

Winter Operations Update

Paul Matthews, Public Works Manager



Winter Maintenance Goal

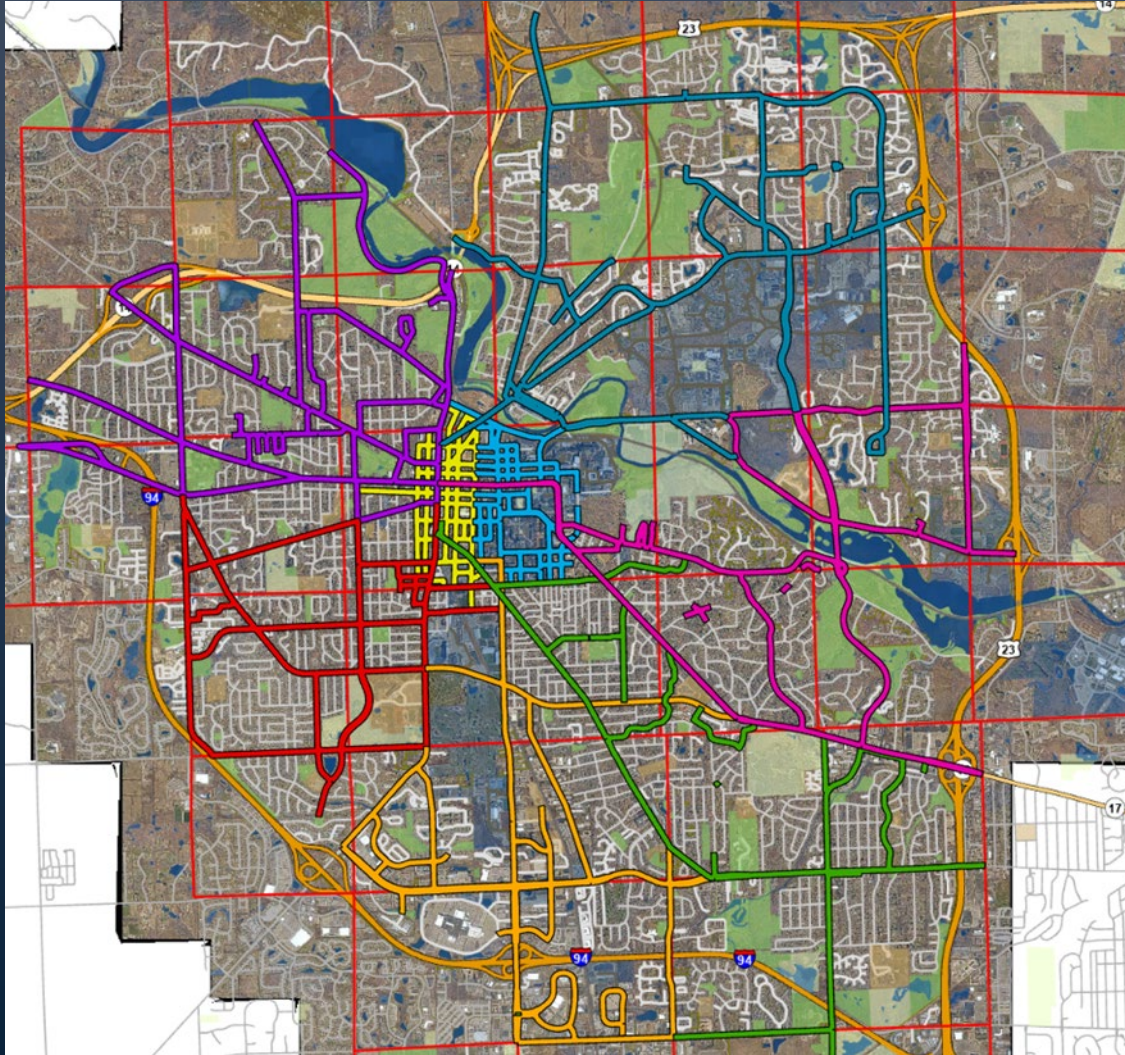
The City of Ann Arbor's winter road maintenance objective is to provide surfaces that are safe to use at reasonable speeds.

A2 Snow Removal

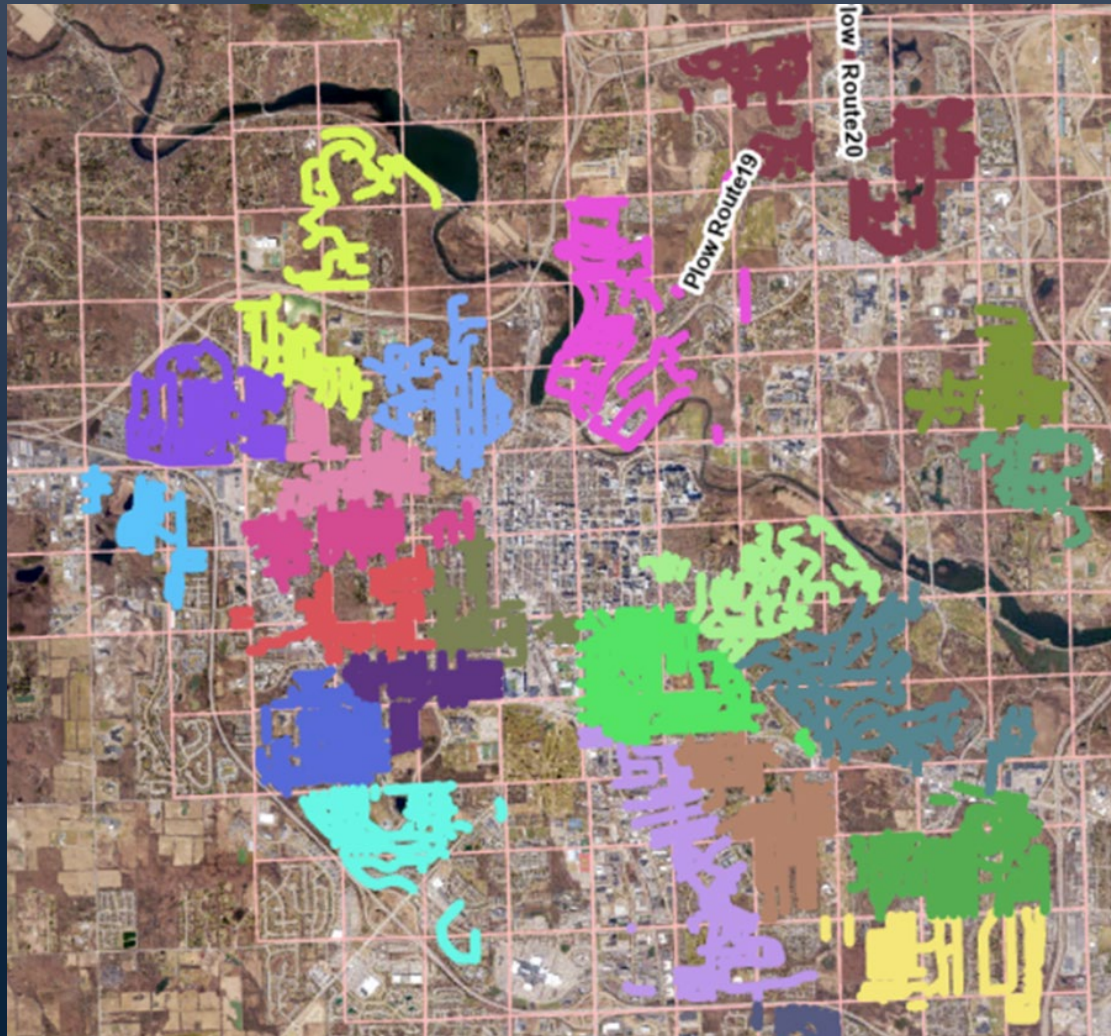
- Public Roads
- Bike Lanes
- Sidewalks
 - DDA
 - Property Owners
 - Public Works Contractors
 - Parks Department

Major Road Maintenance

- 8 Major plow/salt routes are treated to bare pavement and total 346 lane miles.
- Consist of major roads and school routes.



