



The City of New York Department of Sanitation

2024-2025 Draft Snow Plan Borough of Staten Island

Pursuant to Local Law 28 of 2011

**Jessica Tisch, Commissioner
September 2024**

The New York City Department of Sanitation (DSNY) Borough Snow Plan describes measures DSNY will take to fight winter weather, clear streets for safe transportation, and address issues of public safety related to snow and ice conditions. This document is published pursuant to the requirements set forth under Local Law 28 of 2011.

I. INTRODUCTION

DSNY keeps New York City clean, safe, and healthy by collecting, recycling, and disposing of waste, cleaning streets and public spaces, enforcing the rules around cleanliness, and clearing snow and ice. A critical component of this mission is to clear snow and ice from New York City's more than 19,000 lane-miles of roadways and associated infrastructure in a prompt, reliable, and equitable manner.

Winter conditions on the city's roadways introduce potential hazards to all forms of travel. Snow, ice, and other winter weather can impede first responders, temporarily close businesses, close schools, and restrict the mobility of all New Yorkers. Snowfall may lead to the disruption of normal traffic patterns and public transportation. In prolonged or severe snowfall, disruption may last for extended periods of time.

DSNY is dedicated to promptly clearing snow and ice from the city's roadways. However, this is often a time-consuming effort, especially during periods of heavy or persistent snowfall, accompanied by dropping temperatures and strong winds. This Snow Plan focuses on the strategic planning, organization, and response to winter weather conditions, outlining the operational tasks involved in spreading salt on roadways, as well as the plowing, piling, hauling, and melting of substantial snow accumulations from the city's thoroughfares.

II. PLANNING

DSNY takes a continuous and systematic approach to preparation and planning for winter weather. During the spring and summer seasons, DSNY personnel conduct a comprehensive review of approximately 1,500 snow-plowing routes across the city. Adjustments are made as needed, informed by insights from the previous winter season and any modifications to the urban landscape, such as the construction of new schools or hospitals. Snow routes no longer follow outdated "priority" designations, instead being designed to provide equity to all parts of the city. DSNY also performs preventative maintenance on all snow-related equipment and makes upgrades to the equipment as necessary.

In the fall, DSNY holds meetings internally to coordinate operations, discuss snow staffing, and plan snow-drill exercises. DSNY also meets with other city agencies to coordinate asset dedication for its snow operations and to discuss putting city agencies on notice during a Snow Alert. A Snow Alert indicates the type of winter weather expected, amount of snowfall or precipitation expected, temperature and timing of the event as forecasted by weather services contracted by DSNY. As a result of these meetings, DSNY and other city agencies have adopted procedures and made assets available as outlined in Section V-D, below.

DSNY representatives also attend Community Board district service cabinet and borough service cabinet meetings to report on DSNY's Snow Plan.

In the months before the Snow Season begins, DSNY ensures it has adequate equipment, plow parts, and supplies to carry out the Snow Plan, including sufficient plows and chains. DSNY has established contracts with multiple vendors for the replenishment of salt stockpiles, calcium chloride, and brine. These products are delivered to DSNY storage locations located in each borough (see Appendix E). DSNY has 31 permanent and 11 seasonal salt storage sites, with the capacity to store over 300,000 tons of rock salt citywide. DSNY also has 53 calcium chloride locations citywide with the capacity to store 380,500 gallons of calcium chloride. Calcium chloride system components are inspected and tested prior to Snow Season to ensure pumps, nozzles, and associated hardware are fully functional.

Every year, a snow-drill exercise is conducted at the beginning of the Night Plow season to prepare all personnel and identify areas that may need adjustments. This exercise involves all DSNY divisions, including both operational and administrative functions.

III. TRAINING

DSNY conducts annual in-service training for uniformed staff each year from September through December. Training for Sanitation Workers includes, but is not limited to, equipment operation, attachment of plows and chains, use of two-way radios, and the use of route navigation technology, along with other annual training topics related to city and DSNY policies.

