



Meeting Date: January 29, 2025

Prepared By: Director of Emergency Services & Fire Chief

Submitted by: Colin Toth

Report No: FES 01-2025

Subject: Appendix: Middlesex Centre Fire Services – 2024 Year-End Report

Recommendation:

THAT Report FES 01-2025 entitled “Middlesex Centre Fire Services – 2024 Year-End Report” be received for information.

Purpose:

To update Council as to the 2024 year-end statistics relating to Fire Services. This report includes statistics for fire and emergency response, ongoing project status, new partnerships, grants, donations and the status of goals and objectives.

Background:

To keep Council apprised and informed, Fire Services provides a detailed annual report as to call volume, activities, response times and department status – with the intent of maintaining good communication and ensuring transparency while providing competent and factual information.

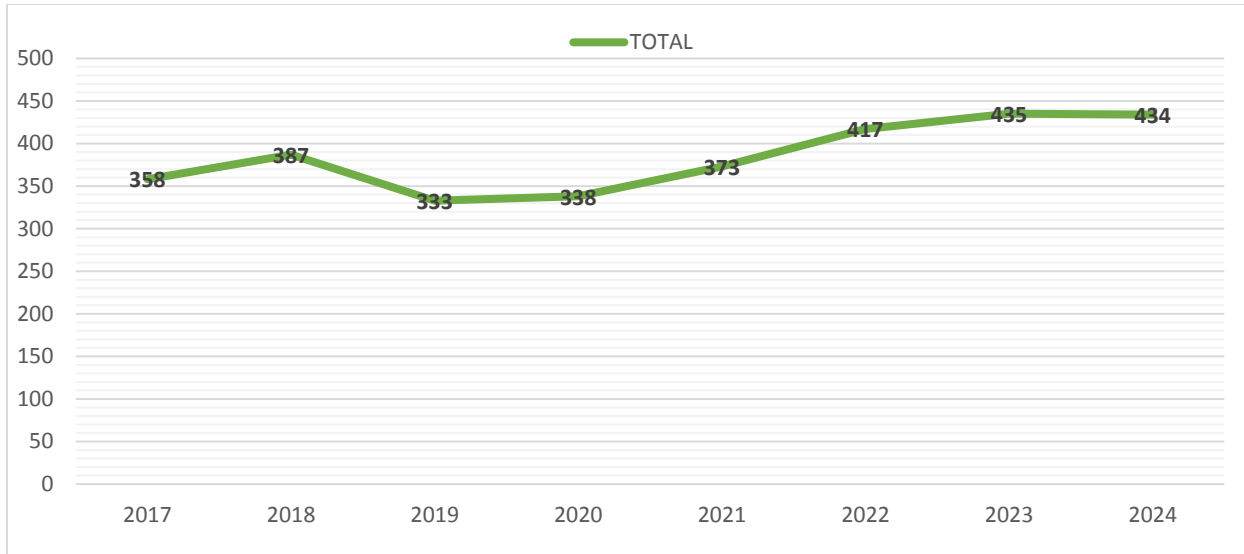
Analysis:

Department Incidents

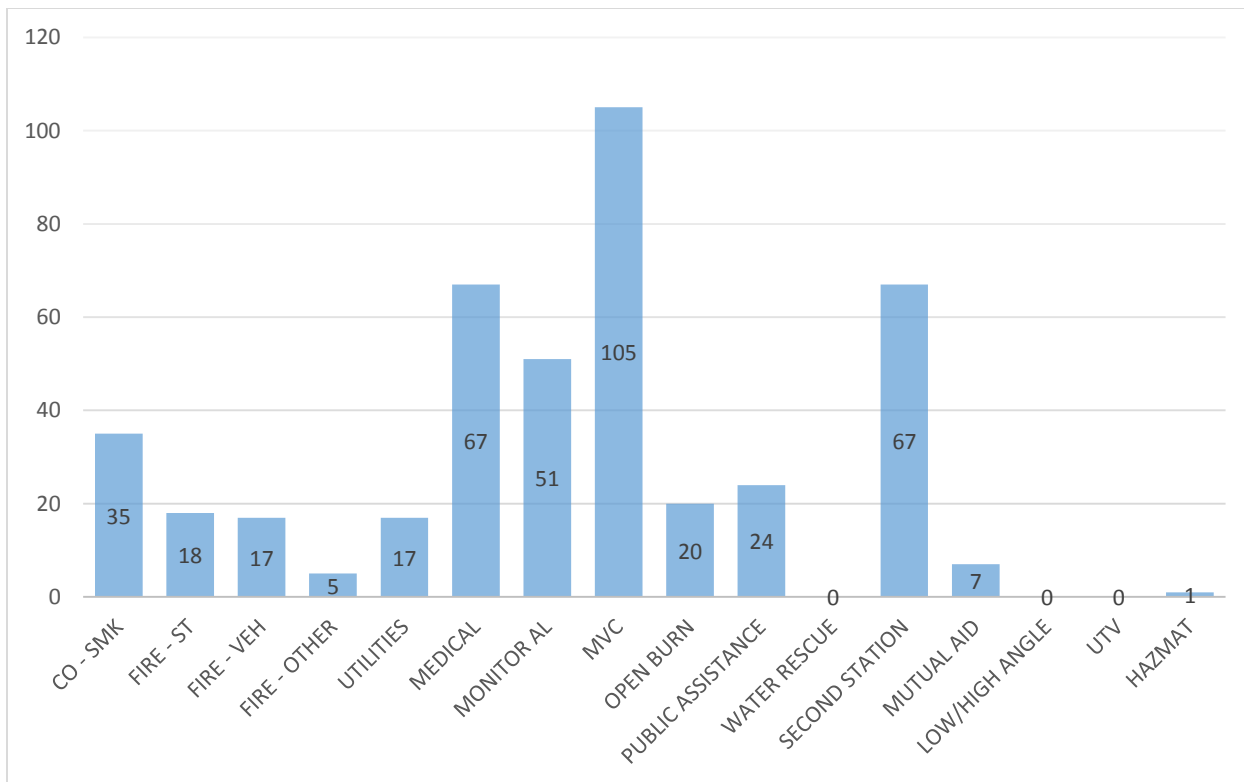
For the 2024 fiscal year, Middlesex Centre Fire Services (MCFS) responded to **434** emergencies, as compared to **435** in 2023, **417** in 2022, and **373** in 2021.

