

Streets Division Salt Usage

Solid Waste Advisory Committee – November 1, 2018



2017-2018

Winter totals	
General plows	4*
Total inches of snow	44.4
Total event days	34

Work totals	
Days deployed	74
Shifts worked	101

Material used	
Tons of Salt	6,705.00
Tons of Sand	7,369.80
Gallons of Saltwater Brine	56,053.00

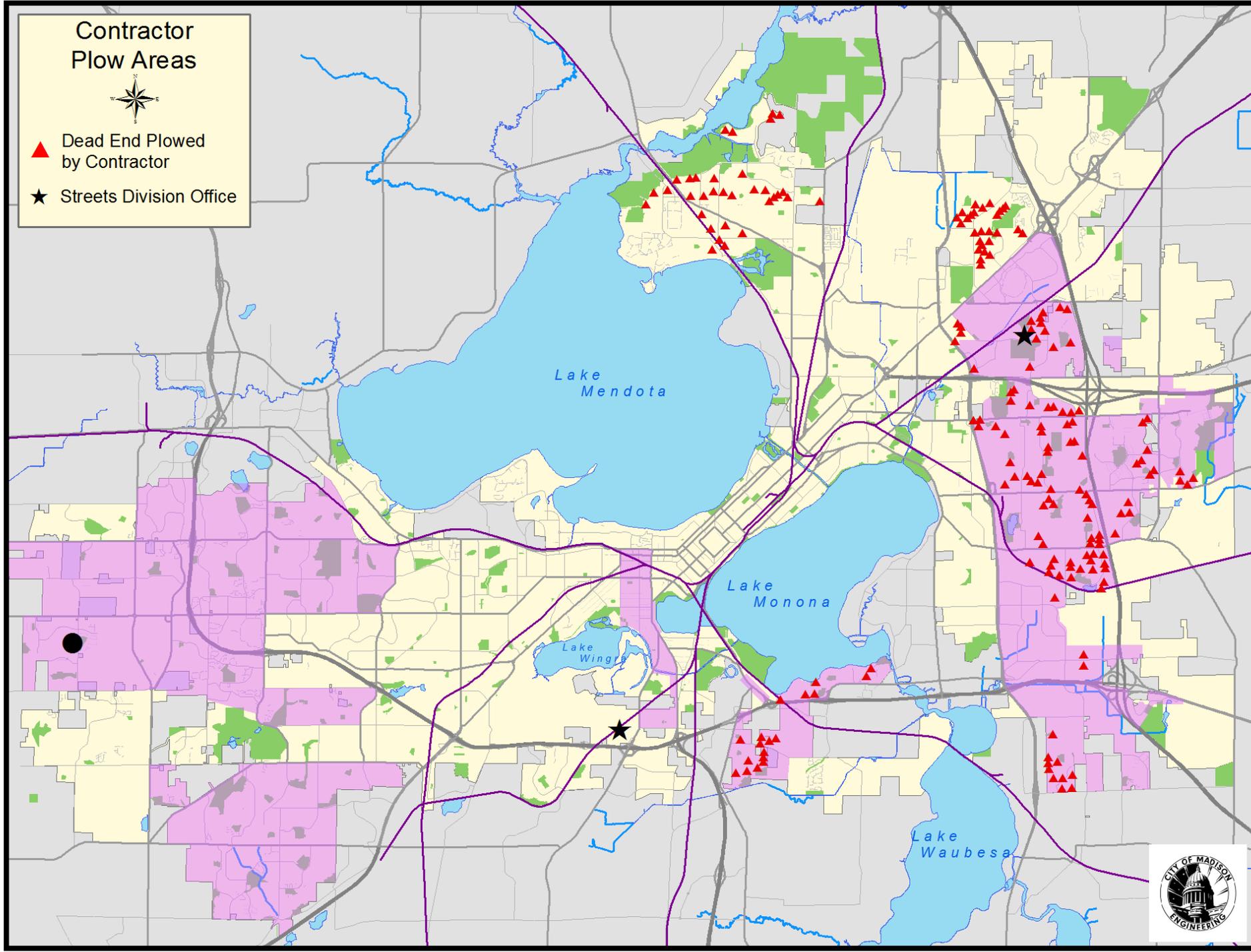
**all general plows occurred in 2018*

PLOWING STREETS



Snow plowing