Front end loaders are a vital piece of snow removal equipment. Each year, Sanitation Workers are selected for training to operate front end loaders at the DSNY training academy located at Floyd Bennett Field. Additional instruction is provided on how to deploy hired equipment and “load and dump” procedures for snow hauling and disposal.

IV. ASSIGNED EQUIPMENT AND PERSONNEL

For a full list of equipment and personnel assigned to each district, see Appendices A and B.

V. IMPLEMENTATION

The following is a step-by-step overview of how DSNY fights an impending snow event.

While DSNY is the lead agency on the removal of snow and ice, the successful implementation of these plans is dependent on equipment and personnel from other city agencies as well, in particular the Department of Transportation (DOT), the Department of Environmental Protection (DEP), and the Department of Parks and Recreation (DPR).

A. Forecast and Preparation

The DSNY Operations Office monitors weather forecasts through the contracted weather reporting services 24/7. The following services will be contracted for the 2024-2025 Snow Season: Accu Weather, Compu Weather, and Metro Weather.

When a risk of snow is indicated by the forecast, senior DSNY staff consider the need to activate personnel and equipment for snow response. If the forecasted amount of frozen precipitation would result in the need to deploy plows, personnel are scheduled into two 12-hour

shifts (normally 7 A.M. to 7 P.M. and 7 P.M. to 7 A.M.). During these situations, regularly scheduled days off for Sanitation Workers and Uniformed Officers are cancelled to ensure maximum personnel availability. DSNY formulates staffing needs 24 hours in advance of snowfall based on weather forecasts and other factors. After an assessment is made as to the necessary action, DSNY will issue a Snow Alert informing DSNY personnel, the Mayor's Office, and other city agencies of a pending snow event. In addition to receiving the snow alert, DEP, DOT, and DPR may be notified of the need for their resources to address the pending snowfall if forecasts warrant it (see Section V-D for city agency responsibilities).

The DSNY Bureau of Public Affairs will issue a Snow Alert declaration to all media and the public via a news advisory and all social media channels. Such advisories will also be posted on New York City Emergency Management (NYCEM)'s Severe Weather page, available at: <http://www.nyc.gov/severeweather>. Subsequent weather forecasts are monitored, and DSNY's Operations Office maintains ongoing communication with contracted weather forecasting services.

Before the snow event, DSNY personnel prepare equipment to begin snow response operations. This may include loading salt spreaders with salt and calcium chloride, attaching plows to equipment used for plowing, and attaching chains to spreaders and plowing equipment based on precipitation type and the amount of precipitation forecasted. If forecasts dictate, hired equipment vendors may be instructed to prepare for piling, hauling, and/or towing operations.

In the hours prior to snowfall and throughout winter weather events, weather condition reports are submitted hourly from DSNY's field weather stations. Salt spreaders may be pre-positioned to begin salting at the first trace of precipitation on roadways.

B. Salting and Plowing Operations

DSNY no longer uses tiered routing designations for different categories of streets – every street is on a route, and every route can be dispatched as needed. This includes bike lane routes.

At the first trace of snow or frozen precipitation on roadways, salt spreaders begin dispensing salt. Salt spreaders are DSNY's first line of defense against snow and ice conditions. Large salt spreaders have plows attached and have the capacity to hold approximately 16 tons of salt. Salt spreaders are equipped with tanks of liquid calcium chloride for pre-wetting salt to enable the melting of snow and ice at lower temperatures. Each salt spreader can hold between 120 and 240 gallons of liquid calcium chloride, depending on the series of truck. DSNY continues to pre-treat specific roadways with liquid sodium brine solution. Beginning 24-48 hours prior to a predicted snow event, DSNY may pretreat certain streets citywide with a liquid sodium brine solution designed to reduce the adhesion of snow and ice to the pavement. This process suppresses snowfall accumulation and can increase the effectiveness of DSNY's plowing operations and provide greater traction to motorists.

Plowing operations begin when snowfall exceeds two inches. Plowing clears snow from the roadways to make roadways passable for emergency vehicles and vehicular traffic. Operators must follow their assigned routes in the proper order to ensure route completion. As a result, plows cannot be diverted from routes to resolve customer complaints until after snow has stopped falling and assigned roadways are clear.

