



# Master Fire Plan

Council Presentation

June 10, 2024

Prepared and Reviewed By:

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# Master Fire Plan

## Purpose

- ▶ This **Master Fire Plan** will guide Council and Senior Staff with a **10-year plan** to continue operating this valued community service for the health and safety of residents, businesses and visitors.
- ▶ The **Master Fire Plan** has been prepared for subsequent integration into associated elements of the annual budget, official plan, and other municipal and departmental strategic plans.

# Overview of Presentation

- ▶ Factors Influencing the Master Fire Plan
  - ▶ Legislation
  - ▶ Municipal Bylaw
  - ▶ Community Risk Assessment
  - ▶ National Fire Protection Association (NFPA) Standards
  - ▶ Fire Underwriters Survey
  - ▶ Consultation
- ▶ Management Structures and Operations
- ▶ Fire Prevention
- ▶ Public Education
- ▶ Call History
- ▶ Recommendations

# Legislation

- ▶ As per Ontario's [Fire Protection and Prevention Act](#), Section 2(1) of the Act mandates a municipality to “(a) establish a program in the municipality which must include public education with respect to fire safety and certain components of fire prevention; and (b) provide such other fire protection services as it determines may be necessary in accordance with its needs and circumstances.”
- ▶ Further, Section 2(2) and Section 5 of the Act, permits a municipality to establish a fire department.
- ▶ To meet the mandate of providing fire protection services, Section 2(3) of the Act permits the municipality to determine “form and content” on how the fire departments provides this service.
- ▶ As a result, the Municipality of Thames Centre has adopted By-Law No. 15- 2015 (dated February 18, 2015) to establish, maintain and operate a fire department under the direction of the Council.

# Municipal Bylaw (By-Law No. 15- 2015)

- ▶ The bylaw authorizes the fire department to engage in the following emergency services:
  - ▶ Fire Suppression / Search and Rescue
  - ▶ Fire Prevention
  - ▶ Fire Safety Education
  - ▶ Training of Persons involved in the provision of Fire Protection, Rescue and Emergency Services
  - ▶ Rescue and Emergency Services and the delivery of those services based on the expertise and training of fire personnel
  - ▶ Medical First Response according to an Agreement with Ontario Ministry of Health
  - ▶ Water Entry Ice and Water Rescue, Water Entry Still Water Rescue, and Water Entry Swift Water Rescue; and
  - ▶ Personal Injury / Auto Extrication at Motor Vehicle Crashes.

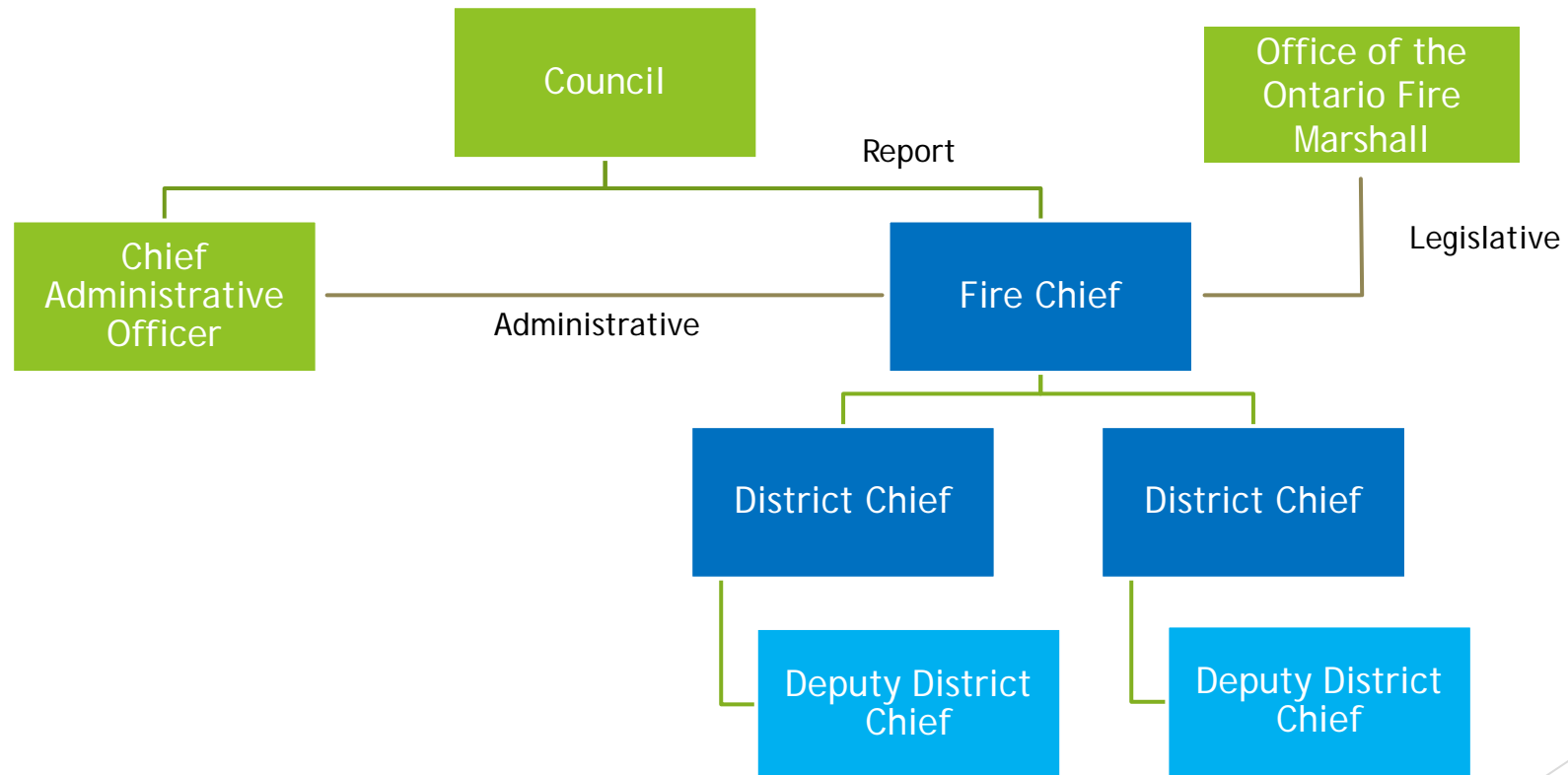
# Other Influencing Factors

- ▶ **May 2024 Community Risk Assessment**
  - ▶ We provided 14 primary recommendations
- ▶ **National Fire Protection Association (NFPA) Standards**
  - ▶ Establish industry standards towards fire prevention, wildfire preparedness, and electrical safety to hazardous materials, community risk reduction, and public safety.
  - ▶ NFPA Standard 1720, entitled “Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments”
- ▶ **Fire Underwriters Survey**
  - ▶ Provides a grading system that sets insurance rates, which includes the following parameters: risk assessment, water supply, fire safety control (including public education) and the fire department (fleet, staffing, training, etc.)

