



Winter Road Maintenance Q & A

Dear Fellow Alaskan:

Now that winter has returned to Southcentral, the Department of Transportation & Public Facilities (DOT&PF) is fielding many questions about winter maintenance. We want to share our frequently asked questions with you in an effort to share information, clarify misunderstandings, and dispel rumors we've heard in the past.

DOT&PF will continue to work cooperatively with local governments with the single purpose of serving Alaska's public. Please feel free to share this information with your friends, neighbors and coworkers.

Q: Which roads are state owned?

A: It's not always easy to tell, is it? The state of Alaska owns the major highways, including the Glenn, Parks, Sterling and Seward Highways, but it also owns many major urban routes, such as Minnesota, C Street, Dimond, along with a number of collector roads such as Abbott, DeArmoun, Huffman, and Rabbit Creek Roads. If you are wondering which roads are state roads, please check the map at http://dot.alaska.gov/stwdmno/documents/State_MOA_MAINT_AN_36x42sm.pdf.

Q: Does DOT&PF work with local governments when maintaining roads?

A: Yes. Ownership may switch along many urban routes, so DOT&PF enters into agreements with the local government to allow both organizations to provide efficient service—so a plow operator isn't lifting their blade for two blocks for example. We do this so both the state and local governments can serve Alaskans in the most efficient way possible.

Q: Why does DOT&PF have a priority system for snow plowing?

A: When DOT&PF was facing budget reductions in 2015, we developed and published our priority system to ensure we were still meeting our mission and providing service to as many Alaskans as possible. Higher volume roads are higher priority roads, for instance. By developing a systematic approach to snow events, we ensure that state routes will be cleared in the most efficient method possible. Check out our <http://dot.alaska.gov/stwdmno/wintermap/>



Q: How fast will the plows get to my route?

A: DOT&PF’s road priority system also sets a target response time from the end of a snowfall. We typically meet our new target response time but the time to re-establish good/fair driving conditions also depends on the specific storm such as amount of snowfall or ice, and the frequency of events. Larger snowfalls, ice events, and back to back storms may extend our response time. Sidewalks are prioritized at the same level as the adjacent roadway, however, they are not plowed simultaneously with the road.

PRIORITY LEVEL 1	High volume, high speed highways, expressways	Up to 24 hours to clear after storm/event
PRIORITY LEVEL 2	Major highways & arterials connecting communities	Up to 36 hours to clear after storm/event
PRIORITY LEVEL 3	Major local roads, collectors roads in large urban areas	Up to 48 hours to clear after winter storm
PRIORITY LEVEL 4	Minor local roads, provide residential or recreation access	Up to 96 hours to clear after winter storm
PRIORITY LEVEL 5	Roads designated as “No Winter Maintenance”	No winter response roads such as Denali Highway



Q: How many operators does DOT&PF typically have on duty?

A: The Anchorage Maintenance Station is comprised of a station manager, four foreman, 27 operators, four seasonal sidewalk operators and two electricians. During the winter schedule, the department has two shifts per day to give the station near around-the-clock coverage. Shifts can be extended (overtime) to respond to winter storms or ice events. Any gap of time between shifts can be covered by overtime during weather events. Additionally the two electricians are trained on snow removal and assist with plow operations when needed.

Q: How many miles of roads and sidewalks does DOT&PF maintain in the Anchorage area?

A: The Anchorage Station covers about 1,187 lane miles of highway and 160 miles of sidewalk. We have six operators on an average shift, as well as two sidewalk operators on the dayshift.

Q: Why don’t I see plows out when I’m out driving?

A: Rest assured, we are plowing, sanding or spreading brine throughout Anchorage day and night. We generally finish up plowing and sanding operations prior to the morning rush and again prior to the evening rush. We do this so we will not interfere with peak traffic—our high-speed plows are still slower than highway traffic and a contingent of three plows could significantly disrupt the commute.



Q: Why doesn’t DOT&PF sand the entire length of the road?

