

# **To Go or not To Go, how do agencies decide to “pull the trigger” on sending out their forces for pre-storm actions?**

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The Covid-19 pandemic continues to force agencies to look at providing the “same expectations” as they have in the past but under budgets that have been reduced significantly due to a major reduction in the funds they would normally receive through the various revenue sources. Perhaps one of the biggest concerns for the snow professional is providing the customary level of service one’s community expects under a much tighter budget. So how do we do that? How will the “new norm” affect the decisions we make on when to “pull the trigger” and send forces out pre-storm or in-storm?

I was honored to recently to be a panel member for a snow webinar hosted by the Professional Snowfighter Association titled “Winter maintenance, to go or not to go”. These seminars have been a great tool for me in helping to fill the gap in education and I have really enjoyed listening to and gaining new insights on how to get things done during winter operations.

Brian Beitzel (Maintenance Director, Village of Buffalo Grove, IL) and I spent an hour discussing our programs and the factors that play a role in helping to decide on when to “pull the trigger” and perform winter maintenance activities. Perhaps the biggest take away for me during this seminar was the factors that play into the decision to treat or not to treat. What factors should you consider before making the decision for winter maintenance before the storm?

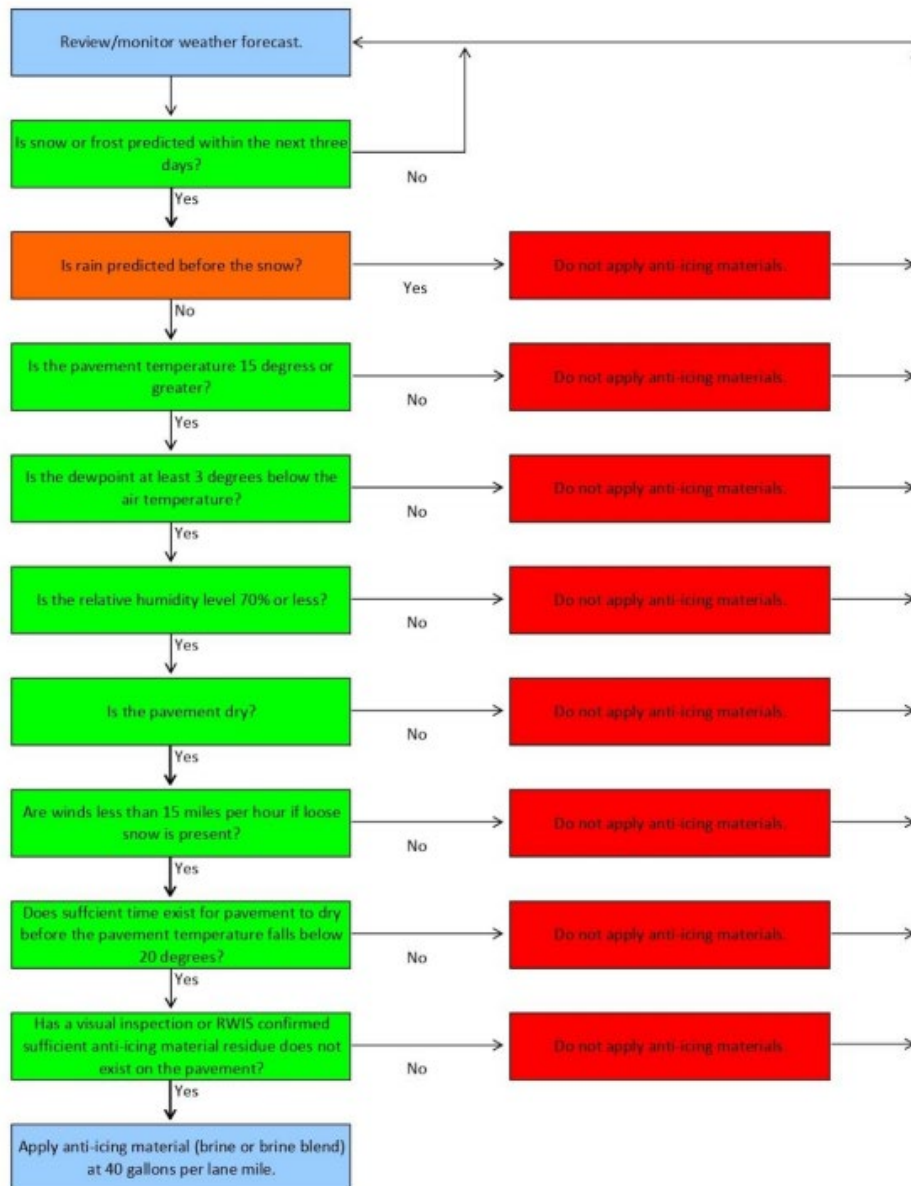
One of the most efficient ways to perform pre-storm activities is anti-icing (applying liquid salt brine, or a combination of salt brine and other liquids such as beet juice) to the road network before the storm arrives. Anti-icing liquids are normally applied in the range of 30-40 gallons per mile. Three factors to consider before anti-icing:

1. Existing weather conditions prior to treatment
2. Route structure and available on hand liquid storage
3. Time on task for the application process

**Existing weather conditions:** The key to liquid application is to apply the right amount, in the right concentration (23.3 % salt to water ratio) with the right equipment, at the right time. Sounds easy right? Do it right and you are the hero, do it wrong and you go from the hero to a zero. In my humble opinion a value-added weather service provider is critical for any winter maintenance operation. Knowing the current and projected pavement temperatures, timing of the event, and type of precipitation can make or break you in this area. If you do nothing else find the funds and invest in a weather service provider who will provide detailed forecast information specific to your community and has 24/7 consultation services. Three questions to

help you with the decision to anti-ice are: What am I going to get, when am I going to get it, and what form am I going to get it in? The APWA developed a decision-making flowchart to help the snow fighter in this decision and using this in conjunction with the weather forecast is key to a successful operation.

**Anti-Icing Application Decision Flowchart**



**Route structure and available on hand liquid storage:** The amount of available liquids to your organization will determine your start times. Do you have enough liquids to anti-ice all of your anti-icing routes in one application or will you need to make brine “on the fly” as you anti-ice? What routes will you treat? I would suggest looking at creating specific routes that can be utilized based upon the day of the week or special events. Examples of these are: routes designated to cover your HBI’s (Hills, Bridges, Intersections), school bus routes, and routes to major transportation nodes.

**Time on task for the application process:** How long will it take to anti-ice your existing routes (at your set gallons per mile)? How many vehicles do you have available with the DLA (direct Liquid application) ability? As a professional snow fighter, it is vital to know the answers to these questions. Knowing this information will help you make informed decisions on the timing and needed staff.

The decision to treat or not to treat is often a difficult one to make and my advice to all professional snowfighters is to make decisions. I retired from the Army Reserve over nine years ago and every leadership school I attended reinforced the need for leaders to make decisions. Too often we become paralyzed by the inability to make decisions. We fear the unknown and repercussions of bad decisions and in combat that inability leads to unnecessary casualties and deaths. Leaders are taught to make decisions using the information on hand, previous experience, and technical knowledge and training. Make decisions and learn from your mistakes, don’t allow past failures or mistakes to hinder your program and what you want to accomplish. Ask the tough questions, learn from your mistakes, tweak your program, and make decisions. The work you do with snow and ice control is a matter of safety and you are a first responder. Good luck this winter season and be safe.