

REPORT ON SNOW & ICE CONTROL COSTS

Staff has been asked to review snow & ice control costs for this past mild winter compared to previous winters. It is important to note that winter seasons generally run from about November 1 to March 30 for our Department but the annual budget for the City covers the calendar year from January 1 to December 31. Expenses for any winter season are reflected in two budget periods for the City. Our comparison will be from winter season to winter season with comments provided on the impact to the 2012 budget.

During the winter there are several cost items that make up the majority of the costs for our snow & ice control efforts. For purposes of this exercise we will address the following parameters:

Overtime	Temporary Salaries
Road Salt	Calcium Chloride
Traction Sand	Towing
Outside Contractors	

Overtime

During the winter in response to storm events the Public Works Department staff are paid their direct salaries regardless of the work assigned and we do not track their straight time based on their assignment. We do track overtime expenses as they relate to snow events and for the past 4 winters the overtime is as noted below for the period each year from November 1 of one year to March 30 the following year.

2008-2009 winter season	\$284,564.43
2009-2010 winter season	\$273,223.20
2010-2011 winter season	\$384,403.37
2011-2012 winter season	\$ 57,378.21

The 2012 budget for the Department includes overtime for the Streets, Sewers & Forestry Division amounting to about \$277,800. Only \$57,378.21 has been spent so far but the 2012 budget also needs to cover any snow related overtime in November and December. It is hard to predict what will happen but one needs to remember the snow storm of December 1, 2006 or the ice storm of December 19, 2009 before we can say we have a lot of "extra" money that can be used elsewhere.

Temporary Help

During the winter the Department needs to supplement the field staff to provide enough drivers to cover the Snow Routes, Hill Routes and Loader assignments for each event. Since there is not enough full time staff available to cover all assignments, temporary employees are hired. We have continued to hire about 22-25 temporary staff each winter season. During their term of employment as temporary staff they work a full week or so in November to complete training and then are guaranteed only two days of work per week. If it snow they work more but it has generally average to about three days of work per week. In 2008-2009 we guaranteed three days per week but lowered this to two days for the 2009-2010 winter season. During any times when snow is not involved the temporary workers along with our full-time staff provide other services to the community. We assign crews to patch pot holes, perform minor maintenance activities and most

frequently we assign crews to trim trees throughout the City that we cannot get to during the summer and fall. This past winter we did a lot of tree trimming. The costs for temporary workers in each of the past four winters are shown below.

2008-2009 winter season	\$401,895.78
2009-2010 winter season	\$264,546.81
2010-2011 winter season	\$274,282.81
2011-2012 winter season	\$259,286.56

The change from 2008-2009 is the result of the reduction in work days from three to two for temporary workers.

Road Salt

The City uses the State contract for the annual contract for the purchase of road salt. Under this contract the City needs to submit our request for an annual allocation under the contract and we are obligated to buy a minimum amount below our request and the price is only guaranteed for a maximum amount above our allocation. The Department adjusts this amount each year depending on the supply on hand and the expectation for winter needs. We also consider the potential for the price change and may order more in advance of the new contract if pricing is going up or delay purchases if pricing is going down. Shown below is the amount of road salt we used, the amount we have purchased the cost associated with the purchases.

	<u>Tons Used</u>	<u>Tons Purchased</u>	<u>Cost</u>
2008-2009 winter season	7,562 tons	12,474 tons	\$593,014
2009-2010 winter season	6,832 tons	8,024 tons	\$445,492
2010-2011 winter season	6,448 tons	6,400 tons	\$355,328
2011-2012 winter season	2,808 tons	6,400 tons	\$362,368

A few comments are in order to explain these figures. In 2008-2009 we purchased more road salt than usual as we were restocking our supply due to the shortages we experienced in the previous winter season when we, as did many other agencies, almost ran out of road salt. The harsh winter demanded the use of high amounts of salt which depleted regional supplies. In this past winter we only used 896 tons of road salt but under our contract through the State we are obligated to buy a minimum of 6,400 tons. So far this winter season we have only purchases 2,808 tons but we will still need to complete our order. The figures above reflect this full purchase. The amount the City requests for the following winter will be reduced and a one year reduction in the line item for road salt should be possible in the 2013 budget.