DSNY may deploy specialized equipment based on the conditions. Pick-up spreaders are small spreaders with plows attached for treating narrow roadways and other areas where large salt spreaders cannot access. These spreaders can hold approximately 2.5 tons of salt. Front end loaders are primarily used for salt loading and may be used for plowing narrow streets and loading cut downs during snow hauling operations. Trucks equipped with V-plow attachments may be strategically deployed to locations where drifting or significant snow accumulations hinder the effectiveness of standard truck plows.

Additionally, in heavy snowfall events, DSNY may activate emergency hired equipment contracts as needed.

C. Situational Awareness

DSNY headquarters, located at 125 Worth Street in Manhattan, operates a snow command center. All spreading and plowing equipment are outfitted with two-way radios and GPS devices to maintain communication with supervisory personnel, borough commands, and the snow command center throughout an event. GPS devices are installed in all DSNY equipment as well as the units responding from other city agencies that may be assigned to DSNY during winter weather events. This allows DSNY to track all resources engaged in snow response efforts.

DSNY maintains situational awareness throughout a snow event using a range of technologies and channels of communication. Supervisory personnel monitor operations in the field which are communicated with district, borough commands, and the snow command center. DSNY's snow command center, monitors periodic progress reports on the status of spreading and plowing operations.

In 2023, DSNY made significant enhancements to our GPS tracking application known as BladeRunner 2.0. BladeRunner 2.0 features significant technology enhancements to better support plowing, salting, cleaning, and collection operations, including:

- Enhanced GPS tracking data for broader time windows, multiple vehicles, and extended history;
- Google map integration to provide a modern view — with satellite and street view access — for vehicles and facilities;
- Real-time brine progress data;
- New visual layer data with brine coverage locations, snow preposition points, and protected bike lane information;
- Ability to locate vehicles of interest through proximity features and advanced time frame and location search capabilities;
- Significantly enhanced search capabilities; and
- New cloud-based system to allow for more concurrent users and faster response times.

Ahead of any predicted snowfall, DSNY will activate its snow command center, where BladeRunner 2.0 is housed, to track operations around the city. Each of the thousands of DSNY Superintendents have been trained to use the system, which will be available in all 59 DSNY garages. New Yorkers will still be able to utilize PlowNYC to track plowing progress in their neighborhoods.

Radio communication is an effective tool for relaying orders and information to and from the field. Each borough command utilizes separate radio channels to expand radio transmission abilities during winter weather events.

When the NYC Emergency Management's Emergency Operations Center (EOC) is activated in response to a winter weather event, DSNY Operations Office will assign personnel to the EOC for the entirety of the activation. The DSNY representative is responsible for coordinating interagency needs through NYCEM's EOC including, but not limited to, assisting emergency vehicles, NYCHA developments, hospitals, and other important areas. This coordination will continue for the duration of the EOC activation. DSNY also assigns personnel the NYPD and DOT command centers to monitor those agencies' camera feeds in real time.

D. Other City Agencies

City agencies are responsible for clearing snow from their own property and facilities to comply with their Charter-mandated responsibilities. During a snow event, other city agencies (DOT, DPR, and DEP) may assist DSNY by providing plowing equipment and personnel as described below; this participation is essential to the timely and equitable clearing of snow and ice.

DOT: The Department of Transportation provides plowed trucks with operators (see Appendix F). When plowing operations are completed, these trucks may also assist in snow hauling operations. During a snow event, DOT will send a representative to the DSNY snow command center to facilitate coordination between DSNY and DOT. All DOT employees assigned will be directed by DSNY personnel. DOT services the four lower East River Crossings and calls upon DSNY to assist as necessary during a snow event. Additionally, the Brooklyn Promenade on the BQE, from Tillary Street to Atlantic Avenue will not be salted. DOT will use their same anti-icing protocol for this stretch. DSNY will still be responsible for plowing the BQE along the Brooklyn Promenade area.

JCDecaux, DOT's bus shelter contractor, is responsible for maintaining and clearing the interior of bus shelters.

