

# All About Liquids

- \* Shane L Mark M.S.
- \* Director of Streets
- \* Newton DPW

# What are Liquids and why use them?

- ❑ In basic form... salt water or “Brine”
  
- ❑ In advanced form
  - Brine +...
  - $\text{CaCl}_2$
  - $\text{MgCl}_2$
  - Organics



# Liquids save...

## Time

- \* Speed of pretreatment



## Money

- \* Brine making can be cost effective.



# Common Anti icers

- \* Salt ( $\text{NaCl}$ )
- \* Mag Chloride ( $\text{MgCl}_2$ )
- \* Calcium Chloride ( $\text{CaCl}_2$ )
  
- \* These three are the most popular.

# Other liquids

- \* Beet juice
- \* Brewers
- \* And other organics (more to come later)

# Choices Matter

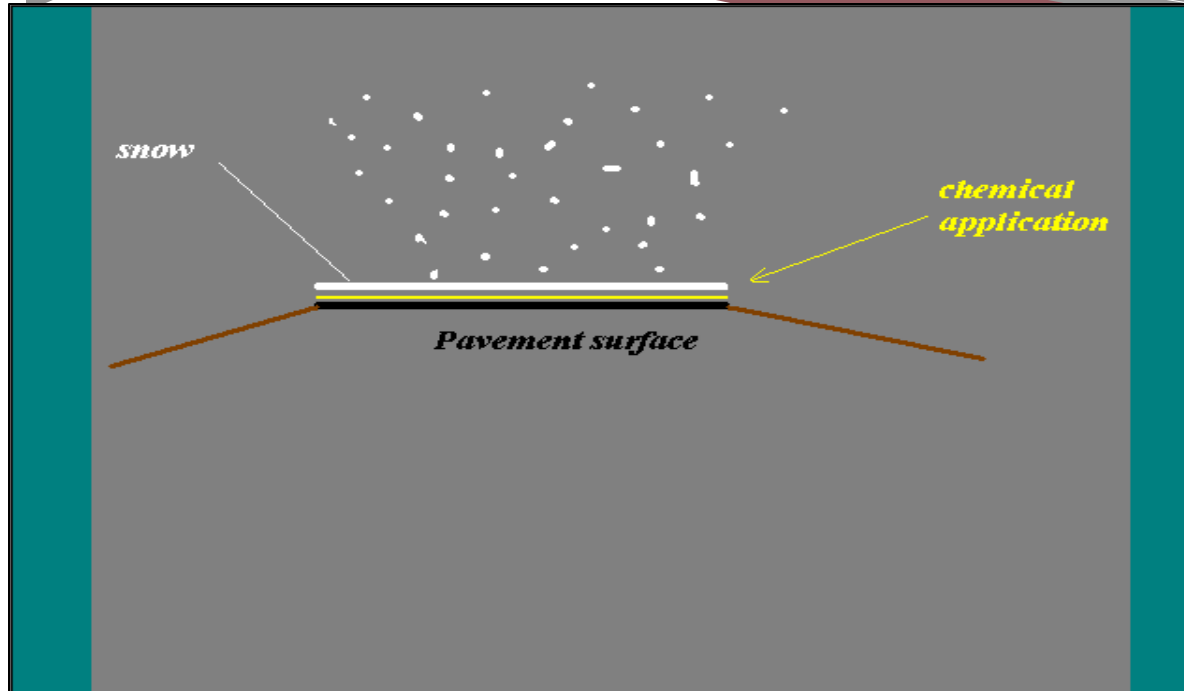


The old cast iron skillet found  
in a 2<sup>nd</sup> hand antique store?

That new copper skillet seen on the  
infomercials at 5:00 am?



# Anti-icing



Liquid deicer is applied to the pavement surface before the snow falls. It melts the snow from the bottom up.



# Anti-icing How does it work?

Anti-icing is not meant to melt everything, only to have a thin layer of melting between the pavement and the snow.



