Pigeonhole Live

Poll (Multiple Choice)

Participant Poll

08 Feb 2018, 08:00 - 14 Feb 2018, 23:00

177	173	88
Participants	Total votes	Highest vote

Q: What is your affiliation?

Winter Maintenance Supervisor	18.5%	32 Votes
Winter Maintenance Staff	16.2%	28 Votes
Local/Regional/State Government Staff	50.9%	88 Votes
Local/Regional/State Decision-Maker	3.5%	6 Votes
Researcher/Educator/Academic/Citizen	6.4%	11 Votes
Private Applicator/Business	4.6%	8 Votes

3 Comments

Anonymous • 08 Feb 2018 08:42 • Voted for: **Winter Maintenance Supervisor**
Great class. topic,s and subjects .great information and facts.

Anonymous • 08 Feb 2018 08:43 • Voted for: **Local/Regional/State Decision-Maker**
Great program feature for asking questions.

Anonymous • 08 Feb 2018 10:06 • Voted for: **Local/Regional/State Government Staff**
Half the trouble is to many attorneys. if you can get rid of half of them we can use less salt.

Pigeonhole Live

Q&A

Q&A: Mayor Paul Soglin and Hilary Dugan

08 Feb 2018, 08:00 - 14 Feb 2018, 23:59

108	115	31	8
Participants	Votes	Questions	Questions answered
169	19	31 / 0	21 / Good
Interactions*	Highest vote	Allowed / Blocked	Ratings / Top rating

* Interactions include the total number of questions, votes, comments and answer ratings

31 Questions Allowed

19 VOTES

Anonymous • 08 Feb 2018 09:30 • ✓ ANSWERED

Sweden is showing a reduction in chlorides in lakes, are the roads and walkways still safe? What things are they doing that we can incorporate here?

Answer ratings Very Good

0 0 2 2 2

14 VOTES

Anonymous • 08 Feb 2018 09:16

How does Madison deal with Public complaints of unsalted roads?

11 VOTES

Anonymous • 08 Feb 2018 09:32 • ✓ ANSWERED

Hilary: how do Scandanavian countries that are not experiencing the chloride increase treat their roads? Do they just not salt them, or do they have something else?

Answer ratings Good

0 0 0 3 1

10 VOTES

Anonymous • 08 Feb 2018 09:04 • ✓ ANSWERED

Mayor Soglin, what has been the biggest challenges with public perception you've dealt with? What kind of outreach are you doing?

Answer ratings Neutral

0 0 2 0 1

9
VOTES

Anonymous • 08 Feb 2018 09:18 • ✓ANSWERED

Mayor Soglin - what techniques have you found to be most successful to increase participation of the private sector in your certification program?

Answer ratings **Very Good**

0	0	0	0	1

6
VOTES

Anonymous • 08 Feb 2018 09:11

What incentives do you use to get people to get trained?

6
VOTES

Anonymous • 08 Feb 2018 09:32 • ✓ANSWERED

What are the Swedes doing that led to reduction of chlorides?

Answer ratings **Good**

0	0	0	2	1

5
VOTES

Anonymous • 08 Feb 2018 09:19

Does your department have set policy's for salt application? How do you sell such a policy to city residents and or council?

5
VOTES

Anonymous • 08 Feb 2018 09:19

Do you think it would be easier to get buy in from city council to hire more staff to remove snow. Or get residents or motorists to lower expectations for winter driving conditions?

3
VOTES

Anonymous • 08 Feb 2018 09:17

How does Madison work with local supervisors to change perceptions? Considering they are on the frontlines.

3
VOTES

Anonymous • 08 Feb 2018 09:18

On the collector roads where you do salt, what does the average operator use per lane mile on an average snow? Also is it regular rock salt or treated salt?

3
VOTES

Steve lund, mndot • 08 Feb 2018 09:20 • ✓ANSWERED

Mayor, good presentation - thanks. I see how private cert will ensure awareness, but how does it ensure follow through?

