

Yours Truly

FY25 Snow Program Update

Public Works Committee

October 14, 2024

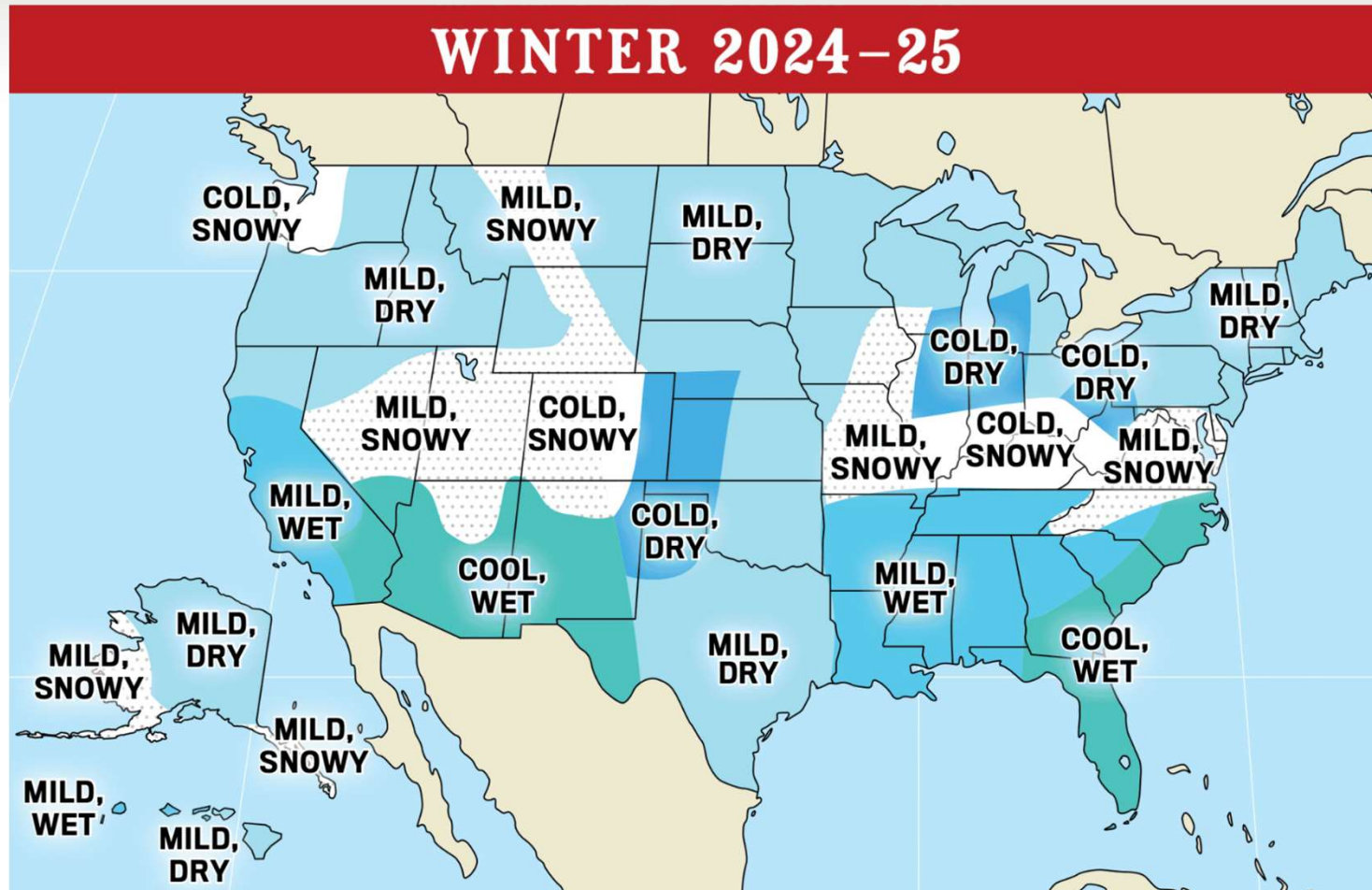
Outline

- Snow Predictions
- Snow Plan Goal
- Available Resources
- Equipment Upgrades
- Training
- Helpful Tips
- How City Council Can Help
- Questions

