

City of Longmont

Snow and Ice Control Plan



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SNOW PLAN DEFINITION

The City of Longmont's Snow & Ice Control Plan is designed to provide City employees with guidance and direction for maintaining roads during periods of snow or ice. The City's streets are classified by their function for moving traffic. Arterials roads are the principal routes that deliver traffic from collector roads to urban centers and major highways. Collector roads provide access to residential areas and serve to move traffic to and from arterials. Other high priority roads include streets that serve schools, hospitals, and public buildings. The goal of Longmont's Snow and Ice Control Plan is to maintain a safe flow of traffic throughout the City and to ensure that each residential area is in close proximity to a plowed street. Emphasis is also placed on ensuring that emergency services can be provided throughout the City.

The Snow Plan is available on the city web site at:

http://www.ci.longmont.co.us/public_works/streets/snow_removal.htm#FullVersion

Residents are advised that in certain areas, snow may be inadvertently plowed onto sidewalks or into driveways due to the narrowness of the roadways. The City's Municipal Code stipulates that residents have 24 hours after a storm ends to remove snow and ice from sidewalks abutting their property (LMC 9.04.130). Residents can minimize the need to repeatedly shovel sidewalks by waiting until a storm is over and streets have been plowed.

The Snow and Ice Control Plan incorporate Best Management Practices to aid in maintaining the desired air and water quality in our community. Efforts are placed in the selection of granular and liquid products used on the roadways, its distribution rates, and street sweeping efforts in follow-up to snow events.

In 1997, Longmont began using a naturally occurring granular de-icing product that is sold under the trade name of Ice-Slicer. This product is widely used in municipal snow and ice removal operations throughout the western United States. Ice-Slicer provides traction while functioning as a dissolving de-icing material. Ice-Slicer is applied at approximately 50 percent of the rate at which traditional sand and salt mixtures are applied. Use of this product has virtually eliminated residual debris left by traditional sand and salt mixtures including the fine particles that contribute to air pollution during winter months. Liquid de-icers are particularly effective on overpasses such as Pratt Parkway and Ken Pratt Blvd, which are susceptible to freezing conditions.

Snow teams are used to deploy snow and ice removal equipment throughout town using the mobilization strategy identified in the table on page 5 of this plan. In general, snow teams work in staggered 12 hour shifts to provide round the clock coverage until the snow event(s) have ended. Snow team duties include plowing, sanding/deicing, and snow removal.

After major snowstorms, depending on temperatures and future forecasts, snow plowing and snow removal operations may be conducted in areas where heavy shading prevents melting and where drainage may not be sufficient to remove melting snow and

ice during the daytime. In these areas, crews will attempt to remove as much snow and ice as possible; however, it is important to note these efforts will not result in bare pavement.

The City of Longmont primarily relies upon the use of regenerative air sweepers to remove street debris after snowstorms. Every effort is made to continue street sweeping during winter months to clean streets after storm events. Weather, temperature, and snowfall accumulation dictate when sweepers can effectively operate.

Objectives

1. Provide neighborhood access to plowed roadways and bus routes during a snow event; this generally involves plowing and sanding collector streets.
2. Provide access to emergency services, by plowing and sanding roadways adjacent to major medical facilities.
3. Provide commuter access through the City and to major commercial/industrial zones via the plowing and sanding of arterial roadways.
4. Ensure safe vehicle access to schools by including those areas on the snow routes.
5. Promote returning the transportation system to a normal state by removing snow & ice including after storms have ended if necessary.

Deployment Guidelines

The decision to deploy snow operations is based on predicted weather conditions, air and ground temperatures, and the potential for consecutive storms occurring in a short time period.

Longmont employees monitor regional weather forecasts and local conditions to help anticipate the severity of an upcoming snow event. Managers, supervisors, public safety officers and on-call staff continually observe weather prior to, and during a storm. Snow teams are placed on an on-call status when forecasts indicate that snow and other related factors such as temperature are likely to create adverse road conditions in the City (generally when a 50% or greater chance for snow is forecasted).

A snow team leader is assigned each probable snow event. That leader is responsible for deploying snow teams on time. The decisions are based on information provided by Operations staff, media and electronic information and Public Safety. The City of Longmont categorizes snow response in four levels. The supervisor in charge determines the level of deployment based upon the initial severity of the storm and contacts team members to report for duty accordingly. The snow team leader will also inform the City's communication center that snow teams have been deployed.