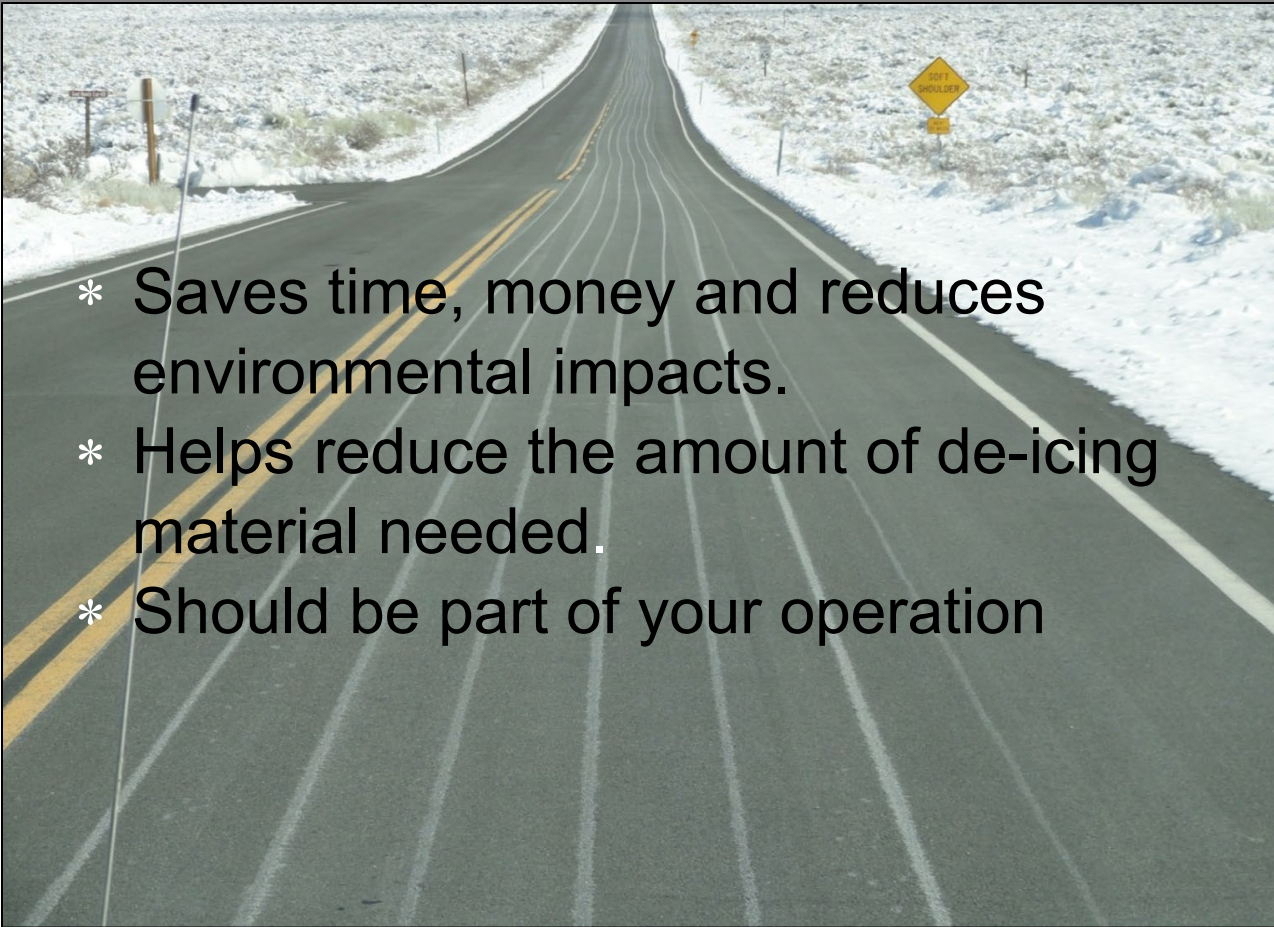


# Anti-icing Proactive Strategy

- \* Proactive: Anything we can do in advance of the roads becoming icy or snowy



# Anti-icing



- \* Saves time, money and reduces environmental impacts.
- \* Helps reduce the amount of de-icing material needed.
- \* Should be part of your operation

# Anti-icing Proactive Strategy

- \* Melts from the bottom up.
- \* Weakens the bond between the road and snow/ice.
- \* Prevents frost from occurring on roads or bridges.



# Where should we Anti-ice?

Where frost or black ice is likely.

On any roads that you de-ice

Especially those demanding high level of service  
Hills, curves, bridges.

# Anti-icing Decision Making Tools