Although total requests for assistance fluctuate month to month, typically year-end numbers have demonstrated an increase of approximately 5-10%. However, for 2024 we have observed a trend anomaly indicating a decrease in calls from our Delaware station and an increase at Ilderton station. Ilderton call increases are spread evenly between response categories while Delaware observed a significant decrease in

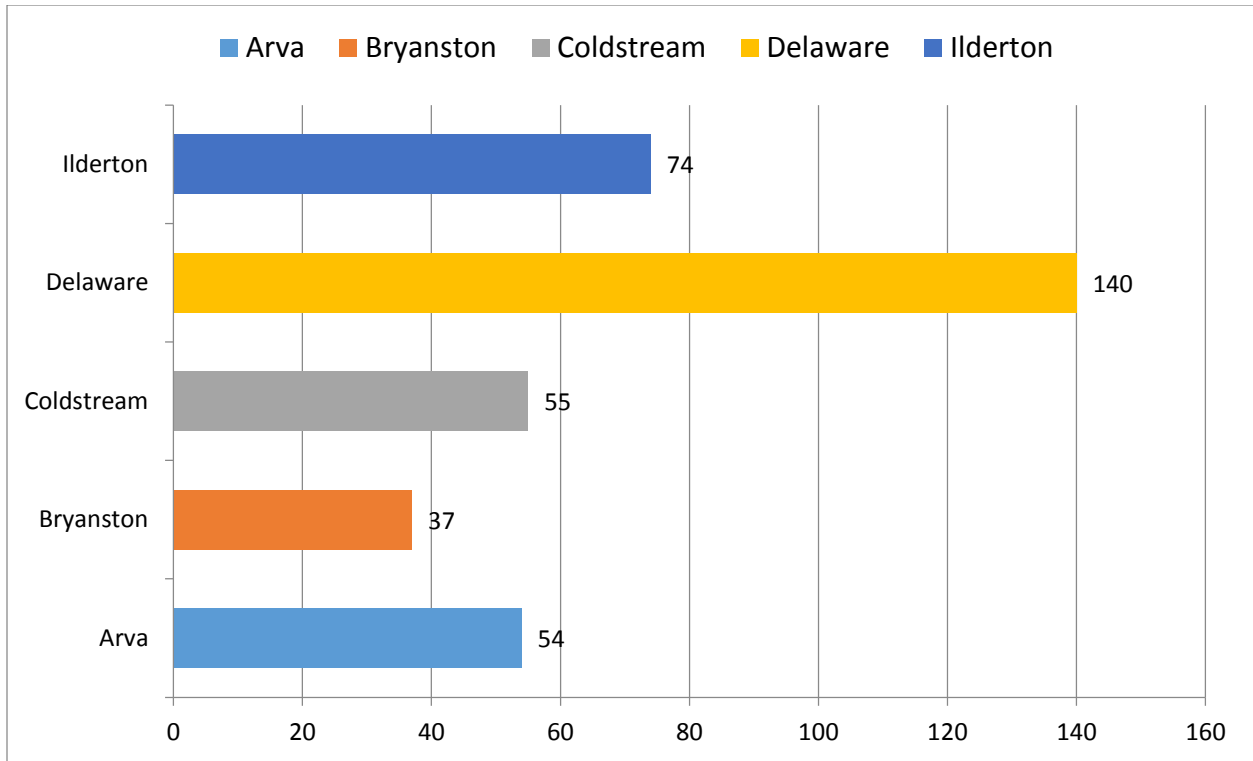
monitored alarms. Although this cannot be measured, Fire Prevention efforts along with our annual Smoke and CO alarm campaign could have contributed to this shift. However, for all stations in 2024, MVCs continue to be our highest response category followed by medical intervention and second-station support. Below are three graphs representing response metrics for long-term trends, response type and response based on station geographical area only.



Total Number of Emergency Responses for All Stations 2017-2024



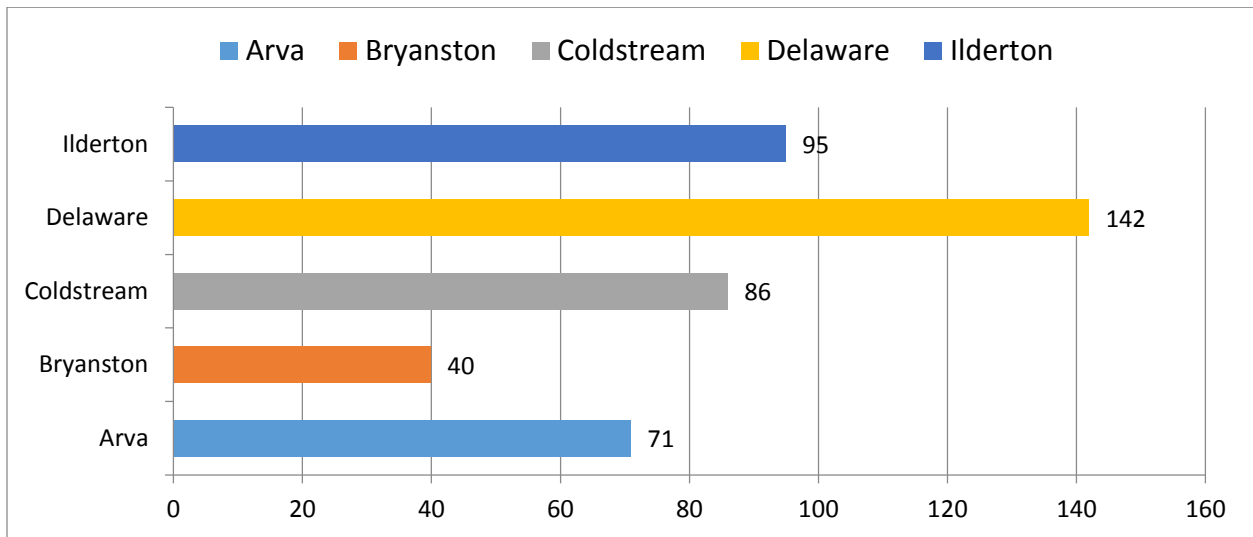
Total Number of Emergency Responses for All Stations by Category