Answer ratings **Good**

0	0	0	1	0

3
VOTES

Anonymous • 08 Feb 2018 09:24

Why doesn't Minnesota use sand on their roads like Fairbanks Alaska does? Wouldn't that help the salt problem?

1 Comment:

Anonymous • 08 Feb 2018 09:32

That sediment then leads to problems in storm sewers and into lakes and streams.

3
VOTES

Anonymous • 08 Feb 2018 09:38

I learned from the MN Pollution Control Agency that in the winter months a water sample should be collected from the bottom of the lake. Is that how the samples are collected in your dataset?

2
VOTES

Anonymous • 08 Feb 2018 09:31

What new invasive species should we be worried about due to salt?

2
VOTES

Anonymous • 08 Feb 2018 09:34 • ✓ANSWERED

What do the Swedes do differently that have kept chloride levels in their lakes low?

Answer ratings **Very Good**

0	0	0	1	1

2
VOTES

Anonymous • 08 Feb 2018 09:34 • ✓ANSWERED

Hilary, how does the depth of the well compare with how much chloride is found in the well water?

Answer ratings **Good**

0	0	0	1	0

2
VOTES

Anonymous • 08 Feb 2018 09:36

Hilary - did your study look into road maintenance practices from the areas in Scandinavia with lower chloride concentrations, wondering if there is anything we can learn from their practices.

2
VOTES

Anonymous • 08 Feb 2018 09:37

Because of public pressure to have clear roads to drive on what is your answer to them

---

1
VOTE

Geoff • 08 Feb 2018 09:16

Mr Mayor, was urban expansion calculated into chloride trends?

1
VOTE

How does sweden keep their roads clear? • 08 Feb 2018 09:36

Does Madison use both liquid salt solution and sold salt?

1
VOTE

Will • 08 Feb 2018 09:36
Great I will spot salt today but John q public want safe fast roads now what

1 Comment:

Will • 08 Feb 2018 09:38
Stop sorry

1
VOTE

Anonymous • 08 Feb 2018 09:41
Does Madison have legal protections to snow removal companies if they are died for less salt use?

1
VOTE

Anonymous • 08 Feb 2018 09:46
GO BADGERS

0
VOTES

Anonymous • 08 Feb 2018 09:38
What is Sweden/Scandinavia doing differently?

0
VOTES

Anonymous • 08 Feb 2018 09:39
Hilary, do you have any documented examples of fish community changing in response to increasing chloride in lakes?

0
VOTES

Anonymous • 08 Feb 2018 09:40
Is anyone in WI looking into the increased corrosiveness of water with elevated chloride that can leach metals, like lead, from the plumbing into the water?

0
VOTES

Anonymous • 08 Feb 2018 09:40
A new well? Is this actively being looked into and studied in terms of feasibility? Cone of depression etc? Groundwater is tricky to model! And location with respect to roads?

0
VOTES

Anonymous • 08 Feb 2018 09:42
Is anyone in WI looking into the increase in the corrosiveness of water with elevated chloride that can leach metals from plumbing, like lead, into drinking water?

0
VOTES

Anonymous • 08 Feb 2018 09:43
Mayor Soglin does the City of Madison take on any legal responsibility if someone slips on an unsalted street or sidewalk?

0
VOTES

Vanessa • 08 Feb 2018 09:45

Is anyone in WI studying the increase corrosiveness of water due to increasing levels of chloride that can leach metals, like lead into the drinking water?

Pigeonhole Live

Q&A

Q&A: Stephen Druschel, William Schneider, and Mike Adams

08 Feb 2018, 08:00 - 14 Feb 2018, 23:59

91 Participants	136 Votes	24 Questions	10 Questions answered
182 Interactions*	20 Highest vote	24 Allowed / 0 Blocked	14 Ratings / Good Top rating

* Interactions include the total number of questions, votes, comments and answer ratings

24 Questions Allowed

20 VOTES

Anonymous • 08 Feb 2018 10:20 • ✓ANSWERED

Which plow and cutting edge do you see to be best?

