

**STATEMENT BY KELLY MCKINNEY, DEPUTY COMMISSIONER  
NEW YORK CITY OFFICE OF EMERGENCY MANAGEMENT**

**OVERSIGHT HEARING ON WINTER WEATHER PREPAREDNESS  
FOR THE 2011-2012 SNOW SEASON BEFORE THE  
NEW YORK CITY COUNCIL  
COMMITTEE ON PUBLIC SAFETY AND  
COMMITTEE ON SANITATION & SOLID WASTE MANAGEMENT  
WEDNESDAY, 30 NOVEMBER 2011, 1:00 PM**

Good afternoon. I am Kelly McKinney, Deputy Commissioner of Planning and Preparedness at the New York City Office of Emergency Management (OEM). As you know, in November of this year Deputy Mayor Holloway submitted to the Council two reports prepared by OEM: the Snow Preparedness and Response Report and the Weather Emergency Protocols Report, prepared in accordance with Local Laws 26 and 24 respectively. Today I will talk to you about the Snow Preparedness and Response Report, which describes the City's response to snow events between November 15th, 2010 and November 14th, 2011. This report is available to the public on the OEM website.

During the 2010-2011 reporting period, there were four "reportable" snow events of six inches or greater. These events occurred on December 26<sup>th</sup>, 2010; January 11<sup>th</sup>, 2011; January 21<sup>st</sup>, 2011; and January 26<sup>th</sup>, 2011. For each of these events, OEM compiled a report based on information provided by our partner agencies.

Each Snow Preparedness and Response Report contains an event description, including snowfall totals, a list of advisories, warnings, or declarations issued by the city or state, and actions taken pursuant to each advisory, warning, or declaration. The reports also

contain agency responsibilities and indicators that agencies use to assess their performance for that event. Agencies were also able to provide additional comments or information regarding actions taken -- or not taken -- during the storm. The Snow Preparedness and Response Report includes a list of 15 recommendations for improving snow event preparation and response. These are the same recommendations contained in the Mayor's 15-Point Plan, which was developed following a comprehensive review of the City's response to the December 2010 blizzard, and which was released last January.

The recommendations provided by the Mayor's 15-Point Plan have guided our preparedness activities over the past year and include:

- A Commissioner's Conference Call procedure that formalizes our process for immediate situational awareness and executive decision-making. The Commissioner Call is chaired by the OEM Commissioner and includes the Deputy Mayor of Operations. Well before the storm's arrival the Commissioner Call will convene all agencies with a critical role in snow preparedness and response, including the Department of Transportation, Sanitation, Fire Department, NYPD and the Department of Education, to work through the critical decisions that need to be made, including the need for emergency declarations, and to identify and resolve strategic problems as they emerge.
- A Hazardous Travel Advisory that serves as a heightened warning to the public to stay off roads, use public transportation and take certain precautions while driving. A Hazardous Travel Advisory was issued for the January 21<sup>st</sup> storm and again last month for the October 29<sup>th</sup> storm. Also, a Weather Emergency

Declaration was issued by the Mayor for the January 11<sup>th</sup> and January 26<sup>th</sup> storms. When issued these emergency declarations are disseminated to the public through all available means, including public and media statements, press releases, city and agency websites, social media including Facebook and Twitter and the City's official source for information about emergency events, NotifyNYC.

- The Street Conditions Observation Unit Teams (SCOUT) that provides a real-time video stream of storm impacts on critical or sensitive areas.
- An updated Citywide Asset and Logistics Management System (CALMS) that expedites deployment of city assets in an emergency. The updated CALMS now include a City Workers Snow Labor table and we have developed a formal process to deploy these additional laborers through the Emergency Operations Center (EOC).
- An interagency Tow Truck Task Force to identify and move disabled and abandoned vehicles that can block snow plows and emergency response vehicles during periods of heavy snowfall. The Tow Truck Task Force serves as a central coordination point and consists of representatives from OEM, the Sanitation Department, Police Department, and Fire Department who can direct assets in the field. We activated the Tow Truck Task Force during the January snowstorms and found it to be an effective tool. It brings the key agencies together to react to storm impacts and solve problems in real time. This model, which harnesses the power of interagency coordination, is the same model that guides our effective operation of the EOC.

- The NYC Severe Weather Website ([www.nyc.gov/severeweather](http://www.nyc.gov/severeweather)) that serves as a portal for weather-related maps, news, and announcements. New Yorkers can submit photos and reports related to a severe weather event to the website and these will be shown on a citywide map in real time.
- A Snow Operations Playbook that guides interagency coordination in the Emergency Operations Center and that supplements the existing Winter Weather Emergency Plan. The Snow Operations Playbook captures all of the elements of the Mayor's 15 Point Plan and the changes we have made over the past year.

As required by the law, in addition to the event description, agency responsibilities and performance indicators, and recommendations, next year's Snow Preparedness and Response Report will provide an inventory of city-owned and privately owned equipment and an assessment of how these privately-owned resources were deployed and overseen by the city. It will also provide the number of snow laborers who registered with the city to work during a snow event and an assessment of how these individuals were deployed.

Going forward, OEM will collect and submit this information using this report template on an on-going basis, immediately following a snowfall of six inches or more and submit an annual Snow Preparedness and Response Report each November 15th as required by Local Law 26.

Local Law 26 goes a long way towards codifying how the City will document our preparations and response to snow storms this year and beyond. It will help to identify

what we can do better, so that we are always improving in our ability to serve New Yorkers during a winter weather emergency. I appreciate this opportunity to share what OEM has done over the last year and look forward to working with the Council to ensure that we are ready for whatever may come this winter.

Thank you very much. I can now take any questions you may have for Commissioner Doherty or me.

**OPENING STATEMENT BY  
JOHN J. DOHERTY, COMMISSIONER  
NEW YORK CITY DEPARTMENT OF SANITATION**

**OVERSIGHT HEARING ON THE PREPAREDNESS BY THE  
NEW YORK CITY DEPARTMENT OF SANITATION  
FOR THE 2011-2012 SNOW SEASON  
BEFORE THE NEW YORK CITY COUNCIL  
COMMITTEE ON SANITATION & SOLID WASTE  
AND COMMITTEE ON PUBLIC SAFETY**

**WEDNESDAY, NOVEMBER 30, 2011  
250 BROADWAY - 14<sup>TH</sup> FLOOR**

Good afternoon Chairperson James, Chairperson Vallone, and members of the Committees on Sanitation and Solid Waste Management, and Public Safety. I am John Doherty, Commissioner for the New York City Department of Sanitation. Joining me here this afternoon is Bernard Sullivan, First Deputy Commissioner of Operations for the Department, and Deputy Commissioner Kelly McKinney for OEM. First I would like to begin by thanking the members of both Committees for this opportunity this afternoon to discuss with you the Department of Sanitation's preparedness for the upcoming winter snow season. I would also like to separately thank Chairperson James and her staff for their recent efforts to engage all members of the Council in the review process of the Department's Draft Borough Snow Plans we released last month for comment. As you know, the Department issued each Borough's Final Snow Plan two weeks ago, and they are presently available for viewing by the public on the Department's website.

I will use my time here to briefly re-cap our overall snow response operations and our preparations for the upcoming snow season, after which I will be happy to answer your questions and address any comments concerning our Final Borough Snow Plans.

To begin, the Department follows its long-established operating guidelines and protocol for responding to snow events. Priority is given to the City's highways and streets – over 17,000 roadway lane miles – so that emergency vehicles and other vehicles delivering essential goods into the City, such as food and medicines, are able to travel safely.

During the early stage of a snowstorm, the Department deploys salt spreaders to reduce the accumulation of snow and prevent the formation of icy conditions. Priority for the deployment of salt spreaders is given to the City's highways and primary streets, followed by secondary and tertiary streets. Reports of street conditions are constantly monitored through hourly condition reports that cover equipment and weather by field managers who report back to their respective borough commands, which then relay this information to our Operations headquarters.

During a light snowstorm, spreading operations continue for the duration of the snowfall. However, when the snow accumulation becomes greater than two inches, the Department will deploy its snow plows while continuing to spread salt in order to maximize vehicular traction to the road surface.

Snow plows are deployed in accordance with planned routes and priorities. Factors that are considered for deployment include the direction and flow of traffic at the hour plowing operations begin. Plow routes vary in distance, and the length of a plow route will be determined based on factors including traffic conditions and the ability of the plow to complete a round trip of the route at least once every two hours. The Department continues plowing operations until all of the City's traffic lanes are passable. Depending on the amount of snow that accumulates, uniformed workers may begin piling and hauling operations as other crews resume refuse collection operations.

Advanced detailed planning and preparation for snow removal in the City is a well-established practice for the Department. Traditionally, snow removal planning is continuous and consists of: 1) reviewing resources such as personnel, fleet and equipment needs, housing locations for road de-icing materials, and snow melting locations; 2) meeting with local community boards; 3) conducting snow refresher courses in spreading and plowing operations; 4) conducting snow drills; and 5) meeting and coordinating services with other city and governmental agencies.

For the 2011-12 snow season, we began our planning cognizant of the challenges we encountered during last year's harsh winter season, and mindful of the constructive suggestions by members of this Committee and the full Council. We also had the opportunity to review and consider all of the comments provided to us by the Council earlier this month in response to our Draft Borough Snow Plans. Based on this review, we have incorporated into our Final Borough Snow Plans several comments provided by the Council where appropriate, including: 1) clarification of the roles of other city agencies during a major snow event, 2) clarification of our piling and hauling operations, 3) a detailed description of the process for hiring temporary day laborers, and 4) an additional appendix identifying each borough's snow melting locations approved by the Department of Environmental Protection.

Also since last winter -- and as a result of the unique challenges we faced during last year's December 26<sup>th</sup> snowstorm, we reviewed our internal operations, strategies and policies to identify what measures we could implement to enhance our performance during future snow events. We also evaluated our strategies in conjunction with other city agencies and the Metropolitan Transportation Authority to enhance inter-agency coordination and response during snow emergencies, and in our communications with the general public.

This year our planning and preparation includes new policies and improvements that were part of the 15-point Plan released earlier this year that we've implemented to enhance our response during future snow emergencies. Among them are: 1) installing GPS systems in every truck used as a snow plow, and salt spreader, to facilitate communications capability in the field between supervisors and sanitation workers; 2) re-training all sanitation workers on equipment operations; 3)

re-tooling data collection and measuring progress in the field during snow events based on completion of individual routes; 4) mapping all snow plowing routes and street designations for the public to view on the City's website at [www.nyc.gov/severeweather](http://www.nyc.gov/severeweather). 5) enhancing direct communications between DSNY's Division of Customer Service and Government Relations and the City Council Speaker's Office; and 6) undertaking significant outreach to the public to recruit and have available a pool of temporary emergency day laborers as may be needed during severe snow events.

Of course, a plan is only as good as our ability to put it into action, and we have ramped-up our snow drills in advance of this winter. As an initial matter, the largest October snowfall in 140 years gave us the opportunity to deploy early, and the operation was a success. We began preparing for this late October storm 72 hours before by increasing our field staffing, loading salt spreaders, and attaching plows to the trucks. When the forecast changed multiple times the morning of this storm, we immediately responded by further increasing our staffing levels for the next 24-hour period, and attached additional plows to increase our plowing capability.

