



Snow/Ice Event Data Summary
2016-2017
(11/18/16 – 5/1/17)

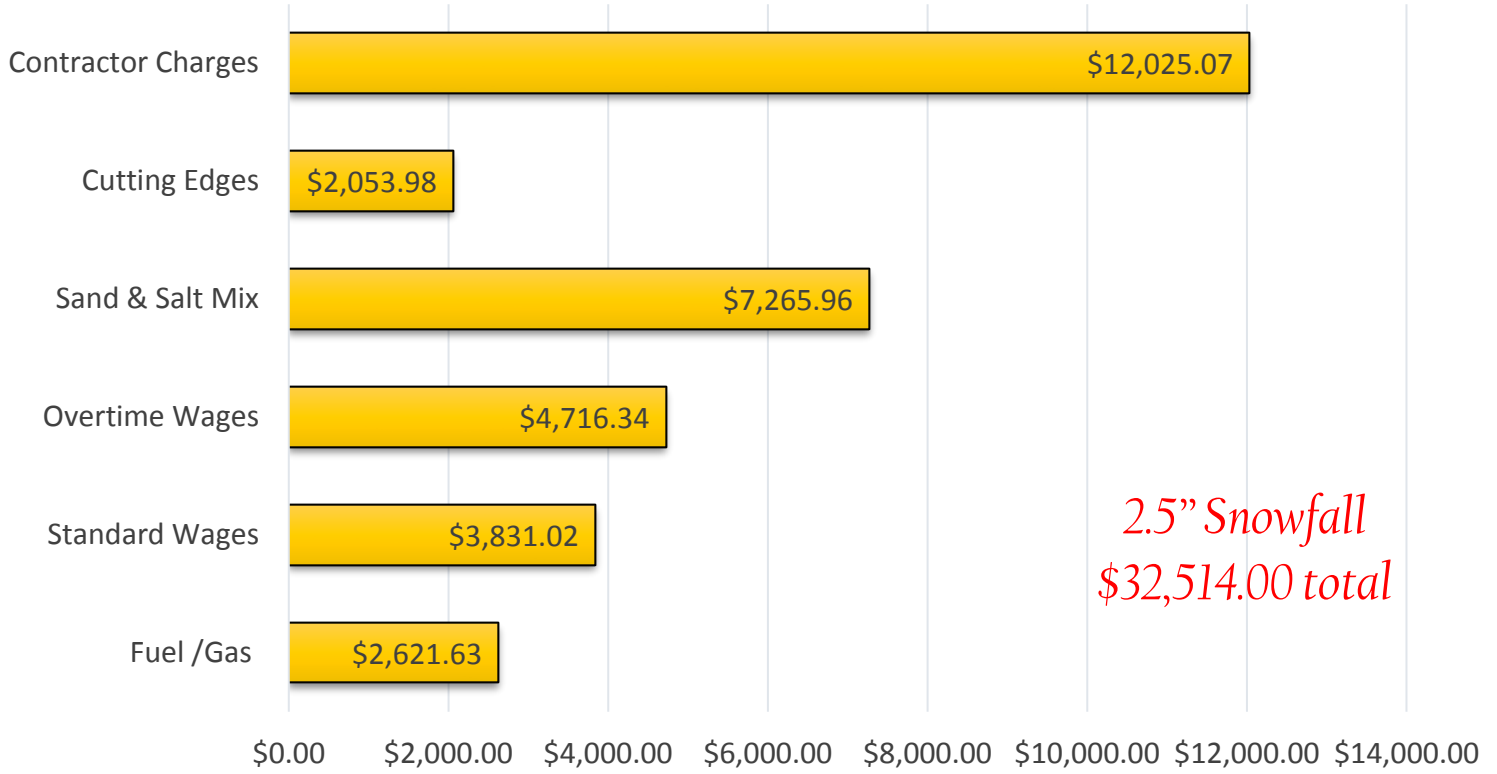
In this summary, you'll find collected data from the 2016-2017 (11/18/16 -5/1/17) snow/ice events. During snow/ice events we always go through the same motions. However, there are many variables that attribute to the fluctuation in cost for each event. These variables are listed (but not limited to) below. Keep in mind that some of these variables control the length of time it takes to clear all the city streets, parking lots, & alleys. Thus, creating extra cost.

- ✓ *Depth of Snow*
- ✓ *Density of Snow (Dry Fluffy or Wet)*
- ✓ *Staffing For Street Department (Illnesses or Vacation)*
 - ✓ *Contractor Availabilities*
- ✓ *Equipment Breakdowns*
- ✓ *Wind (Could Cause Re-Plowing)*
- ✓ *Days Of The Week – (Extra Cost For Working on Weekends and/or Holidays)*
- ✓ *Time Of The Year- (Snow Melts Faster When Closer to Spring)*
- ✓ *Brine Pre/Post Treatment (Liquid Deicing Before/During Snow Event)*
 - ✓ *Melts from Bottom Up. Reduces Snow To Haul*

Each event has been broken down into individual data sheets. You'll find the following information to be included for each event:

- *Total Overall Cost of All the Below Combined as well as broken down into individual costs*
 - *Total Contractor Charges*
 - *Total Cutting Edge Costs*
 - *Total Sand/Salt Mix Costs*
 - *Total Standard Wages*
 - *Total Overtime Wages*
 - *Total Fuel/Gas Costs*
- *Total Accumulation*
- *Temperatures Per Day*
- *All Pertinent Day Information Such As:*
 - *Days of the week the event occurred*
 - *If it was a holiday.*
 - *If the staff worked on the weekend. If so, what day(s)*
- *What time snow clearing began and ended*
- *The workforce ratio of hired contractors vs. street department staff*

Event #1 – 11/18/16 – 11/21/16



Days of the Week This Occurred: Friday – Monday

Was This A Holiday? No

Did The Staff Work The Weekend? Yes, Full Staff. Saturday Only

➤ Did not work on Sunday!!

Temps per Day:

Hi: 31 Lo: 25

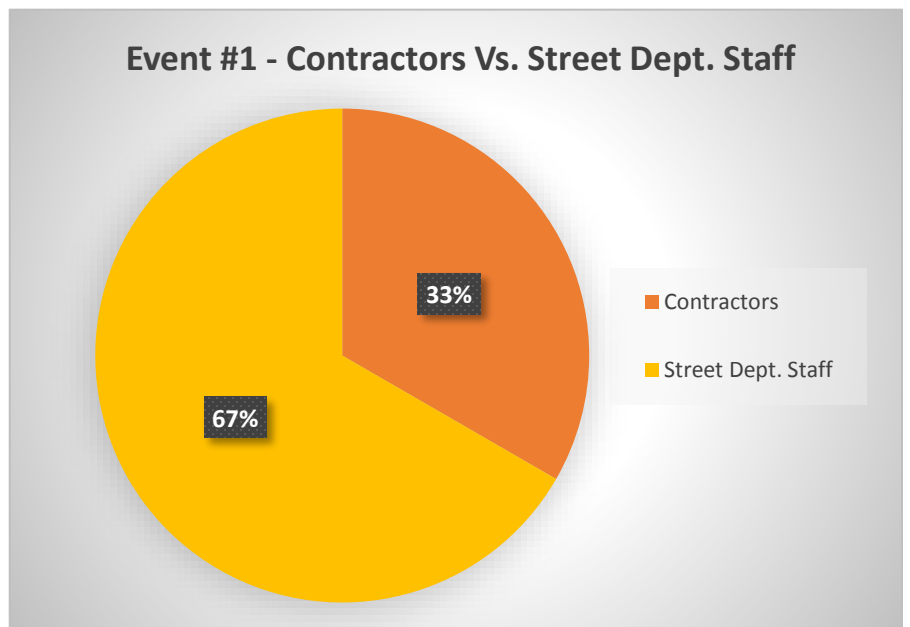
Hi: 27 Lo: 17

Hi: 31 Lo: 18

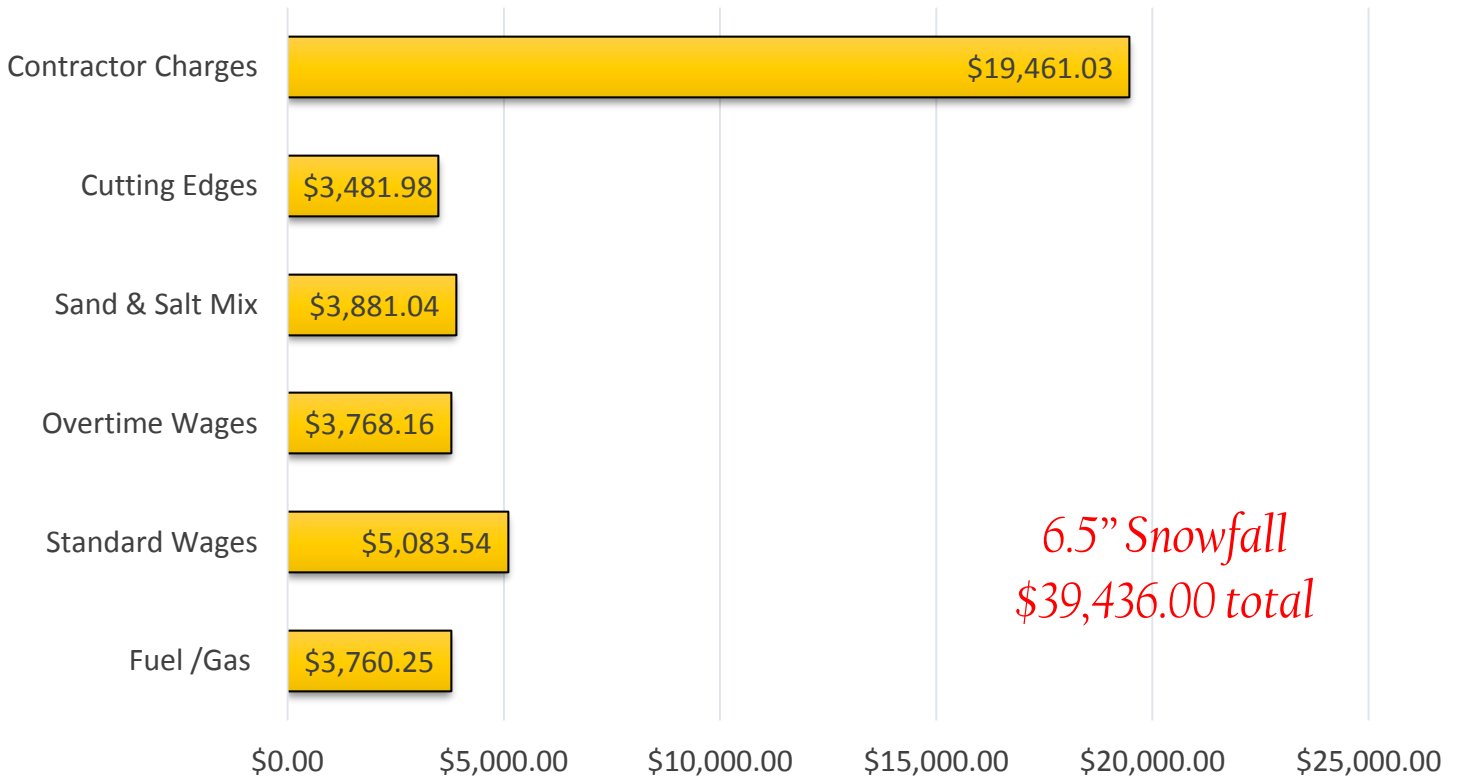
Hi: 37 Lo: 23

Started Cleanup: 1 PM-11/18/16

Completed Cleanup: 4 PM-11/21/16



Event #2 – 12/11/16 – 12/13/16



Days of the Week This Occurred: Sunday - Tuesday

Was This A Holiday? No

Did The Staff Work The Weekend? Yes, 5 on Saturday (a couple hours)

☺ All on Sunday

Temps per Day:

Hi: 13 Lo: -14

Hi: 6 Lo: -17

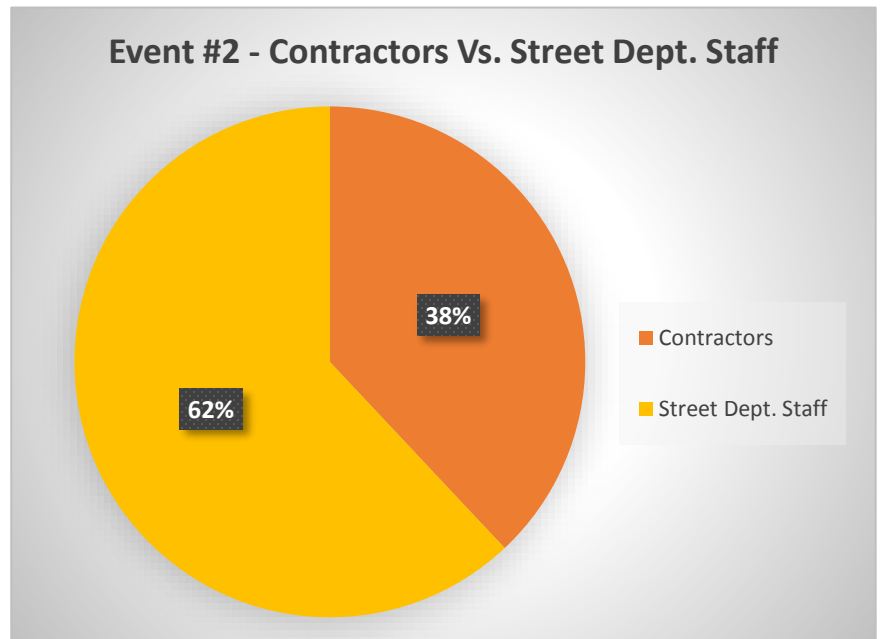
Hi: 11 Lo: -13

- Most of the Overtime Cost Was From Double Time on Sunday

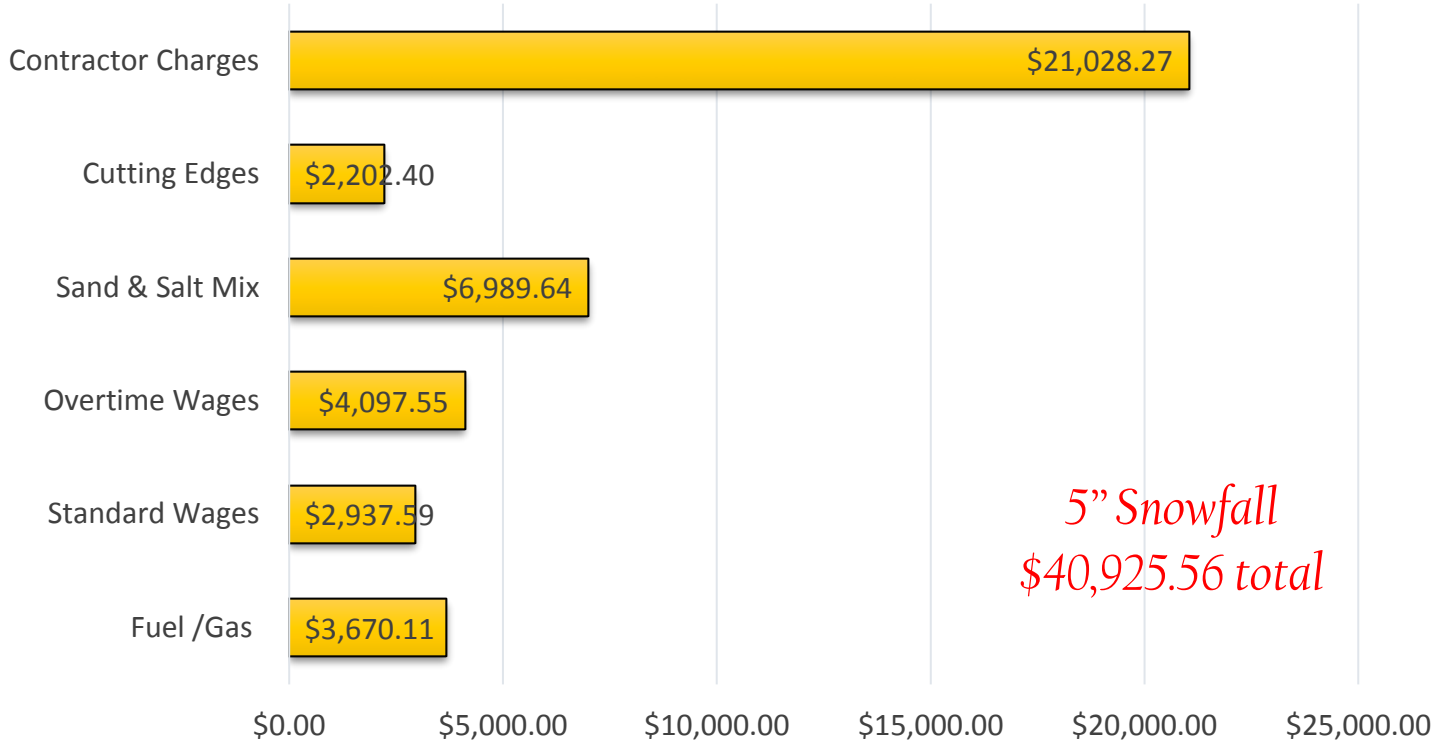
Started Cleanup: 3:30 AM-12/11/16

Completed Cleanup: 1:30 PM-12/13/16

58 Hours



Event #3 – 12/17/16 – 12/19/16



Days of the Week This Occurred: Saturday - Monday

Was This A Holiday? No

Did The Staff Work The Weekend? Yes, Full Staff. Saturday & Sunday

Temps per Day:

Hi: -1 Lo: -29

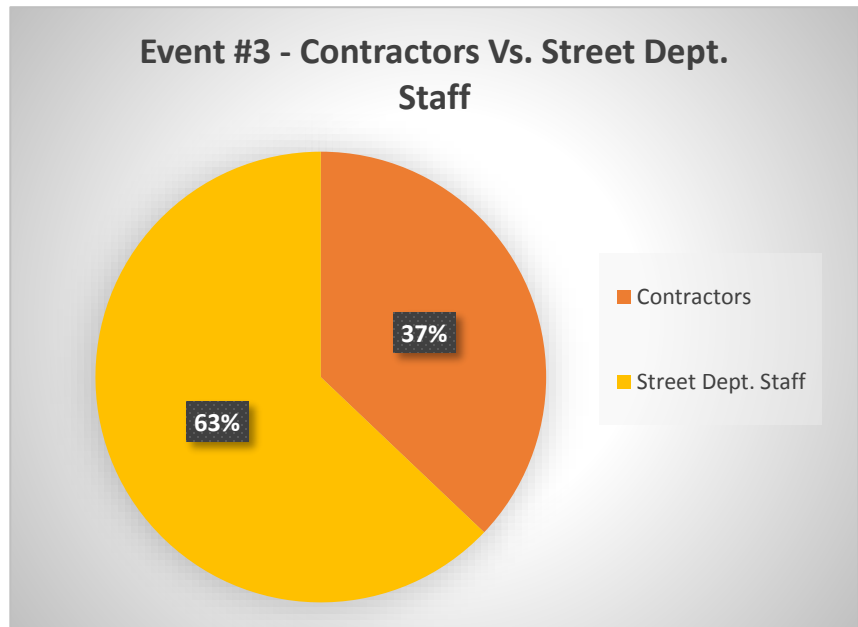
Hi: 1 Lo: -37

Hi: 29 Lo: -3

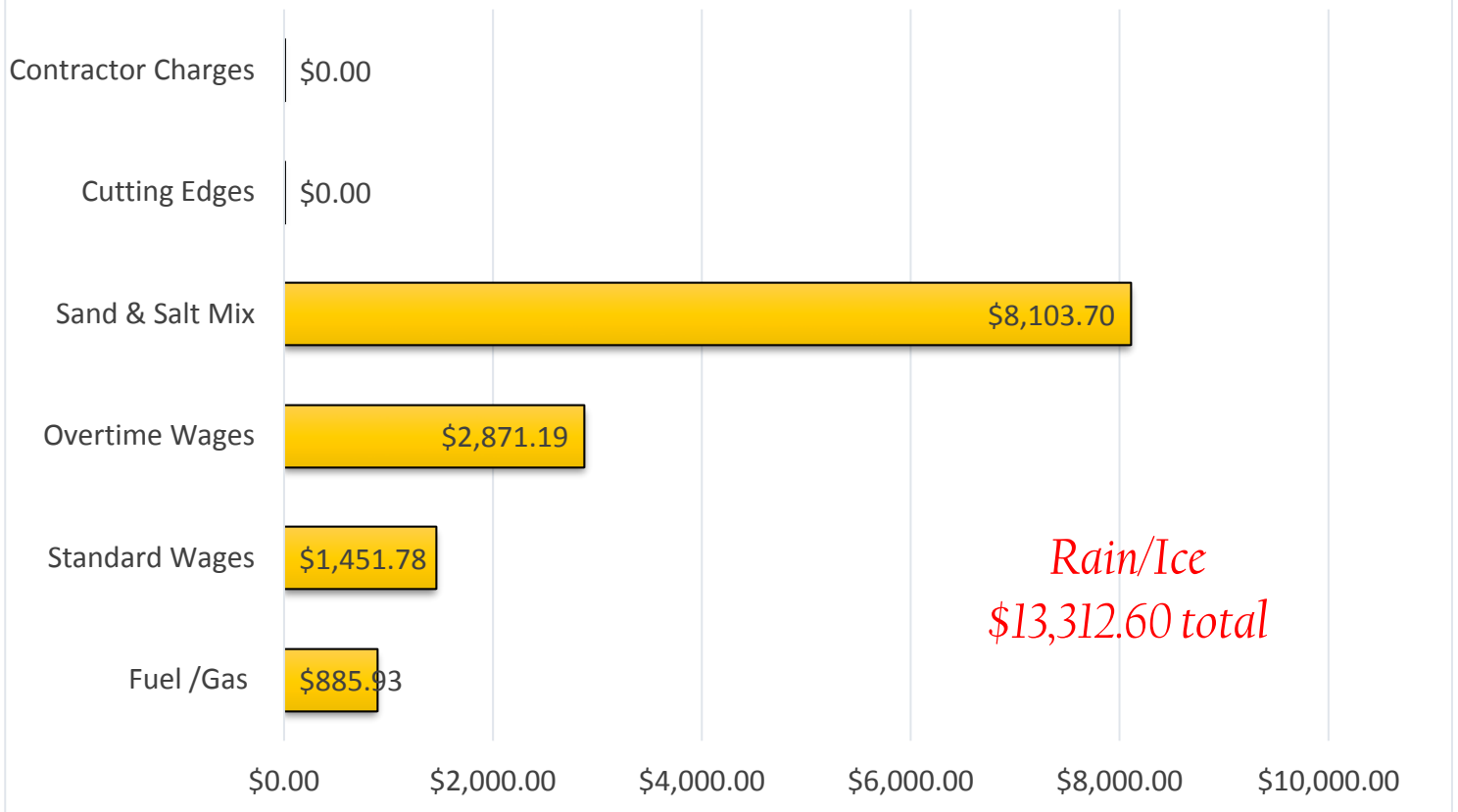
Started Cleanup: 3:30 AM-12/17/16

Completed Cleanup: 12:30 PM-12/19/16

57 Hours



Event #4 – 12/25/16 – 12/27/16



Days of the Week This Occurred: Sunday – Tuesday

Was This A Holiday? Yes, Christmas

Did The Staff Work The Weekend? Yes. Full Staff. Only Sunday.

➤ Rain/Ice No Plowing Necessary

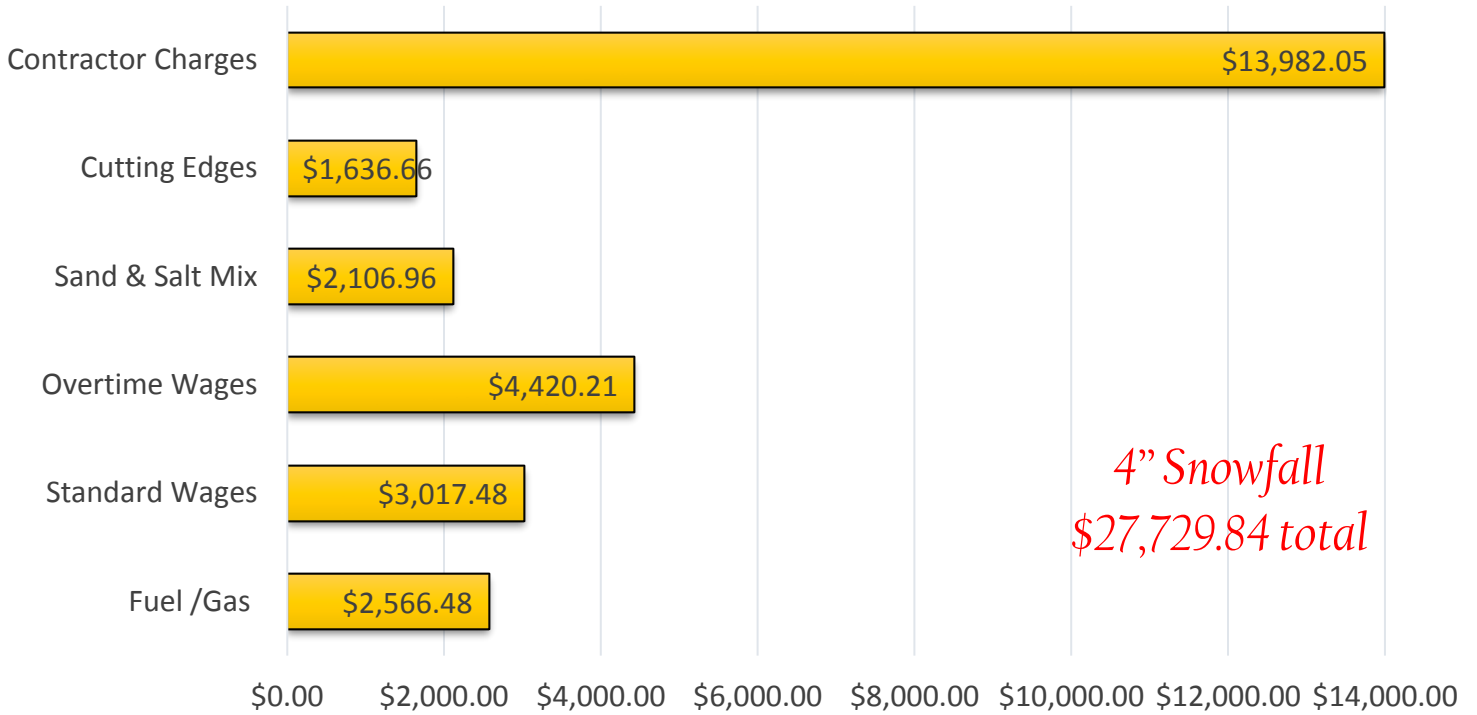
Temps per Day:

Hi: 37 Lo: 26

Hi: 35 Lo: 12

Hi: 21 Lo: 15

Event #5 – 1/2/17 – 1/4/17



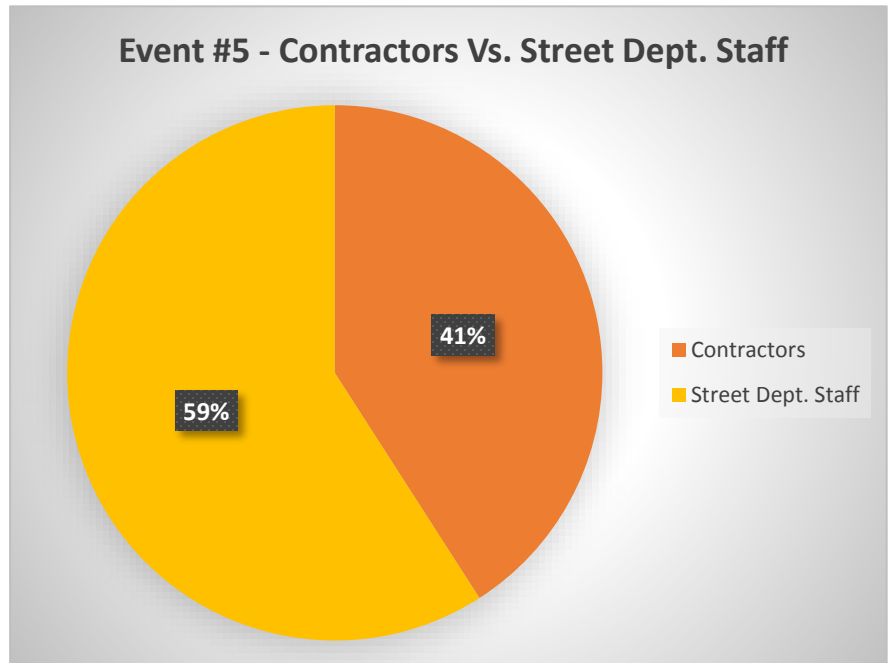
Days of the Week This Occurred: Monday – Tuesday
 Was This A Holiday? Yes, New Year's Day. Full Staff.