1 Comment:

Anonymous • 08 Feb 2018 11:14

Carbide, or hardened steel

Answer ratings Very Good

0	0	0	1	1

12 VOTES

Anonymous • 08 Feb 2018 10:54 • ✓ANSWERED

Mike, what is your favorite weather app or site?

No answer ratings

11 VOTES

Anonymous • 08 Feb 2018 10:42 • ✓ANSWERED

What makes the Epoke spreader so effective?

Answer ratings Good

0	0	0	1	0

10 VOTES

Anonymous • 08 Feb 2018 10:27 • ✓ANSWERED

Have you done any research on trucks that dump forward instead of from the back so that your truck is automatically driving over the salt that is put down?

Answer ratings Very Good

0	0	0	0	1

10
VOTES

Anonymous • 08 Feb 2018 10:31 • ✓ANSWERED

Stephen, have you done research where traffic has compacted snow and ice onto the roadway before you plow and de-ice?

Answer ratings Good

0 0 1 2 0

9
VOTES

Anonymous • 08 Feb 2018 10:34 • ✓ANSWERED

Does Ohio have more freeze, thaw cycles than MN or milder climates. How does that impact your ice control practices?

Answer ratings Good

0 0 1 2 0

8
VOTES

Anonymous • 08 Feb 2018 10:47 • ✓ANSWERED

What is an epoke?

No answer ratings

7
VOTES

Josh dix • 08 Feb 2018 10:29 • Hidden

How bad REALLY is the impact of organics (beet juice) on BOD? Should they be banned, or is their impact worth the environmental cost balanced with increased deicing effectiveness?

1 Comment:

Anonymous • 08 Feb 2018 10:35

This question will be asked to Scott Koefod in the next section

6
VOTES

Anonymous • 08 Feb 2018 10:09

Stephen, with the pressure of using less salt, what do you see the cities legal responsibility should be if someone slips and falls and needs medical care?

6
VOTES

Anonymous • 08 Feb 2018 10:28 • ✓ANSWERED

Stephen How can your research outcomes be applied to parking lot and sidewalk chloride management?

Answer ratings Good

0 0 0 2 0

6
VOTES

City of river falls • 08 Feb 2018 10:47 • ✓ANSWERED

Dr. Schneider which plow blades did you find to be the most effective and economical?

Answer ratings Good

0 0 0 1 0

5
VOTES

Anonymous • 08 Feb 2018 10:08 • ✓ANSWERED

Do you do any studies on humidity effects on the road treated with salt?

1 Comment:

Anonymous • 08 Feb 2018 10:28

Good question, because Climate Change is causing more humid winters.

Answer ratings **Good**

0 0 0 1 0

5
VOTES

Anonymous • 08 Feb 2018 10:44

How did you optimize 1600 plow routes?

4
VOTES

Anonymous • 08 Feb 2018 10:51

What type of plow blades or blade systems were lasting 3 seasons?

3
VOTES

Anonymous • 08 Feb 2018 11:05

Mike, what can you say about frequency of freezing rain.

1 Comment:

Mike adams • 12 Feb 2018 14:11

Not a lot, actually. Here is Wisconsin, we tend to only get one or two major freezing rain events somewhere in the state each winter. What we do see is a lot of freezing drizzle on the backside of storms. That can happens upwards of ten times a year. But without knowing your location, it's hard to be more specific.

3
VOTES

Anonymous • 08 Feb 2018 11:06

What is the difference between the Americans and European forecast models?

1 Comment:

Mike adams • 12 Feb 2018 14:08

It's really just what assumptions each makes to simplify the equations in the model. Each model thus has different biases, depending on the situation. Up until this winter, the general opinion was that the European model seemed to handle winter storms a little more accurately. However, I haven't noticed that quite as much this winter. Each storm, things have been a little different.

3
VOTES

Anonymous • 08 Feb 2018 10:33

Have there been any tests with commercial combination vehicles specifically with the vacuum and wind created by them causing salt and sand to be blown off the road? What can be done?

2
VOTES

Steve lund, mndot • 08 Feb 2018 10:40

Doc Schneider - thanks for your presentation... at one time, ODOT was big on Halliday friction wheels, do they still use them? If so, how do they incorporate them into performance management?

