



CITY OF NOVI
Administrative ePacket
June 15, 2023

Public Safety (Police/Fire)

[January - May 2023 Public Safety Update - Zinser](#)

Infrastructure (Roads/Water/Sewer)

[2022-2023 Winter Maintenance Report - Wiktorowski](#)

[2022-2023 Tree Planting Summary - Salowich](#)

Economic Development (City Revenue/Job Growth)

Citizen-Focused Government (Shared Services/Customer Services)

Natural Areas & Features and Community Character (Community that Preserves)

Fiscally Responsible Government (Maintain)

Parks, Recreation & Cultural Services (Enhance Services)

Capital Improvement Program

City Council Only or Confidential

Novi Public Safety

Police and Fire Departments 2023 v. 2022 Year-to-Date Statistics
January - May

June 2023

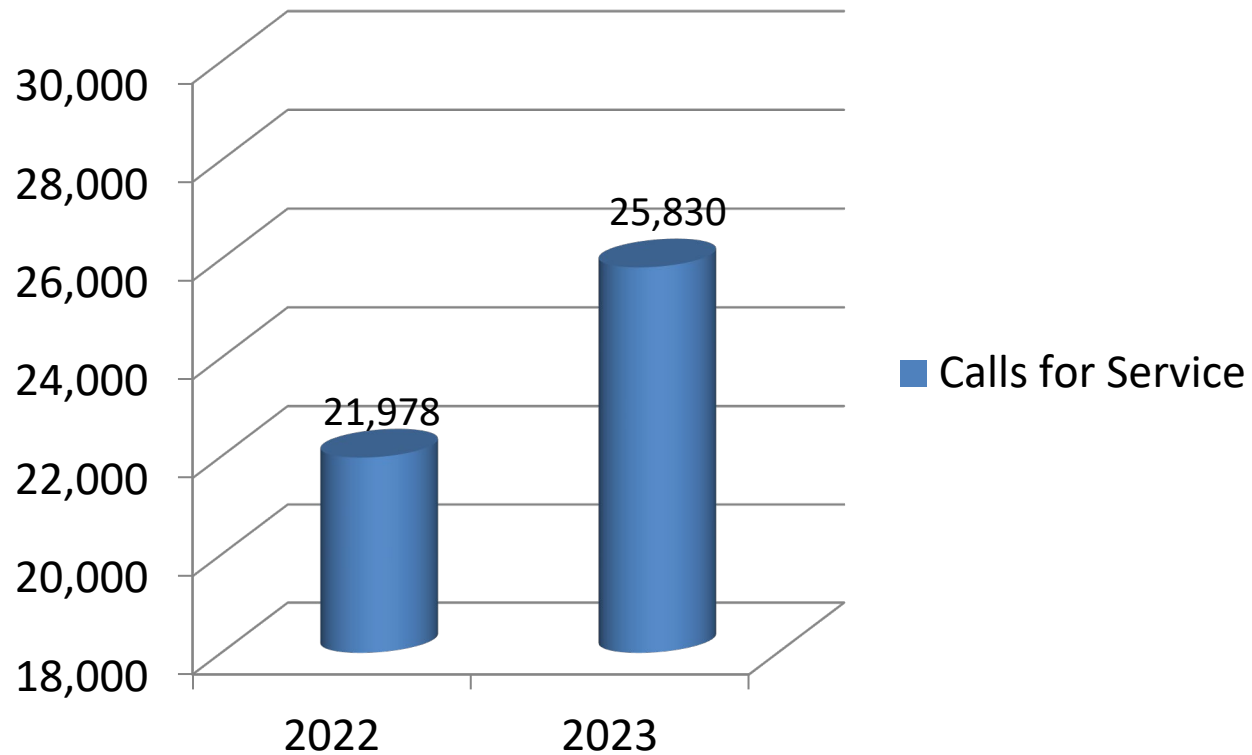


Part A Crime

Description	2023	2022	% Change	Arrests/ EXC	% Cleared	23 YTD	22 YTD	% Change	Arrests/ EXC 23 YTD	% Cleared 23 YTD	Arrests/ EXC 23 YTD	Arrests/ EXC 22 YTD	% Change
Murder	0	0	No Change	0	No Change	0	0	No Change	0	No Change	0	0	No Change
Negligent Homicide	0	0	No Change	0	No Change	1	0	N/C	0	0.00%	0	0	No Change
Kidnapping/Abduction (Parental)	0	0	No Change	0	No Change	0	0	No Change	0	No Change	0	0	No Change
Crim. Sexual Conduct	0	2	-100.00%	0	No Change	5	8	-37.50%	2	40.00%	2	5	-60.00%
Robbery	0	0	No Change	0	No Change	0	4	-100.00%	0	No Change	0	4	-100.00%
Assault (Aggravated)	4	1	300.00%	1	25.00%	16	12	33.33%	15	93.75%	15	10	50.00%
Assault (Non-Aggravated)	18	30	-40.00%	10	55.56%	104	109	-4.59%	93	89.42%	93	102	-8.82%
Threats/Stalking	3	4	-25.00%	0	0.00%	13	9	44.44%	6	46.15%	6	7	-14.29%
Arson	0	0	No Change	0	No Change	0	0	No Change	0	No Change	0	0	No Change
Extortion	0	0	No Change	0	No Change	0	0	No Change	0	No Change	0	0	No Change
Burglary	2	4	-50.00%	0	0.00%	8	9	-11.11%	2	25.00%	2	3	-33.33%
Larceny	17	18	-5.56%	1	5.88%	96	77	24.68%	13	13.54%	13	17	-23.53%
Motor Vehicle Theft	2	1	100.00%	1	50.00%	25	16	56.25%	4	16.00%	4	4	0.00%
Forgery/Counterfeiting	2	1	100.00%	1	50.00%	4	3	33.33%	1	25.00%	1	3	-66.67%
Fraud	13	8	62.50%	3	23.08%	53	35	51.43%	5	9.43%	5	7	-28.57%
Retail Fraud	19	10	90.00%	8	42.11%	98	80	22.50%	59	60.20%	59	49	20.41%
Embezzlement	1	1	0.00%	1	100.00%	7	8	-12.50%	3	42.86%	3	8	-62.50%
R&C Stolen Property	1	1	0.00%	0	0.00%	1	1	0.00%	0	0.00%	0	1	-100.00%
Vandalism	5	8	-37.50%	0	0.00%	25	25	0.00%	5	20.00%	5	10	-50.00%
Narcotics	3	2	50.00%	3	100.00%	10	2	400.00%	8	80.00%	8	1	700.00%
Obscenity	0	0	No Change	0	No Change	0	1	-100.00%	0	No Change	0	1	-100.00%
Prostitution & Vice	0	0	No Change	0	No Change	0	1	-100.00%	0	No Change	0	1	-100.00%
Weapons	4	4	0.00%	4	100.00%	14	5	180.00%	14	100.00%	14	5	180.00%
Animal Cruelty	0	0	No Change	0	No Change	0	0	No Change	0	No Change	0	0	No Change
Total Part A Incidents	94	95	-1.05%	33	35.11%	480	405	18.52%	230	47.92%	230	238	-3.36%