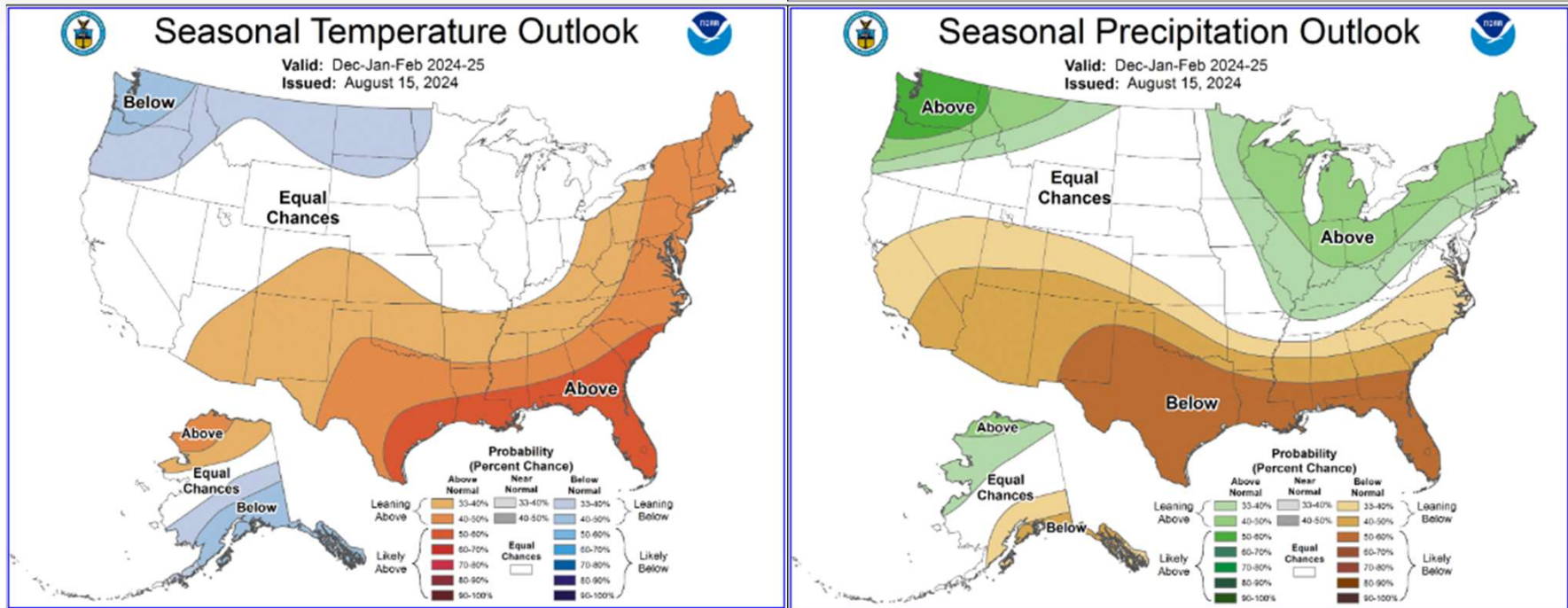
Farmers Almanac



Old Farmers Almanac



National Weather Service



Snow Plan Goal

- The goal of the City of Lee's Summit (City) is to provide adequate mobility and safety for properly equipped and prudently operated vehicles within a reasonable time after the end of the storm.
 - Provide a high level of customer service to our citizens
 - Defined Level of Service and completion time
 - Operate within available financial resources
 - Budget using three to five year average of actual expenses
 - Ensure operational balance for the City and employees
 - Continuous 24/7 response as needed

Snow Plan Goal

- The City's Snow Plan outlines steps for the completion of storm response within **10 - 48 hours after precipitation has ended** provided that required levels of equipment/ people are available.
- Residential routes treated only when $< 2''$ of snow accumulation
- **Level 1 ($< 1''$ of snow and pre-treatment) 10 hrs.**
- **Level 2 ($1 - < 2''$ of snow) 24 hrs.**
- **Level 3 ($\geq 2'' - 6''$) 32.5 hrs.**
- Level 4 ($> 6'' - 10''$) 40 hrs.
- Level 5 ($> 10''$) or sustained winds > 30 mph) 48 hrs.

