



2022 ANNUAL REPORT

Our mission:

Provide a safe environment for the Clio/Thetford/Vienna community through Emergency Response, Planning, Fire Prevention, Education, Fire Suppression, and Vehicle Rescue Operations, and do so with the safety of our personnel and the public as the primary consideration.

Clio Area Fire Department

3291 W Vienna Rd

Clio, MI 48420

Visit us on the web at clioareafire.com or call 810-687-8506



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REMARKS FROM THE CHIEF



Chief Jim Bronson

It is my pleasure to present the Clio Area Fire Department's Annual Report for 2022. This comprehensive report provides history, activities, and the resulting statistical data that is continuously examined throughout the year. It is utilized to enhance the service that we provide to our community.

The men and women of this department responded to a total of 333 calls for service during 2022, above our 5-year average of 280. This represents an increase of nearly 19%. We are privileged to serve each citizen and visitor in our community, and we are exceptionally proud to provide the highest level of fire and rescue services possible.

In 2022, fire department management, officers and responders continued to meet on a regular basis to assess our daily operations, emergency response capabilities and overall member wellness. Through this process, many actions and initiatives were taken to strengthen the response capabilities of our department as well as provide for the safety and health of our emergency responders, their families, and the residents of our community.

The department had a tremendous year of procuring and purchasing equipment & apparatus for the overall improvement of the department. The highlighted purchased items include a new engine that replaced a 28-year-old engine, updated our grass unit with new skid & pump, new command vehicle & two new five-gas air monitors.

Community involvement remained a high priority of the Clio Area Fire Department. We continue to offer installation of smoke & carbon monoxide alarms free of charge with the help of MI Prevention. We continue to actively participate in several collaborative efforts and organizations such as the Genesee County Fire Chiefs Association, Genesee County Hazardous Materials Response Team, Genesee Local Emergency Planning Committee. This concept allows for the sharing of information, ideas and resources between departments and communities to reduce the cost of providing services, while still providing a quality and reliable response to the needs of our citizens.

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Chief Jim Bronson on the Department's continued community involvement and cooperation

After over 42 years of service, Assistant Chief Todd retired, I would like to personally thank Chief Todd for his dedication and service he has devoted to the Clio Area Fire Authority and wish him well in his retirement.

Our challenge that we continue to see is recruitment & retention. We will be focusing an extreme amount of effort toward this issue. This is not only a Clio issue, as it is being felt at other fire departments across the local area, state, and nation.

The budget continues to be strong with the support of the City of Clio, Thetford & Vienna Townships. and after 8 months into the budget year, we are at 70% of our 2022/2023 budget.

I am extremely thankful for all the hard-working men & women of the Clio Area Fire Department, and to our mutual aid departments, as we wouldn't be where we are today without all of them.

James T. Bronson
Fire Chief

2022 SIGNIFICANT ACCOMPLISHMENTS AND EVENTS

Apparatus

- Took delivery of a new front-line engine, Engine 11, replacing a 28-year-old apparatus.
- Completed a major overhaul of Grass 23, including new fire suppression systems, emergency warning systems, scene lighting, and storage systems.
- Removed two Chevrolet Suburbans (model years 2000 and 2001) from service, with disposition via sealed bids.
- Placed a new GMC Yukon into service as a command vehicle.



Figure 1: Engine 11 at Manufacturer Prior to Delivery

Budget, Financials, and Grants

- Fiscal year (FY) 2022 capital and operations expenditures were within budget.
- Audit of FY 2022 financials resulted in an Unmodified Opinion
- Recipient of several grants including:
 - \$100,000 towards firefighting vehicles, courtesy of Vienna Township Business Development Authority.
 - \$15,000 ceiling grant for new uniforms, courtesy of Clio Fire Department, Inc.
 - \$4,023.86 grant for new particulate hoods, courtesy of Clio Fire Department, Inc.
 - \$2,279 grant from The Hundred Club of Genesee, Shiawassee, and Lapeer Counties for a multi-gas detector.
 - \$1,600 grant towards the purchase of three automated external defibrillators courtesy of the Community Foundation of Great Flint.

Recognition and Awards

- **Sergeant Dustin Schultz named Firefighter of the Year for 2022.**

Since joining the department in 2016, Sergeant Schultz has excelled in serving his community while taking on extra projects and responsibilities. He led an initiative to catalog all firefighting equipment and tools, assign asset tags, and record this data in our records system for asset tracking, maintenance, and life-cycle replacement. Sergeant Schultz also leads SCBA management and repair for the organization. On and off the fireground, Sergeant Schultz stands out as one who is always ready, prepared, and eager to assist those in need while demonstrating superb leadership. These qualities, performance, and more not only led to him receiving the Firefighter of the Year award, but also a promotion to sergeant in late 2022.

- **Lieutenant Mike Hemingway named Officer of the Year for 2022.**

Lieutenant Hemingway began his fire service career with our department in 2014 and has since provided exemplary service to the community and leadership to his fellow firefighters. Lieutenant Hemingway voluntarily stepped up to lead the Clio Area Fire Department Explorer Program, which not only provides an activity for high-school students in our area, but also serves as a unique and effective recruiting tool for the department. He also spearheaded the overhaul of Grass 23, significantly improving its response capability and utility. Always looking for ways to improve himself and the department, Lieutenant Hemingway designed and constructed a turnout gear drying apparatus, which dramatically reduced the drying time of turnout gear after washing from greater than 24-hours to less than three.