Temps per Day:
 Hi: 28 Lo: 3
 Hi: 5 Lo: -16

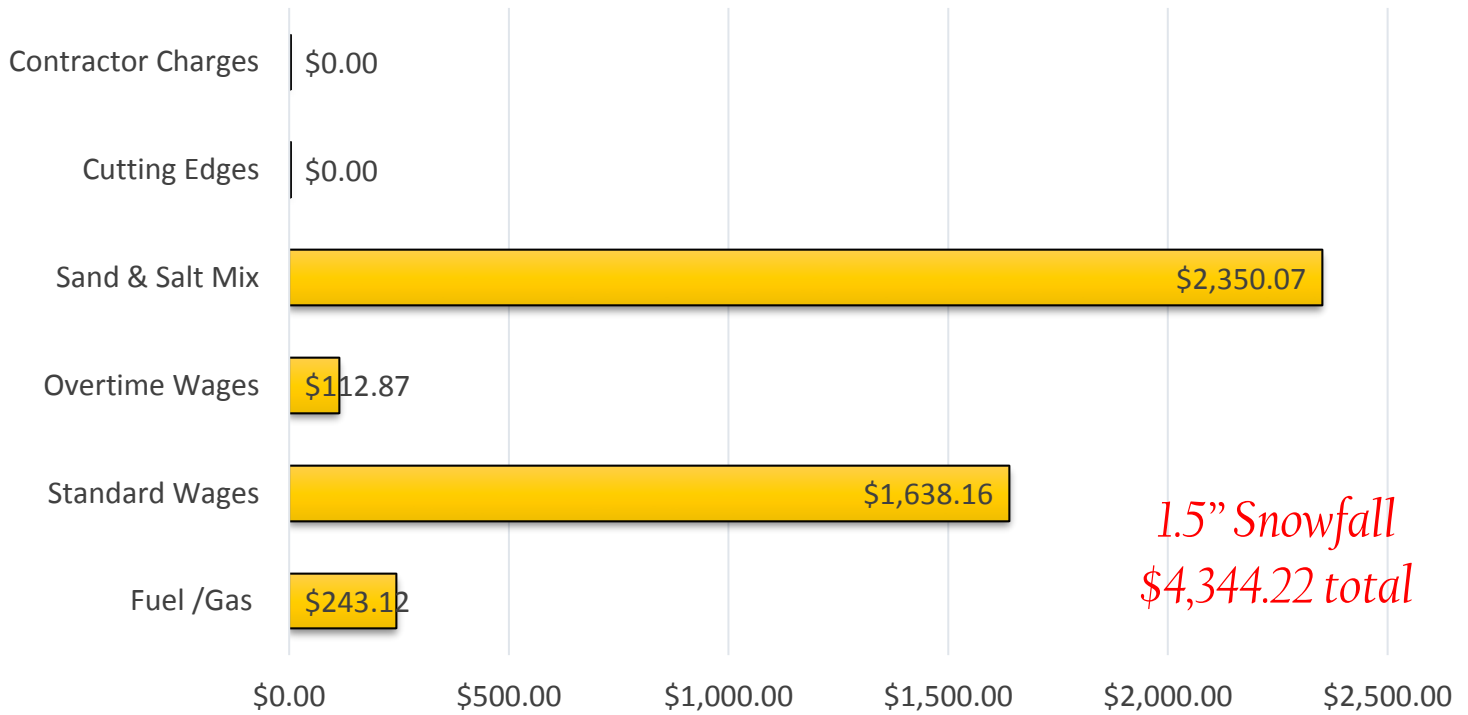
➤ Snowed 2" On Both Days for a total of 4".

Started Cleanup: 5 AM-1/2/17
 Completed Cleanup: 12 PM-1/3/17

30.5 Hours



Event #6 – 1/9/17



Days of the Week This Occurred: Monday

Was This A Holiday? No.

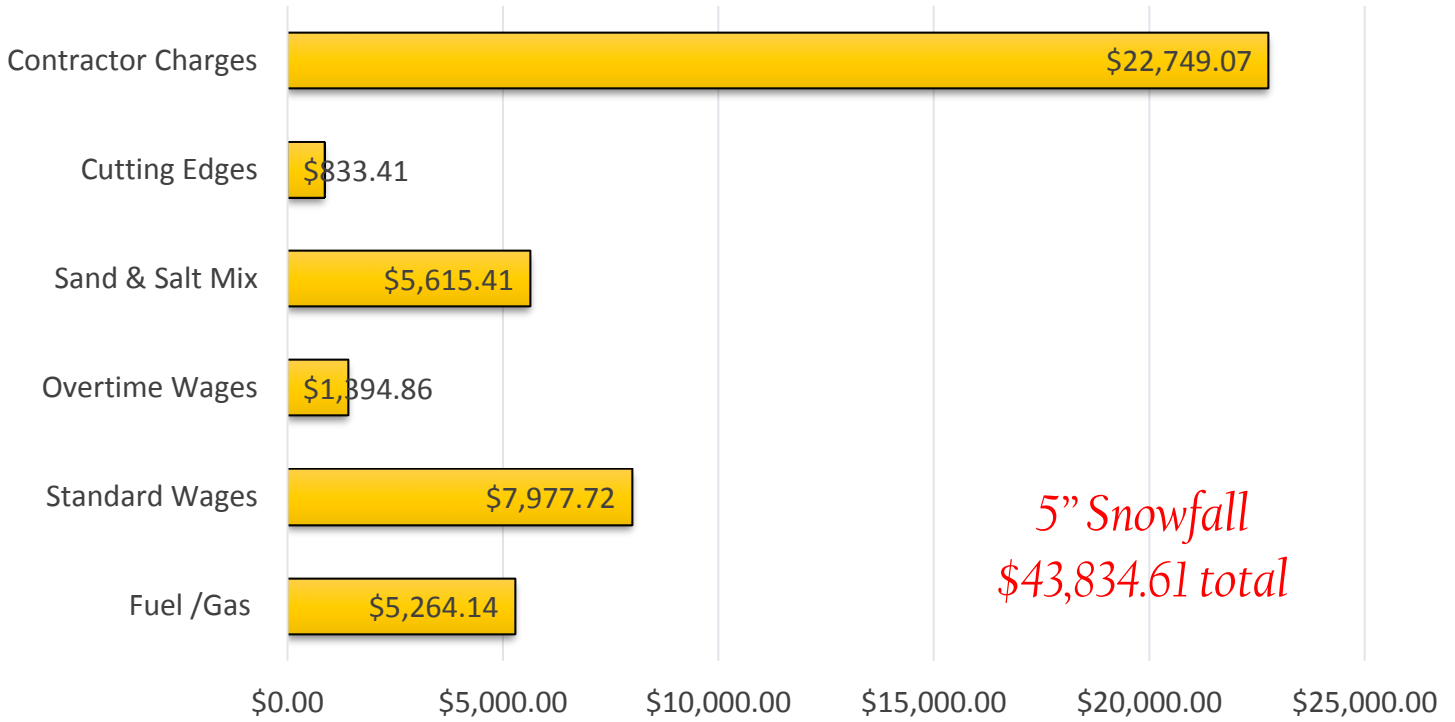
Did The Staff Work The Weekend? No.

Temp:

Hi: 17 Lo: 14

- New Employee Started 1/9/17 – JM
- Light Dusting Of Snow. No Plowing Necessary.

Event #7 – 1/10/17 – 1/12/17



Temps per Day:

Hi: 12 Lo: -2
 Hi: 3 Lo: -4
 Hi: 5 Lo: -15

Days of the Week This Occurred: Tuesday - Thursday

Was This A Holiday? No.