Available Resources

- Plows
 - 10 Dump trucks
 - 11 One ton trucks
- Support Equipment
 - 2 Backhoes (Level 5 event)
 - 1 Front end loader (Used to load spreaders)
 - 2 Skid Steers (Level 5 event)

Available Resources

- Staff

- 2 Managers
- 4 Supervisors
- 2 Snow Desk staff
- 32 PW Operators (2 new expansion employees in FY25)
- Multiple volunteers from WU, PW Engr, DS, Admin, PD, Fire, P&R, etc.

- Infrastructure

- 2 Salt domes (6,000 Ton total capacity)
- Conveyor system
- Brine System (40,000 Gallon capacity)
- Calcium Chloride Storage Tank (12,000 Gallons)
- Radio communications
- AVL
- Turn by turn routing
- Public Facing Mapping

Equipment



Equipment Upgrades Complete

New Trucks have:

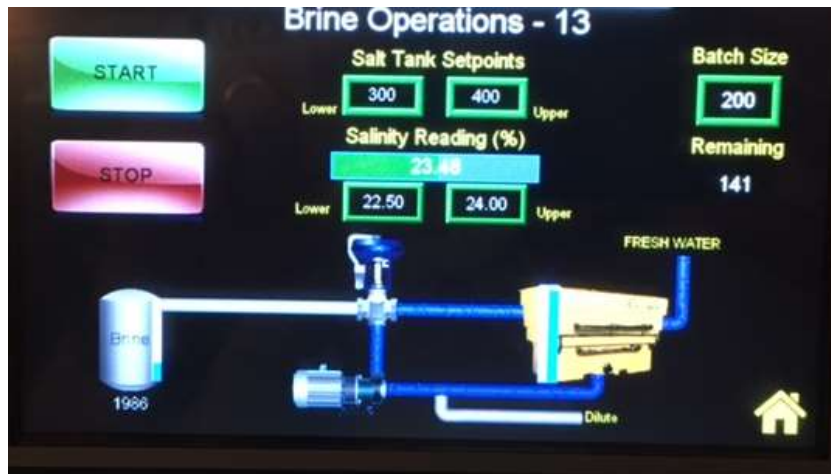
- Heavier plow and frame mount
- Larger salt capacity
- Wing plow
- Liquid distribution