# Consultation

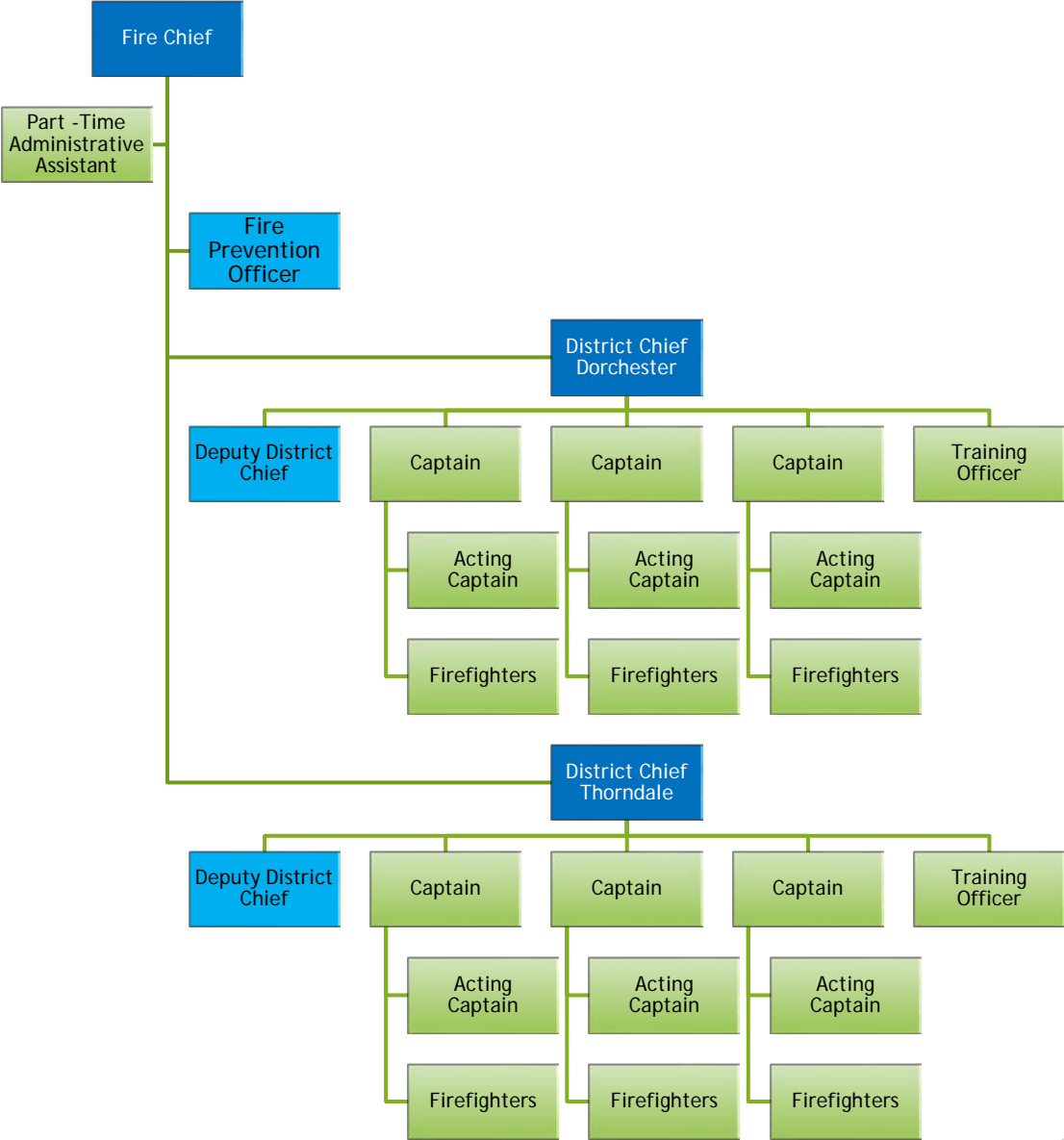
- ▶ Interviews with Fire Chief, District Chiefs, and CAO
- ▶ Firefighters' Survey
  - ▶ achieved a 91% participation rate, which translates to a +/- 4% margin of error, with a 95% confidence level
  - ▶ attended training nights
- ▶ Council Survey
- ▶ Visits to Fire Stations
- ▶ Reviewed Public Input to Strategic Plan

