



PIERCE COUNTY

Transportation Services

ROAD OPERATIONS DIVISION

Snow and Ice Plan

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Introduction

The mission of Pierce County Transportation Services Department, Road Operations Division, is to establish an organization to preserve and enhance the Public investment in road, drainage and ferry system by creating a preventative maintenance program and roadway surfaces, drainage and ferry system by creating a preventative maintenance program and roadway surfaces, drainage facilities, bridge and dock structures, including capabilities for responding to emergency situations in an effective and timely manner. As part of its mission, the Division conducts sanding, de-icing and snow removal operations to mitigate hazardous driving conditions during snow and ice events.

The Pierce County Road Operations Division is responsible for approximately 1,900 miles of roadway (this includes contract services provided to the cities of Edgewood, University Place and Lakewood).

The purpose of the Pierce County Snow and Ice Plan is to provide the safest possible roadway system and access routes for the motoring public, Pierce

County Transit, public schools, fire, police, aid vehicles, the citizens of Pierce County and the surrounding communities understanding the plan cannot eliminate all the impacts or effects of a snow and/or ice emergency. The intent of this plan is to reduce the threat to public safety from a snow and ice emergency. During inclement weather, the Road Operations Division will make every effort to maintain the traffic flow in unincorporated Pierce County as close to normal driving conditions as possible.

Event Information and Response

Initial Response to a Snow and Ice Event

The following snow and ice equipment is dispersed throughout the unincorporated area and contract cities:

- 22 - Tailgate Sander Trucks
- 8 - V-Box Sander Trucks
- 41 - Snow Plows
- 6 - Graders



Priority Listing of Roadways

Each one of the four geographic road operations districts has a pre-established priority listing of roadways to sand and plow. Priorities are established by the following designations:

- Major arterials
- Pierce Transit and school bus snow routes
- Life Line Emergency routes (i.e., main arterials)
- Access roads to freeways and park and ride lots

When a snow and ice event continues, priority routes are monitored by Road Operations personnel on a regular reporting basis. Some roadways may require sanding, de-icing and plowing several times within a 12-hour shift. Therefore, some routes on the priority list may not be sanded until first priority routes are clear depending on the severity of the event.

Although it is difficult to utilize crews to sand, de-ice and plow lower priority residential roadways, Road Operations crews make every effort to clear steep access roads in heavily populated areas. Crews also strive to de-ice and/or sand problematic or dangerous intersections, curves, and steep hills.

Organization of Staff and Equipment

Pierce County Road Operations headquarters is located in Tacoma. This facility provides 24-hour a day, 7-day a week staffing and call-in/reporting services. Road operations are divided into four separate geographic districts. Each district is managed and maintained by a supervisor and an assigned staff ranging from

28 to 50 employees. Each district supervisor is responsible for planning, scheduling, and dispatching crews during snow and ice events. The Road Operations Superintendent is responsible for all four districts and oversees the emergency response effort Countywide. Additional support is allocated depending on prevailing conditions. The four Road Operations Division satellite shops are located as follows:

District 1:

10411 John Bananola Way, Puyallup, WA 98374
Telephone: (253) 798-3842

This district encompasses the following unincorporated areas of Pierce County: Alderton, Bonney Lake, Browns' Point, Buckley, Carbonado, Dash Point, Edgewood, Fairfax, Fife, Graham, Midland, Milton, Orting and Puyallup.

District 2:

23101 Mountain Highway, Spanaway, WA 98387
Telephone: (253) 798-4980

This district encompasses the following unincorporated areas of Pierce County: Ashford, Eatonville, Elbe, Kapowsin, La Grande, Parkland (south of 512 to Meridian), Roy, Spanaway and Tanwax.

District 3:

9515 39th Ave. Ct. SW, Lakewood, WA 98499
Telephone: (253) 798-4972

This district encompasses the following unincorporated areas of Pierce County: Anderson Island, Lakewood, Parkland (north of 512, west of Pacific to City of Lakewood), Tillicum and University Place.

District 4:

13209 Goodnough Dr., Gig Harbor, WA 98332
Telephone: (253) 798-4949

This district encompasses the following areas of unincorporated Pierce County: Artondale, Fox Island, Gig Harbor, Longbranch, Rosedale and Wauna.

Field offices and sand stockpile sites are located throughout each district to serve the areas efficiently and effectively.



Snow and Ice Equipment by Division

Each of the 4 districts discussed in the previous paragraphs has specific snow and ice removal equipment assigned to the sites. The equipment allocation and assignment follows:

District 1:

- 3 V-box sander trucks
- 6 sander trucks
- 2 road graders
- 2 loaders
- 1 500 gallon de-icer truck



District 2:

- 3 V-box sander trucks
- 8 sander trucks
- 2 road grader
- 4 loaders
- 1 500 gallon de-icer truck

District 3:

- 1 V-box sander truck
- 5 sander trucks
- 1 road grader
- 1 de-icer truck

District 4:

- 1 V-box sander truck
- 6 plow / sander trucks
- 1 road grader
- 1 de-icer truck
- 1 loader



The Equipment Services Division facility at 1420 E.112 St. in Tacoma. houses additional emergency and pool equipment which can be dispatched as necessary:

Snow and Ice Operations - Three Phases

Pierce County Road Operations Division mobilizes road crews based upon the severity of a snow and ice event. There are three phases of response, procedures, resource allocation, and coordination to a major storm event as listed below:

Phase 1. A significant storm is forecast. At least one to two inches of snow and/or a severe black ice condition with temperatures below 30 degrees. The following steps are implemented:

- 1) Division supervisors are alerted.
- 2) Each area is checked for snow or freezing conditions.
- 3) Maintenance crews prepare equipment for mobilization to begin snow and ice maintenance operations.
- 4) Supervisors will adjust initial response schedules as the weather event unfolds.
- 5) Crews are on 8-hour shifts during this phase unless the event occurs after hours at which time the on call Supervisor will dispatch personnel as conditions warrant. Personnel may be required to work more hours if the phase changes, or conditions warrant.

Phase 2. Snow or freezing conditions have occurred. The need for response is widespread due to compact snow or ice accumulations. The following steps are implemented during this phase:

- 1) Maintenance superintendent is alerted.
- 2) All maintenance crews are divided into 8 hour day and night shifts (which may be expanded to 12 hour shifts at the Supervisor's discretion) to provide 24-hour coverage for commuters.
- 3) Snow and ice teams are assigned specific areas within each division and provide maintenance and support to the established priority routes within those specific areas.
- 4) All personnel keep detailed records of the lane miles sanded/plowed and the tons of sand and liquid de-icer used.

Phase 3. The long-range forecast calls for hazardous conditions to continue. The following steps are implemented during this phase:

- 1) Crews adjust to 12-hour shifts for 24-hour per day coverage.
- 2) The Road Operations Manager is alerted.
- 3) Additional departments within Pierce County are requested to provide support to crews.
- 4) The Road Operations Manager is continuously updated and advised of maintenance progress and/or problem areas.

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