

Seattle refuses to use salt; roads "snow packed" by design

Seattle's strategy for clearing roads relies on sand and de-icer, not salt, which is a more effective method of melting ice and snow.

By [Susan Kelleher](#), 2008



To hear the city's spin, Seattle's road crews are making "great progress" in clearing the ice-caked streets.

But it turns out "plowed streets" in Seattle actually means "snow-packed," as in there's snow and ice left on major arterials *by design*.

"We're trying to create a hard-packed surface," said Alex Wiggins, chief of staff for the Seattle Department of Transportation. "It doesn't look like anything you'd find in Chicago or New York."

The city's approach means crews clear the roads enough for all-wheel and four-wheel-drive vehicles, or those with front-wheel drive cars as long as they are using chains, Wiggins said.

The icy streets are the result of Seattle's refusal to use salt, an effective ice-buster used by the state Department of Transportation and cities accustomed to

dealing with heavy winter snows. "If we were using salt, you'd see patches of bare road because salt is very effective," Wiggins said. "We decided not to utilize salt because it's not a healthy addition to Puget Sound."

By ruling out salt and some of the chemicals routinely used by snowbound cities, Seattle has embraced a less-effective strategy for clearing roads, namely sand sprinkled on top of snowpack along major arterials, and a chemical de-icer that is effective when temperatures are below 32 degrees.

Seattle also equips its plows with rubber-edged blades. That minimizes the damage to roads and manhole covers, but it doesn't scrape off the ice, Wiggins said. That leaves many drivers, including Seattle police, pretty much on their own until nature does to the snow what the sand can't: melt it.

The city's patrol cars are rear-wheel drive. And even with tire chains, officers are avoiding hills and responding on foot, according to a West Precinct officer.

Between Thursday and Monday, the city spread about 6,000 tons of sand on 1,531 miles of streets it considers major arterials. The tonnage, sprinkled atop the packed snow, amounts to 1.4 pounds of sand per linear foot of roadway, an amount one expert said might be too little to provide effective traction.

"Hmmm. Six thousand tons of sand for that length of road doesn't seem like it's enough," said Diane Spector, a water-resources planner for Wenck Associates, which evaluated snow and ice clearance for nine cities in the Midwest.

Spector and snow-control experts in four cities said sand is typically mixed with salt and used for trouble spots. "The occasional application of salt is probably not going to have a lasting effect" on the environment, Spector said. But she cautioned it's highly dependent on where it's used, how often and how much is applied.

Seattle's stand against using salt is not shared by the state Department of Transportation, which has battled the latest storms in Western Washington with de-icer, 5,800 tons of salt and 11,500 cubic yards of salt and sand mix, said spokesman Travis Phelps.

Many cities are moving away from sand because it clogs the sewers, runs into waterways, creates air pollution and costs more to clean up.

Its main attraction is that it typically costs less than one-fifth the price of salt, according to Spector.

"We never use sand," said Ann Williams, spokeswoman for Denver's Department of Public Works. "Sand causes dust, and there's also water-quality issues where it goes into streets and into our rivers."

Instead, it sprays an "anti-icing" agent on dry roads before the snow falls and then a combination of chemicals to melt the ice.

Cheryl Kuck, spokeswoman for the Portland Bureau of Transportation, said her city prepared the streets last week with the "anti-icing" spray. Once the snow started, Portland used chemical de-icers, followed by plowing with 55 plows and treating trouble spots with sand and gravel.

Although the city had plowed 29 of its 36 major routes, "nothing is clear," Kuck said late Monday afternoon. "This is a difficult and challenging situation that's going to take us a long time to recover from."

Wiggins, of Seattle's transportation department, said the city's 27 trucks had plowed and sanded 100 percent of Seattle's main roads, and were going back for second and third passes.

"It's tough going. I won't argue with you on that," he said. But here in Seattle, "we're sensitive about everything we do that impacts the environment."