

Franklin Department of Public Works

Snow & Ice Removal Program

Town Council Meeting November 29th, 2017

Robert Cantoreggi, Director

Carlos Rebelo, Highway and Grounds Superintendent

Snow Removal Priorities

1. Roadways
2. Public Buildings / Schools
3. Sidewalks

These priorities were established with cooperation of the School and Police Departments.

FY 2018

- * FY 2018 Approved Budget: \$953,500.00
- * \$398,200.00 for Salt

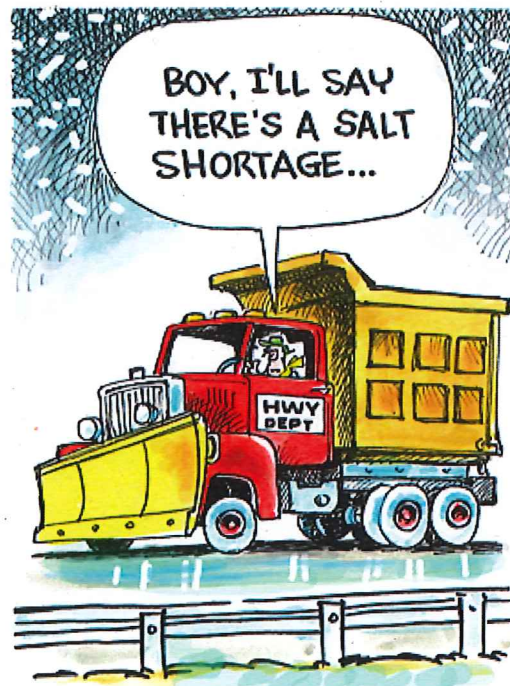
- * FY 2017 Costs
- * 19 Events. (61 Inches of snow)
- * \$1,031,928.00 Total
- * \$349,535.00 for Salt

Road Salting



Cost of Salt ???

- * 2008 = \$54.00 per ton
- * 2009 = \$70.20 per ton
- * 2010 = \$64.00 per ton
- * 2011 = \$47.50 per ton
- * 2012 = \$48.20 per ton
- * 2013 = \$47.20 per ton
- * 2014 = \$ 47.20 per ton
- * 2015 = \$ 59.98per ton
- * 2016 = \$ 65.80 per ton
- * 2017 = \$ 53.50per ton



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Mixing Rate

- 100% Salt*

*Special Circumstances



Mixing Rate Concerns:



Environmental Concerns:

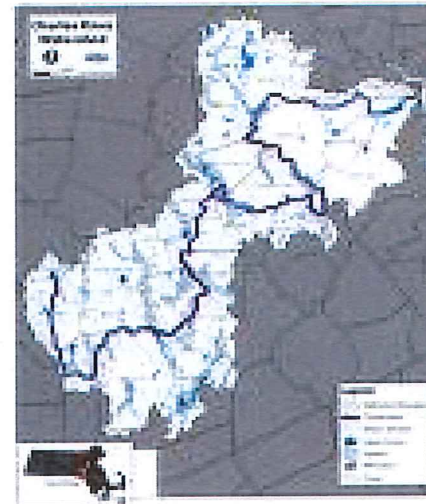
Rising Salt Levels in Water Supply

Well #3, Grove Street

D.E.P recommends < 20 ppm

- * 2000 17.4 ppm
- * 2008 43.8 ppm
- * 2012 59.7 ppm

Storm Water Run-off to Surface Water



“Five Truck Route”

VS.

“Treating the Whole Town”

Treating the Whole Town:

14 Sanders	
Twenty-one Employees	\$4620.00
400 Yards of Salt	\$25,200.00
Total:	\$ 29,820.00

“Five Truck Route“:

6 Sanders	
Seven Employees	\$1540.00
120 Yards of Salt	\$6300.00
Total:	\$ 7,840.00



Plowing



35 pieces of DPW
Equipment
“On Road” at one
time

D.P.W.
Employees Cost
\$1300.00 per
hour.



