



DATE: November 14, 2022

TO: Mayor Robinson and City Councilmembers

FROM: Chris Long, Assistant Director, Mobility Operations, 452-6013
Transportation Department

SUBJECT: Winter Weather Preparedness and Response

Introduction

Bellevue experiences a wide range of weather during the winter season including heavy rains, strong winds, snow and ice. The seasonal forecast strongly indicates a La Niña weather pattern for the third year in a row (only the third time this has happened in recorded history!). Early winter months (November – December) are anticipated to have above average precipitation and slightly above average temperatures followed by slightly below average temperatures through the rest of the winter (January - March). Although we consider seasonal forecasts, this information is used for awareness as we consistently prepare to respond to weather events throughout the year. The shorter term (current to 14-day) forecasts are far more useful to execute equipment, material and staff planning for weather related events.



Flood



Ice and Snow



Wind

Preparedness, Response, and Recovery – One City Approach

Eligible staff from Transportation, Utilities, Parks and Finance and Asset Management (Facilities and Fleet) are trained in response and recovery activities prior to the winter season with this year's training occurring throughout the month of October. We have multiple new staff members this year, which prompted our Streets leadership to develop new approaches to training. Fortunately, we were able to bring back small group, in-person training this year to compliment the on-line training done in the past. In addition, we coordinated with the Washington State Department of Transportation (WSDOT) to use their snowplow training course in Monroe at the fairgrounds. We sent

10 staff to a half day training at this site. Our team had the opportunity to learn from veteran plow drivers from the City of Bellevue and WSDOT.

New Innovations for 2022/2023 Season

Over the past two winter seasons we have been testing new Automatic Vehicle Locating (AVL) technology that was deployed on 24 of our winter response vehicles. We saw significant improvements in how we were able to monitor snow removal progress on our priority routes and experienced many successes in our ability to quickly respond to emergency snow removal needs. This year we are ready to launch the next phase of this project which is a public-facing real-time snow removal map. A new website will be launched later this month that will provide information on which arterial roadways have been serviced, using a color code indicating if the service was in the last 2, 4, 12 or 12+ hours. This season will be considered a “beta test” for the map. We will be calibrating the program against our dispatch records throughout the event and will provide a means for users to give us feedback through the map website.

Interdepartmental Support for Winter Weather Response

Transportation is the lead department for snow, ice and wind events but only has half the staff required to manage a large event on their own. A typical snow event that extends to the lowlands requires 60 staff. It requires a “One-City” approach to properly manage a snow event. The following summarizes the roles of our partners:

- Finance and Asset Management is a critical department in winter weather response activities. Not only do they address facility needs, they also service vehicles and equipment before, during and after snow events.
- The Parks Department provides additional support personnel for plowing and dispatch and leads snow removal efforts on fire station and hospital properties.
- The Utilities Department also provides personnel for plowing and dispatch and leads the response for flooding, water main breaks and sewer issues.
- The Office of Emergency Management (OEM) conducts training and exercise activities for operational departments using winter weather scenarios. The OEM is also able to quickly staff the EOC with trained city personnel during significant winter weather events to assist with the coordination of public safety announcements.

Ice and Snow Response Management

Bellevue’s topography presents a unique challenge for ice and snow response. Since many ice and snow events occur only at higher elevations, resources are usually enough to service residential streets in addition to priority routes. However, if snow or ice is accumulating Citywide, only priority routes will receive continuous plowing and/or de-icing until conditions stabilize. The ability to get plows into neighborhoods during Citywide events is influenced by event intensity and time of day/day of week. Attachment A shows how different roadways are prioritized throughout the City.

A major ice or snow occurrence is considered an emergency event, thus our top priority when responding starts with life safety. We focus on making sure our arterial roadways

are passable for emergency responder and other essential public services. The next priority is property damage. We work to address issues in the public right-of-way that could lead to damage on private property, such as erosion, flooding and falling trees. Once emergency situations are addressed and priority routes are passable, we start working on other arterials and neighborhoods streets, to provide for public transportation, school transportation and the general public to start traveling throughout the City.

Communications

The public can obtain a real-time view of road conditions during a winter weather event using the City's traffic map and camera page on the following website:

<https://trafficmap.bellevuewa.gov/>.

The public facing winter event response map can be accessed at the following website: <https://bellevueWA.gov/winter-response-map>.

The public can also signup for extreme weather emergency alert via email or text notification at: <https://bellevuewa.gov/city-government/departments/city-managers-office/communications/emergencies-and-extreme-weather>.

Summary

Bellevue devotes significant resources to winter weather preparedness and response with a coordinated, One City approach. For questions, please contact Chris Long at CLong@bellevuewa.gov.

Attachment

A. Snow Response Priorities Map