Emergency Responses by Station - Geographical Area Only

Individual Station Response

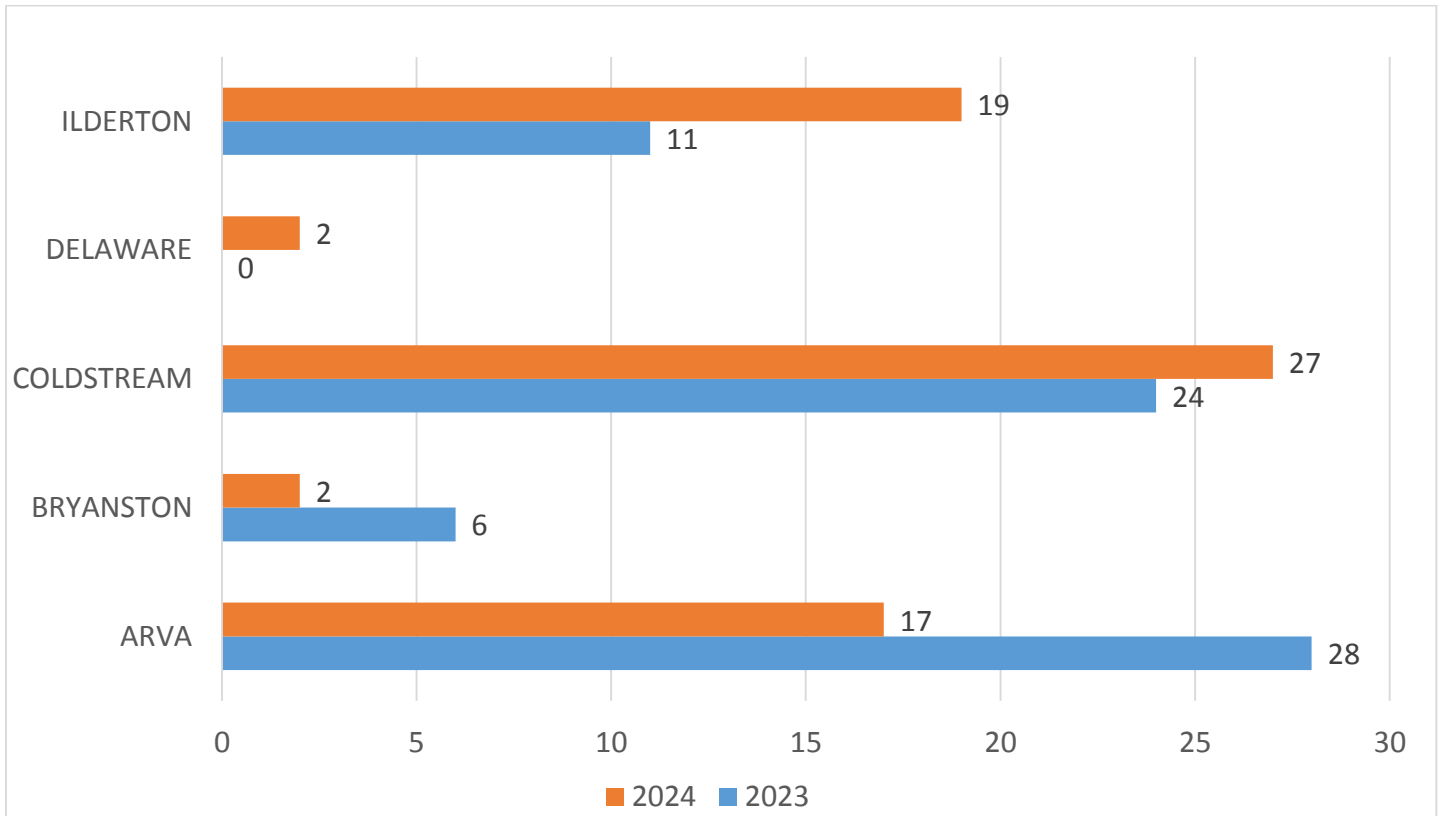
As mentioned above, the graph below indicates the total response for 2024 being **434**. Individual stations resulted in Arva answering **71** incidents, Bryanston with **40**, Coldstream with **86**, Delaware with **142** and Ilderton with **95**.



Total Number of Emergency Responses by Station

Department protocol requires response support from an additional station depending on the incident type, situation, and location - denoted as a “second station” response. (i.e. involved MVCs, structure fires, water rescue, and other incidents as deemed necessary by the on-scene Incident Commander)

In 2024, MCFS provided second station support as follows: Arva **17** incidents, Bryanston **2**, Coldstream **27**, Delaware **2**, and Ilderton **19**. (**67** second station responses overall)



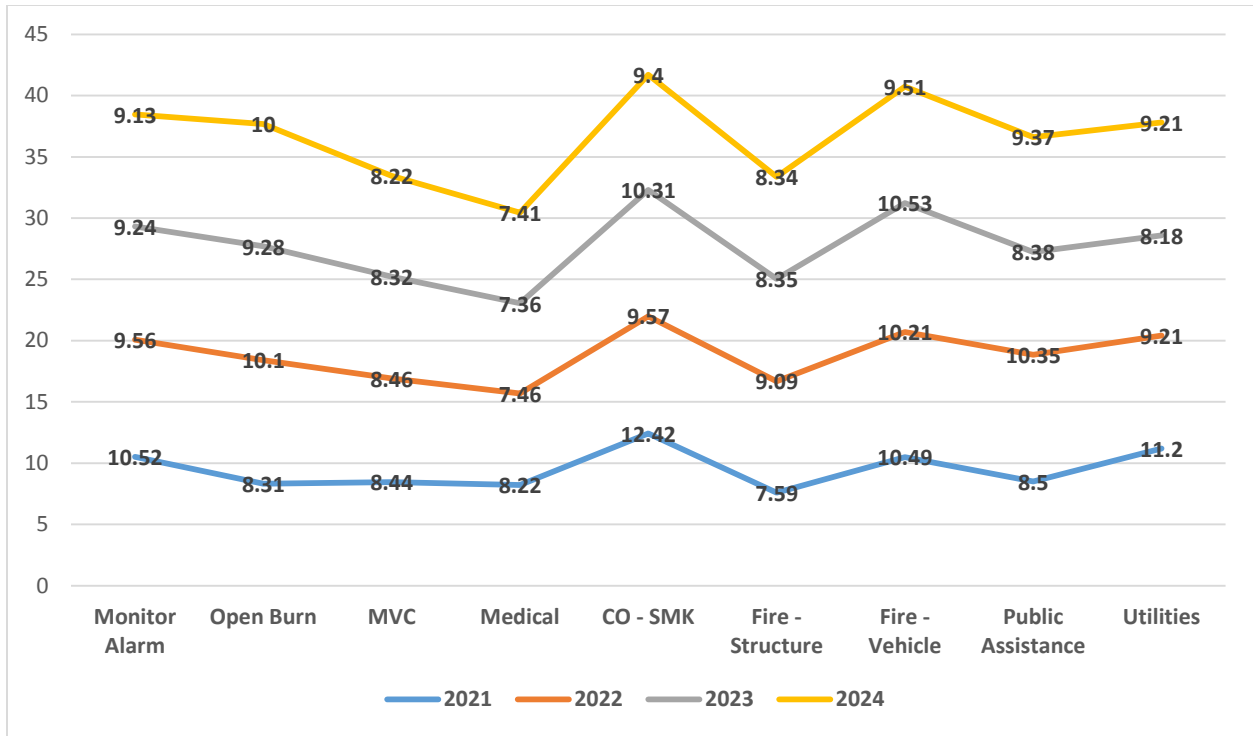
Total Number of Second Station Responses by Station

Additional station response charts are attached to this report as “Schedule A”

Response Times

Overall response times are measured when the firefighters receive the emergency page until the first apparatus arrives on the scene. These times are dependent on the availability and proximity of firefighters to their stations, time of day and distance from the station to the location of the incident.