2
VOTES

Anonymous • 08 Feb 2018 10:44

Does ODOT have a published salt reduction goal?

2
VOTES

Anonymous • 08 Feb 2018 10:48

William, what gps and weather program are you using? We at Mndot use MDSS

1
VOTE

Anonymous • 08 Feb 2018 11:15

Why are the European weather models better than some of the US weather models?

1 Comment:

> Mike adams • 12 Feb 2018 14:13
>
> Up until recently, the Euro model ran on a more powerful computer. I believe that NOAA has upgraded recently, and that might improve their model performance. Time will tell.

1
VOTE

Anonymous • 08 Feb 2018 10:51

Stephen, could you briefly recap the de-ice and anti-ice findings from your last slide as they pertain to traffic?

0
VOTES

Anonymous • 08 Feb 2018 11:07

Great presentation Mike! Do you know meteorologist Stu Muck?

1 Comment:

> Mike adams • 12 Feb 2018 14:15
>
> No I do not.

0
VOTES

Anonymous • 08 Feb 2018 11:19

What's the arcgis add in to optimize plow routrs?

1 Comment:

> Mike adams • 12 Feb 2018 14:14
>
> In our case, it's FleetRoute software by C2Logix.

Pigeonhole Live

Q&A

Q&A: Scott Koefod and Mike Gresch

08 Feb 2018, 08:00 - 14 Feb 2018, 23:59

68 Participants	84 Votes	28 Questions	6 Questions answered
129 Interactions*	11 Highest vote	28 Allowed / 0 Blocked	6 Ratings / Good Top rating

* Interactions include the total number of questions, votes, comments and answer ratings

28 Questions Allowed

11 VOTES

Mike gresch • 08 Feb 2018 13:34

Would a smaller size of rock salt do better job of contacting the pavement and be more efficient?

9 VOTES

Steve lund, mndot • 08 Feb 2018 13:20 • ✓ANSWERED

No answer ratings

Are you aware of any research that shows how long rock salt (prewetted or not) stays available to work with/towards brine before traffic knocks it off the road surface?

9 VOTES

Anonymous • 08 Feb 2018 10:32 • ✓ANSWERED

How bad REALLY is the impact of organics (beet juice) on BOD? Should they be banned, or is their impact worth the environmental cost balanced with increased deicing effectiveness?

Answer ratings Very Good

0	0	0	1	1

8 VOTES

Anonymous • 08 Feb 2018 13:08

Any truth to the rumor that beer is the next liquid to be experimented with?

6 VOTES

Anonymous • 08 Feb 2018 11:10

Any slurry application research or experience?

5
VOTES

Anonymous • 08 Feb 2018 11:51

Who provided the water softener training?

1 Comment:

Mike gresch • 08 Feb 2018 13:52

Madison Metro Sewerage District

4
VOTES

Mike gresch • 08 Feb 2018 08:40

Does softener brine discharge contain calcium chloride and is this more corrosive to concrete and steel?

1 Comment:

Mike gresch • 13 Feb 2018 06:08

Scott answered this. It does contain some calcium chloride.

4
VOTES

Anonymous • 08 Feb 2018 13:15 • ✔ ANSWERED

No answer ratings

Has anyone experimented with heated brine?

3
VOTES

Anonymous • 08 Feb 2018 13:28

I disagree, my observations are that high traffic action carries the salt away and creating slick glossy roads!

1 Comment:

Scott koefod • 13 Feb 2018 08:46

Thanks very much for this! You raise a good point, and this is something I will keep in mind as I discuss our research with other maintenance workers. Certainly, you are correct that if traffic action is doing more to knock the salt off the road than it is to facilitate repeated mixing of the salt and brine and snow/ice, it will be counter-productive to enhancing the ice melting speed. My speculation is that both factors are probably at play under field conditions, but it is not clear to me how they balance out. This is something I will be interested in better understanding. Thanks!

