



Analyzing Costs Associated with Winter Storms

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NASBO has recently received several inquiries regarding the impact of winter storms on state budgets. Because natural disasters and winter storms are unpredictable, they can lead to unexpected costs and impacts on state and local budgets. This issue brief summarizes some of the issues to examine when trying to determine the costs of winter storms on state and local budgets. NASBO will continue to share information and identify best practices when dealing with natural disasters and winter storms.

Massive snow storms have impacted large regions of the U.S.

Many states and cities have recently faced extreme winter weather with storms having dumped record snowfall totals. For example, in early February, a major storm system affected 30 states and dumped a near-record 20 inches of snow in Chicago and covered some areas in Oklahoma with as much as 21 inches of snow.

Thirty-two states and their cities have already surpassed annual snowfall totals for the year. For instance, New York City and Boston average 12.0 and 20.2 inches of snowfall per year respectively. New York City and Boston have more than tripled their averages with 57.7 and 70.7 inches of snowfall so far this year¹. Even states that are rarely affected by snow, such as those in the Southeast region, have had record snowfalls. Georgia, South Carolina, and North Carolina have more than doubled their annual snowfall totals this winter².

Record snowfall places extra burdens on state and local budgets

Winter storms have both direct and indirect cost burdens on state and local governments. Costs increase dramatically during years with worse than average weather. These major winter storms have come at a time when state and local governments already face fiscal pressures on their budgets. Recent fiscal information gathered by NASBO has found that while there is some improvement in revenue growth, resources for states and localities will remain tight.

The most common direct costs are snowplow driver overtime wages and supplies of salt. Salt expenditures are an important and costly resource for snow removal services. According to Bret Hodne, a public works director in Iowa, the price of salt has doubled from \$30 to \$60 a ton over the last four years³. The total usage of salt varies among governments. Missouri used 20,000 tons of salt, which cost \$1.2 million, during its recent snow storm this year⁴.

¹ Data from The Weather Channel, "2010 and 2011 Winter Seasonal Snow Totals" http://www.weather.com/outlook/weather-news/news/articles/winter-seasonal-snow-totals_2011-02-04

² Ibid

³ Karen Pierog and Lisa Lambert, "'Stormageddon' latest pain for city and state budgets", Reuters, Feb. 3, 2011

⁴ Duplantier, W, "Nixon orders MoDOT to help plow local roads", Columbia Missourian, Feb. 5, 2011

Winter storms can also have indirect adverse effects on state and local economies. A study commissioned by the American Highway Users Alliance examined the effect of major snow storms on state governments and businesses. The study provided cost estimates for sixteen states and found that some state economies can lose between \$300 and \$700 million for one-day shutdowns due to winter storms⁵. In addition, state governments can lose tax revenue. For example, Maryland could expect to lose \$9.8 million in state and local taxes for a one-day shutdown⁶.

Snow removal budgets and the impact on other government spending

Tennessee, North Carolina, South Carolina, Alabama, and Virginia have exhausted or have come close to exhausting their snow removal budgets this year. For example, Tennessee has spent \$25 million statewide on snow removal this year, which is \$10.2 million more than their budget.

Major cities have also run out of money for snow removal. The late December storm that dumped 20 inches of snow in New York City and closed their airports for days cost the city \$1 million for every inch of snow. New York City has spent its entire \$38.8 million snow removal budget as a result of this storm and other preceding winter storms this year⁷.

For many of these states and cities, this is the second year in a row where they may go over their snow removal budget. For example, Virginia budgeted \$93.7 million and \$115.1 million for snow removal costs in 2009-2010 and 2010-2011. Virginia spent \$266.8 million in 2009-2010 and has already spent \$107.7 million in 2010-2011⁸.

Despite snow removal budgets being depleted, this does not necessarily mean state and local governments do not have ways to cover the costs of additional winter storms. Some governments are allowed to forward snow removal budget deficits to the next year⁹. The governments that have had two years of snow removal budget deficits will have a difficult time meeting this fiscal challenge. In addition, in most instances they will have to find other items in their budget to cut in order to pay for these deficits. Missouri Department of Transportation spokeswoman Sally Oxenhandler stated that her department will likely have to cut annual road maintenance to pay for the snow removal costs this year¹⁰.

