

# 2022 GRFD Annual Report

### **2022 BREAK-EVEN DATE**

### June 26th

When the total value of property and contents saved by the GRFD surpassed the department's annual budget.

.24,736
.24,659
77
.35,134
.30,743

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# RESPONSE

Total Incident Review	10
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Apparatus Responses	16
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#### DATA TYPE DEFINITIONS

Fire (NFIRS Incident Type 100s) - All Fires including Building Fires, Car Fires and Trash Fires

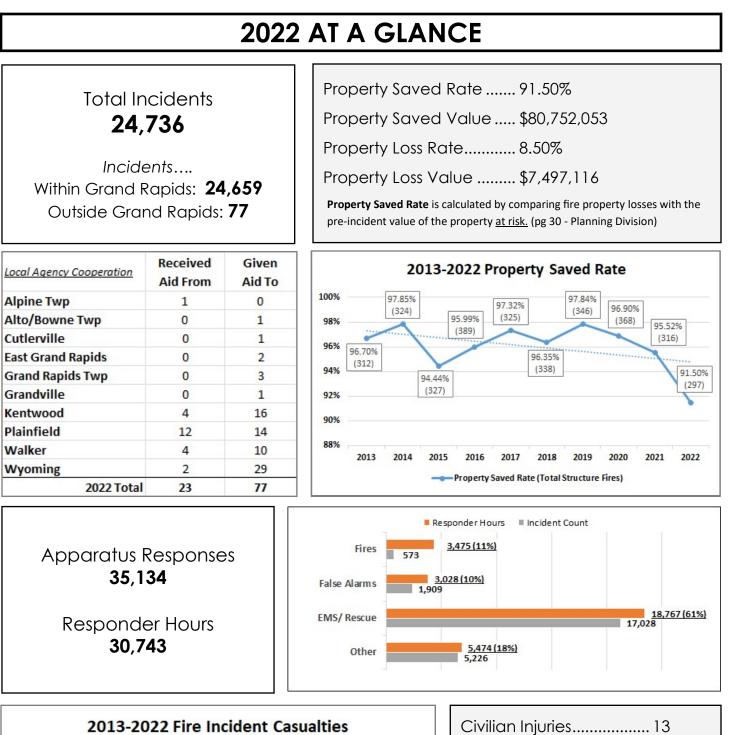
False Alarms (NFIRS Incident Type 700s) - All False Alarms/Calls including Fire or CO Alarm System malfunction

EMS/Rescue (NFIRS Incident Type 300s) - Includes Cardiac Arrests, Overdoses, Traumatic Injuries and Rescues

Other (All Remaining NFIRS Incident Types) - Includes HazMat Responses, Wire Downs, and Service Calls

Alarm Type - What we are dispatched to

NFIRS Incident Type - What situation is actually found



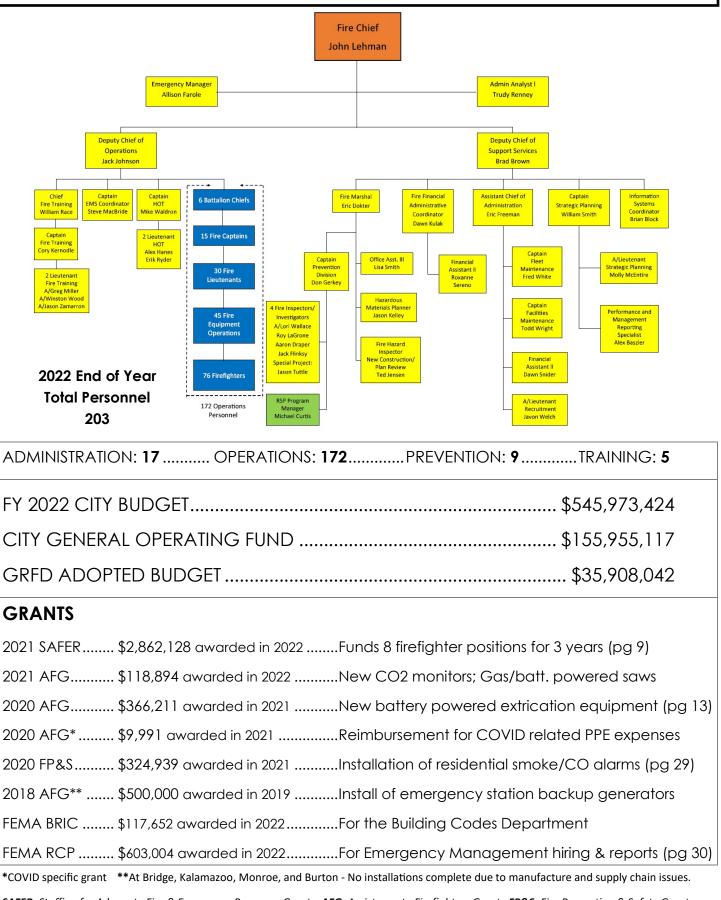


Civilian Injuries13	
Civilian Deaths 2	
Firefighter Injuries*	
Firefighter Deaths	

\*During an active incident.

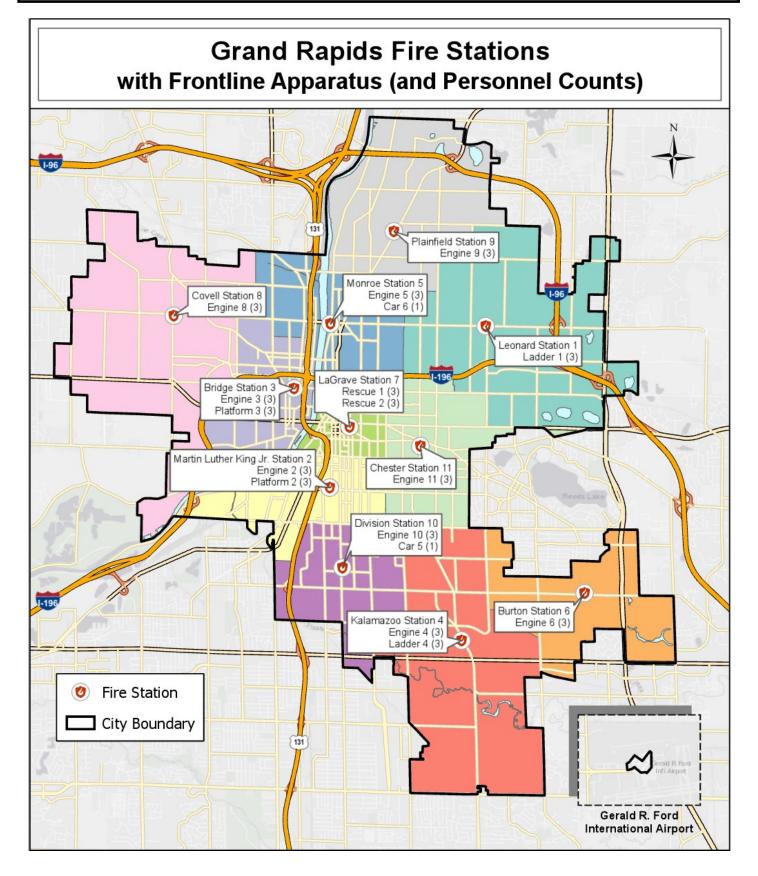
Civilian casualties are during fire incidents within Grand Rapids. Firefighter Injuries are during any active incident, including those outside of Grand Rapids. There were 23 non-incident related, on-duty firefighter injuries in 2022.

# **GRFD ORGANIZATION & FISCAL**



SAFER: Staffing for Adequate Fire & Emergency Response GrantAFG: Assistance to Firefighters GrantFP&S: Fire Prevention & Safety GrantBRIC: Building Resilient Infrastructure and CommunitiesRCP: Regional Catastrophic Preparedness

# **GRFD DISTRICT INFO**



# **2022 SPECIAL MENTIONS**



### LETTER FROM THE CHIEF

2022 was a year of significant change for our executive command staff. I am very appreciative of the incredible work of Deputy Chiefs Tennant and VanderWall. Their years of committed leadership and assistance to my office will always be remembered. Newly promoted Deputy Chief Brad Brown and Deputy Chief Jack Johnson as well as Assistant Chief of Administration Eric Freeman have quickly demonstrated that we at the GRFD have a deep bench of many excellent people ready to step up and meet the challenges of leadership.





Executive Chiefs with State Fire Marshal Kevin Sehlmeyer

I am thankful for the successful contract negotiations with local 366 which represented a lot of hard work, and positive outcomes for all parties. Additionally, through the dedicated endeavors of many individuals, we were able to launch our Cadet Program, allowing us to provide an avenue for development and eventual hire of youth from our community. Having the Homeless Outreach Team (HOT)

go from a trial to a permanently funded and staffed program will allow our HOT team to grow and evolve into the future as they work with our partners in the community to assist the unhoused.

