# Franklin Department of Public Works Snow & Ice Removal Program

School Committee, December 12<sup>th</sup>, 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

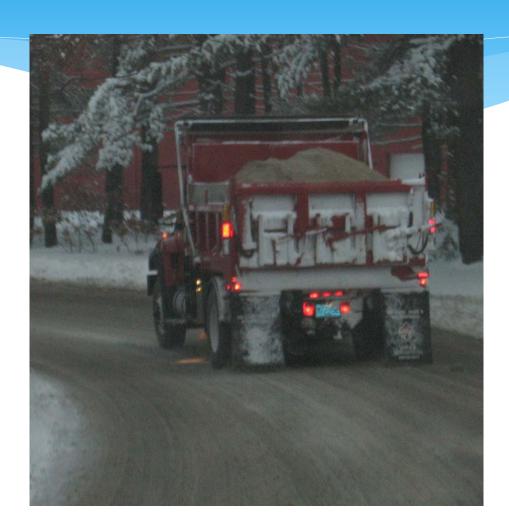
- \* FY 2017 Costs
- \* 19 Events. (61 Inches of snow)
- \* \$1,031,928.00 Total
- \* \$349,535.00 for Salt

# Road Salting



# Mixing Rate

• 100% Salt\*



\*Special Circumstances

#### "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

Pre-Treat Town: \$30K Plow for 8 hours: \$70K

Salting Town After: \$30K

Total Cost: \$130,000.00

Cost

# 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 then six inches of snow, snow plows are used.

1 day

\* More then six inches of snow, snow blowers are used.

**3-5 days** 







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 then 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



# 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:

- 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 then 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
- The plow trucks are driving like 40 miles per hour!
- 10. When is it going to stop snowing?

# Think Summer!

