



The Corporation of the Town of Tecumseh

Fire & Rescue Services

To: Mayor and Members of Council

From: Wade Bondy, Director Fire Services & Fire Chief

Date to Council: January 28, 2020

Report Number: FIRE-2020-01

Subject: Tecumseh Fire Services 2019 Year End Overview

Recommendations

It is recommended:

That the Tecumseh Fire Services 2019 Year End Overview presented in the Fire & Emergency Services Department Report FIRE-2020-01, **be received**.

Background

The purpose of this Fire Services Report is to provide Council with an overview of Tecumseh Fire Rescue Services (TFRS) activities for the calendar year 2019.

TFRS provides firefighting protection for the lives and property of citizens of the Town of Tecumseh. Personnel respond to all calls for service, provide firefighting, rescue, emergency medical intervention (including defibrillation), vehicle extrication, shore-based water rescue, and confined space entry rescue.

The Fire Department is a volunteer fire service operating out of two stations, each with a complement of 20 volunteer firefighters. Station 1 is located at 985 Lesperance, while Station 2 is located at 5520 Walker Road. The department services a population of approximately 24,000, providing fire and emergency medical coverage to a 95 square kilometre area, and responds to approximately 400 calls per year.

Comments

Calls for Service – Volume and Type of Response Overview

i) Volume of Calls

Figure 1
Number of Calls for Service by Month
2015 to 2019

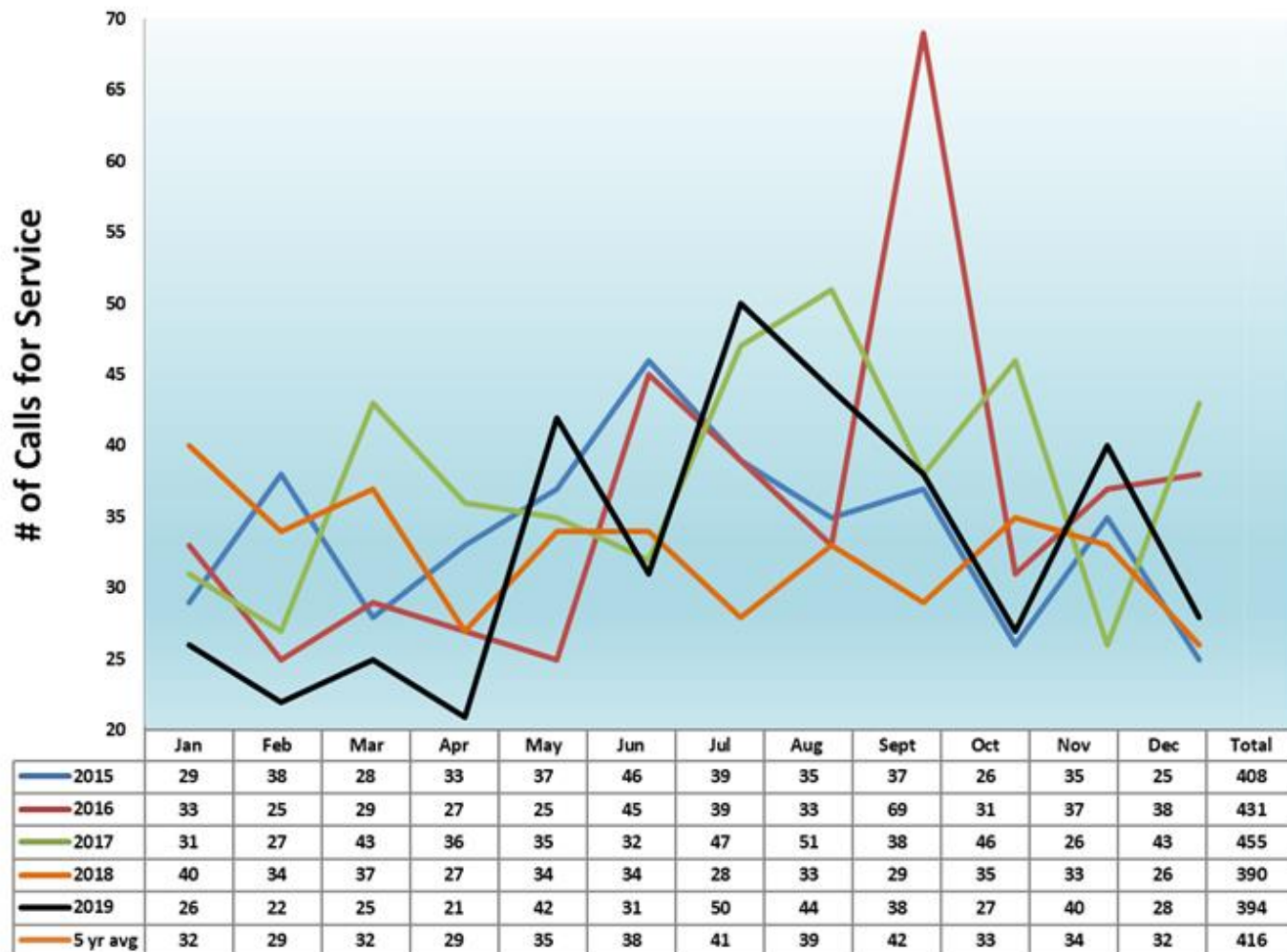
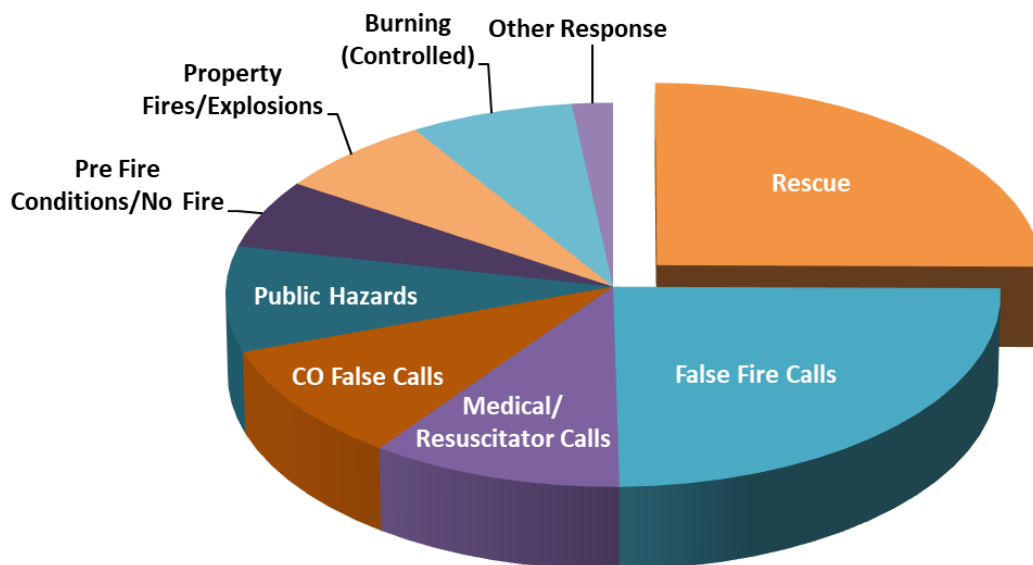