Community Risk Reduction

- Commenced the production of a Community Risk Assessment and Plan
- Accelerated installation of complimentary smoke and carbon monoxide alarms in residents' homes through greater participation the Michigan MI Prevention program.
- Conducted various community outreach events, including a Fire Prevention Open House, school visits, and messaging.
- Launched a new website with easier access to safety resources.
- Instituted a fire safety inspection program for commercial occupancies.

Health and Safety, Personnel, and Training

- Zero injuries or accidents in 2022.
- Implemented an NFPA 1582 compliant physical examination program.
- Seven personnel completed the hiring process, three of which were already certified.
- Enrolled five personnel in local fire academies.
 - First occurrence of sponsoring a 17-year-old explorer in academy.
- Four personnel completed the National Fire Protection Association's Fire Inspector I program.
- Assistant Chief Kirk Todd retired with 42 years of service. Chief Todd has since rejoined the department in a driver-only role.
- Entered into an agreement with Michigan Task Force 1 (MI-TF1), the State's only Type III urban search and rescue team, permitting our personnel to join and train with MI-TF1.

Service Anniversaries

- 30 Years
 - **Jim Bronson**
- 15 Years
 - **Austin Finkbeiner**
- Five Years
 - **Ryan Moore**

ORGANIZATIONAL CHART

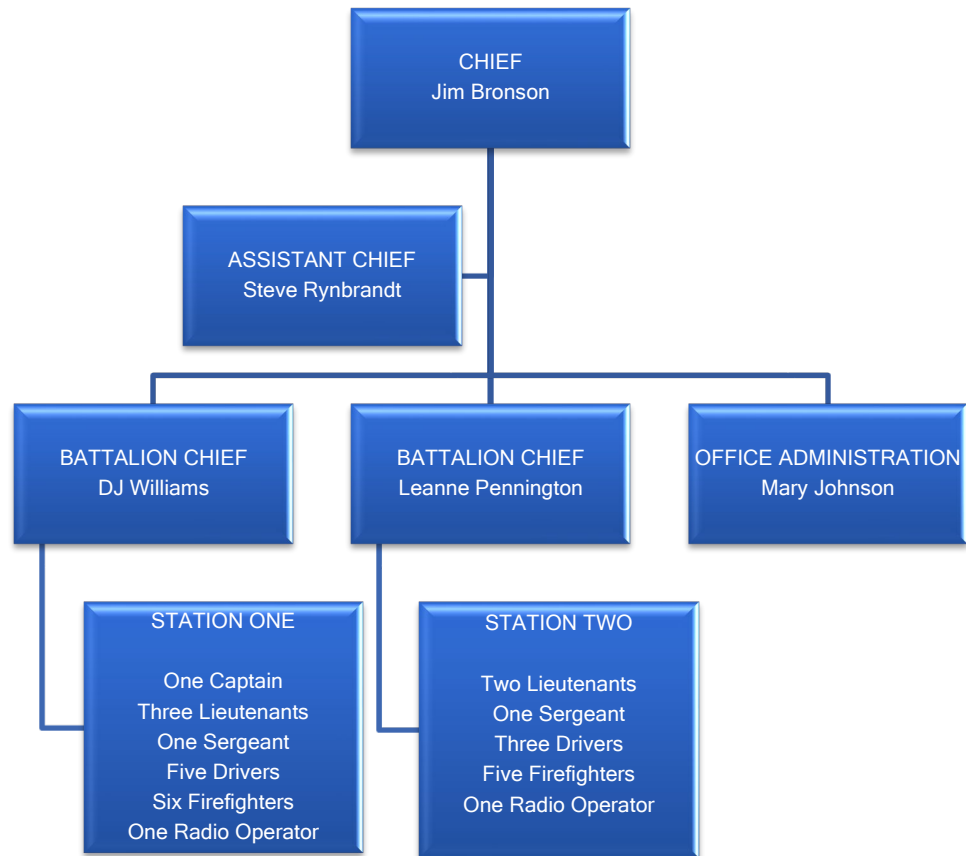


Figure 2: Organizational Chart

INCIDENT RESPONSE

General

CAFD personnel responded to 333 calls for service in 2022. This is the same number of incidents as in 2021 and represents an 18.9% increase above our five-year average (2017 through 2021) of 280 incidents.

Incident alarm times were concentrated between 10:00AM and midnight with relatively even distribution for day of the week.

Unfortunately, our community did experience one civilian fire fatality in 2022. This fire occurred on February 25, 2022, at an automotive repair facility in Vienna Township.

2022 Incident Quick Facts:

- ***Number of Incidents: 333***
 - 98 Fires
 - 17 EMS/Rescue
 - 218 other calls for service
- ***Mutual Aid Incidents***
 - Given: 47
 - Received: 29
- ***Property Value Saved: \$2,314,500***
- ***One Civilian Fire Fatality***

