

## Case: Municipality uses snowfall hedges to ensure snow removal costs don't exceed the budget

A municipality in the snow belt operates on a very tight budget with minimal reserves to accommodate higher snow removal costs that occur in seasons with above average snowfall. In the past, the municipality's superintendent of public works was able to offset higher than expected snow removal cost with cutbacks elsewhere, such as pothole and other road repairs, landscape maintenance, and other infrastructure repairs. However, the combination of higher pension funding requirements and taxpayer resistance to rate increases resulted in meaningful trimming across all areas of the municipalities budget, the public works budget being no exception. State law did allow municipalities to forward deficits in their snow removal budgets to the following year, but both the treasurer and mayor feared the deep financial hole that would result from consecutive years of above average snowfall. Arbitrarily raising the snow removal budget to cover above average snowfall wasn't an option either because state law prohibits cities and towns from reducing their snow removal budgets from one year to the next. The municipal council proposed managing the variability in seasonal snow removal expenses by deferring snow removal equipment replacement to years with below average snow, but this proved challenging. The superintendent observed that aging equipment tended to experience fatal failure in big snow years when the equipment was subject to greater use and stress levels. The need to immediately replace failed equipment or rent replacement equipment further exacerbated budget overruns resulting from above average snow.

Ultimately, the municipality eliminated the disruptive effect on their budget resulting from above average seasonal snowfall with a snowfall hedge. Everyone loved the snow removal expense hedge. The treasurer no longer had scramble to find emergency funding to cover above average snow removal expenses. The mayor and council members no longer experienced unforeseen budget deficits and the need to explain them to taxpayers. Instead of constantly juggling initiatives to meet budget, the superintendent was able to devote his focus to a longer term, more cost effective approach to meeting the achieving the municipality's public works objectives and service levels.

The benefit of the snowfall hedge was evident to all municipality stakeholders during the 2010-11 season when total snowfall exceeded the average by 17". The hedge almost completely offset the above average snow removal expense, effectively capping the municipality's seasonal snow removal expense.

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

Snow removal expense in an average season	\$	741,752
Seasonal average snowfall		38"
Actual seasonal snowfall		55.3"
Seasonal snowfall in excess of average		17.3"
Actual seasonal snow removal expense	\$	971,500
Cost of snowfall hedge	\$	133,515
Snowfall hedge payout	\$	331,837
Seasonal snow removal cost after hedge payout	\$	773,179