Local Road Snow Removal



- 23 Local Snow Routes
- Over 500 Lane Miles
- The intersections, hills and curves on local roads are salted and these streets are plowed when snow totals reach 4" or at managements discretion.
- All local roads are plowed within 24 hours after the snow stops falling.



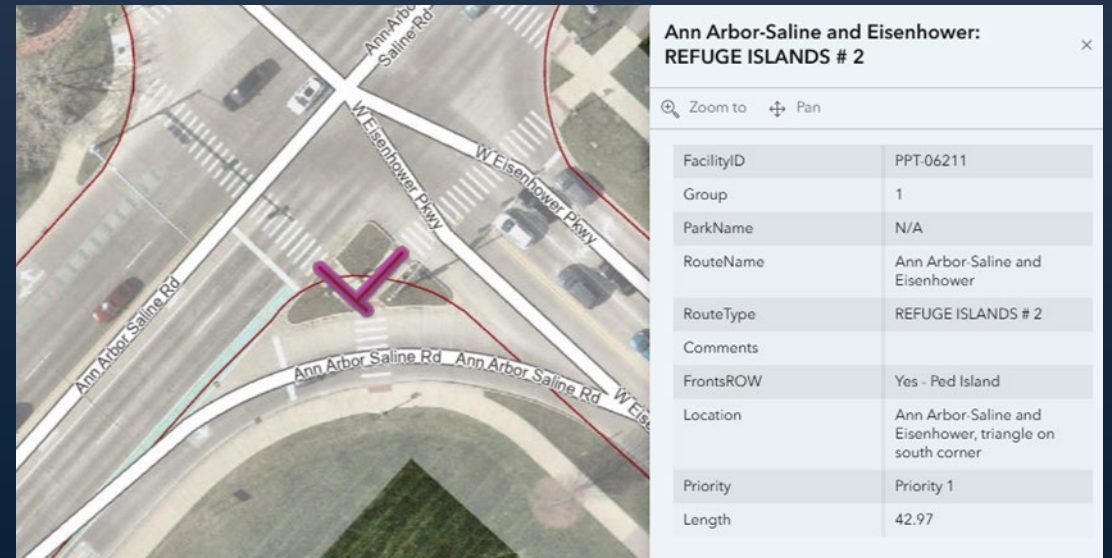
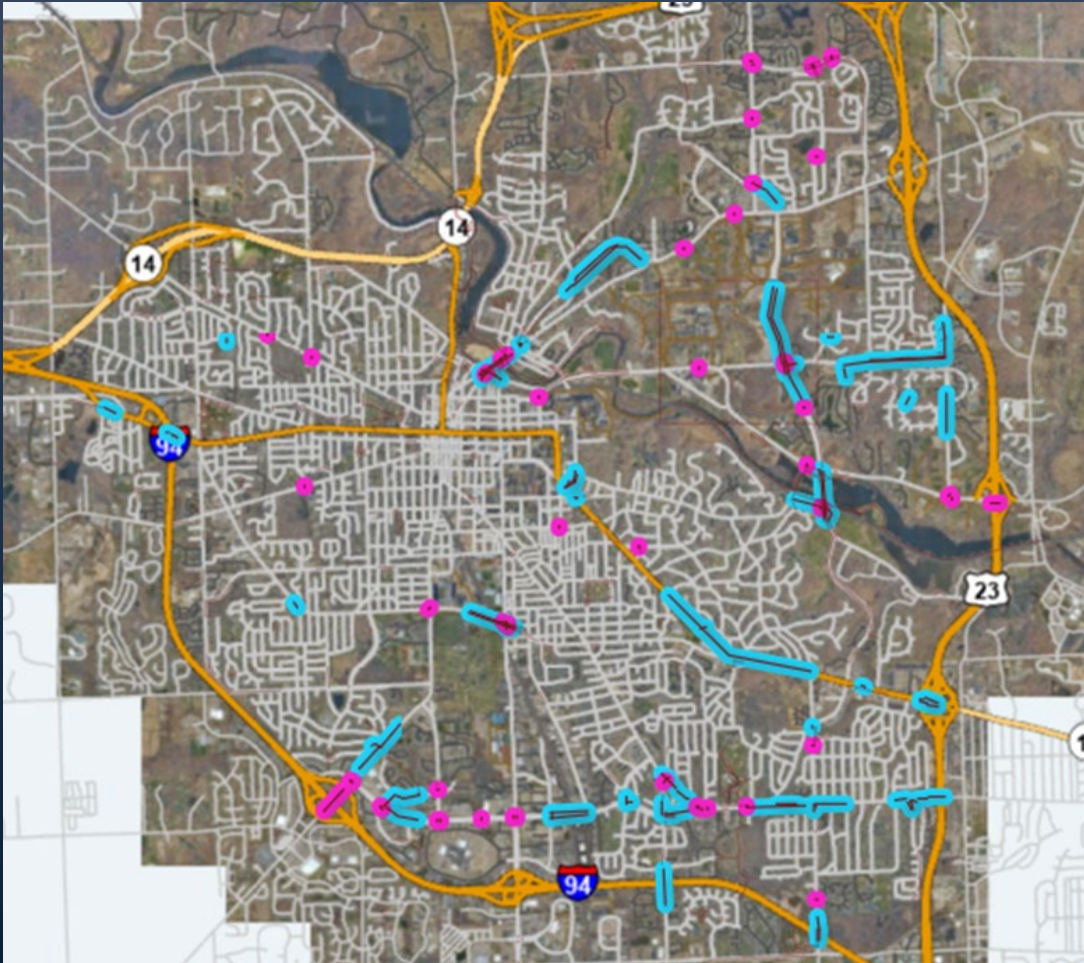
Bike Lane Maintenance



- 13.2 Miles of Buffered or Protected Bike Lanes that are treated to bare pavement with specialized equipment.
- 90.2 miles of on-street bike lanes that are treated in conjunction with the roadways. Additional pass after an event to push them back.

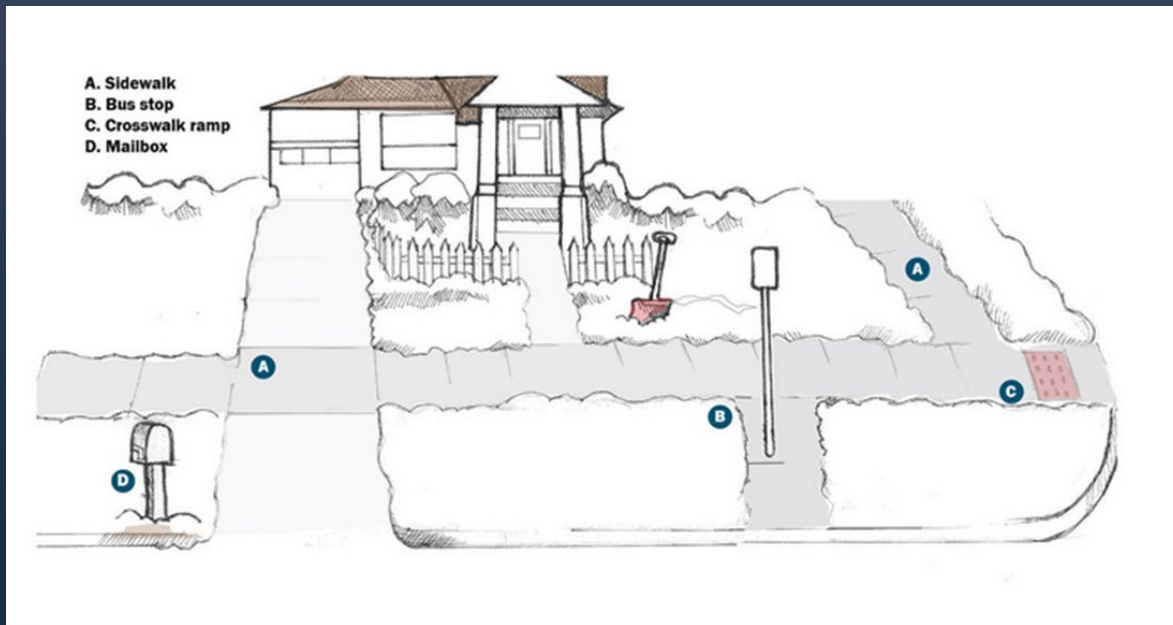
Sidewalks, Paths and Refuge Islands

- 14 Miles of sidewalks and paths.
- 66 Pedestrian Island and locations requiring snow removal by hand.