3
VOTES

Anonymous • 08 Feb 2018 13:31

When depending on traffic action for mixing a pre-wetted mixture, how does this really play out on the road? In other words, what happens to the parts of the road that's not in the tire tracks?

1 Comment:

Scott koefod • 13 Feb 2018 08:44

This is an excellent question. For the moment, I can only speculate. Presumably, the areas of the road in which the salt and brine and snow/ice are not being repeatedly ground together and mixed by traffic action (e.g. away from the tire tracks) will receive less mixing action and therefore will show slower ice melting and a higher effective working temperature for the salt. But without further testing it is not yet clear just how much mixing action is enough to maintain a maximally efficient ice melting rate (in our tests so far we have just compared the two extremes – no mixing versus high mixing). This will probably require a next level of simulation of real traffic action on the road to answer well.

2
VOTES

Anonymous • 08 Feb 2018 11:51

Mike, who is working on the patent for the brine reclamation?

1 Comment:

Mike gresch • 13 Feb 2018 06:11

There was a person at the symposium with 2 patents. I am planning to contact him when I can.

2
VOTES

Anonymous • 08 Feb 2018 12:03 • ✓ANSWERED

Mike, could you reclarify the benefits/summary of reclaiming brine? The final slide went quick.

Answer ratings Good

0 0 0 2 1

2
VOTES

Anonymous • 08 Feb 2018 13:27

Is the temperature of -3 air temp or road temperature?

2
VOTES

Anonymous • 08 Feb 2018 13:34 • ✓ANSWERED

Any experience with non-chloride products as a pre-wet agent?

Answer ratings Good

0 0 0 1 0

2
VOTES

Anonymous • 08 Feb 2018 13:34

Is there a study that shows how long the salt actually stays on the road and even gets a chance to work

2
VOTES

Anonymous • 08 Feb 2018 13:45

What are your thoughts on treating stockpile salt with chemicals?

1 Comment:

Scott koefod • 13 Feb 2018 08:50

I think that as a general rule pre-wetting is a good idea and permits lower salt application rates. There are various ways the salt can be pre-wetted. It can be purchased as a pre-blended, treated salt product, it can be sprayed with brine right at the spinner from saddle tanks on the salt truck, or agencies can treat their own stockpiles with liquid. The latter is certainly an option. A couple things to bear in mind: 1) the less thoroughly the salt is blended with the liquid, the more likely it is to leach in storage. If thoroughly mixed, salt can hold about 8 gal/ton, but if it is not well mixed leaching may result. 2) If you treat your pile with a plain salt brine it will freeze hard if it gets too cold. Treating the pile with a brine containing either magnesium chloride or calcium chloride will prevent the pile from freezing hard at colder temperatures than a pile treated with plain salt brine.

2
VOTES

Anonymous • 08 Feb 2018 10:30

What are the silt ponds doing to help ?

1
VOTE

Steve lund, mndot • 08 Feb 2018 11:56

How much water is typically used in a residential softener recharge?

1 Comment:

Mike gresch • 13 Feb 2018 06:41

Not sure. I have a residential softener. I added a ball valve and a hose. I turned the valve off during brine fill or displacement. I was able to capture 10 gallons of brine. I used a brine storage bin from a softener that I changed out. I have salty brine in it but don't use salt on my driveway. I would use a back pack sprayer to apply it if I did.

1
VOTE

Mike • 08 Feb 2018 13:28

Comment: By far the best presentation. Thank You!

1
VOTE

Will • 08 Feb 2018 13:32

What would happen if you heated up the temp of the liquid brine somehow to like 100° and applied it

---

1
VOTE

Anonymous • 08 Feb 2018 13:33

Does this take into account traffic causing salt to go off the road?

1 Comment:

Scott koefod • 13 Feb 2018 08:51

Excellent point. No, it does not, and that is a factor we will want to understand better as we explore this further.

1
VOTE

Anonymous • 08 Feb 2018 13:37

What's the melting difference of using treated salt versus normal salt when both are combined with brine?