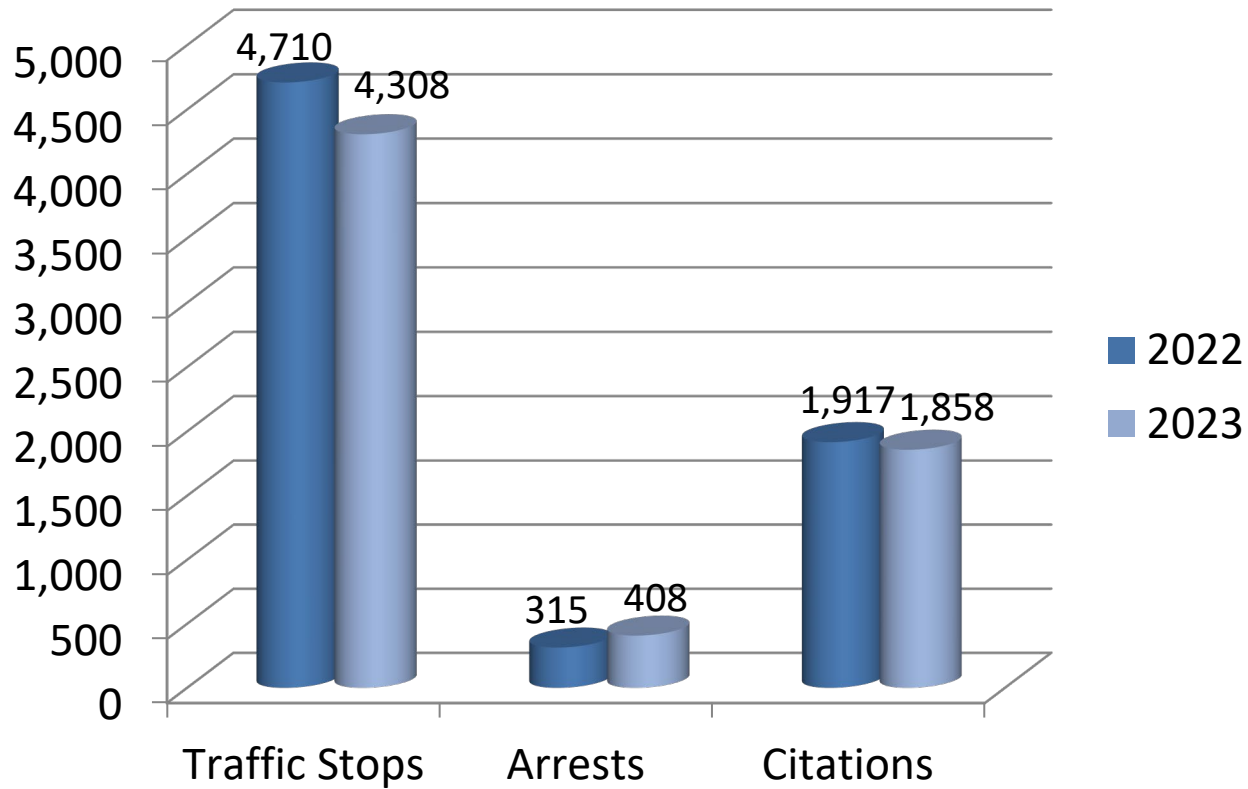
Police Total Calls for Service*



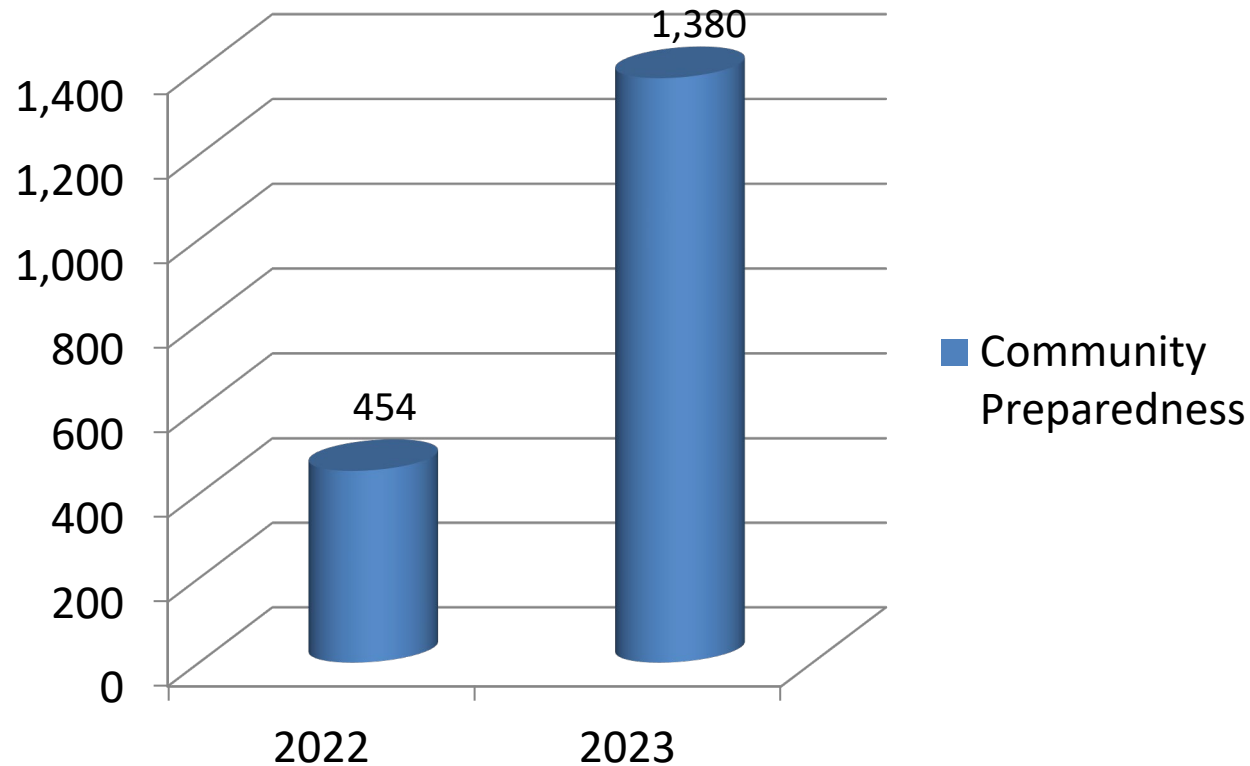
*includes all traffic stops, self initiated