In addition, utilization of our current GPS communications capability not only allowed us to identify the locations and movement of our equipment, but as a result of this storm, the GPS enabled our field workers to quickly communicate locations of tree limbs on the ground for which we are now developing new reports to identify such conditions that would be useful in the future to other impacted agencies.

Then, on November 2, 2011, led by Deputy Mayor for Operations Cas Holloway and OEM Commissioner Joe Bruno, we did a full-scale snow tabletop exercise, with full participation from all City agencies, as well as the MTA, and the National Weather Service. The drill went well—and reinforced the importance of early coordination among the many agencies and entities that provide essential services—from public transportation to emergency response.

Our annual Snow Drill exercise is currently in progress. It entails our personnel loading our spreading equipment, attaching plows to the trucks, attaching chains to the trucks and spreaders, field testing of GPS phones, testing of emergency radio talk groups, and operating equipment along plowing and spreader routes.

In short, we are prepared. The severe 2010-11 season served as a benchmark for the most recent severe winter. The Department has been preparing for at least as severe a season this year. Let me assure you that the Department is a dynamic agency that responds quickly and learns positively from past experiences. Last winter allowed us to re-examine our snow removal procedures, and future Department practices will benefit from that experience.

Thank you for this opportunity to testify. I will be happy to answer your questions at the end but for now will turn over the microphone to Deputy Commissioner Kelly McKinney for OEM.





# The City of New York Department of Sanitation



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**FINAL**  
**2011-2012 Winter Snow Plan for the  
Borough of the Bronx**

**Pursuant to Local Law 28 of 2011**

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**John J. Doherty, Commissioner**  
**November 15, 2011**

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## **FY 12 BRONX BOROUGH SNOW REMOVAL PLAN**

The Department of Sanitation Borough-Based Snow Plan sets forth the measures to be undertaken by DSNY to enable transportation to continue safely and address issues of public safety due to snow and ice conditions that may occur on the City's public streets and highways. This document is published pursuant to the requirements set forth under Local Law 28 of 2011 which became effective on August 5, 2011.

### **INTRODUCTION**

Winter conditions on the City's nearly 17,000 roadway lane miles introduce potential hazards to vehicles. Snowfall can be expected to lead to the disruption of normal traffic patterns. In prolonged or severe snowfall, disruption can last for several days, as experienced during the Blizzard of December 2010.

While the Department makes every reasonable effort to clear snow and ice from the City's highways and streets, it can be a lengthy process, particularly when persistent or heavy snowfall occurs combined with falling temperatures and high winds. This Snow Plan concentrates on the planning, organization and response to winter weather conditions, the execution of operational tasks to perform salt spreading on roadways, and the plowing, piling and hauling of significant snow accumulations from the City's roadways.

#### **I. SEASONAL PLANNING**

Planning for each winter season is an ongoing process in the Department. The steps outlined below detail the Department's preparation for the onset of the 2011-2012 snow season.

##### **A. Post Season Planning (Spring/Summer)**

- The approximately 3,000 snow-plowing routes ("Snow Routes") that DSNY covers throughout the City are reviewed and adjusted as necessary based on the prior year's experiences and changes in the physical cityscape (i.e., construction of a new school or hospital).
- All snow equipment is upgraded, as necessary, and preventative maintenance is performed.
- At the end of each winter season, the Department's Operations Division performs a review and assessment of the Department's response to all winter storms during the previous season. Operational changes and adjustments, such as,

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improving equipment training and improving communications between snow removal equipment and supervisory personnel, are made as necessary.

### **B. Pre-Season Planning (Fall)**

- Internal Departmental meetings are held in order to coordinate operations, discuss snow staffing and plan snow-drill exercises.
- The Department meets with other city agencies (OCAs) to coordinate asset dedication to DSNY for snow operations and to discuss putting OCAs on notice during a snow alert. A Snow Alert indicates the type of frozen precipitation, amount expected, temperature and timing of the event as forecasted by weather services contracted by DSNY. A notification of a Snow Alert is transmitted by a combination of telephone and email to OCAs
- Based upon these meetings with OCAs, the following assets will be in place / available for the upcoming snow season:
  - **DOT:** The Department of Transportation will provide **10** truck plows with operators in the Bronx. When plowing operations are completed, these trucks may also assist in snow hauling operations. During a snow event, DOT will send a representative to DSNY Operations Command Center to facilitate coordination between DSNY and DOT. All DOT employees assigned will be directed by DSNY personnel.
    - DSNY meets with the DOT Bridge Division to review winter plans and to exchange contact information. DOT services the four lower East River Crossings and calls upon DSNY to assist as necessary during a snow event.
    - New for the 2011-2012 Snow Season, representatives of DSNY met with DOT and CEMUSA, DOT's contractor for bus shelters and street furniture, to develop plans and allocate responsibilities for clearing snow from bus shelters. During a snow event, CEMUSA will be sending a representative to OEM to liaison and coordinate snow removal from bus shelters.

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- **DEP:** DSNY meets with Department of Environmental Protection representatives of each borough to assist in determining suitable sewers to support snow melting operations.
- **DPR:** The Department of Parks and Recreation will provide assistance after completion of snow removal work at DPR locations.
  - New for the 2011-2012 Snow Season, DPR will also be notified when DSNY activates a “Snow Alert.”
- **NYPD:** DSNY meets with NYPD to exchange contact information with the NYPD Traffic & Tow and Highways Divisions and to review the use of NYPD tow trucks during and after heavy snow.
- **FDNY:** Beginning with the 2011-2012 Snow Season, DSNY met with FDNY to coordinate their winter plans and the potential deployment of the Tow Truck Task Force. The Tow Truck Task Force, which is coordinated through OEM, may involve the use of Front End Loaders from DSNY to clear snow from streets to provide access for NYPD tow trucks to tow snowbound ambulances. FDNY will also be notified when DSNY activates a “Snow Alert”.
- **MTA:** DSNY will attend the MTA’s Annual Snow Operations Meeting to discuss issues and concerns going into the new snow season.
  - New for the 2011-2012 Snow Season, turn-around locations for bus lines have been included as priority locations for DSNY salting and plowing.
- Although DSNY does not coordinate with the Port Authority of NY & NJ or the Triborough Bridge and Tunnel Authority (TBTA), the Port Authority 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 TBTA manages the toll bridges and plazas within New York City.
- Community Board district service cabinet meetings are held at the district level where Department representatives report on the Department’s snow operations plan.

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- Borough service cabinet meetings are held at the borough level where Department representatives report on the Department's snow operations plan.
- Salt, sand, and calcium chloride are delivered to Department storage locations located in each borough. For the Bronx, this information is as follows:
  - There are **5** permanent salt storage sites, with a usable capacity of **43,800 tons**
  - There are **7** tank locations for the storage of calcium chloride. Total storage capacity is **56,340 gallons**.
  - New for the 2011-2012 Snow Season, DSNY entered into multiple contracts that include multiple vendors for the replenishment of salt stockpiles. This will be advantageous during periods of heavy use such as what occurred in January 2011.
- When attaching tire chains, chains are attached to each of the outer tires of the rear axle(s) of spreading and plowing equipment. DSNY ensures that a sufficient number of snow chains are available to ensure an adequate inventory for the snow season.
- Training for winter operations is held each year from September through December. Training for Sanitation Workers will include, but is not limited to, Spreader Operation, attachment of plows and chains, and use of two-way radios and GPS phones.
  - The Department improved training procedures for all Sanitation Workers throughout the city. Given changes in technology and equipment, the Department's Bureau of Support Services is updating all training manuals and procedures for Sanitation Workers and Supervisors.
  - New for the 2011-2012 snow season, personnel from the Bureau of Motor Equipment joined the training effort by going to field locations to demonstrate and train field personnel on the proper attachment of chains, use of the Automatic Traction Control Mud/Snow mode and Inter-Axle Differential Lock on vehicles equipped with these features as well as providing a thorough understanding of proper plow maintenance. Material was distributed as a handy reference for these topics.

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- While the Department has a strong driver training program that has been guiding the workforce for many years, more input and guidance from our Bureau of Motor Equipment will become a permanent part of the Training Division.
- One of the lessons learned from the Blizzard of December 2010 was the need to train plow operators on how to make proper turns into side streets when ridges of snow are present so as to avoid getting stuck in the snow. Sessions were conducted at each garage location accompanied by an illustration that will be posted at each location as a reminder.
- 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 center located at Floyd Bennett Field.
- Additional classroom training is conducted for instruction on procedures when employing Hired Equipment and "Load and Dump" procedures for hauling and snow disposal operations.
- Night Plow Season Staffing is established.
  - Night Plow Season is a specified period of time during the snow season where DSNY increases staffing of personnel on night shifts. The Night Plow Season begins each year in mid-November, and ends the first Monday in April. During this time period, personnel are scheduled for regular cleaning and collection functions on three shifts (0001 hrs - 0800 hrs, 0600 hrs -1400 hrs, and 1600 hrs -2400 hrs) to ensure sufficient personnel are available day and night to address weather related issues.
- Every year, a snow-drill exercise is conducted at the beginning of the Night Plow season to get everyone in "Snow Mode" and identify areas that may need strengthening.
- Temporary Snow Laborers
  - Each year in October DSNY seeks individuals interested in registering as temporary snow laborers during major snow events via its website and through the media, and by providing information through 311 upon request. Persons interested in becoming a temporary snow laborer can

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register at any local district garage between the hours of 7 A.M. to 3 P.M. The rate of pay begins at \$12 per hour and increases to \$18 per hour, after completing the first 40 hours. 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 photos, and original and copies of two forms of identification together with their social security card at the time of registration.

- Once a snow alert is activated during the snow season and a Department request for temporary snow laborers to report for duty is issued publicly, a temporary snow laborer typically reports for duty at 8 A.M. at the district garage where the laborers initially registered. This occurs usually within 24 to 48 hours after the snowfall ceases and plowing operations are completed. DSNY relies on this pool of available temporary laborers to undertake the task of clearing an ingress and egress path at bus stop areas, and from certain crosswalks, pedestrian curb cuts, step streets, and some pedestrian overpasses throughout the City. All work performed by temporary snow laborers is supervised by DSNY supervisors. In cases where there are insufficient temporary snow laborers who report for duty in a specific district during a major snow event, temporary snow laborers from nearby district garages will be transported to assist in the manual snow removal efforts of the district where there is a shortage and transported back at the end of the work shift to their original assigned garage where they reported for duty.

## **II. DSNY SNOW REMOVAL PRIORITY (PRIORITY STREET CLASSIFICATION)**

To formulate an effective snow removal response, roadways are categorized and serviced in the following order: Primary, Secondary and Tertiary streets. Each year, as part of pre-season preparations, street designations are reviewed and updated in accordance with the DSNY Public Street Snow Removal Classification criteria. Mapping of streets indicating priority designation has been created. Street priority designations are accessible via the following New York City website: <http://www.nyc.gov/severeweather>.