1
VOTE

Anonymous • 08 Feb 2018 13:38 • ✔ANSWERED

No answer ratings

Do you know of anyone who has used water softener regeneration brine for larger scale applications, like roads? What do you think would be the largest challenges in doing so?

1 Comment:

Mike gresch • 13 Feb 2018 06:33

I don't know but have talked to 2 insurance companies that plan to use the restroom softener brine on their own property. Seems like a good endorsement of the technology. I should have some full strength softener brine by spring, summer. Right now I dump 40 lbs of dry salt in the tank and add dilute brine.

1
VOTE

Anonymous • 08 Feb 2018 13:38

Mike- did you have to deal with any water reuse or plumbing codes while you were completing your reclamation

1 Comment:

Mike gresch • 13 Feb 2018 06:29

Not that I know of. Plumbers did the plumbing work. We used schedule 80 pvc. The manual stated that the drain should be at the floor. It it possible that we had to increase the water pressure going to the softeners due to the raised drain. We have not had any issues since. We had many other issues due to age, bad solenoid valve, bad check valves, eductors. Raising the drain was not a concern for either softener technician we have used.

1
VOTE

Anonymous • 08 Feb 2018 13:47

Acetate are expensive yet could they be incorporated into the ice melting process.

0
VOTES

Anonymous • 08 Feb 2018 13:35

Did you look at prewet application rates between 8 and 20 gallons per ton? If so was there a benefit to application rates of around 15?

0
VOTES

Anonymous • 08 Feb 2018 13:35

What about gradation of rock salt?

0
VOTES

Anonymous • 08 Feb 2018 13:40

Mike- could you discuss the reduction in the chloride level of the brine after you switched supplier?

1 Comment:

Mike gresch • 13 Feb 2018 06:20

I switched from rock salt to softener salt because the softener salt is cleaner. The softener salt is also delivered to our salt storage tank. 200-300 lbs of dry salt per snow event, to 40 lbs per event. Roughly 2 lbs salt per gallon of brine. I only add 1 bag of salt per 60 gallon tank of brine. Once I purchase a hydrometer or refractometer, I can tell what percentage of salt is in the brine.

Pigeonhole Live

Open-text Poll

Emerging Issues - Question #1

08 Feb 2018, 08:00 - 14 Feb 2018, 23:59

101	53	37	0
Participants	Votes	Answers	Questions answered
92	8	37	0
Interactions*	Highest vote	Allowed	Blocked
		0	None
		Ratings	Top rating

* Interactions include the total number of questions, votes, comments and answer ratings

Answer status breakdown:

Q: During freezing rains and freeze/thaw events, what can or should we do (or do differently) to reduce salt use?

37 Answers Allowed

8 VOTES

Josh dix • 08 Feb 2018 13:54

Start with the lowest rate practical, with the possibility of treating twice rather than going too high the first time around. Also, wider spread pattern on low traffic roads and a low rate.

7 VOTES

Anonymous • 08 Feb 2018 08:50

Use sand instead of salt

1 Comment:

Anonymous • 08 Feb 2018 13:54

That's a false negative

6
VOTES

Anonymous • 08 Feb 2018 13:54
Stay home/telework

5
VOTES

Anonymous • 08 Feb 2018 13:55
Call in sick

5
VOTES

Anonymous • 08 Feb 2018 13:56
There are menu different responses to this. What is the future weather forecast. Are temps going to be rising or falling? What time of day is it?

4
VOTES

Anonymous • 08 Feb 2018 13:54
permeable pavement

1 Comment:

Anonymous • 08 Feb 2018 13:58
And/or Solar roads!

3
VOTES

Cloud town • 08 Feb 2018 13:53
More Brine

3
VOTES

Anonymous • 08 Feb 2018 13:54
Use more coarse salt.

3
VOTES

Anonymous • 08 Feb 2018 14:00
Low salt rate , wider pattern

2
VOTES

Anonymous • 08 Feb 2018 13:55
Wait for spring

2
VOTES

Anonymous • 08 Feb 2018 13:56
Salt , less brine during rain

1
VOTE

Anonymous • 08 Feb 2018 13:55
Prewet and slow application speeds to reduce bounce and scatter.