activity, routine and priority calls for service, etc.



Officer Productivity



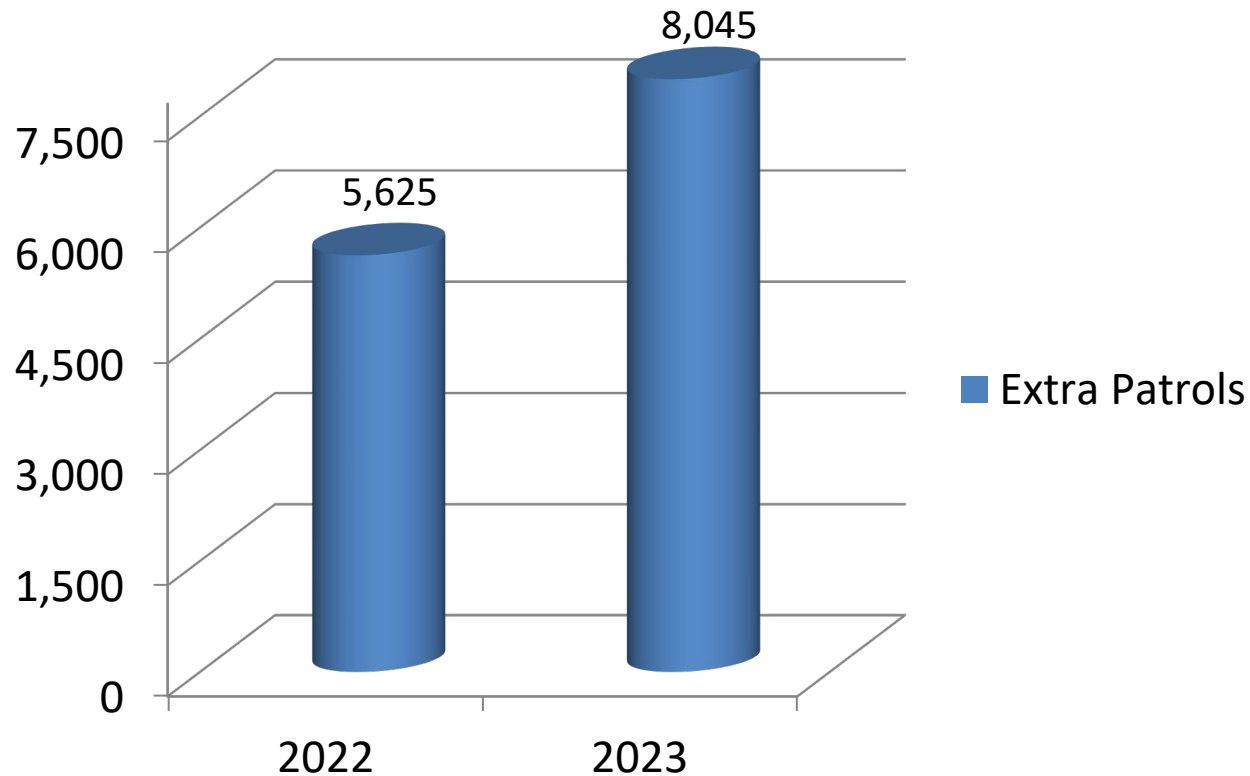
Community Preparedness Numbers* – Self Initiated



