and other sections of roadway that become icy. These locations are generally addressed with or following the completion of the Priority I routes.

Cul-de-sacs and eye brows will be partially cleared by plow equipment during the initial pass of priority III streets. Attempting to pile snow while avoiding parked cars, driveways, hydrants and mailboxes typically slows the operators down during the Priority III clearing process. More efficient four-wheel drive trucks equipped with plows will be assigned to clear cul-de-sac and eyebrows. Timing of this action is dependent on availability of staffing and upon completion of Priority 3 Routes.

Downtown Business District

Snow removal is prioritized in the Downtown Business District due to high traffic and pedestrian volumes, and the lack of adequate snow storage along the curbs. Snow in the Downtown Business District is plowed to the curb. Generally, when substantial snow amounts occur, snow clearing of the downtown business district is initiated approximately 48 hours following the clearing of all Priority I, II and III streets. The delay provides ample opportunity for business and property owners to remove snow from the walks to the street curb line where it can be removed.

Public Parking Lots

The city has ten properties with public parking lots that require snow removal following a winter snow event. The Parks Division is responsible for snow clearing operations of all city parking lots. Some lots can be cleared by plowing snow to the edge where adequate room exists to stockpile snow. Clearing of parking lots generally begins at 3 AM so that public access is maintained by the time city buildings open. Generally, all public parking lots can be cleared

in one 8-hour shift.

The following parking lots, listed in order of highest to least priority, are cleared by the Parks Division.

1. Community Center/Service and Planning Complex
2. City Hall
3. Police Department
4. Fire Department
5. Methodist Church Parking Lot
6. Griswold Center
7. New England Ave. W. Public Parking Lot
8. New England Ave. E. Public Parking Lot
9. Kilbourne Building
10. McConnell Arts Center Parking Lot

Sidewalks and Multi-Purpose Recreational Trails

The Parks Department and the Service and Engineering Department are responsible for clearing specified segments of public sidewalk and multi-use recreational trails. While the goal is to have all sidewalks and trails cleared within 48 hours of a particular snow event, the ability to complete the work is at times subject to the availability of personnel and equipment to assist in the work.

Sidewalks cleared and treated with salt include the following, in order of priority. These do not include residential sidewalks throughout the City's various neighborhoods:

- Sidewalks abutting city owned facilities.
- Sidewalks abutting city controlled public parking lots.
- Sidewalks on public highway bridges.
- Sidewalks abutting city park areas.
- Handicapped Sidewalks designated City responsibility
- Walkways designated City responsibility within Right-of-Way

Only heavily utilized sections of multi-use recreational trails within the public right of way will be cleared of snow following a snow event. Trails in remote areas of the community, or in areas where there will be little use and that have alternate walking routes available will not be cleared.

Staffing and Equipment

Snow clearing operations are managed principally by a core team of twelve staff members from the Service and Engineering Department, with additional support from the Parks and Recreation Department. All drivers of single axle plow trucks must have a Class A Commercial Driver's License with tanker endorsement, and be trained in the safe operation of large plow and salt spreader equipment. Staff assigned to operate the brine application equipment must also be certified with a tanker endorsement. Non-CDL drivers are permitted to operate the 3/4 ton and one-ton pickups outfitted with plows with appropriate training. The core group operates on 12-

hour shifts as required to manage winter snow events.

