



Winter Maintenance Safety and Sustainability Checklist

Winter Maintenance Section

Levels of Safety and Service	Yes	No	Score
Are all roads within an agency's area of responsibility assigned a level of safety and service?			
Are the different levels of safety and service clearly identified?			
Can agency personnel easily determine whether and when a given stretch of road has achieved its desired level of safety and service?			
Has the community served by the agency been involved in the process of determining levels of safety and service for roads serviced by the agency?			
Does a plan exist to evaluate levels of safety and service on agency roads on a regular basis?			
Is the level of safety and service of a given road segment determined by including factors such as AADT, peak hour traffic, access for emergency services, school hours and bus routes, and other similar factors?			
Have road segments that are in particularly environmentally sensitive areas been clearly identified, and assigned a level of safety and service accordingly?			
In the last two years, has your agency been free from lawsuits resulting from personal injury or property damage as it relates to improper winter maintenance?			
Maximum Total Points for Level of Safety and Service	8		
Your Agency's Score for Level of Safety and Service			
Materials Usage	Yes	No	Score
Does the agency have a method to specify application rates as a function of pavement temperature, route cycle time, and storm type?			
Does the agency have the capability to pre-wet all solid applications? On the truck (2 points) or in the facility (1 point)?			
Does the agency have the capability to apply liquids before and during a storm?			
Does the agency limit the use of abrasives or abrasive-salt mixtures to those conditions in which straight salt usage is not appropriate?			
Does your agency utilize the deicing tool (NCHRP577) in selecting the most economical and effective deicing products.			
Maximum Total Points for Materials Usage	6		
Your Agency's Score for Materials Usage			
Equipment Selection and Operations	Yes	No	Score
Are all material delivery systems calibrated regularly? Annually (1 point) or monthly (2 points)?			
Do all agency vehicles have surface temperature measuring equipment attached?			
Is all winter maintenance equipment specified and purchased on the basis of life-cycle costs?			
Does delivery equipment have the capability to record where material was placed on the road, and at what rate it was placed?			
Is the equipment fleet managed using a pro-active maintenance system?			
Is it standard practice in equipment operations to use the most fuel efficient vehicle capable of efficiently conducting a specified task?			
Do fuel efficiency, vibration reduction, minimizing of pavement damage, and wear resistance all get incorporated into cutting edge selection for snow plow blades?			
Are various pieces of equipment (e.g. snow plows, material delivery systems) easily exchanged between vehicles (i.e. in less than 10 minutes)?			
Maximum Total Points for Equipment Selection and Operations	9		
Your Agency's Score for Equipment Selection and Operations			

Performance Measurement and Continuous Improvement	Yes	No	Score
Do you have a post-storm review process that is used after each storm?			
Do you have a formal system to measure whether and when the required level of safety and service has been achieved on each road segment?			
Is your storm severity measurement quantitative?			
Do you have a system that actively seeks out ways to improve your winter safety and service activities?			
Maximum Total Points for Performance Measurement and Continuous Improvement	4		
Your Agency's Score for Performance Measurement and Continuous Improvement			
Strategic (annual) Operations	Yes	No	Score
Do you provide annual refresher training in winter maintenance for all winter maintenance personnel?			
Do you conduct a post-winter review of all activities in the spring/early summer of each year, to identify areas of success and areas in need of improvement?			
Do you review snow plow routes annually for efficiency?			
Do you have a pro-active frost prevention strategy?			
Do you have a snow drift prevention program in operation?			
Do you provide some sort of media interaction meeting in the fall, to prepare the local media for the upcoming winter season and your activities in it?			
Do you have a well-defined system for the media to contact your organization during winter storm events?			
Do you have a system to provide the media with special access that allows them to communicate winter maintenance activities effectively to the community (e.g. reporter ride-alongs)?			
Do you have some form of annual open day or open events to allow the public to learn about what you do?			
Do you conduct forums or surveys to obtain feedback from the public on the winter safety and maintenance services that you provide to your community?			
Do you track the total loading of materials placed on the road network each winter?			
Do you have a system in place to designate certain road segments as being environmentally sensitive (at least annual review)?			
Do you have systems in place to provide real-time road surface condition information to the traveling public?			
Do you hold annual (at least) co-ordination meetings with appropriate emergency services agencies?			
Maximum Total Points for Strategic (annual) Operations	14		
Your Agency's Score for Strategic (annual) Operations			
Tactical (per storm) Operations	Yes	No	Score
Do you use some sort of Value Added Meteorological Service to provide forecasts for your winter storms?			
Are these forecasts site specific (i.e. they provide different forecasts for different road segments)?			
Do these forecasts provide pavement temperature forecasts?			
Do you adapt your storm strategies depending on the time of day at which the storm starts or ends, to take account of variations in traffic levels?			
Do you have methods in place to deal with disruptions that can occur during winter storms (e.g. equipment failure, traffic congestion, crashes etc.)?			
Do you have systems in place that allow for easy communication with emergency services in your area?			
Maximum Total Points for Tactical (per storm) Operations	6		
Your Agency's Score for Tactical (per storm) Operations			
Maximum Total Score for Winter Maintenance Section:	47		
Total Score for Winter Maintenance Section:			

