

CITY OF WINSTON-SALEM SNOW/ICE CONTROL PROGRAM

PUBLIC WORKS COMMITTEE

DECEMBER 14, 2021



Outline

- Overview
- Monitoring an approaching weather system
- Communication before and during the event
- COWS Snow/Ice fighting tools
- Snow/Ice removal plan
- Why was my road not plowed?

Overview

- ▶ The city has responsibility for over 1,020 miles of roads.
- ▶ During snowfall, the Field Operations Division works to clear over 400 miles of arterial streets, 245 miles of collector streets and the remainder are residential streets.
- ▶ NCDOT owns, and maintains a number of roads within Winston-Salem such as: Martin Luther King Jr Drive, University Parkway, Silas Creek Parkway, Peters Creek Parkway, Robinhood Road, New Walkertown Road (to name a few).
- ▶ During a major snowfall Field Operations may log as many as 25,000 miles by either plowing or spreading de-icing salts and sand.



Overview

- ▶ Streets are plowed/salted in order of priority with major routes and critical care facilities such as hospitals, dialysis centers, doctors offices receiving the top priority.
- ▶ When major routes and critical areas are cleared, then operations move to the collector streets.
- ▶ When collector streets are completed, then plowing starts in the residential areas.
- ▶ Note: during the process, staff also responds to critical care needs and emergency complaints.



Winter Weather Monitoring

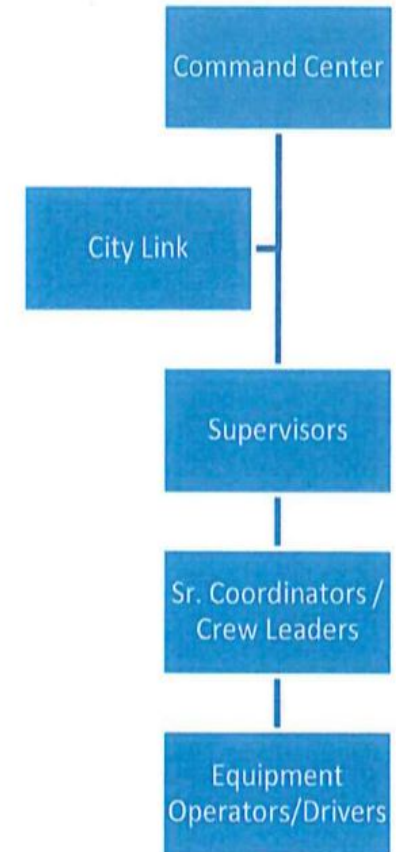
- ▶ When winter weather is predicted, city staff monitors several different forecasts days in advance of the storm.
- ▶ The type of winter weather predicted determines the strategy (i.e. ice event requires salt and brine and snow events could require salt, brine and plowing).
- ▶ The timing of the storm, day/night the temperature all matters when assembling staff and equipment.



Communication

- ▶ Many City Departments are involved in a snow/ice control event: Fleet Services, City Link, Marketing, Operations, Field Operations, Emergency Management.
- ▶ During the event, the Snow Room is activated and daily operations occur out of this command center (336-727-2789).
- ▶ Daily operational briefings on progress are provided to the media.
- ▶ Elected Officials are provided briefings on more frequent intervals.

COMMUNICATION ORGANIZATIONAL CHART PER SHIFT



Communication

- Before the event starts, a schedule is developed so every participant knows what they are doing and where they are supposed to be.
- Crews and supervisory staff run two 12 hour shifts until the event is over.
- Field Operations staff coordinate with other city departments during the event (i.e. Fleet Services to repair broken equipment).
- A post-condition briefing meeting is held after the event to discuss any concerns or procedural changes stemming from the operation.

17-Feb-21	Night Shift	Contact #	Day Shift	Contact #
Brine Solution Loading	10:00 pm to 10:00 am		10:00 am to 10:00 pm	
	Alvin Duncan		Joe Duncan	
	Daniel White		Gerald Key	
	Robert Kelly		Zane Keaton	
	Maxxon Parker			
Central Business District	Night Shift	Contact #	Day Shift	Contact #
	Andy Whitaker		Earl Jackson	
	Mitch Robertson		Maurice Rucker	
Snow & Ice Control Section A	Night Shift	Contact #	Day Shift	Contact #
	Jane Carter		Jeff Tilley	
	Stephen Pierce		Ric Perez	
	Doris Peay		Percy Snyder	
	Alan Link		Fred Brown	
Snow & Ice Control Section B	Night Shift	Contact #	Day Shift	Contact #
	Natoshia James		Desmond Thomas	
	Joel Throckmorton		Marty Roberts	
	Marctavious Gray		Shawn Hinson	
	Monterius Williams		Marquise Crosby	
Snow & Ice Control Section C	Night Shift	Contact #	Day Shift	Contact #
	Cory Granger		Alain Brown	
	Chris Thompson		Mark Axelson	
	Chris Smith		Anthony Speas	
	Shan Winfrey		Richard Pierce	
Snow & Ice Control Section D	Night Shift	Contact #	Day Shift	Contact #
	Mickey Ferguson			
	Daniel Sprinkle			
	Jeff Hunter			
	Adam Marshall			
Motorgrader Operation	Night Shift	Contact #	Day Shift	Contact #
	N/A		N/A	
	N/A		N/A	
	N/A		N/A	
	N/A		N/A	
Loader Operation	Night Shift	Contact #	Day Shift	Contact #
	Damey Dean		Ben White	
Storm Room	10:00 pm to 10:00 am		10:00 am to 10:00 pm	
	Mark Volden		Tim Ford	
	Chad Aldridge		TBD	
Supervision / Management	Keith Huff		10:00 am to 10:00 pm	
	Lance Covington		10:00 pm to 10:00 am	
	Johnnie Smith		10:00 am to 10:00 pm	
	Mike Doub		4:00 am to 4:00 pm	