This will be my last annual report. As I reflect back on the last six years, I am proud of what our department has been able to accomplish in that time. There is much left to do, but we have a great team



and an excellent road map to guide us into the future. Exciting times are ahead for this organization and with the continued support of the City and community, anything is possible.

JOHN S. LEHMAN

Chill ht

## ABOUT THE HOMELESS OUTREACH TEAM (HOT)

Any resident, business, neighborhood association, or other entity in the City of Grand Rapids can contact HOT at <u>616-456-4240</u> and via email at <u>grhot@grcity.us</u>. HOT should only be contacted with issues regarding unsheltered homelessness. If the team cannot address the issue, they will direct you to the appropriate department or agency.

### FRANKLIN STATION RENAMED TO MARTIN LUTHER KING JR. STATION

Prior to 1979, GRFD stations were named numerically after the engine companies they housed; afterwards, stations were given names to reflect their street location. Franklin Street Station was the first to receive its name. In 2002, the community began the process to rename two streets in Grand Rapids to Martin Luther King Jr. and Cesar E. Chavez. While Franklin St. and Grandville Ave., respectively, were selected to hold these honorary names, the street



Kent County Commissioner and Grand Rapids City officials join community members at fire station rededication event

name changes were formalized last year. On March 30<sup>th</sup>, 2022, the GRFD celebrated the official renaming of the Franklin Street Fire Station to the Martin Luther King Jr. Fire Station, with city and county officials joining community members and representatives from the National Forum for Black Public Administrators (NFBPA). "Names are important," said City Manager Mark Washington. "Today's action by the fire department further recognizes the legacy of Dr. King and how this city actively chooses to honor him ... I appreciate the work of the City Commission and Moving Ahead for Remarkable Civil Rights Heroes (MARCH) Committee in making this moment possible."

### **2022 FIREFIGHTER CHALLENGE**

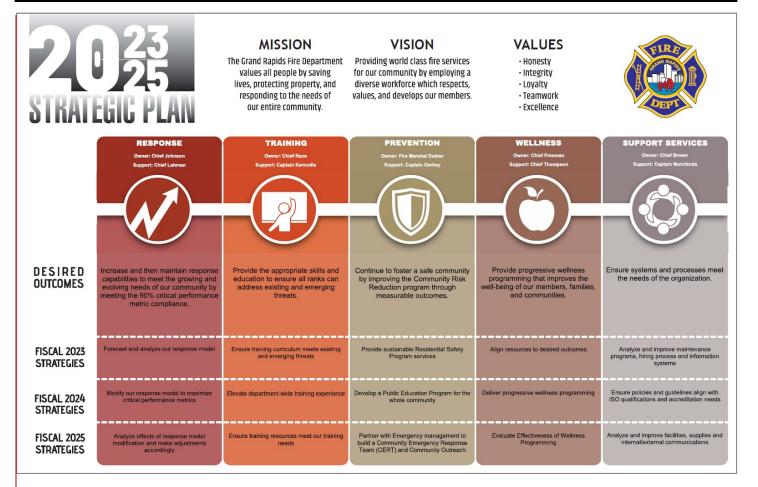
The official Firefighter Challenge was hosted for the first time in GR this past summer. Individuals and teams (184 participants total) went head to head on a 5-stage course simulating the physical demands of real-life firefighting by climbing a five-story tower, hoisting, chopping, dragging hoses, and rescuing a life-sized, 175-pound "victim" - some in full turnout gear and others to raise funds for charities. The weekend event was an opportunity to honor the work of local first responders as well as the many nonprofits, volunteers, frontline workers, emergency personnel, and other professions and organizations.

16 GRFD members ran the course, doing the department proud and even making history as firefighter recruit Carlye Scheer set the woman's state record in the *Individual* challenge.

> Top: Firefighter Strasel (42nd overall), Bottom left: Firefighter Scheer (81st overall), Bottom right: Firefighter Ingersoll (34th overall)



# FY23 - FY25 STRATEGIC PLAN



### THE CREATION PROCESS

The GRFD strategic planning process uses a collaborative approach to collect input from three groups of stakeholders: the community, partnering agencies, and GRFD membership. Stakeholders are asked for feedback on the organization's current state and to provide recommendations on where the organization should be focusing its



efforts. The information is gathered through surveys and direct interactions. To ensure alignment with the city's strategic plan, guidance is provided from city leadership at public safety committee meetings.

After input is collected, a day-long planning retreat is conducted with the 40 member GRFD strategic plan review team to assesses the mission, vision, and values statements to ensure they represent community needs. The group then analyzes and refines all of the stakeholder input to craft a strategic plan to guide the organization over the next three years. This plan is then brought back to city leadership for approval before final implementation.

#### RESPONSE

Successfully completed a multi-jurisdictional full-scale High-Rise Fire exercise at City Hall, which provided meaningful, real-time training that served to evaluate responder capabilities, dispatch and fire ground radio communications, Incident Command proficiency, and medical triage/treatment. Response performance gaps are consistently reviewed and investigated, with a focus on extended response times in the southeast corner of GR. The software program Tablet Command was implemented, providing operations personnel real-time status of GRFD responses, and providing on-scene emergency incident management tools for our Battalion Chiefs. The SAFER grant helped us staff two more daily positions in the Kalamazoo and MLK Jr. districts, which we anticipate will improve response metrics in both areas.

#### TRAINING

Work was completed to assess training needs for regulatory compliance; specifically Public Act 291 mandated by the State of Michigan. An audit was also initiated for Insurance Services Office (ISO) training credits that assist with maintaining our ISO 1 rating. This foundation will carry forward to document all available training credit for our suppression personnel. A yearly fire officer training curriculum was developed, and the Training Division successfully delivered its first annual Fire Officer training that assists with succession planning, providing excellence to the fundamentals of firefighter effectiveness.

#### PREVENTION

Work begun in 2021 was completed by the Fire Prevention Division and external stakeholders that formed the Grand Rapids Fire Prevention Foundation [501 (3)c], a financial mechanism to accept monetary support from the community. Private donations grew to a respectable and unexpected level that assisted with the procurement of fire prevention educational materials for public education initiatives. Work has been established to identify high risk homes within the neighborhoods of focus. Lastly, Fire Prevention Inspectors were joined by suppression staff on a "part -time" basis to assist with commercial property inspections that were unable to be performed due to the pandemic. The additional personnel helped achieve important Residential Safety Program goals (pg 29).

#### WELLNESS

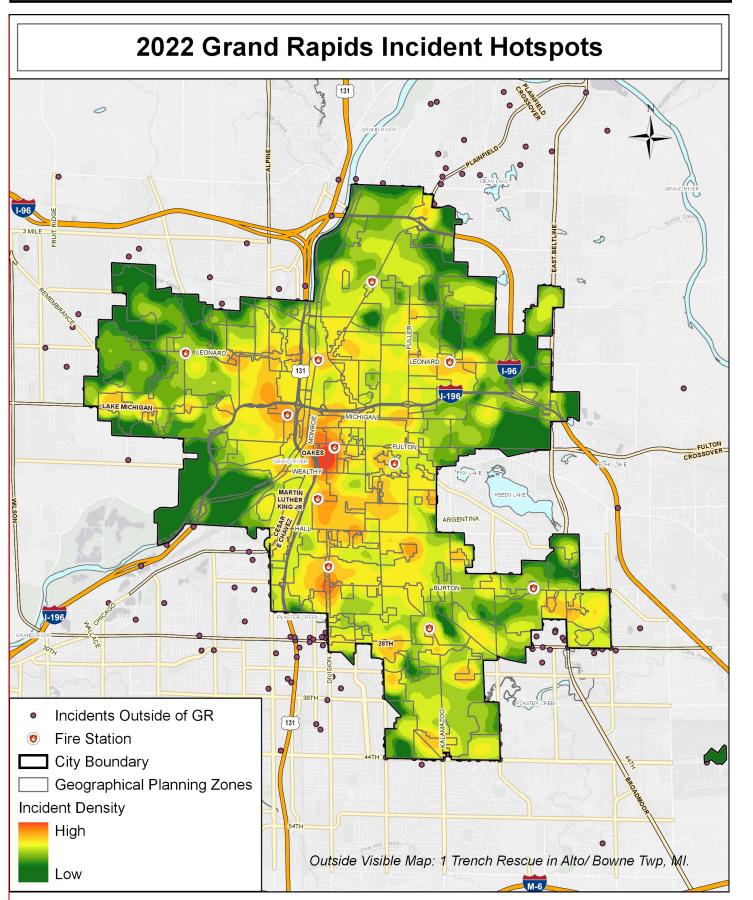
GRFD had 195 uniformed personnel participate in a biometric evaluation analysis, resulting in an overall improvement health indicator when compared to the 2021 analysis, (191) participants. This report covered the physical data collected during annual physicals and pertained primarily to blood pressure, body mass index, diabetic screening, and total cholesterol. Our component of this pillar is training that revolves around awareness and healthy lifestyles. A key to success is finding ways to encourage our personnel to incorporate the education they receive into their lives. The awareness items were routinely discussed, with an appropriate number of educational moments offered. All staff members are encouraged to be aware of sleep deprivation, good nutrition habits, physical fitness needs, cancer risk reduction, mental health needs, and financial stability.