Pink-purple and red triangle areas are handled by contractors

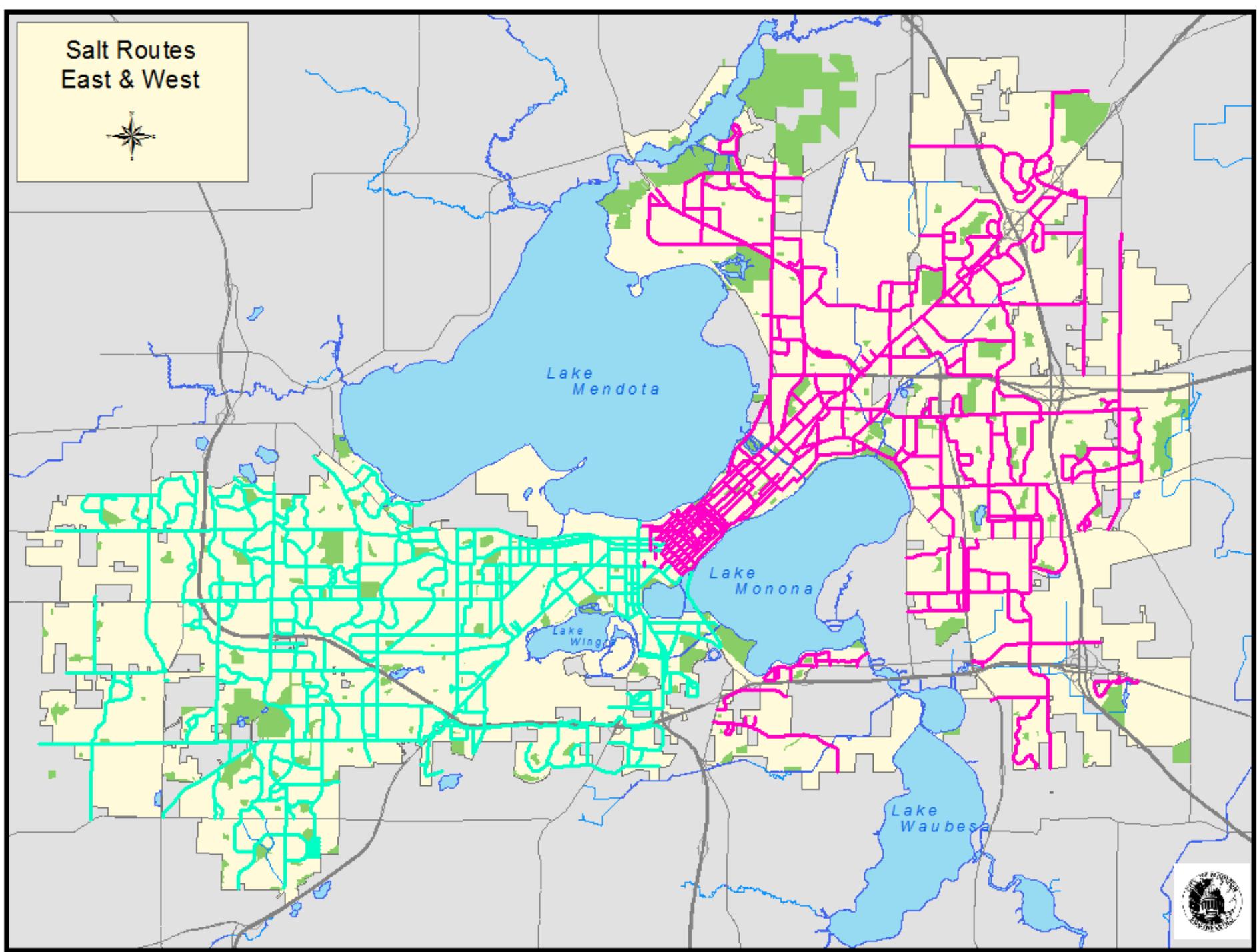


SALT USE



Salt routes

- 900.2 lane miles salted
- 50.6% of all lane miles in Madison



Understanding salt usage

Industry standards/best practices are known for salt application rates

- Streets Division's spreaders set to discharge a maximum of 300 pounds of salt per lane mile

How long salt stays in the roads and when to apply a second or third treatment is unknown