*Extra patrols at critical infrastructure (ie. ITC Transmission, US Energy Distribution, Ascension Providence Park Hospital, Water Treatment Facility, etc.) within the city.



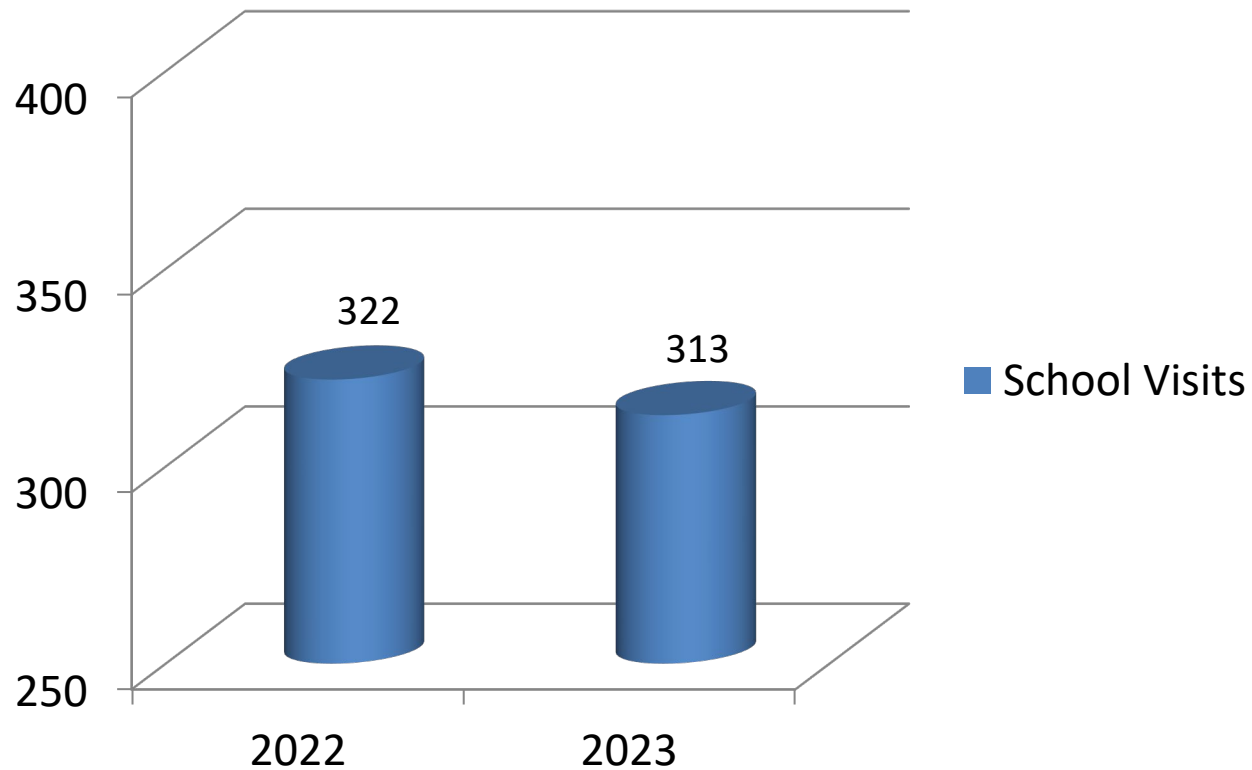
Extra Patrol Numbers* – Self Initiated



*Officers providing additional patrols at various locations above and beyond routine patrol.



School Visit Numbers* – Self Initiated



*Additional patrols at area schools where officers typically walk inside.



