

## **Winter Snow & Ice Removal Mobility & Safety**

### **Introduction**

Due to its geographic location, Salina, Kansas is subject to freezing rain, ice and snow at any time during the fall, winter and spring months. Winter storms may occur from November through March.

During snow and ice conditions, the Public Works Department is responsible for the “mobility and safety” of the traveling public.

Following is a summary of the City’s snow and ice removal program. Considerable time and effort is spent planning and preparing prior to the actual snow and ice removal season. A separate detailed Winter Snow Plan Manual is maintained by the Public Works Department to fully describe snow and ice removal procedures.

### **Plans and Procedures**

The City snow removal operation is contained in the Winter Snow Plan Manual. This Manual is updated annually to account for new streets and any changes made to the overall street system. It calls for snow plowing to begin after accumulations have reached a level where effective plowing can begin. In coping with both snow and ice, the first responsibility of the Public Works Department is to clear the main arterial streets (like Ohio, Ninth, Crawford, and Magnolia etc.) so emergency vehicles can reach all areas of the community.

After the snow coordinator decides that these major streets will remain open to traffic, crews turn their attention to collector streets (like Quincy, North, South, and Oakdale, etc.). Collector streets connect residential streets to arterials. In some situations arterial and collector streets are plowed multiple times before crews enter residential areas.

Snow crews closely watch four-way intersections, hills and bridges for build-up of snow and ice. Salt is spread according to conditions. Those areas holding the greatest threat for accidents during a snow storm receive the most attention from City snow fighters.

After the arterial and collector streets are judged passable, then residential streets are cleared of snow as time permits.

Many factors affect road conditions and the ultimate price tag of clearing streets. Wind and temperature are two such conditions. Moisture content, the time of day and whether snow falls on already existing snow or ice also has an effect.

The City of Salina's snow plan calls for plowing and salting to the extent that emergency vehicles can reach all areas of the community. An additional resource we have available to us in achieving this objective is the use of liquid magnesium chloride which is applied as conditions dictate to promote safe driving.

### **Preparation**

City snow fighters begin preparing for the winter ice and snow in August. The de-icing trucks must be calibrated every year. The anticipated de-icer is ordered in June and put into storage by November. All snow fighting equipment is inspected prior to October. All of the snow equipment is tested and, if necessary, repaired before each winter.

The snow crews run an obstacle course in August-September. The course reminds the snow fighter that driving a truck with front-end equipment requires a higher degree of care and skill than ordinary vehicles. The course is designed to improve the driver's skills in moving in and out and turning with a snowplow attached to the front of the truck. In addition, drivers must be comfortable with using both side rearview mirrors. Over the years, we have increased the difficulty of the City's course to ensure our drivers are the best in the business.

### **Initial Mobilization Procedures**

Snow is an inconvenience and can be a hazard for everyone. During a really heavy storm, employees from the Public Works Department are pressed into action to get City streets cleared as soon as possible.

Other Departments such as the Department of Parks and Recreation provide help with clearing snow from sidewalks at City facilities, recreational areas, the corners of the downtown business district, the downtown arcades, and the downtown brick alleys. During winter snow or ice conditions, City snow fighters continue working 24 hours a day. Employees are divided into two teams, each working twelve hour rotations until City streets become passable and safe.

### **Chemical and Abrasive Treatment**

The first step fighting any snow storm is the spreading of chemical and/or salts on priority routes where traffic congestion may occur when icy conditions develop.

The use of rock salt and magnesium chloride for snow and ice removal is the accepted procedure. Salt will be used to melt snow and will prevent bonding of compacted snow to pavements, thus ensuring a cleaner plowing if plowing becomes necessary. Magnesium chloride is mixed with salt to increase its melting capacity of both snow and ice.

The City realizes the use of chemicals and abrasives can impact long-term

environmental quality. As a result, we believe moderation is the best solution. We take care to calibrate each of the salt/material spreaders to distribute only the amount of material necessary to provide safe streets.

## **Snow Plowing**

Typically, after snow accumulation has reached a depth of several inches and has become “mealy,” Street crews are directed to begin plowing. In most cases arterial streets are plowed first. These streets provide access throughout town for emergency vehicles and handle the most traffic volume. Collector streets are then plowed. Residential streets are plowed as time permits.

## **Questions and Answers**

### **Why does it take so long for the City to plow snow from the street in front of my house?**

Arterial streets are always our first concern. The streets provide access for emergency vehicles and handle the most traffic volume. Collector streets are then plowed, followed by residential streets as time permits.

### **Why doesn't the City have snow emergency routes?**

The City of Salina does not feel snow routes are necessary at this time. Snow emergency parking bans are costly, time-consuming and confusing to the general public. In addition, most of the City's busiest streets either do not currently allow parking at any time or are wide enough for snow plows to pass.

### **Why do City snow crews always throw snow on my sidewalk and driveway?**

Snow plows must maintain a minimum speed to remove snow out of the street. We understand and apologize for the inconvenience this may cause. Snow plow drivers have been instructed not to throw snow any further than necessary. If you are elderly or have a disability which prevents you from removing snow from your driveway, please contact the Department of Parks and Recreation for assistance.

### **Why doesn't the City plow sidewalks?**

There are simply not enough funds available for the personnel and equipment necessary to remove snow from all City sidewalks.

### **What can the City do to get people to shovel their sidewalks?**

City ordinance requires property owners to shovel sidewalks which may pose a hazard to pedestrians. If you see a dangerous snow covered sidewalk, please

notify the Police Department at 826-7210.

### **3 Things Citizens Can Do After a Snow Storm**

- **Stay off City streets until they have been cleared.**  
Any traffic slows the snow removal effort. Stranded and stuck vehicles may bring street clearing to a halt.
- **Clear your gutters.**  
This allows the maximum melt water flow to the nearest storm-sewer inlet.
- **Clear your sidewalks.**  
City ordinance requires property owners to shovel sidewalks. This is to ensure pedestrian safety.

**For Additional Information Contact:  
Department of Public Works  
Phone (785) 309-5750  
TDD (785) 309-5747**

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