# City of Urbana, Illinois <br> Department of Public Works 

Operations Division

# MEMORANDUM 

TO: William R. Gray, P. E., Public Works Director<br>FROM: Jim Kelly, Operations Manager<br>DATE: March 22, 2007<br>RE: Sidewalk Snow Removal Program

## INTRODUCTION

If the City Council is considering a sidewalk snow removal program or ordinance, it is important to have an understanding of current law and logistics of snow removal, with a focus on the quantity of sidewalks within Urbana.

The State of Illinois law, currently known as the Snow and Ice Removal Act of 1979, seeks to encourage citizens "to clean the sidewalk abutting their residence of snow and ice." It accomplishes that by shielding liability "caused by the snowy or icy condition of the sidewalk resulting from his or her acts or omissions unless the alleged misconduct was willful or wanton." Judges seem to be most interested in "unnatural accumulation" from plowed or shoveled mounds of snow that obstructs a driver's view. These mounds could be at intersections or in the median/parkway. The visibility triangle must remain free of any unnatural obstructions blocking the view of motorists.

The logistics of snow and ice removal create a unique challenge that takes many months of preparation, in order to assure the objectives can be met in all scenarios (see attached priority list). Each snow event is different. A small amount of snowfall with the right wind and temperature conditions could require more of a removal effort than a larger snowfall with no wind and higher temperatures. What makes snow fighting unique is everything needs to be accomplished at the same time. Most other duties do not require all aspects of the job to be accomplished simultaneously, such as snow removal. The 12-hour shifts utilizing Operations, Arbor, Fleet and Public Facility Divisions are not uncommon. The Snow Manual, which is generated each year, identifies priorities via snow routes and helps provide an overall perspective of the amount of work involved with fighting snow/ice, and the equipment used to maintain the current standard.

## RESPONSIBILITY

Outside of allowing property owners to handle snow removal as they wish, there are two different approaches to assigning responsibility for removing snow from sidewalks:

- The owner or occupant of the property-via an ordinance.
- The City's workforce and/or contractor.


## Questions for Consideration

- What about the disabled and elderly who are incapable of removing snow?
- Who is responsible for the properties in the instance of vacations or winter break at the University?
- In the case of occupants of apartment buildings, duplexes, or townhouses, who of these occupants would be considered liable for snow removal?
- How wide does the sidewalk have to be cleared?
- How does the City address the snow on the sidewalk placed there by the City's snowplowing efforts?
- What if the snow/ice is too solid or frozen to clear with a snow shovel or snow blower?


## Owner, Tenant, or Occupant of the Property

Recent research of Chicago area communities and Big Ten cities has revealed that many cities have an ordinance requiring property owners or tenants to remove the snow from their sidewalks within a certain period of time. Fines are associated with failure to remove snow from sidewalks. An ordinance would need to be created; and all property owners, tenants, and/or occupants would need to be informed that snow on the sidewalk adjacent to their property must be removed. An ordinance must address the following:

- Who the ordinance applies to - Business and Residents.
- Why the ordinance exists - For pedestrian safety, outside of vehicular traffic.
- A standard for precipitation - Amount of snowfall requiring removal.
- Time period for compliance with the ordinance - After the storm event, what is the time period allowed to remove snow from the sidewalks?
- Fines for violation of the ordinance.
- Who will enforce the ordinance?


## City Workforce and/or Contractor

A small number of cities plow snow from sidewalks as a city service. If the City Council were to cause the City's workforce or contractors to remove the snow from all sidewalks, the following would need to be considered:

- A standard for precipitation - Snowfall amount when the City's workforce would step in to begin sidewalk snow removal.
- Time frame - After the storm event, the amount of time allowed for clearing snow from the sidewalks.
- Resources - Staff and equipment required to accomplish the directive.
- Cost - How would this impact the City's Budget?
- Source of revenue?
- Sidewalk encroachments would impede snow removal efforts resulting in damage to equipment, vegetation, or private property.


## CURRENT PROGRAM

The current sidewalk snow removal standard for the City of Urbana Public Works Department is to remove all snow and ice from the sidewalks adjacent to city-owned property. The staff and equipment it takes to remove snow from three and one-half (3.5) miles of sidewalk is significant. The Public Works Department dedicates three (3) walk-behind snow blowers and also a large tractor with snow blower and snowplow attachments. The Public Works Department budgets $\$ 2,000$ per year for deicing chemicals. With the use of the abovementioned equipment and chemicals, this process would generally take four workers (4) an average of eight (8) hours to remove and deice the assigned sidewalks during and immediately following the storm. For the most part, the equipment used is specifically designed to remove snow and can not be utilized for any other use during the non-winter months. The current cost to remove snow on three and one-half (3.5) miles of sidewalk is $\$ 1,000$ per mile/per event for sidewalk snow removal.

