

Case: Regional Airport uses snowfall hedges to cap seasonal snow removal expense

A regional airport in the snow belt struggles in seasons when snowfall exceeds the average. The class II airport has adequate snow removal equipment, having taken advantage of an FAA Airport Improvement Grant that covered 95% of the cost of new snow removal equipment. However, the airport covers the full cost of snow removal labor, fuel and deicing chemicals. Inevitably, major snowfalls result in significant overtime pay in order to keep the runways operational. Simply deferring the snow removal until the next day or days is not an option. Federal Aviation Requirements Part 139 (Certification of Airports) outlines specific performance thresholds for snow removal. The airport's executive director also realizes that sustaining good snow removal performance is also critical to retaining the airport's current users, who seek to minimize flight delays and cancellations

First and foremost, timely snow removal is a safety matter for the airport. It is imperative that snow be removed such that all air carrier aircraft propellers, engine pods, rotors, and wing tips clear any snow drift and snow bank as the aircraft's landing gear traverses any portion of the primary instrument runway, one of two principal taxiways to the ramp area. Moreover, snow and ice had to be managed sufficiently to minimize engine ingestion. Getting the job done quickly minimizes the amount of time a snow removal crew is exposed to unsafe conditions. Aircraft have been known to still land even when the runway was officially closed.

The airport received funding from local government to make up the difference between revenues and expenses. Sustaining the airport was considered to be a good investment in the regional economy, however, funding the airport's snow removal budget overruns was problematic because they occurred simultaneous with the local government's own snow removal budget overruns. The airport's executive director eventually found the solution to this problem with a snowfall hedge. Not only did the snowfall solution put an end to budget concerns about snow removal, the hedge payout allowed the airport to hire outside contractors for overnight removal and hauling of snow banks that began to build.

The airport experienced the benefit of the snowfall hedge during the 2010-11 season when total snowfall exceeded the average by 21". The hedge almost completely offset the above average snow removal expense, effectively capping the airport's seasonal snow removal expense.

Exhibit A: Snow Removal Figures for the 2010-11 Season

Snow removal expense in an average season	\$	420,995
Seasonal average snowfall		38"
Actual seasonal snowfall		59.1"
Seasonal snowfall in excess of average		21.1"
Actual seasonal snow removal expense	\$	556,544
Cost of snowfall hedge	\$	75,779
Snowfall hedge payout	\$	188,340
Seasonal snow removal cost after hedge payout	\$	443,983