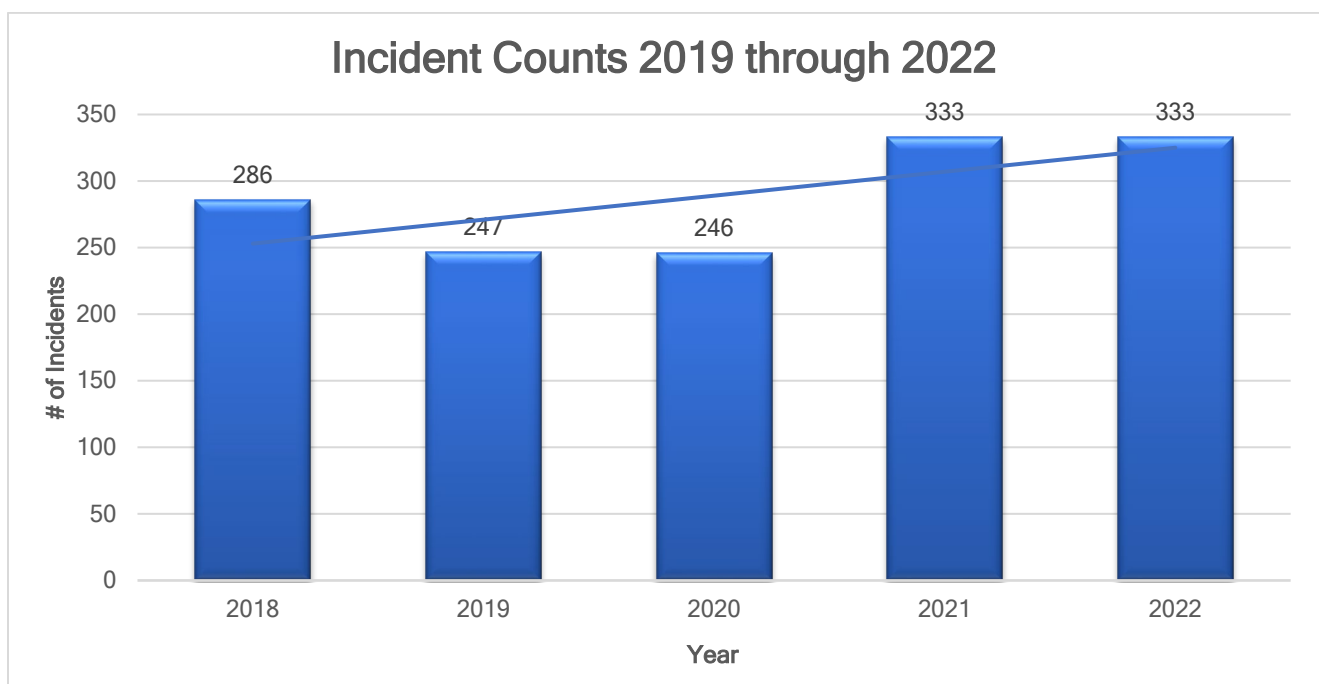


Figure 3: Incident Counts 2019 through 2022

Analytics and Graphs

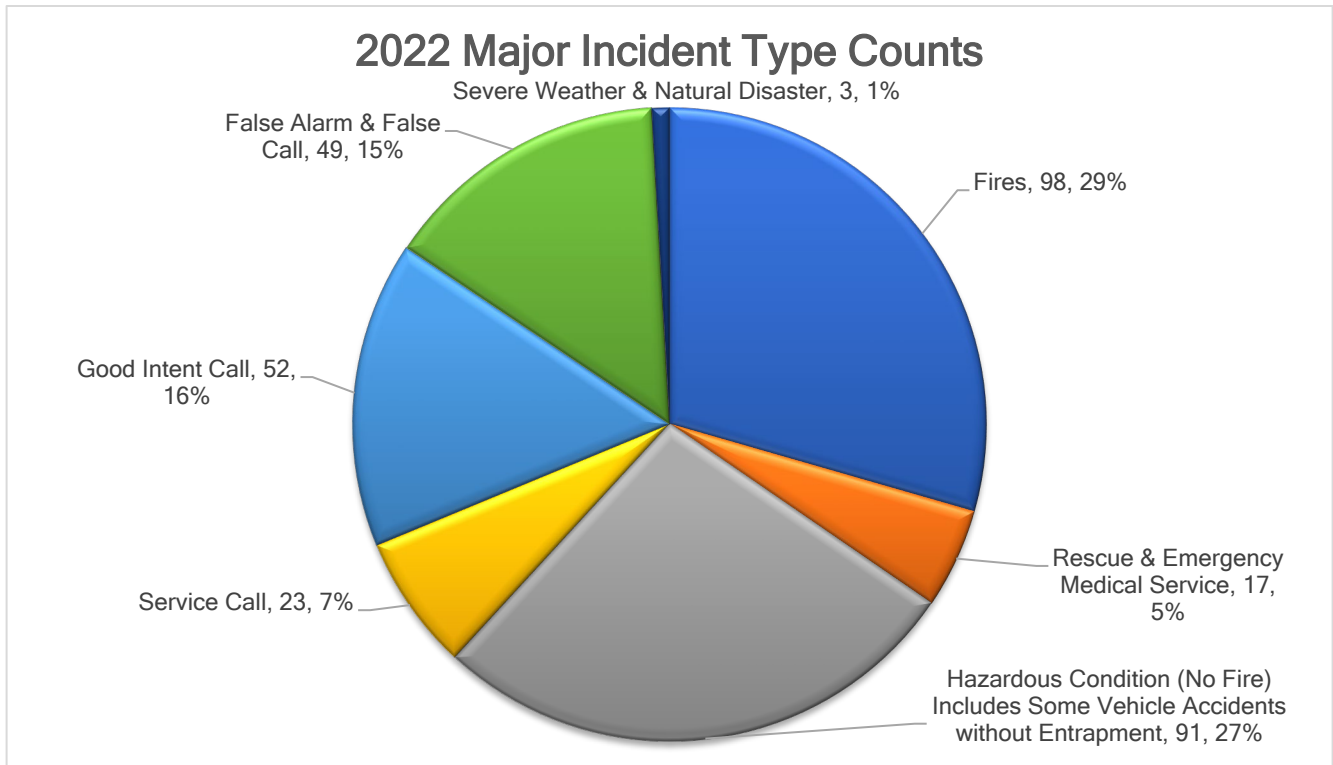


Figure 4: 2022 Major Incident Types

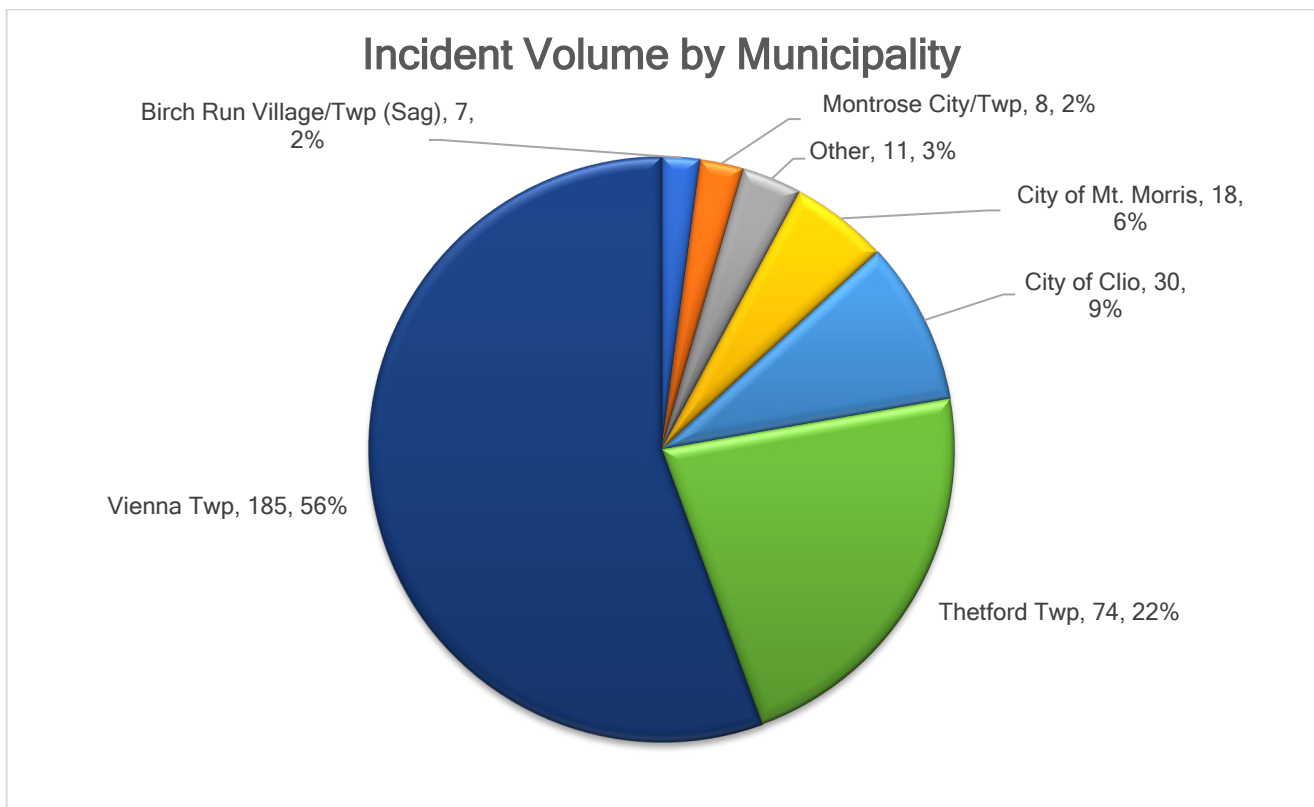


Figure 5: Incident Volume by Municipality

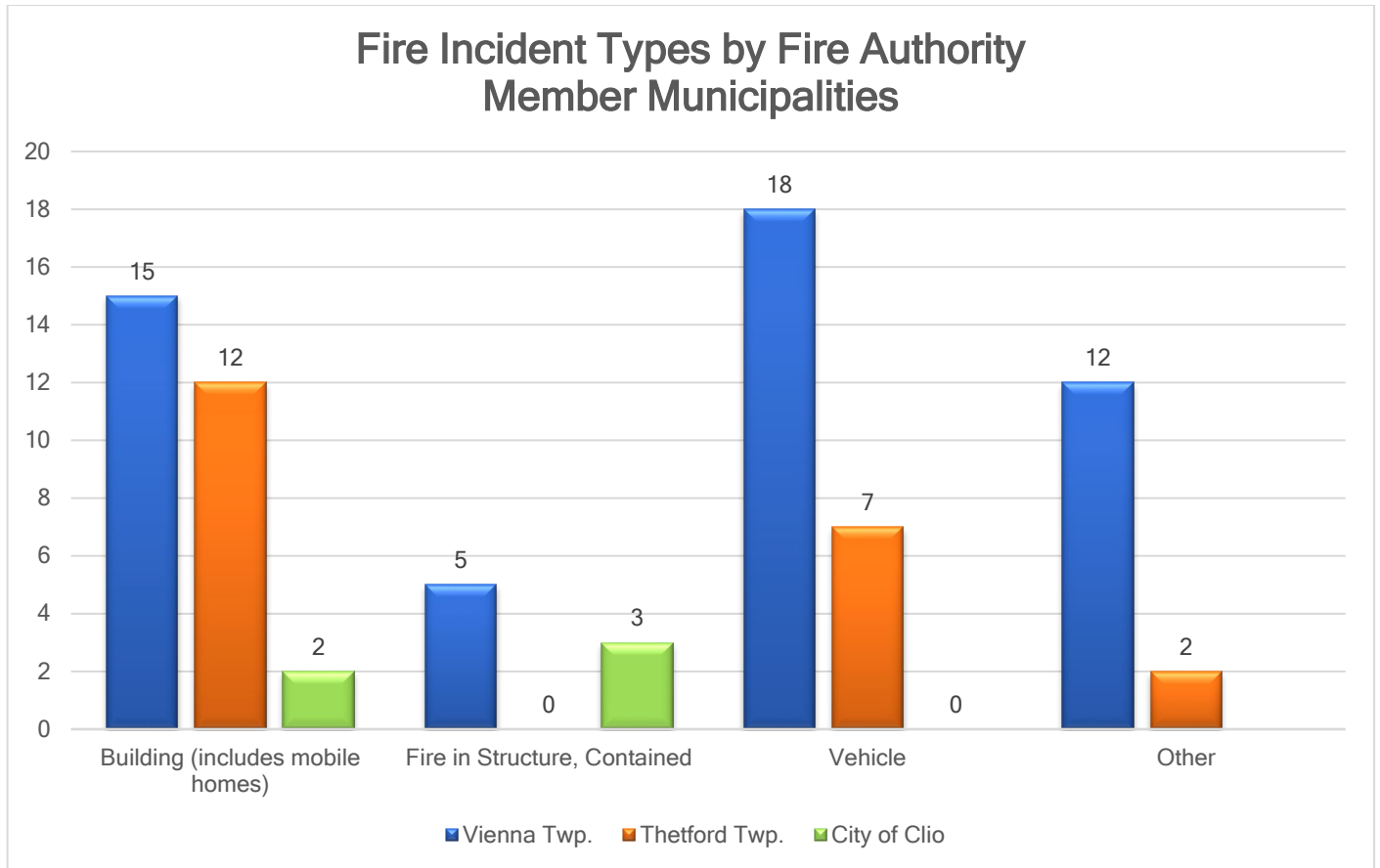


Figure 6: Fire Incident Types by Fire Authority Member Municipalities

of Incidents by Hour of the Day

Incident Category ■ Fire ■ EMS ■ Other