The 2012 budget for road salt, which also includes the costs for Calcium Chloride is set at \$562,500. It would appear that there will be no additional purchases of road salt in 2012 above our minimum order and only a few more purchases of Calcium Chloride so total expenses could be kept to about \$375,000 which would be a savings from the budget of about \$187,000.

For reference staff has worked hard to reduce the use of salt over the years and we have been fairly constant in what has been used, even with the variable winters, from 2008 to 2011. In the 2006-2007 winter the City used 14,061 tons of salt in the 2007-2008 winter we used 16,172 tons. Our efforts to conserve the use of salt and still provide adequate service to the community has been

significant. By reducing salt use by about 7,000 with prices near \$60 per ton this relates to a savings due to the changes in our operations of about \$420,000 annually.

Calcium Chloride

Calcium chloride is used to wet road salt to extend its effectiveness in colder temperatures. The City purchases this material by the gallon and purchases are made as needed throughout the winter. We have purchased the following amounts of Calcium Chloride and spent the following amounts for the past four winters.

2008-2009 winter season	17,537 gallons	\$11,199
2009-2010 winter season	30,630 gallons	\$20,101
2010-2011 winter season	13,272 gallons	\$ 8,437
2011-2012 winter season	8,523 gallons	\$ 5,444

Traction Sand

The City began using traction sand mixed into our road salt in the winter of 2008-2009 to extend salt use due to shortages of road salt in the Midwest. We continued using traction sand to help offset higher road salt costs during the following winter seasons. The roads mix used included about two parts road salt and one part traction sand. In the 2007-2008 winter road salt was priced near \$39 per ton and in the following winter when supplies were scarce we paid as much as \$96 per ton for road salt. For the past few years the price has settled to between \$56 and \$60 per ton. We have purchased the following amounts of Traction Sand and spent the following amounts for the past four winters.

2008-2009 winter season	2,188 tons	\$21,723
2009-2010 winter season	1,325 tons	\$13,578
2010-2011 winter season	1,900 tons	\$19,694
2011-2012 winter season	583 tons	\$ 6,299

Towing

When weather conditions are severe the City will need to move cars to help with plowing operations. This is not a practice used often during the winter season and in fact in the last four winters it was only implemented during the blizzard in February 2011. The only expenses related to towing were during the 2010-2011 winter and they amounted to \$1,150.00.

Outside Contractors

For the past several years the City has relied on outside contractors to help with plowing in various areas of the City. We do not call in these contractors until we go into a full plowing event (more than 2" of snow) and they usually focus on residential street plowing. During the blizzard we called in any contractor with large equipment we could find to help keep streets open during this major snow event. Costs in 2010-2011 were significantly higher than in other years. The City did submit for reimbursement for snow costs during this declared emergency and identified costs of about \$290,448 attributed to the event. Under IEMA policy we did receive 75% reimbursement in the amount of \$217,836.49 to offset our expenses for this storm event. Most of the reimbursement was for equipment rental & contractor costs but some was reimbursed to cover overtime and other storm related expenses. The costs for this additional contractor assistance are shown below for each winter season.

2008-2009 winter season	\$ 13,397
2009-2010 winter season	\$ 36,034
2010-2011 winter season	\$279,903
2011-2012 winter season	\$ 17,324

During this past winter contractors were only called in for one storm event.

Summary

The attached table provides a summary of the costs related to snow & Ice control for the past four winters. There are some other small costs but the ones we have identified are the most significant costs related to snow events. The costs being compared are for the comparable winter period from November of one year to March of the next year and do not necessarily reflect the impact on the operating budget which is based on a calendar year. As can be seen in the table our comparable costs for this past winter run between \$345,000 (2009-2010) to \$617,700 (2008-2009) less than previous winters. The final impact on the 2012 budget will not be determined until we see what winter in November and December holds for the City. During the December 1, 2006 event we used almost 5,000 tons of road salt during the five days recovering from that event and spent about \$203,000 for contractor assistance.