# Management Structure

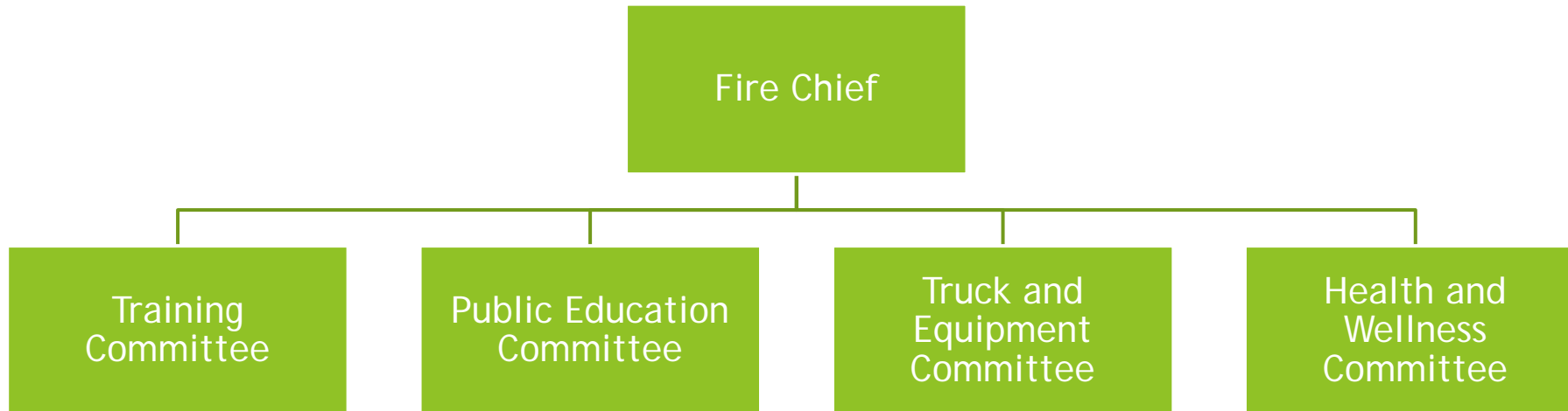




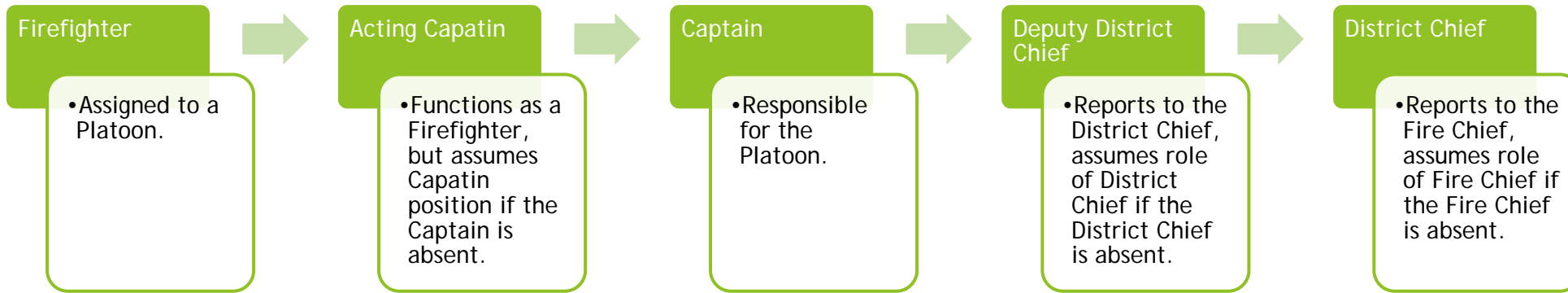
# Operational Structure



# Committee Structure



# Incident Command Structure



# Fire Prevention

## ► Legislation

- The municipality which must include public education with respect to fire safety and certain components of fire prevention
- Municipality of Middlesex Centre has employed a Fire Prevention Officer, and, has entered into an agreement with the Municipality of North Middlesex, and, the Municipality of Thames Centre for the provision of fire prevention and fire safety services. (Bylaw 87-2023 and 88-2023).

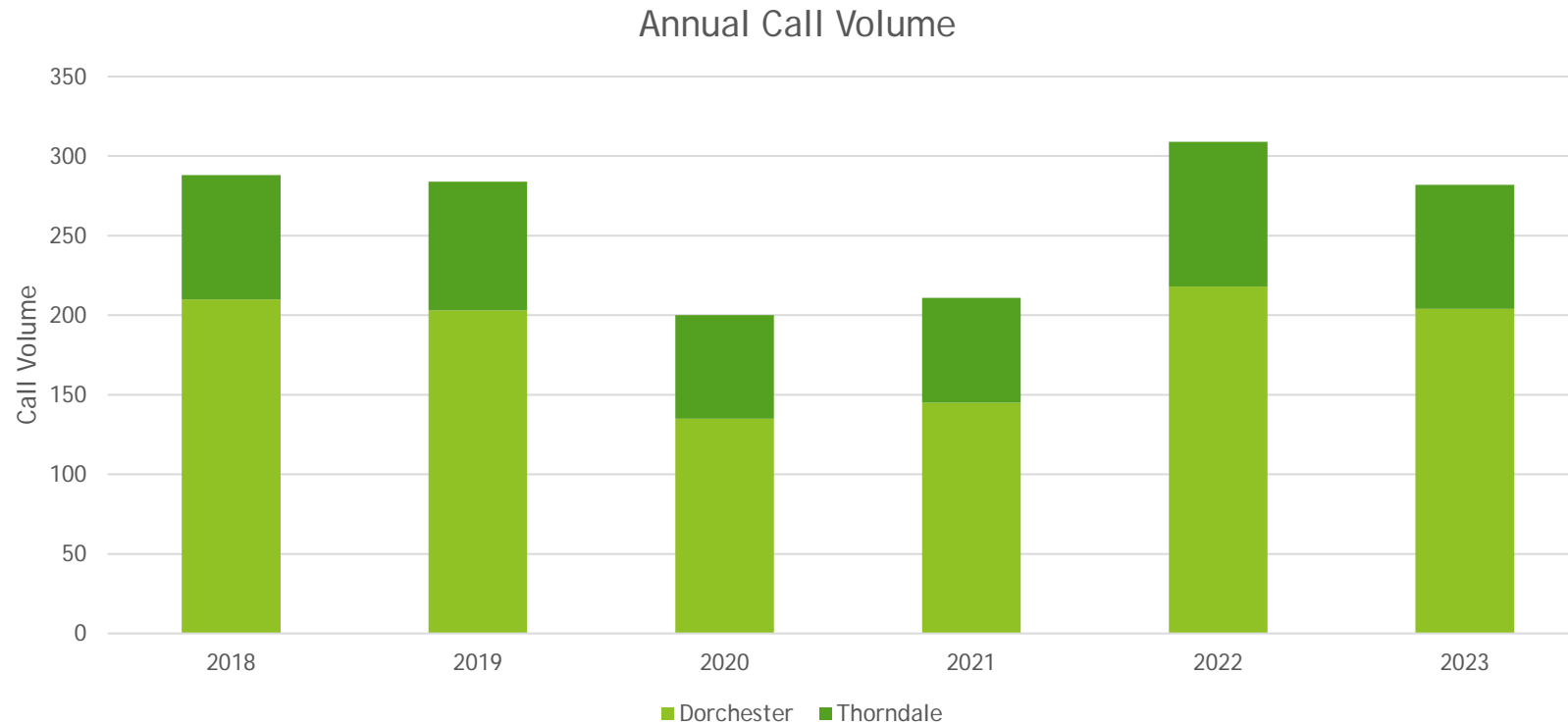
| Year | Total Inspections Events |
|------|--------------------------|
| 2018 | 68                       |
| 2019 | 188                      |
| 2020 | 25                       |
| 2021 | 89                       |
| 2022 | 45                       |
| 2023 | 69                       |

