



City of
Evans, Colorado

Snow & Ice Control Plan

FORWARD

The City of Evans Snow and Ice Control Plan is designed to direct cost-effective maintenance efforts during periods of snow or ice. The city's streets are divided into main and secondary arterials, plus streets that serve schools. These areas receive sanding and plowing priorities. This assures each residential area is in close proximity to a plowed street and that emergency services can be provided.

The Snow Plan is available to citizens that are interested in how this service is conducted. It is located on the city's web site www.cityofevans.org.

The primary purpose of the Snow and Ice Control Plan is to organize safe travel ways during snowstorms. Some inconvenience may be caused to citizens as snow is moved out of the streets and into the gutters. In certain areas, snow may be plowed onto sidewalks or into driveways. Citizens have 24 hours after the storm stops to shovel their walks - by waiting to clear sidewalks until the storm is over and the streets have been plowed, the problem of having to repeatedly shovel walks is minimized.

City crews put forth maximum effort during snowstorms, with prolonged storms becoming very tiring to the operators running the snow removal equipment. Equipment breakdowns, staffing availability and abrupt changes in the weather each can have drastic effects for the snow removal efforts. These issues must be dealt with on an individual basis during each storm.

In order to make the City of Evans Snow and Ice Control Plan effective, it requires the cooperation of many people including the Public Works Department, the Police Department, vendors, contractors, and most importantly, the citizens of Evans.

The City is actively involved in testing new de-icing products and techniques including abrasives that are designed to substitute for salt and sand;

- Liquid de-icers such as magnesium chloride which substitute for solid salt;
- Anti-icing which involves treatment of road surfaces prior to snow and ice formation;
- New technology such as computerized de-icer application equipment.

These efforts are conducted with emphasis on motorist safety, cost effectiveness, environmental benefits, and operational logistics.

Purpose

The primary purpose of the Snow and Ice Control Plan is to organize snow and ice removal efforts so that safe travel routes are available during snowstorms. The Plan identifies “Designated Streets” which meet at least one of the following criteria:

- Arterial or collector status.
- Provide access to significant commercial and industrial areas.
- Provide access to schools.
- GET bus routes.
- Provide access to emergency facilities.

The Plan also identifies the order in which these “Designated Streets” are plowed and sanded during snowstorms. Similar to other Front Range communities, most residential streets are considered “Non-Designated Streets” and will only be plowed according to the procedures outlined within the Snow and & Ice Control Plan.

Service Objectives

1. To have all designated streets in the Snow Removal Plan plowed and sanded within 24 hours after a storm.
2. To reduce the cost of snow removal through the acquisition and utilization of efficient equipment, thereby minimizing the cost of hiring contractors to supplement City efforts.
3. To divide the city into areas where one truck equipped with a plow and sander can effectively provide snow removal services in each area.
4. To ensure that all properties are within 2-3 blocks of a plowed street at any given time.
5. To sufficiently train adequate numbers of personnel to operate all available snow removal equipment.

Snow Plow Operations Deployment Levels

Level One

- Level one is considered for snow and ice events when the snow accumulation is zero to two inches and no other storms are expected back to back.
- Selected locations such as overpasses, bridges and shaded areas are responded to as needed.
- Staff typically does not plow at this level. The typical operation is to sand or deice specific locations as they are noticed or called in by the Police Department or city residents.
- The staff on the Public Works Operations On-Call list maintain operations.

Level Two

- Level two is considered for snow events with accumulations of two to six inches with the possibility of back-to-back storms.
- The entire snow team is called in for duty. Currently, the team size is 3 staff and trucks per shift. There is a thirty-minute response time for staff to report for duty and commence with a twelve-hour work shift until the storm(s) end. This work schedule is referred to as twelve on and twelve off.
- Operations will consist of plowing, sanding, de-icing and vehicle cleaning and maintenance.
- Fleet Maintenance will be put On-Call.
- Limited and/or targeted snow removal operations are possible around School zones and other special hazard areas based upon conditions.