Figure 1 illustrates call volumes for the 5-year period 2015 through 2019 on a monthly basis. An elevated number of calls for service in July 2019 included:

- 11 CO false alarm (no CO present)
- 11 False Fire calls (malfunction/accidental activation/perceived emergency)
- 8 Rescue (vehicle collisions/persons trapped in elevator)
- 6 Property Fire/Explosions (4 loss fires, 2 no loss/outdoor fires)
- 4 Public Hazard (power lines down, CO Incident-CO present)
- 4 Medical/Resuscitator
- 2 Pre-fire Condition/No Fire (cooking/toasting/smoke/steam)
- 2 Burning (controlled/complaint)
- 2 Other Response (assist other agencies)

ii) 2019 Type of Response

Figure 2
Response Type as a Percentage of Total Calls for Service
2019



Response Type	2019		2018		2017		2016		2015	
	%	#	%	#	%	#	%	#	%	#
Rescue	25.1%	99	27.4%	107	26.6%	121	27.1%	117	22.8%	93
False Fire Calls	24.6%	97	21.3%	83	19.3%	88	14.6%	63	20.1%	82
Medical/Resuscitator Calls	10.2%	40	13.6%	53	18.2%	83	14.6%	63	14.2%	58
CO False Calls	9.6%	38	7.9%	31	11.0%	50	12.8%	55	12.0%	49
Public Hazards	8.9%	35	9.2%	36	9.5%	43	14.8%	64	6.4%	26
Burning (Controlled)	7.1%	28	5.9%	23	3.7%	17	3.7%	16	5.9%	24
Property Fires/Explosions	6.9%	27	6.2%	24	5.1%	23	4.6%	20	7.6%	31
Pre Fire Conditions/No Fire	5.8%	23	6.4%	25	5.3%	24	5.6%	24	7.8%	32
Other Response	1.8%	7	2.1%	8	1.3%	6	2.1%	9	3.2%	13
Total:	100.0%	394	100.0%	390	100.0%	455	100.0%	431	100.0%	408

Figure 2 illustrates types of response as a percentage of total calls for service in the calendar year 2019. The accompanying table provides comparable data for the years 2015 through 2019.