The plowing of snow and spreading of road salt to treat icy road conditions will be undertaken in order of strategic priority as follows:

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### **A. PRIMARY STREET** - Any street that is considered:

1. A main traffic artery, main thoroughfare or a lifeline street such as highways, expressways, drives or bridges;
2. Feeder approaches to and exits from bridges, tunnels, ferries, highways, airports;
3. All bus routes, private and city owned;
4. All streets within concentrated food-produce, industrial, financial, theatrical-amusement, shopping, hospital or maritime (passenger and freight) areas;
5. Streets which have located upon them facilities such as FDNY fire houses and EMS stations, NYPD police stations, hospitals, nursing homes, newspaper plants, fuel distribution depots, transportation terminals, and schools;
6. All Snow Emergency Streets so designated by the Department of Transportation.

### **B. SECONDARY STREET** - Any street that is:

1. Reasonably heavily trafficked but not a primary street;
2. Used as an alternate route for a primary street;
3. The short length of residential area streets that feed into primary streets;

### **C. TERTIARY STREET** - All other streets not heavily trafficked and not considered primary or secondary streets, including, but not limited to dead-end streets.

## **III. ASSIGNED EQUIPMENT AND PERSONNEL**

See Appendix.

## **IV. IMPLEMENTATION**

The Snow Plan is implemented every winter and will normally be in effect from mid November through the beginning of April. This period is referred to as the Night Plow Season.



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During this time period, field personnel are scheduled for regular cleaning and collection functions on three shifts (0001 hrs - 0800 hrs, 0600 hrs -1400 hrs, and 1600 hrs -2400 hrs) to ensure sufficient personnel are available around the clock to address weather related issues.

The following is a timeline of how the Department fights an impending snowstorm.

### **STAGE 1: Forecast for Snow (48 to 72 hours before)**

- The Department of Sanitation uses three meteorological services to determine and monitor the threat of winter storms during the Snow Season. The following three services will be contracted for the 2011-2012 Snow Season:
  - MetroWeather
  - Accuweather
  - CompuWeather
- The Department's Operations Office monitors the weather forecasts through the contracted weather reporting services 24/7.
- When a risk of snow is indicated by the forecast, the Department Bureau Operations Chief will brief the Commissioner, First Deputy Commissioner and Bureau Director. At this stage the First Deputy Commissioner will consider the need to activate personnel for snow response. If the forecasted amount of frozen precipitation would result in the need to deploy plows, personnel are re-scheduled into two 12 hour shifts (normally 0700 hrs – 1900 hrs and 1900 hrs – 0700 hrs). During these situations, regularly scheduled days off for Sanitation Workers, and Uniformed Officers are cancelled to ensure maximum personnel availability.
- Orders are issued to have all spreaders loaded with salt and calcium chloride
- Orders are issued to attach plows and chains to all spreader equipment and all vehicles used for plowing, based on precipitation type and the amount of precipitation forecasted.
- Subsequent weather forecasts are monitored and discussions are conducted with contracted weather forecasting services
- An assessment will be made based on the forecasts provided as to what action is needed and a "Snow Alert" will be issued informing DSNY personnel as well as

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City Hall, DEP, DOT, DPR, FDNY, MTA, OEM and NYPD of a pending snow event.

- The DSNY Office of Public Information will issue a "snow alert declaration" to all media and the public via a news release/advisory. Such advisory will also be posted on OEM's New York City's Severe Weather page, which can be found at: <http://www.nyc.gov/severeweather>.

### **STAGE 2: 24 Hours Prior to Snowfall**

- Staffing needs are formulated based on current forecasts.
- Attaching plows and chains to equipment continues as needed based on current forecasts.
- When a threat of Snow is imminent, as indicated by the forecast, the Department will issue a "Snow Alert" informing DSNY personnel of the possibility of frozen precipitation. The Snow Alert is also transmitted by a combination of phone and email to City Hall, DEP, DOT, DPR, FDNY, MTA, OEM and NYPD of a pending snow event.
- In addition to receiving the snow alert, DEP, DOT and DPR are notified of the need for their resources to address the pending snowfall.

### **STAGE 3: Four Hours Prior to Snowfall**

- Weather condition reports are submitted hourly from the Department's twenty one field weather stations located at Department facilities.
- Salt spreaders equipped with two-way radios and GPS are pre-positioned.

- **RADIO COMMUNICATION:**

DSNY headquarters, located at 125 Worth Street, New York, maintains a Radio Control Center. Spreading and plowing equipment are outfitted with two-way radios and GPS phones to maintain communication with Supervisory personnel, Borough Commands and the Radio Control Center throughout the event.

Each Borough Command transmits on a separate assigned radio talk group.

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New for the 2011-2012 Snow Season, in the event of increased radio transmission traffic due to emergency situations, additional talk groups will be utilized to alleviate radio traffic.

- **GPS:**

Implementation of GPS phones in equipment began in January 2011. Spreaders and truck plows are now equipped with a GPS system that allows for remote monitoring of the equipment location by supervisory and management personnel. GPS phones also enable vehicle operators to submit reports and transmit issues such as impeded streets or breakdowns and communicate directly with supervisory personnel via the “push-to-talk” feature.

- DSNY has extensively field tested the two-way radio and GPS phone systems to ensure that they are effective.

- Pre-salting may be initiated if conditions warrant.

- When the OEM Emergency Operations Center (EOC) is activated in response to a snow event, DSNY will send the following representatives to liaison and coordinate with OEM officials and representatives of other city agencies.

**Days**

**Michael Warren,  
Deputy Chief**

**Roy Brandquist,  
Supervisor**

**Nights**

**Anthony Bianculli,  
Deputy Chief**

**William Walpole,  
Supervisor**

- **Customer Service**

- **Customer Service and Government Relations**

- The following Department representatives from the DSNY Customer Service & Government Relations (CSGR) office will be available to liaison with government and elected officials and

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community boards regarding snow events by providing updates and maintaining communications. The Division of CSGR also serves as liaison to the City's 311 Customer Service Center.

❖ **Maria Termini, Associate Commissioner, Division of Customer Service & Government Relations**

❖ **Henry Ehrhardt, Director, Customer Relations, Division of Customer Service & Government Relations**

○ **311 Customer Service Center – Public Information, Service Requests & Complaints**

- 311 is New York City's single number for non-emergency services and information about City government including information and services related to snow events. The Department 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 snow events. The data and information from 311 is regularly received by DSNY officials. Service requests and complaints go directly to the relevant sanitation district field office for review and appropriate action. Throughout snow events the DSNY Division of Customer Service and Government Relations sends regular updates to 311 about snow operations, laborer and private equipment hiring, enforcement of sidewalk clearing responsibilities and collection service.
- During the snow event, a Rapid Service Request (RSR) is deployed (by 311), allowing customers to submit reports of locations of concern during DSNY snow operations. Because DSNY is currently 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 an overview of the storm situation and snow operations. These locations are mapped and listed periodically during and immediately after the storm. Such maps and lists are analyzed internally.
- After the conclusion of the snow event, once the Mayor and/or the Commissioner has announced that snow clearing operations are concluded, all complaints and service requests are sent

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immediately from 311 directly to the Sanitation District and/or Enforcement Zone for action. The local district supervisors determine priority needs based on street designations (primary, secondary, and tertiary) and local conditions.

- 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) isolated serious icy patches on streets; (4) conditions caused by post-storm freeze/thaw cycles; (5) icy conditions not caused by a storm or natural event; and (6) enforcement service request for failure to clear snow/ice from sidewalk area.
- Snow Removal Volunteers and NYC Services
  - NYC Services has taken on the role of assisting organizations such as local not-for-profit organizations, civic organizations and community groups to establish registries of recruited volunteers willing to help remove snow on behalf of persons who are unable to do so due to infirmity, illness or disability.

### **STAGE 4: Precipitation Commences**

- Salt spreaders begin dispensing salt.
  - Spreaders are the department's first line of defense against snow and ice conditions. Large spreaders have plows attached and have the capacity to hold approximately 16 tons of 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. Spreaders are also equipped with two-way radios to ensure operators can communicate with supervisory and management personnel. All spreading equipment is also outfitted with GPS phones.
- Plows are prepositioned based on forecasted amount of snow:
  - When snowfall exceeds 2 inches, plowing operations begin. Plowing clears snow from the roadways moving it out of the way of the path of

## **FY 12 BRONX BOROUGH SNOW REMOVAL PLAN**

moving traffic. After streets have been addressed, municipal parking lots and bike lanes are also cleared of snow. The department reviews and updates plow routes each season.

- The plowing of snow and spreading of road salt to treat icy road conditions will be undertaken in order of strategic priority as follows:
  1. Arterial Highways and Primary Roadways
  2. Secondary Roadways
  3. Tertiary Streets  
(see definitions on page 6-7)
- Utility haulsters are deployed where needed:
  - Utility haulsters are small spreaders with plows attached for treating areas with limited accessibility. These spreaders have a capacity to hold approximately 2 yards of salt and are equipped with a liquid calcium chloride pre-wetting system, two-way radios and GPS.
- Front end loaders are deployed as needed :
  - Front End loaders are assigned for salt loading and snow plowing in designated areas that benefit from this type of specialized equipment (i.e., municipal parking lots, dead end streets, narrow streets) as well as snow hauling operations.
- V-plows are deployed as needed:
  - V plows are deployed to areas where drifting or considerable accumulations of snow have made plowing too difficult for truck plows alone.
- Progress reports are taken on spreading and plowing operations.
  - New for the 2011-2012 Snow Season, a new electronic reporting system has been developed for the percentage of streets plowed and salted. Report updates will be submitted from the field at more frequent intervals throughout the work shifts on the progress of plowing and salting operations until all streets have been serviced. These reports will be used internally to ensure that all plowing and salting operations are on schedule.
- Equipment is monitored by supervisory personnel with GPS system.

## **FY 12 BRONX BOROUGH SNOW REMOVAL PLAN**

- Plowing contract for tertiary streets is activated based on forecasted amount of snow.
  - New for the 2011-2012 Snow Season, contractors have been solicited with an Invitation to Bid on a Service Contract to plow the estimated **236** miles of Tertiary public roadways in the Bronx to augment DSNY snow removal resources. Once notified, contractors are to respond with plow equipment within eight hours.
- A determination is made whether or not emergency hired equipment for snow removal is necessary.
  - DSNY maintains a Hired Equipment Agreement as a means of obtaining additional resources if needed for severe storm events.

### **STAGE 5: Precipitation Ceases**

- Spreading and Plowing operations continue until all streets are serviced.
- Piling operations begin as needed:
  - When snow accumulations approach the 6 to 8 inch range, the operation of piling follows plowing. Snow is plowed to keep main arteries open. This ridge created is then pushed into piles for scheduled removal. The Department updates piling routes as needed each season.
  - Solicitations for bidders have also gone out to contractors for a Requirements Contract for supplemental snow piling and hauling equipment that includes equipment for the incidental towing of vehicles. With this Requirements Contract, contractors are expected to have equipment readily available for DSNY employment throughout the snow season.
  - DSNY does not pile snow to be left on the public streets. Piles temporarily made by DSNY are hauled to approved snow disposal locations and left to melt or are transported to snow melter locations to be melted. Secondary pilings made by the public should be reported to 311 for DSNY removal.

