

Municipality of Lakeshore - Report to Council

Legislative & Legal Services

Fire Services



To: Mayor & Members of Council
From: Don Williamson, Fire Chief
Date: April 20, 2021
Subject: 2016 thru 2019 Fire Department Report to Council

Recommendation

This report is for information only.

Background

The *Fire Protection and Prevention Act* requires that a fire service provide as a minimum level of service: fire inspections based on complaint and request, public education, smoke alarm programs and emergency response. This high level multi-year report provides a comparison that includes statistics related to those categories.

Comments

The following Executive Summary, attached maps and related Appendices discuss the 2016 through 2019 Fire Department performance through Emergency Response, Fire Inspection/ Code Enforcement and Public Education categories.

Emergency Response:

Lakeshore Fire Department cannot predict when someone will call for help or what type of emergency will occur. Will a single fire truck with limited staff address the emergency? Are 2 or more fire stations required? Should 1 or more chief officers attend?

Not only is a request for emergency assistance unpredictable, so is the availability of the volunteer firefighter and their depth of experience for the specific emergency type.

Lakeshore Fire Administration has 3 chief officers that monitor all emergency responses. One chief officer is always available to provide direction, upgrade the response or attend the emergency location. During the 4 year period of this report one or more chief officers responded to 824 emergency calls along with volunteer firefighting crews.

The 4 year Fire Department Activity (see **Appendix A** – page 5) is illustrated through charts and associated commentary. The call volume by year, by month and by incident type reflect the unpredictability of when, where and what kind of emergency the department can experience.

Station 1 (Puce) and Station 3 (Belle River) provide first response coverage for the northwest quadrant of Lakeshore. This area has experienced the most growth (urban-like setting), contains approximately 76% of Lakeshore's population and experiences a large portion of the municipal emergency call volume.

Fire department response data (see **Appendix B** – page 11) was analyzed and compared with historical measurements.

Actual Structure Fire Responses were compared against a former standard for consistency. As Chart 8 (page 11) shows, we can staff the first truck with at least 4 firefighters most of the time, but it is taking longer to do it over the last 4 years. As the 10 staff in 10 minute percentage indicates, we typically don't have enough firefighters to properly engage the fire ground tasks until later in the event. This means fire control measures may be delayed, rescue efforts cannot begin and in places where hydrants don't exist – the potential to run out of water.

Other high call volume categories were also analyzed. The 4 year data average shows that Chart 9 - All Fires (Excluding Structures) - page 12 and Chart 10 - MVC Responses – page 13 have at least 4 firefighters on the first truck 74% of the time and result in a total staff attendance of 7 or 8 firefighters.

A minimum staff of 8 is typically enough to work these emergency types. However, a heat warning day in the summer or a multi-vehicle collision requires more firefighter resources.

Chart 11 - Fire Alarm Activations – page 13 turns out a much smaller overall compliment of staff averaging a total of 5 firefighters. If the alarm activation is a real emergency, that staffing average is not enough to address it.

Although the staffing numbers are averages for those 4 years, it reflects calls that occurred at any time of day and any day of the week. With the volunteer firefighter service model, we have no idea who is available to respond. Every call is a wait and see.

In the daytime, Monday through Friday we know from experience and now from a stats analysis, that "if" our typical daytime staff are at home and available to respond, we only have around 20 volunteer firefighters across the municipality. That number drops between commute times in the morning and the evening as staff transition to and from work.

A 2019 analysis of the weekday Monday to Friday 6AM to 6PM response, identified that 41% of all emergency responses occurred in that timeframe, that 4 firefighters was the average attendance and that it took an average of 7 minutes for the first truck to leave the station (see **Appendix C**).

Any Fire Alarm Activation call without details to say otherwise, is assumed to be an emergency event until the Fire Department is advised or observes otherwise. Four staff members for alarm calls is not enough to work the event.

With a new 6 storey hotel followed by five – 6 storey condominiums and a proposed 8 storey apartment building, an initial weekday single fire station response of 4 or less firefighters has a very limited potential of what we can do. In an attempt to supplement that limited weekday single station staffing response, a second station will soon be automatically added to the dispatch protocol for weekday fire alarm activations. This will apply to the area from the Patillo Road corridor westward to Manning Road for any large or high occupancy buildings and multi-storey structures.