An industrial equipment malfunction was listed as the cause of a fire that resulted in significant losses in excess of 2 million dollars, in part due to the activation of sprinklers in the building even though the fire was mainly contained to the machine. Other significant fires resulting in losses in the last half of 2019 involved a shed containing older model cars and a vehicle parked near an attached garage with a fully involved fire under the hood.



Figure 3
Number of Calls for Service – Rescue Type Response
2019

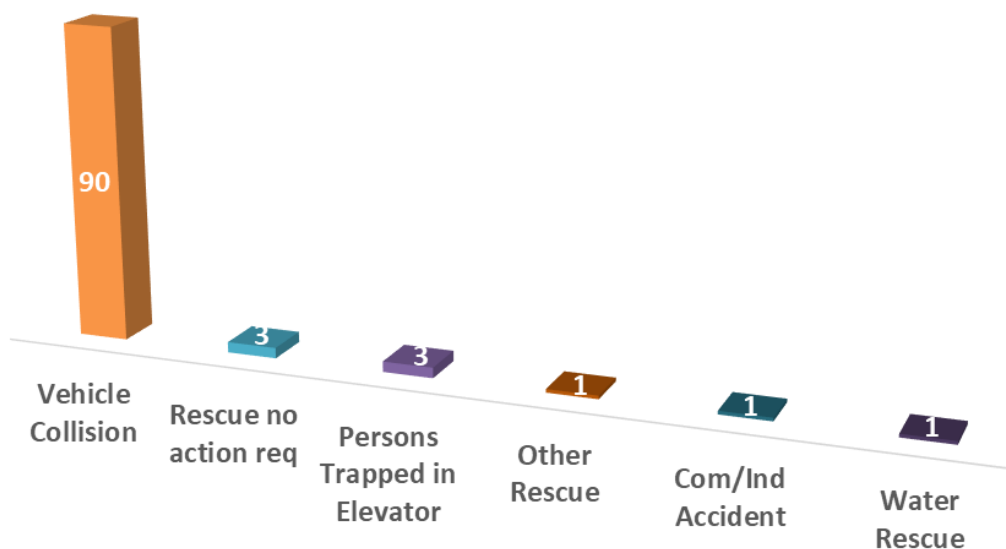


Figure 3 illustrates the number of incidents for each category of Rescue Type Response. Rescue was the greatest percentage of all calls for service in 2019 at 25.1%. The largest number of these rescue type response calls involve **vehicle collisions and extrications** at a combined 90 incidents.