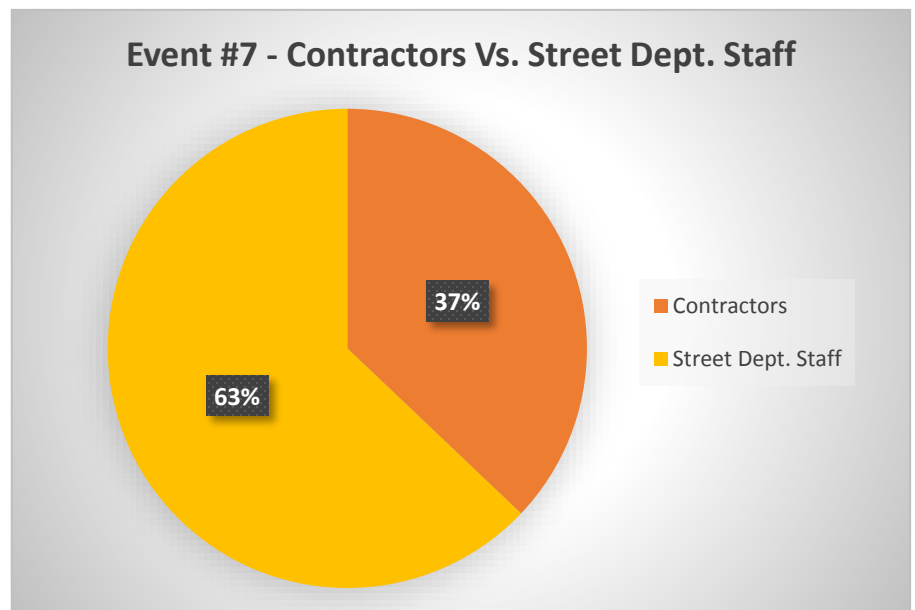
Did The Staff Work The Weekend? No.

- Very Windy!!
- 3" total accumulation as of 1/10/17
- Received 2+ inches of fresh snow overnight.
 - Complete accumulation - 5" from 1/10/17 – 1/11/17
- Both Snow Loaders & Snow Blower Broke down

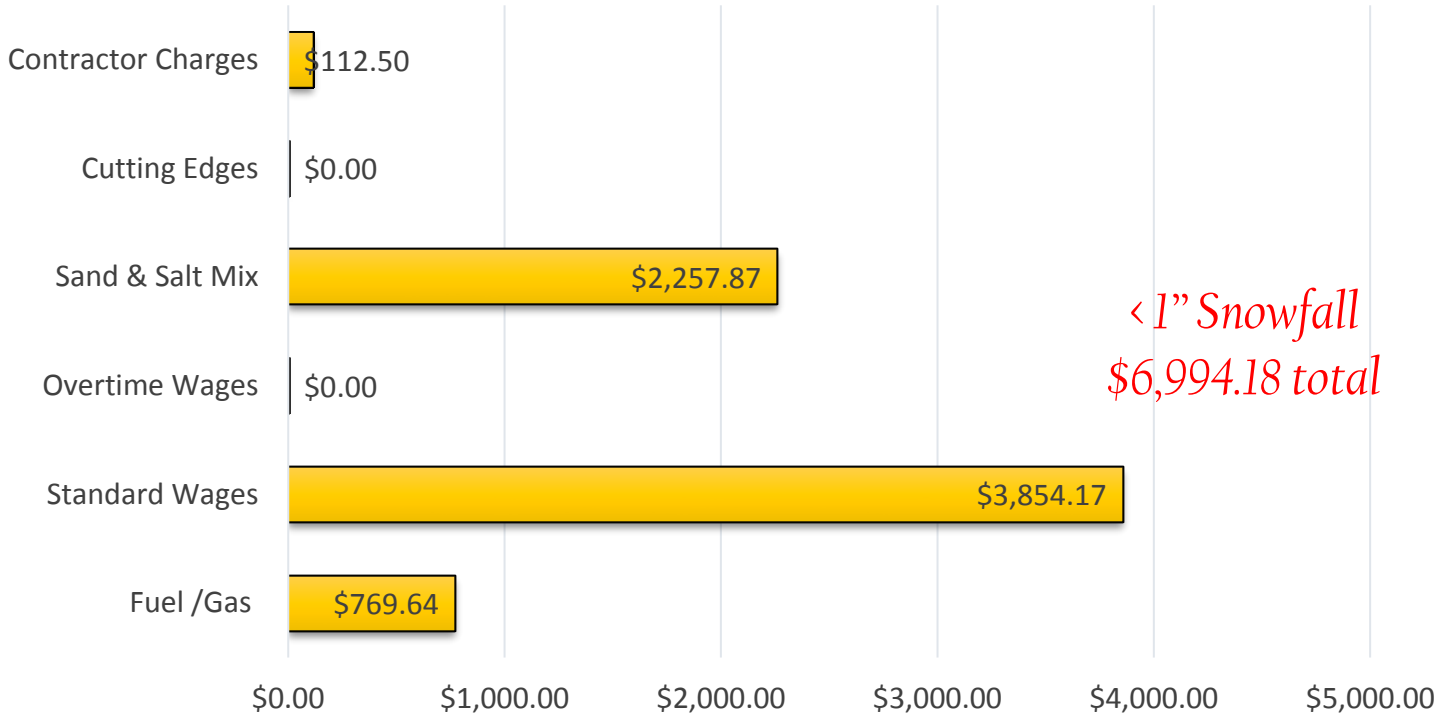
Started Cleanup: 10:15 AM-1/10/17

Completed Cleanup: 1:30 PM-1/12/17

51 Hours



Event #8 – 1/25/17 – 1/26/17



Days of the Week This Occurred: Wednesday - Thursday

Was This A Holiday? No.

Did The Staff Work The Weekend? No.

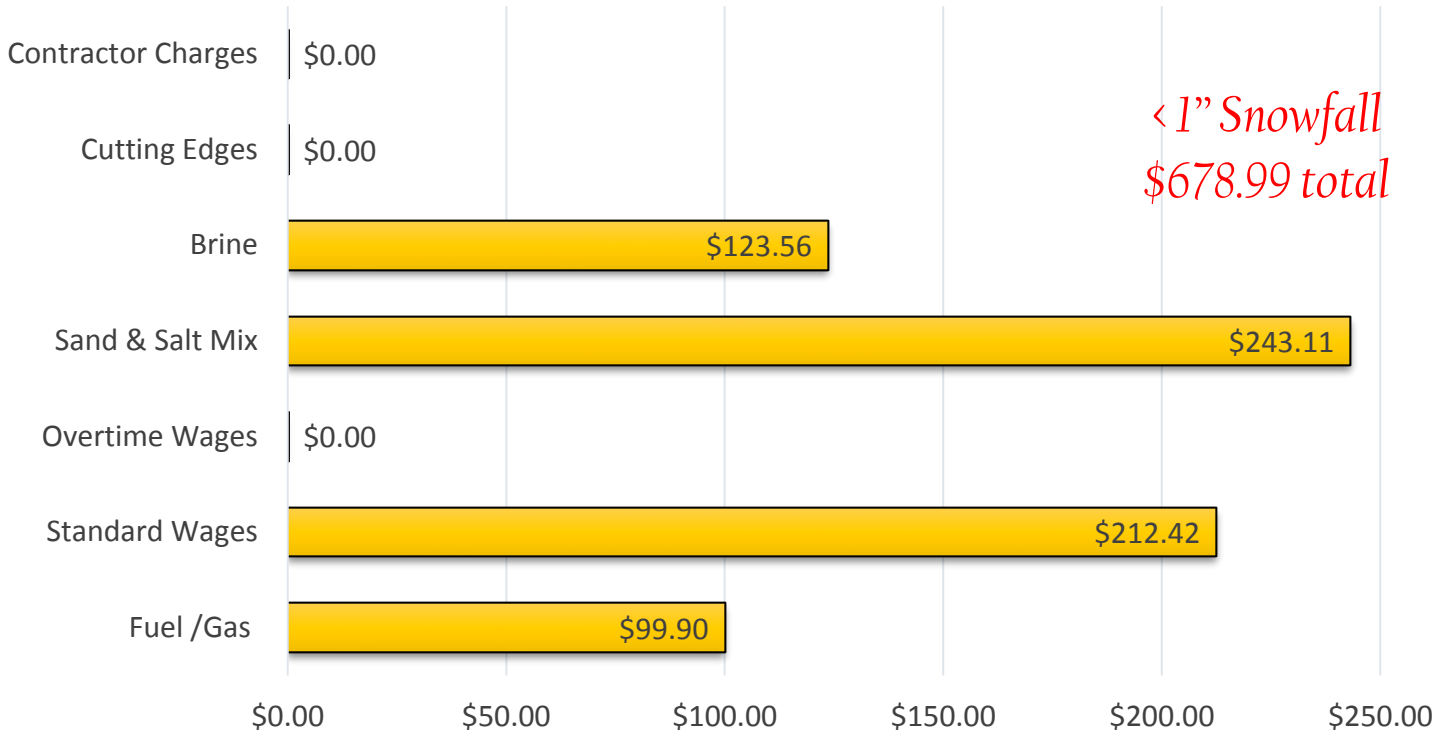
Temps per Day:

Hi: 27 Lo: 14

Hi: 18 Lo: 10

- Salt/Sand Only Mission
- Light Dusting of Snow. No Plowing Necessary.

