

# STREETS DIVISION ANNUAL REPORT



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2017

# STREETS DIVISION SERVICES

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## **SOLID WASTE**

Recycling

Refuse

Large item

Brush

Leaves/Yard Waste

Drop-off Site

## **STREET SWEEPING & ROADSIDE CLEANUP**

Street Repair

Graffiti removal

Stump removal

Street sweeping

Mowing

## **SNOW & ICE**

Salting

Sanding

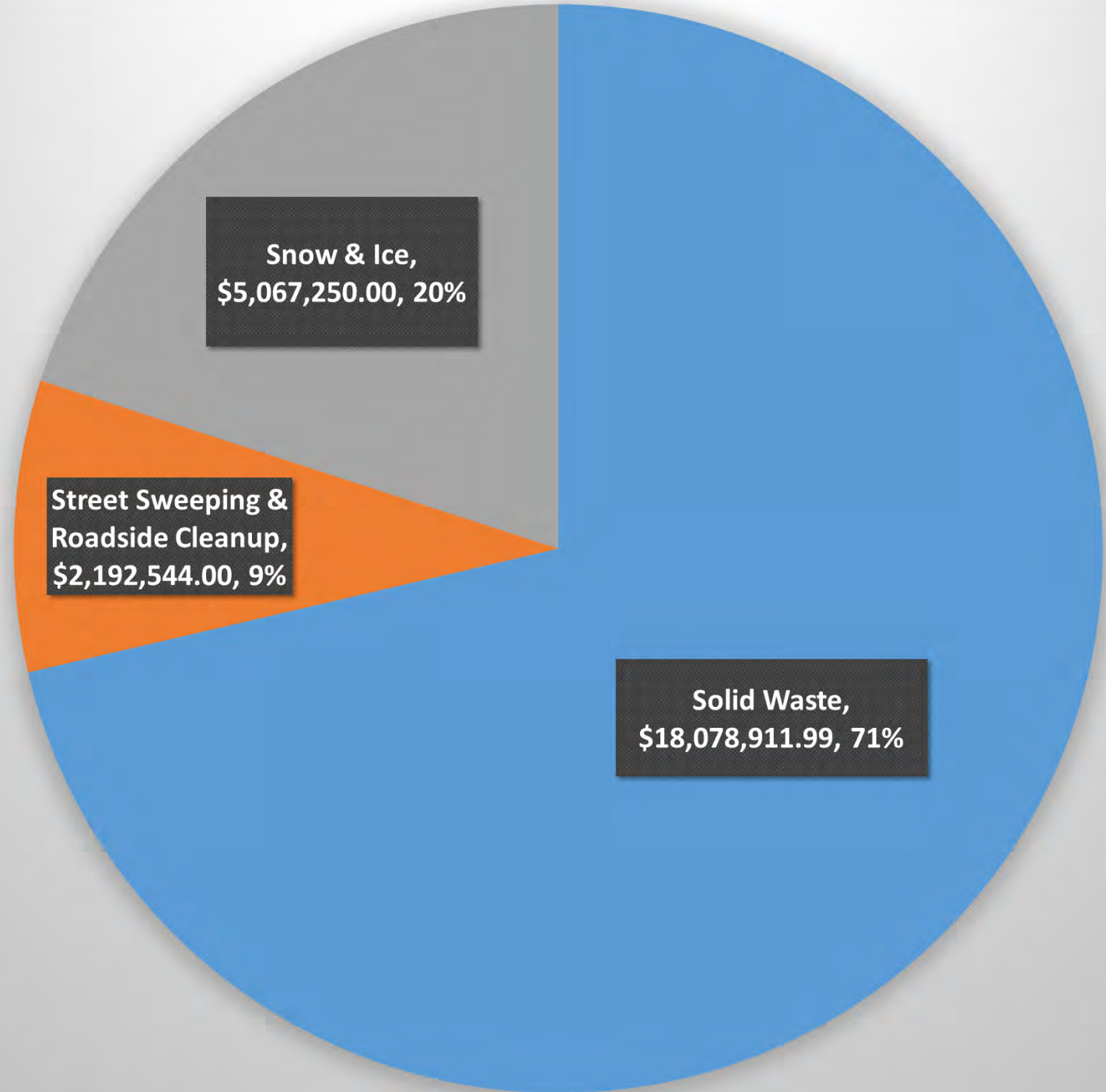
Plowing

# 2017 BUDGET BREAKDOWN

Total Budget:  
**\$25,338,705.99**

Madison population estimate:  
250,073

Cost for all services per resident  
per month:  
\$8.44





# SOLID WASTE & RECYCLING SERVICES



# SOLID WASTE & RECYCLING

## Improvements for 2019

- Refuse collection in 100 Madison Parks
- Increasing route efficiency.
  - Removing 3 automated collection trucks