Ann Arbor-Saline and Eisenhower: REFUGE ISLANDS # 2	
Zoom to Pan	
FacilityID	PPT-06211
Group	1
ParkName	N/A
RouteName	Ann Arbor-Saline and Eisenhower
RouteType	REFUGE ISLANDS # 2
Comments	
FrontsROW	Yes - Ped Island
Location	Ann Arbor-Saline and Eisenhower, triangle on south corner
Priority	Priority 1
Length	42.97

Right of Way Sidewalks



- Residential property owners are responsible for clearing sidewalk, bus stops, crosswalk ramps, and mailbox areas within 24 hours when snow accumulation is greater than 1”.
- Non-residential property owners are responsible for clearing all snow that has accumulated prior to 6 a.m. on a sidewalk adjacent to the property before noon on the same day.
- City provides free salt sand mixture.
- A2 Snow Match Program
- Enforced by Community Standards

Challenges

- Limited Staff
- Limited Resources
- Equipment
- Weather Patterns
- Expectations
- Cooperation
- Property Owner Maintenance

Weather and Road Monitoring Tools

- ClearPath Weather
 - The system provides forecasts, 24, 48, 72-hour outlooks, air temperature, dew points, wind speed & direction, wind gusts, precipitation percentage, humidity and pavement temperature.
- Pivotal Weather
 - Provides Global Forecast System (GFS) models for total snowfall .
- Frost Solutions
 - There are several road weather information systems (RWIS) positioned at locations throughout the city. These stations provide real-time road temperature, air temperature, humidity, and dew point data that is used to forecast future road conditions. They also provide a live camera feed to visually monitor current conditions.
- City Owned Traffic Cameras
- Front facing cameras and pavement temperature monitors on snow removal trucks.
- Additional Weather Forecasting
 - AccuWeather
 - Channel 4 Weather
 - NOAA/NWS

Group

Ann Arbor, MI

Search



☒ Ann Arbor, MI

☒ All



E Huron + N Division

May 19, 23 11:15 AM EDT

Air: 68.3 °F / Surf.: 73.5 °F

H: 45.4% / D: 48.6 °F

Wind: 5 mph SSE

Current

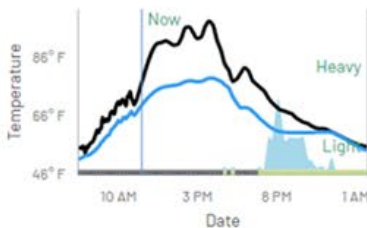


Forecast



5 hrs 18 mins 5 hrs 18 mins

0.33 in rain over next 12 hours

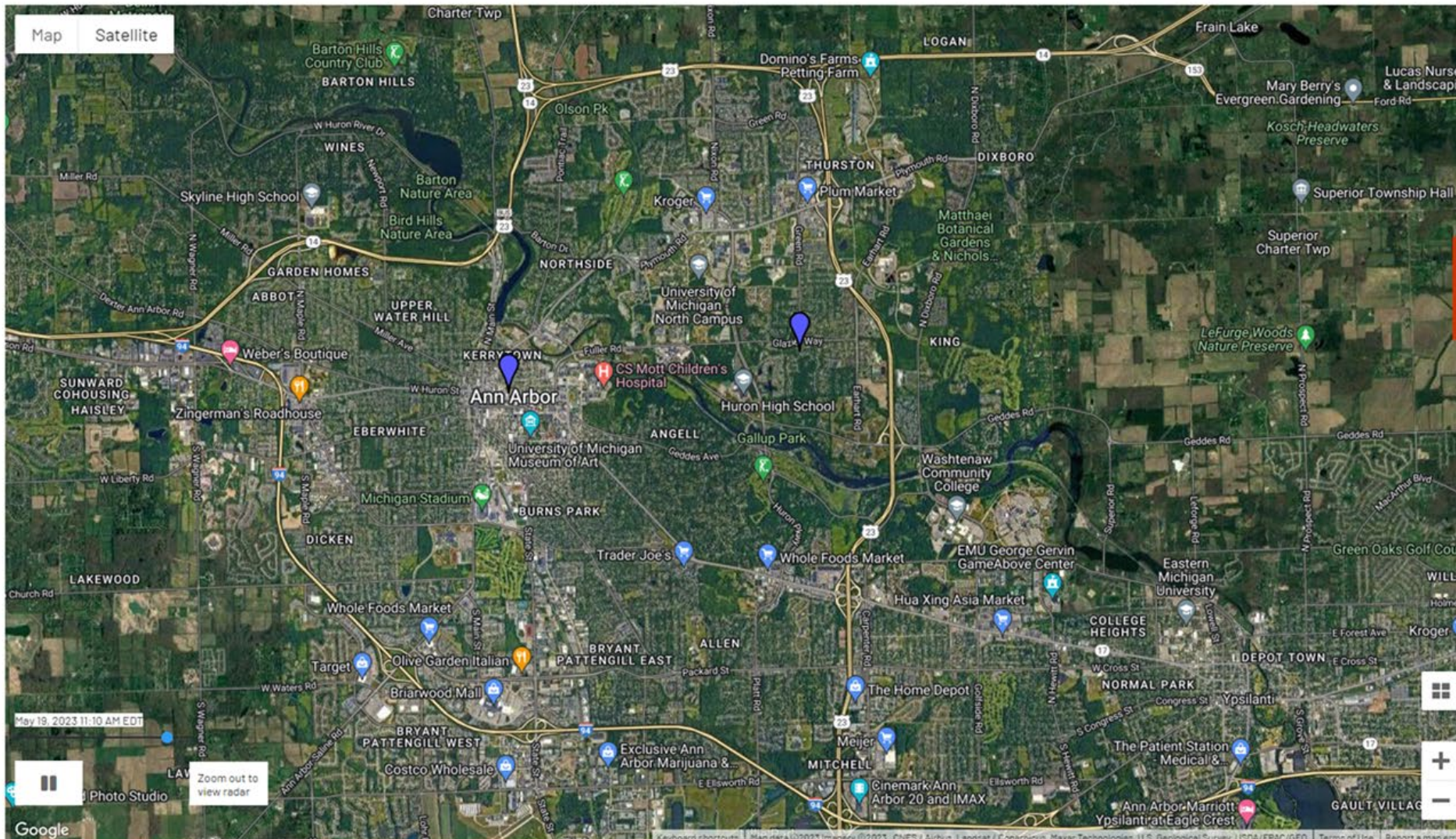


Green + Foxhunt

May 19, 23 11:20 AM EDT

Air: 67.3 °F / Surf.: 72 °F

H: 49% / D: 49 °F



Google



Photo Details:

E Huron +N Division

May 19, 23 10:12 AM EDT

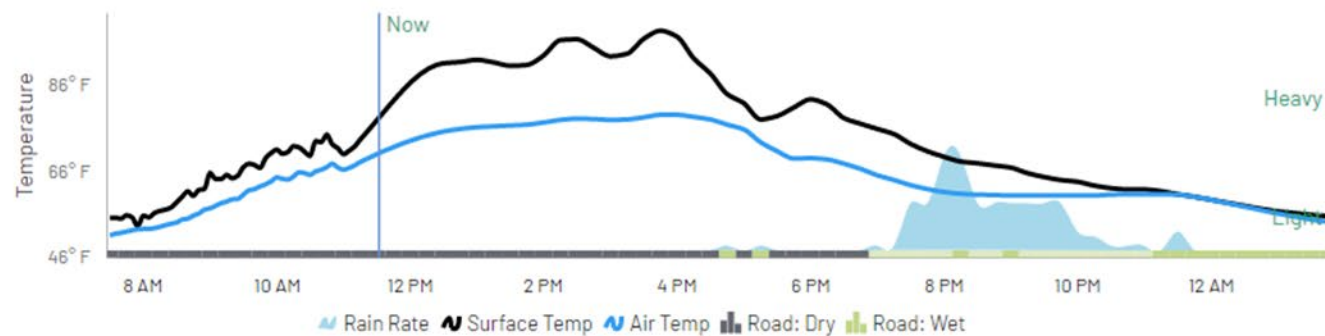
Air: **63.8°F**

Surface: **71.2°F**

Dew Point: **46.2°F**

Humidity: **51.2%**

Wind: **1.8 mph SSE**

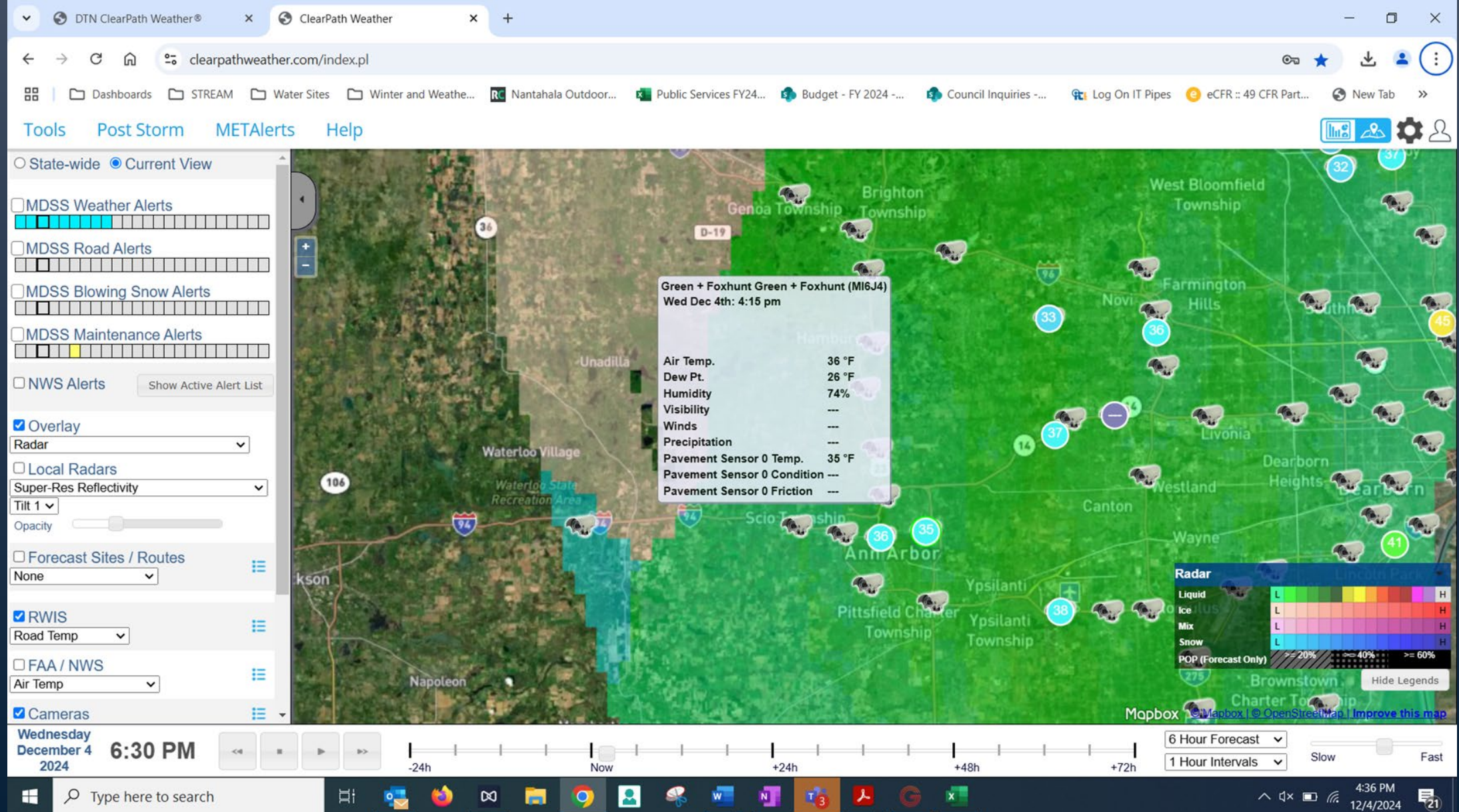


TOOLS

HISTORY

ANNOTATE

DTN Weather Forecasting Services



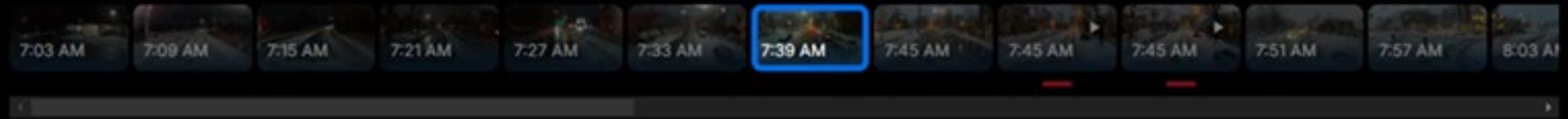
FY25 Program Changes

- New Technology
- New Contracted Services
 - Supplemental Residential Street Plowing Services
 - Sidewalk Snow Removal Services
- New Equipment
- Snow Parking Ban Ordinance Revision