The current weekday volunteer firefighter service model is challenged to provide the firefighter resources needed to support some of the higher demand emergency response types.

The future 2021 Fire Master Plan update will identify staffing options for Council to consider.

Fire Inspection and Code Enforcement

Over the 4 year report period, the single person Fire Inspection division conducted 973 site inspections that identified 3298 fire code deficiencies. A snap shot of the 250 inspections completed in 2019 showed that 4.4 million square feet of space was inspected which impacted almost 24,000 people in our community.

The home Smoke Alarm check program was completed by fire crews during emergency response calls and through the fire inspection program. It resulted in 2226 site inspections and a 97% compliance rate.

Overall the fire inspection program has provided significant benefits for the community (see **Appendix E**).

Public Education

Public education event counts were down over the last 4 years due to both limited volunteer firefighter availability and Fire Administration review of requests that assessed their impact on public education for the cost incurred by the municipality.

Fire Prevention Week in October continues to be our biggest opportunity to engage the public through fire station open houses and in-school visits. From 2016 through 2019

Lakeshore Fire recorded Open House attendance totals at 3520 people and In-School Visits attendance at 7980.

Conclusion

The *Fire Protection and Prevention Act* implies that the level of fire protection services should meet the needs and circumstances of the community. It is the opinion of administration that the Fire Department meets the minimum expectation of that legislation as it applies to the smoke alarm program, fire inspections and public education.

However, our emergency response capabilities are challenged at times to meet those needs. Adequate and timely emergency responders during Monday to Friday daytime in one or more fire districts is limited and sometimes non-existent. There is no visibility regarding who is in their area and available to respond. Volunteer firefighting is a part-time commitment with availability dependent on many factors including full time work schedules, children and other life choices.

The residential growth along County Road 22, the large structures in the Patillo Road industrial park and now the multi-storey buildings on Amycroft, have outgrown what our typical volunteer firefighter attendance model can provide.

Administration will look to a multi-station daytime callout assessment in an attempt to get enough staffing resources.

The time may be here for Council to consider a weekday fulltime firefighter presence along the County Road 22 corridor. This would provide an assured staff response within minutes of the dispatch, backed by a volunteer firefighter response to supplement as required. The future 2021 Fire Master Plan will discuss these options further.

Financial Impacts

There are no financial impacts from this report.

Attachments:

- 2016 thru 2019 Fire Department Response Motor Vehicle Collisions
- 2016 thru 2019 Fire Response Structure Fires
- 2019 Fire Inspection Locations

Report Approval Details

Document Title:	2016 thru 2019 Fire Department Report to Council.docx
Attachments:	- 2016-2019MVA.pdf - 2016-2019StructureFires.pdf - 2019Inspections.pdf
Final Approval Date:	May 5, 2021

