Types of Snow Emergencies

- **Blizzard Warning**: Issued for sustained or gusty winds of 35 mph or more, and falling or blowing snow creating visibilities at or below 1/4 mile; these conditions should persist for at least 3 hours.

- **Wind Chill Advisory**: Issued when wind chill temperatures are expected to be a significant inconvenience to life with prolonged exposure, and, if caution is not exercised, could lead to hazardous exposure.

- **Wind Chill Warning**: Issued when wind chill temperatures are expected to be hazardous to life within several minutes of exposure.

- **Winter Storm Warning**: Issued when hazardous winter weather in the form of heavy snow, blizzard conditions, heavy freezing rain, or heavy sleet is imminent or occurring. Winter Storm Warnings are usually issued 12 to 24 hours before the event is expected to begin.

- **Winter Storm Watch**: Alerts the public to the possibility of a blizzard, heavy snow, heavy freezing rain, or heavy sleet. Winter Storm watches are usually issued 12 to 48 hours before the beginning of a Winter Storm.

- **Winter Weather Advisories**: Issued for accumulations of snow, freezing rain, freezing drizzle, and sleet which will cause significant inconveniences and, if caution is not exercised, could lead to life threatening situations.
## 2021 Winter Storms

<table>
<thead>
<tr>
<th>Dates</th>
<th>Type of Snow Emergency</th>
<th>Inches of Snow</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/3 – 1/4</td>
<td>Winter Weather Advisory</td>
<td>0.5”</td>
<td>8 hours</td>
</tr>
<tr>
<td>1/26 – 1/27</td>
<td>Winter Weather Advisory</td>
<td>0.3”</td>
<td>8 hours</td>
</tr>
<tr>
<td>1/31 – 2/2</td>
<td>Winter Storm Warning</td>
<td>17.5”</td>
<td>36 hours</td>
</tr>
<tr>
<td>2/7</td>
<td>Winter Storm Warning</td>
<td>5”</td>
<td>12 hours</td>
</tr>
<tr>
<td>2/11</td>
<td>Winter Weather Advisory</td>
<td>0.5”</td>
<td>5 hours</td>
</tr>
<tr>
<td>2/13 – 2/14</td>
<td>Winter Weather Advisory</td>
<td>0.05” Ice, 0” snow</td>
<td>NA</td>
</tr>
<tr>
<td>2/18</td>
<td>Winter Storm Watch</td>
<td>6 - 12” forecasted</td>
<td>36 hours forecasted</td>
</tr>
</tbody>
</table>
February Nor’easter

- Most snow since the current record snowfall for Hudson County of 26.5” on 1/24/2016
- Category 3 Major Nor’easter with blizzard conditions
- New Jersey State of Emergency
- NJ Transit suspended all service statewide
- Closed COVID-19 testing and vaccination sites
- Likely to be a declared disaster eligible for FEMA reimbursement for snow-related activities
Since the Nor’easter

- 10 out of 15 days temperatures at or below freezing
- 3 more winter storm events with an additional 5.5” of snow and ice
- Total 23” snowfall since February 1
- Another storm is forecast for tomorrow with 6” – 12” of snow lasting 36 hours

Forecasts say the stormy winter weather pattern will likely continue for at least another week to 10 days. So New Jersey could face several more shots of snow. AccuWeather
Preparedness before a Snow Emergency
Snow Emergency Plan

- The Snow Emergency Plan outlines the responsibilities and resources to be deployed for emergency snow operations.
- The plan is updated annually and distributed to the chain of command prior to the start of every snow season.

Responsibilities
- Roadways
- Parks
- Public Buildings

Resources
- Personnel
- Equipment
- Materials
Chain of Command

February Nor’easter:
Snow meeting on 1/30 at 11 AM
Coordinate Logistics

- OEM Coordinator meets with Directors approximately 24 – 48 hours in advance
  - Review forecast
  - Review preparedness resources
  - Determine when to activate snow emergency routes and discount parking
  - Determine approximately when to begin treating roadways
  - Determine if and when street cleaning will initially be suspended following the snow emergency
- Logistics may change if forecast changes
- Decisions made based on best available data from National Weather Service, Harrison Weather Center, and Hudson County OEM

February Nor’easter:
Snow meeting on 1/30 at 11 AM
Roadway Jurisdiction

Hoboken has ± 26 miles of City roads, 9 miles of County roads, and 1.5 miles of private roads.
Crosswalks and ADA Ramps

Hoboken has more than 250 intersections with more than 1,000 crosswalks and 1,000 ADA ramps
Hoboken has 25 parks encompassing 38 acres, including 11 acres of new parkland since 2010.
Public Buildings

Hoboken has 19 City-owned buildings

Public Property

- Hoboken Environmental Services (Roads)
- Hoboken Environmental Services (Public Property)
- Hoboken Parking Utility
- Hoboken Fire Department
- Hoboken EMS
Environmental Services
Snow Equipment

