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## Clackamas County Policy

Name of Policy	SNOW AND ICE RESPONSE PLAN	Policy #	
Policy Owner Name	Terry Shane Abbott	Effective Date	
Policy Owner Position	Transportation Operations Manager	Approved Date	
Approved By		Last Review Date	
Signature		Next Review Date	

### I. PURPOSE

The purpose of this policy is to provide direction to Transportation Maintenance (OPERATIONS) on how to allocate a limited amount of resources in an organized approach to ensure that the highest priority roads receive service during a snow and ice event.

### II. AUTHORITY

ORS 368.001(2) authorizes the county governing body to appoint an individual to be responsible for administration of the road activities of the county. Clackamas County Code Section 7.03.020(F) appoints the Director of the Department of Transportation and Development as the Road Official, delegates any authority conferred upon the Road Official by state statute to be exercised by the Director, and allows the Director to adopt written policies designating employees of the Department of Transportation and Development that are authorized to act as the Road Official for specified purposes.

### III. GENERAL POLICY

To provide access for emergency vehicles to as much of the County as possible. To prioritize and define the appropriate level of service to be provided by OPERATIONS in response to snow and ice accumulations on County roads. To mitigate unsafe road surface conditions to the greatest extent possible with available resources. Identify service level priorities by location and function of County roads.

### IV. DEFINITIONS

- **ANTI-ICING**

Roadway anti-icing is the application of chemicals that hinder the formation of ice or the development of a bond between snow and the roadway surface. Anti-icing is achieved by the application of a chemical freezing-point depressant. The technology uses various solutions of magnesium chloride applied to the roadway prior to moisture reaching the freezing point. In light or moderate snowstorms, the freezing point can be depressed to as low as minus 10 degrees Fahrenheit.

- **DE-ICING**

In a typical de-icing operation, snow is cleared from roadways and a mixture of sand and/or liquid deicers are spread on the snow pack or ice. After allowing sufficient time for the snow/ice layer to soften, the material is plowed from the road surface. Examples of common roadway deicing salts

include sodium chloride (also known as “rock salt,” NaCl), magnesium chloride (MgCl<sub>2</sub>), and calcium chloride (CaCl).

## **V. POLICY GUIDELINES**

Clackamas County has maintenance responsibility for over 1,400 miles of road with an average daily traffic of nearly 40,000 vehicles in places. Our maintenance responsibility covers a very broad area from Welches, south of Molalla, west of Lake Oswego to north of Happy Valley and Milwaukie. We do not allocate money specifically for snow and ice response since the amount of time spent in winter weather events vary year to year. With this broad of an area to cover and the need for limited resources to provide 24 hour coverage we are forced to prioritize our response. The Clackamas County Transportation Maintenance Program (OPERATIONS) has established this snow removal and ice control operational policy in order to efficiently use its available resources and most effectively respond to snow and ice conditions that cause unsafe driving conditions.

## **VI. PROCESS AND PROCEDURES**

The County’s Road Official delegates to the Transportation Operations Manager primary responsibility to take all reasonable and prudent steps to satisfy this plan consistent with resources available and accessibility by County equipment. The County’s Road Official reserves the right to override a decision of the Transportation Operations Manager made pursuant to this delegation.

- **SERVICE PRIORITIES**

Roads will be cleared and maintained based on service level priority. The following factors were taken into consideration in establishing service priorities:

1. Road Functional Class.
2. Traffic Volumes.
3. Availability of alternate routes.
4. Steep grades, sharp curves, intersections or potentially hazardous areas.
5. Roads with adequate room to maneuver County equipment.
6. Emergency vehicle accessibility.

Snow plowing, anti-icing and de-icing measures will be accomplished by service level priority. Road service priorities are designated as high, medium and low. Service levels are further defined below in the snow removal priority. If and when needed, the Transportation Operations Manager may make temporary changes in the service priority of any road when in their judgment, conditions related to the service priority factors listed above require such actions.

- **COMMUNICATIONS**

Communications within OPERATIONS and between OPERATIONS and other agencies are important in providing information to execute this plan.

Notice of adverse road conditions may be received by OPERATIONS from observations of its employees, telephone calls from private citizens to OPERATIONS or the Sheriff’s Department or notification from the C-COM dispatch center. Response to these notices shall be in accordance with the plan.

Anyone may call to report problems or concerns to OPERATIONS during regular business hours (Monday through Thursday, 7:00 A.M. to 5:30 P.M.) at 503-557-6391, or by contacting the Sheriff's/C-COM's non-emergency number after hours, weekends, and holidays at 503-655-8211. During ongoing snow and ice operations, OPERATIONS should be contacted directly.

- **CALL OUT CRITERIA**

OPERATIONS will review call out criteria and the On-Call Personnel list with the Sheriff's Department/C-COM by November 1st of each year. This will allow for consistent and timely notice of areas requiring inspection. C-COM dispatch will call the Emergency On-Call OPERATIONS Supervisor to inspect a road to determine whether snow and ice control operations are needed.