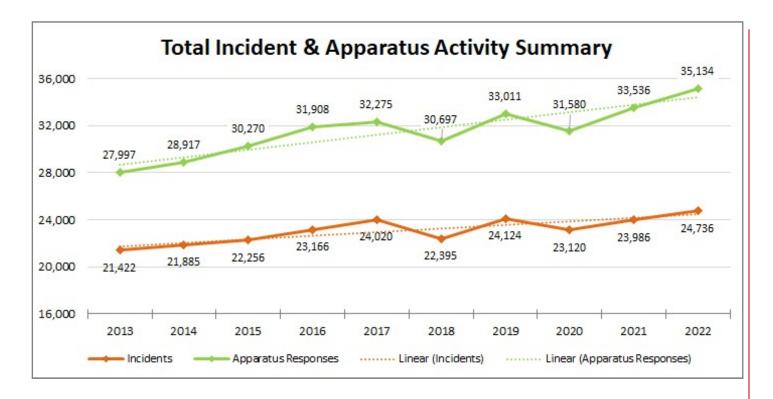


#### SUPPORT SERVICES

The Support Services Pillar saw the transition of leadership from DC Ron Tennant to DC Brad Brown and supporting officer from BC Mark Noorman to BC Scott Stevenson. 2022 also saw the wrap up of the fouryear strategic plan which produced a continuity of operations through a promotional pathway/succession plan, a diverse hiring plan to better represent the community we serve, a comprehensive asset management plan including both apparatus and facilities, and the incorporation of emergency management into the support services pillar. The FY23-FY25 support services portion of the strategic plan has kicked off by focusing on maintenance programs, our hiring process, and information systems.

# TOTAL INCIDENTS REVIEW

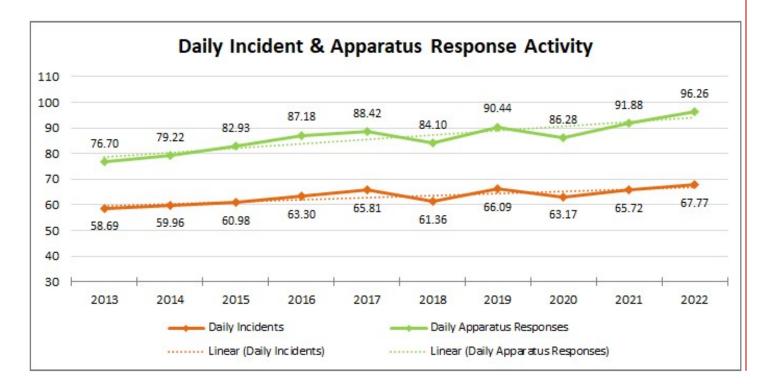


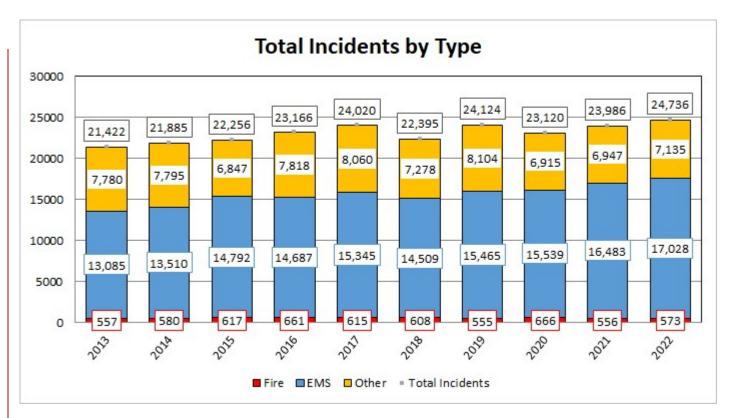


Since 2013, overall trend lines for both incidents and apparatus activity continue to rise.

Apparatus responses since 2013 have risen 25.49%, with a 4.76% rise from 2021 to 2022. Incident counts since 2013 have risen 15.47%, with a 3.13% rise from 2021 to 2022.

The increased jump in apparatus responses over incident counts is due to an August 2021 change in response requirements to fire alarms in higher risk buildings, which now require four apparatus instead of three.





**EMS incidents since 2013 rose 30.13%,** with a **3.31%** rise from 2021 to 2022, marking another record year increase. **Fire incidents since 2013 have risen 2.87%**, with a **3.06%** rise from 2021 to 2022.

Total Incidents by Type	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Fires	557	580	617	661	615	608	555	666	556	573
Overpressure/Rupture	36	45	43	51	191	202	158	113	138	115
EMS/ Rescue	13,085	13,510	14,792	14,687	15,345	14,509	15,465	15,539	16,483	17,028
Hazardous Conditions	1,035	990	898	1,166	1,155	1,006	1,574	1,006	1,064	1,147
Service Call	2,037	2,003	1,368	1,492	1,704	1,542	1,252	1,053	876	953
Good Intent	3,085	3,143	2,976	3,315	3,462	3,033	3,258	3,252	3,070	2,995
False Alarm/Calls	1,579	1,600	1,555	1,774	1,537	1,487	1,849	1,488	1,783	1,909
Severe Weather	3	9	4	14	10	6	11	2	5	8
Special Incident	5	5	3	6	1	2	2	1	11	8
Total	21,422	21,885	22,256	23,166	24,020	22,395	24,124	23,120	23,986	24,736

The biggest increase in incident type grouping from 2021 to 2022 is <u>Severe Weather with a 60%</u> increase, reflecting the eight (8) severe weather events the city experienced last year. The next two biggest jumps are <u>Service Call</u> incidents, with an 8.79% increase and <u>Hazardous Condition incidents</u> with a 4.64% increase from 2021.

Total Incidents by Type	Numerical Change from 2021 to 2022	Percent Change from 2021 to 2022	Percentage of 2022 Incidents
Fires	17	3.06%	2.32%
Overpressure/Rupture	-23	-16.67%	0.46%
EMS/Rescue	545	3.31%	68.84%
Hazardous Conditions	83	7.80%	4.64%
Service Call	77	8.79%	3.85%
Good Intent	-75	-2.44%	12.11%
False Alarm/Calls	126	7.07%	7.72%
Severe Weather	3	60.00%	0.03%
Special Incident	-3	-27.27%	0.03%
Total	750	3.13%	

### 2022 INCIDENT SPOTLIGHTS

January 10, 2022 - Garage Fire extends to home (Front page) Garage fire extending into the 2-story dwelling. Crews stretched several hose lines and opened up the roof. This was the second working fire of the day.



March 14, 2022 - Commercial Fire on Wealthy Grand Rapids firefighters battled a 2-alarm (33 members) commercial building fire for several hours. Crews utilized multiple ground monitors and master streams during defensive operations, allowing them to remain safe on scene despite numerous collapses.



**October 27, 2022 - Rollover on Westbound 1-96** Stabilizing equipment was deployed to safely extricate the occupant of a rollover accident on the highway.

**Nov. 16, 2022 - Parking Structure Fire (Front page)** GRFD crews extinguished a vehicle fire on the 4<sup>th</sup> floor of a parking structure, utilizing high rise hose packs and a standpipe located in stairwell for a quick and effective fire attack.



July 12, 2022 - Fire in Rail Car

Responded to a smoldering gluten feed fire due to spontaneous combustion at the CSX yard. A 3,000 gallon water tender was provided by Alpine Twp for water shuttle operations; about 12,000 total gallons used to fill/ extinguish three sections of rail car.

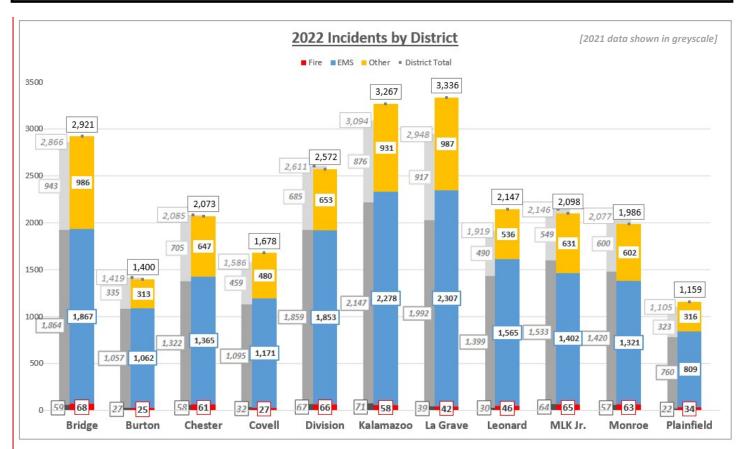


July 23-24, 2022 - Severe weather rolls through GR GRFD responded to 201 calls, including 103 wire downs and 2 full structure fire assignments within 12 hours.