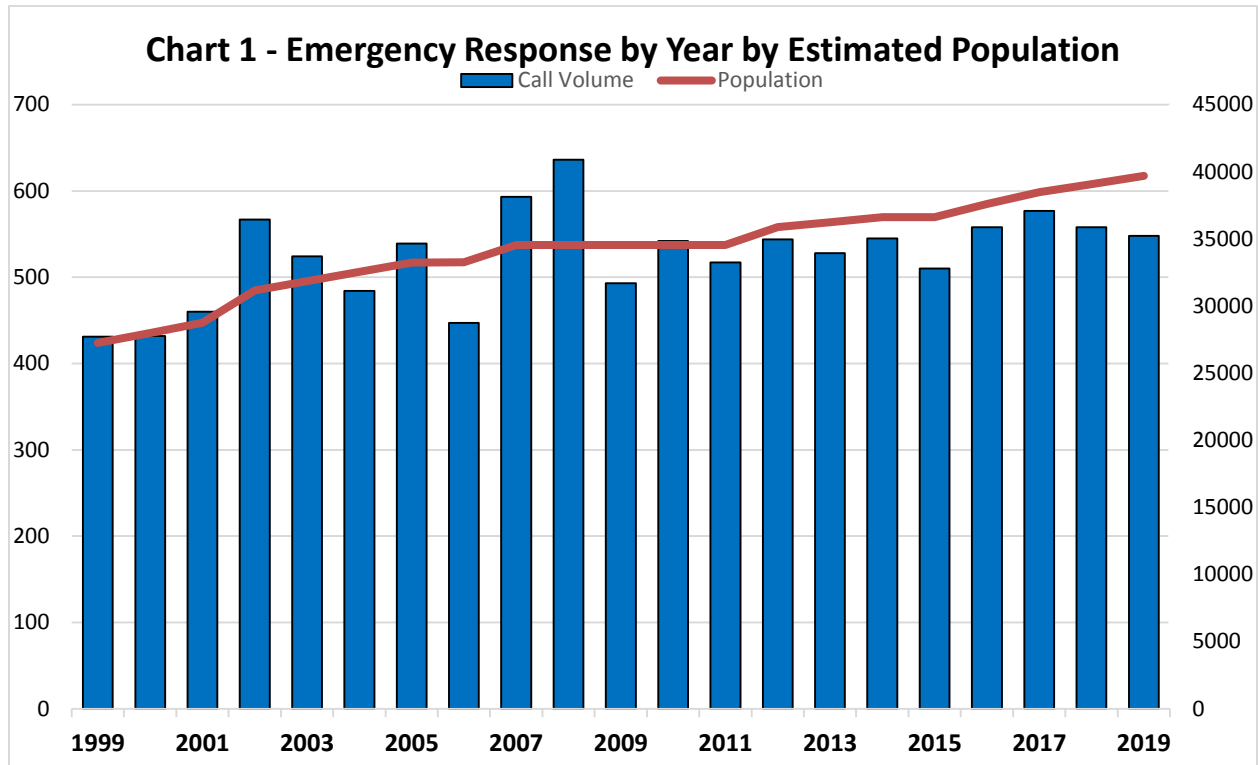
This report and all of its attachments were approved and signed as outlined below:

Kristen Newman

Rosanna Pellerito

Truper McBride

APPENDIX A



Variety of Calls

Chart 2 demonstrates the unpredictability of call volumes by month and by year. That same uncertainty relates to what day, what time, what type of call and the amount of equipment and available firefighting staff that are required to address it.