1 VOTE
Anonymous • 08 Feb 2018 13:56
Sand/salt

1 VOTE
Anonymous • 08 Feb 2018 13:58
Need experienced operators

1 VOTE
Anonymous • 08 Feb 2018 14:00
Buy force 6100 and program your rates to 25/lbs increases

1 VOTE
Anonymous • 08 Feb 2018 14:04
Use a NASCAR jet blower

0 VOTES
Anonymous • 08 Feb 2018 13:53
Use hot sand, as in Sweden.

0 VOTES
Anonymous • 08 Feb 2018 13:53
Using more brine

0 VOTES
Anonymous • 08 Feb 2018 13:53
Use rock salt early in the event. The salt and rain will create a brine.

0 VOTES
Anonymous • 08 Feb 2018 13:54
Close the road

0 VOTES
Anonymous • 08 Feb 2018 13:54
Less brine

0 VOTES
Anonymous • 08 Feb 2018 13:55
Use winter mix with more liquids

0 VOTES
Anonymous • 08 Feb 2018 13:55
Apply salt when the temperature is drops below freezing.

0 VOTES
Anonymous • 08 Feb 2018 13:55
Sanders on sixes

0
VOTES

Mike gresch • 08 Feb 2018 13:55
Put down brine as needed.

0
VOTES

Anonymous • 08 Feb 2018 13:56
Don't use liquid, use granulars.

0
VOTES

Anonymous • 08 Feb 2018 13:58
Brine the hell out of it

0
VOTES

Anonymous • 08 Feb 2018 13:58
Lowest rate possible, no brine as the rain will get the salt to solution

0
VOTES

Anonymous • 08 Feb 2018 13:58
Apply at a slower rate try to confine to smaller area keep on centerline let leach out

0
VOTES

Anonymous • 08 Feb 2018 13:58
Timing is everything

0
VOTES

Anonymous • 08 Feb 2018 13:58
Use salt sand mix

0
VOTES

Hennepin county • 08 Feb 2018 14:00
Pre treat the roads before the storm, minimize usage of material until after storm is done, tarp loads, monitor road and air temps!

0
VOTES

Anonymous • 08 Feb 2018 14:00
Treat with light sand mix during rain and focus on known freezing spots as conditions change adjust chemicals to include brine, rock salt and clear lane with emphasis on emergency routes first

0
VOTES

Anonymous • 08 Feb 2018 14:01
Use student tires

0
VOTES

Anonymous • 08 Feb 2018 14:01
Use sand

0
VOTES

Anonymous • 08 Feb 2018 14:01

Slow down the traffic and apply rock salt. Slow traffic will grind in the salt.

0
VOTES

Nick • 08 Feb 2018 14:02

Is there any sort of mechanical ‘ice pick’ tool? Residents are encouraged to use ice picks for their driveways, could a truck be an ice pick for spot treating trouble areas?

Pigeonhole Live

Open-text Poll

Emerging Issues - Question #2

08 Feb 2018, 08:00 - 14 Feb 2018, 23:59

77	18	16	0
Participants	Votes	Answers	Questions answered
35	9	16 Allowed / 0 Blocked	0 Ratings / None Top rating
Interactions*	Highest vote		

* Interactions include the total number of questions, votes, comments and answer ratings

Answer status breakdown:

Q: If you have used a liquid-only strategy during or after a storm , 1) what were the conditions, 2) what was your application rate, and 3) how did it work?

16 Answers Allowed

9 VOTES
Anonymous • 08 Feb 2018 13:52
N/A

3 VOTES
Anonymous • 08 Feb 2018 13:59
Icy wheel tracks- 20 gallons of potassium agitate per lane mile- Cleared pavement within three hours at -4 degrees.

2 VOTES
Anonymous • 08 Feb 2018 13:56
The roads were ice packed and temperatures in the teens below zero. We applied calcium chloride liquid to the road at a rate of 20 gallons per lane mile. This helped to clear most of the ice.