Event #9 – 2/28/17



Days of the Week This Occurred: Tuesday

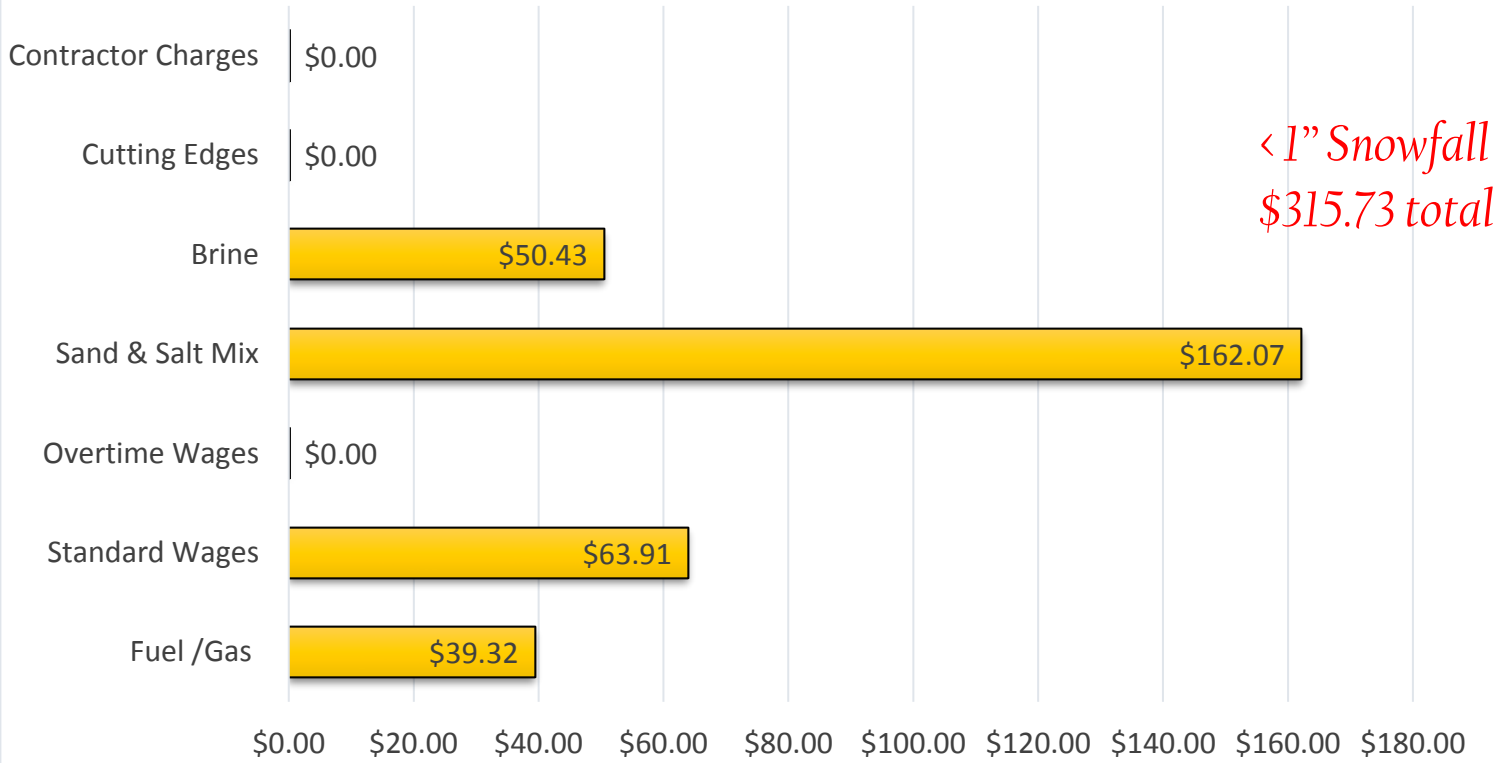
Was This A Holiday? No.

Temp:

Hi: 29 Lo: 24

- First Post Treatment with Brine System.
- Melted By Noon.
- Light Dusting of Snow. No Plowing Necessary.

Event #10 – 3/2/17



Days of the Week This Occurred: Thursday

Was This A Holiday? No.

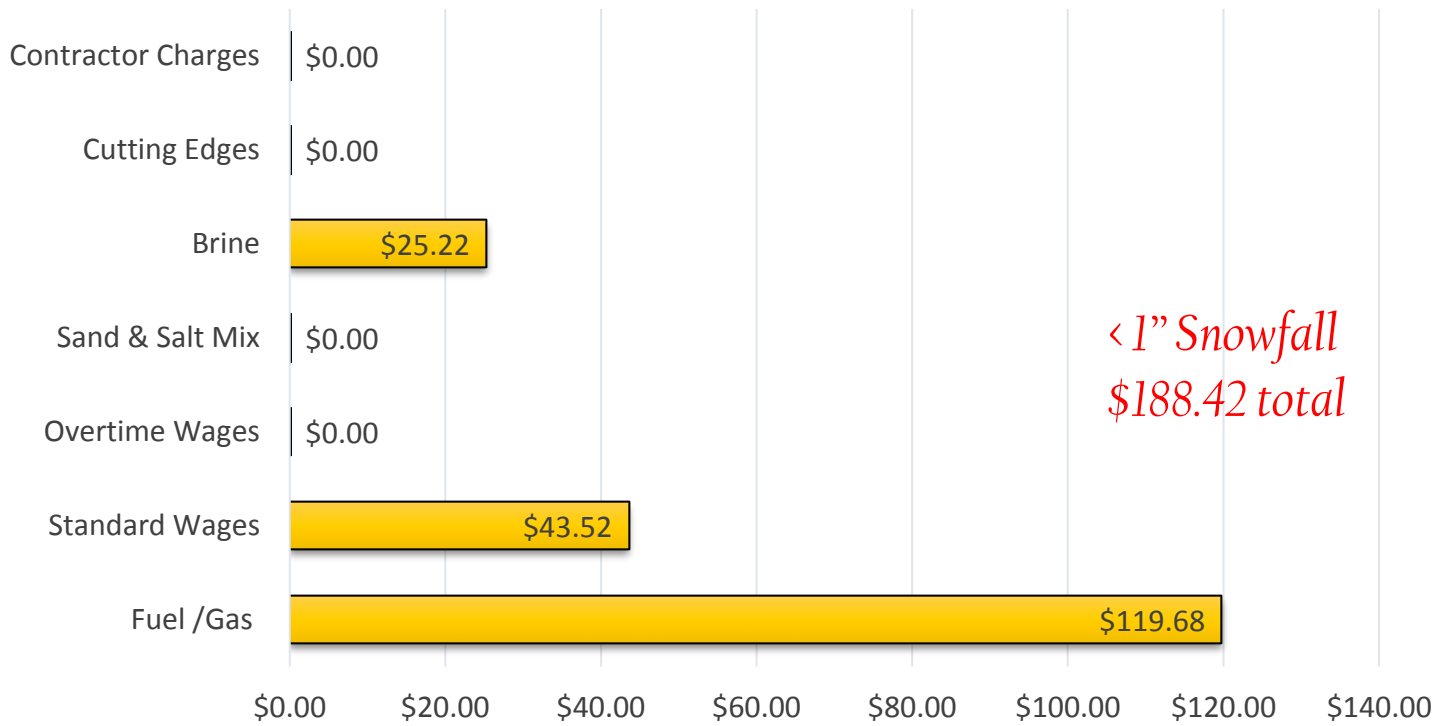
Did The Staff Work The Weekend? No.

- Pre & Post Treatment of Brine.
- Melted By Noon.
- Light Dusting Of Snow. No Plowing Necessary.

Temp:

Hi: 25 Lo: 11

Event #11 – 3/7/17



Days of the Week This Occurred: Tuesday

Was This A Holiday? No.

Did The Staff Work The Weekend? No.

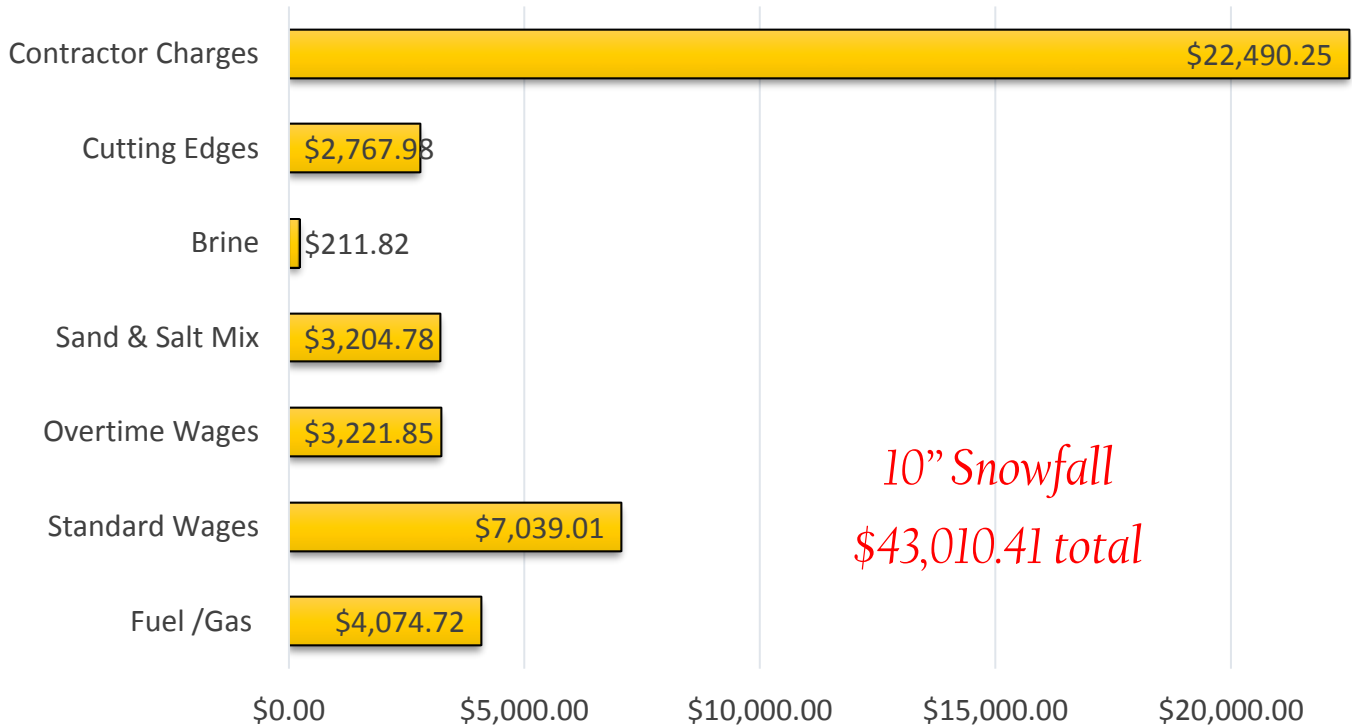
- Post Treatment of Brine.
- Melted By Noon.
- Light Dusting Of Snow. No Plowing Necessary.