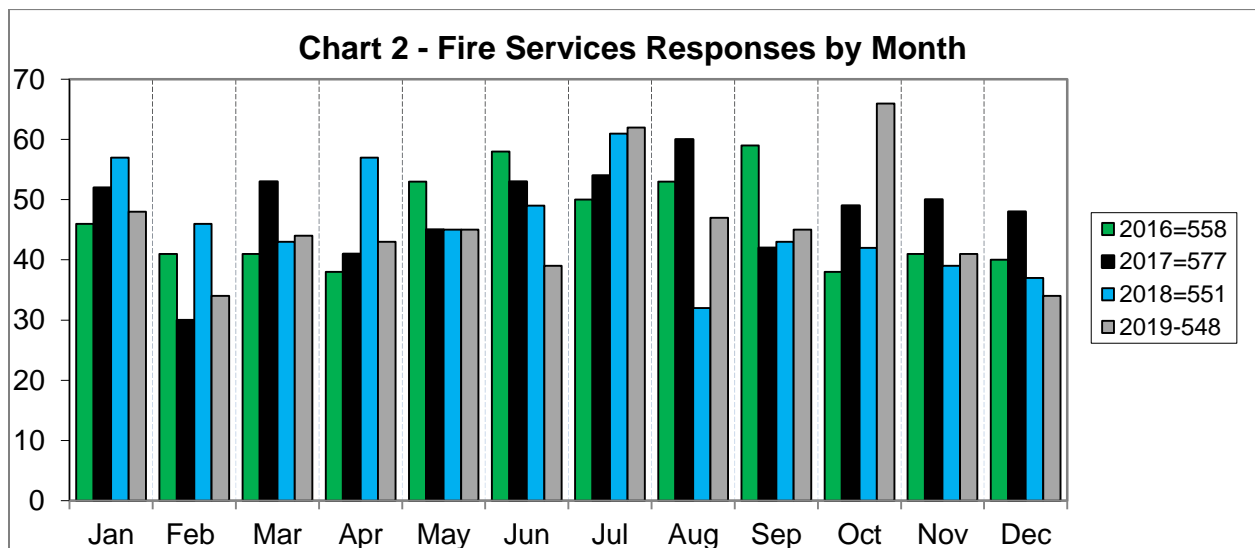
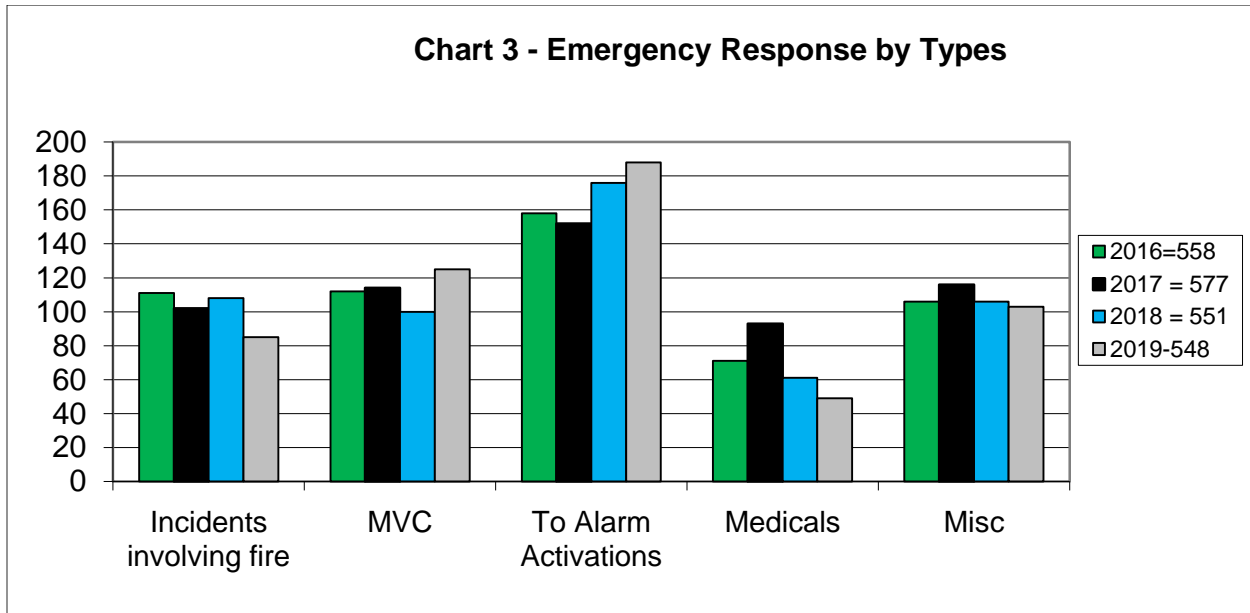


Chart 3 shows Incidents Involving Fire include: structures, vehicles, brush, dumpsters, BBQs and open burning. MVC (motor vehicle collisions) and To Alarm Activations are detailed in later charts. Miscellaneous calls can include but are not limited to: cancelled on route, assistance not required on arrival, odour complaints, wires down, natural gas leak investigation and assisting other agencies.