# Public Education

- ▶ In previous years, public safety programs related to fire prevention was a district responsibility of each fire station. Public education programs and events were ad hoc with no centralized or annualized strategic plan.
- ▶ Early this year, the Fire Chief established the “Public Education Committee” consisting of six Firefighters and/or Officers who have certification in NFPA 1035 Fire and Life Safety Educator.
- ▶ Responsibilities Include:
  - ▶ Plan and deliver (or assign and monitor delivery of) TCFD community event participation and public education opportunities;
  - ▶ Research new public relations opportunities, trends and techniques. Keep accurate and up-to-date records of all public events attended;
  - ▶ Post bulletins and information regarding upcoming scheduled events;
  - ▶ Network and build relations with external stakeholders in the community; and
  - ▶ Regular communication with the Public Information Officer (PIO) is expected.

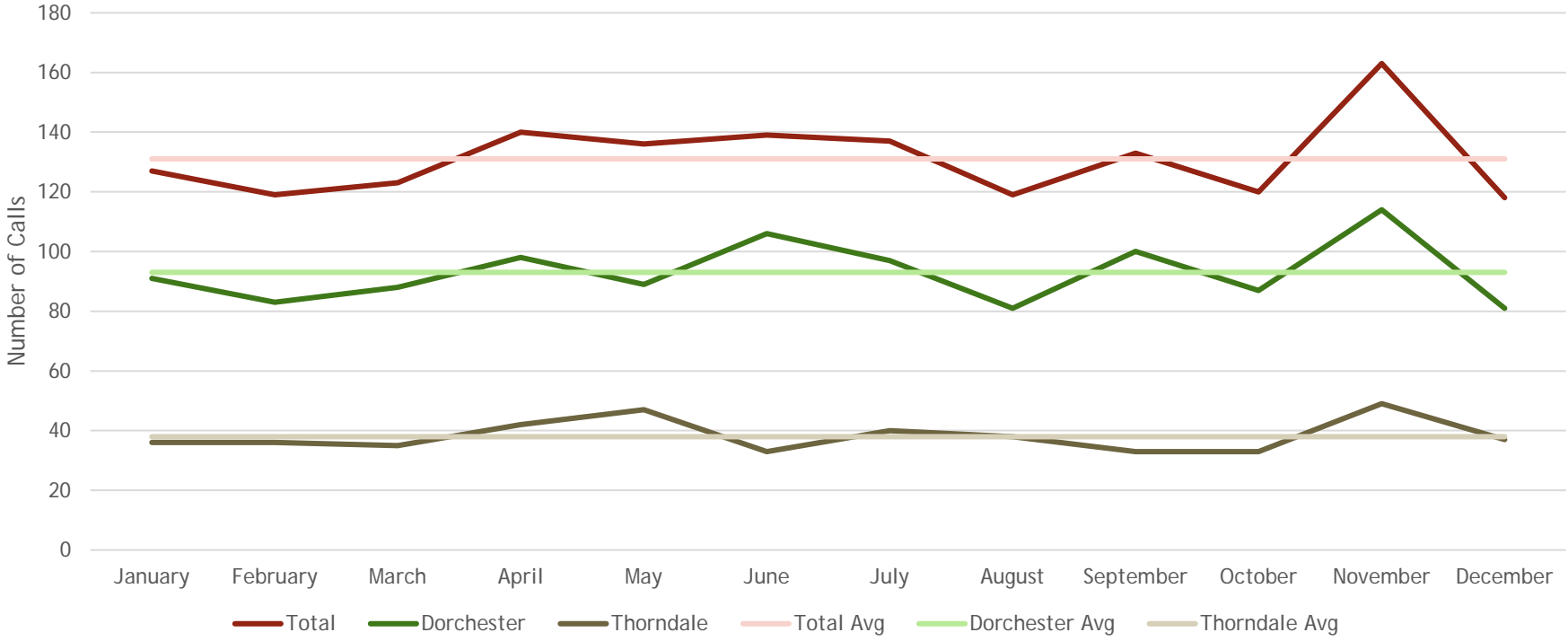
# Call History

- ▶ Of the total call volume, approximately 70% is assigned to the Dorchester Fire Station, versus 30% assigned to the Thorndale Fire Station.

