

DATE: November 7, 2016

TO: Mayor Stokes and Councilmembers

FROM: Dave Berg, Director; Transportation Department

SUBJECT: **Winter Weather Preparedness and Response**



Flooding



Ice and Snow



Landslides



Wind Storms

Introduction

Bellevue experiences a wide range of weather during the winter season, including heavy rain storms, windstorms, and snow/ice events. Bellevue's topography has a direct influence on our preparedness and response activities. This is very evident during snow and ice events as Bellevue's neighborhoods range in elevation from lake level to over 1400 feet. In addition to densely populated, high-elevation terrain, we also have some of the steepest roads in the region. The Transportation Department works with staff and resources from the Utilities, Parks, and Civic Services Departments to provide a coordinated response to winter weather events.

Weather Monitoring and 2016-17 Winter Weather Outlook

Weather is monitored by Bellevue Transportation and Utilities staff year-round. Northwest WeatherNet provides Bellevue-specific forecasts daily and has local meteorologists available for questions 24-hours/day. We also utilize local stations, NOAA weather forecasts and information available from the University of Washington.

The National Weather Service's Warning Coordination Meteorologist from Seattle recently spoke at the Regional Winter Weather seminar attended by members of area local public works agencies including Bellevue. They are predicting a LA Nina year; meaning a winter with lower than normal temperatures in early part of 2017, above average precipitation now through January 2017. We could have major event; but the frequency and intensity is still unclear at this time.

Preparedness, Response, and Recovery

Eligible staff from the Transportation, Utilities, Parks, and Civic Services Departments are trained in response and recovery activities prior to the winter season. This year the Ice & Snow Operators training will be held on November 9th. Advance preparedness includes the annual

training event, stocking materials, equipment maintenance and testing, weather monitoring, and event planning. Event response activities include sharing staff and equipment resources between departments, and strategically prioritizing response activities based on storm severity to the most critical needs. Once the event subsides, recovery efforts focus on restoring all city services as quickly, safely, and efficiently as possible.

Priority of Response

- Life Safety
- Property Damage
- Mobility

Key Operational Objectives

- Clear streets of snow, ice, water, and debris
- Restore mobility and assist in keeping City services operating
- Provide up-to-date information to the public and city leadership

Ice and Snow Response Expectation Management

Bellevue's elevation ranges present a public relations/expectations challenge for ice and snow response. Since many ice and snow events occur only in higher elevations, resources are usually sufficient to service residential streets in addition to priority routes. However, if snow or ice is accumulating city-wide, priority routes may require continuous plowing and/or deicing. Under these conditions, it is virtually impossible to service residential streets until the priority routes have been stabilized. The timing and intensity of snow or freeze also has an impact on response; if conditions deteriorate during a commute, the response/plow vehicles cannot service the roadways as quickly or effectively due to the traffic. The focus of response is always to do the most good for the most people. Staff members are immediately dispatched if access is needed for fire or police response to a neighborhood.

Snow and Ice Response Process / One City Approach

- Transportation takes the lead during a snow or wind event; Utilities has the lead for flooding - and in any event they work with other operating departments to share resources for staffing and operational support. This collaboration and teamwork among departments takes a one city approach to weather response services.
- The City has seven 4x4 vehicles that can be used in the hills and eight larger 5-yd trucks that are primarily used on flats and main arterials. Two smaller support trucks are also available.
- Plows and deicer tanks for two pickups were added for operational support to clear turn pockets and intersections; while they are not capable of through-lane plowing they move the larger trucks more quickly through the system.
- Reviewed and expanded routes have been created for pre-storm anti-icing application under specific conditions such as freezing fog or expected ice. Drivers must always remember that ice is not always visible; if there is moisture and the temperature is below freezing they must assume there is ice.
- We utilize an electronic dispatch software capability which will reduce paper records in the dispatch area and increase efficiency.

Public Education and Outreach

- Web Information and "Extreme Weather" Button - online web access to up-to-date weather reporting and current response action plan. Additional links to things such as the Bellevue School District web site, Traffic Cameras and "frequently asked questions":

Drivers are encouraged not to drive during severe weather unless absolutely necessary. If they must drive, they should be prepared with the proper knowledge and equipment and use

routes which are less steep and most likely to have been serviced. Familiarizing themselves with the priority response map ahead of time is beneficial.



Visit www.bellevuewa.gov, click on **EXTREME WEATHER RESPONSE** to subscribe to automatic e-mail updates that explain when response conditions are forecast and how the city is preparing. In addition, the City's Snow Response Priorities map can be viewed as well as videos, driving tips, and information to help citizens prepare in advance for winter weather conditions.

- Ice and Snow videos – provided on the Bellevue web page to help Bellevue drivers prepare for conditions.
- Utility Bill Inserts can be used to share information such as the web address or winter driving tips.
- “It’s Your City” articles – annual reminder of personal preparedness, driving safety for winter, where to find response priorities maps and response information, and tips to help prevent flooding damage.
- “Snow Response Priorities” map (See attachment) - a key tool to ensure that resources are deployed appropriately during events. It is also available to citizens on-line for route planning purposes.

Attachment

Snow Response Priorities Map