

De-Icing Program

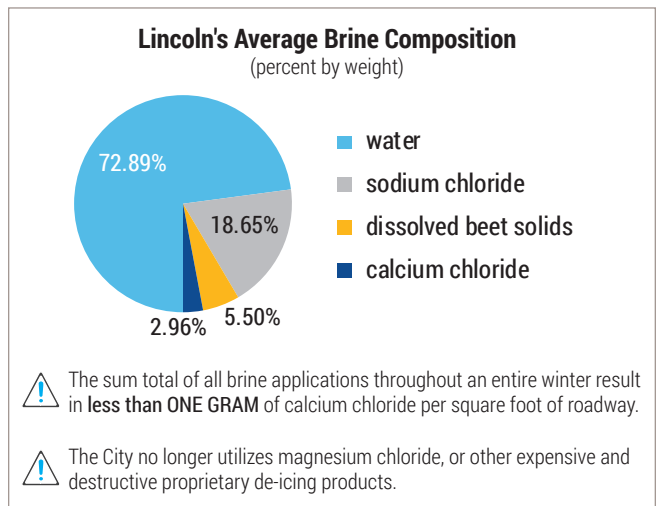
July 2018

The Department's Mission: To responsibly deliver, enhance and maintain vital infrastructure and services for the good of our community

A Better, Safer and Cheaper Method

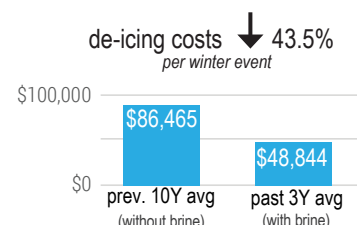
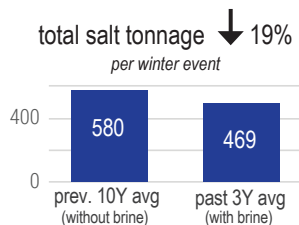
Salt brine is a key tool for City Snowfighters in providing safer winter maintenance strategies while focusing on environmental benefits, sustainability and cost reductions.

We didn't invent brine use, we merely perfected it.



Road salt is the same as the salt on the dinner table, NaCl, just bigger particles and not as clean. Our salt brine is nothing more than salt and water with a liquid organic accelerator. Beet juice is essentially a dissolved sugar additive that increases the stickiness of the de-icing solution reducing bounce and scatter resulting in less salt usage. It also serves as a corrosion inhibitor and the blended product is 75% less corrosive than salt brine itself.

- ✓ **Better**
- ✓ **Safer**
- ✓ **Cheaper**



3 Uses of Brine

1

Anti-Ice

"Stripes" before the storm

- 50 gallons per lane-mile (60,000 gallons per event)
- Very good residual effects
- Goes to work when precipitation begins, buying time for our crews to respond



2

Pre-Wet

Material spreaders

- 20 gallons of brine per ton of salt
- Mixes with the granular salt to produce a slurry
- Significantly reduces the waste of bounce & scatter



3

De-Ice

Direct brine application over congealed snow/ice

- 150 gallons per lane-mile
- Only on localized trouble spots (not broadcast)