**December 31, 2022 - Vehicle Extrication in Grand River** Grant funded battery powered extrication equipment was instrumental in the rescue of a trapped occupant from an upside-down car in the river. The operation would have been significantly more difficult and hazardous, if not impossible, with the previous equipment.

# **DISTRICT INCIDENT ACTIVITY**



### NOTABLE INCIDENT ACTIVITY MOVEMENT

- La Grave leads the districts with a 13.16% increase in total incident activity and a <u>15.81% increase</u> in EMS calls from 2021.
- Leonard saw fire incidents rise sharply 53.33% and also had the second highest EMS call increase (11.87%), contributing to a total incident activity increase of 11.88%.
- Kalamazoo saw less fire incidents compared to 2021, with a decrease of 18.31%, yet had the third highest increase in total incident activity, rising **5.59%** from the previous year.



2022 Annual Report

### SIMULTANEOUS CALLS

The occurrence of multiple calls at the same time serve as a decision point for both the distribution and concentration of resources. When multiple alarms occur in a single district, either a second unit in that district or resources from adjoining districts (or outside agencies) must be utilized for an effective response.

Citywide simultaneous call rate rose 0.5%; but since 2013, it has risen 10.67%.

<u>Kalamazoo district leads the city in simultaneous call volume at 14.05%</u>. This district also experiences an increased wait time for ALS transport during medical emergencies. Continued evaluation of this metric will aid in future station planning and resource deployment. For additional analysis, see page 25.

City Wide Si	imultaneous
2013	51.81%
2014	56.18%
2015	55.29%
2016	60.04%
2017	59.60%
2018	63.15%
2019	61.05%
2020	57.88%
2021	61.98%
2022	62.48%

Only Bridge, Division, and Monroe districts saw a decrease in their simultaneous call volume in 2022.

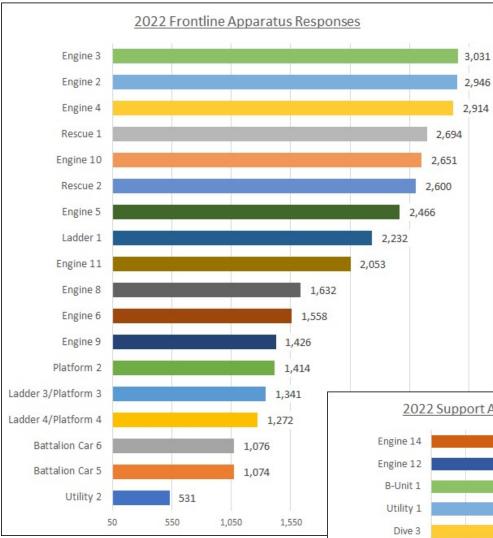
	Simultaneous Call Percentage by Station District									
Station	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Bridge	9.07%	9.54%	10.19%	10.01%	11.49%	9.62%	10.62%	10.18%	10.96%	10.48%
Burton	4.85%	4.43%	6.07%	4.80%	5.50%	6.07%	6.90%	5.97%	7.33%	7.43%
Chester	7.69%	8.57%	7.05%	9.00%	11.59%	8.61%	11.80%	8.10%	8.59%	8.63%
Covell	6.52%	7.22%	7.28%	7.31%	9.39%	7.84%	13.15%	7.45%	8.07%	8.10%
Division	8.70%	6.71%	7.18%	9.53%	9.31%	8.00%	9.38%	9.91%	9.07%	10.58%
Kalamazoo	11.31%	10.79%	11.56%	12.73%	13.70%	22.65%	13.07%	10.26%	13.54%	14.05%
La Grave	9.72%	10.32%	7.45%	9.81%	10.49%	11.71%	11.22%	7.88%	9.09%	11.03%
Leonard	6.86%	8.70%	6.97%	9.23%	7.70%	7.57%	12.89%	8.79%	9.28%	10.76%
MLK Jr.	5.03%	5.60%	7.30%	6.61%	7.05%	7.35%	7.85%	7.10%	10.16%	8.06%
Monroe	6.90%	5.37%	8.59%	8.25%	6.75%	7.45%	11.69%	8.41%	9.15%	8.46%
Plainfield	3.62%	4.14%	6.68%	3.96%	5.27%	4.59%	10.40%	5.51%	6.33%	6.56%

### AID GIVEN OR RECEIVED

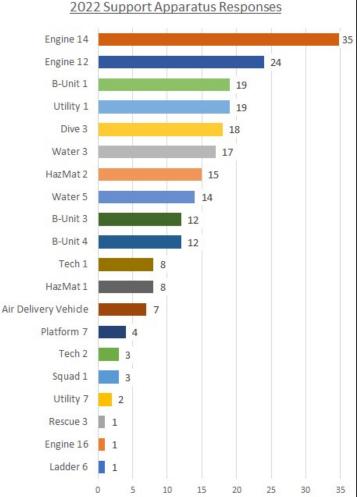
Our current auto aid agreements with Plainfield, Kentwood, and Walker requires us to respond automatically to structure fire alarm types in each other's identified municipal areas. All other responses within or outside GR city boundaries are upon request. This table shows the number of times we responded to, or received aid from, the indicated agencies (Auto/ Mutual) and any instance where only the GRFD responded (Other). The counts reflect any alarm type, not just structure fires.

	AID RECEIVED AID GIVE						
	Auto	Mutual	Total	Auto	Mutual	Other	Total
Alpine Twp	25	1	1		0	0	0
Alto/ Bowne Twp		0	0		1	0	1
Cutlerville		0	0		1	0	1
East Grand Rapids		0	0		2	0	2
Grand Rapids Twp		0	0		0	3	3
Grandville		0	0		1	0	1
Kentwood	3	1	4	6	4	6	16
Plainfield	7	5	12	6	6	2	14
Walker	2	2	4	5	3	2	10
Wyoming		2	2		18	11	29
2022 Total	12	11	23	17	36	24	77

# **APPARATUS RESPONSES**



Engine 3 out of Bridge Station was GRFD's busiest machine in 2022 with 3,031 responses, followed by Engine 2 (out of Martin Luther King Jr. Station) and Engine 4 (out of Kalamazoo Station) at over 2,900 calls each.



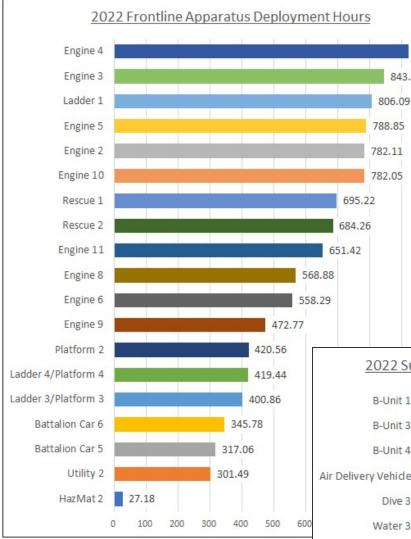
Engine 3's increase of incidents from last year was due to an uptick in "other" incident types such as wires down, gas leaks, and police matters. Rescue 1 and 2 out of La Grave saw the largest increase in call volume from the previous year; since 2021, Rescue 1 jumped 18.26% (up from 2,278) and Rescue 2 jumped 15.45% (up from 2,252).

Due to an officer involved shooting in April, the department upstaffed Engine 14, a support apparatus, to help alleviate increased call volume. The ADV, another support apparatus, had a notable decrease in incident count from the prior year because it was replaced with Tech 1 in May 2022.