Collection costs
Tipping fees
Transfer station operations
Resource recovery fees
<i>Cost offsets/revenue</i>
<b>Total</b>
<b>\$18,078,911.99*</b>

**TONS OF REFUSE COLLECTED:**  
**43,351.74**

**TONS OF RECYCLING COLLECTED:**  
**18,757.20**

**TONS OF BRUSH COLLECTED:**  
**5,515.36**

**TONS OF YARD WASTE COLLECTED (APPROX.):**  
**14,372**

# Recycling challenges & opportunities

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## Chinese import restrictions

- Rigid plastic program ended
- Prices for commodities volatile & will impact budget

## Organics

- Pilot ended
- New opportunities to provide this service

In 2017  
59.7% of waste  
collected was recycled



Madison's recycling  
program started  
September 1968.



# STREET SWEEPING & ROADSIDE CLEANUP





# STREET SWEEPING & ROADSIDE CLEANUP

## Improvements for 2019

- New sweeping scheduling will increase capacity by 3000 hours
  - No new employees
  - No new equipment

Street sweeping
Pothole repair
Graffiti removal
Stump removal
Mowing
<i>Cost offsets</i>
<b>Total</b>
<b>\$2,192,544.00*</b>

### **STUMP REMOVAL:**

- **2,443 removed**

### **SWEEPING:**

- **4,551.11 tons of material swept from the streets.**
- **Each street swept at least 9 times**
- **Shared-use paths swept 8 times**