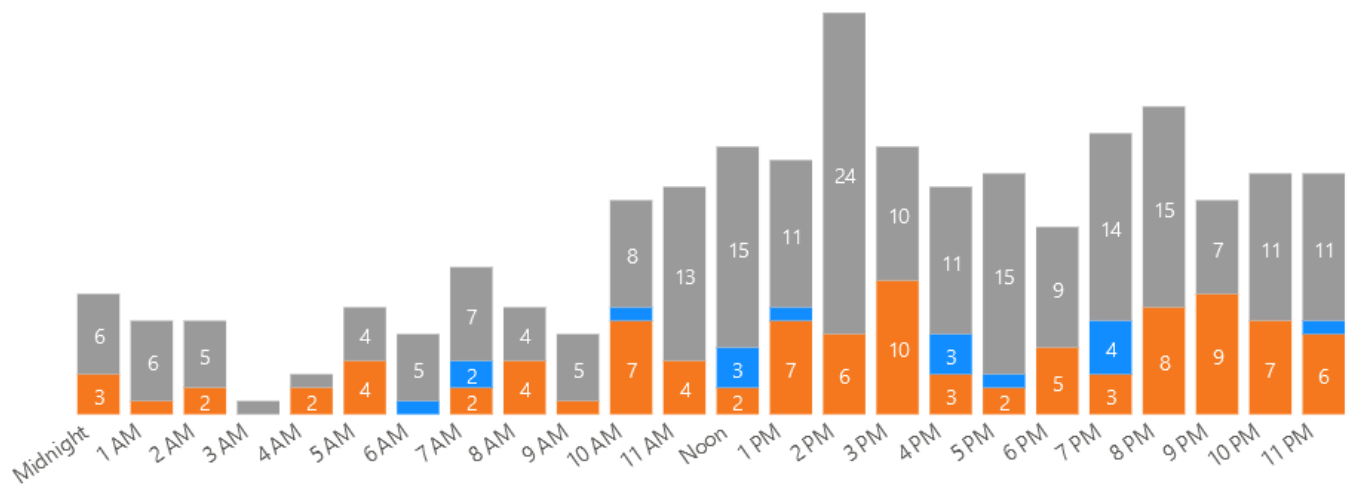


Figure 7: Incidents by Hour of Day

of Incidents by Weekday and Incident Category

● Fire ● EMS ● Other

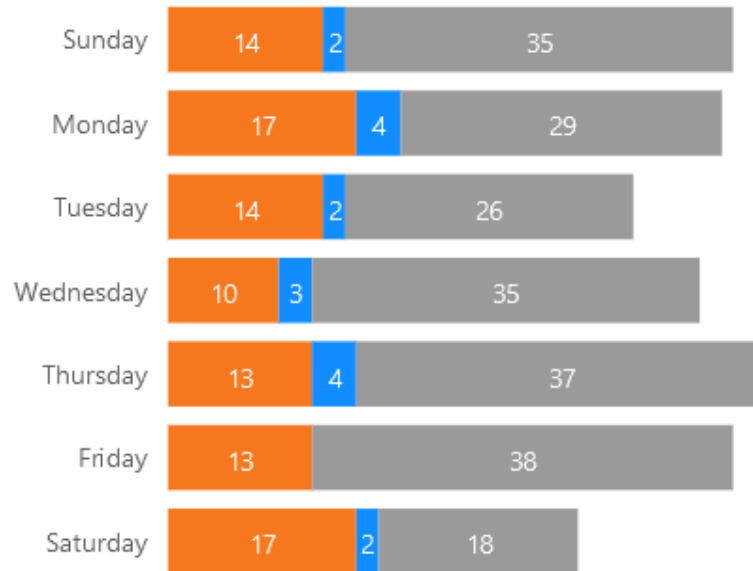
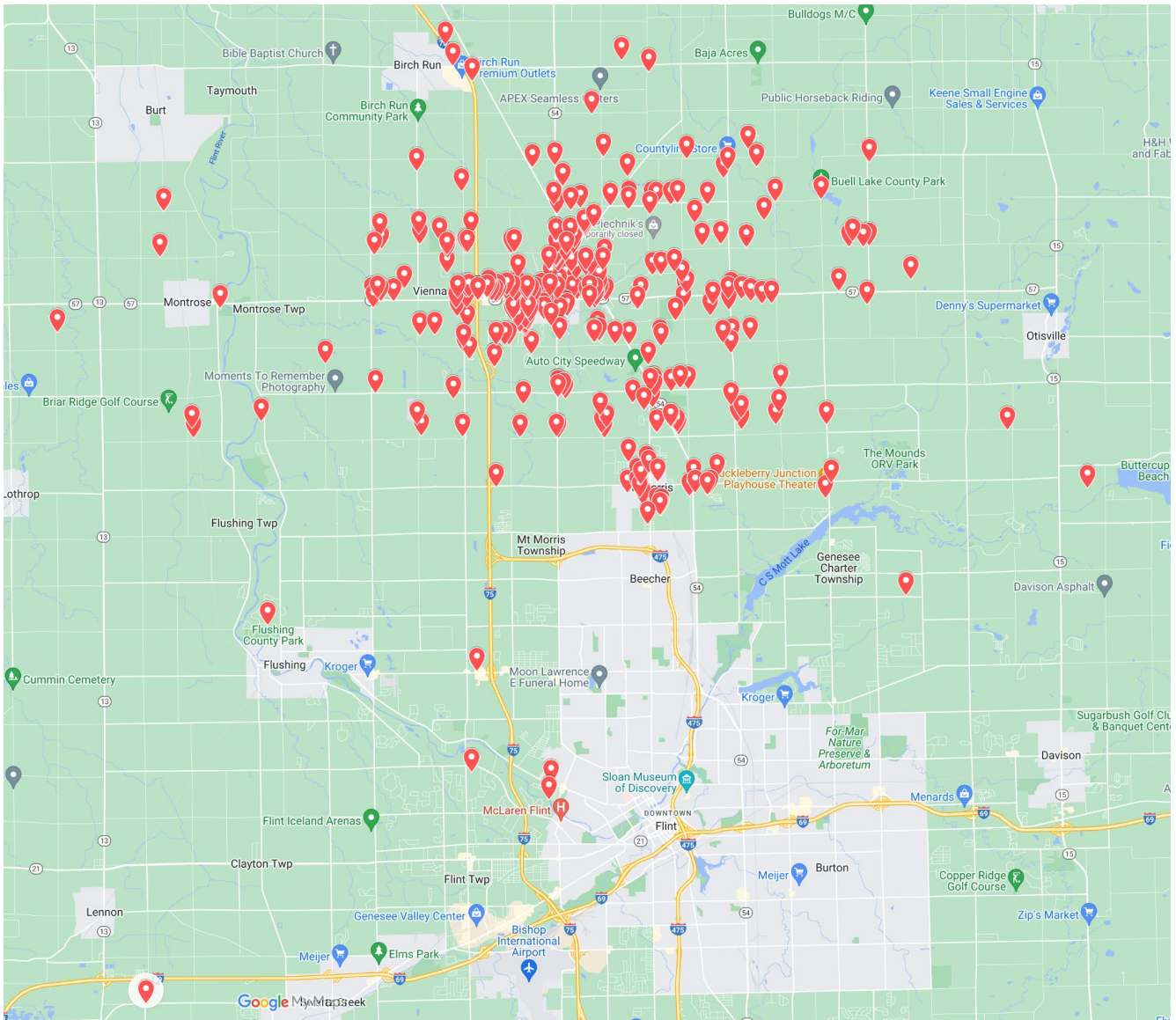


Figure 8: Incidents by Day of Week



Figure 9: Map of 2022 Incidents, Local Area



NFPA 1720 Response Capability Analysis

NFPA 1720 is the “Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments”. One component of NFPA 1720 is response capability, which outlines a standard for response time and minimum responding personnel. These standards vary upon the population density of the fire district. Under this standard, the City of Clio is classified as “urban” (>1,000 people per square mile), while Vienna and Thetford Townships are classified as “rural” (<500 people per square mile).

% by Zone



Figure 11: NFPA 1720 Compliance by Zone

Average turn-out-time (the amount of time between dispatch and a unit enroute) was 5:37 while average response time (the time between dispatch and first-unit arrival) was 11:15.

While our average response time met the NFPA 1720 response capability standard for rural areas (less than five hundred people per square mile), our staffing and availability prevented achieving the standard 49% percent of the time (Note: this analysis is limited to fire and EMS/rescue incidents only, and only within the Clio Area Fire Department district).