DEP: The Department of Environmental Protection provides plowing assistance to DSNY when necessary. DEP also advises DSNY on sewers suitable to support snow melting operations.

DPR: The Department of Parks and Recreation provides plowing assistance to DSNY when necessary. DPR supplies light duty vehicles with plows, which can perform snow removal work in narrow streets across the city.

NYPD: DSNY collaborates with NYPD Highway, Traffic, and Tow divisions, facilitated by the Tow Truck Task Force, to exchange contact information and review the deployment of NYPD tow trucks during and after significant snowfall, as well as the protocols for highway escort routes. Additionally, DSNY assigns representatives to the NYPD command center to coordinate efforts and monitor street conditions through private and public streaming video feeds from several cameras positioned throughout the five boroughs.

FDNY / EMS: FDNY, along with NYPD, DOT, and DSNY, staff the Tow Truck Task Force, which is coordinated through NYCEM. In heavy accumulation events, DSNY may be called upon to clear roadways to provide access for FDNY vehicles or NYPD tow trucks to tow snowbound ambulances.

MTA: DSNY attends the MTA's Annual Snow Operations Meeting to discuss issues and concerns going into the new Snow Season. MTA submits priority locations for DSNY salting and plowing, including turn-around locations for bus lines.

Port Authority & TBTA: The Port Authority of New York & New Jersey is responsible for managing bridges and tunnels between New York and New Jersey as well as airports in New York City and Northern New Jersey. The Triborough Bridge and Tunnel Authority (TBTA) manages the toll bridges and plazas within New York City. Although DSNY does not directly coordinate the Port Authority or the TBTA responses, communication is still maintained throughout the entirety of each event. These authorities have seats at NYCEM's Emergency Operations Center and are in constant contact with City agencies during a snow event. If necessary, DSNY will assist as able.

E. Customer Service

New York City's 311 Customer Service Center is main source for non-emergency services and information about city government, including information and services related to winter weather events. DSNY has worked very closely with the city's 311 Customer Service Center to provide a medium for public information and when appropriate for registering service requests and complaints related to winter weather events. Throughout these events the DSNY Bureau of Community Affairs sends regular updates to the 311 Customer Service Center regarding snow operations, Emergency Snow Shoveler and private equipment hiring, enforcement of sidewalk clearing responsibilities, and collection service schedules.

During the winter weather event, the 311 Customer Service Center uses Rapid Service Requests, allowing customers to submit reports of locations of concern during DSNY snow operations. Because DSNY is actively salting/plowing snow or ice from highways, roadways, and streets, it cannot respond to individual plowing or spreading requests. This information is used to provide awareness to field personnel. These locations are mapped periodically during and immediately after a snow event, and these maps are used to evaluate the effectiveness of snow operations and allocate resources as necessary.

After the snow event ends and DSNY has announced that snow clearing operations have concluded, all complaints and service requests are sent immediately from 311 directly to the district garage and/or Enforcement division for action. Supervisory personnel will assess all complaints and take action to remediate if necessary.

The following are examples of complaints and/or service requests received by 311: (1) unplowed streets (those streets where it is apparent that a plow has missed the location); (2) conditions where a plow has been down a street but residents have been throwing snow into the street creating new conditions; (3) unsafe icy patches on city streets; (4) icy conditions not caused by a storm or natural event; and (5) enforcement service request for failure to clear snow/ice from sidewalk area.

The DSNY Bureau of Community Affairs is available to liaise with government and elected officials and community boards regarding snow events by providing updates and maintaining communications. The Bureau of Community Affairs also serves as liaison to the city's 311 Customer Service Center.

New Yorkers can use the PlowNYC online mapping tool to track the progress of DSNY snow operations throughout the five boroughs. PlowNYC is activated when DSNY snow clearing

operations begin. When PlowNYC is active, residents can access a map displaying city streets that have been serviced by DSNY snow clearing equipment. Streets are color-coded based on the amount of time that has elapsed since a plow or spreader last passed down the street, and the map is updated every 15 minutes. PlowNYC data is available to the public and software developers through the city's Open Data Portal. To access PlowNYC, go to: <https://plownyc.cityofnewyork.us/plownyc/>

F. Snow Clearing Operations

Spreading and plowing operations continue until all public streets are cleared. When snow accumulations approach the 6 to 8-inch range, depending on forecasted temperatures and additional frozen precipitation, DSNY may transition into a piling/hauling operation. Snow ridges, created from plowing to the right, are pushed into piles to increase curb accessibility, and are scheduled for removal. DSNY updates piling routes as needed each season.