# SNOW & ICE SERVICES



# SNOW & ICE

Budget total for  
January 2017 to December 2017

*This slide does not include  
budget info for January to April  
2018.*

Salt & sand purchasing Operations
<b>Total</b>
<b>\$5,067,250.00</b>







# 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



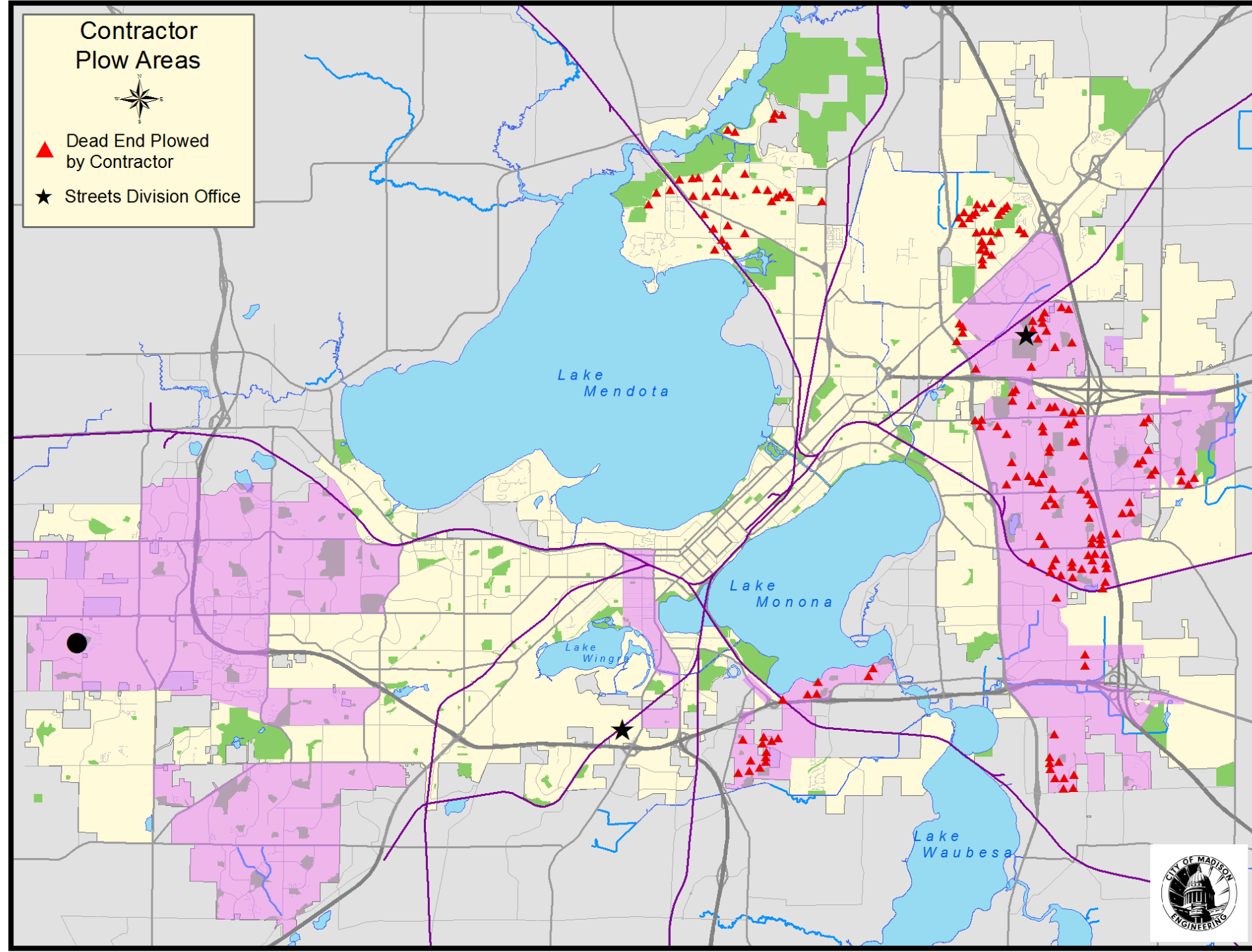


# Snow plowing

- Lost major contractor in 2017/2018
- Retaining/recruiting contractors to retain current level of service is an issue

## Improvements for 2018/2019

- Addressing contractor issue with multi-year contracts and other means
- Upgrading employee overtime call-in procedure to automated system



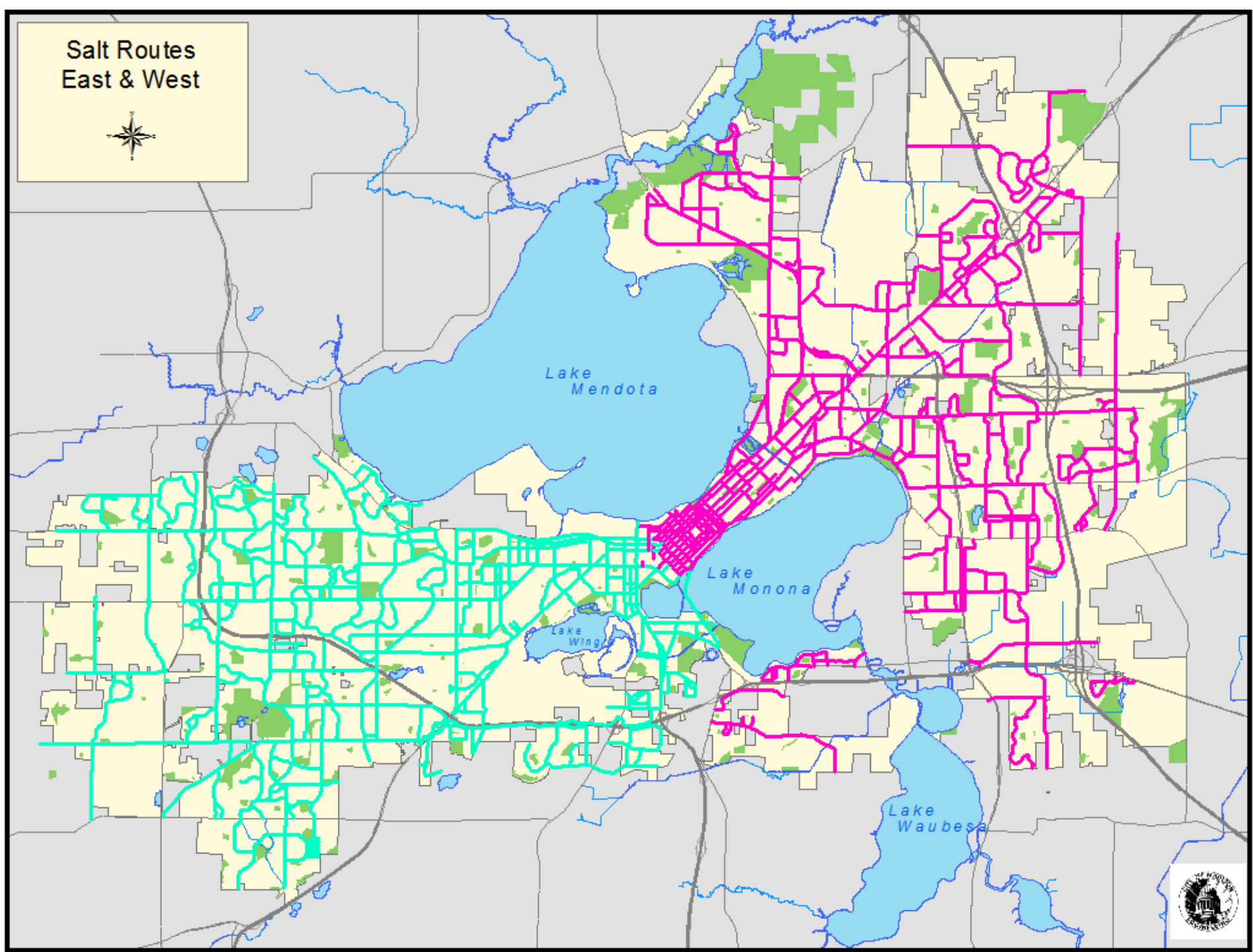


# SALT USE



## Salt routes

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



# Understanding salt usage

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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"