Fire Priority Calls for Service January - May 2023 v. 2022

INCIDENT ACTIVITY REPORT				
Summary Comparison January 1 - May 31				
Priority Calls for Service				
Incident Type	2023	2022	Difference	% Change
Fires	37	32	5	16%
EMS	2209	1974	235	12%
Hazardous Condition	96	43	53	123%
Service Call (Unauthorized Burn)	41	62	-21	-34%
Good Intent	54	49	5	10%
False Calls	114	116	-2	-2%
Other	3	6	-3	-50%
TOTAL:	2554	2282	272	12%

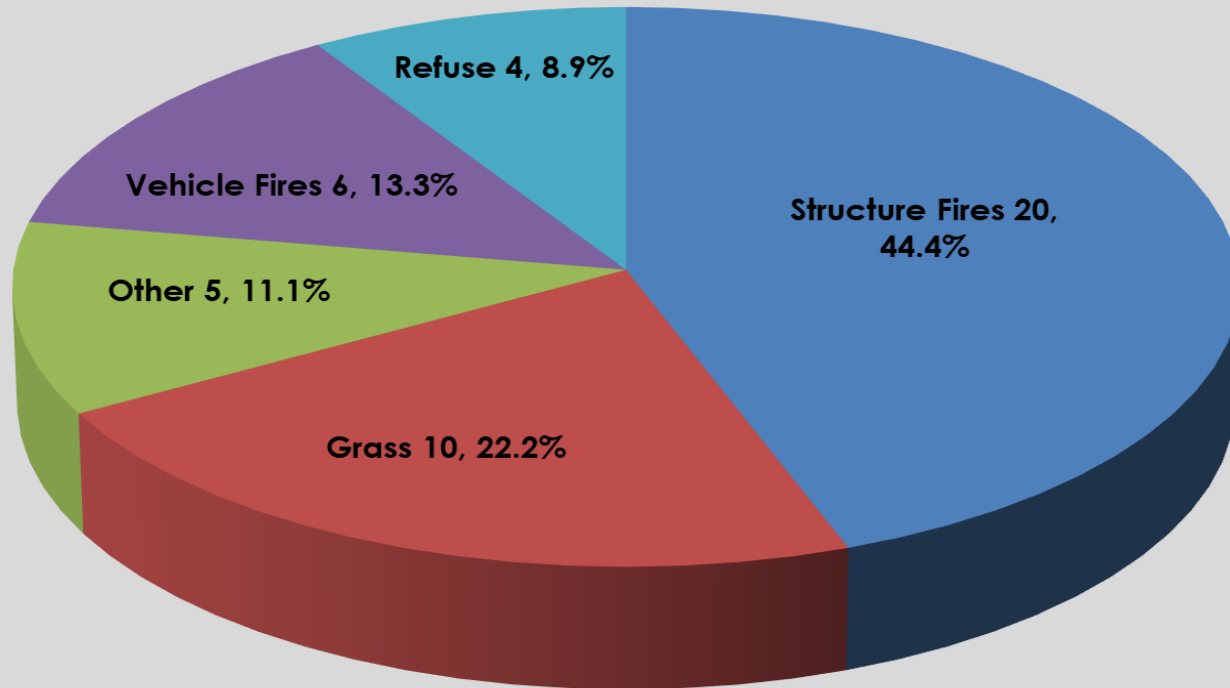


Fire All Calls for Service January - May 2023 v. 2022

INCIDENT ACTIVITY REPORT				
Summary Comparison January 1 - May 31				
All Calls for Service				
Incident Type	2023	2022	Difference	% Change
Fires	47	33	14	42%
EMS	2300	2089	211	10%
Hazardous Condition	145	70	75	107%
Service Call (Unauthorized Burn)	364	374	-10	-3%
Good Intent	115	108	7	6%
False Calls	248	212	36	17%
Power Outage Investigation	2	8	-6	-75%
Other (Inspections, Pub-Ed, Pub-Relations, Car Seats, etc.)	279	279	0	0%
TOTAL:	3500	3173	327	10%