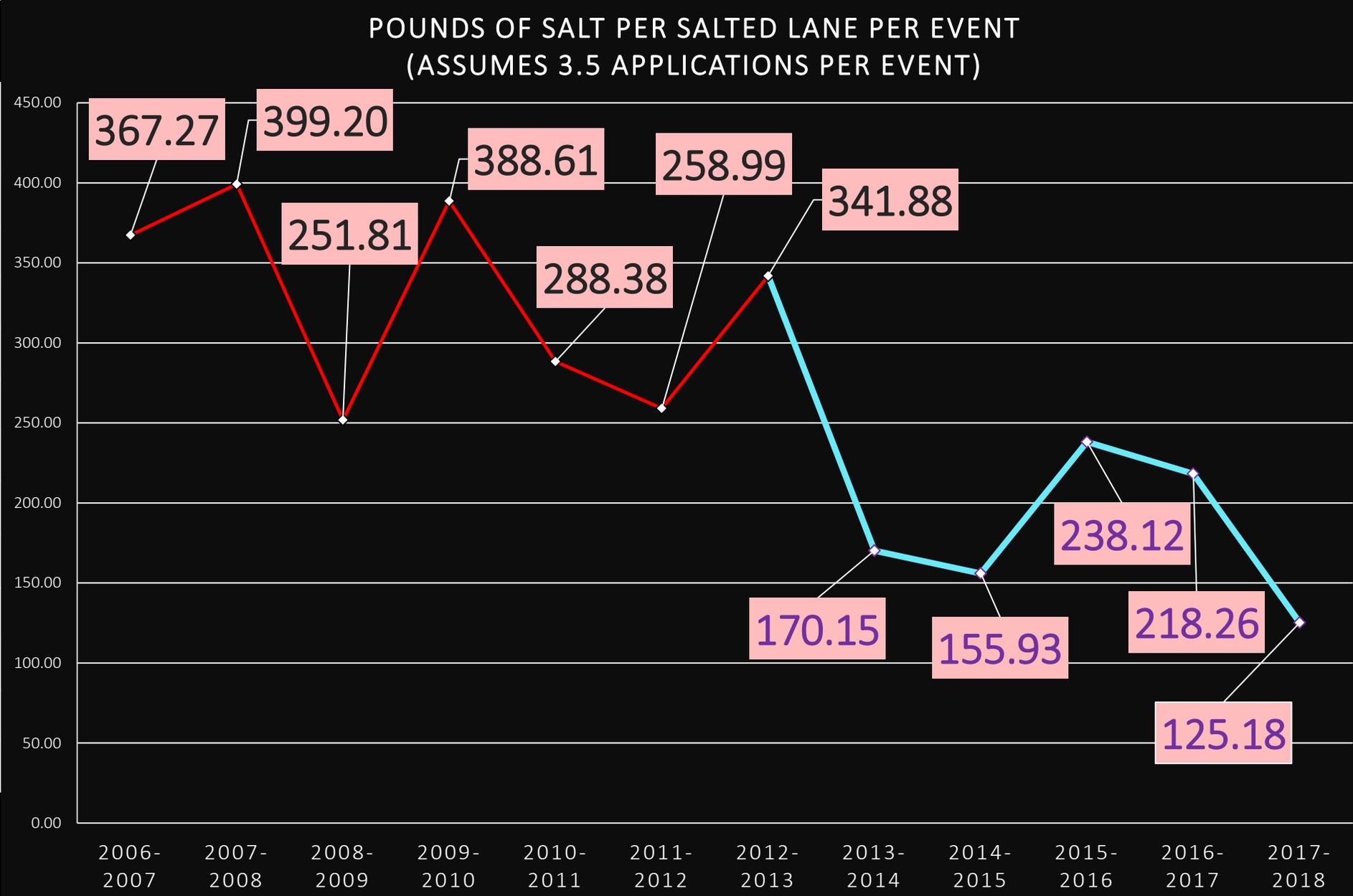
- How streets look is the best guide

Historically, Streets referred to snowstorms as "events"

- During an event, the routes may be salted multiple times, depending on conditions & length of storm

Salt application rate 2006 - 2018

Year	Snow Total (inches)	Events
2006-2007	55.10	24
2007-2008	101.40	36
2008-2009	72.00	31
2009-2010	51.60	22
2010-2011	73.40	38
2011-2012	31.40	23
2012-2013	70.60	34
2013-2014	59.20	60
2014-2015	33.70	36
2015-2016	32.70	21
2016-2017	44.00	27
2017-2018	44.40	34



Salt reduction next steps

Adding two new salt routes to the east side

Scales at facilities will provide precise weight of salt on trucks

- At present, we know **approximately** the tonnage a salt spreader holds and operator reports **approximately** how much they use

GPS should allow for precise routing & improved monitoring

- And more manager & operator accountability
- And more appreciation of operator expertise of their routes

Continued participation in the Winter Salt Certification trainings from City Engineering