Temp:

Hi: 43

Lo: 20

Event #12 - 3/12/17-3/14/17



Days Of The Week: Sunday - Tuesday

Holiday? No.

Did The Staff Work The Weekend? Yes. 5 Staff Members Saturday
(Sanding / Brining), All Staff Plowed Sunday

- Pre-Treatment of Brine.
- Only 4" of frost left in the ground.
- Load limits were off as of 2/27/17.
- Re-plowed Highways & snow routes on Monday due to high winds in the evening of Sunday (3/12/17).

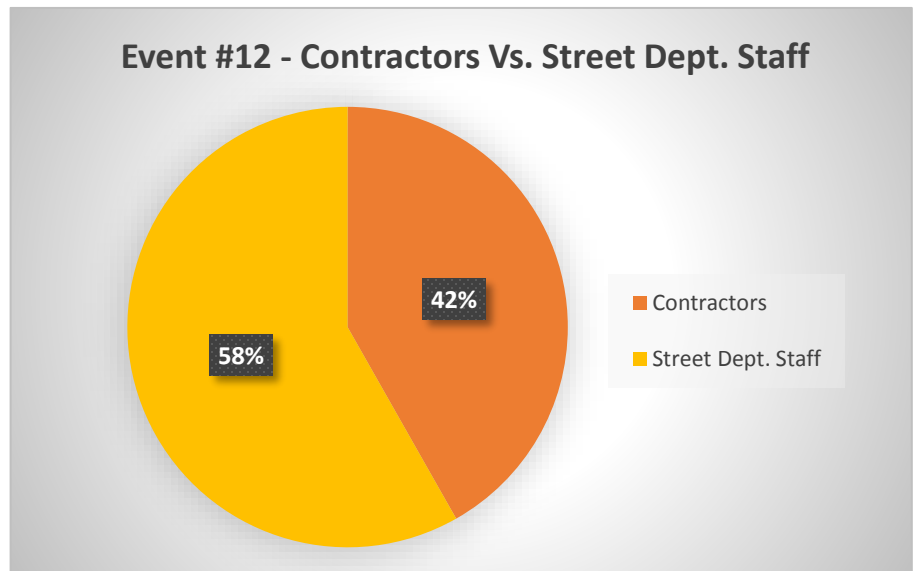
Temps per Day:

Hi: 24 Lo: 11
Hi: 17 Lo: 5
Hi: 22 Lo: 5

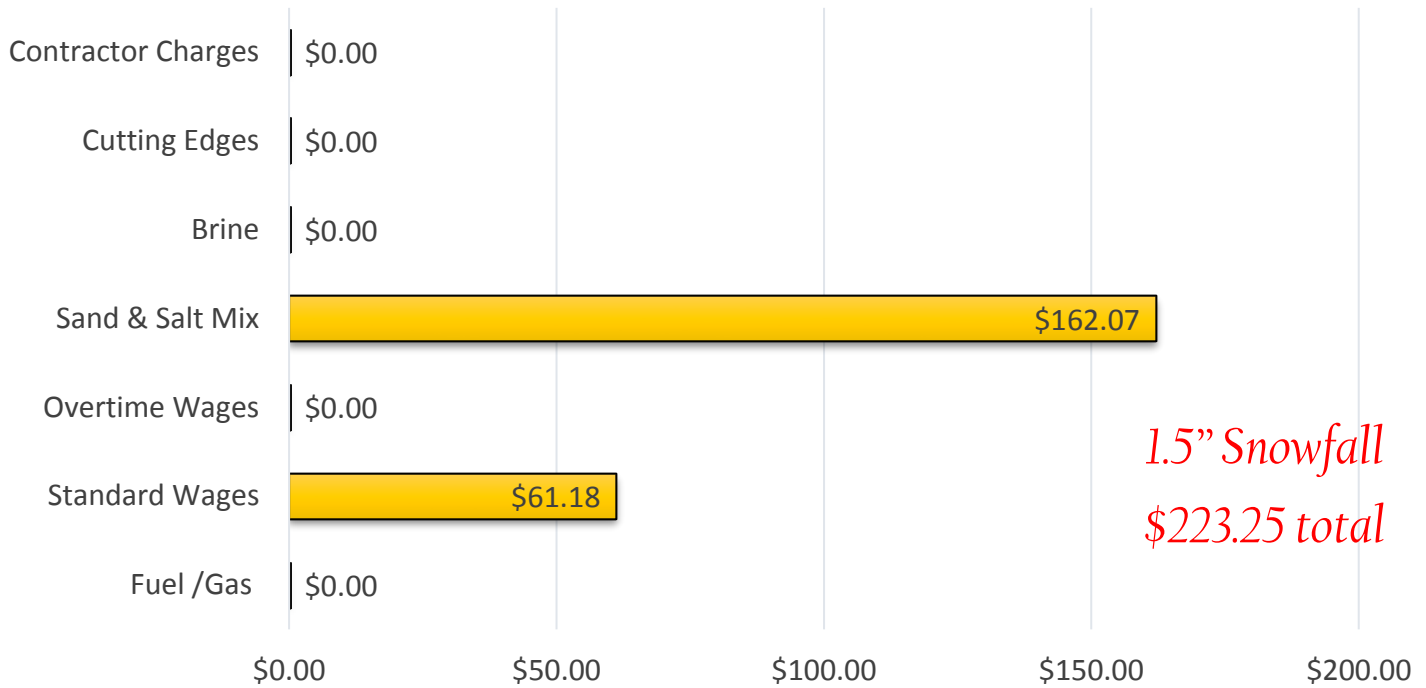
Started Cleanup: 12:30 PM-3/12/17

Completed Cleanup: 2 PM-3/14/17

49.5 Hours



Event #13 – 5/1/17



Days Of The Week: Monday

Holiday? No.

Did The Staff Work The Weekend? No.

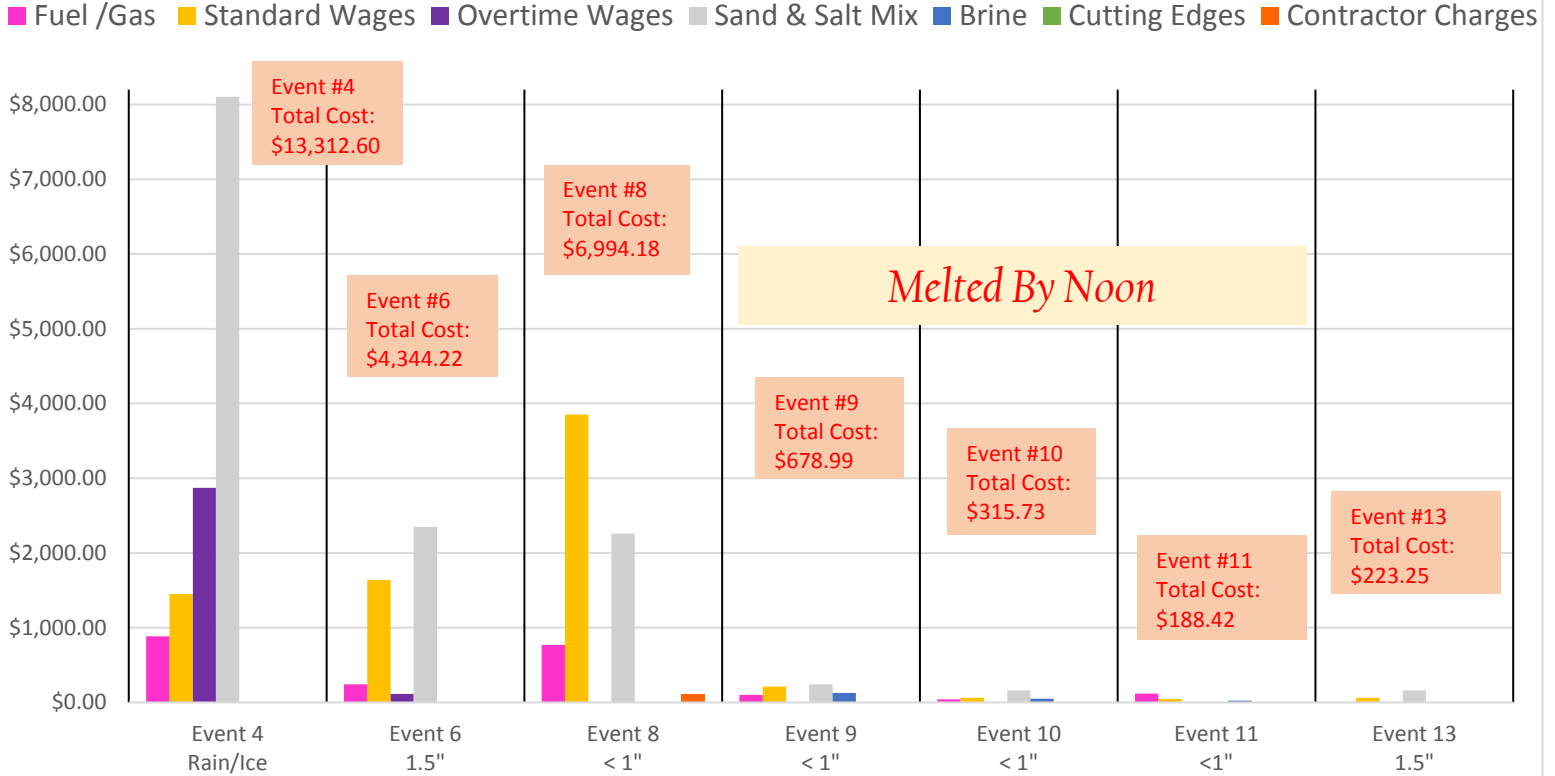
Full Staff on the Weekend?