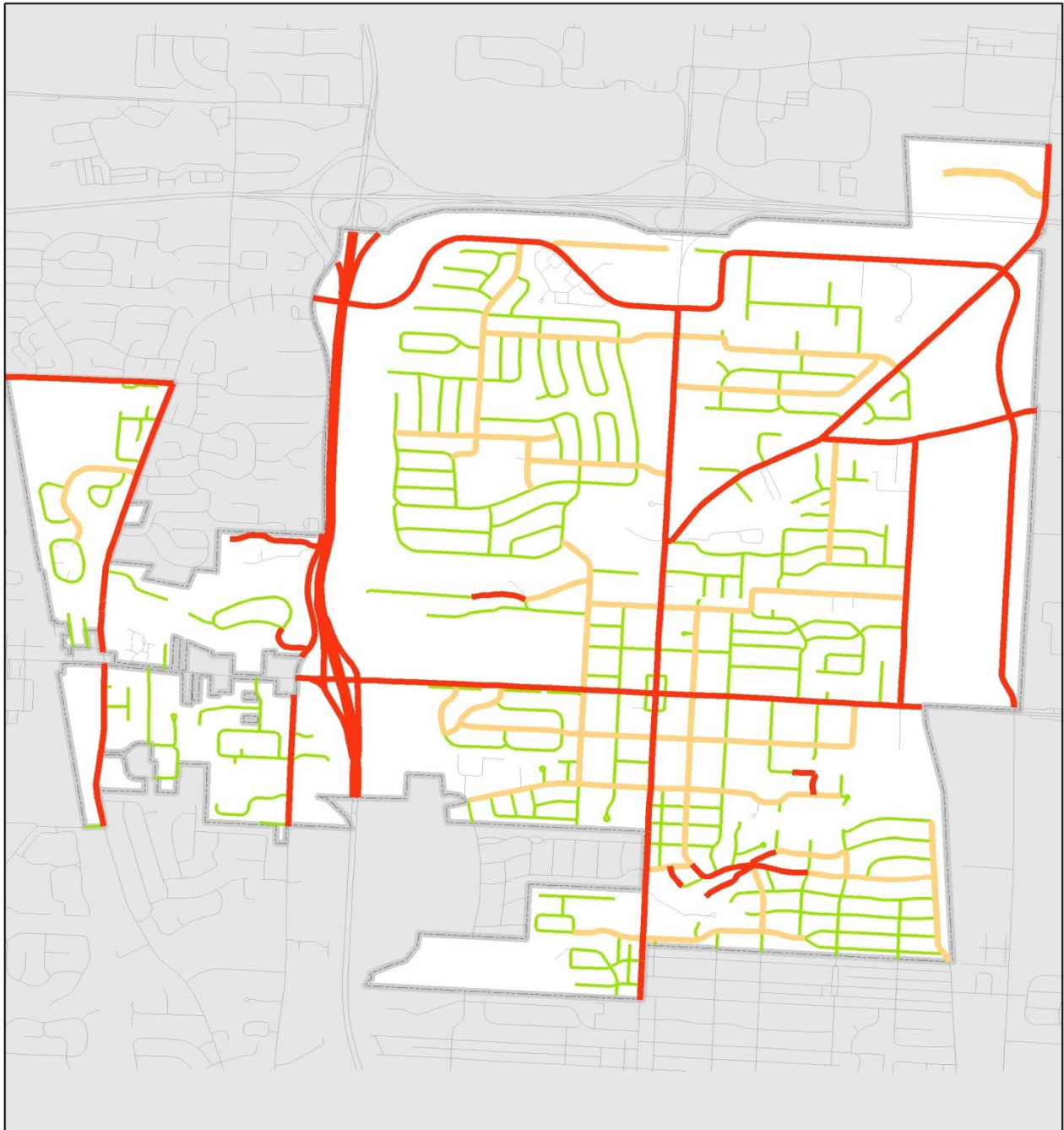
The Service and Engineering Department maintains five single axle dump trucks and one single axle one ton as the front line snow removal equipment, each equipped with 10' or 11' straight plows, salt spreaders, and pre-wet applicators. The single axle dumps can carry 8 tons of salt while the one ton can carry two tons of salt. Also available are two, ¾ ton pickup trucks with plows. The city also utilizes a 1065-gallon capacity, automated anti-icing applicator insert that can be quickly installed or removed from a single axle dump truck for pretreating operations. A second brine applicator is attached to one of our single axle dump trucks and has a carrying capacity of 360 gallons of liquid.

Community Responsibility

While the city works hard to provide the highest level of service and support to the community during the winter season, property owners and motorists alike have a responsibility to do their part in maintaining safety as well by following several simple practices:

- Keep your distance when driving near snowplows and brine application vehicles.
- Never pull up directly behind a plow truck in the driver's blind spot, as plows often back up as part of their operation.
- Do not attempt to pass a snowplow on either side as plows can suddenly shift lanes.
- Keep children away from streets while plows are clearing snow.
- Move parked cars off the street whenever possible to allow plow drivers a clear path to work.
- Drive cautiously during snow and icy conditions. A good rule of thumb is "half the posted speed limit or less, depending on the conditions." Accidents cause delays in snow and ice removal.
- Use winter snow tires to improve traction.
- Pile shoveled snow from driveways to the right of the driveway as you face the street.
- Do not push snow into the roadway with shovels or snow blowers.
- Clear snow around fire hydrants for the obvious reason of access in the case of fire.
- Keep sidewalks and ramps clear and free of snow and ice.