The average 2024 response time for incidents for all stations is shown below categorized based on the specific call types. (Not including second station or mutual aid responses)



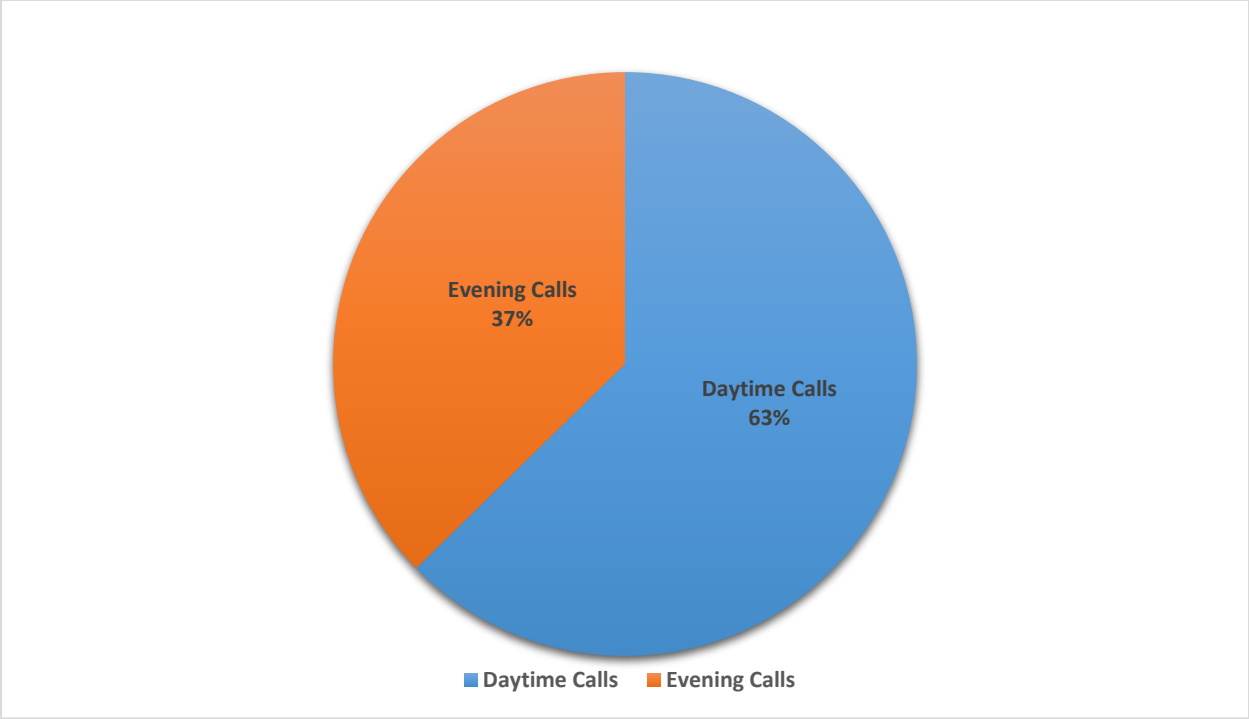
Average Response Times by Category 2021-2024

The Department averaged **10** firefighters per incident in 2024, **11** in 2023 and **11** in 2022. This average considers many types of incidents such as medical response, fires, MVCs, open-air burning complaints, and other incidents. (Not including CO, second station or mutual aid responses)

Response by Time of Day

Being cognizant of when calls are taking place throughout the day is imperative for paid-on-call departments and allows for competent pre-planning and other key functions.

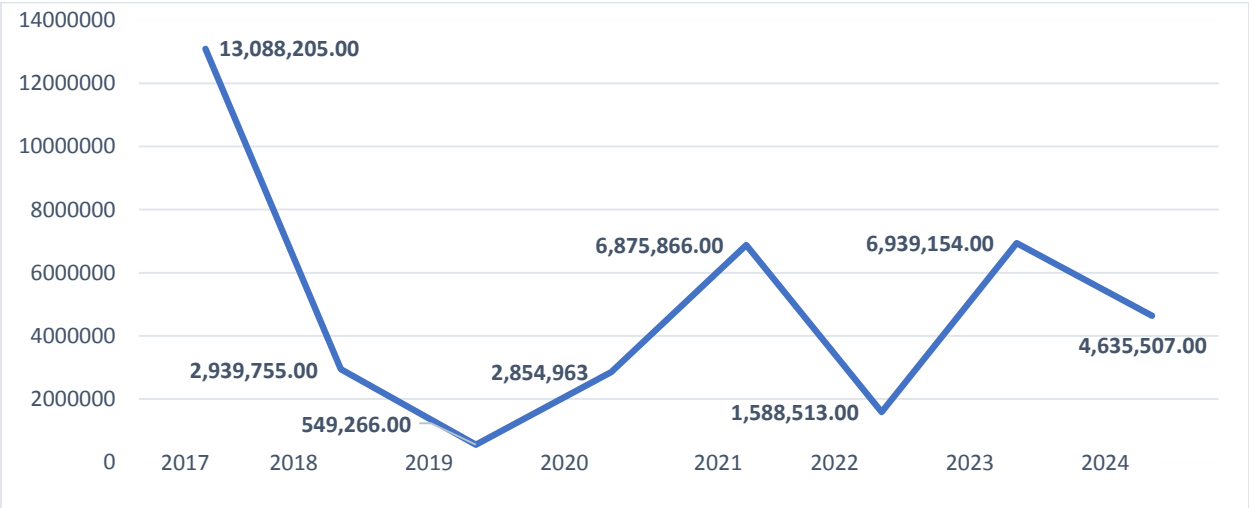
The critical information provided from this data set ensures MCFS has proper staffing and municipal coverage, second station assistance, maintains automatic aid agreements and guarantees proper resources are available. As can be observed, the majority of calls answered in 2024 were during daytime hours. This is primarily the most difficult time for MCFS firefighters to respond due to employment location or simply not being able to respond promptly.



Total Number of Emergency Responses for Time of Day as a Percentage

Fire Loss Statistics

In 2024, the estimated dollar loss for fire events was approximately \$4.6 million as compared to 6.9 million in 2023 and \$1.58 Million in 2022. This decrease can be attributed, in part, to the lack of large-scale structure fires.



Total Dollar Loss 2017-2024

Fire Prevention Inspections and Investigations

The Municipality of Middlesex Centre provides Fire Prevention services to the Municipalities of North Middlesex and Thames Centre through service agreements. The service agreements deliver fire prevention inspections, some components of public education and fire investigations. MCFS currently employs one full-time Fire Prevention Officer (FPO) to fulfill the needs of the program.

Specific duties associated with the program include fire safety inspections, consultation, assistance with specific types of public education, courtroom and legal intervention, fire investigations and records management.