- Melted By The End Of The Day.
- Light Dusting Of Snow. No Plowing Necessary.

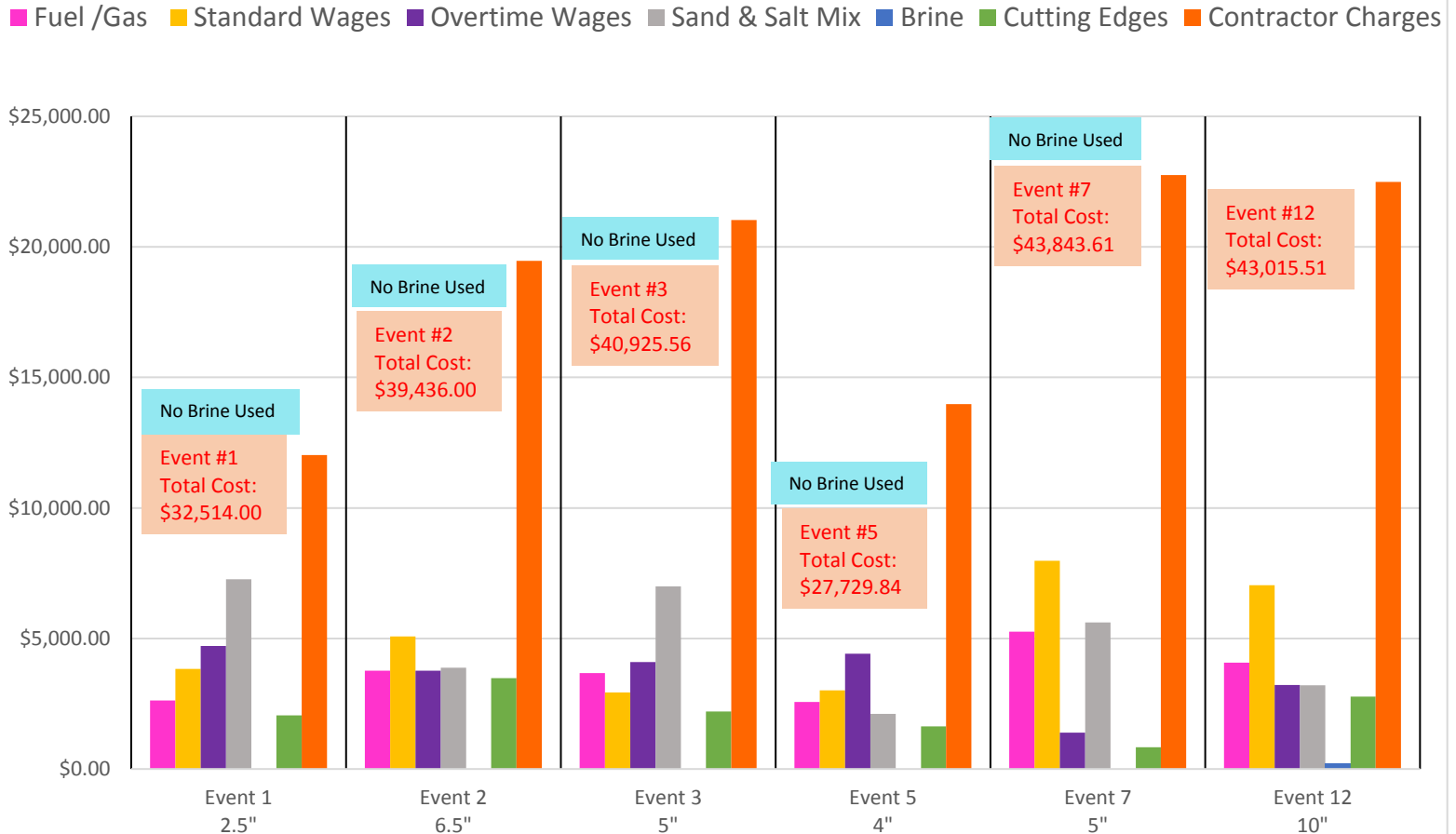
Temp:

Hi: 55 Lo: 30

2016-2017 Minimal Snow/Ice Event Cost Breakdown Comparison

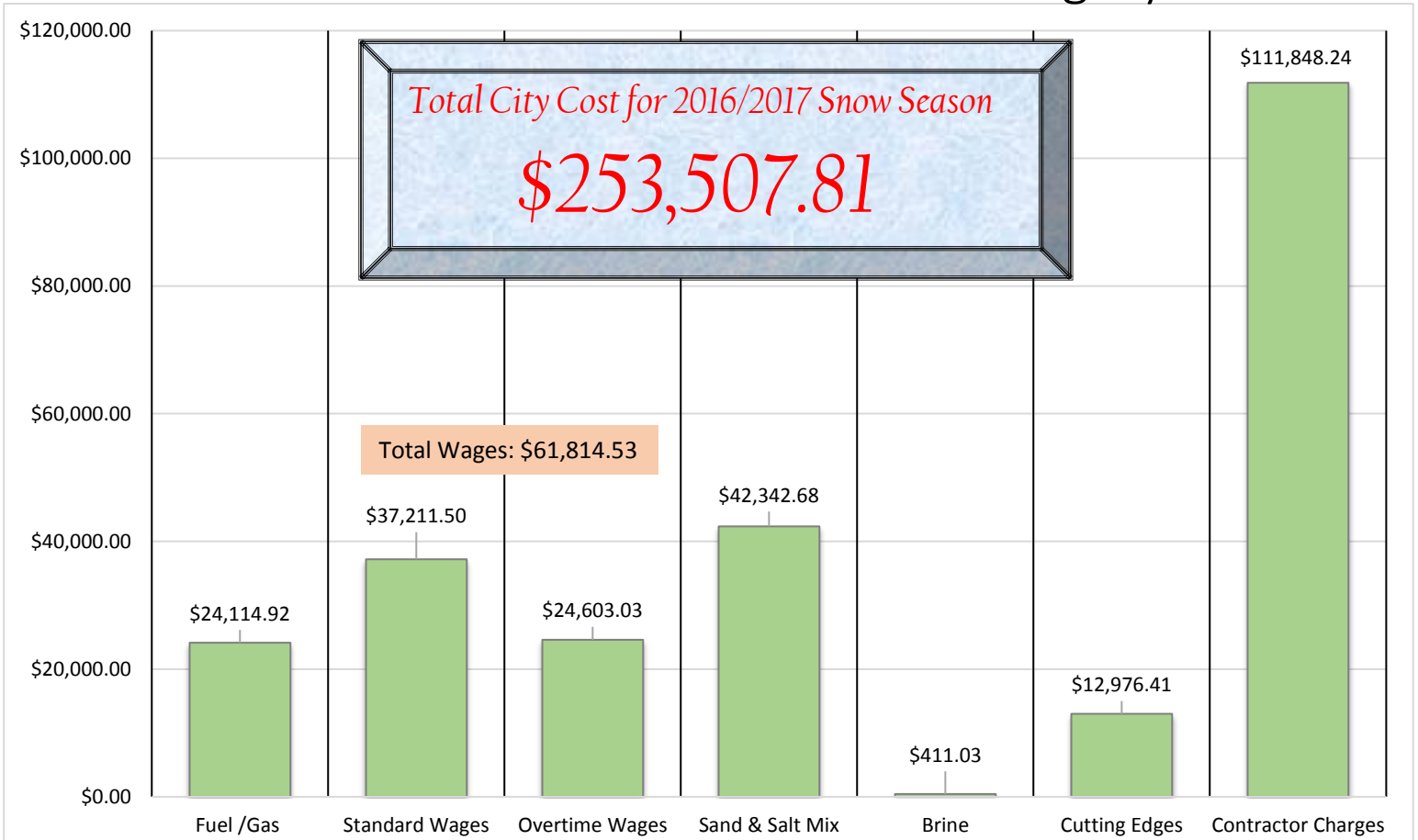


2016-2017 Major Snow/Ice Event Cost Breakdown Comparison



2016/2017
(11/18/16 – 5/1/17)

Individual Cost Breakdown Per Category



Total Average Workforce Used For 2016/2017 (11/18/16 – 5/1/17) Snow Season

