

EQUIPMENT

The Virginia Department of Transportation (VDOT) has 2,226 pieces of state equipment, 5,293 pieces of hired equipment and 534 pieces of interstate maintenance contractor equipment for snow and ice control.

MATERIALS

Snow and ice-control materials and supplies in stock include: 282,000 tons of salt, 75,000 tons of sand, 48,000 tons of treated abrasives, 330,000 gallons of liquid calcium chloride and 138,000 gallons of liquid magnesium chloride. VDOT replenishes supplies as they are used. To assist in these replenishment efforts, an additional 208 tons of magnesium chloride (50-pound bags) and 26 tons of calcium chloride (50-pound bags) are also in stock. In addition, VDOT has the capability of making salt brine at some facilities, with a total of 292,000 gallons of salt brine in inventory.

TECHNOLOGY

A statewide network of 77 weather sensors in roadways and bridges, including 16 mobile video-data platforms, allows VDOT maintenance crews to quickly identify when and where road surfaces might be freezing.

ANTI-ICING, PRETREATMENT, SNOW REMOVAL AND DE-ICING OF ROADS

VDOT deploys numerous anti-icing, snow-removal and de-icing strategies, such as pre-treating roads and bridges with abrasives and brine when forecasts predict the likelihood of severe winter weather. VDOT constantly coordinates throughout the year with state and local police authorities and has access to the National Weather Service.

CONTRACTORS AND STAFFING LEVELS

VDOT has 2,891 staff dedicated for snow-removal operations.

VDOT has privatized the maintenance of the commonwealth's interstate system by contracting with several roadway maintenance firms. Snow removal and emergency response are among the primary functions of these contractors.

Currently, interstate maintenance contractors are working on all interstate highways as well as several arterial/primary roads. They are required to report road conditions during their snow-removal operations through VDOT's internal Virginia Traffic internet traffic/incident response tracking tool. VDOT then shares this information with the public via <http://511virginia.org>.

Interstate contractors are included in VDOT's pre-event planning sessions so they will have the necessary equipment and manpower to ensure effective and efficient snow removal during a winter storm or other emergency. VDOT monitors all snow-removal operations and reports any problems it observes to the contractor to resolve. VDOT conducts after-action reviews with its interstate maintenance contractors, where they address any outstanding issues or concerns.

COST

- Average cost for a major statewide snow/ice storm affecting all nine districts and requiring full mobilization is approximately \$10 million per day.
- VDOT's total winter budget for 2010-11 is \$115 million. This includes \$96.5 million budgeted for snow removal and \$18.6 million for Turnkey Asset Management (TAMS) contractors who handle snow removal on interstates.