DSNY has an established requirements contract for supplemental snow piling and hauling equipment that includes equipment for emergency towing of vehicles. (See Appendix G). With this contract, contractors will be expected to have equipment readily available for DSNY employment throughout the Snow Season.

Temporary piles made by DSNY are hauled to DEP approved snow melter locations. Additional piles made by the public should be reported to 311 for DSNY removal.

When forecasts warrant, DSNY stages snow melters in pre-determined locations. DSNY has 26 small snow melters, each capable of melting 60 tons of snow per hour and two larger "mega-snow melters" capable of melting 120 tons of snow per hour. Snow melters are used in conjunction with hauling operations. Water from the melted snow is discharged directly into city sewers preapproved for melting operations by DEP (see Appendix C for approved locations).

DSNY, through arrangements with DPR and other entities, obtains usage of large vacant lots which may be used as snow disposal locations during major hauling operations when melting locations become overburdened. These locations allow DSNY to move large amounts of snow from the city streets which can be left to melt naturally.

Alternate side parking regulations may be suspended before, during, or after a snow event. After roadways have been serviced and the temperatures are expected to be above freezing, the process of clearing snow from street cleaning routes begins. Alternate side parking regulations will be reinstated to facilitate this process. A combination of front-end loaders, plows, spreaders and pick-up spreaders may be used to clear snow away from curbs.

G. Clearing Bicycle and Pedestrian Infrastructure

DSNY has committed to addressing bike lanes while simultaneously treating all city roadways. After salting and plowing operations have stopped, DSNY addresses snow and ice removal from pedestrian overpasses, step streets, bus stops and crosswalks. DSNY has a fleet of 102 skid-steer loaders to clear pedestrian areas more quickly and efficiently and 44 smaller bike lane plows to pre-treat and clear snow from protected bike lanes.

After major snow events, DSNY employs individuals as Emergency Snow Shovelers to clear crosswalks, pedestrian curb cuts, catch basins, paths for loading and unloading at bus stops,

sidewalks adjacent to vehicular overpasses, and pedestrian bridges. All work performed by Emergency Snow Shovelers are supervised by DSNY personnel.

Each year in October, DSNY seeks individuals interested in registering as Emergency Snow Shovelers during major snow events via its website and through the media, and by providing information through 311 upon request. Interested applicants can register at any local district garage between the hours of 7 A.M. to 3 P.M., after making an appointment online or through 311. The rate of pay begins at \$18.54 per hour and increases to \$27.81 per hour after completing the first 40 hours in a given week. Applicants must be at least 18 years of age, eligible to work in the United States, and capable of performing heavy physical labor. All applicants must bring two small passport-sized photos, originals, and copies of two forms of identification, and social security card at the time of registration.

Citi Bike is a public-private partnership between the City of New York, represented by the New York City Department of Transportation (DOT), and Lyft. Lyft is a private company that owns and operates bike share systems around the country. Lyft is required to remove snow from a six-foot radius around bike stations. Lyft is also responsible to remove any snow that is inadvertently plowed against Bike Share stations. In cases where severe snowstorms are predicted, Lyft will be responsible for removing bikes and deactivating stations in advance.

H. Property Owner Responsibilities

All New York City property owners and managers, including homeowners, are required to remove snow and ice from the sidewalks adjacent to their properties.

Snow and ice must be cleared from sidewalks within these specific timeframes from the end of snowfall:

- Snowfall Ends between 7 A.M. and 4:59 P.M.: Clear within 4 hours.
- Snowfall Ends between 5 P.M. and 8:59 P.M.: Clear within 14 hours.
- Snowfall Ends between 9 P.M. and 6:59 A.M.: Clear sidewalks by 11 A.M.

