



Small Town. Real Life.

CITY OF DUVALL SNOW AND ICE PLAN



2022 Update

Snow and Ice Removal Plan

The mission of the city of Duvall is to provide safe and passable roads to the best of our ability during the winter season. A mechanism for providing effective snow and ice removal services is outlined in this plan known as the “Snow and Ice Removal Plan”. The plan sets out procedures to provide the safest possible roadway system and access routes for motorists, public schools, fire, police, and aid vehicles. The city will provide such control in a safe and cost-effective manner, keeping in mind employee and public safety, budget, personnel, and environmental concerns. The city will use city employees, equipment, and/or private contractors to provide this service. We will provide the service to the best of our abilities to mitigate the impacts as well as we can; however, it will not eliminate the effects or impacts of all items that may be related to a snow and / or ice emergency.

Citizen Preparedness

Please be prepared for the upcoming winter conditions. Have your vehicle winterized and make sure you have adequate traction devices for the conditions you’ll be driving in. Please be patient and courteous to other drivers when traveling in hazardous conditions. Drive only when necessary and plan for delays, childcare or other family needs. Please learn the “snow route” and become familiar with it prior to a snow event and make sure you know other routes to get around Duvall if the road you normally use is closed.

What type of equipment and material does the City have available to use?

Due to budget limitations and the infrequent nature of these types of storms, the city maintains several multi-use vehicles which can be equipped for snow fighting. The vehicles currently utilized for these operations are:



Vehicle	Plow	De-Icing Applicator	Sand Applicator
2006 Ford F-550 4x4 (refurbished in 2019)	✓		✓
2007 Ford F-250 4x4	✓	✓	
2019 Ford F-250 4x4	✓		
2019 International 5 Yard Dump Truck	✓		✓

The City stockpiles 1,000 gallons of de-icing liquid, five (5) tons of salt blended with forty (40) tons of sand for the upcoming snow season. De-icing solution can also be utilized on our equipment and sand at the maintenance yard to limit the potential for freezing of the sand. In extreme cold temperature situations, **colder than 15° F, de-icing liquid is ineffective**. We’ll be salting at that point should the need arise. Additionally, we will not be able to apply deicer if it is raining prior to a forecasted freeze event. The solution would be washed away before the freeze occurred, making it ineffective. When we do apply salt, the salt lowers the freezing point of water causing snow and ice melt faster even when the temperature is below freezing. Salt does have a negative effect on metals (i.e. cars) so it would be wise to rinse your car after a major event. WSDOT will be applying a lot of salt to the state routes this year so rinsing your car will be a good idea in general after snow / ice events or travels on state routes this winter.

When will the City start snow or ice control operations?

The Public Works Superintendent and Supervisor in conjunction with weather reports, field staff and Police Department observations will decide when to begin snow or ice control operations on a case by case basis. The criteria for those decisions are:

- Weather forecasts & temperatures;
- Snow accumulation;
- Drifting of snow that causes unsafe travel conditions;
- Icy conditions which seriously affect travel; and
- Timing of snowfall in relationship to heavy use of streets

City Preparedness

Starting in December the snowplow equipment is all fully assembled and operational, and materials have been made available for use (*i.e.* Deicer, salt, etc.). Plow vehicles are placed on standby, so they are available as soon as they are needed. When advanced snow alert is given, the public works crews will prepare snow and ice removal equipment during normal work hours and determine if a stand-by crew will be needed for afterhours support. All road closure and detour signs will be pre-placed at the common road closures for immediate use if needed. The city has added a signage plan that will be installed throughout the city.

Typically, these areas are as follows: Stephens Street, Bruett Road, Big Rock Road, and 3rd Avenue (Snow Route).