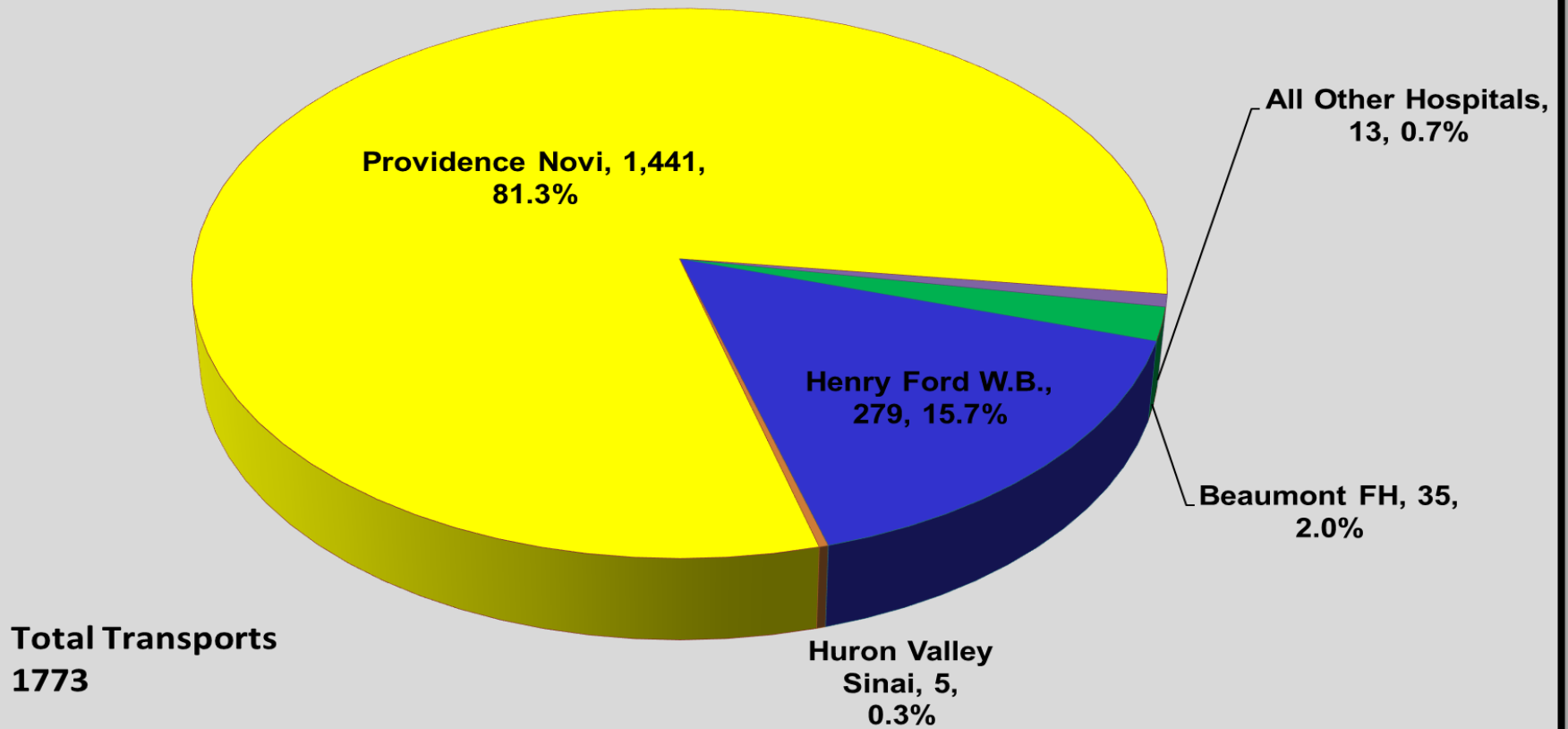
2023 YTD FIRES



TOTAL 45



Hospital Transports 2023



FIRE OPERATIONS AVERAGE RESPONSE TIMES PRIORITY RESPONSES ONLY

TEAM / STATION	May	Total Calls	YTD	Total Calls	YTD	Total Calls
	2023		2023		2022	
TEAM 'A':						
STATION 1	4:59	93	5:29	502	5:15	463
STATION 2	5:02	75	5:43	396	5:50	355
STATION 3	5:49	33	5:38	139	5:34	193
STATION 4	5:39	32	5:29	195	6:01	109
TEAM 'A' AVERAGE:	5:13	233	5:35	1232	5:34	1120
TEAM 'B':						
STATION 1	5:31	86	5:49	497	5:38	452
STATION 2	6:13	88	6:34	446	6:11	359
STATION 3	6:50	30	7:07	198	6:24	185
STATION 4	7:15	20	7:18	163	6:35	144
TEAM 'B' AVERAGE:	6:08	224	6:27	1304	6:03	1140
TEAM. AVERAGE	5:40	457	6:02	2536	5:49	2260



MEMORANDUM



TO: JEFFREY HERCZEG, DIRECTOR OF PUBLIC WORKS
FROM: MATT WIKTOROWSKI, FIELD OPERATIONS SR. MANAGER
SUBJECT: FY 2022-2023 WINTER ROAD MAINTENANCE REVIEW
DATE: JUNE 15, 2023

Mayor and Council –

FYI, review of our Winter Maintenance activities this past year

- Victor

This memorandum reports winter maintenance performance data for the 2022/2023 winter season. The data is compared to previous seasons and supported by factors that posed challenges or conversely enhanced service, such as abnormal weather and equipment advancements, respectively.

Background and Winter Road Maintenance Results

Southeast Michigan experienced a mild 2022-2023 winter season, responding to only 20 events, at an average temperature of 32 degrees, with approximately 33" of total snow accumulation (historical 15-year average is 34 events, 31 degrees, and 49" of snow). The mild conditions contributed to another effective winter road maintenance season.

The exact total of measurable snow received of 32.75 inches was slightly more than the previous three-year average of 31.8 inches. This season, neighborhoods were cleared more often to remove hardpack snow/ice, which is often associated with wet snow and warmer temperatures indicative of the recent winter weather patterns.

Sustained improvements in service are attributed to efficiency obtained through the continued investment in new equipment and advances in material application technology. Regularly clearing major roadways before rush hour and expeditious completion of neighborhoods continue to be the benchmarks for the Novi DPW Winter Maintenance program.

The attached table shows this season's data compared to records obtained from the previous 15 winter seasons. Each of these performance measures is discussed in detail below:

Citizen Feedback

DPW received a total of 146 concerns from citizens relating to winter maintenance compared to the previous 15-year average of 193. This seasons concerns, when broken down, are as follows:

- 6 Driveway Plowed In
- 70 Lawn Damage

- 14 Mailbox Hit
- 4 Not Close Enough to Curb
- 2 Not Close Enough to Mailbox
- 30 Road Missed
- 6 Sidewalk Plowed In
- 14 General Concern

Many of the complaints registered were lawn damage (70). This higher-than-normal number of sod repairs is a direct result of warm winter dotted with a couple large snow events that prohibited drivers from easily seeing the edge of the roadway. Corrective action was immediately taken to address complaints relating to the few cases in which plowing was not totally completed. In addition, all lawn repairs reported prior to May 1, have been completed. Overall, in 2022-2023, the department averaged 7.30 citizen concerns per event.