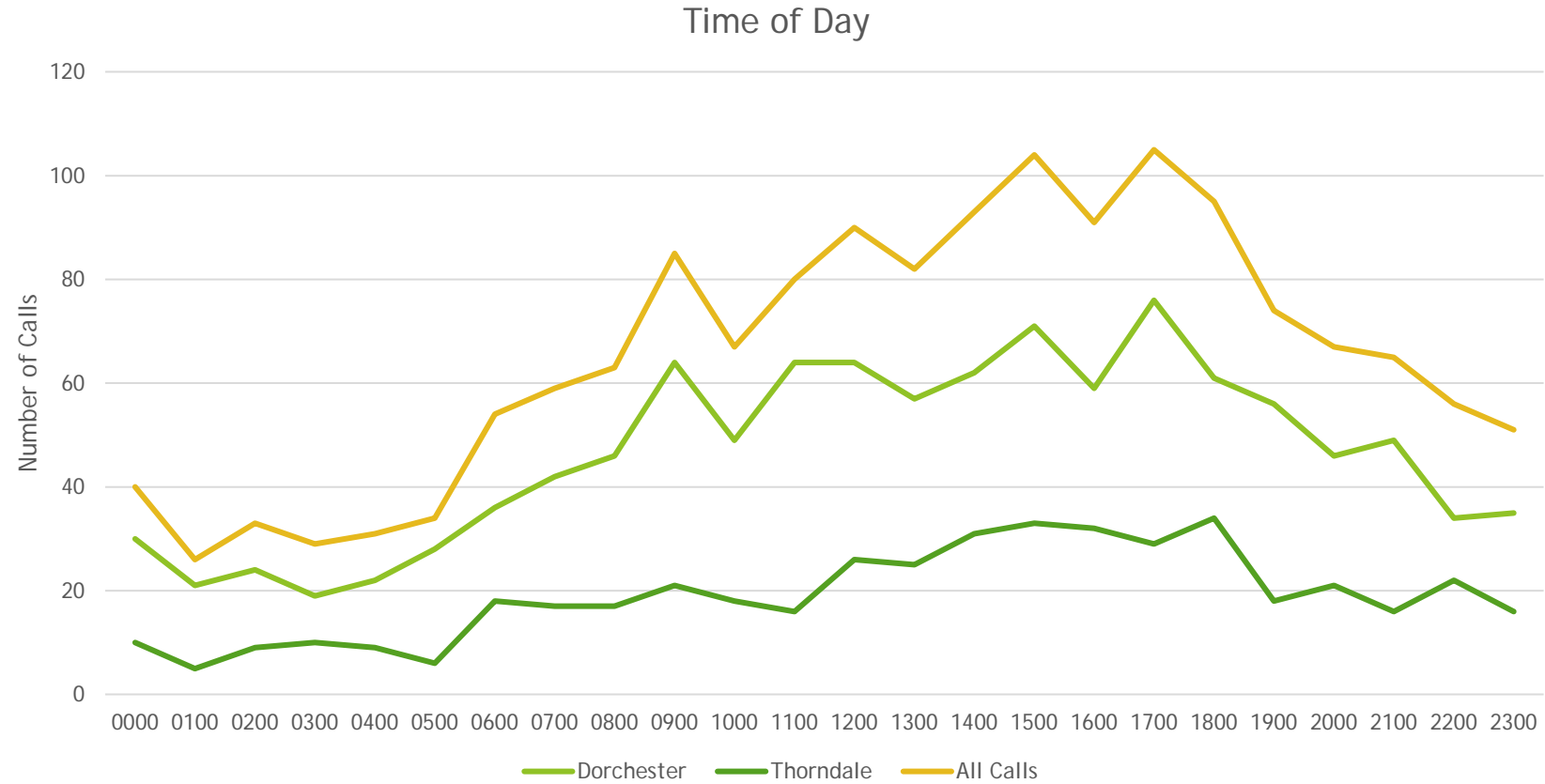


# Call History

Calls Per Month (2018 to 2023)