## FY 12 BRONX BOROUGH SNOW REMOVAL PLAN

- Snow Melters are brought out to predetermined staging areas:
  - Small melters are capable of melting 60 tons of snow per hour. Larger “mega-melters” are capable of melting 130 tons of snow per hour. Melters are used in conjunction with hauling operations. In simple terms the snow is melted as opposed to hauling it away and dumping it. Water from the melted snow is discharged directly in to sewers approved by NYC DEP. See Appendix for approved locations.
- Emergency Laborers are employed:
  - When necessary, the Department hires emergency snow laborers to clear crosswalks, pedestrian curb cuts, catch basins and paths for loading and unloading at bus stops.
  - For the 2011-2012 Snow Season, DSNY has taken steps to reduce the time taken to pay laborers and intensified its public outreach through DSNY’s Office of Public Information to ensure a more timely and proper hiring of Laborers should the need arise.
- Bike lanes, pedestrian overpasses and step streets, bus stops and crosswalks are addressed for snow and ice removal
- Hauling operations begin to authorized Snow Disposal Locations:
  - Utilized for large accumulations of snow, Piling is the precursor to hauling. Hauling is accomplished with Departmental personnel, Other City Agency personnel and Private Equipment if necessary. Snow is hauled to snow melters and approved snow disposal locations.
- Snow Disposal Locations:
  - Snow disposal locations are utilized during hauling operations to expeditiously remove piles of snow from streets to a location where snow can be piled and left to melt.
  - Authorized snow disposal locations for the Bronx this season are:
    - **Orchard Beach Parking Lot**
    - **Mill Pond Park Pier 5**



## **FY 12 BRONX BOROUGH SNOW REMOVAL PLAN**

### **STAGE 6: Ongoing Operations After Precipitation Ceases**

- Snow melting operations are implemented.
- Hauling operations continue as needed.
- SCR (street cleaning regulations) routes are cleared to prepare for the return of mechanical sweeping.
  - Often when there is snow accumulation, Street Cleaning Regulations (SCR) are cancelled while the DSNY plows and salts the City's roadways. After roadways have been serviced and the temperatures are expected to be above freezing, the process of clearing snow from SCR routes begins. SCR regulations will be placed back in effect according to the schedule of SCR days. A combination of Front End Loaders, plows, spreaders and haulsters may be used to clear snow away from curbs.

### **V. Post-Season Review**

At the end of each winter season, the Department's Operations Division will perform a review and assessment of the Department's response to all winter storms during the current season and adjust and make changes where necessary.

- Snow routes are reviewed and revisions are implemented as needed.
- Snow equipment is assessed and repaired as needed.

**FY 12 BRONX BOROUGH SNOW REMOVAL PLAN**

**APPENDIX**

**ASSIGNED SNOW PERSONNEL BY DISTRICT**

The following reflects planned personnel to respond to snow events.

Personnel available from other units such as the Bureau of Waste Disposal and the Lot Cleaning Unit will be assigned to Boroughs on a citywide basis as needed.

<b><i>DISTRICT</i></b>	<b><i>ADDRESS</i></b>	<b><i>G/S</i></b>	<b><i>SUPV</i></b>	<b><i>S/W</i></b>
<b>BRONX Borough Chief - Paul Visconti</b>				
BORO OFFICE	800 EAST 176th STREET			
BRONX 1	680 EAST 132nd STREET	1	8	39
BRONX 2	650 CASANOVA STREET	1	6	38
BRONX 3	680 EAST 132nd STREET	1	4	31
BRONX 4	720 EAST 132nd STREET	1	6	48
BRONX 5	1331 CROMWELL AVENUE	1	6	61
BRONX 6	800 EAST 176th STREET	1	6	57
BRONX 7	423 WEST 215th STREET	1	8	56
BRONX 8	423 WEST 215th STREET	1	8	75
BRONX 9	850 ZEREGA AVENUE	1	8	74
BRONX 10	850 ZEREGA AVENUE	1	8	70
BRONX 11	800 ZEREGA AVENUE	1	8	60
BRONX 12	1635 EAST 233rd STREET	1	8	83
	<b>TOTAL</b>	<b>12</b>	<b>84</b>	<b>692</b>

**DSNY INVENTORY OF AVAILABLE SNOW MANAGEMENT EQUIPMENT  
BRONX**

BORO	DIST.	LARGE SPREADER	UTILITY HAULSTER	PLOWABLE TRUCKS	Front End Loaders	PLOW BLADES ASSIGNED	V-PLOWS ASSIGNED	SNOW MELTER	
								SMALL	LARGE
B R O N X	1	4		14	2	39	2		
	2	2		12	5	20	4		
	3	3		14	3	30	4		
	4	4		27	2	45	1		
	5	5		24	1	44	2		
	6	5		20	6	41	3		
	7	5	1	24	3	36	2		
	8	7	2	20	5	38	5		
	9	8	1	32	2	50	5		
	10	8	2	25	2	52	3		
	11	6	1	26	5	46	1		
	12	6	3	33	5	63	4		
	BORO								4
TOTALS		63	10	271	41	504	36	4	1

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	SNOW MELTER	
								SMALL	LARGE
	<b>BX</b>	<b>63</b>	<b>10</b>	<b>271</b>	<b>41</b>	<b>504</b>	<b>36</b>	<b>4</b>	<b>1</b>
	<b>TOTAL</b>	<b>63</b>	<b>10</b>	<b>271</b>	<b>41</b>	<b>504</b>	<b>36</b>	<b>4</b>	<b>1</b>

**Snow Melter Staging Areas**

DEP approved sewer locations

Location	From	To
East 152nd Street	Bergen Avenue	Brook Avenue
Ryawa Avenue	Faile Street	
East 165 Street	Jerome Avenue	River Avenue
East 176 Street	Crotona Parkway	Boston Road
Orchard Beach / Parking Lot		

<p><b>Summary</b></p>	<p>The New York City Office of Emergency Management (OEM) has plans and protocols in place to guide New York City's response to weather emergencies, including plans for winter weather, coastal storms, extreme heat, flash floods, and events causing power outages, damage to structures, and/or significant amounts of debris. The four key weather emergency plans include the Winter Weather Emergency Plan, Coastal Storm Plan, Heat Emergency Plan, and Flash Flood Emergency Plan. Each plan:</p> <ul style="list-style-type: none"> <li>• Describes a coordinated, flexible response to the hazardous weather event</li> <li>• Defines agency roles and responsibilities</li> <li>• Guides agencies through key decisions and actions to mitigate effects on people, critical infrastructure, and City operations</li> </ul>																	
<p><b>Plan Activation Process</b></p>	<ul style="list-style-type: none"> <li>• OEM Watch Command tracks New York City weather conditions in real time in conjunction with the National Weather Service, 24 hours a day, seven days a week, and disseminates related hazard information to agencies.</li> <li>• When a weather emergency meets one or more of the forecast triggers, OEM activates the relevant plan and convenes interagency steering committee conference calls to coordinate preparation for the event.</li> <li>• OEM activates the Emergency Operations Center, when necessary, to prepare for and respond to weather emergencies.</li> <li>• When a weather emergency exhausts New York City's response resources, OEM will work with agencies to identify vendors that can provide appropriate resources or will request support from the state through the established mission request process.</li> <li>• If conditions warrant, OEM may concurrently activate additional all-hazards and recovery plans and protocols.</li> </ul>																	
<p><b>Activation Levels</b></p>	<p>Based on forecast triggers and interagency steering committee discussion, OEM may convene citywide coordination at one of the following levels:</p> <table border="1"> <thead> <tr> <th>Level</th> <th>Coordination Center</th> <th>Agencies</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Emergency Operations Center (full)</td> <td>OEM personnel, all interagency steering committee agencies, and additional subject matter experts and partners as needed</td> </tr> <tr> <td>2</td> <td>Emergency Operations Center (partial)</td> <td>OEM personnel and a subset of interagency steering committee agencies</td> </tr> <tr> <td>3</td> <td>Situation Room</td> <td>OEM personnel and key interagency steering committee agencies</td> </tr> <tr> <td>4</td> <td>Watch Command</td> <td>OEM personnel *The City's EOC is always at least at a level 4 activation.</td> </tr> </tbody> </table>			Level	Coordination Center	Agencies	1	Emergency Operations Center (full)	OEM personnel, all interagency steering committee agencies, and additional subject matter experts and partners as needed	2	Emergency Operations Center (partial)	OEM personnel and a subset of interagency steering committee agencies	3	Situation Room	OEM personnel and key interagency steering committee agencies	4	Watch Command	OEM personnel *The City's EOC is always at least at a level 4 activation.
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<b>Mutual Aid Assistance</b>	If resources are required beyond City assets and procurement, NYC OEM will request assistance from NYS OEM through the following options (in order):	
	<b>Mutual Aid Options</b>	<b>Description</b>
	State-level or federal-level assets	NYS OEM coordinates requested resource through appropriate NYS or federal agencies
	Intra-State Mutual Aid Program (IMAP)	Once an emergency is declared, NYS OEM requests assistance from participating local governments within New York State
	Emergency Management Assistance Compact (EMAC)	After gubernatorial declaration of state of emergency, NYS OEM requests assistance from surrounding states
<b>Plan Development/ Maintenance Actions</b>	<p>OEM continuously revises and improves upon its weather plans and protocols. Key plan development and maintenance actions conducted during the reporting include:</p> <ul style="list-style-type: none"> <li>• Established a commissioner-level interagency conference call procedure for weather emergencies</li> <li>• Established an interagency tow truck task force protocol for winter weather emergencies</li> <li>• Established an interagency downed tree task force protocol for severe weather emergencies</li> <li>• Established a damage assessment and power restoration protocol for large-scale, destructive events</li> <li>• Established a coastal storm evacuation decision support brief that summarizes forecast and risk information from FEMA's hurricane evacuation decision tool</li> <li>• Conducted an interagency pre-season coastal storm planning workshop with more than 50 government agencies, non-profit, and private organizations</li> <li>• Revised the Heat Emergency Plan activation trigger in coordination with the National Weather Service and Department of Health and Mental Hygiene</li> <li>• Revised and expanded the Cooling Center Protocol for heat emergencies</li> </ul>	

This document summarizes the weather emergency protocols that are contained within the NYC Winter Weather Emergency Plan (WWEP).

