

1. Event Description

Snowfall (Source: National Weather Service)

Date	December 26 th & 27 th , 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	
Additional comments/information:			
<ul style="list-style-type: none"> ▪ Because the storm's impacts were centered on the east coast, DEP brought in additional snow removal equipment and staff from upstate. ▪ Provided staff to DSNY for clean-up activities at Times Square for the New Year's Eve festivities. ▪ Provided tow trucks to assist the Tow Truck Task Force. 			
Department of Education	Delay school opening		X
	Close schools		X
	Conduct snow removal operations at school facilities	X	
Additional comments/information:			
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	
	Additional comments/information: 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
	Additional comments/information: None		
Department of Sanitation	Conduct roadway snow plowing and spreading operations	X	
	Implement alternate schedule for trash pickup	X	
	Additional comments/information: <ul style="list-style-type: none"> ▪ Snowfall Duration: 22 hours ▪ DSNY Snow Depth Measurements (may vary from NWS measurements noted above): <ul style="list-style-type: none"> ○ Manhattan – 19; Bronx – 14 ½; Brooklyn – 26; Queens – 18 ½ ○ Staten Island – 29 ½ ▪ Street Cleaning Regulations (SCR) was cancelled for the following dates: <ul style="list-style-type: none"> ○ 12/27/10 thru 1/9/11 (excluding 12/31/10 and 1/1/11 which were holidays) ▪ Mayoral Press conference was held on 12/26/10 @ 1627 hrs: <ul style="list-style-type: none"> ○ Commissioner announced SCR would be cancelled ○ Commissioner announced Refuse and Recycling collection would be cancelled ▪ At approximately the same time, First Deputy Commissioner declared an Emergency Procurement Declaration for DSNY to hire private equipment. 		

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	
	Additional comments/information: <ul style="list-style-type: none"> ▪ Conducted both hydrant thawing and shoveling. ▪ Assisted OEM in the development/review of the Tow Truck Task Force Protocol. 		
NYC Police Department	Monitor winter weather-related 911 calls	X	
	Assist in removal of abandoned vehicles from major roadways	X	
	Additional comments/information: None		
Office of the Chief Medical Examiner	Monitor any reported winter weather-related deaths	X	
	Additional comments/information: 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, www.nyc.gov/oem	X	
	Provide logistics support (e.g. assist in mutual aid and resource request processes)	X	
	Additional comments/information: 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	
	Additional comments/information: 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	
	Additional comments/information: None		
New York State Office of Emergency Management	Provide logistics support		
	Issue supporting emergency declarations		
	Additional comments/information: 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	
	Additional comments/information: <ul style="list-style-type: none"> ▪ Plowed access ramps and limited highway (e.g. New York Expressway, Dyer Ave, Varick St, etc) access to bridges and tunnels. ▪ Plowed streets that provided access to Brooklyn Piers and Howland Hook (SI). ▪ Cleared entrances to PATH stations and cleared catch basins in immediate area of PATH station entrances. 		

1. Event Description

Snowfall (Source: National Weather Service)

Date	January 11 th & 12 th , 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"> ✓ Advisory to the public to avoid all unnecessary driving and use public transportation whenever possible ✓ Suspension of alternate side parking ✓ Suspension of meter rules ✓ Suspension of garbage collections ✓ Towing of any vehicles found to be blocking roadways or impeding the ability to plow streets

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	
	Additional comments/information: None		
Department of Education	Delay school opening		X
	Close schools		X
	Conduct snow removal operations at school facilities	X	
	Additional comments/information: 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	
	Additional comments/information: <ul style="list-style-type: none"> ▪ 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
	Additional comments/information: None		
Department of Sanitation	Conduct roadway snow plowing and spreading operations	X	
	Implement alternate schedule for trash pickup	X	
	Additional comments/information: <ul style="list-style-type: none"> ▪ Snowfall Duration: 11 hours ▪ DSNY Snow Depth Measurements (may vary from NWS measurements noted above): <ul style="list-style-type: none"> ○ Manhattan – 9; Bronx – 7 ³/₄; Brooklyn – 8; Queens – 9 ¹/₂; Staten Island – 8 ¹/₂ ▪ Street Cleaning Regulations (SCR) was cancelled for the following dates: <ul style="list-style-type: none"> ○ 1/12/11 thru 1/16/11 		
NYC Fire Department	Conduct hydrant thawing and/or shoveling operations	X	
	Monitor EMS runs and services	X	
	Additional comments/information: <ul style="list-style-type: none"> ▪ Conducted hydrant thawing but not shoveling; snowfall totals did not warrant hydrant shoveling ▪ Assisted OEM in the development/review of the Tow Truck Task Force Protocol 		

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	
	Additional comments/information: None		
Office of the Chief Medical Examiner	Monitor any reported winter weather-related deaths	X	
	Additional comments/information: 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, www.nyc.gov/oem	X	
	Provide logistics support (e.g. assist in mutual aid and resource request processes)	X	
	Additional comments/information: 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	
	Additional comments/information: 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	
	Additional comments/information: None		
New York State Office of Emergency Management	Provide logistics support		
	Issue supporting emergency declarations		
	Additional comments/information: 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	
	Additional comments/information: None		