# Call History

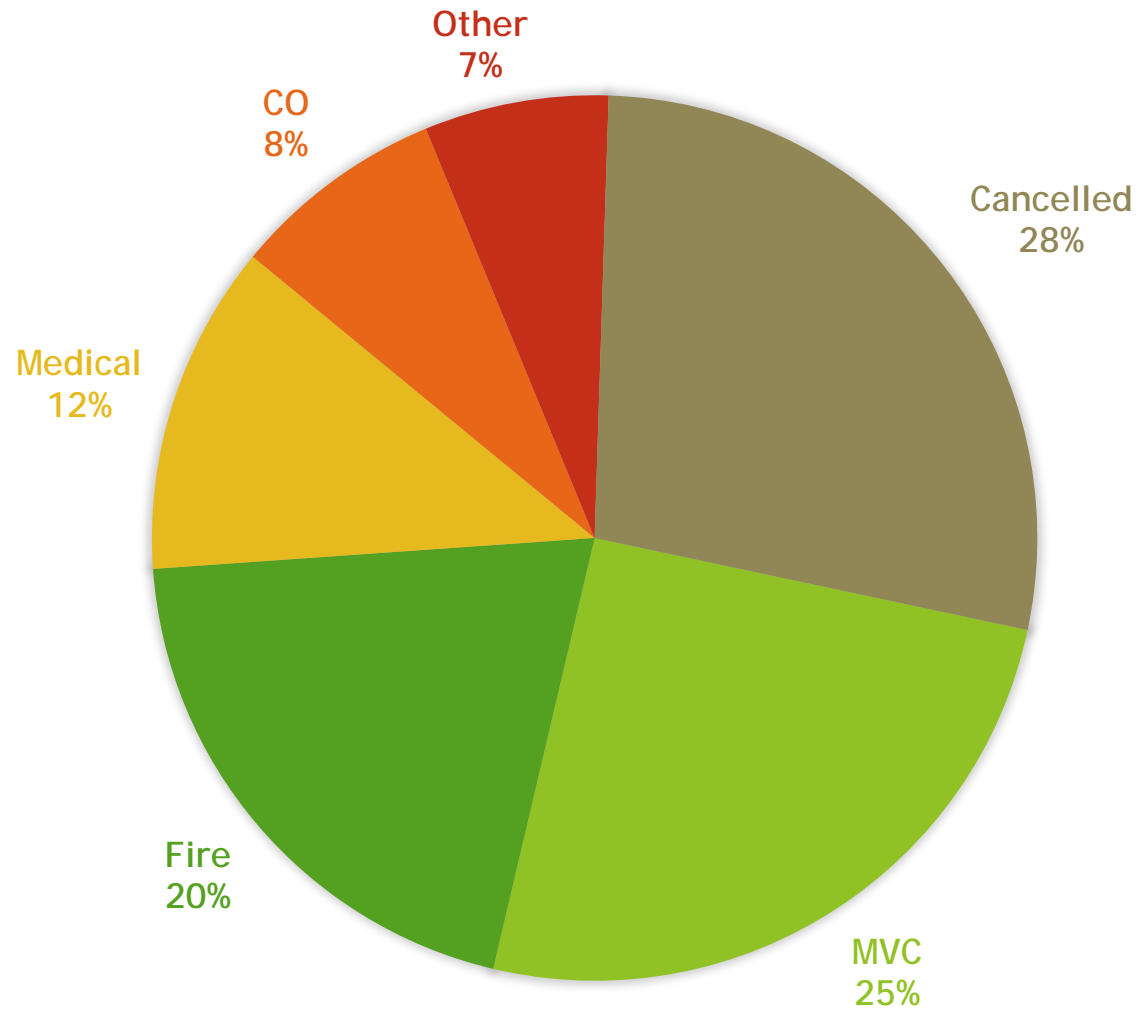




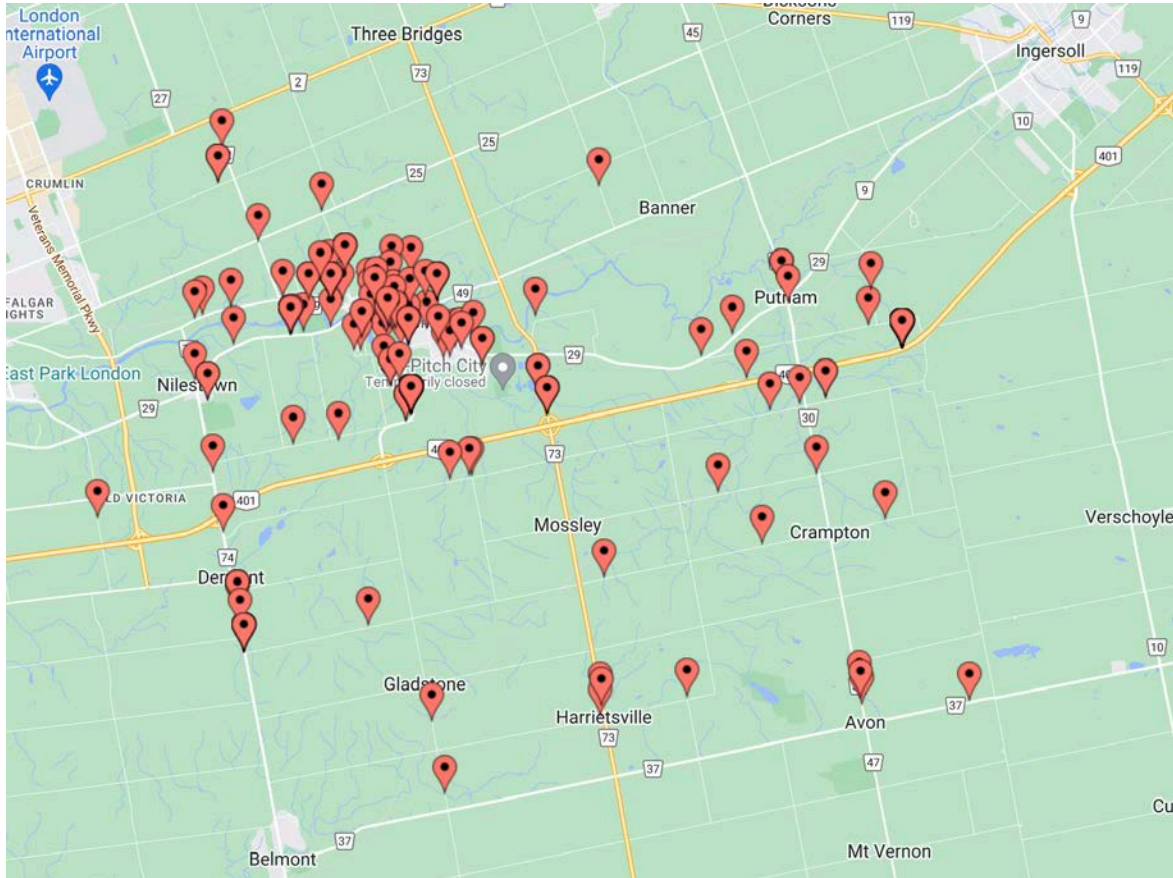
# Call History

| Category             | Description                    | Dorchester | Thorndale | Total       |
|----------------------|--------------------------------|------------|-----------|-------------|
| Vehicles             | Motor Vehicle Collisions (MVC) | 236        | 133       | 369         |
|                      | MVC with Extrication Required  | 27         | 3         | 30          |
| <b>Sub-Total</b>     |                                |            |           | <b>399</b>  |
| Fire                 | Structure                      | 92         | 45        | 137         |
|                      | Outdoor - No Permit            | 51         | 26        | 77          |
|                      | Outdoor - With Permit          | 15         | 4         | 19          |
|                      | Mechanical Overheat            | 28         | 0         | 28          |
|                      | Pre-Fire Conditions            | 13         | 11        | 24          |
|                      | Gas Leaks                      | 8          | 7         | 15          |
|                      | Mutual Aid                     | 5          | 12        | 17          |
|                      | Automatic Aid                  | 0          | 1         | 1           |
| <b>Sub-Total</b>     |                                |            |           | <b>318</b>  |
| Medical              | Emergency                      | 79         | 24        | 103         |
|                      | CPR or VSA                     | 44         | 21        | 65          |
|                      | No Assistance Provided         | 17         | 5         | 22          |
| <b>Sub-Total</b>     |                                |            |           | <b>190</b>  |
| (CO) Carbon Monoxide | Malfunction or No CO Detected  | 77         | 23        | 100         |
|                      | CO Present                     | 13         | 10        | 23          |
| <b>Sub-Total</b>     |                                |            |           | <b>123</b>  |
| Other Emergency      | Public Hazard Conditions       | 26         | 4         | 30          |
|                      | Power Lines Down               | 10         | 17        | 27          |
|                      | Assistance to Other Agency     | 18         | 31        | 49          |
| <b>Sub-Total</b>     |                                |            |           | <b>106</b>  |
| Cancelled            | On Scene - Incident Not Found  | 45         | 10        | 55          |
|                      | On Scene - Other Agency Cancel | 17         | 0         | 17          |
|                      | On Scene - No Rescue Required  | 4          | 0         | 4           |
|                      | Cancelled En Route             | 223        | 15        | 238         |
| Fire Alarm           | Accidental or Human Error      | 30         | 32        | 62          |
|                      | Equipment Malfunction          | 37         | 25        | 62          |
| <b>Sub-Total</b>     |                                |            |           | <b>438</b>  |
| <b>Total Calls</b>   |                                |            |           | <b>1574</b> |