Deployment Levels

Summary Table of Deployment Levels

LEVEL	ACCUMULATION	WEATHER	# OF EMPLOYEES	ACTION
1	0 - 1 inches	Single Snow Storm	4-6. as needed	Overpasses, bridges, and shaded areas treated, as needed
2	0 - 6 inches	Single Snow Storm, Possibility of Multiple Storms	2 shifts of 13 employees, as needed	Plowing and sanding of all streets on designated snow route
3	6 - 15 inches	Multiple Storms Predicted	2 shifts of 13 employees, possible contractor support	Plowing and sanding of all streets on designated snow route - Targeted snow and ice removal occurs, as needed
4	> 15 inches	Multiple Storms Probable	2 shifts of 13 or more employees, plus contractor support	Plowing and sanding of all streets on designated snow route - Targeted snow and ice removal occurs to maintain crucial city services

Level One Deployment

- Level one deployment is considered for snow and ice events where accumulation is small and no other storms are expected.
- Selected locations such as overpasses, bridges and shaded areas are treated as needed.
- Full deployment of snow teams is not typical at this level of storm. Deployment occurs as needed, and the primary purpose is to sand or de-ice specific locations with accumulation or areas that have been reported by the Communication Center, Risk Management or residents.
- Staff included in the Operations Division's on-call list is deployed for this level of operation.

Level Two Deployment

- Level two deployment is considered for snow events with accumulations of zero 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 13 staff and trucks per 12 hour shift. There is a thirty-minute response time for staff to report for duty with a twelve-hour work shift until the storm ends. More than one twelve hour shift may be required.
- Operations will consist of plowing, sanding, de-icing along the identified snow routes.

- Fleet Maintenance mechanics are placed on-call to ensure the plow truck fleet remains operational.
- Limited and/or targeted snow removal operations are possible along the Downtown area and school zones based upon conditions.

Level Three Deployment

- Level three deployment is considered for snow accumulations of six to fifteen inches regardless of single or multiple storm predictions.
- Entire snow team is called for duty. Back to back shifts of twelve hours on and twelve hours off are used to provide continuous snow route coverage.
- Fleet mechanics will be called in for duty to immediately address equipment problems.
- City staff providing back-up to snow and ice operations may be used.
- Private contractors may be contacted to assist City crews.
- School zones are cleared curb to curb.
- Plowing priority will be given to the continuation of critical City services including Trash, Water, Electric, etc., along with emergency response needs.