← Trip Timeline 2h 34m



All Videos & Images ▾

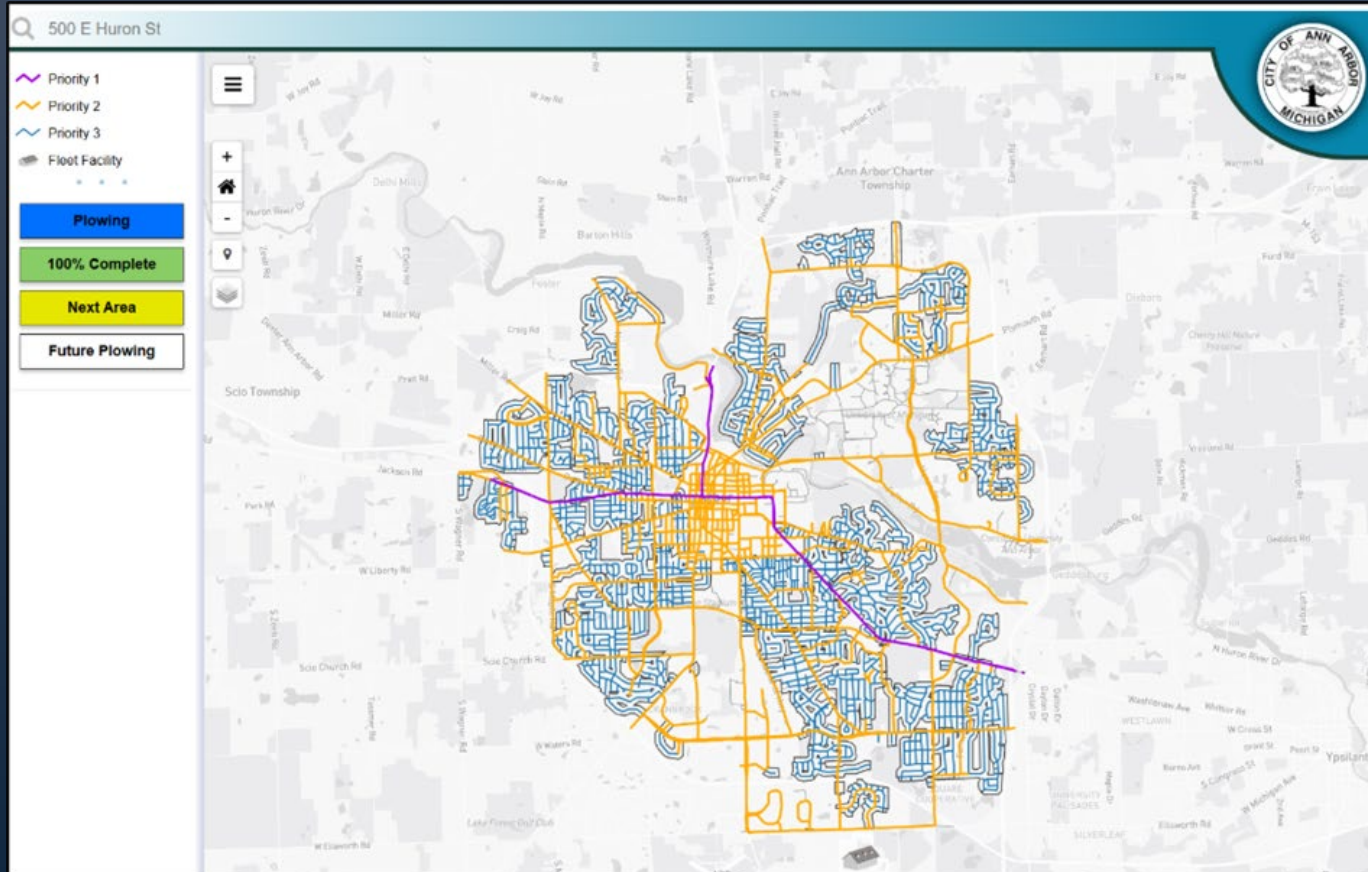


11
mph
LIMIT 30

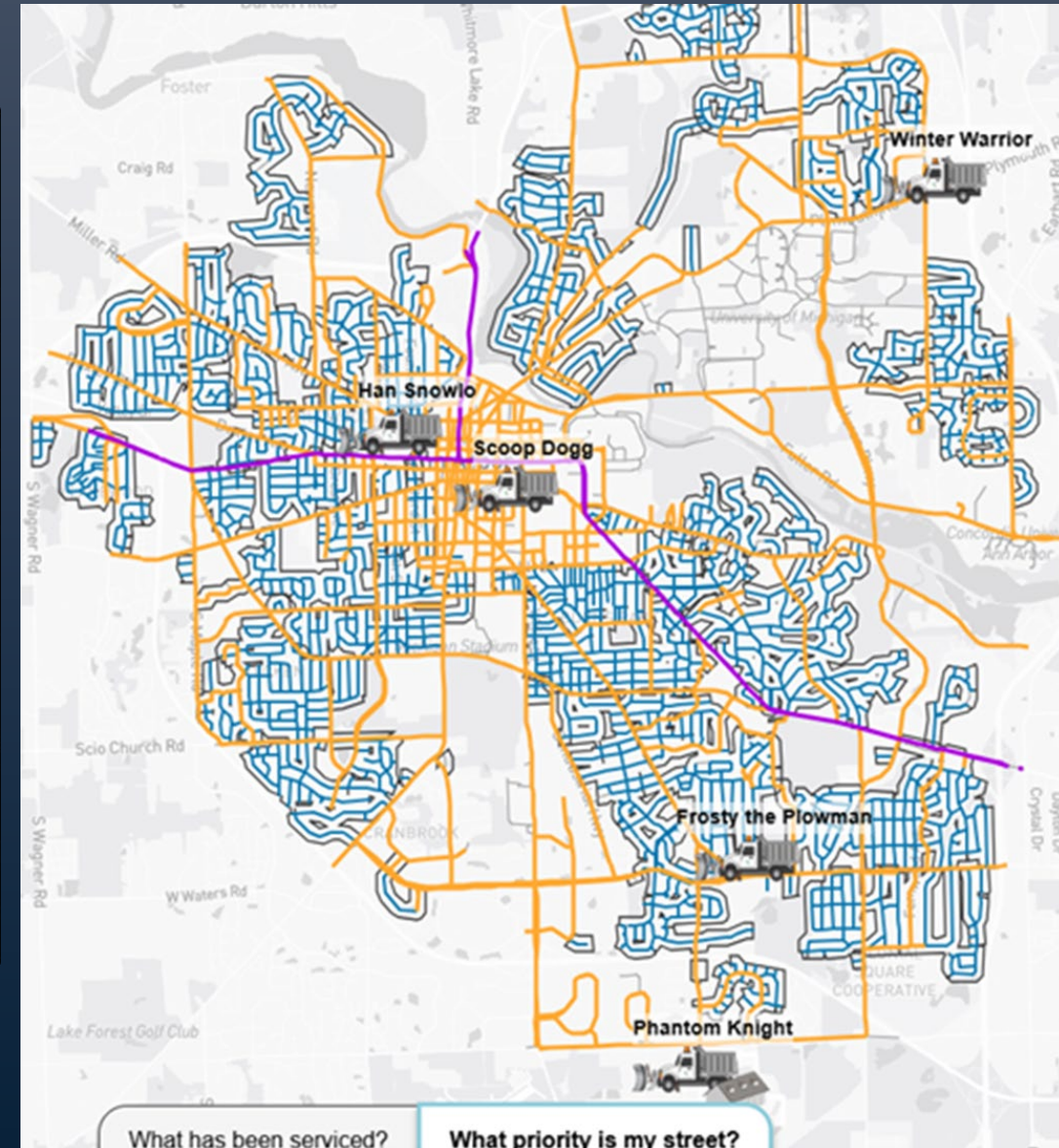


7:39:19 AM EST

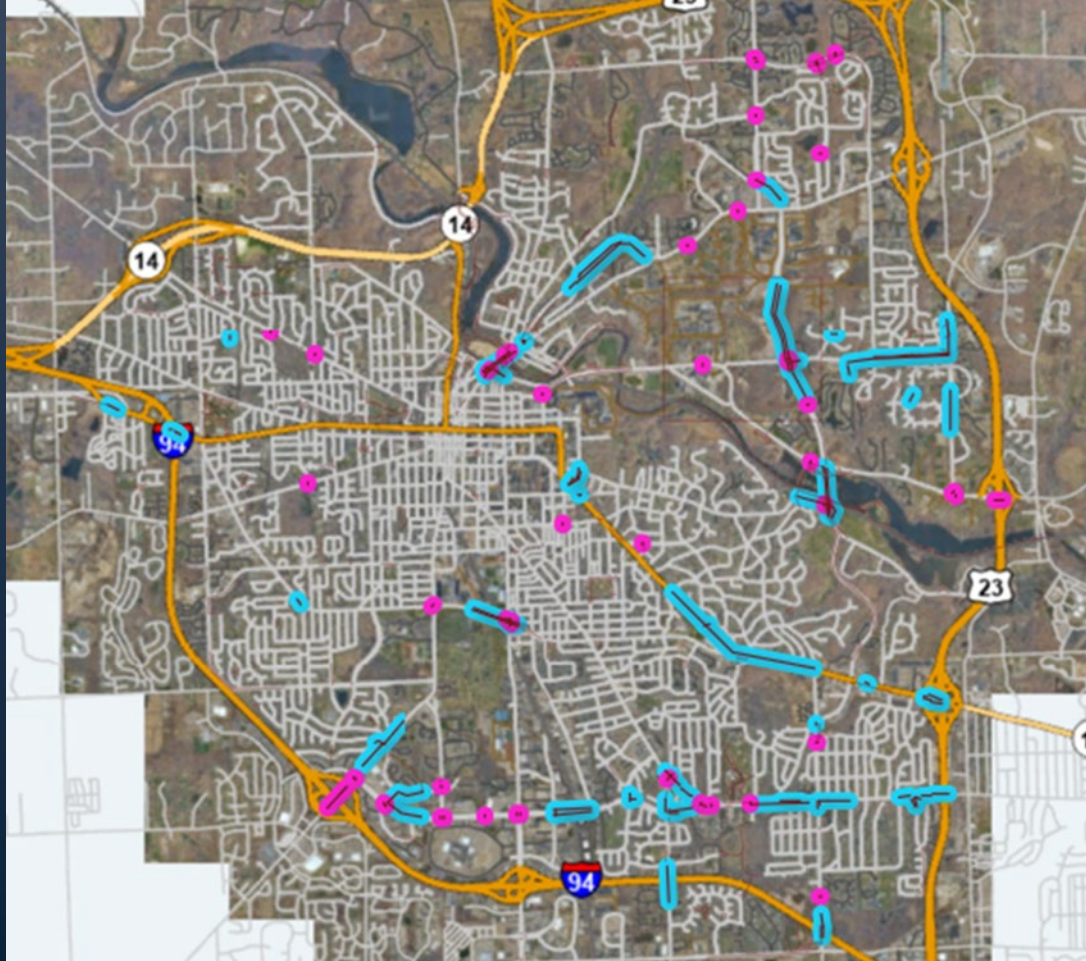
Improved Plow Tracking Map



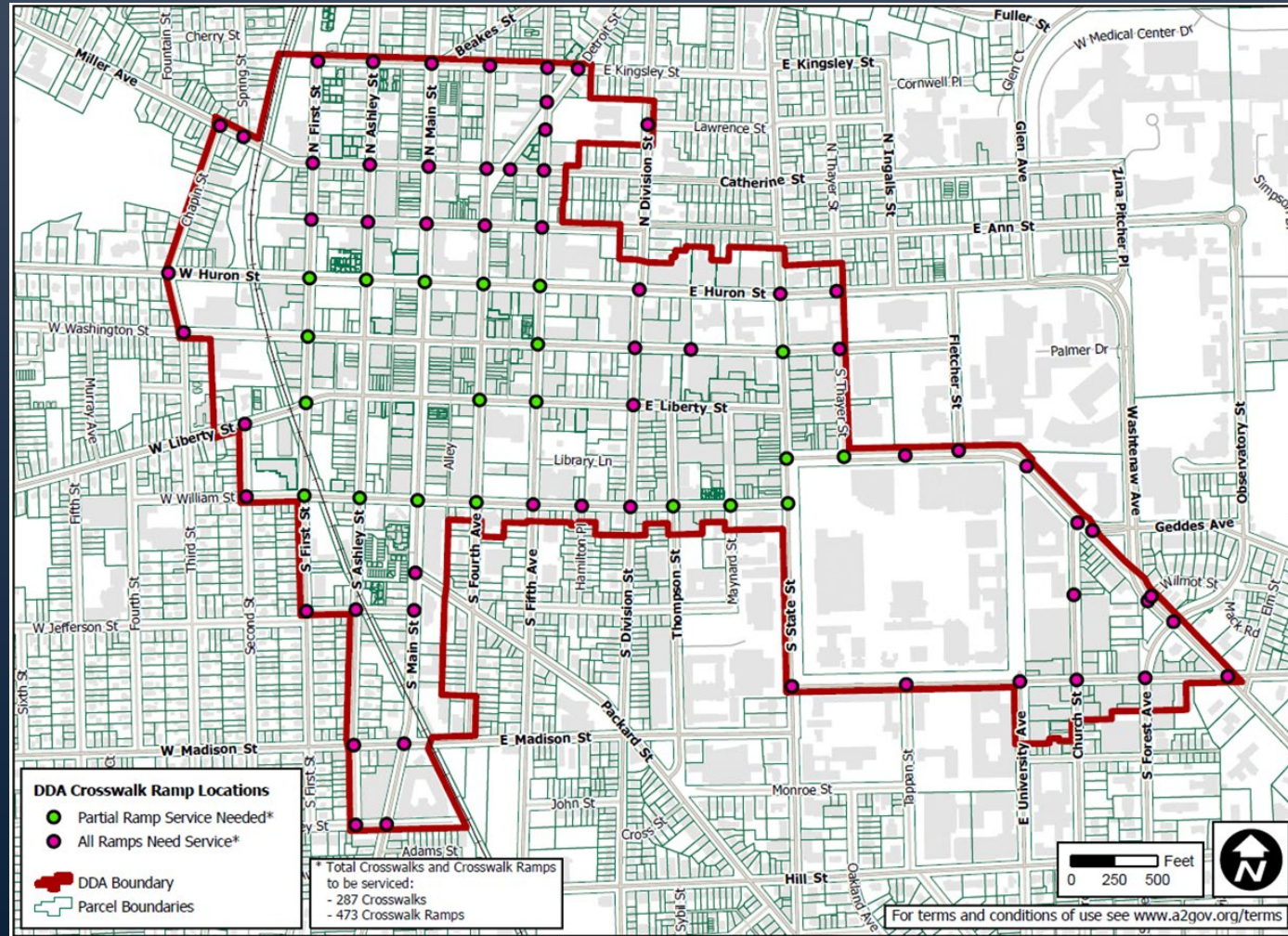
<https://snowplowmap.a2gov.org>



Contracted Sidewalk Clearing



DDA Handicap Ramp Maintenance



Contracted Residential Plowing

➤ KBK

- Bid on 14 of 23 Sections
- 2 Plowing Cycles this Year
- Bid on all 23 Sections for this Upcoming Winter

Equipment Improvement





Why is Ordinance Change Necessary?

- Loss of Efficiency
- Safety
- ADA Access
- Return Trips to Remove Windrows
- Blocked Storm Drains
- Seek Alternate Parking Arrangements



2025 Winter Stats

Month	Snow	Avg High/Low Temperature	Max/Min Temperature
November	5.5"	52/38	72/22
December	7.6"	38/25	56/2
January	12.2"	29/16	48/-6
February	12.6"	33/17	55/-5
March	.9"	54/30	73/12
April	2.1"	62/35	85/19

City of Ann Arbor - 2024-2025 Public Works Winter Maintenance Summary

Total Major Roads Winter Maintenance Work Events:	23 Events	Total Salt Use for 2024-2025 Winter Season:	4661 Tons
Total Major Roads Winter Maintenance Work Orders:	48 Work Orders	Total Salt Costs for 2024-2025 Season:	\$256,691.18
Total Local Roads Winter Maintenance Work Events:	11 Events	Total Contracted Local Roads Winter Maintenance Events:	2 Events
Total Local Roads Winter Maintenance Work Orders:	31 Work Orders	Total Contracted Sidewalk Winter Maintenance Events:	8 Events
Total Protected Bike Lanes Winter Maintenance Work Events:	31 Events	Total Contracted DDA Winter Maintenance Events:	1 Event (\$3,200)
Total Protected Bike Lanes Winter Maintenance Work Orders:	44 Work Orders	Total Contracted Winter Maintenance Events:	\$70,591.60
