

Snow Strategies

The Virginia Department of Transportation is responsible for clearing all state roads of snow. Cities and towns are responsible for clearing their own roads. Check out the list of snow strategies below that explain VDOT's snow removal methods.

To the Right!!!

VDOT workers plow snow to the right. Sometimes it ends up blocking driveways. To avoid double work, shovel your driveway after the snow plow has passed. Shovel snow to the right of the driveway as you face the road.



Try it...

The next time it snows shovel the snow to the right of your driveway as you face the road AFTER the plow has passed. Where else does the snow go when it is plowed?

When it melts, where does the water go?

What would happen if the snow was plowed to the left?

Try it...

Materials: Ice cubes, string, salt
Lay a piece of string over the top of an ice cube
Sprinkle salt on the top of the ice cube and string.
What happens?

Pick up the string. What happens?

Why do you think this is happening?

Try it...

Materials: square pan of ice (from your freezer), sand, 2 small toy cars
Fill a metal pan with water. Let it freeze outside or in your freezer overnight. Get a tablespoon of sand or gritty dirt.

Sprinkle the sand on 1/2 of the pan of ice.

Leave the other half alone.

Run one car over the sand. What happens?

Does the car slow down?

Why?

What happens when the other car runs over the ice?



The Science of Salt:

VDOT does not put salt on the roads before snow falls because it can blow off of the road. The best way to use salt is after the snow is 1 inch deep and the temperature is 20 degrees or higher. This way, the snow and salt will mix and form a slush within about two hours, that can easily be removed from the road. Salt will not melt snow and ice if the temperature is below 27 degrees.

Calcium Chloride

VDOT uses calcium chloride mixed with salt to make a chemical reaction to melt snow when the temperature is below 27 degrees.

Abrasives

Abrasives are small gravel or sand that do not melt snow. Often they are mixed with salt and to avoid using expensive chemicals