<p><b>Triggers</b></p>	<ul style="list-style-type: none"> <li>• Snowfall exceeding six inches</li> <li>• High temperatures below 15°F for a 48-hour period</li> <li>• Wind chill below 0°F</li> <li>• Sustained winds exceeding 40 miles per hour</li> <li>• Forecasted ice storms or freezing rain</li> <li>• Coastal flooding exceeding three feet</li> </ul>															
<p><b>Winter Weather Emergency Steering Committee</b></p>	<ul style="list-style-type: none"> <li>• 311</li> <li>• American Red Cross</li> <li>• Community Affairs Unit</li> <li>• Con Edison</li> <li>• Department for the Aging</li> <li>• Department of Buildings</li> <li>• Department of Citywide Administrative Services</li> <li>• Department of Education</li> <li>• Department of Environmental Protection</li> <li>• Department of Health and Mental Hygiene</li> <li>• Department of Homeless Services</li> <li>• Department of Housing Preservation and Development</li> <li>• Department of Human Resources Administration</li> <li>• Department of Information Technology and Telecommunications</li> <li>• Department of Parks and Recreation</li> <li>• Department of Sanitation</li> <li>• Department of Transportation</li> </ul>	<ul style="list-style-type: none"> <li>• Greater New York Hospital Association</li> <li>• Health and Hospitals Corporation</li> <li>• Long Island Power Authority/National Grid</li> <li>• Metropolitan Transportation Authority</li> <li>• National Weather Service</li> <li>• New York City Fire Department</li> <li>• New York City Housing Authority</li> <li>• New York City Police Department</li> <li>• New York State Dept of Health</li> <li>• New York State Office of Emergency Management</li> <li>• Office of the Chief Medical Examiner</li> <li>• Office of Emergency Management</li> <li>• Port Authority of New York and New Jersey</li> <li>• Regional Emergency Medical Services Council</li> <li>• United States Coast Guard</li> <li>• Verizon</li> </ul>														
<p><b>Operational Strategies</b></p>	<p>The following are WWEP strategies implemented by agencies and coordinated by OEM:</p> <table border="1"> <thead> <tr> <th>Operational Strategy</th> <th>Agencies</th> </tr> </thead> <tbody> <tr> <td>Cold Weather Alert</td> <td>DHS, DOHMH, FDNY-EMS, MTA, NYPD, OEM, Port Authority</td> </tr> <tr> <td>Plowing and Spreading</td> <td>DOT, DSNY, OEM</td> </tr> <tr> <td>Winter Weather Towing</td> <td>DOT, DSNY, FDNY, MTA, NYPD, OEM</td> </tr> <tr> <td>Carbon Monoxide Response</td> <td>FDNY, OEM</td> </tr> <tr> <td>No Heat/Hot Water</td> <td>311, DOHMH, DoITT, HPD, NYCHA, OEM</td> </tr> <tr> <td>Frozen Hydrant</td> <td>DEP, FDNY, OEM</td> </tr> </tbody> </table>		Operational Strategy	Agencies	Cold Weather Alert	DHS, DOHMH, FDNY-EMS, MTA, NYPD, OEM, Port Authority	Plowing and Spreading	DOT, DSNY, OEM	Winter Weather Towing	DOT, DSNY, FDNY, MTA, NYPD, OEM	Carbon Monoxide Response	FDNY, OEM	No Heat/Hot Water	311, DOHMH, DoITT, HPD, NYCHA, OEM	Frozen Hydrant	DEP, FDNY, OEM
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<b>Key Actions</b>	The following represents the range of decisions and actions city agencies may initiate:											
	<b>Action</b>		<b>Description</b>									
	Issue hazardous weather advisory		Identifies weather-related hazards and advises the public to stay off roads, use public transportation, and exercise caution while driving.									
	Close schools or delay opening		Reduces number of children and parents using roadways.									
	Suspend alternate side parking and/or meter rules		Reduces number of people moving vehicles due to parking rules.									
	Begin towing operations		NYPD or entity designated by DOT may remove vehicles obstructing traffic or illegally parked.									
	Activate Tow Truck Task Force		Coordinated towing of stuck ambulances, buses and other vehicles.									
	Declare DOT citywide snow emergency		Requires chains or snow tires for vehicles on snow emergency streets; prohibits parking/standing on snow emergency streets; may exclude specific streets designated as snow emergency streets.									
	Issue DOHMH cold weather alert		Triggers increased outreach to vulnerable populations; issued automatically when overnight temperatures fall below 32°.									
	Issue DSNY snow alert		DSNY operates normally and prepares for storm; issued when snow is predicted within 36-48 hours.									
Issue weather emergency declaration		A mayoral weather emergency declaration may include any of the actions listed above necessary to protect public safety.										
<b>Plan Activations</b>	<ul style="list-style-type: none"> <li>OEM activated the Winter Weather Emergency Plan eight times during the reporting period: <table border="0" style="width: 100%; text-align: center;"> <tr> <td><i>Dec. 26, 2010</i></td> <td><i>Jan. 7, 2011</i></td> <td><i>Jan. 11, 2011</i></td> <td><i>Jan. 20, 2011</i></td> </tr> <tr> <td><i>Jan. 26, 2011</i></td> <td><i>Feb. 1, 2011</i></td> <td><i>Mar. 30, 2011</i></td> <td><i>Oct. 29, 2011</i></td> </tr> </table> </li> </ul>				<i>Dec. 26, 2010</i>	<i>Jan. 7, 2011</i>	<i>Jan. 11, 2011</i>	<i>Jan. 20, 2011</i>	<i>Jan. 26, 2011</i>	<i>Feb. 1, 2011</i>	<i>Mar. 30, 2011</i>	<i>Oct. 29, 2011</i>
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This document summarizes the weather emergency protocols that are contained within the NYC Coastal Storm Plan (CSP).

<b>Trigger</b>	<ul style="list-style-type: none"> <li>• National Weather Service forecasts a coastal storm making landfall north of North Carolina with potential impacts to New York City.</li> </ul>	
<b>Coastal Storm Steering Committee</b>	<ul style="list-style-type: none"> <li>• 311</li> <li>• Amtrak</li> <li>• American Red Cross</li> <li>• Community Affairs Unit</li> <li>• Con Edison</li> <li>• CUNY</li> <li>• Department of Buildings</li> <li>• Department of Citywide Administrative Services</li> <li>• Department of Corrections</li> <li>• Department of Design and Construction</li> <li>• Department of Education</li> <li>• Department of Environmental Protection</li> <li>• Department for the Aging</li> <li>• Department of Health and Mental Hygiene</li> <li>• Department of Homeless Services</li> <li>• Department of Housing Preservation and Development</li> <li>• Department of Human Resources Administration</li> <li>• Department of Information Technology and Telecommunications</li> <li>• Department of Parks and Recreation</li> <li>• Department of Sanitation</li> <li>• Department of Transportation</li> <li>• Federal Emergency Management Agency</li> <li>• Greater New York Hospital Association</li> <li>• Health and Hospitals Corporation</li> <li>• Mayor's Office of Contract Services</li> </ul>	<ul style="list-style-type: none"> <li>• Mayor's Office of Operations</li> <li>• Metropolitan Transportation Authority</li> <li>• Long Island Power Authority/National Grid</li> <li>• National Weather Service</li> <li>• New Jersey Transit</li> <li>• New York City Fire Department</li> <li>• New York City Fire Department Emergency Medical Service</li> <li>• New York City Housing Authority</li> <li>• New York City Law Department</li> <li>• New York City Police Department</li> <li>• New York Racing Association</li> <li>• New York State Department of Health</li> <li>• New York State Department of Transportation</li> <li>• New York State Office of Emergency Management</li> <li>• Office of the Chief Medical Examiner</li> <li>• Office of Emergency Management</li> <li>• Office of Management and Budget</li> <li>• Port Authority of New York and New Jersey</li> <li>• Regional Emergency Medical Services Council</li> <li>• Taxi and Limousine Commission</li> <li>• United States Coast Guard</li> <li>• Verizon</li> </ul>



<b>Operational Strategies</b>	The following functional plans comprise the NYC Coastal Storm Plan. Each document is a stand-alone plan implemented by agencies and coordinated by OEM:	
	Coastal Storm Functional Plan	Description
	Decision Making Playbook	Provides a summary view of the plan and includes a series of timelines designed to guide decision-makers through the actions needed to activate and implement the numerous operations that constitute the citywide response.
	Advance Warning System	Pushes targeted emergency information to individuals with special needs during emergencies.
	Evacuation	Describes the systems, processes, and procedures to evacuate the general at-risk population from areas of the City that will be inundated with storm surge to safer areas prior to the predicted zero hour.
	Healthcare Facility Evacuation	Describes a coordinated operation to evacuate at-risk healthcare facilities in evacuation zones to like facilities on higher ground.
	Sheltering	Explains the procedures to activate and manage a disaster sheltering system for New Yorkers and visitors who are unable to find alternative shelter outside of storm surge areas.
	Logistics	Outlines the basic activities and timelines needed to effectively implement shelter system support and post-storm commodities distribution operations.
	Public Information	Outlines steps for City public information efforts before, during, and after a coastal storm.
	Recovery and Restoration	Addresses post-storm recovery and restoration activities including: declaration and reimbursement management, initial response and re-entry, damage and needs assessment, essential services restoration, reconstruction coordination, human services.
Debris Management Plan	Provides organizational structure, guidance and standardized procedures for debris clearance, removal, and disposal.	

<b>Key Actions</b>	The following represents the range of decisions and actions city agencies may initiate:	
	Action	Description
	Issue recommended evacuation	Issued when risks do not warrant an evacuation order; may target specific areas, facilities, or populations.
	Issue ordered evacuation	Issued under authority of executive law; empowers the mayor to make emergency orders to protect life and property.
	Suspend alternate side parking and/or meter rules	Reduces the number of people moving vehicles due to parking rules.
	Issue recommended/ordered cessation of non-essential services	Allows citywide resources to be directed toward response operations, especially in specific areas or facilities.
	Open shelters	Allows voluntary evacuation as a response to a localized threat or supports a mandatory evacuation.
	Issue weather emergency declaration	A mayoral weather emergency declaration may include any of the actions listed above necessary to protect public safety.
<b>Plan Activations</b>	<ul style="list-style-type: none"> <li>OEM activated the Coastal Storm Plan one time during the reporting period: Aug. 23, 2011</li> </ul>	

This document summarizes the weather emergency protocols that are contained within the NYC Heat Emergency Plan (HEP).