Appendix A Route



Priority (Lane Miles)

- 1 (58.3)
- 2 (26.6)
- 3 (71.9)
- Other



**City of Worthington
Snow Plow Priorities**

City Manager's Office

Matt Greeson City Manager

614-436-3100 Office

Service and Engineering Department

Daniel Whited P.E. Service and Engineering Director/ City Engineer

614-431-2425 Office

Steven Tennant Maintenance Superintendent 614-431-2425 Office; 614-374-7309 Cell

Parks Division

D. Scott Brown Parks Manager

614-786-7368 Office; 614-348-2426 Cell

Cargill Deicing Technology

Ashley Swipe

1-800-600-7258 Follow Prompts

Cust. # 2500012107

Ashley_Swipe@cargill.com

Appendix C

Winter Mailbox Repair or Replacement Guidelines

The purpose of this policy is to establish a written guideline to address damages that occur to a mailbox in association with winter snow removal operations.

It is the property owner's responsibility to check their mailbox to ensure that it meets the following criteria:

- The front face of the mailbox is a minimum of 6" behind the face of curb.
- The wooden support post is sturdy with no cracks, rot or deterioration. Even cedar posts will deteriorate over time.
- Metal posts are free of rust or other signs of deterioration.
- Support hardware (brackets, hinges, bolts etc.) are not loose or rusted.

Note that a properly maintained mailbox should be able to withstand the force of snow being plowed against it during normal plowing activities. The City of Worthington will not be responsible for any repair or replacement of mailboxes that fail to meet the referenced criteria. We suggest property owners perform a routine mailbox check-up every year.

What's the process if my mailbox has been damaged?

1. Contact the City of Worthington Ohio, Service and Engineering Department @ 614-431-2425
2. A work order is generated and a technician is sent out to inspect the mailbox and make temporary repairs if appropriate in order to receive mail. The actual timing to inspect the mailbox is somewhat dependent on the severity of ongoing winter weather events: however the goal would be to address the issue within 24 hours of it first being reported.
3. Following inspection, contact will be made with the property owner via phone, email or hand delivered letter indicating the findings. If the mailbox is found to be in conformance with the referenced criteria, a Proof of Loss Claim form will be included for the property owner to complete. The homeowner will be reimbursed for their cost in replacing the damaged mailbox.
4. If the mailbox was determined to be out of compliance with the referenced criteria, the letter will identify the specific reason(s) why. If the property owner wishes to challenge our findings, they may do so by completing a Proof of Loss form and submit it to the City of Worthington Law Department. The City's Attorney will make a final determination based on the facts provided by both parties.

Priority I Streets

1. High St.
2. Wilson Bridge Rd. E.
3. Wilson Bridge Rd. W.
4. Worthington-Galena Rd.
5. Schrock Rd.
6. Huntley Rd.
7. Proprietors rd.
8. Granville Rd E.
9. Granville Rd. W.
10. Olentangy River Rd.
11. S.R. 315
12. Linworth Rd.
13. Snouffer Rd.
14. Robbins Way
15. Plesenton Dr. (hill only)
16. Tucker Dr. (hill only)
17. McCoy Dr. (hill only)
18. Park Blvd. (Hartford to Greenwich St)
19. Foster Dr. (Park Blvd. to Loveman Ave.)
20. Colonial Ave. (Greenwich St.to Park Blvd.
21. Bromley Ave.

Priority II Streets

1. Lakeview Plaza
2. Highland Ave.
3. Heischman Ave.
4. Northland Ave
5. North St. (Proprietors to Evening)
6. Hartford St. (North St. to Park Blvd)
7. New England Ave. (Andover to Farrington)
8. South St. (East end to Olentangy Blvd)
9. Park Blvd. (Indianola Ave. to Hartford St.)
10. Colonial Ave. (Park Blvd to Andover St.)
11. Foster Ave. (Park to Corp. Limit)
12. Indianola Ave. (Corp to Park Overlook)
13. Selby Blvd. (Northbrook to Selby Park)
14. Evening St. (South St to Highgate)
15. Larimer Ave. (High St. to Guyer)
16. Reiber St (Wilson Bridge Rd.to Thackeray)
17. Caren Ave. (High to Reiber St)
18. Old W. Wilson Bridge Rd.
19. Collins Dr.