Level Four Deployment

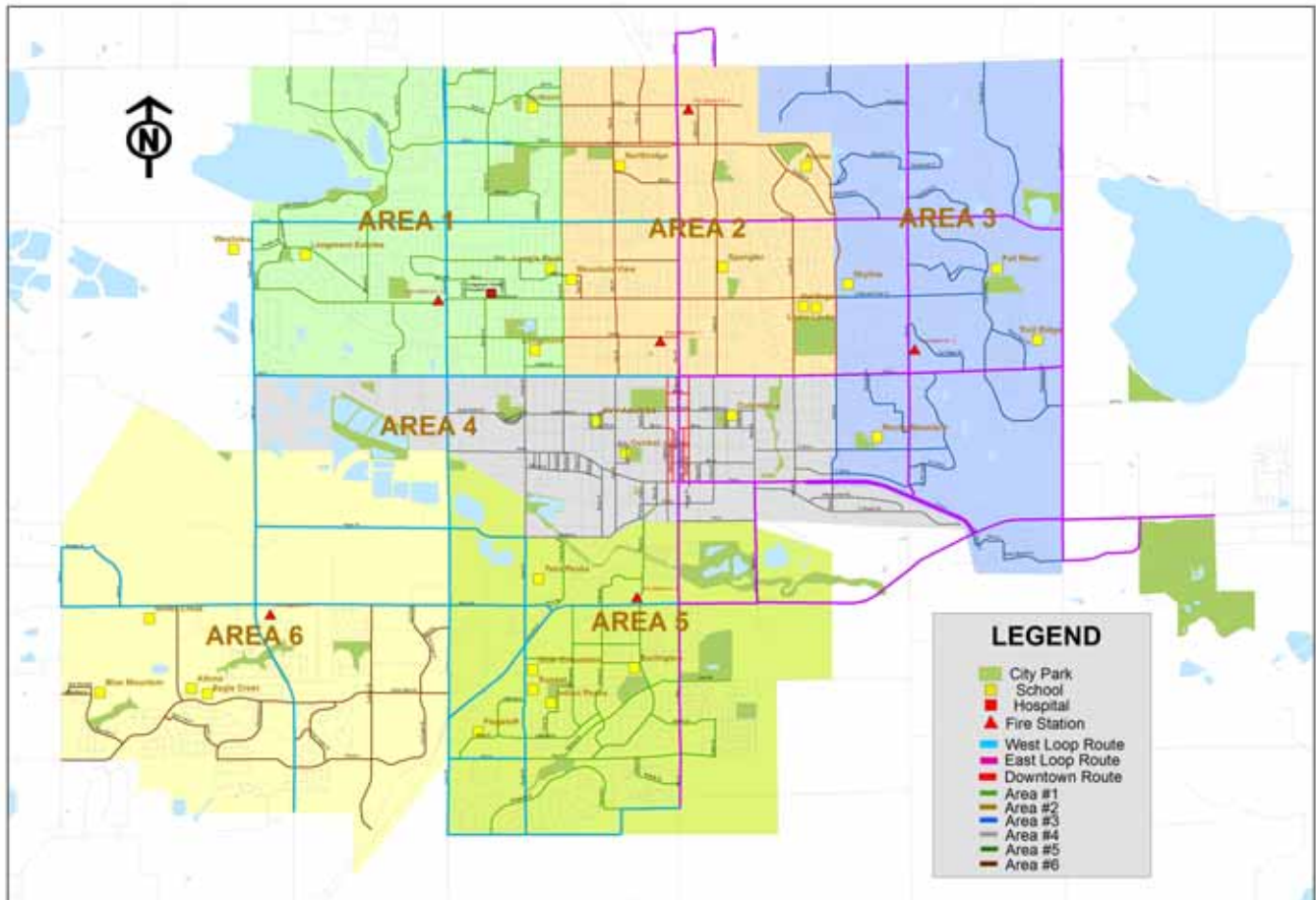
- Transition from level three to level four deployment is based upon the predicted forecast of snow storms with accumulation of fifteen inches or greater and additional accumulation expected.
- Declaration by the City Manager of a snow emergency and the activation of the City's Emergency Operations Center.
 - Incident commander will assume duty. The purpose of the incident commander is to maintain and deploy resources based upon our Snow and Ice Control Plan.
 - Logistics officer will be appointed. The logistics officer's role is to process special requests for equipment, contractors or other needs.
 - Public Information Officer will assume duty. The PIO's role is to receive and disseminate information, which includes press information.
- Entire snow team is called for duty. Back to back shifts of twelve hours on and twelve hours off are used to provide continuous snow route coverage.
- In addition to plowing and sanding designated streets, plowing and sanding of non-designated streets may occur based upon criteria such as snow fall accumulation, availability of funds, emergency vehicle mobility and weather forecasts.
- Back-up and other City staff and resources will be called upon, as needed.
- Contractors will be contacted to assist city crews.
- School zones are cleared curb to curb.
- Fleet mechanics will be called in for duty to immediately address equipment problems.
- Plowing priority will be given to the continuation of critical City services including Trash, Water, Electric, etc., along with emergency response needs.

DESIGNATED STREETS

Designated snow routes, including the downtown area (generally defined as Coffman to Kimbark and 2nd to 9th, along with the Coffman/Main alley and Kimbark/Main alley), can be found on the attached GIS map.



Snow and Ice Control Plan 2011-2012



NOTE – Larger map is also available on the city web site at:
http://www.ci.longmont.co.us/public_works/streets/snow_removal_maps.htm

ADDITIONAL RESOURCES

The city has access to additional resources and has developed agreements with the Colorado Department of Transportation and Boulder County to promote the effective use of resources. The table below summarizes those resources.