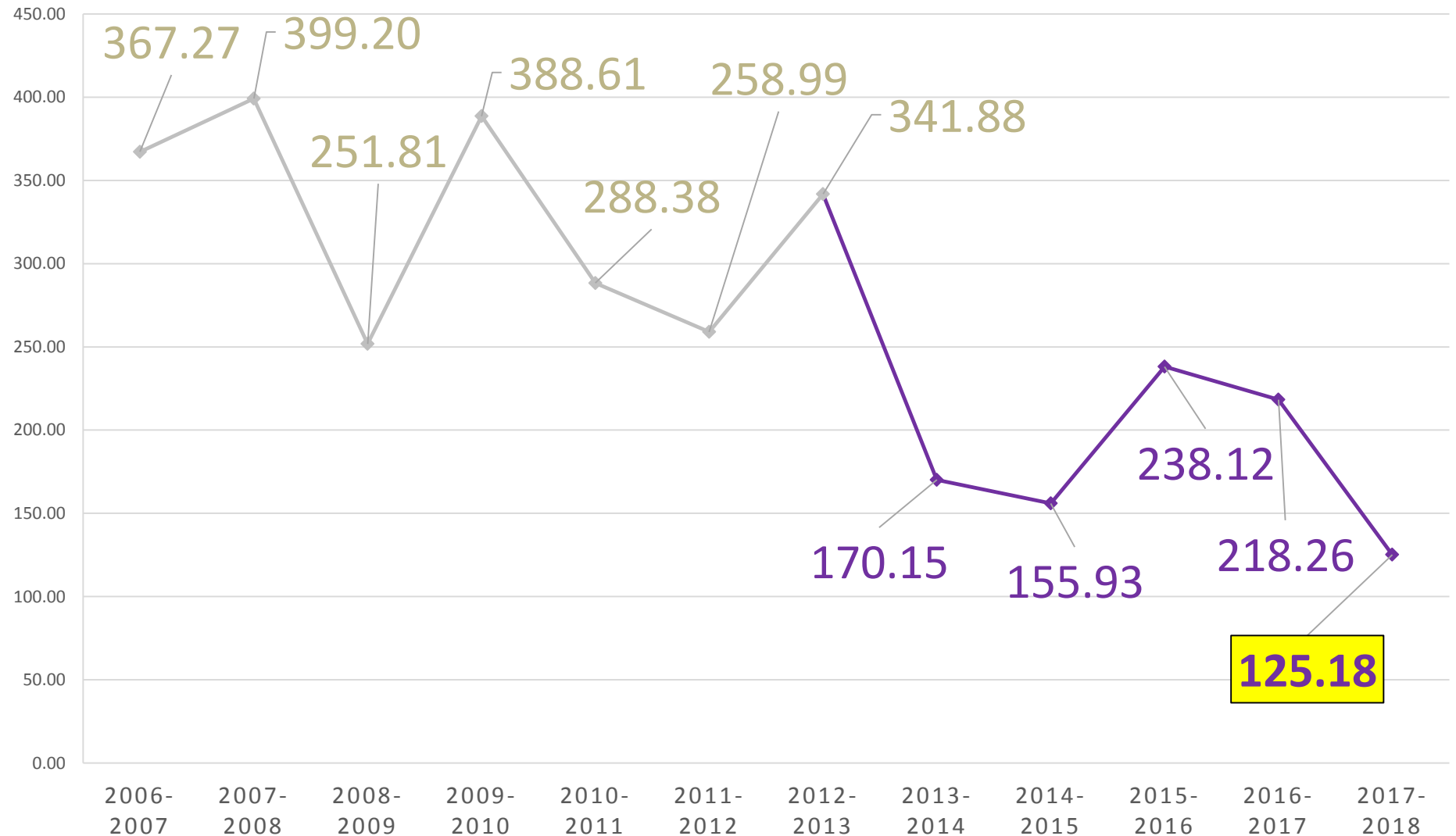
- During an event, the routes may be salted multiple times, depending on conditions & length of storm



# Salt application rate 2006 - 2018

POUNDS OF SALT PER SALTED LANE PER EVENT  
(ASSUMES 3.5 APPLICATIONS PER EVENT)

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
<b>2017-2018</b>	<b>44.40</b>	<b>34</b>



# Salt reduction next steps

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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

# Questions?

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[www.cityofmadison.com/streets](http://www.cityofmadison.com/streets)

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