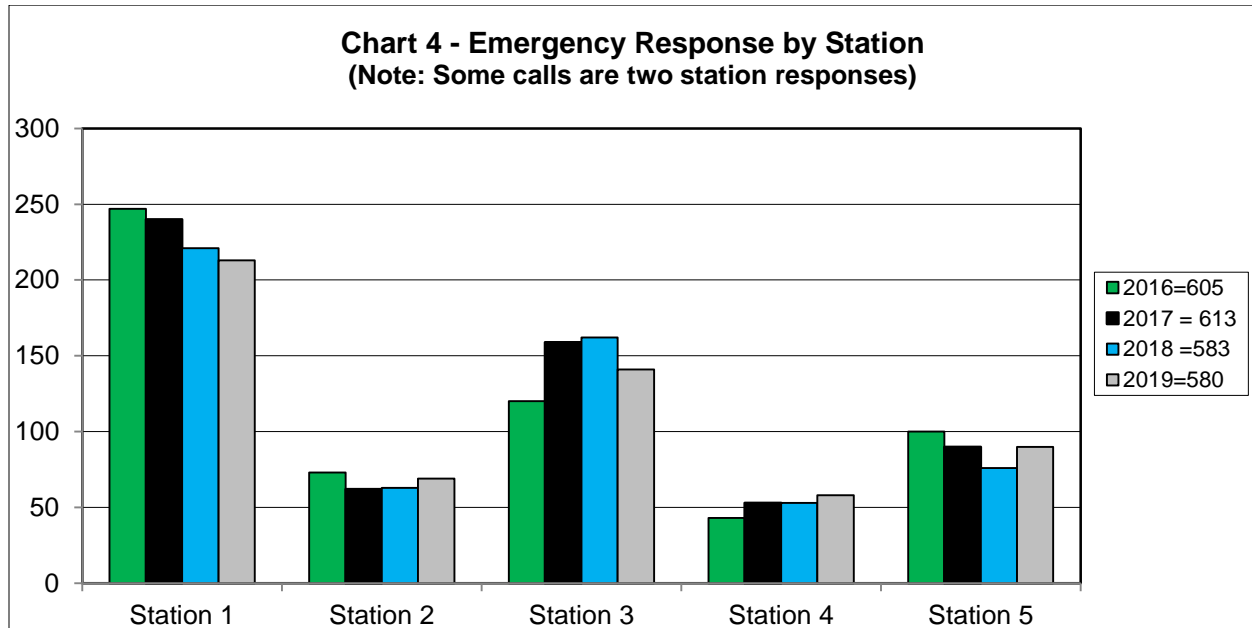
Emergency Response

The 5 Lakeshore emergency response districts shown on the attached maps (in blue, pink, orange, green and gray), were developed based on road networks, posted speed, geographical distance from the closest fire station, and the average time it takes for the first truck to leave each fire station.

Station 1 (Puce) and Station 3 (Belle River) provide first response coverage for the northwest quadrant of Lakeshore. This area has experienced the most growth (urban-like setting), contains approximately 76% of Lakeshore's population and experiences a large portion of the municipality's emergency call volume.

Station 5 (Comber) responds to the 3rd highest call volume in the largest geographical fire district that contains smaller population clusters, a large rural component and the longest stretch of highway 401.

Station 2 (Maidstone) and Station 4 (Ruscom) have similar sized rural and geographical areas. Chart 4 below shows the distribution of call volume by fire district.



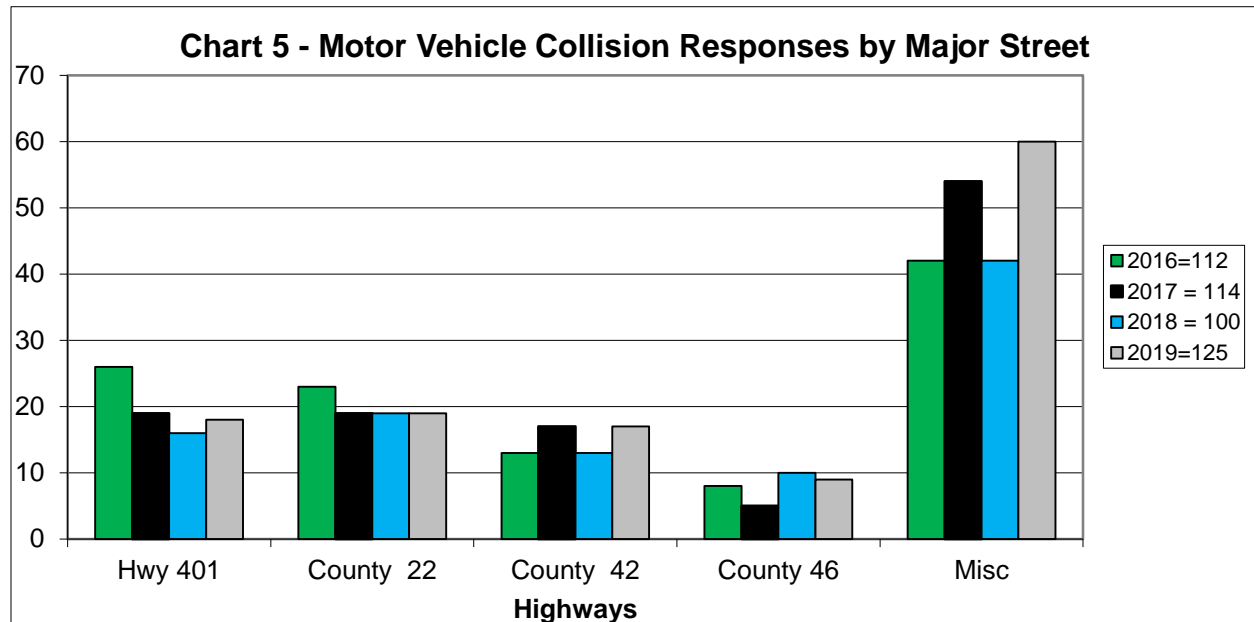
During the 4 year period of this report, one or more senior command staff (chief, deputy, assistant deputy) responded to 824 emergency calls along with volunteer firefighters. The reason for responding include:

- All structure fires are attended because of the inherent safety, complexity, data collection and the fire cause, origin and circumstances assessment that can only be completed by senior staff
- Responses that have a potential to impact firefighter mental wellness (significant injury/ entrapment/ suicide)
- When responding firefighting staff do not have an officer on the truck or the officer and/or staff have limited experience for the call type/ complexity they are responding to
- Highway 401 incidents depending on location, type and weather conditions
- Typical low firefighter availability times to supplement the staff resources
- To retrieve staff from hospital who have assisted paramedics in the ambulance
- Opportunity to observe staff to assess risks, safety, skills and conformance to operating guidelines and provide coaching as needed

Information by Type of Emergency Response

Motor Vehicle Collisions: The Fire Department is typically requested to attend a MVC when injuries, entrapment, significant fluid spill or fire conditions are reported. The incident counts below only reflect when an MVC was attended and work activities occurred. MVC calls where the department responded but were cancelled before arrival or arrived and no services were required are coded under the Miscellaneous category in Chart 3. The counts in Chart 5 below are only MVC events that the Fire Department was required and not a count of all Lakeshore motor vehicle collisions. The majority of

Highway 401 response costs are recovered by Fire Administration through the Ministry of Transportation.



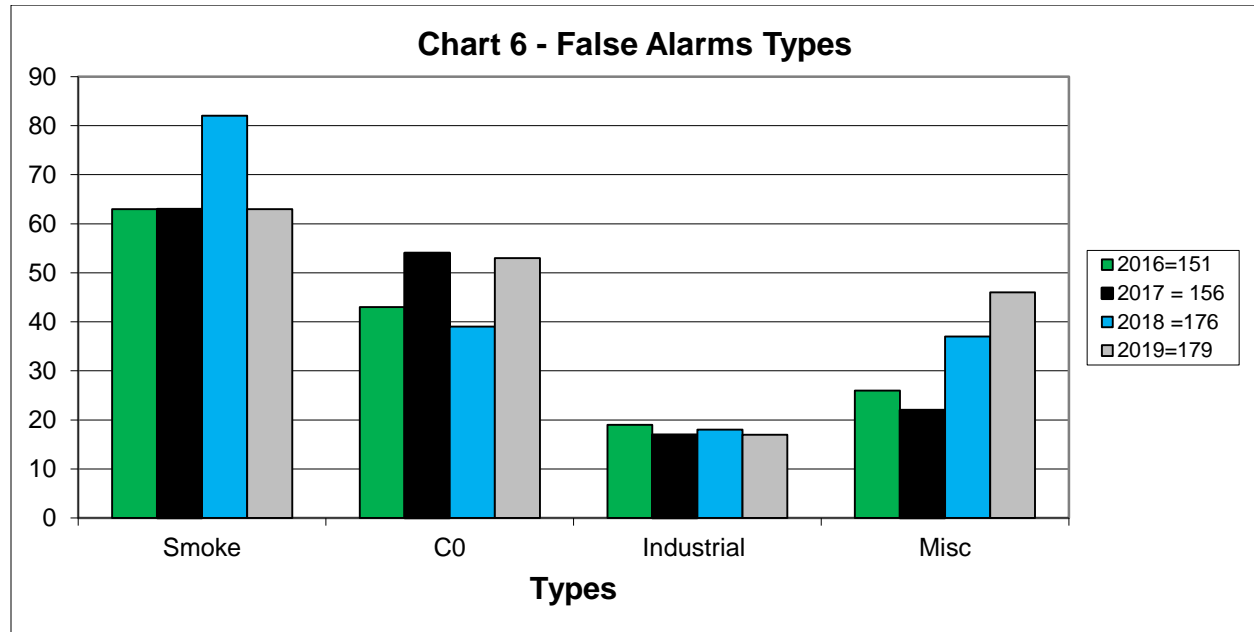
Attached is the “2016 thru 2019 Fire Department Response Motor Vehicle Collisions” map that visually identifies all the Fire Department attended sites including repeat locations and their frequency. As noted on the mapping, each fire district (identified by the 5 different colours) experiences their share of motor vehicle collisions while the west half of the municipality responds to a higher volume. Stations 1 (Puce) and 3 (Belle River) experience the higher density of vehicle collisions based on the urban-like setting.