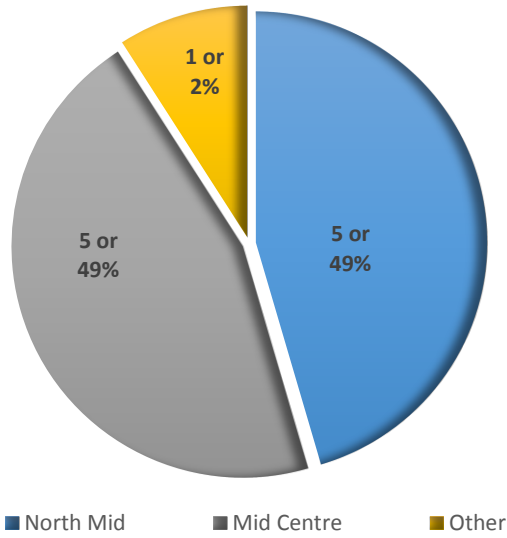
The annual inspection schedule covers all three municipality's inspectable properties and prioritizes them based on type and risk - spread over a four-year cycle. (Utilizing industry best practices and subsequent standards) This schedule continues to evolve resulting in the implementation of efficiencies and increased level of service.

MCFS Fire Prevention conducted **481** fire inspections throughout our three serviced Municipalities. (Compared to **252** in 2023 and **278** in 2022) The following types of occupancies were inspected:

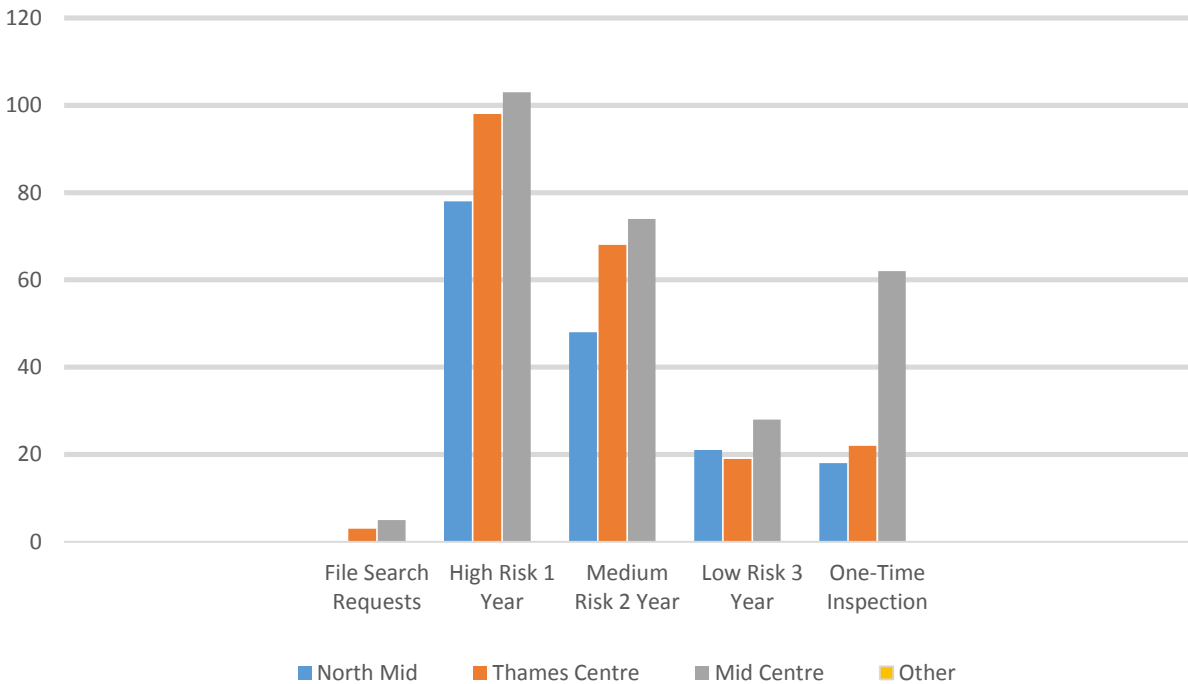
- Assembly (High Risk)
- Industrial (High to Medium Risk)
- Institutional – Vulnerable Occupancies (High Risk)
- Business and Personal Services (Low Risk)
- Residential (High to Medium Risk)
- Mercantile (Low Risk)

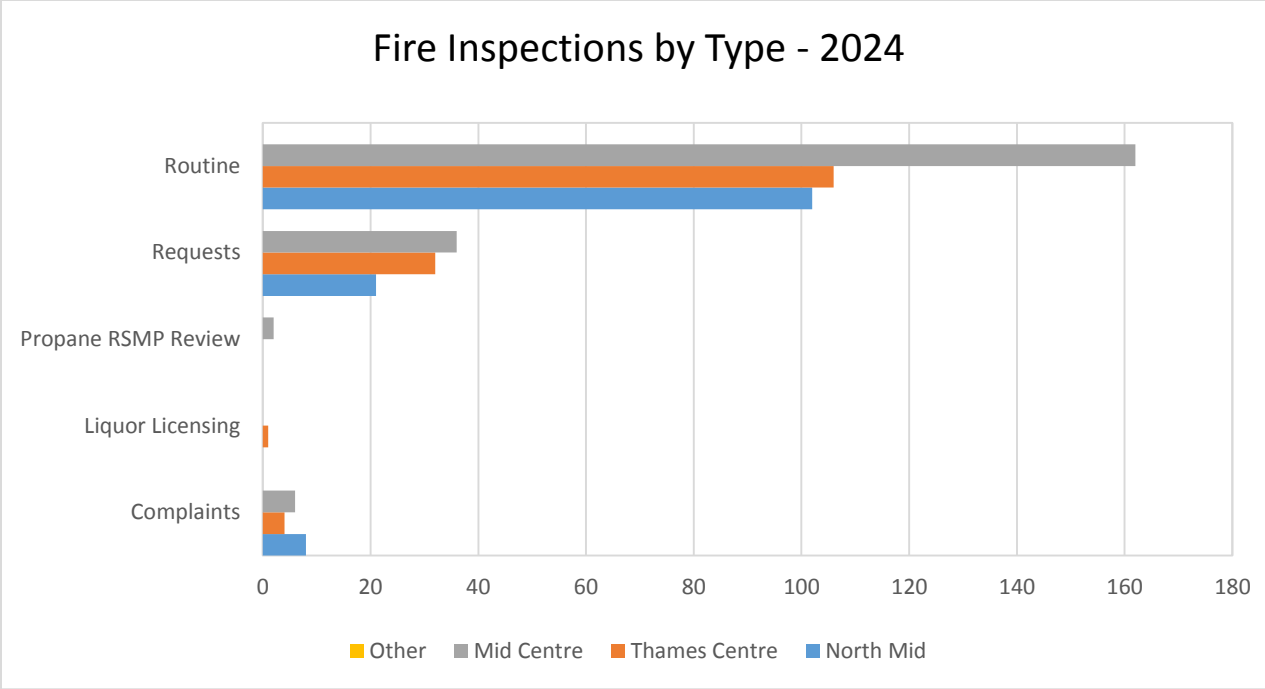
Another component of service provided under the purview of the program is that of Fire Investigations. Fire investigations are imperative to identify fire trends, determine origin and cause and direct focus on public education. However, they are time-consuming and detailed, in part due to the potential liability that customarily accompanies them. In 2024 the Fire Prevention Division investigated **5** fires in Middlesex Centre **5** in North Middlesex, and **1** classified as “other” totalling **11**.

