

# [Snowstorm case study](https://assignbuster.com/snowstorm-case-study/)

Snow and Ice Control Procedures for Airports Control of snow and Ice in airports is important because it determines the efficiency with which an airport will serve its clients. Without proper methods for controlling snow and ice, an airport may end up being extremely inefficient by causing unnecessary and preventable delays to its clients or it may present potentially unsafe travel conditions for its customers. Having proper laid out procedures for handling snowstorms is, therefore, necessary for these two reasons; safety and efficient travel conditions for clients. The paper gives a possible workable plan that can be used by airport supervisors to mitigate the effects of snowstorms.
Every airport should have safety as the priority when conducting its operations. An important first step to doing this is by ensuring that all equipment that is to be used in snow and ice control are calibrated properly, updated, and certified as required at all time. The supervisor, mechanics, and equipment operators should inspect equipment at all times to ensure that the airport is in a position to deal with a snowstorm (Zhang, Debendra, and Rorik, 13). The supervisor needs to ensure that the required automotive fluids, parts used for replacement, and equipment are inventoried and stocked as is required as a pre-emptive move towards preventing a crisis in the event of a snowstorm.
It is important to ensure that personnel notification procedures are up to date at all times. The supervisor should, therefore, review the call-out procedures for personnel preceding winter. The supervisor can do this by overseeing the updating of the cell phone numbers and other contacts of personnel involved in snow and ice control.
Weather forecasting is of utmost importance to an airport because it is invaluable when it comes to scheduling of flights and the snow crew. The supervisor should, therefore, ensure that the airport contracts aviation weather services so that it is prepared in case of a snowstorm. In addition to contracted forecasting services, the airport should make use of the local weather service forecast and the runway surface condition sensor system. Forecasting information from these avenues is useful in scheduling of on-duty and off-duty snow crew personnel. The forecasting information can also be used for preparation of necessary equipment in snow and ice control procedures and the restocking of anti-icing or deicing materials.
One way to ensure that snow and ice do not accumulate and cause a nuisance in the airport is by sweeping or plowing accumulations of the runway. The snow and ice control crew is responsible for sweeping residual contaminants from runway surfaces which may be left by snow plowing for the purposes of avoiding an uneven runway. One efficient way of controlling snow and ice accumulations is by de-icing swept pavement surfaces in order to remove ice and snow glazing before new accumulations occur (Hejazi, Sobolev, and Nosonovsky, 2013).
In conclusion, having a workable snow and ice control plan is important for an airport since it not only ensures efficiency of service provision but also ensures the safety of clients. Weather forecast information is invaluable to airports since helps the airport to be prepared for imminent adverse weather changes such as snowstorms. Making pre-emptive plans towards dealing with snowstorms gives an airport a better chance of successfully dealing with the problem. The perfect weapon that an airport supervisor can use against the detrimental effects of snowstorms is an efficient snow and ice control crew armed with state of the art equipment. Snowstorms are, therefore, manageable but only if an airport is sufficiently prepared.
Reference List
Hejazi, V., Sobolev, K. and Nosonovsky, M. " From superhydrophobicity to icephobicity: forces and interaction analysis". Scientific Reports, 3 (2013): 2194-2199. Print.
Zhang, Jing, Debendra, Das and Rorik, Peterson. “ Selection of Effective and Efficient Snow Removal and Ice Control Technologies for Cold Region Bridges”. Civil, Environmental, and Architectural Engineering, 3(1) (2009): 1-14. Print.