



## Keeping Maine's Roads Safe In Winter

Ever since roads were built in Maine, keeping them passable during winter has been a top priority for MaineDOT. Safe roads remain a top priority, but the technology and treatment of winter roads has evolved.



Previously, roads would be plowed, sanded and salted during a storm. This method was used effectively for decades, but resulted in snowpack bonding to the road for hours and days until crews used salt to remove it.

Today, MaineDOT uses a technique called "anti-icing" that prevents snowpack from forming. Specially calibrated equipment spreads salt early and throughout the storm to prevent the snow and ice from bonding to the road. This results in bare and safer roads soon after the storm.



Previously



Today



## Getting ahead, staying ahead

As a winter storm approaches, MaineDOT snow fighters are hard at work preparing their routes and equipment. Prior to certain types of storms, roads may be "pre-treated" with salt brine. Salt brine is a mixture of salt and water that dries in 45 minutes, leaving a white film of salt that dissolves the first snowflakes as they land on the pavement and minimizes snow packing.

Throughout the storm, as rock salt is applied, it may be "pre-wetted" with either salt brine, a corrosion-inhibited liquid magnesium chloride, or a blend of the two products. Pre-wetting helps the solids stick to the pavement, and speeds melting at lower temperatures and with less salt.



## It's not your grandfather's plow



When storms are cold (below 15°F), nothing is more effective than a plow. Cold temperatures and dry snow means the plow alone can push the snow off the road without anti-icing materials, which would cause the snow to get wet and stick to the roads.

Of course a plow is only as effective as the person behind the wheel. MaineDOT plow drivers spend countless nights and weekends making winter roads safe for all of us. As techniques for treating winter roads have become more sophisticated, so have the cabs and plows. Drivers not only have to pay attention to the road, but also to the controls that determine which materials are being applied and when.