<i>KBK Landscaping (Local Roads Contractor) = \$26,700 Target Facility Maintenance (Sidewalk Winter Maintenance Contractor) = \$43,891.60</i>			

Salt Usage - Current Season

	<u>Tons</u>	<u>Costs</u>
November 2024	88.53	\$4,727.50
December 2024	1,000.56	\$53,429.90
January 2025	1,509.92	\$85,125.97
February 2025	1,970.63	\$108,384.65
March 2025	91.33	\$5,023.15
Totals:	4660.97	\$256,691.18

Salt Usage - Prior Season

	<u>Tons</u>	<u>Costs</u>
November 2023	334.35	\$15,864.91
December 2023	52.66	\$2,498.72
January 2024	2,398.54	\$131,535.25
February 2024	159.2	\$8,501.28
March 2024	203.45	\$10,864.23
Totals:	3148.2	\$169,264.38

Labor and Equipment Costs - Current Season

	<u>Labor Costs</u>	<u>Equip. Costs</u>
November 2024	\$5,217.30	\$7,361.37
December 2024	\$36,088.83	\$74,094.62
January 2025	\$59,200.10	\$113,620.58
February 2025	\$135,212.78	\$186,500.24
March 2025	\$5,793.47	\$8,257.47
Totals:	\$241,512.48	\$389,834.28

Labor and Equipment Costs - Prior Season

	<u>Labor Costs</u>	<u>Equip. Costs</u>
November 2023	\$12,814.63	\$23,452.30
December 2023	\$4,908.76	\$10,500.47
January 2024	\$135,849.64	\$244,455.74
February 2024	\$8,319.07	\$18,392.76
March 2024	\$7,936.57	\$16,885.96
Totals:	\$169,828.67	\$313,687.23

Total FY2024-2025 Winter Maintenance Costs: \$959,895.60

Total Prior Season Winter Maintenance Costs: \$652,780.28

Kudos

Two reports from the field:

- a friend of mine writes, "The snowplow names bring me joy."
- My local street was plowed before NOON today. That is amazing. There have been times that I have not been plowed out by noon 36 hours after a snowfall. Thank you for hiring the local contractors to get moving on our local streets.