Traffic Crashes

The Novi Police Department provided data that officers responded to 50 crashes this past winter, where snow and ice were listed as being on the road surface. Although there is no data to support if the roadway condition was the sole contributing factor to any accident, tracking roadway condition provides a benchmark for service and safety. Historically, Public Safety crews have responded to an average of 91 events over the past 15 seasons.

Salt Use and Liquids Use

DPW is continually looking for new ways to reduce the amount of salt used for melting snow and ice from City-maintained roadways and parking lots. Limiting the amount of salt not only saves on operating expenditures, but also reduces the number of chlorides entering our watersheds and infrastructure. Over the 2022-2023 winter season, DPW crews applied approximately 4,202 tons of salt or \$228,622 of material, at an average of 210 tons, or \$11,340 per event; compared to the 15-year average of 181 tons per event.

This season, the Department applied only 19,654 gallons of liquid, or an average of 983 gallons per event. The limited amount of brine used was due to part shortages delaying automated brine making system use. The maker will be fully functional for the 2023-2024 winter season.

Labor Costs

Labor costs can vary significantly from season to season given the time and frequency of events. If most storms occur in the middle of the night, or on weekends, the labor cost will be high. Conversely, if most storms happen close to a regularly scheduled shift the cost will be lower because less overtime is needed. Since several of this season's events occurred on holidays or weekends, the total labor cost for the 2022-2023 season was \$179,314, or \$8,966 per event, compared to overall seasonal averages of \$227,409 and

\$6,619 respectively. This season only one event required contractual assistance to augment services.



DPW Snow Team

Additional 2022-2023 Winter Weather Impacts and Expenditures

Novi was hit with a pair of major winter storms beginning with 0.25 - 0.5" of freezing rain on February 22, followed by 9" of heavy, wet snowfall on March 3; both of which caused significant tree damage.

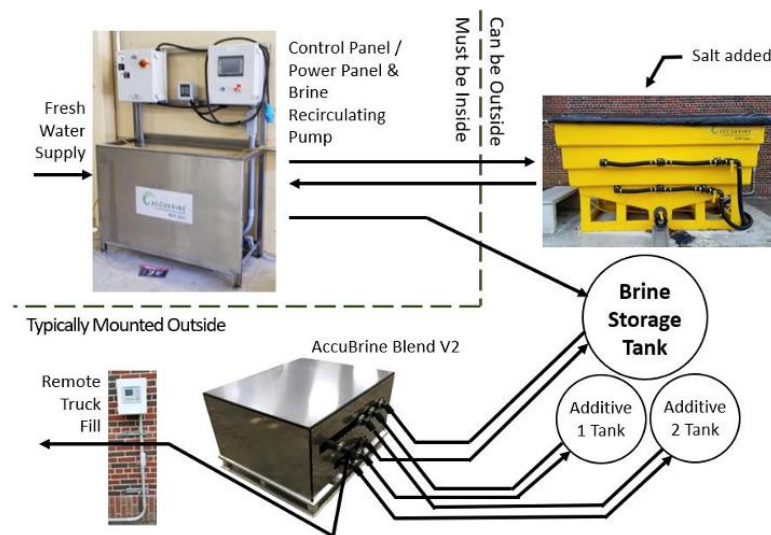
Crews from three contractors and City staff began chipping debris. All crews worked overtime on most weekdays and several weekends. Additionally, GFL dispatched 58 trucks to assist with a final sweep of the city to pick up any remaining debris in front of residences on April 1. The storm clean-up costs totaled approximately \$411,000 due to icy and heavy wet snow produced by the storms.



Storm Damage and Debris Clean-up

Conclusion

DPW continues to increase the efficiency of materials, labor, and equipment used in winter road maintenance. This season, two technologies were explored to streamline reporting processes for operators and managers. The first leverages material usage reports contained in our AVL system. Operators should no longer need to report on route completion, material used (salt or brine), or the length of time equipment was used. The second is an automated brine making system (pictured below) that eliminates the need for an operator to spend time making deicing liquid(s). This machine senses when liquid levels are low and automatically makes up to 6,000 gallons per hour of perfectly blended brine. In addition, each truck is registered in the machine's computer, allowing managers to closely track the type of liquid use for each event and throughout the winter.



Automated Brine Making System

Just as in previous years, the data gleaned from the 2022/2023 winter season will be used to assist decision-making and improve operating procedures for future winter storm events.

WINTER MAINTENANCE PERFORMANCE DATA
For Winter Seasons 2007/2008 Through 2022/2023