Salt Dome/Conveyor



Salt Brine System



Salt Brine



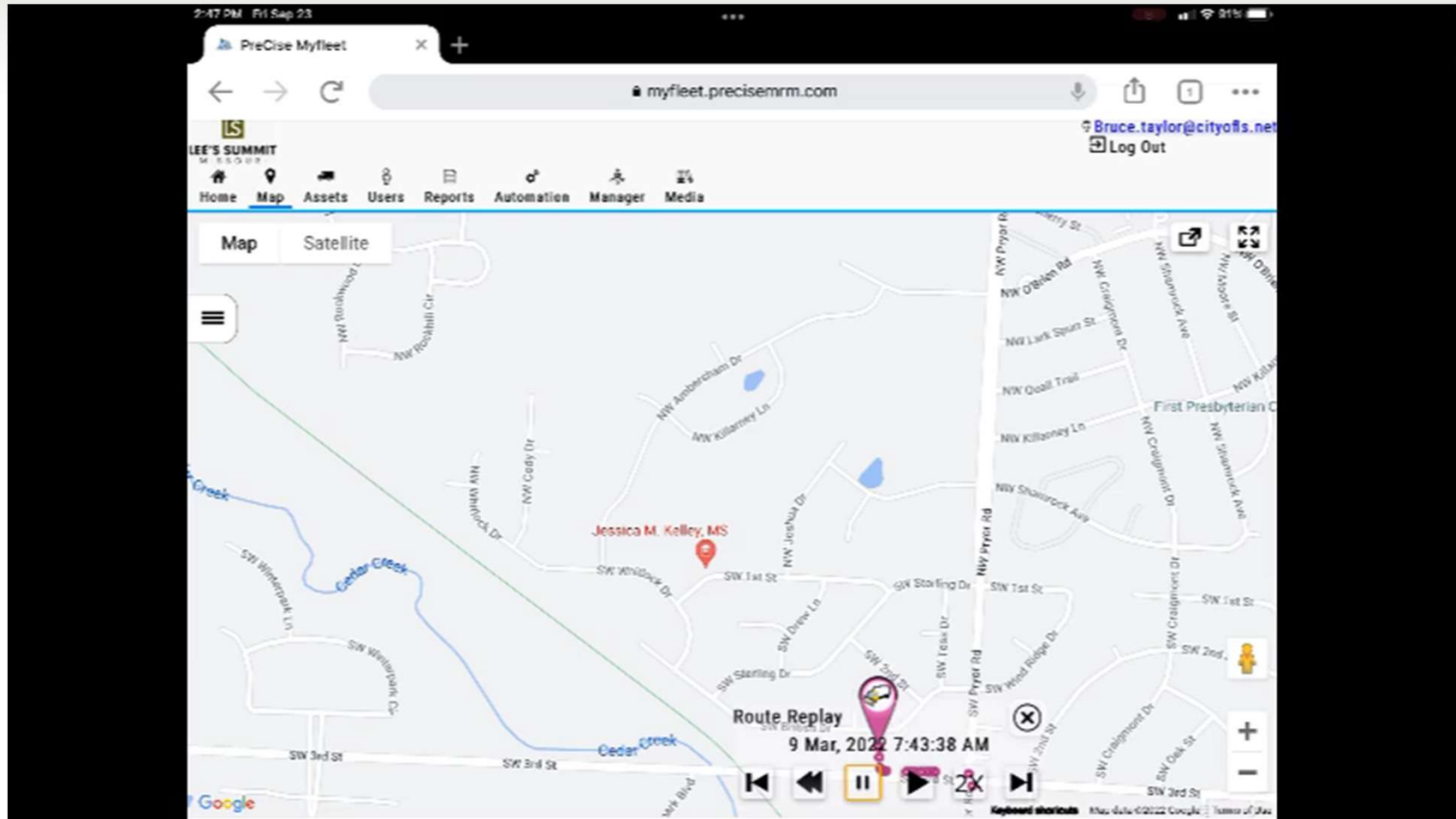
Salt Brine



AVL

- Automatic Vehicle Locating
 - Tells us where the snow plows are
 - Tells us what the snow plows are doing
 - Better QA/QC
 - Customizable
 - More Reliable