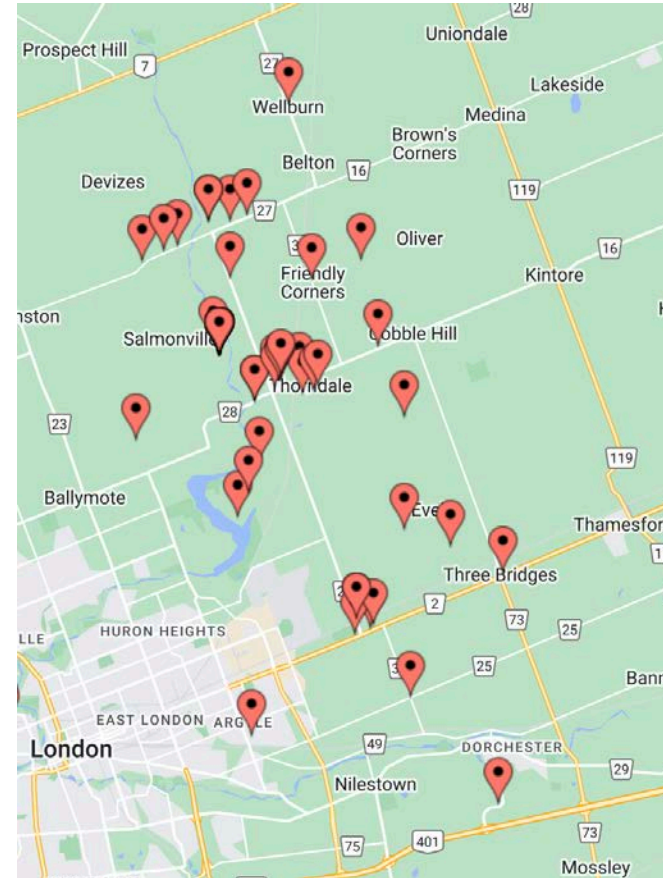
# Call History



# Call History (2023)



Excludes Hwy 401 Calls



# Observations and Recommendations

|   | Observation  | Recommendation   | Timeline  |
|---|--|--|-----------|
| 1 | The municipal bylaw to establish a fire department was last updated and adopted by Council on February 18, 2015. Since this bylaw, there have been changes to provincial legislation, industry standards, agreements and department structure. | Municipal By-law 15-2015 should be reviewed and amended to reflect changes in provincial legislation, industry standards, agreements and department structure. | Fall 2024 |

# Observations and Recommendations

|   | Observation   | Recommendation   | Timeline  |
|---|---|--|-----------|
| 2 | The Thames Centre Fire Department's Standard Operating Procedures (SOPs) and departmental orders are outdated, and in some cases, non-existent. | The Thames Centre Fire Department should implement a review of the Standard Operating Procedures (SOPs) and departmental orders for safe and effective fire operations, and, mitigate risk and liability parameters. | Fall 2024 |

# Observations and Recommendations

|   | Observation  | Recommendation  | Timeline               |
|---|--|---|------------------------|
| 3 | There are a variety of automatic, mutual aid and tiered response agreements involving Thames Centre Fire Department. | It is recommended that a quarterly review and analysis of data associated with response agreements (automatic aid, mutual aid, and tiered response) be established to assess level of effort, quantify performance measures, and annual reporting to Council. | Quarterly and Annually |

# Observations and Recommendations

|   | Observation   | Recommendation  | Timeline    |
|---|---|---|-------------|
| 4 | There are some improvements that can be addressed to reflect availability, communications and support of the senior leadership. | <p>It is recommended that the Thames Centre:</p> <ul style="list-style-type: none"><li>a. Provide all firefighters with a designated Thames Centre specific email address in order that firefighters can:<ul style="list-style-type: none"><li>I. Have a sense they are part of the Thames Centre team;</li><li>II. Receive direct communications from senior leadership;</li><li>III. Receive and access departmental news, events and information; and</li><li>IV. Receive and access corporate news, events and information (such as Council highlights, Mayor’s Breakfast, etc.); and</li></ul></li><li>b. Fire Chief could schedule an “Open Door” once a month, where firefighters can engage the Fire Chief without a scheduled appointment.</li></ul> | Summer 2024 |

# Observations and Recommendations

|   | Observation  | Recommendation   | Timeline  |
|---|--|--|-----------|
| 5 | There is no updated centralized file to collate all training records of individual firefighter certifications, training courses, and other mandatory certificates and licences (such as driver licences, CPR, etc.). | The Training Committee responsibilities, specific to the two Training Officers, should include the creation, input and monitoring of a centralized training file that is readily accessible electronically to the Fire Chief, and, documents firefighter certifications for regulatory compliance. | Fall 2024 |



# Observations and Recommendations

|   | Observation  | Recommendation   | Timeline |
|---|--|--|----------|
| 6 | The average years of service is 15.5 years, and 25.5% of firefighters indicated they would retire over the next 5 years. | <p>It is recommended that:</p> <ul style="list-style-type: none"><li>a. Thames Centre fire department will need to monitor attrition and adapt with the recruitment of additional community volunteers to become firefighters;</li><li>b. For effective fire operations, the fire department should maintain a threshold of 5 Officers and 30 Firefighters, for a total of <b>35 personnel in Dorchester</b>; and</li><li>c. For effective fire operations, the fire department should maintain a threshold of 5 Officers and 20 Firefighters, for a total of <b>25 personnel Thorndale</b>.</li></ul> | Annually |

# Observations and Recommendations

|   | Observation   | Recommendation  | Timeline  |
|---|---|---|-----------|
| 7 | The Thames Centre Fire Department is legislatively mandated to certify all firefighters to the criteria specified in Ontario Regulation 343/22. | It is recommended that the Training Officers, in consultation the Training Committee and senior fire management, adopt a training schedule for firefighter certification as mandated by Ontario Regulation 343/22 for compliance in July 1, 2026, and thereafter, compliance in July 1, 2028. | Fall 2024 |

# Observations and Recommendations

|   | Observation  | Recommendation   | Timeline  |
|---|--|--|---|
| 8 | <p>There is no formalized compensation agreement. The Municipality has undertaken a salary wage review across the municipal departments, which includes the fire department.</p> | <p>It is recommended that:</p> <ul style="list-style-type: none"> <li>a. Council receive the ongoing salary review and make adjustments to firefighters compensation that is competitive to neighbouring jurisdictions (if applicable), and, review the compensation every 3 years;</li> <li>b. The Municipality review the payment model of a point system versus an hourly system; and</li> <li>c. The Municipality pay firefighters with greater frequency (either bi-weekly or quarterly) in lieu of the current annual payment method.</li> </ul> | <p>2024 and Every 3 Years</p> <p>Fall 2024</p> <p>Winter 2024</p> |

# Observations and Recommendations

|   | Observation   | Recommendation  | Timeline    |
|---|---|---|-------------|
| 9 | The Office of the Fire Marshall has produced a Mutual Aid Plan template (revised March 2023) as a guide for municipalities to enter into agreements for assistance with fire protection services. | The Automatic Aid agreement between the Municipality of Thames Centre and the Municipality of Central Elgin be reviewed and reformatted in accordance to the Mutual Aid Plan template published by the Office of the Ontario Fire Marshall. | Winter 2024 |