Priorities and schedule for which streets will be plowed

The city has classified city streets based on the street function, traffic volume, and importance to the welfare of the community. The City will prioritize levels of service so the public will know which areas will be taken care of first. Below is the Priority Schedule:

- **Priority 1** - Snow route as show on plan, (de-icing, sanding, and / or plowing)
- **Priority 2** - Arterial roads (second response needed, around the clock service, de-icing, sanding, and / or plowing)
- **Priority 3** - Arterial collector roads (around the clock service, de-icing, sanding, and / or plowing)
- **Priority 4** - Residential collector roads (when snow and ice event is winding down, up to a 72-hour delay)

- **Priority 5** - Residential roads (during daylight operations only, unless medical, police, or fire request help. Can run around the clock based on weather forecasts, personnel available and notification of the Public Works Director)

Upon notification of road closures, the Engineering Department will work to post closures and travel alerts on the City's social media channels and website. Information will also be shared in real-time with partners at the Fire Department, School District, WSDOT and King County as appropriate.



Events

Tier I- Major event (Large projected snowfall, sustained below freezing temps.) The goal for staff is to begin work as soon as we have a strong forecast, we feel is reliable. We'll begin with intersections and the snow route with salt or de-icing treated sand depending on rain or snow fall. De-icing solution washes away and salt doesn't for the case where it rains first and then turns freezing / or to snow for an extended period. The scale of these efforts will be reflected in the resources that we have available which are not that great.

Snow will be plowed in a manner to minimize any traffic obstructions, focusing on the major intersections and areas designated on the snow route. The center of the roadway will be plowed first. The snow shall then be pushed from left to right. The excess shall go onto the right-hand shoulder of the street. In times of extreme snowfall, it will not always be possible to immediately clear streets completely of snow and rows of snow will be left in front of side streets and driveways. We would intend to try to remove the snow row ASAP, but the arterials are our priority.

Tier II- Above average snowfall event (Normally projected snowfall, sustained freezing temps.) Snow will be plowed in a manner to minimize any traffic obstructions focusing on the major intersections and areas designated on the snow route. The center of the roadway will be plowed first. The snow shall then be pushed from left to right. The discharge shall go onto the right-hand shoulder of the street. In times of extreme snowfall, it will not always be possible to immediately clear streets completely of snow and rows of snow will likely be left in front of the side streets and driveways. We would intend to try to remove the snow row ASAP, but the arterials are our priority.

Tier III- Sustained freezing temps. (no snow accumulation, just extended cold temps) Roadway traction will be the emphasis of our efforts (sanding). This will be an experimental case with salt or de-icing solution based on resources available at the time. Roads will be sanded to maintain safe travels aiding in minimizing the potential for accidents.

Tier IV- Normal event (Normally projected snowfall, around freezing temps.) Roadway traction will be the emphasis of our efforts (sanding). Snow will be plowed, clearing intersections and major arterials as designated in on the snow route. Sustained snow is not expected, and work would likely start around 3am to prepare for the workday commute. Depending on time of year and remaining resources, weekend efforts may not be employed but the weather forecast will be part of that decision. De-icing solution will only be applied to the equipment.

Weather Conditions

Snow and ice control operations will be conducted only when weather conditions do not endanger the safety of city employees and equipment. Factors that may delay snow and ice control operations include sever cold; significant winds; and limited visibility.

Property Owner's Responsibility

Property owners will be responsible to clear away snow from all walkways adjoining their property as well as individual driveway entrances and sidewalks. The city does not have the personnel to remove snow from these areas and are not part of the Public Works Department's Snow Removal Plan. If in the rare event the snow is piled up from plows along parking lots, parking stalls, corners of intersections, the city may remove the snow to another remote location, only after all other services are performed.

We kindly request your patience

The city has a reasonable but limited amount of equipment to plow, sand or de-ice approximately 40 miles of roads. How can you help? Residents can help by moving their cars off the street and into their driveway when an event is on its way. The clearer the street the quicker and better it can be plowed. *It is inevitable that cars and driveways may be blocked with snow from the plow.* Please understand that this is unavoidable. Snow removal in Duvall can be a monumental task with limited resources. The Public Works Crew is dedicated to the safety of the community and will do the best they can around the clock to maintain the city streets.

For questions or comments regarding the City of Duvall's Snow and Ice Removal Plan please contact the Public Works Department at 425.788.3434.