Hi, Erica. A note of appreciate to the Council for allocating additional budget for snow plowing. The Wednesday/Thursday storm was, I think, the first significant snowfall in the 10+ years I've lived on 5th Street that the street was plowed and drivable by the time snow stopped falling. What a difference appropriate resources make!

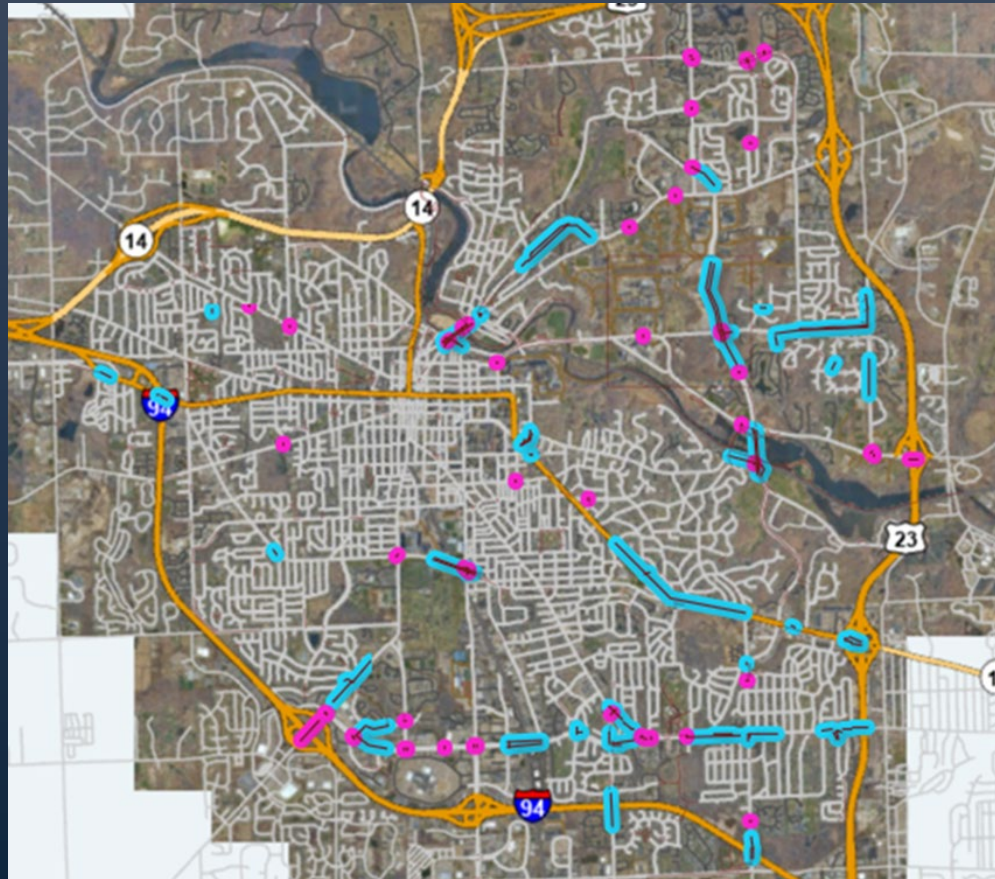
This is not the first of these I've gotten this week. Thank you for the increased level of service: residents are noticing.

More praise for your team. Well deserved.

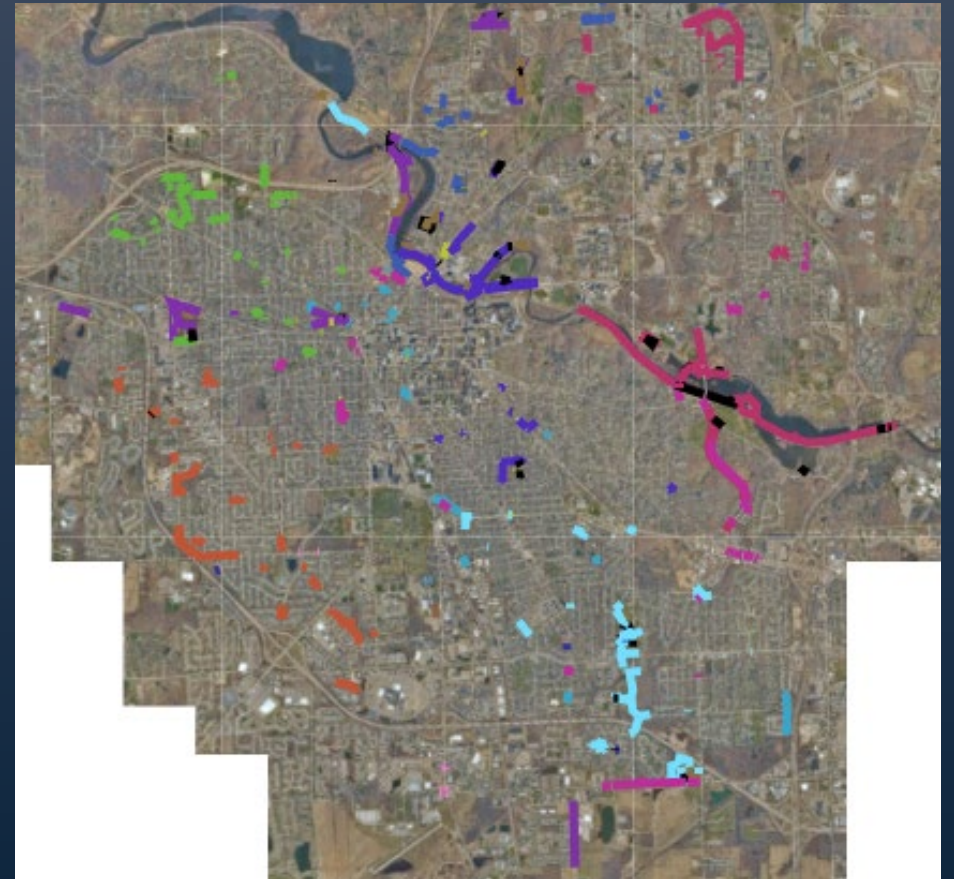
Another compliment. Nice work!

Residents are noticing and appreciative!