• 2 Large Plow/Spreader Trucks
• 8 Pickup Plow/Spreader Trucks
• 1 Payloader, 1 Large Bobcat, 1 Small Bobcat
• 1 John Deere Gator
• 2 Ventrac Power Broom / Snow Blowers
• 2 Push Power Broom, 4 Push Snow Blowers
• 2 Roll-off Trucks for Dumpsters
• 1 Rack Truck
• 1 Snow Melter
• Tools (shovels, salt spreaders, chainsaws)
Parking Utility and Fire Department Snow Equipment

• Parking Utility
  • 1 Pickup Plow/Spreader
  • 2 Jeep Plows
  • Tools (shovels, salt spreaders)

• Fire Department
  • 1 Pickup Plow
  • 1 Push Snow Blower
  • Tools (shovels, salt spreaders, chain saws)
Environmental Services employs 16 snow plow drivers, 8 employees for snow removal in parks, and 10 employees for snow removal at public buildings and around the PATH station.

OEM and Fire Department also each employ 2 snow plow drivers.

Thank you to all the personnel working hard to keep our City safe during snow events.
Materials

• Rock Salt for Roadways
  • Crystals of sodium chloride
  • Breaks bond between snow and pavement

• Salt Brine for Roadways
  • Solution of sodium chloride and water with freezing point lower than pure water
  • Reduces adhesion of snow and ice to pavement

• Green Scapes Ice Melt Environmentally Preferred Salt for sidewalks
Salt Storage Facility

Hoboken’s new salt storage facility holds 400+ tons of salt

Payloader loads salt into plow/spreader trucks
Salt Brine

Hoboken and Hudson County brine roads depending on forecast conditions

Brine is typically applied before a winter storm event overnight or in the early morning hours due to traffic
Prepare Resources

• Monitor weather forecast

• Ensures that all snow removal equipment is operational

• Ensure adequate quantities of materials

• Schedule shifts for snow operations personnel including drivers, laborers, and mechanics

• Consider waste collection schedules and potential suspension of waste collection

• Coordinate with other Departments, Hudson County, Utilities, NJ Transit, and Contractors
Treat Roadways

• Roads are treated with brine and/or salt in advance of the storm
• Brine is often used for storm events forecast to begin at rush hour, with ice or freezing rain, or that are intense at the beginning
• Brine is not used when the storm is forecast to start as rain or when temperatures are extremely cold

February Nor’easter:
Treated roads with salt starting on 1/31 at 10 PM
Activate Snow Emergency Routes

- No parking on snow emergency routes when roads are snow covered
- Violators will be towed
- Labeled with street signs that read “No Parking When Road Is Snow Covered”
- Necessary to move police, fire and ambulances in Hoboken during snow emergencies for the safety and welfare of all our citizens.

February Nor’easter:
Emergency snow routes activated 1/31 at 8 PM
Parking and Transportation

- Offer discount parking for Resident Permit holders in B, D, and Midtown Garages (and persons with disabilities)
  - Consider timing of discount parking related to activation of snow emergency routes, commuter parking, and teacher parking
- Remove in-street pedestrian crossing signs that are not permanently bolted into asphalt

February Nor’easter:
Special rate of $5 per 24-hour period offered 1/31 at 4 PM through 2/1 at 4 PM and later extended
Community Alerts - Preparedness Phase

- Community alerts issued approximately 24-hours in advance via Nixle, Facebook, Twitter, Instagram, reverse 311 and Parking Utility makes calls to all vehicles parked on Snow Emergency Routes

- Types of information in community alerts during the preparedness phase
  - Reminder to limit travel
  - How residents can receive storm updates and report emergencies
  - When snow emergency routes will be activated
  - When and where discount parking will be offered
  - Street cleaning suspension
  - Waste collection suspension
  - Outdoor dining suspension
  - Reminder to keep sidewalks clear

February Nor’easter:
Preparedness alerts issued 1/30 at 5:30 PM, 1/31 at 4 PM
Outdoor Dining

- Sidewalk cafes, parklets, and strEATERIES should
  - Break down pop-up tents
  - Remove and store strEATERY barricades and turf, tables, chairs, railings, umbrellas, awnings, related furniture/equipment, propane tanks, heaters

February Nor’easter:
Outdoor dining materials removed and stored by 1/31 at 4 PM
Response during a Snow Emergency
Plowing

Crews from Hoboken and Hudson County plow City and County streets
Plows focus on clearing travel lanes and emergency snow routes
February Nor’easter
Plowing Operations

- Hoboken plow/spreader trucks operated for 36 hours straight from 1/31 at 10 PM – 2/2 at 4 PM
  - 1 Large Plow/Spreader Truck
  - 6 Pickup Plow/Spreader Trucks
  - 1 Payloader for loading salt
- Salted at the beginning, plowed in the middle, and once roads were cleared, salted again
- Hoboken is divided into 4 zones for plowing
- 16 drivers / equipment operators alternated working 16-hour and 12-hour shifts
February Nor’easter
Parks and Public Buildings Operations