AVL



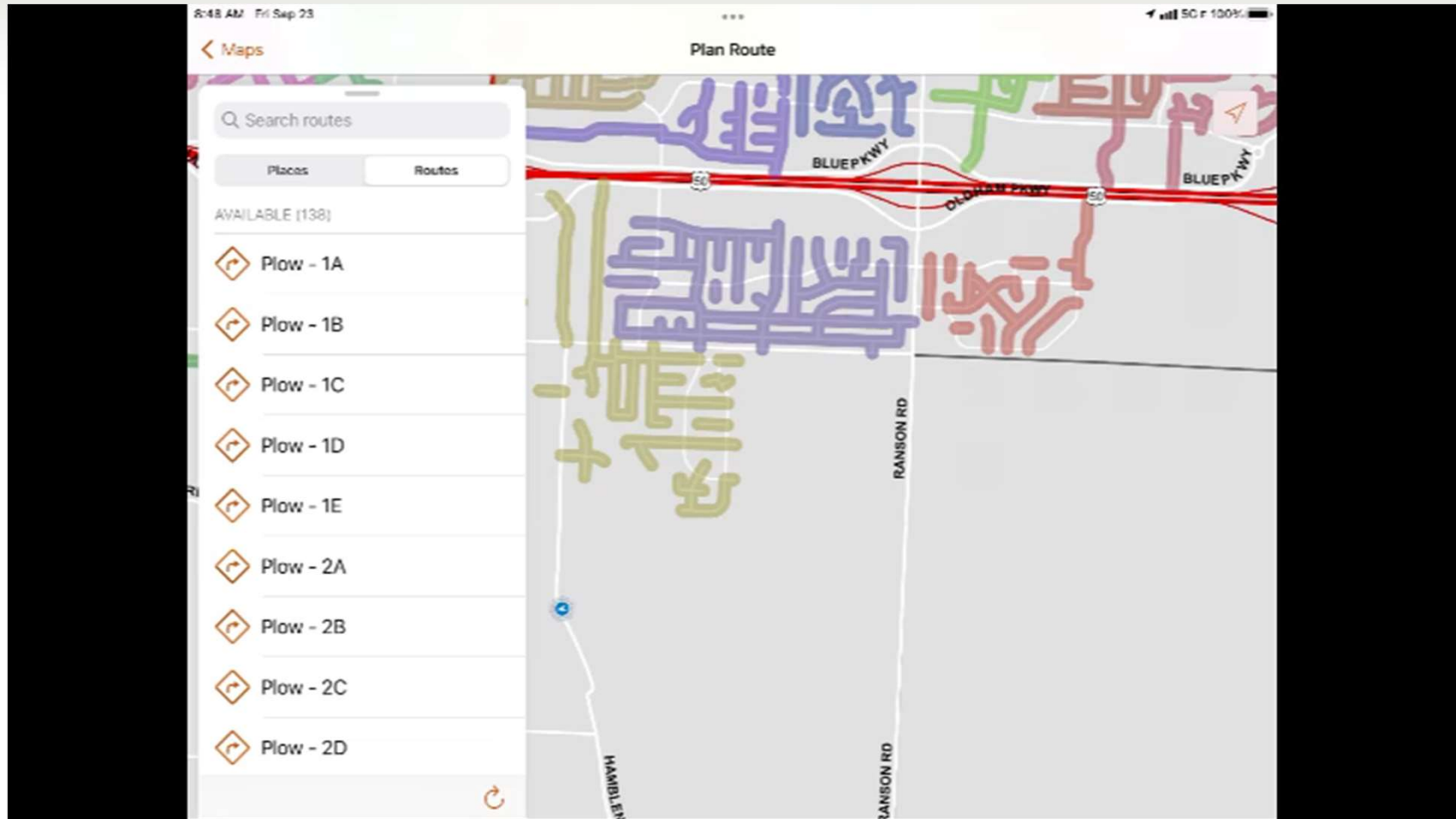
AVL

738

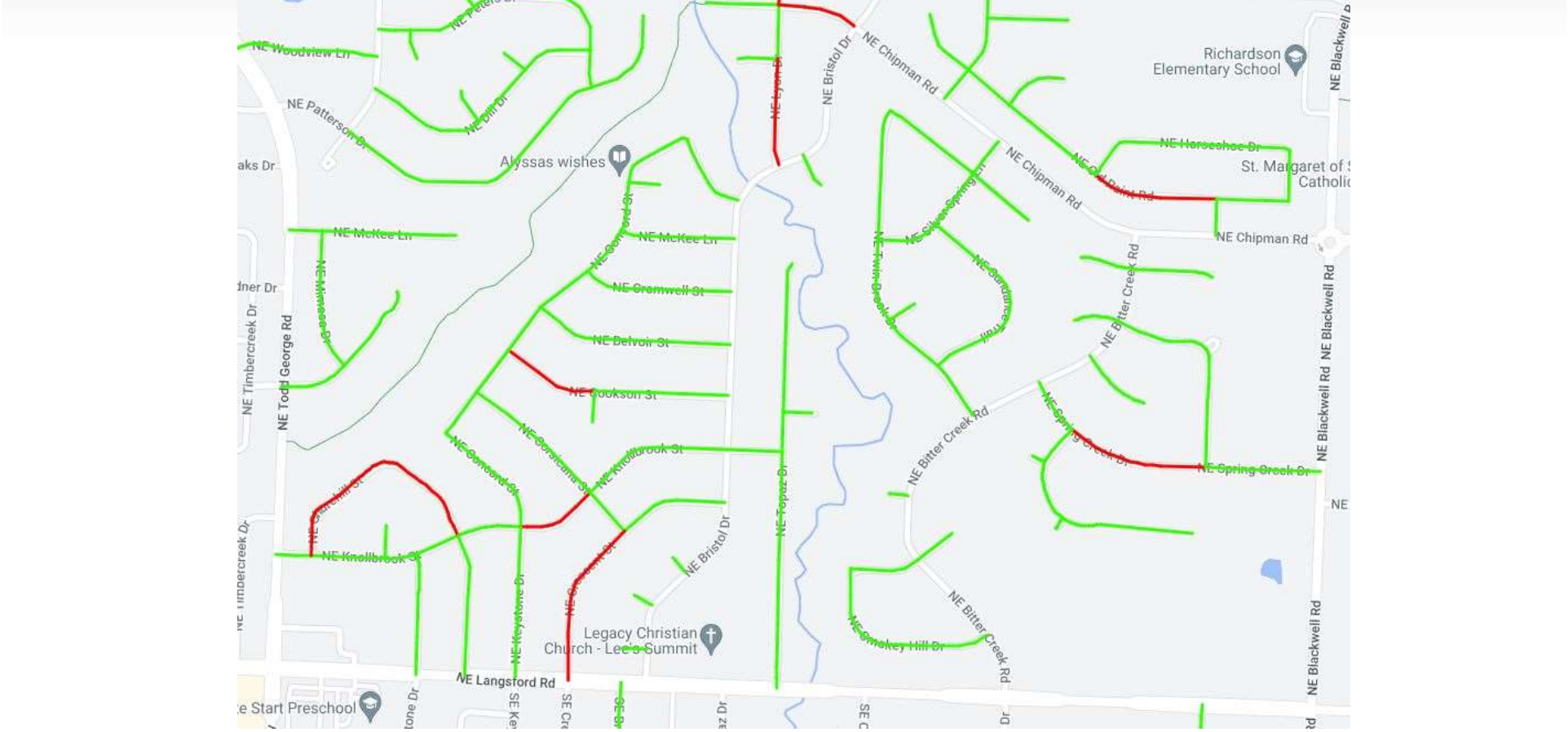
Name:	738
Fleet:	Lee's Summit
Distance From Home:	3.4 Miles
GPS Location:	2/2/2022 5:00:28 AM
Heading:	East
Speed:	2.2 MPH
Ignition:	On
Front Plow:	Up
Wing Plow:	Up
Odometer:	2994.9 miles
Engine Hours:	316.1
Notes:	6100 Gen 5
Address:	2000 SW Walden Dr, Lee's Summit, MO 64081, USA
Coordinates:	[38.90453, -94.41488]
Spreading Status:	S
Granular Material:	SALT
Granular Setting:	300 lb/mi
Granular Spread Rate Index:	3
Granular Mode:	C
Prewet Material:	PWT1
Prewet Setting:	8 gal/ton
Prewet Spread Rate Index:	6
Prewet Mode:	C
Direct Setting:	0 gal/mi
Direct Spread Rate Index:	0
Direct Mode:	C
Road Temperature:	30 °F
Air Temperature:	31 °F
Vehicle ID:	TRUCK 1
Spinner Dial Setting:	0