Fire Investigations - 2024



Fire Inspections by Risk Level - 2024





Fire Service Revenue and Costs

Motor Vehicle Responses

In 2024, Fire Services invoiced non-residents of Middlesex Centre a total of **\$76,598.82** for Motor Vehicle Collisions. This figure has decreased over the 2023 value of **\$104,748.63**. As an important note, invoicing does not mean all invoice amounts were recovered in the reporting year.

Asset Liquidation

Based on 2024 projects and various pieces of outdated equipment being removed from service, liquidated assets amounted to approximately **\$1915.00**.

Grants and Donation Opportunities

Through the year, various grant opportunities were explored with many successfully achieved. These include:

- Community Emergency Preparedness Grant (CEPG) provided funding for a multi-purpose emergency shelter for use as a respite area, command post, etc.
- Project Assist, funded by Enbridge Gas supported the purchase of specialized rescue equipment

- Fire Marshal’s Public Fire Safety Council Grant, funded by Medallion Insurance
- provided a free Fire Prevention Week Public Education kit (Material provided amounting to **\$5000**)
- Project Zero, funded by Enbridge Gas, provided free smoke and carbon monoxide alarms for safety programs (Smoke and CO Alarms provided amounting to **\$3000**)
- Ontario Fire Services Grant 2024 – First Intake

All grants acquired by Fire Services for the 2024 fiscal years equate to \$91,330.66

Fire Marque Inc.

Fire Marque Inc. continues to be an affordable and effective way to recuperate costs incurred by the municipality after responding to structure fires. This revenue stream is solely dependent on the number of fires attended by MCFS over a year.

In **2024**, Fire Marque was able to recover **\$16,445.00** as compared to **\$35,653.24** for **2023**. It is important to understand that Fire Marque provides remuneration at the end of each calendar year. Many ongoing claims are held back depending on file status. Therefore, in some years the Municipality will see an increase in funds received and for other years may see less.

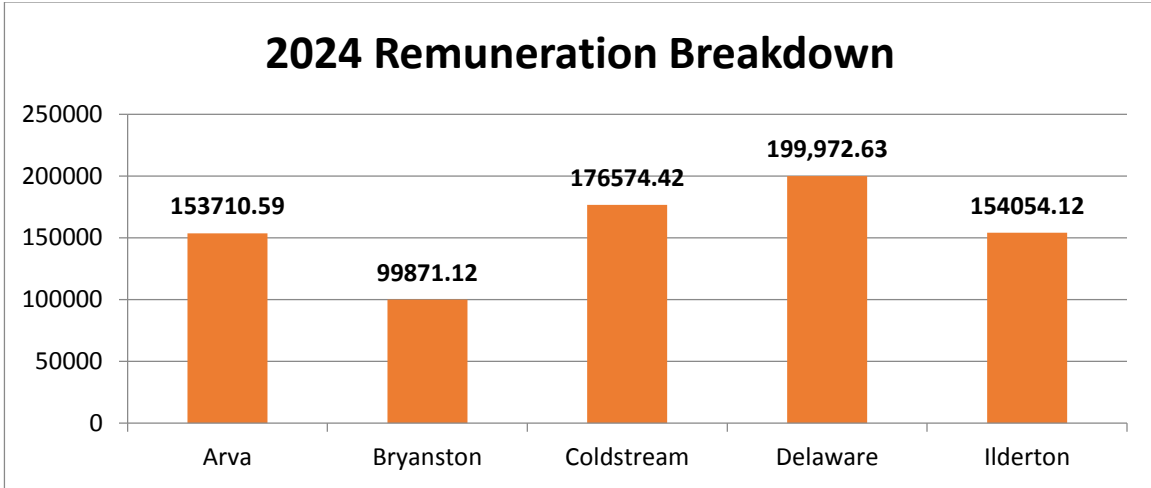
As per the Fire Marque agreement, funds can be utilized for public education, training and vehicles and equipment.

Reports and Fireworks Permits

The Municipality’s Fees and Charges By-law includes a provision allowing invoicing for requested copies of our emergency response reports and permits for fireworks events. In **2024**, the Municipality received **\$1915.00** for incident response report requests and **\$663.00** being collected for fireworks permits.

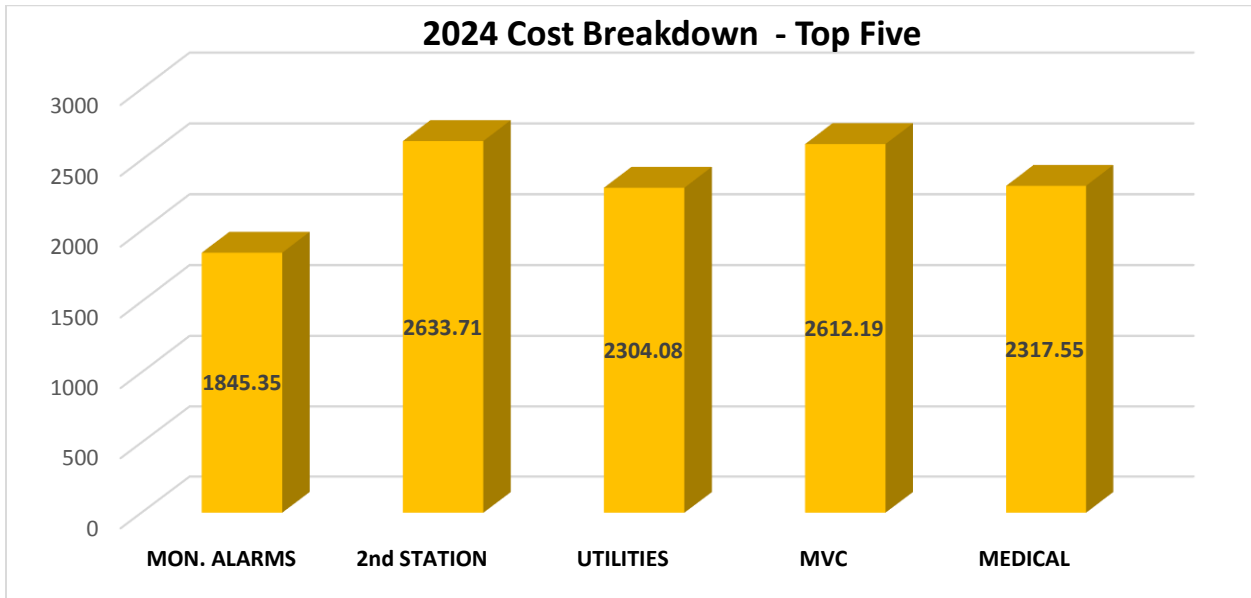
Firefighter Payroll

Middlesex Centre compensates our paid-on-call firefighters on a “points pay” system with base remunerations being provided for Officer positions only. The chart below depicts compensation costs by station.



