

Working for clean and healthy waters now

Snow and ice removal on county roads

Hennepin County's goal is to reduce the intrusion of chloride in soils and surface waters in the county while providing for safety for all drivers — including first responders and emergency service providers — on paved county road surfaces.

Through pro-active efforts, we have been very successful in significantly reducing the amount of salt applied to the more than 2,200 lane miles of county roads. This has established Hennepin County as a statewide leader in balancing safe winter driving conditions and the health of our water resources.

Safe roads using around half the salt

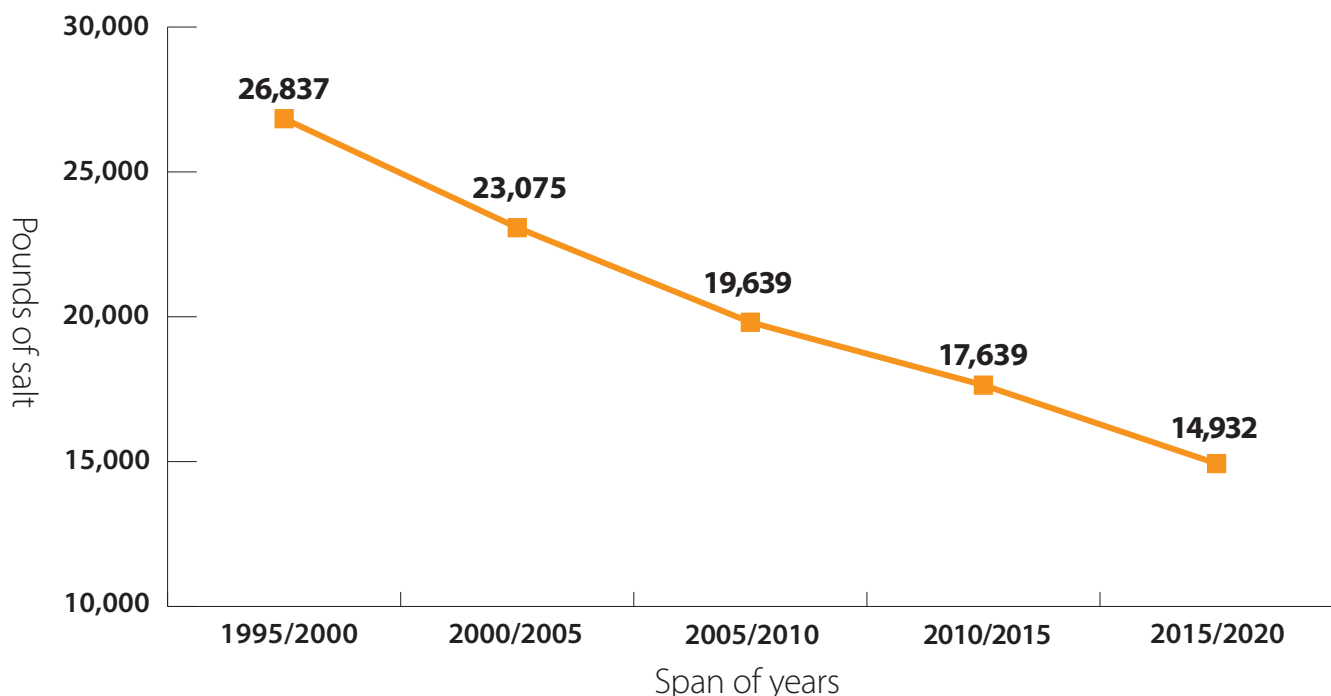
The county has been steadily decreasing the amount of salt we use on our county roads in the last 25 years without compromising safety. We have sought out new equipment and used the latest in best practices to achieve this result.

Based on five-year averages since 1995, the county's per lane mile road salt use has gone down by 44 percent from approximately 27,000 pounds to just under 15,000 pounds per winter season.

We have also reduced the use of sand on our county roads to nearly zero due to its relative lack of effectiveness. Sand only provides short-term benefits and assists with traction only when temperatures are too cold for salt and roads are icy.

Sand also contributes to negative environmental impacts including sediment pollution of our waterways. Abrasives like sand do not melt snow and ice and are easily swept off the road by vehicles.

Salt usage per lane mile (5-year average)



Improving policy and procedures

Over time, we have improved the way we deal with snow and ice. We have established new policies and operating procedures that allow us to also make the most of improvements in technology and new equipment.

- We use new technology, such as sensors installed on trucks that provide real-time air and road condition information and software to measure salt use as it is applied.
- We visit areas near county roads during the growing season to look for drainage problems or opportunities to prevent ice build-up from occurring on roads.
- We identify, monitor and address higher-need areas instead of using a “one-size-fits-all” approach.
- We confirm that equipment is calibrated and performing effectively for proper application of materials.
- We train drivers on when, where and how to use salt on county plow routes and certify drivers who have been trained in salt reduction techniques.
- We collaborate with City of Minneapolis, City of St. Paul, Ramsey County and other local partners on trainings for a more consistent regional approach.
- We pre-treat roads before a storm to reduce the need for salt once the snow and ice arrive.
- We prioritize removing snow on bridges and other high-freeze potential areas to limit the use of salt.
- We monitor and evaluate use of salt to ensure areas don’t get over treated.

In managing roadways, the county’s goals are always safety and an effort to achieve the best environmental outcomes.

Continuing to lead the way

This good work has not gone unnoticed. In 2014, the Freshwater Society recognized our efforts with an environmental leadership award.

We continue to partner with cities and other nearby counties to share best practices and materials, as well as continue the conversation about how we can all do better.

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