

Memorandum

City of Lawrence

Public Works

TO: Chuck Soules
FROM: Mark Thiel
CC: Tom Orzulak, Dave Wagner, Mark Hecker, Steve Bennett
Date: 2/28/2013
RE: **Snow Operations – update 2012 / 2013 (revised 3/4/13)**

The 2012 / 2013 snow season started out mild but February 2013 proved to catch us up to normal snow numbers over a 7 day period with two major events. From 2/21/13 to 2/28/13 we recorded 17.6" of snow. The typical snow fall numbers for our region are 21" of snow over an entire season.

So far this year we have had 6 snow events, recorded 22.6" of snow and spent \$317,512.84 internally. During these last two events our private partners contributed to the cleanup effort significantly. We have estimated the cost at approximately \$70,000.

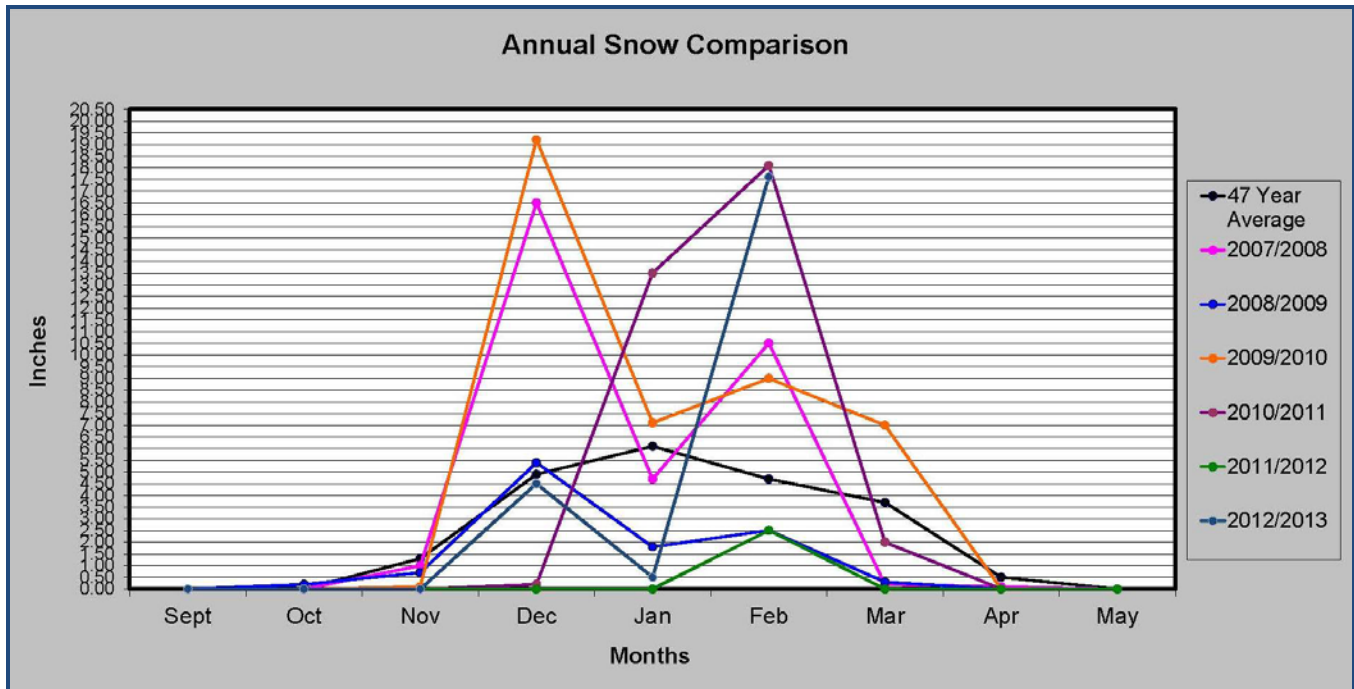
The addition of pretreating roadways with salt-brine prior to snow events significantly reduced the total amount of clean up time for the last two events.