Specific Incident Response Costs

Below is a cost breakdown for specific response types - MCFS' "Top Five".



Training, Recruiting, Retirements and Officer Development

Standardized Training - Disciplines – Core Content Focus

2024 saw continued changes and challenges to our training certification program with the passing of O. Reg 343/22 – Firefighter Certification. This regulation dispels all doubt as to the requirement for certification, options required to comply and benefits of compliance. For MCFS, this means a minimal upfront training commitment for existing firefighters based on past grandfathering opportunities but does mean additional monitoring, tracking and documentation to ensure compliance is maintained. It also must be understood that certification of new firefighters must take place going forward to meet this regulation.

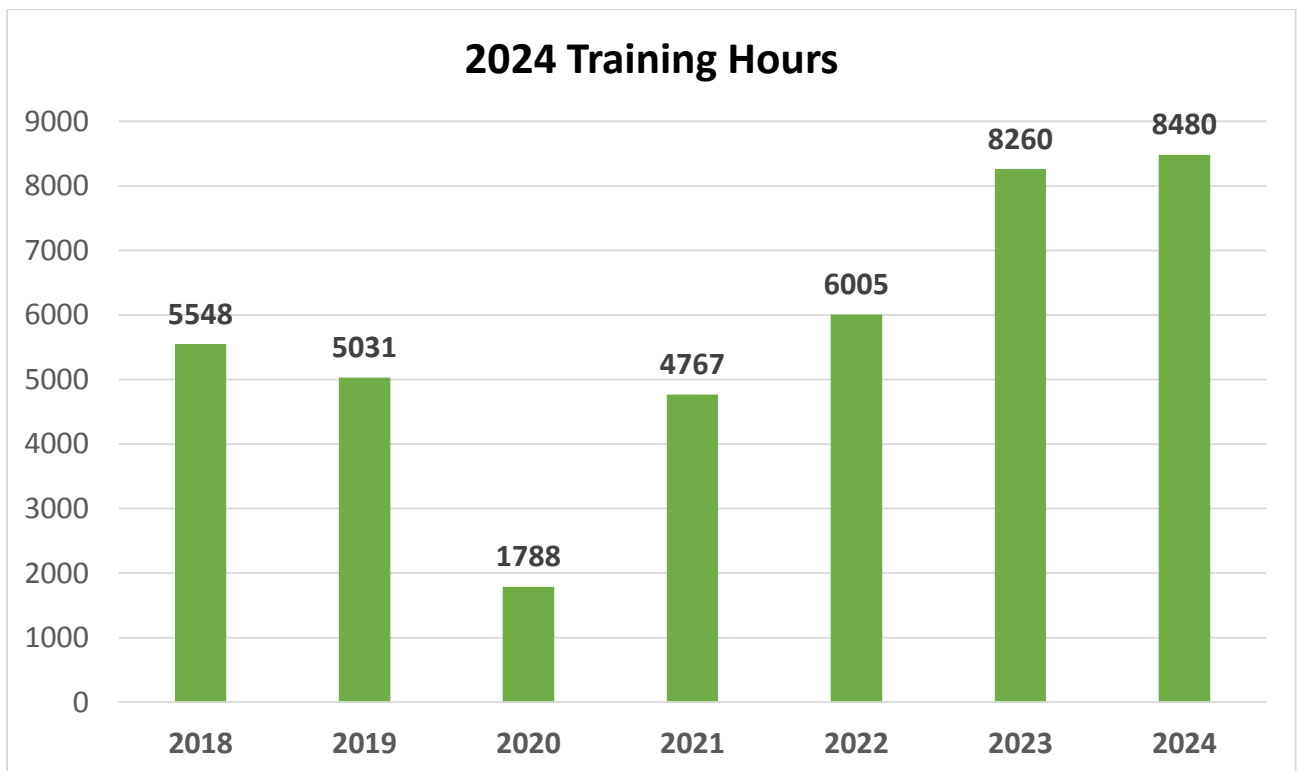
MCFS is continuing our partnership with the Elgin County Regional Training Centre (RTC) under the oversight of the Office of the Fire Marshal (OFM) to access additional certification courses, resources, and unique training opportunities.

For 2024-25, consideration favoring in-house training of some NFPA disciplines has been explored with potential deployment in late 2025 into 2026. However, a cost analysis shows minimal cost savings with the success of the program relying heavily on in-house staff dedicating their weekends. Furthermore, the Office of the Fire Marshal has standards for minimum trainers-to-student ratios. (1 to 5 with course attendance being a minimum of 8) The true benefit of hosting local in-house training is the potential to attract more local candidates.

When referring to our internal training cadre and curriculum - the training division consists of a Chief Training Officer and five Training Officers who develop, deliver, and document a schedule of standardized training evolutions based on the new certification regulation. The graph below depicts the combined training hours for 2024 along with the standardized evolution topics covered.

- Fire Streams
- NFPA 1001/1072 – Recruit Training
- NFPA 1041 – Fire Service Instructor Level 1
- NFPA 1021 – Officer Training Level 1
- NFPA 1521 – Incident Safety Officer
- Structural Search, Victim Removal, Survival, and fire behaviour
- Scene Lighting & Scene Safety
- Auto Extrication
- Emergency Medical Care & First Aid
- Driver Training
- Water & Ice Rescue
- High & Low Angle

- Firefighter Safety & Health
- Personal Protective Equipment
- Fire Department Communications
- Pumper and Tanker Operations
- Equipment Familiarization
- Water Supply & Fire Streams
- Ladders
- Pre-Planning
- Ropes, Webbing & Knots
- Hoses lay and ancillary equipment use
- Loss Control
- Rescue Tools
- Technical Rescue



Specialty Rescue Services

Fire Services currently operates two special operations rescue teams - High-angle rope rescue and Surface/Swift water and Ice rescue. Delaware station continues to provide rope rescue services and Coldstream maintains water rescue.

Currently, our water team supports Strathroy-Caradoc and North Middlesex through service contracts however, future objectives include providing team expertise and support in collaboration with additional neighbouring municipalities.

The Department presently has ten (10) firefighters trained in water rescue techniques with ten (10) trained in high angle rescue.

Paid On-Call Professional Firefighter Recruitment

Continuing into 2024 is MCFS' redesigned recruitment program that creates a cost-effective, streamlined, and defensible process to meet industry and policy-accepted recruiting practices. 2024 recruitment efforts resulted in **131** applications submitted for review. **25** candidates were interviewed with **7** being offered positions. Ten applicants were subsequently placed onto our station reserve lists with **2** being offered a position after-the-fact.

Firefighter Retirements, Resignations and Promotions

2024 saw the retirement of **3** senior firefighters - one from Arva station and two from Coldstream. In turn, we had **4** resignations with **1** firefighter accepting a position with a career department and **3** moving out of MCFS' response area. 2024 also had several promotions - one to Captain and one to Lieutenant both at Delaware station.

The current staff complement of MCFS sits at 120, including headquarters staff.