Public Works Snow Routes

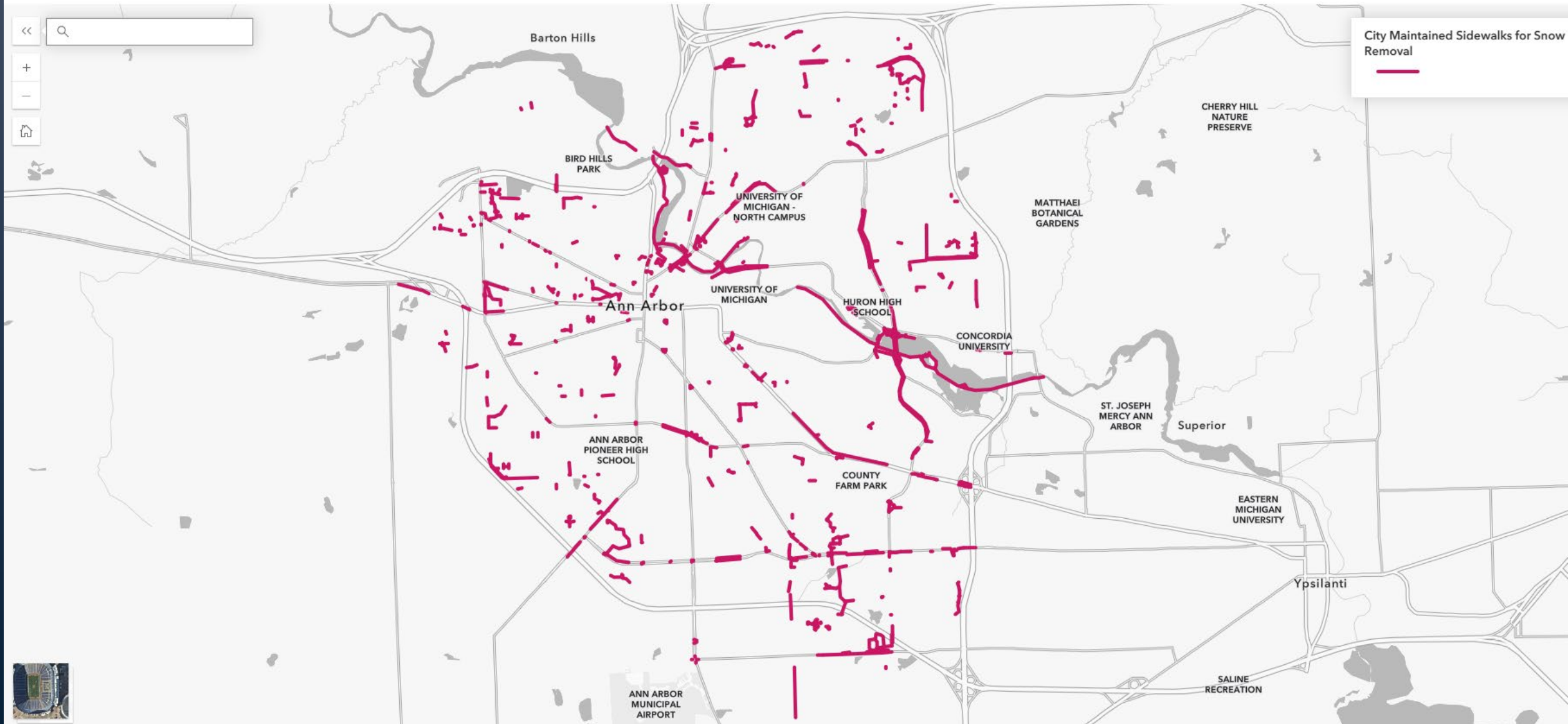


Parks Snow Routes



Ann Arbor Maintained Sidewalks

City of Ann Arbor Sidewalk Snow Removal



Last 5 years Service Requests by City Maintained Sidewalks

Total Snow/Ice on Sidewalk SRs Past 5 Years		3,863
SRs Within City Park or City Owned Parcel		65
SRs Within X feet of City Maintained Sidewalk (or within City Property)		
Distance (Feet)	Request Count	Request Increase
0	65	---
5	91	26
10	111	20
15	141	30
20	163	22
25	180	17
30	204	24
35	235	31
40	257	22
45	272	15
50	291	19
55	309	18
60	328	19
65	344	16

On-Street Snow Parking Ban Ordinance Revision

- Simplify language and direction to residents
- Provide exemptions based on certain conditions
- Provide ample lead time for motorists to comply
- Minimum 12 hours in advance
- Social Media, Television Stations, Website, Email Blasts, Radio, Everbridge

<https://www.a2gov.org/public-works/street-maintenance/on-street-snow-parking-ban/>



[Alerts](#)



[Street exemption map](#)



[Street exemption list](#)



[Request for exemption](#)



[Snow parking ban ordinance](#)

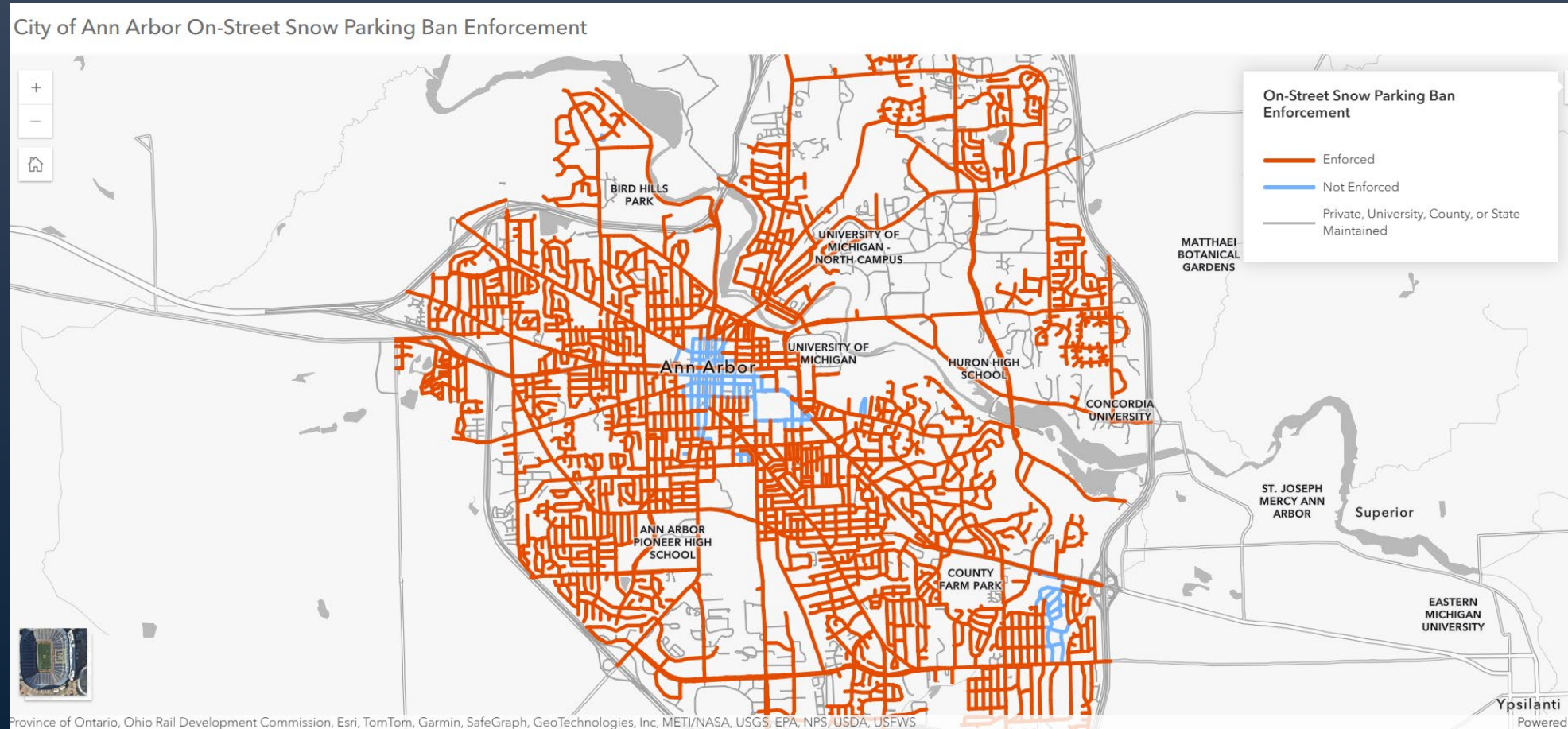


[Ann Arbor Parking Structures](#)



[Editorial](#)

Exemption Map



How we would implement

- Coordinated operations between Public Works, Emergency Management, City Communications, AAPD, and Community Standards
- Multiyear ramp-up to build public muscle memory and awareness
- Seek Voluntary Compliance through significant public education and outreach efforts, but can enforce when necessary.

“Prepare a "Snow Parking Plan":

Create a go-to plan for your household or employees:

- Who will move vehicles?
- Where will cars go?
- Are keys accessible if someone else needs to move your car?
- Write down garage locations and rates ahead of time so you're not scrambling.

Questions????



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