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	
	Additional comments/information: None		
Department of Education	Delay school opening		X
	Close schools		X
	Conduct snow removal operations at school facilities	X	
	Additional comments/information: 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	
	Additional comments/information: <ul style="list-style-type: none"> ▪ 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
	Additional comments/information: None		
Department of Sanitation	Conduct roadway snow plowing and spreading operations	X	
	Implement alternate schedule for trash pickup	X	
	Additional comments/information: <ul style="list-style-type: none"> ▪ Snowfall Duration: 6 hours ▪ DSNY Snow Depth Measurements (may vary from NWS measurements noted above): <ul style="list-style-type: none"> ○ Manhattan – 3; Bronx – 4; Brooklyn – 4; Queens – 4 ½ ; Staten Island – 3 ¼ ▪ Street Cleaning Regulations (SCR) was cancelled for the following dates: <ul style="list-style-type: none"> ○ 1/21/11, 1/22/11, 1/24/11, and 1/25/11 		
NYC Fire Department	Conduct hydrant thawing and/or shoveling operations	X	
	Monitor EMS runs and services	X	
	Additional comments/information: <ul style="list-style-type: none"> ▪ Conducted hydrant thawing but not shoveling; snowfall totals did not warrant hydrant shoveling ▪ Assisted OEM in the development/review of the Tow Truck Task Force Protocol 		

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	
	Additional comments/information: None		
Office of the Chief Medical Examiner	Monitor any reported winter weather-related deaths	X	
	Additional comments/information: None		
Office of Emergency Management	Provide interagency coordination	X	
	Activate and operate NYC Emergency Operations Center	X	
	Provide public messaging through NotifyNYC, OEM website, www.nyc.gov/oem , and SnowUpdate website	X	
	Provide logistics support (e.g. assist in mutual aid and resource request processes)	X	
	Additional comments/information: 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	
	Additional comments/information: 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	
	Additional comments/information: None		
New York State Office of Emergency Management	Provide logistics support		
	Issue supporting emergency declarations		
	Additional comments/information: 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	
	Additional comments/information: 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"> ✓ Advisory to the public to avoid all unnecessary driving and use public transportation whenever possible ✓ Suspension of alternate side parking ✓ Suspension of meter rules ✓ Suspension of garbage collection ✓ Towing of any vehicles found to be blocking roadways or impeding the ability to plow streets ✓ Closure of NYC public schools

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	
	Additional comments/information: None		
Department of Education	Delay school opening		X
	Close schools	X	
	Conduct snow removal operations at school facilities	X	
	Additional comments/information: 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	
	Additional comments/information: <ul style="list-style-type: none"> ▪ 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
	Additional comments/information: None		
Department of Sanitation	Conduct roadway snow plowing and spreading operations	X	
	Implement alternate schedule for trash pickup	X	
	Additional comments/information: <ul style="list-style-type: none"> ▪ Snowfall Duration: 23 hours ▪ DSNY Snow Depth Measurements (may vary from NWS measurements noted above): <ul style="list-style-type: none"> ○ Manhattan - 12 ¾ ; Bronx - 14 ½; Brooklyn - 16; Queens - 15 ○ Staten Island - 18 ½ ▪ Street Cleaning Regulations (SCR) was cancelled for the following dates: <ul style="list-style-type: none"> ○ 1/27/11 thru 2/5/11 		
NYC Fire Department	Conduct hydrant thawing and/or shoveling operations	X	
	Monitor EMS runs and services	X	
	Additional comments/information: <ul style="list-style-type: none"> ▪ Conducted hydrant thawing but not shoveling; snowfall totals did not warrant hydrant shoveling ▪ FDNY Fire Operations issued tow straps to all ladder companies to aid in vehicle removal for future storms ▪ FDNY EMS Operations provided light chains to all EMS stations for its ambulances ▪ Assisted OEM in the development/review of the Tow Truck Task Force Protocol 		

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	
	Additional comments/information: None		
Office of the Chief Medical Examiner	Monitor any reported winter weather-related deaths	X	
	Additional comments/information: None		
Office of Emergency Management	Provide interagency coordination	X	
	Activate and operate NYC Emergency Operations Center	X	
	Provide public messaging through NotifyNYC, OEM website, www.nyc.gov/oem , and SnowUpdate website	X	
	Provide logistics support (e.g. assist in mutual aid and resource request processes)	X	
	Additional comments/information: 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	
	Additional comments/information: 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	
	Additional comments/information: None		
New York State Office of Emergency Management	Provide logistics support		
	Issue supporting emergency declarations		
	Additional comments/information: 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	
	Additional comments/information: <ul style="list-style-type: none"> ▪ Plowed access ramps and limited highway (e.g. New York Expressway, Dyer Ave, Varick St, etc) access to bridges and tunnels ▪ Plowed streets that provided access to Brooklyn Piers and Howland Hook (SI) ▪ Cleared entrances to PATH stations and cleared catch basins in immediate area of PATH station entrances 		

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.