Staff Development, Training and Succession Planning

MCFS will continue to move forward with our internal "Recruit to Officer" training program, which includes a variety of new offerings and opportunities in subsequent years. Some of these new opportunities include: NFPA 1521 Incident Safety Officer, 1002 Apparatus Operator, 1041 Fire Service Instructor and 1033 Fire Investigator. (All of which are offered as blended programs)

Also, one of our senior Officers has enrolled in the corporate management program through the University of Waterloo, continuing into 2025. Finally, maintaining and upgrading the skills and tactics of our Training Officers continue to meet the increasing demand of Industry standards and new certification standards.

Driver Certification Program

In 2018, Middlesex Centre Fire Services entered into a service agreement with the Township of Malahide to train apparatus operators to the required Ontario class “D” license with a “Z” air brake endorsement at a significantly reduced cost!) In 2024, through this Ministry of Transportation-approved Driver Certification Program, 7 firefighters attended and received their “D” license and “Z” endorsement.

Department Projects, Initiatives and Partnerships

Projects and Initiatives

In 2024, several new projects began, many were completed with others outstanding primarily based on their nature.

2024 Strategic Accomplishments for Fire & Emergency Services

Task/Project	Timing	Strategic Alignment - Priority	Strategic Alignment - Objective	Performance Measures	Budget
Master Fire Plan Deployment	2024-2026	Strat Plan 5 – Responsive Municipal Government	5.3 - Foster a culture of innovation, continuous improvement, and cost-effective service delivery	<ul style="list-style-type: none"> Review, research, and deployment of various recommendations as proposed in the 2023 Fire Master Plan 	As per FMP Council Update
Emergency Responder-Specific Wellness Program	2023-2024	Strat Plan 5 – Responsive Municipal Government	5.3 - Foster a culture of innovation, continuous improvement, and cost-effective service delivery	<ul style="list-style-type: none"> Ensure firefighters’ well-being is maintained and addressed in a time-sensitive and job-specific manner. 	Completed in-house with third-party oversight and support. Approx. \$19,000 annually
Fire Operations - Municipal Partnerships	2023-2024	Strat Plan 5 – Responsive Municipal Government	5.4 - Expand our partnerships	<ul style="list-style-type: none"> Report Management System - Computer Aided Dispatch integration - partnership with Strathroy Fire, Police and Dispatch Centre 	\$25,000 (100% grant funded)

Task/Project	Timing	Strategic Alignment - Priority	Strategic Alignment - Objective	Performance Measures	Budget
Fire Specific Pay Grid Review for 2024	2024	Strat Plan 5 – Responsive Municipal Government	5.3 - Foster a culture of innovation, continuous improvement, and cost-effective service delivery	<ul style="list-style-type: none"> Review of current fire services payment methodology using information provided during the 2023 Middlesex Centre Pay Grid Review process 	Completed in-house by Senior Fire Staff. Increases based year over year

In addition to the strategic accomplishments outlined above, Middlesex Centre’s Fire & Emergency Services staff delivered a variety of services in 2024 including:

Acquired five significant fire and emergency services grants that enhance and support multiple projects:

- Community Emergency Preparedness Grant (CEPG) provided funding for a multi-purpose emergency shelter for use as a respite area, command post, etc.
- Project Assist, funded by Enbridge Gas supported the purchase of specialized rescue equipment
- Fire Marshal’s Public Fire Safety Council Grant, funded by Medallion Insurance provided a free Fire Prevention Week Public Education kit (Material provided amounting to \$5000)
- Project Zero, funded by Enbridge Gas, provided free smoke and carbon monoxide alarms for safety programs (Smoke and CO Alarms provided amounting to \$3000)
- Ontario Fire Services Grant 2024 – First Intake
- Continued delivery of a Fire Prevention and Investigation Program in support of two neighboring municipalities producing an average revenue stream of approximately
- Prepared an educational video series to raise awareness of MCFS services provided along with various fire safety topics.
- Continuation of the Personal Protective Equipment (PPE) cyclical replacement program
- Continuation with a green energy initiative by converting from gas power to battery-operated tools. This department-wide project currently is tracking at 95% complete.
- Ongoing cyclical training, enhanced officer development opportunities along with probationary firefighter and driver training, regulatory NFPA certification and tiered medical training.

- Continuing with the implementation of the Fire Plan Master and Community Risk Assessment.
- Continued delivery of a Fire Prevention and Investigation program in support of two neighboring municipalities producing an average revenue stream of approximately \$53,000 annually.
- Enhancement of the current fire Investigation team from two to five members to improve efficiency, divide on-call rotation and manage service levels.
- Engaging with neighbouring municipalities to develop service agreements for the delivery of special operations teams such as high-angle rope, ice/water and off-road rescue services.
- Refining and ongoing development of the fire report and asset management system along with a dispatch component in partnership with Strathroy Dispatch and Fire Services.

Partnerships

MCFS continued strengthening partnerships with many neighbours and community stakeholders through our Mutual Aid Program, training opportunities and education.

Examples of such partnerships are with Fanshawe College Fire Prevention Program mentorship, our Regional Training Centre as well as Muscular Dystrophy fundraising. All have garnered huge benefits for all those involved.

In addition, our Fire Prevention program partnership continues to be an enormous benefit to three municipalities - making our communities safe while meeting legislated and other provincially directed requirements.

Emergency Management

Emergency Management Program Committee (EMPC)

Middlesex Centre's EMPC has met the Emergency Management Ontario requirements prescribed under the *Emergency Management and Civil Protection Act* (EMCPA) for the Municipality's Emergency Management Program.

The EMCPA requires the Municipal EMPC to review, revise, develop and/or endorse the following at least annually:

- Community Hazard Identification and Risk Assessment (HIRA)
- General Community Hazards Assessment
- Hazard Information Sheets for each General Hazard

- Community Risk Profile
- Appendices to the Emergency Response Plan
- Critical Infrastructure Assessment
- Middlesex Centre Flood Emergency Response Plan

Emergency Management Training

In 2024 the Municipality's Emergency Control Group actively participated in the internal review and familiarization of the Emergency Response Plan and completed an annual tabletop exercise dubbed, "Warm Welcome" which served to test and function deploying and operating a reception centre.

To round off 2024, phase 2 of a corporate-wide program educating our staff on how to respond in the event of an Active Intruder. This training was very well received.

2024 Program Compliance Activities

EMPC Meeting – Completed
ERP Review – Completed
Annual Exercise – Completed
Middlesex Centre Flood Plan Review – Completed
Annual CCG Training – Completed

Financial Implications:

None

Strategic Plan:

This matter aligns with following strategic priorities:

- Responsive Municipal Government
- Sustainable Infrastructure and Services

Fire Services' detailed annual report is provided in parallel to the Strategic Plan and Fire Master Plan with the intent of maintaining good communication and ensuring transparency while providing competent and factual information.

Attachments:

Appendix: Middlesex Centre Fire Services – 2024 Year-End Report "Schedule A"