Figure 4
Total Vehicle Collision/Extrication Incidents by Location
2019

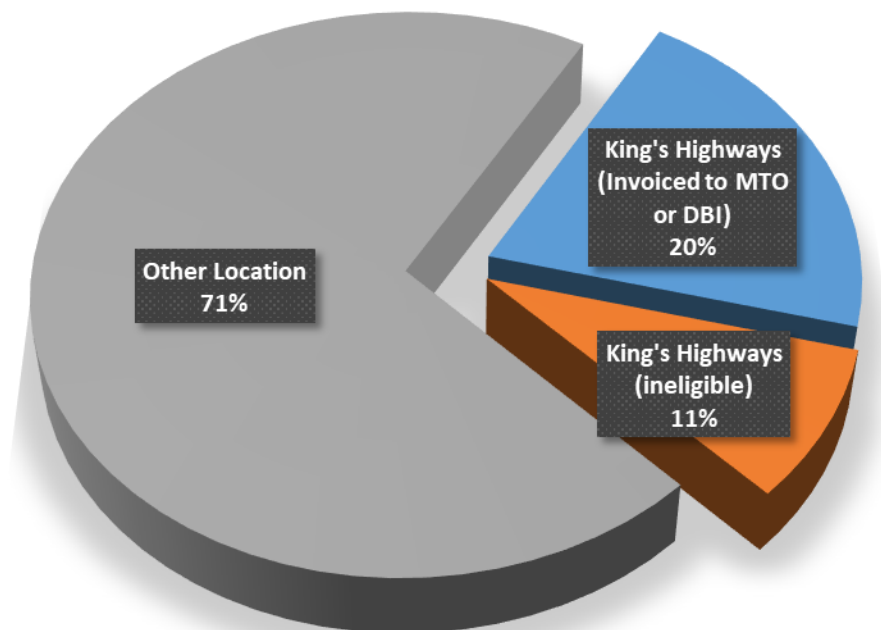


Figure 4 illustrates the number of vehicle collisions/extrications, assistance to police/vehicle fires that occurred on King's Highways in 2019 that were eligible for reimbursement in relation to those occurring on King's Highways but ineligible and occurring in other locations within the municipality. The incidents that occur on provincial highways may be invoiced to the Ministry of Transportation or DeAngelo Brothers Corp. (Herb Gray Parkway) to recover costs. The Ministry's 2019 rate was \$477.00 per hour per apparatus plus reimbursement for absorball (used to clean up spills). Tecumseh Fire invoiced a total of \$21,314 (29 attending apparatus - \$20,866 and 32 bags of absorball - \$448) for incidents occurring on King's Highways that met the criteria to be reimbursed in 2019.

Figure 5
Number of Carbon Monoxide Incidents
2019

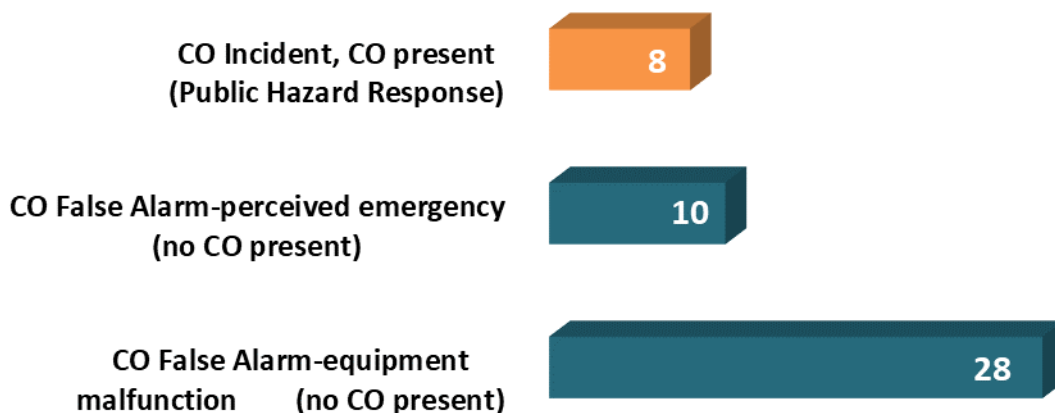


Figure 5 illustrates the number of Carbon Monoxide (CO) incidents where CO has been found to be present and those incidents where CO is not present and the incident is due to an equipment malfunction or another cause.

Carbon Monoxide (CO) is a poisonous gas that has no colour, smell or taste. In the year 2019, 17% (2018 - 24%) of calls for service involving Carbon Monoxide were found to have CO present when readings were taken by TFRS on scene.

Carbon Monoxide Levels and Symptoms

The table below summarizes some health effects due to prolonged exposure to various concentrations of CO. The level of CO concentration is measured using a system called Parts per Million (PPM). For example, 100 PPM means that for every 999,900 molecules of air, there are 100 molecules of CO.

PPM	Symptoms
200	Slight headache, fatigue, dizziness, and nausea after two to three hours.
400	Frontal headaches within one or two hours. Life threatening after three hours.
800	Dizziness, nausea, and convulsions within 45 minutes. Unconsciousness within two hours. Death within two to three hours.
1,600	Headache, dizziness and nausea within 20 minutes. Death within one hour.

Due to the severe consequences of exposure to Carbon Monoxide, TFRS responds to all CO calls whether symptoms are present or not. The policy during business hours when responding to CO calls with no symptoms is for a crew with an Engine to attend at which time readings are taken to determine if further action is required. Outside of business hours when CO calls occur with or without symptoms, a general response is used. Regarding all CO calls, Enbridge (Union Gas) will not enter a residence unless the Fire Department identifies levels and ventilates if necessary.