False Alarms Types: Chart 6 below identifies the majority of false alarm categories over the last 4 years. These call types are alarm activations that result from alarm monitoring systems that notify the Fire Department or residential alarms that activate and the customer does not know why. The Fire Department responds to investigate and determine the cause.

False alarm responses can only be determined as false after the fire department has responded to investigate. Residential smoke alarm activation in this category can be from a careless cook, steam from a shower, construction dust, outdated smoke alarm, low battery alarm, and new construction multi-room smoke alarms that cause owner confusion with an accidental activation.

Carbon monoxide (CO) alarms must be investigated using a detection device to confirm CO does not exist. These false calls can be caused by low battery, outdated devices, and customer health symptoms mimicking CO exposure.

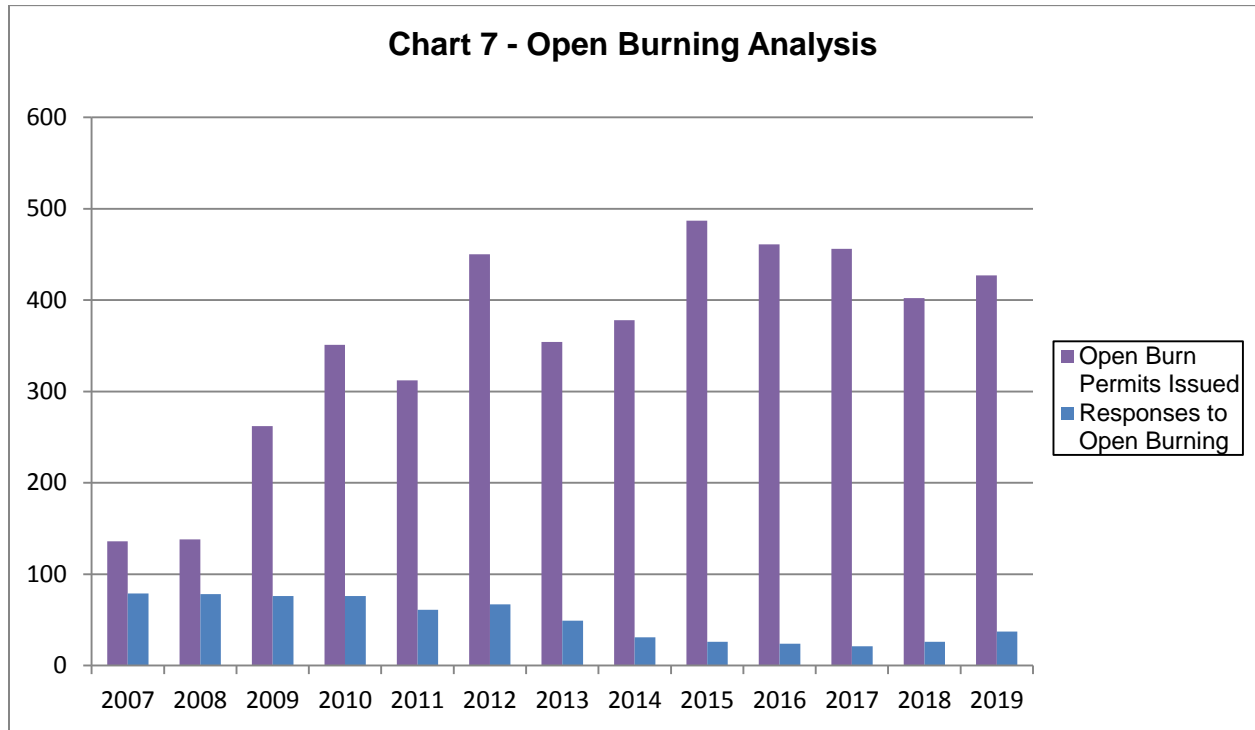
Industrial false alarms can be from bad detection devices, damaged sprinkler heads that cause water flow activating the alarm, person falsely activating a fire alarm pull station, and a fire alarm system malfunction. The fire inspection division ensures that fire alarm systems and devices are maintained in the buildings they inspect. Customers with two or more false alarms in a calendar year are assessed under the False Alarm By-law.