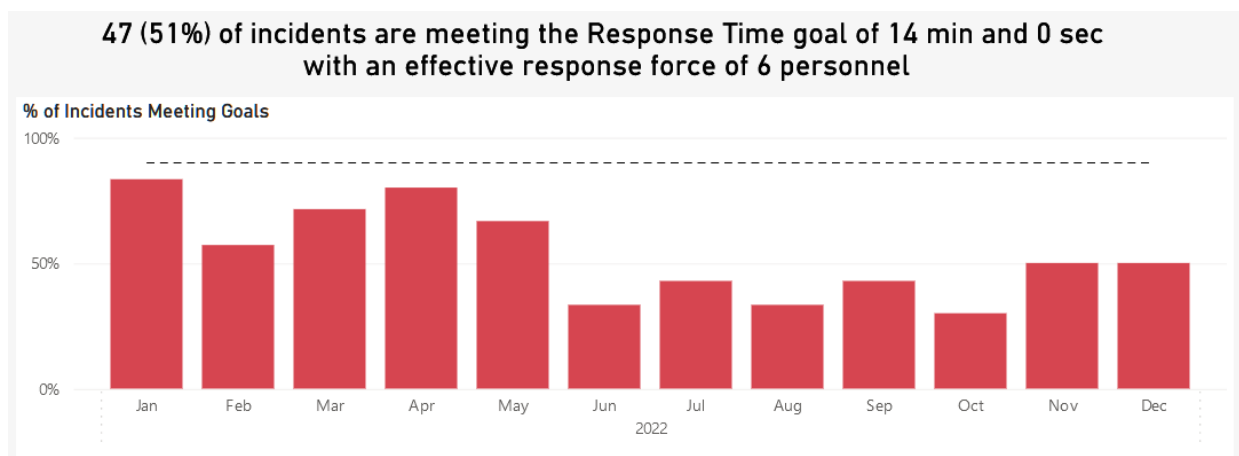


Figure 12: NFPA 1720 Compliance 100/300 Series Incidents by Month

APPARATUS AND EQUIPMENT

New and Modified Apparatus

Delivery of new Engine 11 was the highlight of 2022's apparatus news. Engine 11 replaces an engine that has been in service with the Clio Area Fire Department since 1994.

New Engine 11 Quick Facts:

- *Manufactured by Pierce*
- *Seats 6 Firefighters*
- *2000 GPM Fire Pump*
- *1000-Gallon Water Tank*
- *Class A Foam Tank*
- *Booster Reel*
- *Cost: \$714,000 (approx.)*



While Engine 11 was delivered on March 23, 2022, significant effort remained before the apparatus could be placed into service. Firefighters donated significant amounts of time to prepare Engine 11 for service, with tasks including appliance layouts, radio/computer installation, pump trials, driving trials, hose loading, various training sessions, and transfer of equipment for the old engine to new. Finally, after weeks of hard work and volunteer service, Engine 11 was placed into service on April 16, 2022.

While not a total apparatus replacement, Grass 23 underwent a substantial renovation. Grass 23's existing skid unit and pump were replaced with a purpose-built grass/brush fire skid unit complete with a new fire pump, water tank, scene lighting, and dual hose-reels. All emergency lighting and audible

warning systems were also replaced, which included integrating the interior controls and radio into a new center console.

Lastly, a new GMC Yukon command unit, 24-1, was placed into service, replacing a 2001 Chevrolet Suburban.

Apparatus Inventory

Engines	Engine 11: 2022 Pierce Impel, 2,000 GPM, 1,000 gallons
	Engine 21: 2010 Pierce PUC, 1,500 GPM, 1,000 gallons
Tenders	Tender 15: 2016 Rosenbauer, 1,500GPM, 2,500 gallons
	Tender 25: 1996 Pierce, 1,250 GPM, 2,000 gallons
Aerial Ladder	Aerial 12: 2001 Pierce, 2,000 GPM, 100' Aerial Platform
Grass/Brush	Grass 13: 2004 Chevrolet
	Grass 23: 2004 Chevrolet
Squad/Utility	Squad 16: 1989 Chevrolet Utilimaster (out of service at time of report)
	Utility 20: 2019 Chevrolet Tahoe
Command	Car 1: 2022 GMC Yukon