				Citizen Complaints		Traffic Crashes		Salt Use		Liquids Use		Labor		Roadway Contractual Assistance	
Winter Season	Number of Events	Average Temperature	Inches of Snowfall	Number	Average Complaints Per Event	Number	Average Crashes Per Event	Tons of Salt Used	Average Tons of Salt Used Per Event	Gallons of Liquid Applied	Average Gallons of Liquid Per Event	Total Labor Costs	Average Labor Cost Per Event	Total Cost	Average Cost Per Event
2007-2008	47	No Data	71.7	221	4.70	212	4.51	12,621	269	N/A	N/A	\$ 405,787	\$ 8,634	\$ -	\$ -
2008-2009	33	No Data	65.7	148	4.48	163	4.94	9,868	299	N/A	N/A	\$ 420,031	\$ 12,728	\$ -	\$ -
2009-2010	33	No Data	43.7	58	1.76	116	3.52	6,932	210	N/A	N/A	\$ 291,856	\$ 8,844	\$ -	\$ -
2010-2011	63	No Data	67.2	324	5.14	254	4.03	8,653	137	29,375	466	\$ 294,398	\$ 4,673	\$ -	\$ -
2011-2012	24	No Data	24.0	10	0.42	29	1.21	4,665	194	38,520	1,605	\$ 93,548	\$ 3,898	\$ -	\$ -
2012-2013	26	No Data	41.3	67	2.58	42	1.60	3,395	131	67,630	2,601	\$ 156,082	\$ 6,003	\$ -	\$ -
2013-2014	51	No Data	77.25	426	8.35	77	1.51	6,056	119	37,261	731	\$ 360,909	\$ 7,077	\$ -	\$ -
2014-2015	35	No Data	66.4	206	5.89	88	2.51	4,775	136	49,931	1,427	\$ 167,173	\$ 4,776	\$ -	\$ -
2015-2016	26	34°	47.15	222	8.54	58	2.23	4,363	168	53,617	2,062	\$ 127,105	\$ 4,889	\$ -	\$ -
2016-2017	25	34°	29.62	232	9.28	48	1.92	3,687	147	53,862	2,154	\$ 125,021	\$ 5,001	\$ 48,265	\$ 1,931
2017-2018	31	29°	57.05	415	13.39	120	3.87	5,770	186	64,107	2,068	\$ 278,107	\$ 8,971	\$ 55,250	\$ 1,782
2018-2019	31	28°	30.9	150	4.84	62	2.00	4,778	154	N/A	N/A	\$ 174,577	\$ 5,632	\$ 42,457	\$ 1,370
2019-2020	19	32°	28.24	220	11.58	46	2.42	4,096	216	29,569	1,556	\$ 145,997	\$ 7,684	\$ 32,916	\$ 1,732
2020-2021	28	31°	33.2	102	3.64	0	0.00	4,591	164	78,762	2,813	\$ 193,243	\$ 6,902	\$ -	\$ -
2021-2022	28	32°	34.22	95	3.39	52	1.86	4,353	155	47,505	1,697	\$ 177,296	\$ 6,332	\$ -	\$ -
2022-2023	20	33	32.75	146	7.30	50	2.50	4,202	210	19,654	983	\$ 179,314	\$ 8,966	\$ 1,500	\$ 75
Historical Averages (07/08-21/22):	33	31°	47.84	193	5.87	91	2.54	5,907	179	50,013	1,748	\$ 227,409	\$ 6,803	\$ 11,926	\$ 454

Complaint Detail

	<u>2020/2021</u>	<u>2021/2022</u>	<u>2022/2023</u>
Driveway Plowed In	3	5	6
Lawn Damage	15	22	70
Mailbox Hit	20	11	14
Not Close Enough to Curb	4	5	4
Not Close Enough to Mailbox	13	6	2
Road Missed	8	9	30
Sidewalk Plowed In	0	0	6
General Concern	39	31	14

MEMORANDUM



TO: JEFFREY HERCZEG, DIRECTOR OF PUBLIC WORKS
FROM: KEITH SALOWICH, FORESTER
SUBJECT: FALL 2022 – SPRING 2023 PLANTING SUMMARY
DATE: JUNE 15, 2023

Mayor and Council –

FYI, review of our Tree Planting this past year

- Victor

Novi has added 748 trees and 587 shrubs to its street-side rights-of-way and parks through the fall 2022 and spring 2023 planting seasons. The vast majority of these plantings are native species, as they are best equipped to handle the local climate conditions and benefit local wildlife.

Smaller trees and shrubs are being planted at many sites for two reasons: This allows for a greater number of plantings at lower cost and increases new planting survival, as younger plants adapt more readily to transplanting. The City has also begun purchasing and installing deer guard, a protective plastic mesh wrapping, on young trees using in-house staff to further reduce costs.

Novi's popular seedling distribution program was held for the third consecutive year, allowing hundreds of residents to sign up to receive more than 1,500 trees and shrubs for free. A local girl scout troop volunteered to assist with the distribution of the seedlings and returnable cans and bottles were collected to donate to Cans for Climate—a group of Novi students raising money for tree plantings in Novi parks.

The City's Arbor Day recognition event, held at Wildlife Woods Park on April 28, celebrated the planting of two white oak trees purchased using funds raised by the Cans for Climate group. Novi's local Alpha Kappa Alpha chapter also planted a river birch tree in the park to celebrate the occasion.

The number of trees and shrubs planted in each season and the associated costs are broken down below:

Fall 2022 —	340 trees 426 shrubs Total cost: \$108,940
Spring 2023 —	408 trees 161 shrubs Total cost: \$109,455
Seedling giveaway —	1,543 tree and shrub seedlings Total cost: \$2,706



Novi's City Forester and volunteers install a deer guard around a new white oak to protect its vulnerable bark from deer scrapes, which can kill young trees.



Unlike most infrastructure, green infrastructure like these newly planted street trees appreciate in value and offer greater benefits as they age.



The City of Novi celebrated Arbor Day in Wildlife Woods Park on Friday, April 28, 2023