2012 / 2013 Snow Event Tracking Summary Report										
<i>Event</i>	<i>Dates</i>	<i>Days</i>	<i>Snow Accumulation Inches</i>	<i>Man-Hours</i>	<i>Equipment</i>	<i>Sand Tons</i>	<i>Salt Tons</i>	<i>Brine Gallons</i>	<i>Materials Total</i>	<i>Total Cost</i>
1	12/19 to 12/20	2	2.30	\$ 19,247.80	\$ 5,856.00	210.00	496.10	0.00	\$ 27,109.92	\$ 52,213.72
2	12/31 to 1/1	2	2.20	\$ 10,862.68	\$ 7,118.00	462.50	758.60	5,645.00	\$ 45,720.23	\$ 63,700.91
3	1/12/2013	1	0.00	\$ 3,834.79	\$ 252.00	0.00	0.00	8,200.00	\$ 574.00	\$ 4,660.79
4	1/30/2013	1	0.50	\$ 6,176.08	\$ 2,160.00	24.75	241.75	790.00	\$ 11,133.54	\$ 19,469.62
5*	2/21/2013 to 2/25/2013	5	10.60	\$ 45,543.47	\$ 18,593.00	386.35	544.98	33,175.00	\$ 36,353.29	\$ 100,489.76
6*	2/25/2013 to 2/28/2013	4	7.00	\$ 28,189.75	\$ 13,400.00	418.25	552.25	2,435.00	\$ 35,388.29	\$ 76,978.04
										\$ -
*	does not include contracted labor and equipment.									\$ -
										\$ -
	Totals	15	22.6	\$ 113,854.57	\$ 47,379.00	1,501.85	2,593.68	50,245.00	\$ 156,279.27	\$ 317,512.84

Past Year Comparison

Season	Days Worked	Inches of Snow	Cost
2008 / 2009	20	10.6	\$300,062.84
2009 / 2010	37	42.45	\$700,312.94
2010 / 2011	27	33.8	\$625,670.04
2011 / 2012	9	2.5	\$95,608.05
2012 / 2013*	15	22.6	\$317,512.84

*is not a complete year and does not include contracted labor or equipment



During the last two snow events the Public Works Department partnered with the Utility Department, Park & Recreation Department and private contractors to assist with cleanup of the 17 plus inches of snow. That is a staggering 77.6 million cubic feet of snow of which 270,000 cubic feet had to be hauled from downtown, intersections and cul-de-sac's. That would be equivalent to filling KU's Naismith court with snow 57.5 feet deep.

In addition to the great work done to clear streets, our Facility Division did an excellent job clearing snow from around city facilities, two parking garages and the municipal airport.

Crews worked around the clock from midnight February 20th to noon on February 28th. They are to be complimented on their professionalism and dedication to the community. Through their efforts arterials remained open through the entire time line of these two events. And in most cases complete access to all streets was accomplished within 24 to 36 hours.

Operational Issues

Each year and each event bring its own set of challenges for the successful operations of snow and ice treatment. Some reoccurring issues that our operations face:

- Stranded or stuck cars on roads
- Parked cars on high use roads
- Accumulation of snow in cul-de-sacs and downtown (access for owners and emergencies)
- Obstructions in the right of way (basketball goals, cars, low hanging tree branches)
- Locations to haul snow
- Snow wind rows on sidewalks and driveways
- Only having two operational hubs – timing and fuel use
- Varying radio frequencies from department to department (we can't talk to each other)

- Private contractors pushing snow onto public streets

Unique to this last snow event was that it fell on a county Election Day. We worked closely with Douglas County to insure access to polling locations were open.

In summary, the City of Lawrence emergency response personnel including Fire / Medical, Police, Public Works, Utilities, Parks & Recreation departments and others continue to provide outstanding level of service to the community regardless of the weather or situation.