<b>Triggers</b>	<ul style="list-style-type: none"> <li>• Predicted Heat Index of 100° F or higher for one day or more</li> <li>• Predicted Heat Index of 95° F or higher for two days or more</li> </ul>													
<b>Heat Emergency Steering Committee</b>	<ul style="list-style-type: none"> <li>• 311</li> <li>• American Red Cross</li> <li>• Community Affairs Unit</li> <li>• Con Edison</li> <li>• Department of Design and Construction</li> <li>• Department of Environmental Protection</li> <li>• Department for the Aging</li> <li>• Department of Education</li> <li>• Department of Health and Mental Hygiene</li> <li>• Department of Homeless Services</li> <li>• Department of Housing Preservation and Development</li> <li>• Department of Human Resources Administration</li> <li>• Department of Information Technology and Telecommunications</li> <li>• Department of Parks and Recreation</li> <li>• Department of Sanitation</li> </ul>	<ul style="list-style-type: none"> <li>• Department of Transportation</li> <li>• Greater New York Hospital Association</li> <li>• Health and Hospitals Corporation</li> <li>• Long Island Power Authority/National Grid</li> <li>• Metropolitan Transportation Authority</li> <li>• National Weather Service</li> <li>• New York City Fire Department</li> <li>• New York City Housing Authority</li> <li>• New York City Police Department</li> <li>• New York State Office of Emergency Management</li> <li>• Office of the Chief Medical Examiner</li> <li>• Office of Emergency Management</li> <li>• Port Authority of New York and New Jersey</li> <li>• Regional Emergency Medical Services Council</li> </ul>												
<b>Operational Strategies</b>	<p>The following are HEP strategies implemented by agencies and coordinated by OEM:</p>													
	<table border="1"> <thead> <tr> <th>Operational Strategy</th> <th>Agencies</th> </tr> </thead> <tbody> <tr> <td>Special Needs Advance Warning</td> <td>Con Ed, DFTA, DHS, DOE, DOHMH, HHC, HRA, LIPA/National Grid, MOPD, NWS, VA, VNS</td> </tr> <tr> <td>Cooling Centers</td> <td>ARC, CUNY, DFTA, DOE, DoITT, HRA, MTA, NYCHA, NYPD</td> </tr> <tr> <td>Homeless Outreach</td> <td>DHS, DoITT, DSNY, MTA</td> </tr> <tr> <td>Excavation Safety Alert</td> <td>Con Ed, DDC, DEP, DoITT, DOT, LIPA/National Grid, MTA, DigNet, Parks</td> </tr> <tr> <td>Spray Cap Program</td> <td>DEP, FDNY, NYPD</td> </tr> </tbody> </table>	Operational Strategy	Agencies	Special Needs Advance Warning	Con Ed, DFTA, DHS, DOE, DOHMH, HHC, HRA, LIPA/National Grid, MOPD, NWS, VA, VNS	Cooling Centers	ARC, CUNY, DFTA, DOE, DoITT, HRA, MTA, NYCHA, NYPD	Homeless Outreach	DHS, DoITT, DSNY, MTA	Excavation Safety Alert	Con Ed, DDC, DEP, DoITT, DOT, LIPA/National Grid, MTA, DigNet, Parks	Spray Cap Program	DEP, FDNY, NYPD	
Operational Strategy	Agencies													
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Excavation Safety Alert	Con Ed, DDC, DEP, DoITT, DOT, LIPA/National Grid, MTA, DigNet, Parks													
Spray Cap Program	DEP, FDNY, NYPD													

<b>Key Actions</b>	The following represents the range of decisions and actions city agencies may initiate:						
	Action	Description					
	Activate Special Needs Advance Warning System	Provide advance information about forecasted weather, potential hazards of heat, and the availability of resources such as cooling centers to NYC agencies and organizations whose clients consist of special needs populations.					
	Open cooling centers	Protocol for opening air-conditioned facilities (primarily city-owned) consisting of senior centers and community centers to the public.					
	Begin homeless outreach strategy	Outreach efforts for monitoring of homeless persons to determine need for further protection from heat exposure.					
	Issue excavation safety alert	Provide guidance to contractors on enhanced protective measures to excavate safely around underground critical facilities.					
	Implement spray cap program	Distribute hydrant spray caps to the public to provide relief from the heat and minimizes impact to municipal water supply pressure.					
	Issue heat-related information to the public	Communicate information about heat safety and power conservation tips to the public.					
<b>Plan Activations</b>	Issue weather emergency declaration	A mayoral weather emergency declaration may include any of the actions listed above necessary to protect public safety.					
	<ul style="list-style-type: none"> <li>OEM activated the Heat Emergency Plan four times during the reporting period:                             <table border="0" style="width: 100%; text-align: center;"> <tr> <td><i>June 7, 2011</i></td> <td><i>July 11, 2011</i></td> <td><i>July 20, 2011</i></td> <td><i>July 28, 2011</i></td> </tr> </table> </li> </ul>	<i>June 7, 2011</i>	<i>July 11, 2011</i>	<i>July 20, 2011</i>	<i>July 28, 2011</i>		
<i>June 7, 2011</i>	<i>July 11, 2011</i>	<i>July 20, 2011</i>	<i>July 28, 2011</i>				

This document summarizes the weather emergency protocols and procedures that are contained within the NYC Flash Flood Emergency Plan (FFEP).

<b>Triggers</b>	<ul style="list-style-type: none"> <li>• Rainfall rate of one inch per hour for the duration of 60 minutes or longer</li> <li>• Total rainfall accumulation of two inches or more for the forecast event</li> </ul>																								
<b>Flash Flood Emergency Steering Committee</b>	<ul style="list-style-type: none"> <li>• 311</li> <li>• Con Edison</li> <li>• Department of Environmental Protection</li> <li>• Department of Buildings</li> <li>• Department of Information Technology and Telecommunications</li> <li>• Department of Parks and Recreation</li> <li>• Department of Sanitation</li> <li>• Department of Transportation</li> </ul>		<ul style="list-style-type: none"> <li>• Long Island Power Authority/National Grid</li> <li>• Metropolitan Transportation Authority</li> <li>• National Weather Service</li> <li>• New York City Fire Department</li> <li>• New York City Police Department</li> <li>• Office of Emergency Management</li> <li>• Port Authority of New York and New Jersey</li> <li>• Verizon</li> </ul>																						
<b>Operational Strategies</b>	The following are FFEP strategies implemented by agencies and coordinated by OEM:																								
	<b>Operational Strategy</b>		<b>Agencies</b>																						
	Targeted Cleaning and Maintenance		DEP, DSNY, DOT, MTA																						
	Monitoring and Response		DEP, FDNY, NYPD, DOT, OEM																						
Recovery Assistance		ARC, CAU, DEP, DOHMH, DHS, HRA, DoITT																							
<b>Key Actions</b>	The following represents the range of decisions and actions city agencies may initiate:																								
	<b>Action</b>		<b>Description</b>																						
	Commence targeted cleaning and maintenance operations		City agencies deploy personnel to designated recurring flooding locations to clear streets and catch basins of debris.																						
	Monitor recurring flood locations		City agencies and volunteers provide targeted monitoring of recurring flood locations to improve response during a flood event and to help direct recovery efforts.																						
	Begin dewatering operations		FDNY provides dewatering equipment and personnel to support flood response at critical streets and intersections.																						
	Provide recovery assistance		City agencies provide services and distribute appropriate recovery resources to affected residents through reception centers or Disaster Assistance Service Centers (DASC).																						
Issue weather emergency declaration		A mayoral weather emergency declaration may include any of the actions listed above necessary to protect public safety.																							
<b>Plan Activations</b>	<ul style="list-style-type: none"> <li>• OEM activated the Flash Flood Emergency Plan 18 times during the reporting period:</li> </ul> <table border="0"> <tr> <td><i>Jan. 14, 2011</i></td> <td><i>Jan. 31, 2011</i></td> <td><i>Feb. 24, 2011</i></td> <td><i>March 4, 2011</i></td> <td><i>March 9, 2011</i></td> </tr> <tr> <td><i>April 27, 2011</i></td> <td><i>May 16, 2011</i></td> <td><i>June 9, 2011</i></td> <td><i>June 22, 2011</i></td> <td><i>July 29, 2011</i></td> </tr> <tr> <td><i>Aug. 5, 2011</i></td> <td><i>Aug. 14, 2011</i></td> <td><i>Aug. 19, 2011</i></td> <td><i>Aug. 24, 2011</i></td> <td><i>Sept. 7, 2011</i></td> </tr> <tr> <td><i>Sept. 21, 2011</i></td> <td><i>Oct. 18, 2011</i></td> <td><i>Oct. 28, 2011</i></td> <td></td> <td></td> </tr> </table>					<i>Jan. 14, 2011</i>	<i>Jan. 31, 2011</i>	<i>Feb. 24, 2011</i>	<i>March 4, 2011</i>	<i>March 9, 2011</i>	<i>April 27, 2011</i>	<i>May 16, 2011</i>	<i>June 9, 2011</i>	<i>June 22, 2011</i>	<i>July 29, 2011</i>	<i>Aug. 5, 2011</i>	<i>Aug. 14, 2011</i>	<i>Aug. 19, 2011</i>	<i>Aug. 24, 2011</i>	<i>Sept. 7, 2011</i>	<i>Sept. 21, 2011</i>	<i>Oct. 18, 2011</i>	<i>Oct. 28, 2011</i>		
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**Snow Preparedness  
and Response Report  
Local Law 26/2011**

**Reportable Snow Event 1**  
December 26<sup>th</sup> & 27<sup>th</sup>, 2010

## 1. Event Description

Snowfall (Source: National Weather Service)

Date	December 26 <sup>th</sup> & 27 <sup>th</sup> , 2010			
Measured Snowfall (in inches)	Highest Recorded	Central Park	LaGuardia Airport	Kennedy Airport
	Great Kills (SI) 29.0	20.0	14.0	15.6

Advisories, Warnings, or Declarations Issued by the City or State

None Issued

## 2. Agency Responsibilities and Performance Indicators

Agency	Responsibilities	Performed	
		Yes	No
Department of Environmental Protection	Clean catch basins at primary roadways and poor drainage areas	X	
	Provide equipment and personnel to support snow removal	X	
	Conduct thawing of hydrants identified by FDNY and removal of snow around hydrants	X	
	Ensured pre-determined snow melting locations were prepared for operation	X	
	<b>Additional comments/information:</b> <ul style="list-style-type: none"> <li>▪ Because the storm's impacts were centered on the east coast, DEP brought in additional snow removal equipment and staff from upstate.</li> <li>▪ Provided staff to DSNY for clean-up activities at Times Square for the New Year's Eve festivities.</li> <li>▪ Provided tow trucks to assist the Tow Truck Task Force.</li> </ul>		
Department of Education	Delay school opening		X
	Close schools		X
	Conduct snow removal operations at school facilities	X	
	<b>Additional comments/information:</b> This storm occurred during public schools' winter break. Some of the non-public schools had difficulty with busing routes for several days.		