Notes:

1. Resources will be adjusted as needed in response to weather changes.

2. Fleet Assistance:

3:00 am to 3:00 pm - Tim Harper (336) 399-1721 3:00 pm to 3:00 am - Angus Thomas (743) 999-4381

Snow/Ice Tools

- ▶ Below are the main tools and equipment used:

4 Motor graders

24 Trucks with push plows

25 Salt spreaders

3 Brine tank spreaders

5,000 gallon brine storage tank

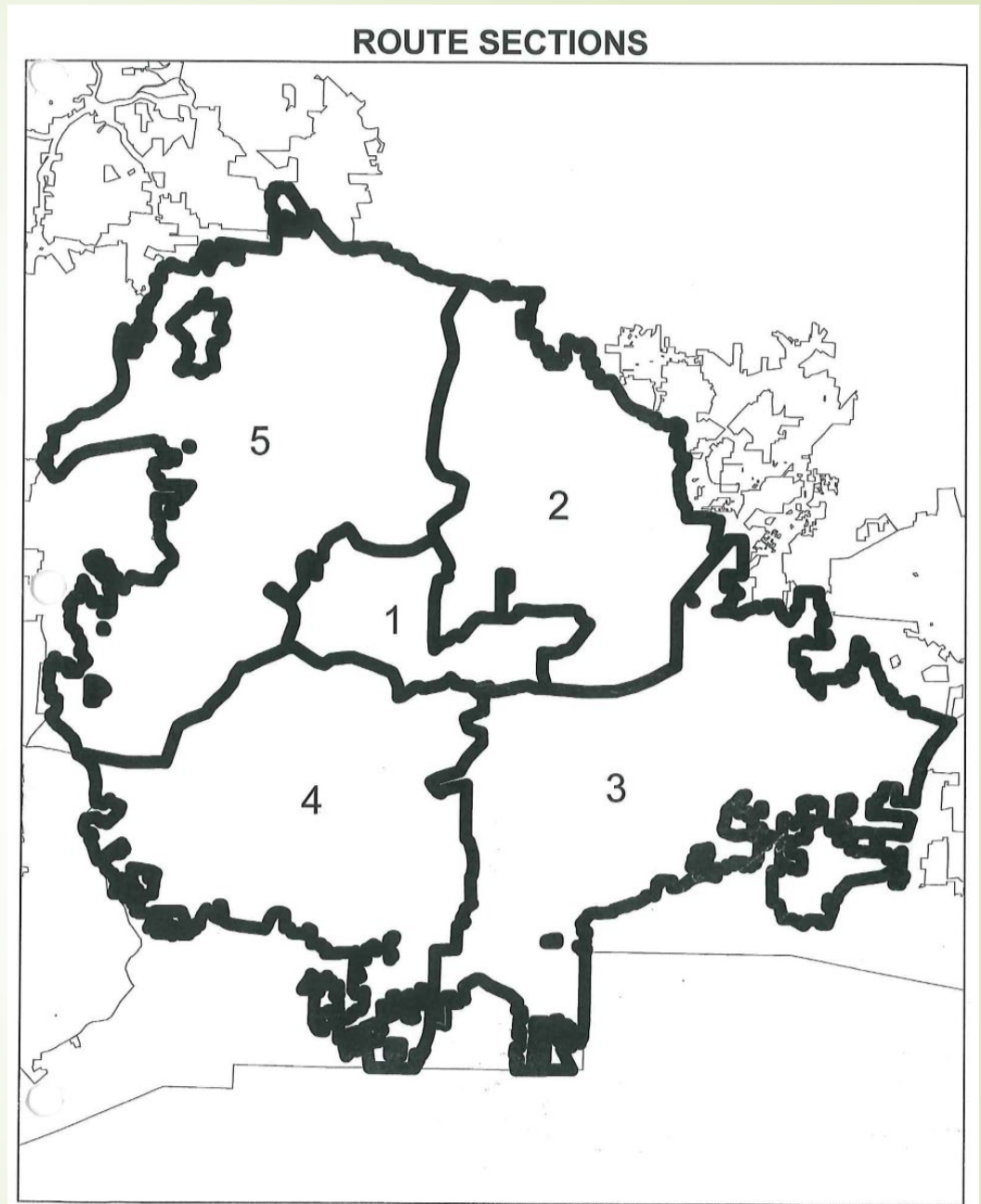
2,000 tons of salt

- ▶ Crews also use the weather to their advantage (too cold and brine is not effective and snow/ice becomes too solid to plow without breaking equipment so do what you can during daylight hours).



Snow/Ice Removal Plan

- ▶ Phase I: Brine application up to two days in advance (assuming no rain).
- ▶ Phase II: Major routes and critical facilities first priority (Central Business District Included).
- ▶ Phase III: Collector streets are cleared for at least one lane of travel.
- ▶ Phase IV: After collector streets are cleared for one lane of travel major roads are cleared for width, additional lanes and turn lanes.
- ▶ Collector streets are cleared as needed, then residential streets are cleared.



Why was my road not plowed?

- ▶ Commons for my road not being plowed:
 - 1) Private Streets
 - 2) Dirt Roads
 - 3) Outside the city (i.e. county roads)
 - 4) Lack of access (i.e. cars parked on the street)
 - 5) Commercial Properties (i.e. private parking lots)



Questions?