Level Three

- Level 3 is considered for snow accumulations of six to twelve inches regardless of single or multiple storm predictions.
- The entire snow team is called for duty, twelve hours on, twelve hours off work schedule.
- Fleet will be called in for duty.
- Other department **staff assistance** may be needed.
- Private contractors may be called in to assist city crews.
- School zones are cleared curb to curb.
- Walk to school routes may **need assistance** by other department staff or contractors.

Level Four

- Transition from level three to level four is based upon the predicted recurrence of snow storms with accumulations of twelve inches or greater with additional accumulations expected.
- Declaration by the City Manager of a snow emergency and the activation of the Emergency Operations Center.
- Incident commander will assume duty. The purpose of the Incident Commander is to maintain and deploy resources based upon our snow and ice removal plan.
- Liaison staff to assume duty. Purpose of the liaison is to receive and disseminate information, which includes press information, special requests etc.
- City of Evans PIO placed On-Call.
- Entire snow team called for duty - twelve hours on, twelve hours off.
- Plow and sand all streets and all alleys with city services.
- Other department staff assistance will be needed.
- Contractors called to assist city crews.
- School zones plowed curb to curb.
- Fleet staff called in for duty.
- Snow removal in many areas of the city.
- Walk to school routes cleared and may occur by city staff or contractor services.
- Resumption and continuation of critical city services including Trash, water, electric and etc.

Designated Streets

The designated streets in the Snow Removal Plan form a network that provides reasonable access to a plowed street for all properties in the city. Designated streets meet at least one of the following criteria:

- Arterial or collector status.
- Provide access to significant commercial and industrial areas.
- Provide access to schools.
- GET bus routes.
- Provide access to emergency facilities.

Plowing/Sanding of Non-Designated Streets

Under certain severe snowstorm conditions, it may be necessary to plow all streets in the city. The following conditions will be evaluated by the administration to determine the necessity of plowing residential streets that are not designated in the plan:

Snow Fall Accumulation - approximately 12 inches of snow should have accumulated in a forty-eight-hour period.

Availability of Funds - careful examination of the current year Snow Removal Services budget as well as the status of Street Fund snow removal reserve.

Emergency Vehicle Mobility - the Police and Fire Chiefs will be contacted to determine whether emergency and Police and Fire vehicles can remain reasonably mobile.

Time of Year - stronger consideration should be given to plowing residential streets in the winter as compared to the spring and fall, when warmer weather is likely to melt much of the snow within two days.

Short-Term Weather Forecast - are other storms or cold spells following? If so, stronger consideration to plowing residential streets should be given.

The Police Chief, the Fire Chief, the Public Works Director and the City Manager shall evaluate these conditions and arrive at the decision. The Public Works Director shall notify the Public Information Officer, the news media and City Council that a snow emergency exists. Storms of this severity will require the hiring of contractors to assist City crews in plowing all streets in the city.

Procedure

1. During light snowfalls of two inches or less, spot sanding will be provided on all designated routes and in certain icy areas on non-designated streets. Often this occurs at controlled intersections with significant elevation changes.
2. If snowfall is predicted to exceed two inches, City crews will plow and sand **designated** routes beginning when two inches of snow has accumulated. The city is divided into three routes with each section covered by one truck.
3. During major storms, crews will plow and sand continuously. Major storms usually result in non-stop plowing until the snowfall stops and all designated routes have been completed. Other conditions such as freezing temperature and high winds cause additional challenges that must be addressed on a case by case basis.

After major snowstorms the City's snow plowing efforts will focus on the continuation of critical City services such as restoring power; trash and recycling; and public safety emergency response capacities. Additionally, snow removal operations will be conducted in certain areas of the city if temperatures are expected to remain low or more snow is expected. These areas include locations in which heavy shading prevents melting and areas where the storm drainage system is entirely above ground.