Further Background: State and local government responsibilities in snow removal

Local governments play a primary role in snow removal services; however, state governments have an important role as well. Most state transportation departments are responsible for plowing major highways and interstates. During major snow occurrences, the state transportation department may also assist local towns and cities with plowing local roads, especially for small towns. After 21 inches fell in Missouri on February 2nd, Governor Jay Nixon asked the state transportation department to assist local communities with plowing local roads¹¹. In these situations, state transportation departments will either seek extra funds from the state legislature, Governor or ask for assistance from the federal government to reimburse them for these extra costs.

⁵ "The economic costs of disruption from a snowstorm," *American Highway Users Alliance*, 2010

⁶ American Highway Users Alliance, 2010, p.6

⁷ Karen Pierog and Lisa Lambert, " 'Stormageddon' latest pain for city and state budgets", Reuters, Feb. 3, 2011

⁸ "States are blowing budgets as well as snow", USA Today, Feb. 5, 2011

⁹ "Snow plowing taking toll on Mass., local budgets", Boston Globe, Jan. 31, 2011

¹⁰ Duplantier, W, "Nixon orders MoDOT to help plow local roads", Columbia Missourian, Feb. 5, 2011

¹¹ Duplaniter, 2011

In addition, state governments play an important role in public safety during storms. Heavy snow storms increases the likelihood of car accidents and other safety concerns. This requires extra state and highway patrol officers. During its February 2nd snow storm, the Illinois Department of Transportation indicated that there were more than 4,000 stranded drivers and 270 car accidents across Illinois. The Illinois Department of National Resources “activated 50 conservation police officers, who used more than 50 ATVs and snowmobiles to help those who were stuck.”¹²

Another important tool for a state government is the ability to declare state of emergencies and call up the National Guard for support. For example, Southeastern states have activated the National Guard four times this winter,¹³ and six governors called up a total of 1,110 National Guard members during the February 2nd snow storm.¹⁴

In most cases, the declaration of a state emergency allows a state to expedite emergency funding and resources. In addition, calling up the National Guard provides extra resources including soldiers, multipurpose wheeled vehicles, and other valuable equipment. The National Guard prepares for these situations and has predetermined coordination and support plans developed.

State and local governments can seek assistance from the federal government

The federal government through its Federal Emergency Management Agency (FEMA) may also provide resources to state and local governments for major snow storm costs. State and local governments must qualify for funding based on criteria developed by FEMA. One criterion requires that the snowfall total in a county must be at least “90% of the county’s all time, single-storm snowfall record”¹⁵. The criteria make this assistance rare, but there has been federal assistance allocated recently. Last year, Virginia received \$45.7 million from FEMA during its record breaking snow storms. Many state and local governments have already indicated that they will seek federal assistance. For more information about FEMA and its policies, please read the full version of their [snow assistance policy](#).

Conclusion

Recent winter storm related costs are placing added pressure on state and local government budgets which have already been weakened due to the recent recession. In most situations, local governments primarily pay for snow removal costs; however, due to unusual snowfalls in many states, state transportation departments have also contributed funding for local snow removal costs. Facing tough fiscal demands, many state governments have already indicated that they will seek federal government assistance and others may be forced to as the winter progresses.

If you would like additional information, please contact Scott Pattison (spattison@nasbo.org or 202-624-8804) or Brian Sigriz (bsigriz@nasbo.org or 202-624-8439).

¹² “Quinn says state tallying blizzard costs to apply for federal aid” Chicago Tribune, Feb. 4, 2011

¹³ “National guard prepares for southeast winter storm support”, John Orrell, National Guard News, Jan. 10, 2011

¹⁴ “National guard responds to winter storm”, John Orrell, National Guard News, Feb. 2, 2011

¹⁵ “FEMA money possible on the way for area snow costs”, Maribeth Conway, Feb. 9, 2011