Figure 13: Apparatus Inventory

Apparatus Incident Response Count

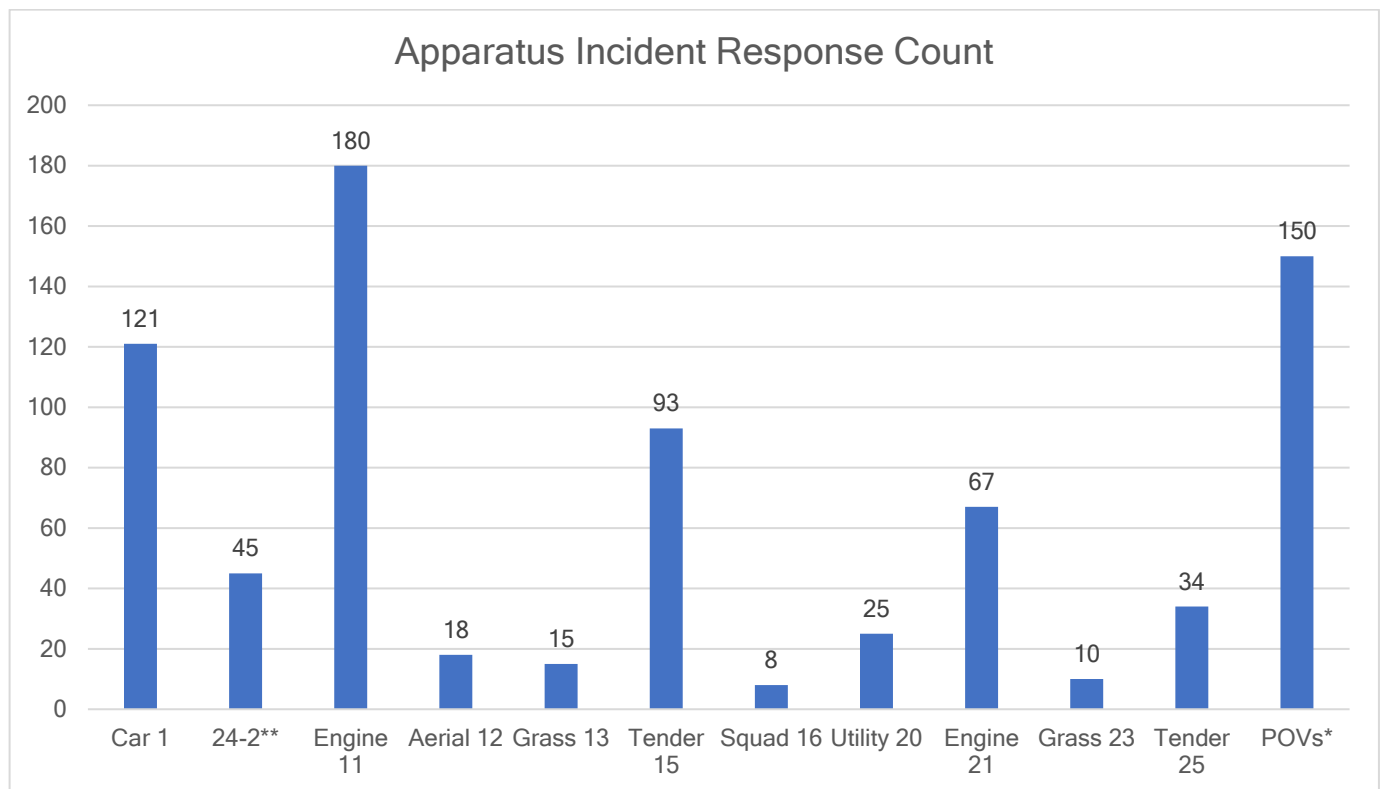


Figure 14: Apparatus Incident Response Count

* Denotes all privately owned vehicles (POV)

** Denotes vehicle removed from service in 2022

General Apparatus Notes

2022 was a relatively heavy year for vehicle maintenance and repairs. Aside from the regular preventive maintenance performed by the Clio Area Schools Bus Garage, several special repairs were undertaken. Aerial 12's hydraulic systems were serviced along with some water plumbing. Tender 15's front suspension received an overhaul and several on-going issues with Tender 25 were also addressed. In 2023, the Department will be contracting with Front Line Services Inc. for fire apparatus specific preventive maintenance.

Major apparatus fire pumps (Engines 11 and 21, Tenders 15 and 25, and Aerial 12) continue to perform well, and all were recertified at their rated flows and pressures. All ladders, including Aerial 12's ladder, were tested and recertified for service.



Figure 15: Station 1 Aerial Photograph

COMMUNITY RISK REDUCTION

The Clio Area Fire Department furthered its strong partnership with the State of Michigan's MI Prevention Program in 2022. These efforts strengthened our community risk reduction (CRR) program within the department as we work towards a safer community.

During 2022, CAFD personnel installed 56 smoke alarms, along with 18 carbon monoxide alarms, into residents' home completely free of charge. In the first month of 2023 we have already installed eight smoke alarms as we continue to accelerate this program. Our goal is that every residence has working smoke and CO alarms.



Figure 16: CAFD Smoke and CO Alarm Installs

CAFD personnel were also active with community outreach events and efforts including school visits, participation in community organizations and events, targeted messaging, and a fire prevention open house.

Our inspection program got off the ground this year with four personnel completing the National Fire Protection Association's 80-hour Inspector I program. As the department works to adopt a common fire code in all three member municipalities, these personnel are continuing their training and conducting fire inspections with an emphasis on community education and fire/life safety in our local businesses.



We have also commenced development of a community risk assessment, which will in turn lead to the development of a community risk reduction plan.

TRAINING

Training continues as a priority in the CAFD with members attending and participating in various session around the state. Delivery of training includes classroom, hands-on practical exercises, and computer-based training.

In early 2022, CAFD implemented a computer-based training platform provided by Fire Rescue 1 Academy. This platform permits training staff to assign required training that employees can complete during times most convenient to them.

2022 training activities included:

- NIMS - ICS
- Fireground Hydraulics
- Hydrant Operations
- Water Drafting Operations
- Utility Safety
- Firefighter Survival and Rescue
- Vehicle Extrication/Jaws
- Address and Street Familiarity
- Radios and Communications
- Water and Ice Rescue
- CPR and AED
- Personnel Accountability
- Community Risk Reduction
- Grass Fires and Wildfires
- Fire Inspection
- Instruction
- Safety and Air Monitoring
- Ladders
- Ventilation
- Fire Investigation
- SCBA
- Search and Rescue
- Aerial
- Hazardous materials/Right to Know
- Handlines and hose streams
- Driver training
- Bloodborne pathogens
- PPE
- Traffic incident management
- Building Collapse

The above is small sampling of topics that our personnel trained on throughout the year as employees seek professional development.

EVERY HOME NEEDS WORKING SMOKE AND CO ALARMS!

If you or someone you know needs smoke or carbon
monoxide alarms, please contact the CAFD at:

Phone: 810-687-8506

Email: info@clioareafire.com

Web: clioareafire.com

The CAFD typically can provide and install
alarms to residents free of charge.