NOTE: The above-described procedures do not result in a "Bare Pavement Policy." Evans' snowplows are equipped with rubber tipped blades, which allows the blade to ride over roadway obstacles thereby preventing damage to the equipment and infrastructure. Snow plowing in an urbanized area is performed at relatively low speed and requires considerably more time to accomplish than in non-urban areas that are typically plowed by County or State Highway crews.

Ice Accumulation

Due to heavy or successive snows, excessive shade or a continuous freeze-thaw cycle, a buildup of ice can occur along the sides of streets or at intersections. When this condition occurs the Public Works Department will prioritize these areas for removal of ice and snow buildup. No Parking signs may be posted, and 24 hours later, any remaining vehicles may be towed at owner's expense to allow the removal of the ice and snow.

Operators

The snowplow operators are the key to the success of the Snow Removal Program. Snowplow operators responsibilities:

- Working together as a team to ensure efficient service is provided;
- Providing a timely, effective service for their designated routes;
- Maintaining vehicles, plows and sanders in safe working order;
- Properly documenting snow removal activities; and
- Serving as good-will ambassadors for the City.

Supervisor

Crew supervisor's responsibilities:

- Maintaining a positive work environment to enhance the teamwork concept;
- Coordination of service to ensure timely, effective coverage;
- Coordinating vehicle, plow and sander maintenance and repair to ensure safe operations and adequate coverage;
- Maintaining supply inventories to ensure adequate levels;
- Timely, courteous response to service complaints, requests and inquiries; and
- Providing training opportunities for snowplow operators.

Management

Management's responsibilities:

- Providing adequate resources to ensure timely, effective service;
- Creating a positive work environment, thereby making the teamwork concept possible;
- Creating training and feedback avenues for supervisors and operators; and
- Utilizing various forums to create and maintain public awareness and support for snow removal activities.

Operations Division Storm Preparedness

PRE - SEASON

Starting at the end of September and into the first of October, Operations personnel start preparing two trucks for storm duty. This procedure includes mounting and testing sanding equipment and plows. An inventory is taken of our sand and salt mixture and upgraded as necessary.

At the end of October, all additional snow equipment is installed and tested. After every use sanders are lubricated to ensure adherence to maintenance policies. Periodically sanders will be down loaded and thoroughly washed and lubricated. Trucks will also be periodically cleaned both inside and out.

At the end of the snow season all equipment is completely cleaned, lubricated and any necessary repairs are made prior to being stored for the season.

SEASON

The Operations Superintendent first prepares for a storm by monitoring any local, regional and national forecasting systems available. The NOAA system is the one of choice. When planning for storms, storm intensity is taken into consideration. Low levels indicate the need for our minimum storm team of three trucks with operators. At higher levels, plans may be needed to schedule snow shifts. Shifts insure that Operations personnel will get adequate rest, during the storm.

In the event that a storm comes unexpectedly or during off hours, we rely on the City of Evans Police Department to help monitor road conditions and notify us when warranted. We have our ON CALL system to make any necessary contact with personnel, twenty four hours a day, three hundred and sixty five days a year.

Frequently Used Telephone Numbers

Evans Police Department	970-339-2441
Evans Fire Department	970-475-1108
Weld County Sheriff's Department	970-356-1212

MUNICIPAL CODE

Chapter 8.24.110

8.24.110 Snow on sidewalks.

- A. No owner of any property within the City, nor tenants or agents in charge thereof, shall allow or permit snow or ice to remain on sidewalks adjacent to such property. It shall be the responsibility of the owner of any property within the City, or tenants or agents in charge thereof, to remove snow and ice from sidewalks adjacent such property within twenty-four (24) hours after the termination of the most recent snowfall.

- B. It is unlawful to drag, shovel, deposit or otherwise move snow from private property onto public right-of-way. (Ord. 466-09)