- **SNOW REMOVAL DURING NON-PRIORITY EVENTS**

Operations does not expect to remove snow in accordance to this plan unless snow accumulation is reasonably expected, in the opinion of the Transportation Operations Manager, to exceed two inches on roads under the County's jurisdiction.

- **SNOW REMOVAL DURING PRIORITY EVENTS**

If snow accumulation is expected to exceed two inches on roads under the County's jurisdiction, Operations will follow this plan until the storm subsides and roads under the County's jurisdiction are reasonably safe for travel.

- **SANDING AND CHEMICAL APPLICATION PRIORITY**

In the event of a county-wide condition of ice build-up, the priority for anti-icing and de-icing measures will be the same as it is for snow removal. In accordance with this plan, traction materials and anti-icing materials will be applied only to intersections where vehicle stops are required and to steep grades, curves and bridges. If OPERATIONS receives actual notice of an area that would benefit from the application of traction materials, the Transportation Maintenance Operations Manager shall evaluate the need in accordance with the priorities of this plan. Sanding material will not be applied to straight, level roads. During snow events, sanding materials will be applied only after plowing operations have ended.

- **CLEAN-UP**

Clean-up involves residual sweeping/flushing of sand from roads and on-street bicycle lanes and will be performed as soon as is reasonably possible after the event. Clean-up will be accomplished using the same service priority level established for snow removal. Clean-up operations can take several weeks to complete, depending on the severity of the storm and the amount of sanding material applied to the roads.

- **BICYCLE LANES**

OPERATIONS will not plow or sand bicycle lanes or paths that are separate from the roadway; OPERATIONS will attempt to plow and sand on-street bicycle lanes.

- **MAILBOXES, SIGNS, DRIVEWAYS AND SIDEWALKS**

In the process of snow removal, mailboxes may be damaged or access to mailboxes obstructed, driveways may be closed and sidewalks may be covered. It is the responsibility of the abutting landowner to remove such snow. Caution will be taken to avoid damage to signs, mailboxes, posts and

delineators during snow removal. Only mailboxes physically hit by OPERATIONS equipment will be reinstalled by OPERATIONS. Mailboxes knocked down by flying snow will not be reinstalled by OPERATIONS.

It is the responsibility of the property owner to provide clear access up to the mailbox for the postal carrier.

OPERATIONS is not responsible for opening driveways that have access onto County roads. This is the responsibility of the property owner. Property owners should not move snow onto the public roadway.

- **PROPERTY DAMAGE**

Care will be exercised by snowplow operators in removing snow in the vicinity of adjacent buildings or facilities that might be damaged by flying snow. Snowplow operators will reduce speeds where doing so will reduce the chances of damage by flying snow while still maintaining the effective operation of the snowplow equipment. OPERATIONS is not responsible for damage to privately owned landscaping or structures, including but not limited to fences, signs, curbs and wires that are installed within the public right-of-way.

- **PARKED AND/OR UNATTENDED VEHICLES**

Care will be exercised in removing snow in the vicinity of vehicles parked adjacent to County roads. Even if vehicles are illegally parked on the travel way, reasonable care will be taken consistent with the necessity of completing the required work. Vehicles parked and unattended in the right-of-way are left at the owner's risk. Any damage to these vehicles is the owner's responsibility and will not be paid by the County (i.e., paint damage by sanding operations will not be repaired or paid).

- **SNOW REMOVAL PRIORITY**

Snow plowing activities will be accomplished by priority in so far as is practical, as described by the following levels. For all levels, the Transportation Maintenance Operations Manager may discontinue efforts when blizzard or other severe forms of weather make operation of maintenance equipment and motor vehicles unreasonable and unsafe. Specific roads and the associated priority levels are set forth in the priority list, and depicted on the priority maps, all of which are attached hereto as addenda.

During severe winter storms OPERATIONS will divide the maintenance crew into two 12-hour shifts to provide 24-hour coverage.

**High**

**Road Type:** Roads that fall under this level are generally major transportation routes such as arterial and major collector roads. Some steep roads serving residential areas, which require early plowing for public safety access, may be included in this level. Roads at this level may be placed at a medium priority when an alternative route is available, the road has a low residential density or storm intensity requires prioritization of more significant transportation routes.

**Control Efforts:** Maintain two lanes of traffic during the storm. Remove snow through the duration of storms to keep roads open to traffic and provide a reasonable surface on which to operate with

approved traction devices. When effective, apply abrasives to enhance traffic safety on steep grades, sharp curves, bridge approaches, decks, and intersections.

**Medium**

Road Type: Roads that fall under this level are minor collector routes, county maintained urban local and county maintained rural local roads that warrant being a medium priority.

Control Efforts: Snow removal shall be accomplished when personnel and equipment are available.

**Low**

Road Type: Roads that fall under this level are county maintained urban residential cul-de-sacs and county maintained rural local roads.

Control Effort: Snow removal shall be accomplished when personnel and equipment are available.

**VII. ACCESS TO POLICY**

This policy will be available

- 1) On the County’s policy management system
- 2) The County’s intranet.

**VIII. ADDENDA (optional)**

- 1) Snowplow priority list by zone
- 2) Snowplow map by zone
- 3) Snowplow priority map by County

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(signifies end of policy)