# **APPARATUS DEPLOYED HOURS**

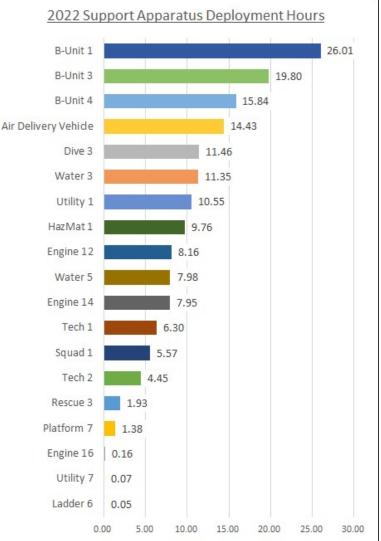
921.37

843.48

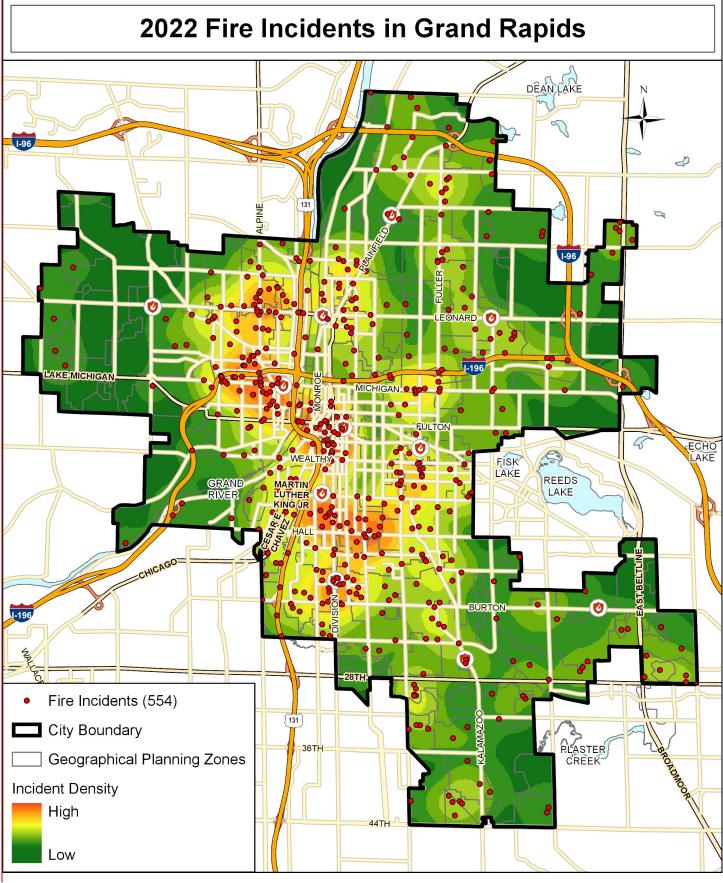


This year, the deployed hours don't have a strong correlation to deployed responses. Engine 4 had the third most responses but had the most deployed hours by far. There are a couple of reasons identified for this. Not only does Engine 4 have a larger district, meaning potentially longer travel times, but they also wait longer for ALS units to arrive on scene (their 90<sup>th</sup> percentile for ALS wait time was 3 minutes longer than Engine 2). Although Engine 2 had more incidents, they arrived and cleared significantly sooner than Engine 4, which put them in fifth place for deployed hours.

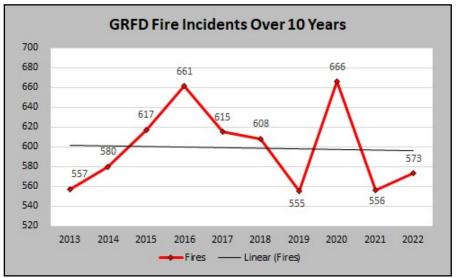
Engine 4 out of Kalamazoo Station had the most deployed hours (921.37) in 2022, followed by Engine 3 (out of Bridge Station) and Ladder 1 (out of Leonard Station) at over 800 hours each.



# **FIRE INCIDENTS**



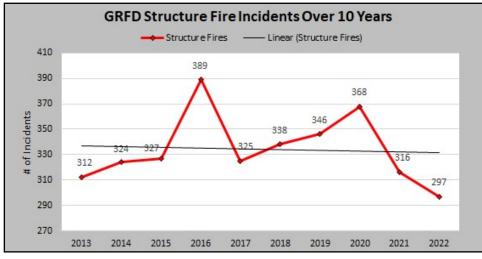
### **ALL FIRES**



<u>TYPES OF FIRES</u>
Structure Fires
Vehicle Fires
Natural Vegetation Fires
Outside Rubbish Fires
Special Outside Fires

In 2022, there were 573 total fire incidents, a 3.24% increase from the previous year. The ten-year overview for fire incidents is on a slight downward trend, with half of the year's incident counts under 600. As you will see in the next section, structure fires made up 52% of all fire incidents.

### **STRUCTURE FIRES**



2022 Simultaneous Structure Fires										
Description	Count	%								
2 Structure Fires at the Same Time	10	2.96%								

2022	2 Structure Fi	ires
# Per Day	Frequency	Total
1	132	132
2	54	108
3	14	42
4	1	4
5	1	5
6	1	6

As in 2021, 2022 presented another reduction in structure fire incident volume, falling 5.38%. Though the number of structure fires over a 10 year span has varied up and down, the recent trend is visibly decreasing.

In 2022, there were 10 instances where 2 structure fires took place at the same time; this is an 80% decrease from the previous year, when there were 18 instances of 2 structure fires at the same time. For the second year in a row, there were structure fires on 203 days, representing a 55.62% chance of a structure fire occurring on any given day.

2021	Structure Fi	ires
# Per Day	Frequency	Total
1	122	122
2	59	118
3	15	45
4	5	20
5	1	5
6	1	6

# **EMERGENCY MEDICAL SERVICES (EMS)**

### **STATISTICS & HIGHLIGHTS**

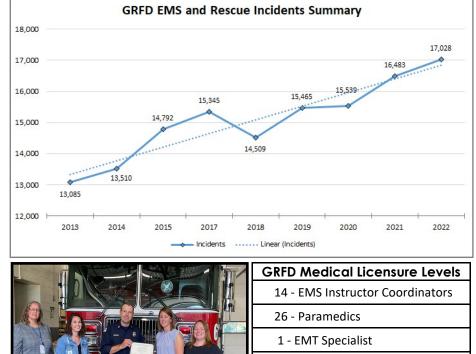
"Why does a fire engine come to my house when I have a medical emergency?"



The majority of our calls are to medical emergencies. The GRFD operates as a Medical First Responder (MFR) agency, which means all GR firefighters have both fire *and* medical training. Our units also typically arrive at the medical scene before the ambulance. This allows us to start the assessment and treatment and get you ready for transport - just another service for our customers!

### Firefighter of the Year: Lieutenant Jim Betz

Lieutenant Jim Betz, our pediatric champion, was instrumental in building the Infant Safe Sleep training with the Kent County Health department. GRFD was the first agency in Michigan to get certified in



this training, which will provide families with education on how to safely put infants to sleep. For his efforts, Lieutenant Betz was recognized as the <u>2022 Firefighter of the Year</u>.

### Return of Spontaneous Circulation (ROSC)

ROSC is when a person's heart begins beating on its own again after suffering cardiac arrest.

*Of the 279 Cardiac Arrests in 2022, only 107 received bystander CPR.* Call 911 and follow the dispatchers instructions for hands-only CPR.

Total Cardiac Arrest Events	. 279
Witnessed Events	. 98
ROSC in Witnessed Events	. 54%
ROSC in all Cardiac Arrest Events	. 34%

Two steps to save a life:

104 - EMT Basics

60 - Medical First Responders

26 - Medical Vehicles Certified

71 - Medical Licenses Reviewed





Call Right Away! Push

Push Hard & Fast in the Center of the Chest!

**36 Team Members** 

36 Team Members

**36 Team Members** 

# **SPECIAL OPERATIONS**

### TECHNICAL RESCUE ------

(Confined Space, Trench/Building Collapse, Vehicle Stabilization/Extrication, Heavy Lifting/Rigging)

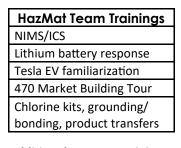
- 9 members completed the MI Urban Search & Rescue: Trench Rescue Technician Program
- Tech 1 apparatus designed and put in service to handle the first hour of any tech rescue incident
- La Grave Station now houses Rescue 1, Rescue 2, Tech 1, and Tech 2 for management, training, and response
- Successfully passed a rigorous two-day evaluation by the MI-MABAS Special Operations Division to assess and validate the department's ability to effectively respond to and mitigate each type of technical incident. The team stands ready to respond to technical rescue incidents throughout the state when called upon

### WATER RESCUE

- 19 team members completed Dry Suit, Full Face Mask, and Dive Rescue 1 training
- 9 team members completed a Rope Rescue Operations course
- Dive Rescue became operational in December, first response was on December 31st, 2022 (pg 13)
- Started the process of preparing for MI-MABAS validation, which will continue through 2023 with necessary training and equipment purchases
- Started developing a modification plan for Boat 1 (1999, 22ft Wooldridge), to improve its use as a dive boat

### HAZARDOUS MATERIALS -----

- 30 members completed MI-MABAS Type 1 HazMat Team validation
- Continued cooperation with Region 6 and Statewide HazMat workgroup, attending multiple training exercises
- Presented to the Grand Rapids Public Safety Committee about GRFD HazMat capabilities
- HazMat 1 office upgraded, with the addition of iPads. Level B suits upgraded and field analysis tests acquired
- 4 CO2 meters (grant funded), 2 Chlorine meters, and 2 Ammonia meters added to cache

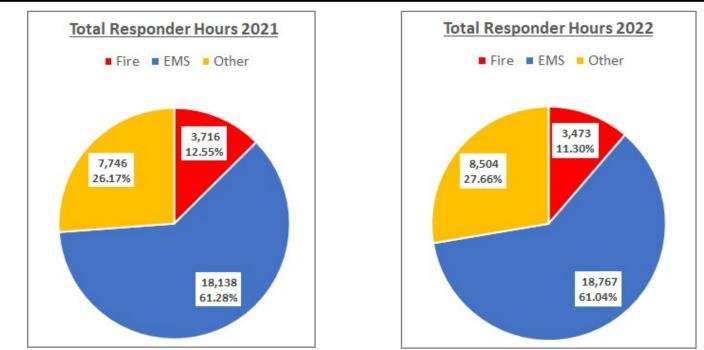


Additional HazMat Trainings: HazMat Officer (2), Advanced Monitoring & Detection (2), Highway Cargo Specialist (1), CNG Risk-Base Response (2), GM's Electric Vehicle course (1)



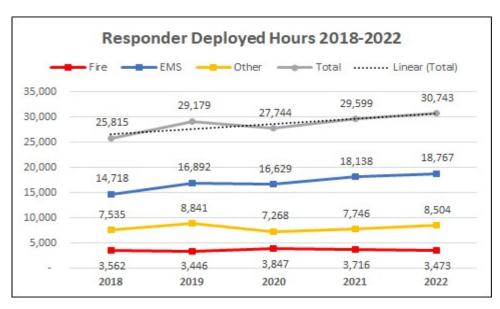
Calls cancelled enroute or where the airboat was used for ventilation are excluded from this chart.