# Observations and Recommendations

|    | Observation  | Recommendation  | Timeline    |
|----|--|---|-------------|
| 10 | The County of Middlesex Mutual Aid Plan contains all the authorizing Letters of Agreements and/or bylaws authorizing automatic aid. Of the four automatic aid agreement pertaining Thames Centre, only two Letters of Agreement are contained in the County's Plan | The Letters of Agreements for Automatic Aid between the Municipality of Thames Centre and the City of London (Station #10), and, the Municipality of Thames Centre and the Biddulph-Blanchard Fire Department should be included in the County's Mutual Aid Plan. | Winter 2024 |

# Observations and Recommendations

| Station                 | Dorchester |       |       |           |    |
|-------------------------|------------|-------|-------|-----------|----|
| Amenities               |            |       |       |           |    |
| Rating                  | Below      | Meets | Above | Excellent | NA |
| Washroom                | 36 %       | 64 %  | 0     | 0         | 0  |
| Showers                 | 46         | 23    | 0     | 0         | 31 |
| Lockers                 | 38         | 27    | 0     | 0         | 35 |
| Kitchen                 | 35         | 65    | 0     | 0         | 0  |
| Dining                  | 20         | 16    | 0     | 0         | 64 |
| Laundry                 | 42         | 46    | 4     | 0         | 8  |
| Rest                    | 28         | 16    | 0     | 0         | 78 |
| Storage and Maintenance |            |       |       |           |    |
| Rating                  | Below      | Meets | Above | Excellent | NA |
| Equipment               | 50         | 46    | 4     | 0         | 0  |
| Supplies                | 46         | 46    | 4     | 0         | 4  |
| Fleet                   |            |       |       |           |    |
| Rating                  | Below      | Meets | Above | Excellent | NA |
| Parking                 | 42         | 58    | 0     | 0         | 0  |
| Access                  | 42         | 58    | 0     | 0         | 0  |
| Egress                  | 35         | 63    | 3     | 0         | 0  |
| Exhaust                 | 50         | 19    | 0     | 0         | 31 |
| Cleaning                | 58         | 35    | 0     | 0         | 7  |
| Maintenance             | 58         | 35    | 0     | 0         | 7  |

# Observations and Recommendations

|    | Observation  | Recommendation   | Timeline  |
|----|--|--|---|
| 11 | <p>The Dorchester Fire Station is in great need of improvements in all areas of amenities, storage and maintenance, and vehicle bays. This observation is aligned with the majority of firefighters who reported low rankings in these categories.</p> | <p>It is recommended that:</p> <ul style="list-style-type: none"> <li>a. The Municipality establish a financial plan in 2024 to either rehabilitate the existing station, or, construct a new fire station in Dorchester;</li> <li>b. The target date to complete the rehabilitation, or new construction, should be prior to 2029;</li> <li>c. The financial plan include funding parameters, such as: contributions to a capital reserve from 2025 to 2029, development charges, debenture, and possibly fundraising; and</li> <li>d. A building committee, including firefighter participation, be implemented for the purposes of design plans for the rehabilitation, or construction.</li> </ul> | <p>Winter 2024</p> <p>2029</p> <p>Annually</p> <p>Winter 2024</p> |

# Observations and Recommendations

|    | Observation   | Recommendation  | Timeline  |
|----|---|---|-----------|
| 12 | The Thorndale Fire Station is in good condition in all areas of amenities, storage and maintenance, and vehicle bays. This observation is aligned with the majority of firefighters who reported high rankings in these categories, except for one element (lockers). | It is recommended that a capital plan be developed to retrofit a designated space to accommodate bunker gear storage and locker space for firefighters. | Fall 2025 |



# Observations and Recommendations

|    | Observation  | Recommendation  | Timeline    |
|----|--|---|-------------|
| 13 | There is an emerging need to add aerial capacity to the fire fleet for both aerial fire attacks and high angle rescue. | Should the municipality grow their building stock with high density residential apartment or condominium buildings, consideration should be given to the purchasing of an aerial fire truck for emergency access to an elevated place (such as the roof of a building); remove people from a high location; and/or elevated water stream application in a fire suppression emergency. | Winter 2026 |

# Observations and Recommendations

|    | Observation   | Recommendation  | Timeline   |
|----|---|---|--|
| 14 | <p>The municipality has entered into a shared service agreement with the Municipality of Middlesex Centre for the provision of fire prevention and inspection services.</p> | <p>It is recommended that the Municipality revise the shared service agreement to include:</p> <ul style="list-style-type: none"> <li>a. An annual Fire Prevention Business Plan where the Fire Chief and Fire Prevention Officer would formally agree on the program objectives for the pending operating year (January to December);</li> <li>b. An annual Fire Prevention Report where the Fire Prevention Officer would report to the Fire Chief their level of effort;</li> <li>c. The Fire Chief utilize elements of the annual Fire Prevention Report in regular scheduled updates to Municipal Council; and</li> <li>d. Implement performance measures to evaluate the program and the associated shared services agreement.</li> </ul> | <p>Annually</p> <p>Annually</p> <p>Annually</p> <p>Winter 2024</p> |

# Observations and Recommendations

|    | Observation   | Recommendation  | Timeline                        |
|----|---|---|---------------------------------|
| 15 | One of the responsibilities of the newly constructed Public Education Committee is to plan and deliver the fire department's community events and public education opportunities. | <p>The Public Education Committee should include the following added responsibilities:</p> <ul style="list-style-type: none"><li>a. The development and planning of an Annual Public Education Plan for the subsequent year in order to coordinate and schedule community events and educational opportunities; and</li><li>b. Prepare and submit an Annual Report listing all community events and educational opportunities completed for inclusion in the Fire Chief's updates to Council.</li></ul> | <p>Annually</p> <p>Annually</p> |

# Observations and Recommendations

|    | Observation   | Recommendation   | Timeline                         |
|----|---|--|----------------------------------|
| 16 | Although the agreement between Thames Centre and Middlesex Centre contains duties for the Fire Prevention Officer pertaining to public education, there is no reference of these duties in the Public Education Committee's Terms of Reference. | <p>The Public Education Committee's Terms of Reference should include the added scope:</p> <ul style="list-style-type: none"><li>a. Identification of the Fire Prevention Officer as an ex-officio member of the committee; and</li><li>b. Responsibilities of the Training Committee include consulting with the Fire Prevention Officer on community events and educational opportunities.</li></ul> | <p>Fall 2024</p> <p>Annually</p> |



CONSULTING &  
STRATEGY GROUP

Questions?