Summary Table of Additional Resources

RESOURCE	ROLE	COMMENTS
CDOT	Snow & Maintenance Agreement to delineate service areas and resource sharing	City is paid to provide maintenance on state highways
Boulder County	Delineate responsibilities to ensure coverage and prevent overlaps, and resource sharing	
Contractors	Additional snow team support for major storms or equipment breakdowns	<ul style="list-style-type: none"> ■ Minimum number of equipment availability established to participate ■ 3 hour response time ■ 4 companies on contract
Equipment Rental	Supplement City's equipment fleet	City has agreements with multiple heavy equipment rental firms

LONGMONT MUNICIPAL CODE

9.04.130 Snow and ice on sidewalks - Owner or occupant responsibility.

- A. Within twenty-four hours after any snow or ice stops falling on a public sidewalk, it is the duty of:
1. Every owner and manager of property abutting the sidewalk; and
 2. Every tenant leasing an entire premises abutting the sidewalk; and
 3. Every adult occupant of a single-family dwelling abutting the sidewalk to remove or cause the removal from public sidewalks abutting the property accumulated snow and ice, as this section provides.
- B. Each responsible person listed above shall remove or cause the removal of snow and ice to expose the abutting public sidewalk for the entire width of the sidewalk or the width of four feet, whichever is less.
- C. After removing snow and ice as required above, each responsible person listed above shall keep the abutting sidewalk reasonably passable.
- D. Under this section, snow or ice has not “stopped falling” if additional snow or ice falls within four hours.
- E. The obligations stated above do not apply to a public sidewalk abutting a single-family residential property on one side, and an arterial street, city greenway, city park, or city golf course

on the other side. Nor do those obligations apply to a sidewalk from which the city regularly removes snow and ice.

F. As used in this section, "sidewalk" means a paved public way designed and constructed for pedestrian travel, and "Arterial Street" means an arterial street identified in the Longmont Area Comprehensive Plan or accompanying maps.

G. Violation of this section is an offense under this code. Public Works and Natural Resources Director, or the director's designee may notify a responsible person listed above of the city's intent to correct a violation. If the violation remains twenty-four hours after such notification, the Director or the director's designee may remove or cause the removal of snow and ice from any sidewalk affected by the offense. Upon a conviction, the municipal court shall add to the sentence of a responsible person so notified the director's reasonable certified expenses of removal. The city shall collect such added expenses in the same manner it collects other municipal court fines. Assessments against property for abatement costs under other parts of this chapter shall not apply to the city's expenses under this paragraph.

H. The council intends, by this section, to create legally enforceable duties for the benefit of persons lawfully using sidewalks. Subject to applicable rules of law, including comparative negligence and other civil defenses, breach of these duties shall support civil recovery by injured persons lawfully using public sidewalks from each violator, jointly and severally, for damages the violation proximately causes. (Ord. 0-98-28 § 1: Ord. 0-94-61 § 9 (part): prior code § 5-5-9)

LONGMONT MUNICIPAL AIRPORT

The Airport Manager is responsible for the snow and ice control plan at the Vance Brand Municipal Airport. It is anticipated that as a separate enterprise fund, the Airport will budget sufficient funds for their Snow and Ice Control Plan.

The Airport Snow and Ice Control Plan includes monitoring for snow events and deployment of equipment and services. Snow and Ice Control Plan is listed in two levels of priorities:

Priority #1:

Road leading into airport for emergency vehicles
Runway
Main taxiways and bump outs (aircraft run up areas)

Priority #2:

Secondary taxiways – taxiways between hangars
Area in front of Air West parking
Areas between hangars
Road leading from airport through the east gate

Monitoring begins when a forecast of snow with accumulation is forecasted. Deployment of equipment begins when either one half inch of heavy wet snow accumulates or two inches of a dry, light snow accumulates.

The Airport Manager also maintains access to snow removal contractors and/or the City department support. Should the airport need assistance for snow plowing or snow removal, an airport representative will be on site to manage the airport traffic during plowing operations on the runway and taxiways.

The Airport Manager will monitor for aircraft traffic while plowing operations occur on the runway and taxiways and will notify the operators when aircraft are in the area. When an aircraft is in the traffic pattern, the snow team will immediately get off the runway and park on a taxiway until the aircraft has landed or departed the area. All snow removal vehicles will maintain flashing strobe lights on at all times.

Snow response will only provide plowing and will not spread granular or liquid materials. The team will not leave any windrows of snow taller than three feet in height.