# **RESPONDER HOURS**



EMS incident types accounted for **68.84%** of all incidents and **61.04%** of total responder hours in 2022. While Fire incidents generated only **2.32%** of the total incident volume last year, it required **11.30%** of our deployed time for safe and effective mitigation. Responder hours for fires is down from 2021, but that is primarily due to 18 less structure fire incidents in 2022.

The time personnel spent on scene of "Other" incidents has also trended upwards for the past few years; an increase of **17%** since 2020 (see chart below), more than the **12.85%** EMS increase in the same time frame.



The trendline for responder deployed hours over the last five years continues to show a steady increase.

# **TEMPORAL ANALYSIS**

	т	empor	al Ana	lysis - /	All Alaı	ms		
Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	150	108	93	80	105	97	151	784
01:00-01:59	163	92	80	88	82	81	127	713
02:00-02:59	145	72	92	79	76	88	131	683
03:00-03:59	98	65	66	62	67	61	82	501
04:00-04:59	84	59	62	55	57	53	76	446
05:00-05:59	67	78	62	66	74	55	86	488
06:00-06:59	99	66	70	103	80	100	101	619
07:00-07:59	87	117	114	110	129	110	105	772
08:00-08:59	108	136	146	172	128	145	138	973
09:00-09:59	142	176	185	157	145	178	140	1,123
10:00-10:59	158	150	184	173	167	167	179	1,178
11:00-11:59	166	167	161	181	215	189	176	1,255
12:00-12:59	182	225	219	188	196	191	181	1,382
13:00-13:59	166	219	185	210	209	218	181	1,388
14:00-14:59	164	196	194	184	221	197	205	1,361
15:00-15:59	190	238	201	219	188	197	193	1,426
16:00-16:59	185	209	233	206	184	223	203	1,443
17:00-17:59	168	225	240	217	218	212	216	1,496
18:00-18:59	195	168	182	170	195	211	179	1,300
19:00-19:59	164	156	208	164	198	195	180	1,265
20:00-20:59	167	152	165	151	156	166	177	1,134
21:00-21:59	164	153	161	150	140	174	169	1,111
22:00-22:59	164	122	134	131	124	168	192	1,035
23:00-23:59	123	118	110	115	105	127	162	860
Total	3,499	3,467	3,547	3,431	3,459	3,603	3,730	24,736

For 2022, the most active time period for the day of the week and hour of the day occurred on **Tuesdays between 5pm and 6pm**, with 240 calls for service. In 2021, the busiest day and hour were Tuesdays between 3pm and 4pm, with 228 calls.

EMS responses continue to be higher between 9 am and 10 pm, the time period most people are active and awake. This year's <u>busiest hours</u> for EMS calls were on Tuesdays from 5pm to 6pm with a total of 164 incidents.

<u>The most responses to fire incidents were seen</u> <u>Sundays between the noon hour and between</u> <u>5pm and 9pm</u>. This corresponds with the continued trend of cooking being the most common cause of fires in Grand Rapids (pg 27).

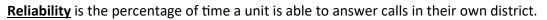
		Tem	poral A	nalysis	- Fire	s		
Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	4	4	2	3	8	1	3	25
01:00-01:59	3	6	4	4	2	0	4	23
02:00-02:59	4	3	1	2	1	1	3	15
03:00-03:59	1	2	2	3	2	2	2	14
04:00-04:59	2	4	3	2	2	0	2	15
05:00-05:59	1	0	1	2	0	1	3	8
06:00-06:59	2	2	3	3	1	3	1	15
07:00-07:59	1	0	2	5	1	0	0	9
08:00-08:59	0	2	4	5	4	1	3	19
09:00-09:59	2	5	1	3	2	4	3	20
10:00-10:59	5	1	3	1	0	1	2	13
11:00-11:59	4	3	1	1	2	3	3	17
12:00-12:59	9	5	5	3	3	3	5	33
13:00-13:59	8	4	2	2	8	2	5	31
14:00-14:59	2	5	7	1	7	5	1	28
15:00-15:59	7	6	0	2	6	10	4	35
16:00-16:59	2	3	6	2	10	5	5	33
17:00-17:59	6	5	1	4	4	6	9	35
18:00-18:59	8	2	6	5	6	3	2	32
19:00-19:59	4	3	3	6	3	1	6	26
20:00-20:59	8	5	2	9	2	9	2	37
21:00-21:59	9	8	2	3	6	2	5	35
22:00-22:59	7	7	2	2	1	2	7	28
23:00-23:59	6	3	4	2	2	2	8	27
Total	105	88	67	75	83	67	88	573

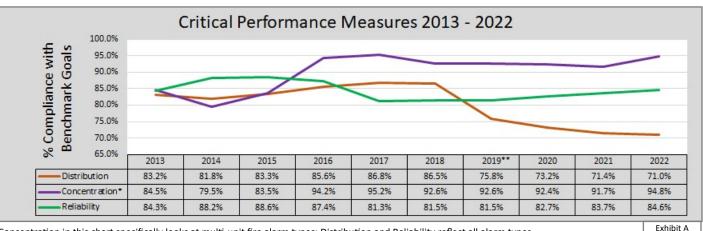
	Tei	mporal	Analy	sis - EN	/IS/ Re	scues		
Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	90	71	64	52	67	67	102	513
01:00-01:59	100	58	55	58	56	62	73	462
02:00-02:59	77	44	70	53	44	56	88	432
03:00-03:59	70	44	49	42	42	45	54	346
04:00-04:59	51	35	44	40	41	32	53	296
05:00-05:59	44	58	45	41	46	40	59	333
06:00-06:59	57	45	52	76	60	78	76	444
07:00-07:59	50	89	72	72	96	84	72	535
08:00-08:59	64	93	105	110	95	100	97	664
09:00-09:59	92	127	131	116	103	122	96	787
10:00-10:59	109	111	130	116	116	115	129	826
11:00-11:59	108	129	110	123	151	142	135	898
12:00-12:59	121	162	152	129	147	141	134	986
13:00-13:59	106	148	125	150	140	156	125	950
14:00-14:59	121	142	134	121	141	140	145	944
15:00-15:59	114	146	142	146	129	130	132	939
16:00-16:59	134	143	158	154	127	153	138	1,007
17:00-17:59	115	156	164	158	160	157	142	1,052
18:00-18:59	134	118	131	119	129	154	114	899
19:00-19:59	117	98	145	107	132	141	123	863
20:00-20:59	113	116	113	94	113	113	127	789
21:00-21:59	115	108	118	110	96	125	115	787
22:00-22:59	111	89	88	92	84	122	112	698
23:00-23:59	82	82	71	83	62	98	100	578
Total	2,295	2,412	2,468	2,362	2,377	2,573	2,541	17,028

# **CRITICAL PERFORMANCE MEASURES**

**Distribution** is the ability to get our first unit on scene within a set time; **Distribution Travel Time** being the biggest factor for meeting this benchmark.

<u>Concentration</u> is the ability to assemble an **effective response force (ERF)** within a set time. **ERF** is the number of personnel required to perform the required critical tasking per incident type in alignment with GRFD policies.





\*Concentration in this chart specifically looks at multi-unit fire alarm types; Distribution and Reliability reflect all alarm types.

\*\*In 2019, the department began using a more accurate start time when calculating these metrics.