## EXPANDED SIDEWALK SNOW REMOVAL PROGRAM

It is estimated that the average cost to remove snow after each snowfall event along sixty-five (65) miles of primary route sidewalks would be approximately $\$ 65,000$; from eighty-nine (89) miles of secondary route sidewalks--\$89,000; and from thirty (30) miles of school sidewalk routes would be approximately $\$ 30,000$. An additional four (4) tractors with snow removal equipment, costing approximately $\$ 60,000$ per piece of equipment, would be required.

Timing is also a critical issue. Without adding personnel to accomplish this task, sidewalk snow removal would begin after all other priorities have been completed. The snow removal priorities for the February 13, 2007 snow storm were completed six days after the snow began to fall. The snow-removal workforce worked 12 -hour shifts from Tuesday thru Sunday. The snow on the sidewalks would now be six days old. The thawing days and freezing nights would have hardened or froze the snow, making removal very difficult if not impossible. The snow-removal workforce that would have been assigned to sidewalk snow removal would have been coming off the 12 -hour shifts. These employees would be exhausted and would require much needed rest, increasing the chance of an accident or personal injury.

## SUMMARY

A requirement for the owner/occupant of property to remove snow and/or ice from sidewalks would require an ordinance passed by City Council that identifies the issues listed above and addresses the outstanding questions stated above. Notice should be provided to all property owners adjacent to sidewalks of the new requirement and consequences of non-compliance. If City Council would require owner/occupant of property to remove snow from sidewalks within a designated time frame, that requirement in turn places a time frame on the City to also be in compliance. As stated above, during some snowfall events, the entire snow fighters' workforce is being utilized. The Department of Public Works would need to review the various impacts such an ordinance would have on snow and ice removal operations. It can be assumed that during certain snowfall events additional resources would be required.

If the City Council would direct the City's workforces to remove snow from sidewalks and not require the owner/occupant of property to remove snow and/or ice from sidewalks, additional equipment and staff would be necessitated. The amount of equipment and staff needed would depend on the standard set forth by the City Council. Presently, all equipment and staff available are being utilized during current snowfall events to clear streets, parking lots, and sidewalks adjacent to city property. If the City Council would direct staff to add quantity and a designated time frame for sidewalks to be cleared, additional resources would be required to effectively meet that directive.

JK:klf
Attachment: Priority List - Snow and Ice Operations

# The following list is from the City of Urbana's Snow and Ice Control Operational Plan Manual (FY 2006-2007). The points of information that follow are in order of priority, with foremost priority as the first bullet point. (Sidewalk mileage is included for primary and secondary routes.) 

- 4 - Primary Routes ( $\mathbf{6 5}$ miles of sidewalks)

Defined as 123.3 lane miles of streets that, as arterial streets, provide major east-west and north-south access throughout the City.

- 2 - Secondary Routes ( $\mathbf{8 9}$ miles of sidewalks)

Defined as 37.1 lane miles of streets that provide access to all primary and secondary routes.

- 15 - Residential Routes

Defined as 117.5 lane miles of local streets that are not primary or secondary routes.

- 120-Cul De Sacs

Defined as 16.1 miles of cul de sacs, comprised of 120 cul de sacs that require tractor/loader work to clear snow.

- 2466 - Parking Spaces

Defined as 18 public parking lots serving the City's buildings; facilities; and other public properties, including metered and on-street parking.

- Central Business District

Defined as "Downtown" and generally bounded by Race Street, Vine Street, University Avenue, and Illinois Street; includes on-street parking. This area requires the physical removal of snow.

- University District

Defined as on-street metered parking adjacent to University of Illinois property.

- 3.5 miles - Sidewalks Adjacent to City Property

It is the policy of the Urbana Public Works Department to remove all snow and ice from sidewalks adjacent to city-owned property. We hope to provide this service prior to 8:00 A.M. Heavy snowfall or other higher snow removal priorities may extend the expected time frame for completion.

- Alleys

One pass will be made in all seven miles of alleys after a 10 " snowfall and after all other priorities are completed.

