

The following information details the Virginia Department of Transportation's equipment, materials, budget and other data that support its preparedness and readiness for the 2014-2015 winter season and all related snow- and ice-removal activities.

EQUIPMENT

The Virginia Department of Transportation (VDOT) has the following equipment available for snow- and ice-control activities statewide:

- 3,442 pieces of state equipment,
- 7,188 pieces of hired equipment, and
- 1,363 pieces of interstate contractor equipment.

MATERIALS

VDOT has the following materials and supplies in stock for snow and ice removal:

- 366,678 tons of salt
- 122,766 tons of sand
- 60,850 tons of treated abrasives
- 564,405 gallons of liquid calcium chloride
- 1.1 million gallons salt brine

VDOT replenishes supplies as they are used through the winter.

Additionally, VDOT produces salt brine at some facilities. Salt brine prevents snow and ice from bonding to the pavement when used to pretreat the roads before a storm.

In 2013-2014, VDOT started the season with 362,000 tons of salt; 100,000 tons of sand; 89,000 tons of treated abrasives; 566,000 gallons of liquid calcium chloride; and 836,000 gallons of salt brine

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.

VDOT remains in constant coordination with state and local police authorities and has access to the National Weather Service.

PRETREATING ROADS AND SNOW/ICE REMOVAL

VDOT uses several methods to prevent snow and ice from sticking to the roads before a storm and to remove snow and ice after a storm. These include using various chemicals (salts) in solution (brine) to prevent a bond from forming between the pavement and the snow or ice before a storm.

In addition to plowing after a storm ends, VDOT also will spread abrasives on areas prone to icing, such as bridge decks.

CONTRACTORS AND STAFFING LEVELS

VDOT has approximately 2,500 crewmembers for snow-removal operations statewide.

In addition, VDOT uses contractors to maintain the interstates throughout the commonwealth. Snow removal is one of the main functions of these contractors. While the contractors are required to report road conditions while removing snow, VDOT remains accountable for their performance.

VDOT includes the interstate maintenance contractors in pre-event planning sessions in advance of snowstorms so they have the necessary equipment and manpower for effective and efficient snow removal following a storm. VDOT monitors their operations and immediately reports any problems it observes back to the contractor. VDOT also conducts after-action reviews with the contractors, during which the agency addresses any issues or concerns.

COST

The average cost for a major statewide snow or ice storm affecting all nine VDOT districts and requiring a full mobilization is approximately \$11 million per day.

VDOT has \$145.5 million budgeted for snow-removal activities for the winter of 2014-2015. This includes funding for anti-icing, one of the processes that can prevent the bonding of snow or ice to the pavement before a storm.