2
VOTES

Josh dix • 08 Feb 2018 14:04
I got caught anti-icing in the snow. I increased rate to 65 gal/mi to try DLA. Temp was mid 20's. First 1/2" burned off awesome, but it kept snowing and after that it greased up bad and got slippery.

1
VOTE

Anonymous • 08 Feb 2018 13:55
Put down dry salt

1
VOTE

Anonymous • 08 Feb 2018 16:36
I have had very good results deicing with brine on sidewalks after sweeping. Sweeping doesn't leave enough moisture for rock salt to brine out making liquid a much more effective option.

0
VOTES

Anonymous • 08 Feb 2018 13:55
Ice

0
VOTES

Anonymous • 08 Feb 2018 14:01
We only use just liquid to pretreat

0
VOTES

Anonymous • 08 Feb 2018 14:02
Have not tried it

0
VOTES

Hennepin county • 08 Feb 2018 14:03
It worked terribly. We directly applied brine after an ice storm and it diluted to fast and refroze almost instantly. We spent more time chasing and cleaning up afterwards.

0
VOTES

Anonymous • 08 Feb 2018 14:05
Treat after the storm after the snow has been cleared from the road

0
VOTES

Anonymous • 08 Feb 2018 14:05
Not used

0
VOTES

Mike gresch • 08 Feb 2018 14:05
I apply about 60 gallons of brine to 24,000 square feet of pedestrian sidewalk.

1 Comment:

Mike gresch • 08 Feb 2018 14:07
I am not involved with highway salting, only pedestrian walkways.

0
VOTES

Anonymous • 08 Feb 2018 14:07

1) first storm of season 2) 25-35 gallons brine per land mile depending on the route 3) fine, best day before a storm

0
VOTES

Anonymous • 08 Feb 2018 14:08

Tried it. Plow Truck would be unable to control once brine tank was depleted, which was fairly quick. Like half the plow route.

0
VOTES

Nick • 08 Feb 2018 14:10

Observation: there’s a whole realm of cultural and social forces at play. Would future symposiums be able to integrate these by inviting other experts to discuss cultural change/education/policy?

Pigeonhole Live

Open-text Poll

Local Chloride Initiative Updates

08 Feb 2018, 08:00 - 14 Feb 2018, 23:59

46	22	10	0
Participants	Votes	Answers	Questions answered
32	4	10 Allowed / 0 Blocked	0 Ratings / None Top rating
Interactions*	Highest vote		

* Interactions include the total number of questions, votes, comments and answer ratings

Answer status breakdown:

Q: Questions or Comments:

10 Answers Allowed

4 VOTES
Anonymous • 08 Feb 2018 14:16
Have any surface waters impaired for chloride been delisted?

4 VOTES
Anonymous • 08 Feb 2018 14:19
Do you think the regulatory agencies will ever regulate salt usage (How much agencies could purchase, for example).

3 VOTES
Anonymous • 08 Feb 2018 14:12
Any studies going on regarding saltwater/chlorine pools that are becoming so popular, and usually drain into streets and down storm drains?

3
VOTES

Anonymous • 08 Feb 2018 14:20
Is the MPCA supporting the limited liability legislation that is up for approval this spring? Are you involved in that at all?

3
VOTES

Anonymous • 08 Feb 2018 14:30
Does or will the potential salt legislation (slip and fall protection) apply to local government agencies in addition to private sector?

2
VOTES

Anonymous • 08 Feb 2018 14:14
If 78% of salt is staying local, where is the rest going?

2
VOTES

Nick • 08 Feb 2018 14:18
How much do we know about chloride levels in wetlands and wetland soils... do we need to know more here?

1
VOTE

Nick • 08 Feb 2018 14:17
Are chloride impairments more often lakes with no output?

0
VOTES

Anonymous • 08 Feb 2018 14:33
Is anyone monitoring crashes vs implementing winter maintenance alternatives that reduce chloride use? Would be good to know that metric !

0
VOTES

Anonymous • 08 Feb 2018 14:36
The Mississippi River is at 80 mg/L, which is well below the chronic limit of 230 mg/L. Should we be worried?