Salt Storage Section

Storage & Safety	Yes	No	Score
Does this facility store at least 75% of its annual requirement of salt?			
Has this facility been operational for at least one full winter season?			
Do you have a written policy for snow and ice control operations?			
Does this facility have a written safety program?			
Is this facility fenced or otherwise secured to prevent unauthorized access?			
Has this facility been free of any safety violation citations by government regulatory agencies in the past two years?			
Does this facility have outside lighting for night operation?			
Does this facility have inside lighting for night operation?			
Does this facility conduct safety meetings at regular intervals (monthly, quarterly, annually)?			
Maximum Total Points for Safety	9		
Your Agency's Score for Safety			
Housekeeping	Yes	No	Score
Is this salt storage facility kept free of debris/trash or equipment not related to snow and ice control?			
Does this facility have a fenced, walled or secured area where all recyclable materials are stored?			
Is solid waste generated at this facility, whether near the storage area or otherwise, contained for proper removal/disposal?			
Does this facility have a written procedure requiring that all salt and/or salt/abrasive mixtures spilled during loading or unloading operations are cleaned up and placed under cover before the end of each working day or at conclusion of a storm event?			
Does this facility have a written policy requiring cleanup of loading & spreading equipment after each snow/ice event?			
Does this storage facility have a written housekeeping policy?			
Maximum Total Points for Housekeeping	6		
Your Agency's Score for Housekeeping			
Environmental	Yes	No	Score
Does this facility comply with all zoning ordinances?			
Does this facility comply with all applicable building and sanitation codes?			
Is the primary storage pile covered by a rigid, roofed structure or a waterproof cover?			
Does this primary storage facility contain all salt and/or salt/abrasive mixtures?			
Is loading of spreader trucks done on asphalt, concrete, or another type of impervious pad?			
Does this storage facility have a written inspection program to periodically assure the integrity of the pad, lighting, structure or other items?			
Is runoff of salt brine from this storage facility controlled on property owned by the agency or collected for disposal in accordance with applicable permits?			
Is this facility free of any environmental violation within the past year?			
Does this facility have a written policy for disposal of wash water from trucks and spreaders?			
Maximum Total Points for Environmental	9		
Your Agency's Score for Environmental			
Maximum Total Score for Salt Storage Section:	24		
Combined Total Score for Maintenance and Storage Sections:			
Eligible for Award?			

Disclaimer: The information contained in this publication is intended as general information only. It does not constitute business advice or attempt to establish industry best practices or guidelines, nor should it be relied upon as a substitute for the advice of professionals and experts that readers should consult with directly. The Salt Institute and its officers, personnel, agents, CEO Council and members disclaim any and all liability for any harm, injury or damages whatsoever (including, without limitation, direct, indirect, consequential, incidental, or punitive) arising out of the use of, or inability to use, any of the information in this publication or the materials, information, or procedures or referenced therein. Readers should use their own independent judgment, with the assistance of professionals and experts when appropriate, to determine the practices and procedures that they decide to follow in their ordinary course of business.