2 Feb, 2022 5:00:00 AM

Turn by Turn Routing

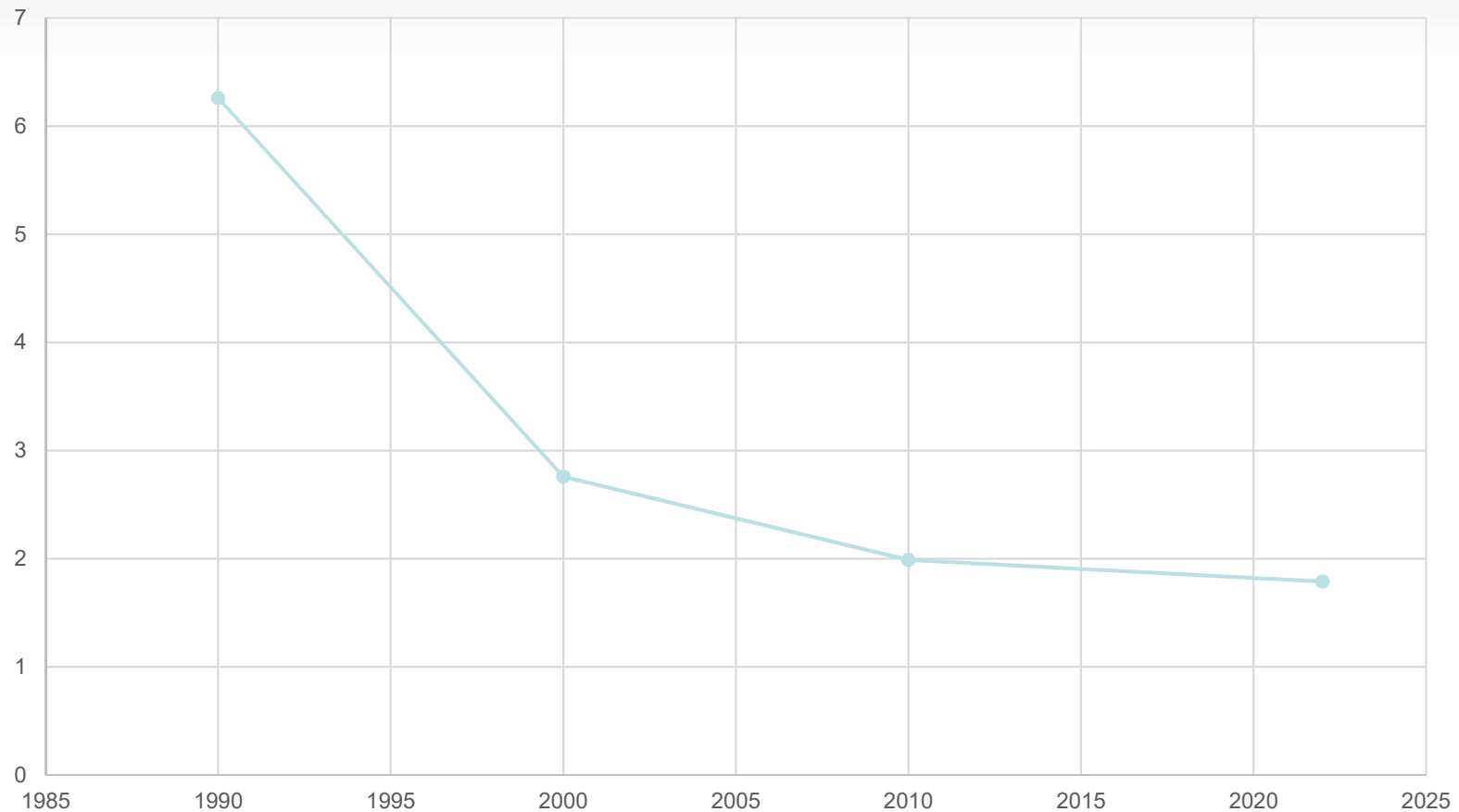


Public Facing Map



Efficiency Gains

Minutes per Lane Mile by Year



Snow Rodeo

- September 16 – 20, 2024
- 85 employees participated in the training
- New rodeo course
 - Loading and unloading materials
 - Following traffic rules
 - Driving skills

Snow Rodeo



Snow Training

- Public Works has scheduled a mock event
 - November 6, 2024
 - Snow plow drivers will drive routes to become familiar with them
 - Test all technology systems – AVL, Turn by Turn Routing, Snow Tracker
 - Public Outreach

Helpful Tips

- Remove cars from the street
- Keep trashcans and basketball goal out of the street
- Do not build snow forts in the piles of snow in the street
- Do not shovel snow from your driveway into the street
- Shovel downstream of snow plowing to lessen the amount of snow left at your driveway entrance

How City Council Can Help

- Help managing expectations
- Help rally our troops
- Help educate the public (share our snow goal)
 - Our goal is to provide adequate mobility and safety for properly equipped and prudently operated vehicles within a reasonable time after the end of the storm.
- Help keep the public informed during snow events

Questions