DISTRIBUTION TRAVEL TIME - 2022 distribution travel time compliance for all alarms. 2021	1 Citywide: 73.78%
------------------------------------------------------------------------------------------	--------------------

	Bridge	Burton	Chester	Covell	Division	Kalamazoo	La Grave	Leonard	MLK Jr.	Monroe	Plainfield	Citywide
Pass	1867	621	1134	663	1663	1225	2622	1017	1469	1197	580	14058
Fail	327	500	401	617	433	1356	130	675	194	319	319	5271
Compliance	85.10%	55.40%	73.88%	51.80%	79.34%	47.46%	95.28%	60.11%	88.33%	78.96%	64.52%	72.73%
												Exhibit B

#### CONCENTRATION (ERF) - 2022 concentration ERF compliance for all multi-company alarms. 2021 Citywide: 76.55%

	Bridge	Burton	Chester	Covell	Division	Kalamazoo	La Grave	Leonard	MLK Jr.	Monroe	Plainfield	Citywide
Pass	83	12	45	29	70	98	75	39	52	47	22	572
Fail	13	8	12	21	23	15	21	55	3	11	29	211
Compliance	86.46%	60.00%	78.95%	58.00%	75.27%	86.73%	78.13%	41.49%	94.55%	81.03%	43.14%	73.05%
												Exhibit C

#### **RELIABILITY** - Trend over 10 years for all alarms.

When reliability gets too low, the deployment model requires review to determine if another unit is needed in that district.

Station	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Bridge	88.34%	92.62%	92.07%	89.88%	79.83%	78.04%	80.14%	81.57%	83.65%	84.93%
Burton	84.02%	87.16%	88.06%	86.87%	83.30%	84.24%	83.41%	84.45%	86.72%	86.43%
Chester	79.45%	83.39%	84.02%	81.17%	73.76%	72.64%	71.56%	65.89%	69.47%	73.99%
Covell	82.40%	85.82%	85.01%	85.19%	77.53%	78.43%	76.87%	79.81%	82.72%	82.65%
Division	82.55%	83.90%	83.27%	82.19%	78.91%	79.86%	76.04%	80.96%	81.53%	81.97%
Kalamazoo	90.76%	95.43%	95.34%	94.13%	86.92%	87.90%	90.93%	91.72%	91.52%	90.97%
La Grave	85.41%	83.50%	91.20%	94.13%	88.29%	85.30%	85.50%	89.10%	88.55%	89.37%
Leonard	84.49%	86.99%	86.47%	85.13%	76.36%	81.29%	78.69%	83.45%	80.50%	82.56%
MLK Jr.	87.22%	95.78%	94.77%	93.07%	81.62%	87.25%	89.02%	88.82%	89.22%	88.41%
Monroe	81.17%	85.80%	79.59%	77.77%	76.35%	74.56%	72.68%	76.42%	77.21%	79.28%
Plainfield	81.78%	90.09%	86.70%	85.38%	84.50%	82.81%	81.37%	85.16%	85.48%	84.30%
CITYWIDE	84.33%	88.20%	88.55%	87.37%	81.29%	81.48%	81.00%	82.66%	83.67%	84.64%
										Exhibit D

# PERFORMANCE GAP ANALYSIS

This page evaluates performance gaps for the total response area, such as inadequacies, inconsistencies, and negative trends. In addition, this data compares the current operational capabilities and capacity of the department to the identified risk level within the community. Once the gaps have been identified, a continuous improvement plan will be developed and tracked throughout the following year to address these existing gaps and variations.

#### Distribution - Goal of 90% compliance.

- <u>Citywide Distribution</u> decreased to **71.0%** from **73.78%** in 2021. This gap continues to be driven by large single company districts on the edge of the city, combined with an increasing population/risk. Station notification issues also impacted this metric in 2022.
- **Covell Distribution** travel time fell to **51.80%** from **58.52%** in 2021, due to <u>increased call volume at the</u> <u>district's boundaries</u>.
- Kalamazoo Distribution travel time fell to 47.46% from 52.95% in 2021, also due to a large amount of calls at the southern and northern extremes of the district.

#### <u>Concentration (Effective Response Force) — Goal of 90% compliance (measures all call types).</u>

The following outlying districts, where it is more difficult to assemble effective response forces, all showed a decline in their concentration compliance.

- Covell's ERF fell from 64.00% to 58.00% (- 6% )
- Plainfield ERF fell from 48.84% to 43.14% (- 5.7%)
- Burton ERF fell from 64.29% to 60.00% (- 4.29%)
- Leonard ERF fell from 45.5% to 41.49% (- 4.01%)

#### **Reliability - Goal of 90% compliance**

- Monroe Reliability is at **79.28%**, a slight improvement from 77.21% in 2021. Monroe's reliability is impacted by their responses as a second due engine on the north half of the city without a second unit in the station. Monroe also covers for Covell, Plainfield, and Leonard districts when they experience simultaneous alarms.
- **Chester Reliability** at **73.99%,** up from 69.47% in 2021. This uptick can be attributed <u>to changes on the Computer</u> <u>Aided Dispatch street speed layer, which decreased the likelihood of other units responding into Chester's</u> <u>district and leaving their district with a lack of coverage.</u>

#### Simultaneous Responses - Monitored for overall call volume in response districts (pg 15)

8 districts saw increases in simultaneous responses compared to 2021.

- **Kalamazoo,** a double company station with the largest district population, continues to be the highest district for simultaneous calls at **14.05%**. Kalamazoo has lead all other stations for simultaneous calls since 2013.
- La Grave and Bridge are the next highest double company stations at 11.03% and 10.48% respectively.
- Leonard and Division are the highest single company districts at 10.76% and 10.58% respectively.

# **ADMINISTRATIVE CHIEFS**

### **DEPUTY CHIEF OF SUPPORT SERVICES - Brad Brown**

#### **Strategic Plan Pillar Owner - Support Services**

- Personnel & Human Resources
- **Evaluations & Injury** Documentation
- **General Management Support**
- Scheduling & Leave Usage
- Promotions, Retirements, & New Hires
- **Prevention & Planning Division**

### **DEPUTY CHIEF OF OPERATIONS - Jack Johnson**

#### Strategic Plan Pillar Owner - Response

- **Operations Personnel**
- Radio, Gas Monitor, Drone Programs & Mask Room
- Safety Committee

### **ASSISTANT CHIEF - Eric Freeman**

**Strategic Plan Pillar Owner - Wellness** 

- Fiscal Services (Budget)
- Procurement
- **Building & Fleet Maintenance**

- Station Alerting & Communications
- **EMS Division & Special Operations**
- Homeless Outreach Team (H.O.T.)
- **Response Metrics Analysis**

Personal Protective

### FIRE MARSHAL - Eric Dokter

**Strategic Plan Pillar Owner - Prevention** 

- **Commercial Inspections** 
  - & Plan Reviews
  - **Fire Investigations**
  - **Public Education**
  - **Residential Safety** Program
  - Fire Match





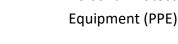






**Strategic Plan Pillar Owner - Training** 

- Multi-Company & Instructor Training
- Host state classes
- Facilitates CPR & **Confined Space** Training



Recruitment

**TRAINING CHIEF - William Race** 

# **BATTALION CHIEFS**

Battalion Chiefs, our highest ranking suppression officers, direct large-scale emergency scenes, coordinate community interaction opportunities, bring direction from administration to our crews, and tend to the needs of suppression personnel, including fostering professional development and coordinating accident/injury investigations. Daily personnel staffing is managed by the South Battalion Chiefs to assure an effective response across the city.

### **NORTH BATTALION**

Leonard, Bridge, Monroe, La Grave, Covell, Plainfield



**Dave Noorman** 

Extrication **External Agency Liaison** (including MABAS)



Ed Braman Tech Rescue



**Richard Clark** Water Rescue

### **SOUTH BATTALION**

#### Martin Luther King Jr, Kalamazoo, Burton, Division, Chester



**Mark Noorman Apparatus Inventory** Wellness



Kathleen Thompson

Hazardous Materials



**Scott Stevenson** 

Mask Repair Unmanned Aerial Vehicle (UAV)

# **COMMUNITY RISK REDUCTION**

Protecting against loss of life and property through education and prevention efforts.

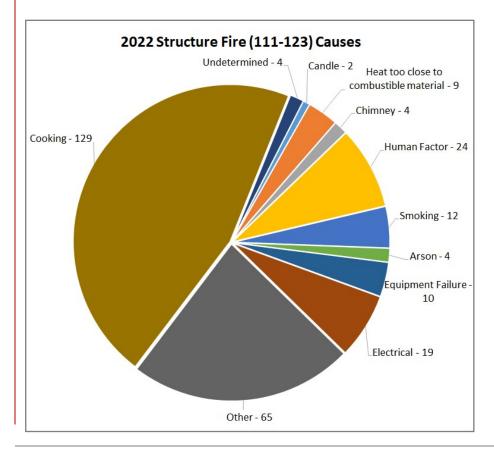
### **Inspections & Investigations**

- 90% of the assigned Operational Permit inspections were completed.
- Additional personnel were brought in to support the Residential Safety Program and perform commercial property inspections.
- Nearly 300 commercial building referrals concerning fire code violations were reported by fire suppression officers. All of these referrals were addressed.
- Investigators are deployed to incidents where injuries, deaths, or high dollar losses occur due to fire. Unfortunately, because of fire, thirteen people were injured and two lost their lives in 2022.
- One of the lives lost in 2022 was due to arson; an arrest was made and charges were pressed.
- Two investigators provided testimony on a fatal fire case from 2020 that ultimately led to an involuntary manslaughter conviction.