## 2. Agency Responsibilities and Performance Indicators (cont.)

Agency	Responsibilities	Performed	
		Yes	No
Department of Transportation	Suspend alternate side parking	X	
	Mechanical sweeping on highways	X	
	Clear East River bridge crossings	X	
	Monitor condition of highways/bridges at Traffic Management Center	X	
	Provide equipment and personnel for snow removal	X	
	<b>Additional comments/information:</b> Last Arterial Sweeping for winter of 2010/2011 was Dec. 14, 2010		
Department of Parks and Recreation	Conduct snow removal at City parks	X	
	Provide equipment and personnel for snow removal	X	
	Cancel or reschedule outdoor special events		X
	<b>Additional comments/information:</b> None		
Department of Sanitation	Conduct roadway snow plowing and spreading operations	X	
	Implement alternate schedule for trash pickup	X	
	<b>Additional comments/information:</b> <ul style="list-style-type: none"> <li>▪ Snowfall Duration: 22 hours</li> <li>▪ DSNY Snow Depth Measurements (may vary from NWS measurements noted above): <ul style="list-style-type: none"> <li>○ Manhattan - 19; Bronx - 14 ½; Brooklyn - 26; Queens - 18 ½</li> <li>○ Staten Island - 29 ½</li> </ul> </li> <li>▪ Street Cleaning Regulations (SCR) was cancelled for the following dates: <ul style="list-style-type: none"> <li>○ 12/27/10 thru 1/9/11 (excluding 12/31/10 and 1/1/11 which were holidays)</li> </ul> </li> <li>▪ Mayoral Press conference was held on 12/26/10 @ 1627 hrs: <ul style="list-style-type: none"> <li>○ Commissioner announced SCR would be cancelled</li> <li>○ Commissioner announced Refuse and Recycling collection would be cancelled</li> </ul> </li> <li>▪ At approximately the same time, First Deputy Commissioner declared an Emergency Procurement Declaration for DSNY to hire private equipment.</li> </ul>		

## 2. Agency Responsibilities and Performance Indicators (cont.)

Agency	Responsibilities	Performed	
		Yes	No
NYC Fire Department	Conduct hydrant thawing and/or shoveling operations	X	
	Monitor EMS runs and services	X	
	<b>Additional comments/information:</b> <ul style="list-style-type: none"> <li>▪ Conducted both hydrant thawing and shoveling.</li> <li>▪ Assisted OEM in the development/review of the Tow Truck Task Force Protocol.</li> </ul>		
NYC Police Department	Monitor winter weather-related 911 calls	X	
	Assist in removal of abandoned vehicles from major roadways	X	
	<b>Additional comments/information:</b> None		
Office of the Chief Medical Examiner	Monitor any reported winter weather-related deaths	X	
	<b>Additional comments/information:</b> None		
Office of Emergency Management	Provide interagency coordination	X	
	Activate and operate NYC Emergency Operations Center	X	
	Provide public messaging through NotifyNYC and OEM website, <a href="http://www.nyc.gov/oem">www.nyc.gov/oem</a>	X	
	Provide logistics support (e.g. assist in mutual aid and resource request processes)	X	
	<b>Additional comments/information:</b> None		



To the extent information is available:

## 2. Agency Responsibilities and Performance Indicators (cont.)

Agency	Responsibilities	Performed	
		Yes	No
Metropolitan Transportation Authority	Clear entrances to bridges and tunnels	X	
	Remove abandoned buses from roadways	X	
	Monitor and remove snow from subway and commuter rail stairs and platforms	X	
	<b>Additional comments/information:</b> None		
New York City Housing Authority	Conduct snow removal operations at NYCHA Housing Developments. Snow removed from hydrants, fuel oil lines, utility manholes, building entrances, sidewalks, garage roofs, and wood framed structures.	X	
	Deployed Salt & Sanding Operations	X	
	Hired temporary staff, contractors or rented equipment to assist with snow removal		X
	Addressed Major Service Disruptions	X	
	Cancel community services/events	X	
	<b>Additional comments/information:</b> None		
New York State Office of Emergency Management	Provide logistics support		
	Issue supporting emergency declarations		
	<b>Additional comments/information:</b> Information not available for this report		
Port Authority of New York & New Jersey	Clear entrances to bridges and tunnels	X	
	Conduct snow removal operations at airports	X	
	<b>Additional comments/information:</b> <ul style="list-style-type: none"> <li>▪ Plowed access ramps and limited highway (e.g. New York Expressway, Dyer Ave, Varick St, etc) access to bridges and tunnels.</li> <li>▪ Plowed streets that provided access to Brooklyn Piers and Howland Hook (SI).</li> <li>▪ Cleared entrances to PATH stations and cleared catch basins in immediate area of PATH station entrances.</li> </ul>		

**Snow Preparedness  
and Response Report  
Local Law 26/2011**

**Reportable Snow Event 2**  
January 11<sup>th</sup> & 12<sup>th</sup>, 2011

## 1. Event Description

Snowfall (Source: National Weather Service)

Date	January 11 <sup>th</sup> & 12 <sup>th</sup> , 2011			
Measured Snowfall (in inches)	Highest Recorded	Central Park	LaGuardia Airport	Kennedy Airport
	Fresh Meadows (QN) 12.0	9.1	6.9	6.1

Advisories, Warnings, or Declarations Issued by the City or State

Issued	Actions Taken
Weather Emergency Declaration (issued by the Mayor)	<ul style="list-style-type: none"> <li>✓ Advisory to the public to avoid all unnecessary driving and use public transportation whenever possible</li> <li>✓ Suspension of alternate side parking</li> <li>✓ Suspension of meter rules</li> <li>✓ Suspension of garbage collections</li> <li>✓ Towing of any vehicles found to be blocking roadways or impeding the ability to plow streets</li> </ul>

## 2. Agency Responsibilities and Performance Indicators

Agency	Responsibilities	Performed	
		Yes	No
Department of Environmental Protection	Clean catch basins at primary roadways and poor drainage areas	X	
	Provide equipment and personnel to support snow removal	X	
	Conduct thawing of hydrants identified by FDNY and removal of snow around hydrants	X	
	Ensured pre-determined snow melting locations were prepared for operation	X	
	<i>Additional comments/information:</i> None		
Department of Education	Delay school opening		X
	Close schools		X
	Conduct snow removal operations at school facilities	X	
	<i>Additional comments/information:</i> None		

## 2. Agency Responsibilities and Performance Indicators (cont.)

Agency	Responsibilities	Performed	
		Yes	No
Department of Transportation	Suspend alternate side parking	X	
	Mechanical sweeping on highways	X	
	Clear East River bridge crossings	X	
	Monitor condition of highways/bridges at Traffic Management Center	X	
	Provide equipment and personnel for snow removal	X	
	<b>Additional comments/information:</b> <ul style="list-style-type: none"> <li>▪ Last Arterial Sweeping for winter of 2010/2011 was Dec. 14, 2010</li> </ul>		
Department of Parks and Recreation	Conduct snow removal at City parks	X	
	Provide equipment and personnel for snow removal	X	
	Cancel or reschedule outdoor special events		X
	<b>Additional comments/information:</b> None		
Department of Sanitation	Conduct roadway snow plowing and spreading operations	X	
	Implement alternate schedule for trash pickup	X	
	<b>Additional comments/information:</b> <ul style="list-style-type: none"> <li>▪ Snowfall Duration: 11 hours</li> <li>▪ DSNY Snow Depth Measurements (may vary from NWS measurements noted above): <ul style="list-style-type: none"> <li>○ Manhattan – 9; Bronx – 7 ¾ ; Brooklyn – 8; Queens – 9 ½ ; Staten Island – 8 ½</li> </ul> </li> <li>▪ Street Cleaning Regulations (SCR) was cancelled for the following dates: <ul style="list-style-type: none"> <li>○ 1/12/11 thru 1/16/11</li> </ul> </li> </ul>		
NYC Fire Department	Conduct hydrant thawing and/or shoveling operations	X	
	Monitor EMS runs and services	X	
	<b>Additional comments/information:</b> <ul style="list-style-type: none"> <li>▪ Conducted hydrant thawing but not shoveling; snowfall totals did not warrant hydrant shoveling</li> <li>▪ Assisted OEM in the development/review of the Tow Truck Task Force Protocol</li> </ul>		

## 2. Agency Responsibilities and Performance Indicators (cont.)

NYC Police Department	Monitor winter weather-related 911 calls	X	
	Assist in removal of abandoned vehicles from major roadways	X	
	<i>Additional comments/information:</i> None		
Office of the Chief Medical Examiner	Monitor any reported winter weather-related deaths	X	
	<i>Additional comments/information:</i> None		
Office of Emergency Management	Provide interagency coordination	X	
	Activate and operate NYC Emergency Operations Center	X	
	Provide public messaging through NotifyNYC and OEM website, <a href="http://www.nyc.gov/oem">www.nyc.gov/oem</a>	X	
	Provide logistics support (e.g. assist in mutual aid and resource request processes)	X	
	<i>Additional comments/information:</i> None		

To the extent information is available:

**2. Agency Responsibilities and Performance Indicators (cont.)**

Agency	Responsibilities	Performed	
		Yes	No
Metropolitan Transportation Authority	Clear entrances to bridges and tunnels	X	
	Remove abandoned buses from roadways	X	
	Monitor and remove snow from subway and commuter rail stairs and platforms	X	
	<i>Additional comments/information:</i> None		
New York City Housing Authority	Conduct snow removal operations at NYCHA Housing Developments. Snow removed from hydrants, fuel oil lines, utility manholes, building entrances, sidewalks, garage roofs, and wood framed structures.	X	
	Deployed Salt & Sanding Operations	X	
	Hired temporary staff, contractors or rented equipment to assist with snow removal		X
	Addressed Major Service Disruptions	X	
	Cancel community services/events	X	
	<i>Additional comments/information:</i> None		
New York State Office of Emergency Management	Provide logistics support		
	Issue supporting emergency declarations		
	<i>Additional comments/information:</i> Information not available for this report		
Port Authority of New York & New Jersey	Clear entrances to bridges and tunnels	X	
	Conduct snow removal operations at airports	X	
	<i>Additional comments/information:</i> None		

**Snow Preparedness  
and Response Report  
Local Law 26/2011**

**Reportable Snow Event 3**  
January 21, 2011

## 1. Event Description

Snowfall (Source: National Weather Service)

Date	January 21, 2011			
Measured Snowfall (in inches)	Highest Recorded	Central Park	LaGuardia Airport	Kennedy Airport
	Pelham Parkway (BX) 6.0	4.2	4.1	3.9

Advisories, Warnings, or Declarations Issued by the City or State

Issued	Action Taken
Hazardous Travel Advisory (issued by OEM)	✓ Advisory to the public about winter weather-related hazards, to avoid driving during and immediately after the storm, use public transportation, and take precautions if driving

## 2. Agency Responsibilities and Performance Indicators

Agency	Responsibilities	Performed	
		Yes	No
Department of Environmental Protection	Clean catch basins at primary roadways and poor drainage areas	X	
	Provide equipment and personnel to support snow removal	X	
	Conduct thawing of hydrants identified by FDNY and removal of snow around hydrants	X	
	Ensured pre-determined snow melting locations were prepared for operation	X	
	<i>Additional comments/information:</i> None		
Department of Education	Delay school opening		X
	Close schools		X
	Conduct snow removal operations at school facilities	X	
	<i>Additional comments/information:</i> None		

## 2. Agency Responsibilities and Performance Indicators (cont.)

Agency	Responsibilities	Performed	
		Yes	No
Department of Transportation	Suspend alternate side parking	X	
	Mechanical sweeping on highways	X	
	Clear East River bridge crossings	X	
	Monitor condition of highways/bridges at Traffic Management Center	X	
	Provide equipment and personnel for snow removal	X	
	<b>Additional comments/information:</b> <ul style="list-style-type: none"> <li>▪ Last Arterial Sweeping for winter of 2010/2011 was Dec. 14, 2010</li> </ul>		
Department of Parks and Recreation	Conduct snow removal at City parks	X	
	Provide equipment and personnel for snow removal	X	
	Cancel or reschedule outdoor special events		X
	<b>Additional comments/information:</b> None		
Department of Sanitation	Conduct roadway snow plowing and spreading operations	X	
	Implement alternate schedule for trash pickup	X	
	<b>Additional comments/information:</b> <ul style="list-style-type: none"> <li>▪ Snowfall Duration: 6 hours</li> <li>▪ DSNY Snow Depth Measurements (may vary from NWS measurements noted above): <ul style="list-style-type: none"> <li>○ Manhattan - 3; Bronx - 4; Brooklyn - 4; Queens - 4 ½; Staten Island - 3 ¼</li> </ul> </li> <li>▪ Street Cleaning Regulations (SCR) was cancelled for the following dates: <ul style="list-style-type: none"> <li>○ 1/21/11, 1/22/11, 1/24/11, and 1/25/11</li> </ul> </li> </ul>		
NYC Fire Department	Conduct hydrant thawing and/or shoveling operations	X	
	Monitor EMS runs and services	X	
	<b>Additional comments/information:</b> <ul style="list-style-type: none"> <li>▪ Conducted hydrant thawing but not shoveling; snowfall totals did not warrant hydrant shoveling</li> <li>▪ Assisted OEM in the development/review of the Tow Truck Task Force Protocol</li> </ul>		