80 pieces of
hired
equipment

Contractors
Cost
\$7500.00 per
hour!



Cost Estimate of 6 Inch Storm

	<u>Cost</u>
Pre-Treat Town:	\$30K
Plow for 8 hours:	\$70K
Salting Town After:	\$30K

Total Cost:

\$130,000.00

Sidewalks



Challenges

- * Over 35 miles of sidewalks identified for snow removal operations.
 1. School walking routes
 2. Downtown areas
 3. High traffic / speed routes

- * Mother Nature
 1. Timing of storm
 2. Length of storm
 3. Type of snow
 4. Amount of snow



Time to Clear Sidewalks

- * Less than six inches of snow, snow plows are used.

1 day

- * More than six inches of snow, snow blowers are used.

3-5 days





Student walking
in street

Recently
installed &
plowed sidewalk

Picture taken 12/22/2009 @ 2:30PM on Brook St.

Goals:

- * Be Prepared!
- * Respond with the appropriate resources in a timely manner.
- * Ensure that emergency vehicles can always respond during snow / ice events.
- * Provide safe passage of vehicles during snow fall.
- * Have all roadways cleared, i.e. showing some asphalt, less than one inch of snow and ice within 4 hours of the end of the storm.

Items That Can Effect Response

- * Timing of storm (day of week, hour of day)
- * Duration of storm
- * Amount and type of precipitation
- * Temperature during storm
- * Weather pattern: warm to cold or cold to warm
- * Frost in/on ground
- * Month of storm
- * Recent storm activity

Preparing For A Storm

- * Watch the weather
- * Equipment readiness
- * Availability of DPW personnel
- * Contact with other town departments
- * Contact contractors for equipment / personnel
- * Availability of supplies (Salt)
- * Training and after-action reviews...

Getting ready for the next one!!!

Pushing Snow into Roadway

TOWN BYLAWS: PEACE AND GOOD ORDER, CHAPTER 155-12 Deposit of Snow and Ice

- * No person shall plow, push, deposit, throw or pile snow or ice into or across any public street, sidewalk or property nor direct nor cause the same to be done unless in the employ of the Town.



Winter Storm Overnight Parking Ban

TOWN BYLAWS: ARTICLE X, 170-60 : The parking of any motor vehicle within the layout or right-of-way of any public street or any roadway open to the public is prohibited between the hours of 1:00 a.m. and 5:00 a.m. while a winter storm parking ban is in effect.



No Salt Available at DPW Yard

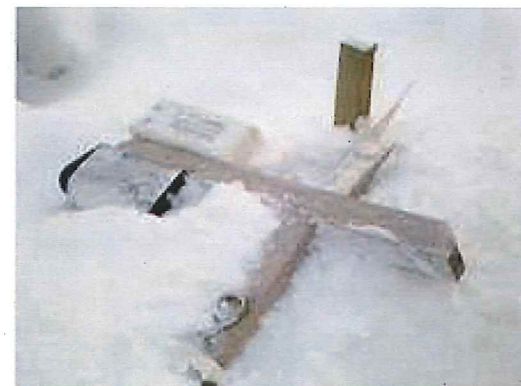
- * Safety of employees and residents
- * DEP regulations
- * Liability issues



Clear Fire Hydrants



Mailbox Policy



Basketball Hoops

**Not allowed in public
right-of-way**

**TOWN BYLAWS: PEACE AND
GOOD ORDER, CHAPTER 125-4**
Obstructing streets and
sidewalks



Top 10 Complaints:

1. Plows keep putting snow in my driveway right after I shovel
2. My street is not down to asphalt, but others are.
3. There is more snow on my side of the road than the other
4. The roadway is too narrow, there only enough room for one car
5. The snow banks are too high, I can't see on-coming traffic
6. You hit my mailbox, I can not get to my mailbox
7. I can't dig out / find the hydrant
8. You pushed snow up on my property
9. The plow trucks are driving like 40 miles per hour!
10. When is it going to stop snowing?

Think Spring!



Think Summer!