• Hoboken snow equipment operated for 36 hours straight from 1/31 at 10 PM – 2/2 at 4 PM
  • 1 Large Bobcat, 1 Small Bobcat, 1 John Deere Gator, 1 Ventrac Power Broom for clearing parks
  • 1 Ventrac Power Broom, 4 Push Snow Blowers for clearing public buildings
  • Tools (shovels, salt spreaders, chainsaws)
• 8 parks employees alternated shifts
• 10 public property employees alternated shifts
February Nor’easter
Emergency Snow Routes

• Emergency snow routes were activated on 1/31 at 8 PM
• Towing began when roads were snow covered on 1/31 at 11:30 PM
• 23 cars were towed, none had residential parking permits
• Emergency snow routes were cleared and parking resumed on 2/3 at 7:30 PM
• Discount parking ended on 2/4 at 7:30 AM
Discount Parking for Teachers

- Discount parking may be offered in certain situations to teachers to help facilitate the reopening of in-person learning in schools

February Nor’easter:
Teachers were eligible for discount parking in municipal garages on 12 PM on 2/4 and 2/5
Addressing Related Emergencies

Coordinating with PSEG for power outages, heat, removing fallen trees or limbs
Response at COVID-19 Testing and Vaccination Centers
Community Alerts - Response Phase

- Community alerts are issued during the storm via the same channels as preparedness alerts
- Types of information in community alerts during the preparedness phase
  - Reminder to limit travel
  - Update on snow operations
  - Update on transportation suspensions
  - Snow emergency routes remain in effect
  - How to report power outages
  - Reminder to property owners to clear sidewalks, ADA ramps, fire hydrants, and storm drains
  - Update on street cleaning suspension
  - How to report unshoveled sidewalks via 311

February Nor’easter:
Response alerts issued 2/1 at 4 PM, 9 PM
Recovery after a Snow Emergency
Clearing Snow at Public Facilities

Clearing Snow in Curbside Areas

Removing Snow in Curbside Areas
Clearing Crosswalks, School Zones, Sidewalks at Parks and Public Buildings

In the case of significant snow, the City will prioritize removal of snow from public places including parks, sidewalks adjacent to City buildings, school zones, and crosswalks in high-trafficked areas.
Street Cleaning Regulations Suspended for Clearing Public Facilities

The City often suspends street cleaning to allow crews time to focus on clearing snow from public facilities and provide residents ample time to remove snow from parked cars.
Property Owners Responsible for Clearing Sidewalks, Curb Cuts, and Ramps

- Per City Code, property owners required to clear snow and ice from sidewalks, ADA ramps, curb cuts, and fire hydrants adjacent to their property
  - Snow and ice must be cleared within 6 hours of the end of the storm
  - A traversable walkway must be cleared so that a minimum of four feet or 2/3 of the width of the sidewalk, whichever is greater, is free of snow and ice
  - Where public facilities or public infrastructure are present on a sidewalk, the property owner must maintain clear access to them, including mailboxes, ADA ramps at corners, parking meters, bicycle racks, and benches
- At no time shall snow, ice, dirt, or any matter be removed into the street
- Sanitation inspectors enforce the City Code for snow removal
- Residents should report an unshoveled sidewalk via 311

February Nor’easter:
Sidewalks were required to be cleared by 2/2 at 12 PM
Outdoor Dining

- Parklets are responsible for snow removal operations within 4’ surrounding their parklet in all directions.
- Each parklet permit extension had an approved snow removal plan in which the applicant identified where they would safely pile snow per City Code.

February Nor’easter:
Parklets, like property owners for adjacent sidewalks, were responsible for removing snow by 12 PM on 2/2.
Street Cleaning Regulations
Resume for Clearing Curbside Areas
Challenges with Clearing Snow from Curbside Areas

Vehicles that do not move during designated street cleaning hours slow the speed and effectiveness of snow clearing operations.
Removing Snow Piles from Curbside Areas

After the majority of snow has been temporarily piled and staged for removal in curbside areas, the City removes the largest piles of snow from sidewalks and streets.
Reporting to FEMA

• If a winter storm emergency receives a presidential disaster declaration, the City could be reimbursed for 75% of snow-related activities as an eligible emergency protective measure.

• Coordination with Grant Rite Management to prepare documentation of eligible expenses:
  • Equipment
  • Labor
  • Vendor invoices
Preparing for the Next Event

Hoboken mechanics repair snow equipment, certain diesel and specialized equipment is sent to vendors for repairs.

Check quantities of materials and order as needed.
Community Alerts - Recovery Phase

- Community alerts are issued after the storm via the same channels as response alerts
- Types of information in community alerts during the preparedness phase
  - Update on snow operations
  - When parking will be allowed on snow emergency routes
  - When discount garage parking will end
  - Reminder to property owners to clear sidewalks, ADA ramps, fire hydrants, and storm drains
  - Update on street cleaning suspension
  - How to report unshoveled sidewalks via 311

February Nor’easter:
Response alerts issued 2/2 at 11 AM, 6 PM, 2/3 at 2 PM
How You Can Help

• Stay off the road during snow events
• Treat and clear sidewalks, ADA ramps, fire hydrants, and storm drains adjacent to your property
• Assist elderly or disabled neighbors with clearing snow
• Move your vehicle for street cleaning
• Report an unshoveled sidewalk via 311