Snow and ice may not be pushed into a street or crosswalk. Where possible, clear a continuous path at least four feet wide. Corner properties should clear a path to the crosswalk, including pedestrian ramps. Property owners must also shovel the area around any fire hydrants and should clear a path to any catch basin to encourage proper drainage. Those who do not comply can face fines of \$100-\$250. If possible, New Yorkers should consider assisting older neighbors or those with disabilities.

Pursuant to Local Law 27 of 2011, NYC Service and DSNY provide capacity-building tools and resources to local not-for-profit organizations and other community groups to establish registries of volunteers willing to help remove snow on behalf of persons who are unable to do so due to infirmity, illness, or disability. For more information and resources, visit nyc.gov/snow.

Owners of private streets, driveways, parking lots, easements and other non-public roadways are responsible for clearing their properties. Snow may not be pushed or thrown into a city street from any private property. Operators who violate this provision are liable for fines that start at \$100.

I. Waste Containerization Requirements

During extreme weather, DSNY may suspend waste containerization requirements for residents and businesses, if conditions require. DSNY will post any information regarding the suspension of containerization requirements on its website and will notify the public via Notify NYC. To sign up for Notify NYC, call 311, visit www.nyc.gov, or follow @NotifyNYC on X (formerly known as Twitter).

APPENDIX

APPENDIX

ASSIGNED SNOW PERSONNEL BY DISTRICT

The following reflects planned personnel to respond to snow events.

Personnel available from other units such as Solid Waste Management and Lot Cleaning will be assigned to Boroughs on a citywide basis as needed.

Staten Island Borough Chief - Christopher Hancock				
DISTRICT	ADDRESS	G/S	SUPV	S/W
BORO OFFICE	2500 RICHMOND AVENUE			
STATEN ISLAND 1	539 JERSEY STREET	1	12	192
STATEN ISLAND 2	2500 RICHMOND AVENUE	1	12	190
STATEN ISLAND 3	1000 WEST SERVICE ROAD	1	12	188
	TOTAL	3	36	570

B

DSNY INVENTORY OF AVAILABLE SNOW MANAGEMENT EQUIPMENT

BORO	DIST.	Large Spreader	Utility Haulster	Plowable Trucks	Front End Loaders	Anti Icing Vehicles	Plow Blades Assigned	V-Plows Assigned	Skid Steers	Bike Lane	Snow	SUV
										ATVs	Melters	
S T A T E N I S L A N D	1	23	10	74	14		159	21	3	1		6
	2	21	7	60	12	3	141	21	2	1		6
	3	18	12	70	9		137	18	2			7
	BORO										3	9
	LCU											
	SERT											21
	TOTALS		62	29	204	35	3	437	60	7	2	3

B O R O U G H R E C A P	BORO	Large Spreader	Utility Haulster	Plowable Trucks	Front End Loaders		Plow Blades Assigned	V-Plows Assigned	Skid Steers	Bike Lane	Snow	SUV
	SI	62	29	204	35	3	437	60	7	2	3	49
	TOTAL	62	29	204	35	3	437	60	7	2	3	49

C

Snow Melter Staging Areas

DEP locations

Location	From	To
Jersey Street	Bank Street	
Father Capodanno Blvd	Parking Lot #8 - Fr. Cap. Blvd and Hunter Ave (DPR)	

D

Authorized snow disposal locations:

- Midland Beach - Parking Lot #8 - Fr. Cap. Blvd and Hunter Ave (DPR)

E

Salt and Calcium

There are **(8)** salt storage sites

Usable capacity is **(76,500)** tons.

There are **(5)** tank locations for the storage of calcium chloride.

Total storage capacity is **(45,000)** gallons.

F

OCAs

DOT will provide **(12)** truck plows with operators.

DEP will provide **(1)** truck plow with operator.

DPR will provide **(TBD, previously 4)** truck plows with operators.

G

Piling and Hauling Contracts

	<u>Minimum</u>
	<u>Pieces of</u>
	<u>Equipment</u>
Ricceli	5
Natural Landscaping	2
Breen Brothers	3
Perciballi Container Services	11