### **Construction & Plan Review**

Inspecting new construction and renovation projects within Grand Rapids can help determine new areas of potential risk in the community. The table below shows completed plan reviews by district.

	Bridge	Burton	Chester	Covell	Division	MLK	Kalamazoo	La Grave	Leonard	Monroe	Plainfield	Citywide
Count	94	73	26	8	28	27	30	85	60	48	3	482
Percentage	19.50%	15.15%	5.39%	1.66%	5.81%	5.60%	6.22%	17.63%	12.45%	9.96%	0.62%	



### **Public Education**

The public engaged in fire safety education opportunities at 123 events last year, including community open houses, festivals, school visits, and church gatherings. These are supported, in-part, by the newly funded **Grand Rapids Fire Prevention Foundation**, which achieved 501 (c)(3) status in 2022.

The goal of the foundation is to raise funds to remove barriers to fire safety through education and providing and installing smoke and carbon monoxide alarms.

# Home Safety Assessments (HSAs) & Risk Assessments

This data shows the combined efforts of prevention and suppression personnel to mitigate hazards through commercial property risk assessments and Residential Safety Program (RSP) assessments. Of those completed, 29% were done within the Neighborhoods of Focus (NOF).

	Bridge	Burton	Chester	Covell	Division	MLK	Kalamazoo	La Grave	Leonard	Monroe	Plainfield	Citywide
Home Safety Assessment	10	63	58	86	48	14	89	3	63	13	44	491
Risk Assessment	121	122	119	29	98	89	166	106	134	158	43	1,185

With funds from the 2020 FP&S grant, the RSP program completed <u>491 HSAs of</u> <u>the goal of 500, a 98% completion rate</u>.

### 2022 Statistics

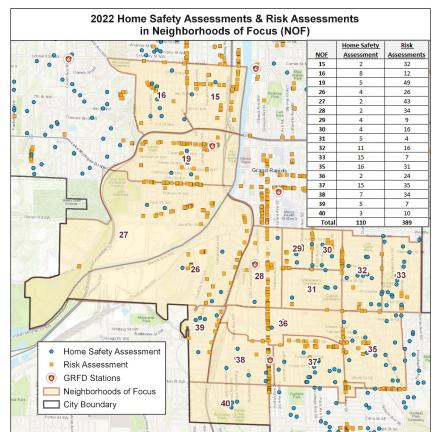
Smoke Alarms installed	2,444
CO Alarms installed	1,272

Additionally, <u>suppression members</u> <u>completed</u> **1,185 Risk Assessments** on commercial and multi-family residential structures, helping to identify new hazards and updating response needs.

With the City's focus on Neighborhoods of Focus (NOF), the map here shows how many HSAs and Risk Assessments were performed in those areas.



Call 311 for Home Safety Assessment eligibility and scheduling, or scan the QR code above to learn more!



## Fire Match Program

- With the assistance of our partnering agencies\*, we made successful contact with 17 families out of 22 referrals. All children either successfully completed the program or are still in their 6 month monitoring period.
- Plans are in place to train four new firefighters in 2023 to ensure program sustainability.

\*(Kent County Probation, DHHS/ Social Services, Arbor Circle, Grand Rapids Public Schools and DA Blodgett)

# PLANNING DIVISION

Providing information to support decision making activities throughout the organization.

### **Major Accomplishments**

- Helped to refine the process for determining the percentage of property value at risk to calculate a more accurate save rate; previously the entire estimated property value was used.
- Facilitated creation of new FY23-25 GRFD Strategic Plan (pg 8).
- Continued succession planning and facilitation for a new Planning Captain and Acting Planning Lieutenants.
- During the New Officer Training, the Performance & Management Reporting Specialist (PMRS) provided an Incident Documentation focus (NFIRS & NEMSIS) with EMS Captain MacBride.
- Performed audit of all Insurance Services Office requirements and communicated results to appropriate parties.
- The PMRS continued involvement with the NFPA 1022 Technical Committee on Fire Service Analysts and Informational Technical Specialists Professional Qualifications (PQU-FSA).

# **EMERGENCY MANAGEMENT**

Working toward creating a resilient and prepared community through preparedness, response, and recovery.



### **Major Accomplishments**

- Facilitated an active shooter functional exercise at GRCC and a full-scale high-rise fire exercise at City Hall.
- Throughout 2022, the City of Grand Rapids witnessed an increase in the lifting of COVID-19 restrictions.
- In April, the GR Police Department was involved in an officer involved shooting that took the life of community member Patrick Lyoya. The Emergency Operations Center (EOC) was activated for 6 days to coordinate resources and information for demonstrations that occurred downtown and at City Commission meetings in response to this incident.
- The Emergency Management Administrator was accepted into the FEMA Advanced Academy program.
- To improve engagement and maintain knowledge, monthly training on VEOCI, the city's incident management tool, was scheduled for over 100 users.
- The City's Continuity of Operations Plan (COOP) was finalized at the end of 2022 and is currently in review by the Office of Emergency Management to prepare for adoption at the executive level.
- In December 2022, the Federal Emergency Management Agency (FEMA) and the State of Michigan Emergency Management and Homeland Security Division (EMHSD) approved the 2022 Regional Hazard Mitigation Plan (HMP) for the City of Grand Rapids, Kent County, and Ottawa County.
- Received grant funding to develop a Threat and Hazard Identification Risk Assessment, Stakeholder/Community Preparedness Report and to hire an Emergency Management Specialist to focus on public outreach & education.

# PROMOTIONS

#### **DEPUTY CHIEF/ ASSISTANT CHIEF**

1/4/2022	Johnson, Jack	(DC of Operations)
5/16/2022	Brown, Brad	(DC of Support Services)
5/16/2022	Freeman, Eric	(Assistant Chief of Admin)

#### **BATTALION CHIEF**

1/13/2022 Clark, Rich 5/23/2022 Stevenson, Scott

#### CAPTAIN

1/13/2022Nowack, Andrew3/3/2022Kernodle, Cory (Training Captain)5/23/2022Dumond, Matthew7/25/2022Smith, William (Planning Captain)7/25/2022Johnson, Kara11/6/2022Sparks, Ryan

#### LIEUTENANT

 1/13/2022
 Weatherwax, Dan

 1/13/2022
 Dobb, Paul

 5/23/2022
 Mika, Brandon

 6/17/2022
 Hutter, Matt

 7/28/2022
 Schneider, Abe

 11/6/2022
 Myers, Mike

### EQUIPMENT OPERATOR

5/6/2022	Adamczyk, Steve
5/6/2022	Elyea, Jared
5/6/2022	Kuipers, James
5/6/2022	Smith, Brad
5/6/2022	Wallace, Lori
5/6/2022	Walsh, Ben

# **NEW HIRES**

1/24/2022	Burnett, Jr., David
1/24/2022	Bristol, Terrance
1/24/2022	Hoeksema, Matt
1/24/2022	Scheer, Carlye
1/24/2022	Ornelas, Javier
1/24/2022	DuVerneay, Jacob
1/24/2022	Lottridge, Nick
1/24/2022	Gelder, Owen
1/24/2022	Harper, Timothy
1/24/2022	Kwekel, Andrew
1/24/2022	Kunak, Thomas
1/24/2022	Copado, Joshua
1/31/2022	Kimball, Shaine

# RETIREMENTS

Thank you to our 2022 retirees for their many years of dedicated service. Together these men and women have served the City of Grand Rapids and fulfilled the mission of the GRFD. We wish you the best in your future endeavors.

1/3/2022	DeBlaay, Dan (Lieutenant)
1/3/2022	VanderWall, Todd (DC of Operations)
1/3/2022	Lohman, Steve (Training Captain)
5/16/2022	Tennant, Ron (DC of Support Services)
7/4/2022	Druckenmiller, Jason (Lieutenant)
7/24/2022	VanderWall, Craig (Captain)
7/25/2022	Gray, Scott (Planning Captain)
9/16/2022	VanderVennen, Bill (Chaplain)
11/5/2022	DeForest, Brian (Captain)
11/29/2022	Hunderman, Philip (Equipment Operator)



GRFD 2022 Firefighter of The Year and Promotional Ceremony



#### MISSION

The Grand Rapids Fire Department values all people by saving lives, protecting property, and responding to the needs of our entire community.

#### VISION

Providing world-class fire services for our community by employing a diverse workforce which respects, values and develops our members.

#### VALUES

Honesty
 Integrity
 Loyalty
 Teamwork

• Excellence



**Contact Information** 

311 for Home Safety Assessment eligibility and scheduling - page 29

616.456.4240 for Homeless Outreach Team (HOT) - page 7

616.456.3900 for Grand Rapids Fire Department inquiries

# Dial 911 for Emergencies

Grand Rapids Fire Department 38 La Grave Ave SE Grand Rapids, MI 49503



For further information on this Annual Report contact the Grand Rapids Fire Department at 616.456.3900