A: DOT&PF Anchorage station uses a lot of sand, an average of 20,000 tons of it every year. Sand adds temporary abrasives to the road surface, which is an important tool when ice forms. But sand is also temporary, as soon as it is applied, traffic will whisk the sand to the center and edges of the road. We do not sand roads from end-to-end because it does not provide a commensurate improvement in road conditions.

Instead we focus it to target hills, curves, rutted areas and ramps, where it can provide drivers traction when they need it the most. Sanding around Anchorage and Eagle River also includes intersections, turn pockets and double turn lanes. Our operators will use more sand over longer sections of the roadway during freezing rain.

Q: What is brine and when does DOT&PF use it?

A: We've added a salt brine program to our winter maintenance efforts, which has the benefit of treating the roads before ice and snow can form a bond with the asphalt surface. Additionally because it is highly effective and has relatively low cost we can treat an entire length of road.



The department still uses sand in areas where additional traction is needed, but the use of brine is most efficient and actually reduces our costs. Interestingly, we are using less salt with this program than what was used for the sanding program (salt is added to sand to keep it from freezing in truck beds). We can cover 60 lane miles with about 2,500 gallons of brine. The average application rate of sand under the same conditions would be approximately 20 lane miles of coverage. As a result, we've been able to reduce our bulk salt costs by 6 percent (we use an average of 1,500 tons every year).



Q: Why do DOT&PF plows push snow onto sidewalks?

A: Ideally, we would remove snow from our sidewalks and roads simultaneously. However, the department's snow removal methods for state roads and sidewalks is often dictated by the amount of Right-Of-Way (ROW) in which we can work and the number of personnel and equipment available. We start the snow removal process from the center of the road and work our way to the edges of the ROW. This process often means we place snow that is in the roadway onto the adjacent sidewalks until it can be removed separately. This practice allows us to clear the roads for emergency responders, serve the greatest number of travelers, maintain a high level of safety on the road with the appropriate lane widths and provide for effective drainage when melting occurs. This can mean that

sidewalks, after they are initially cleared, may have additional snow being placed on them until it can be removed.

Q: Do DOT&PF equipment operators work on evenings and weekends?

A: In Anchorage, yes. DOT&PF M&O Anchorage station switches to a winter schedule in September each year which include a day and night shifts, seven days a week.



Q: Was the DOT&PF budget really cut?

A: Yes. Like other state agencies, DOT&PF now receives fewer general fund (state) dollars than it did prior to the downturn in the economy in 2015. Our maintenance budget in Central Region was reduced by 27% and we lost 15 positions in recent years, with over half of these positions from the Anchorage area. DOT&PF responded to this reduction by developing the Priority System and target response times, and is utilizing new programs (brine) and equipment (tow plow) to increase productivity.



Q: A DOT&PF plow or grader operator left a berm after I shoveled my driveway, will they come back and remove it?

A: No. Our plow operators are focused on keeping the roads open for everyone and do not have time to clean up every driveway that intersects with a state road. Our grader operators, which often follow after a plow to clean up the area, will make every attempt to minimize berms, however, the responsibility to clean up the berm rests with the property owner per 17 AAC 10.020:

17 AAC 10.020

(g) The burden and cost of maintaining a driveway or approach road within a highway right-of-way is upon the lands served by a driveway or approach road. A driveway or approach road must be maintained to conform the requirements of 17 AAC 10.040 and to accepted engineering practice. The department is not obligated to remove snow berms plowed into a driveway or approach road during its highway snow removal activities. A permittee may not plow snow from a driveway or approach road onto a highway, or interfere with highway drainage structures.



For updated road conditions visit 511.Alaska.Gov or call 511.

The Alaska Department of Transportation and Public Facilities oversees 242 airports, 10 ferries serving 35 communities, more than 5,600 miles of highway and 731 public facilities throughout the state of Alaska.

The mission of the department is to . . .

“Keep Alaska Moving through service and infrastructure.”