Figure 6
Number of Child Restraint Inspections
2019

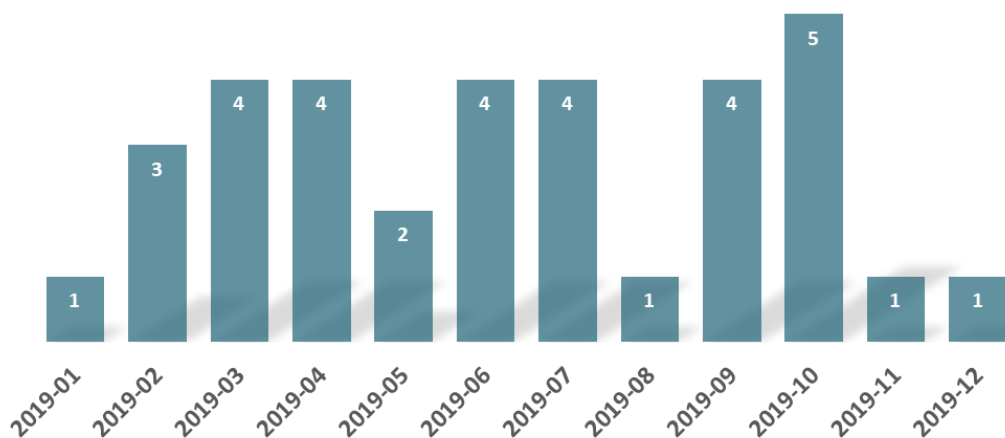
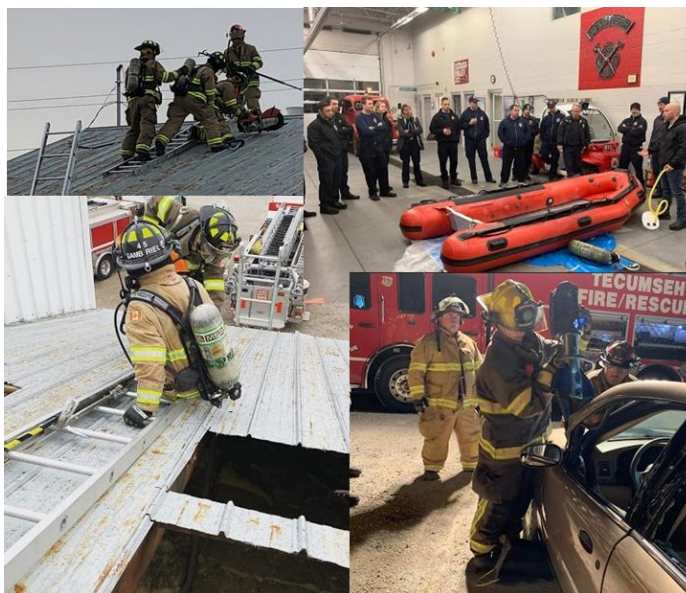


Figure 6 illustrates the number of Child Restraint Inspections and installations on a monthly basis provided by Tecumseh Fire Rescue Services. The goal is to assist and teach parents to properly install and to use the restraints so that future installations can be handled without assistance.

Q4-2019 Highlights

○ Training

Dan's Nautical Shop provided training for the new Achilles Rescue Boat for high water rescue. An abandoned building was the scene of several realistic training scenarios including roof venting, aerial operations and forcible entry, and the new Hurst eDraulic equipment for auto extrication was utilized in rescue training.



- **Enbridge Grant – Carbon Monoxide Fire Safety Program**

Tecumseh Fire has successfully applied and been granted funding in the amount of \$1,500 through Enbridge for a Carbon Monoxide Safety Program. These funds are to be used to purchase and distribute detectors in the community particularly to vulnerable sectors where alarms are inoperable or absent.

- **WomenOnFire Event**

With the support of the Mayor, Town Council and administration, Tecumseh Fire was able to host the WomenOnFire initiative in 2019. A group of women firefighters from each municipal department in Windsor-Essex County have worked to produce an event that promotes diversity within emergency response and security organizations. Tecumseh Fire Rescue Services would like to recognize all who participated in the success of this event, and in addition congratulate two participants on their successful recruitment to our department.



Consultations

None

Financial Implications

None

Link to Strategic Priorities

Applicable	2019-22 Strategic Priorities
<input checked="" type="checkbox"/>	Make the Town of Tecumseh an even better place to live, work and invest through a shared vision for our residents and newcomers.
<input checked="" type="checkbox"/>	Ensure that Tecumseh's current and future growth is built upon the principles of sustainability and strategic decision-making.
<input checked="" type="checkbox"/>	Integrate the principles of health and wellness into all of Tecumseh's plans and priorities.
<input checked="" type="checkbox"/>	Steward the Town's "continuous improvement" approach to municipal service delivery to residents and businesses.
<input checked="" type="checkbox"/>	Demonstrate the Town's leadership role in the community by promoting good governance and community engagement, by bringing together organizations serving the Town and the region to pursue common goals.

Communications

Not applicable ☒

Website ☐

Social Media ☐

News Release ☐

Local Newspaper ☐

This report has been reviewed by Senior Administration as indicated below and recommended for submission by the Chief Administrative Officer.

Prepared by:

Kathie Primeau
Clerk II Administrative Clerk

Reviewed by:

Wade Bondy
Director Fire Services & Fire Chief, C.E.M.C.

Recommended by:

Margaret Misek-Evans, MCIP, RPP
Chief Administrative Officer

Attachment Number	Attachment Name
None	None