## 2. Agency Responsibilities and Performance Indicators (cont.)

Agency	Responsibilities	Performed	
		Yes	No
NYC Police Department	Monitor winter weather-related 911 calls	X	
	Assist in removal of abandoned vehicles from major roadways	X	
	<i>Additional comments/information:</i> None		
Office of the Chief Medical Examiner	Monitor any reported winter weather-related deaths	X	
	<i>Additional comments/information:</i> None		
Office of Emergency Management	Provide interagency coordination	X	
	Activate and operate NYC Emergency Operations Center	X	
	Provide public messaging through NotifyNYC, OEM website, <a href="http://www.nyc.gov/oem">www.nyc.gov/oem</a> , and SnowUpdate website	X	
	Provide logistics support (e.g. assist in mutual aid and resource request processes)	X	
	<i>Additional comments/information:</i> A newly developed SnowUpdate website was available for this snow event.		



To the extent information is available:

## 2. Agency Responsibilities and Performance Indicators (cont.)

Agency	Responsibilities	Performed	
		Yes	No
Metropolitan Transportation Authority	Clear entrances to bridges and tunnels	X	
	Remove abandoned buses from roadways	X	
	Monitor and remove snow from subway and commuter rail stairs and platforms	X	
	<i>Additional comments/information:</i> None		
New York City Housing Authority	Conduct snow removal operations at NYCHA Housing Developments. Snow removed from hydrants, fuel oil lines, utility manholes, building entrances, sidewalks, garage roofs, and wood framed structures.	X	
	Deployed Salt & Sanding Operations	X	
	Hired temporary staff, contractors or rented equipment to assist with snow removal		X
	Addressed Major Service Disruptions	X	
	Cancel community services/events	X	
	<i>Additional comments/information:</i> None		
New York State Office of Emergency Management	Provide logistics support		
	Issue supporting emergency declarations		
	<i>Additional comments/information:</i> Information not available for this report		
Port Authority of New York & New Jersey	Clear entrances to bridges and tunnels	X	
	Conduct snow removal operations at airports	X	
	<i>Additional comments/information:</i> None		

## 1. Event Description

Snowfall (Source: National Weather Service)

Date	January 26, 2011			
Measured Snowfall (in inches)	Highest Recorded	Central Park	LaGuardia Airport	Kennedy Airport
	Great Kills (SI) 20.0	19.0	17.3	10.3

Advisories, Warnings, or Declarations Issued by the City or State

Issued	Actions Taken
Weather Emergency Declaration (issued by the Mayor)	<ul style="list-style-type: none"> <li>✓ Advisory to the public to avoid all unnecessary driving and use public transportation whenever possible</li> <li>✓ Suspension of alternate side parking</li> <li>✓ Suspension of meter rules</li> <li>✓ Suspension of garbage collection</li> <li>✓ Towing of any vehicles found to be blocking roadways or impeding the ability to plow streets</li> <li>✓ Closure of NYC public schools</li> </ul>

## 2. Agency Responsibilities and Performance Indicators

Agency	Responsibilities	Performed	
		Yes	No
Department of Environmental Protection	Clean catch basins at primary roadways and poor drainage areas	X	
	Provide equipment and personnel to support snow removal	X	
	Conduct thawing of hydrants identified by FDNY and removal of snow around hydrants	X	
	Ensured pre-determined snow melting locations were prepared for operation	X	
	<i>Additional comments/information:</i> None		
Department of Education	Delay school opening		X
	Close schools	X	
	Conduct snow removal operations at school facilities	X	
	<i>Additional comments/information:</i> None		

## 2. Agency Responsibilities and Performance Indicators (cont.)

Agency	Responsibilities	Performed	
		Yes	No
Department of Transportation	Suspend alternate side parking	X	
	Mechanical sweeping on highways	X	
	Clear East River bridge crossings	X	
	Monitor condition of highways/bridges at Traffic Management Center	X	
	Provide equipment and personnel for snow removal	X	
	<b>Additional comments/information:</b> <ul style="list-style-type: none"> <li>▪ Last Arterial Sweeping for winter of 2010/2011 was Dec. 14, 2010</li> </ul>		
Department of Parks and Recreation	Conduct snow removal at City parks	X	
	Provide equipment and personnel for snow removal	X	
	Cancel or reschedule outdoor special events		X
	<b>Additional comments/information:</b> None		
Department of Sanitation	Conduct roadway snow plowing and spreading operations	X	
	Implement alternate schedule for trash pickup	X	
	<b>Additional comments/information:</b> <ul style="list-style-type: none"> <li>▪ Snowfall Duration: 23 hours</li> <li>▪ DSNY Snow Depth Measurements (may vary from NWS measurements noted above): <ul style="list-style-type: none"> <li>○ Manhattan - 12 ¾ ; Bronx - 14 ½; Brooklyn - 16; Queens - 15</li> <li>○ Staten Island - 18 ½</li> </ul> </li> <li>▪ Street Cleaning Regulations (SCR) was cancelled for the following dates: <ul style="list-style-type: none"> <li>○ 1/27/11 thru 2/5/11</li> </ul> </li> </ul>		
NYC Fire Department	Conduct hydrant thawing and/or shoveling operations	X	
	Monitor EMS runs and services	X	
	<b>Additional comments/information:</b> <ul style="list-style-type: none"> <li>▪ Conducted hydrant thawing but not shoveling; snowfall totals did not warrant hydrant shoveling</li> <li>▪ FDNY Fire Operations issued tow straps to all ladder companies to aid in vehicle removal for future storms</li> <li>▪ FDNY EMS Operations provided light chains to all EMS stations for its ambulances</li> <li>▪ Assisted OEM in the development/review of the Tow Truck Task Force Protocol</li> </ul>		

## 2. Agency Responsibilities and Performance Indicators (cont.)

Agency	Responsibilities	Performed	
		Yes	No
NYC Police Department	Monitor winter weather-related 911 calls	X	
	Assist in removal of abandoned vehicles from major roadways	X	
	<i>Additional comments/information:</i> None		
Office of the Chief Medical Examiner	Monitor any reported winter weather-related deaths	X	
	<i>Additional comments/information:</i> None		
Office of Emergency Management	Provide interagency coordination	X	
	Activate and operate NYC Emergency Operations Center	X	
	Provide public messaging through NotifyNYC, OEM website, <a href="http://www.nyc.gov/oem">www.nyc.gov/oem</a> , and SnowUpdate website	X	
	Provide logistics support (e.g. assist in mutual aid and resource request processes)	X	
	<i>Additional comments/information:</i> None		

To the extent information is available:

**2. Agency Responsibilities and Performance Indicators (cont.)**

Agency	Responsibilities	Performed	
		Yes	No
Metropolitan Transportation Authority	Clear entrances to bridges and tunnels	X	
	Remove abandoned buses from roadways	X	
	Monitor and remove snow from subway and commuter rail stairs and platforms	X	
	<i>Additional comments/information:</i> None		
New York City Housing Authority	Conduct snow removal operations at NYCHA Housing Developments. Snow removed from hydrants, fuel oil lines, utility manholes, building entrances, sidewalks, garage roofs, and wood framed structures.	X	
	Deployed Salt & Sanding Operations	X	
	Hired temporary staff, contractors or rented equipment to assist with snow removal		X
	Addressed Major Service Disruptions	X	
	Cancel community services/events	X	
	<i>Additional comments/information:</i> None		
New York State Office of Emergency Management	Provide logistics support		
	Issue supporting emergency declarations		
	<i>Additional comments/information:</i> Information not available for this report		
Port Authority of New York & New Jersey	Clear entrances to bridges and tunnels	X	
	Conduct snow removal operations at airports	X	
	<i>Additional comments/information:</i> <ul style="list-style-type: none"> <li>▪ Plowed access ramps and limited highway (e.g. New York Expressway, Dyer Ave, Varick St, etc) access to bridges and tunnels</li> <li>▪ Plowed streets that provided access to Brooklyn Piers and Howland Hook (SI)</li> <li>▪ Cleared entrances to PATH stations and cleared catch basins in immediate area of PATH station entrances</li> </ul>		

## **2010-2011 Recommendations for Improvement**

The recommendations outlined below were identified after an analysis of all of the reportable snow events, including the 2010 Christmas blizzard.

### **I. Declaration of Emergencies**

1. Improve the process for declaring emergencies.
2. Provide a broader range of options that could be part of an emergency declaration and make them clear and understandable to New Yorkers.

### **II. Tracking and Accountability Tools**

3. Equip every Department of Sanitation truck with a GPS device enabled with two-way communication.
4. Improve accountability tools and plowing definitions used by Sanitation for street conditions.
5. Use live monitors (SCOUT) to stream video of trouble spots.

### **III. Rapid Deployment of all Possible City Assets**

6. Enhance immediate availability of critical equipment.
7. Enhance ability to deploy City employees from other departments.
8. Enhance the Emergency Operations Center as the center of resource coordination.
9. Improve tow truck deployment.

### **IV. Better Pre-Positioning of Private Resources**

10. Secure and expeditiously deploy private contractors for assistance.
11. Improve the process of hiring additional laborers.

### **V. Communications**

12. Improve two-way communications through real time portal.
13. Provide better methods for citizens to request help.

### **VI. Emergency Communications**

14. Reform dispatch protocols in extreme and high volume events.
15. Accelerate PSAC integration and implementation.

**THE COUNCIL  
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. \_\_\_\_\_ Res. No. \_\_\_\_\_

in favor  in opposition

Date: \_\_\_\_\_

(PLEASE PRINT)

Name: Commissioner John Doherty

Address: DSNY

I represent: Department of Sanitation

Address: DSNY

**THE COUNCIL  
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. \_\_\_\_\_ Res. No. \_\_\_\_\_

in favor  in opposition

Date: 11/30/11

(PLEASE PRINT)

Name: Kelly McKinney

Address: 1105 Cadman Plaza East

I represent: Office of Emergency Management

Address: \_\_\_\_\_

**THE COUNCIL  
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. \_\_\_\_\_ Res. No. \_\_\_\_\_

in favor  in opposition

Date: \_\_\_\_\_

(PLEASE PRINT)

Name: Robert Papp

Address: 245 32 61st Ave

I represent: myself associate member <sup>amended</sup> ~~Spring~~

Address: association

Please complete this card and return to the Sergeant-at-Arms