Open Burns

The Open Burn By-law was enacted in the spring of 2010. Chart 7 below shows open burn fire truck responses (blue) are now less than half of the 2010 response total. The no cost open burn phone call request has provided an opportunity to both educate the customer on fire safety and allow Fire Administration to know where the event is taking place.

Up until 2015 the burn permits counts shown, only represented one burn day at a time. The 2019 graph shows 427 permits which represents 1 day, 7 day and 1 month burn permissions where applicable. These changes were made to minimize customer call-in inconvenience, maximize their choice for weather appropriate burning and reduce Fire Administration time processing permit requests.



APPENDIX B

Response Data

The next 4 charts are intended to introduce our common emergency response measurements for Actual Structure Fire Responses, All Fires (Excluding Structures), MVC Responses, and Fire Alarm Activations.

The measurements shown represent all emergency responses for these categories in those years regardless of the time of day or day of the week. This connects later in the report when the Monday through Friday weekday only response focus is discussed.

Actual Structure Fire Responses: Chart 8 below is a comparative performance measure showing the “Actual Structure Fire” call volume for the last 10 years and the percentage of those calls that had at least 4 firefighters on the first responding truck. A minimum of 4 staff is required before the truck should leave the station.

Chart 8	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Actual Structure Fire Responses	19	33	16	25	20	19	20	22	22	21	23
First Response: 4 staff minimum (% of fire calls achieved)	95%	90%	100%	83%	80%	89%	90%	91%	86%	78%	88%
Depth of Service for structure fires: 10 staff/ 10 minutes 90% of the time	21%	15%	0%	4%	15%	11%	5%	9%	0%	0%	0%
Overall Department Average Assembly Time for structure fires Minutes: Seconds	6:06	5:43	6:41	6:11	6:28	6:56	7:06	5:53	5:56	6:31	7:02

The “Depth of Service” measurement was a former Ontario Fire Marshall guideline used to assess whether a minimum of 10 firefighters were on scene within 10 minutes of the call to staff the basic residential structure fire task requirements. Fire Administration has continued this measurement as a reference to historical performance.

The “Overall Department Average Assembly Time” represents how many minutes it takes for the first truck to leave the station after the pagers were activated. That truck has travel time to the location and onsite equipment set up before firefighting activities can begin. The depth of those activities is limited until additional trucks and personnel arrive. Truck launch times vary greatly depending on volunteer firefighter availability,

their location and activity when the pager is activated, day of the week, time of day along with weather and traffic conditions.

Fire doubles in size every minute. It can take 3 to 4 minutes for the process of fire discovery, initiating a 911 call and then dispatch gathering information before paging out the 2 nearest fire stations. Add assembly time for volunteer firefighters to get to the station and dress, then drive time from the fire station to the incident, and by the time fire crews arrive it will require several hours of firefighting efforts because of the amount of time the fire had to grow.

As Chart 8 shows, we can staff the first truck with 4 firefighters most of the time but it is taking longer to do it over the last 4 years. As the 10 staff in 10 minute percentage indicates, we typically don't have enough firefighters to properly engage the fire ground tasks until later in the event. This means fire control measures may be delayed, rescue efforts cannot begin and in places where hydrants don't exist – the potential to run out of water.

Attached is the "2016 thru 2019 Fire Response Structure Fires" map showing a visual representation of where the structure fires occurred across the municipality. Council will note that the majority of structure fires occur in the high density urban center throughout the Station 1(Puce) and Station 3 (Belle River) corridor. These same two fire stations respond to more than half of the Fire Department emergency responses each year.

Additional Response Data for other Call Types:

Charts 9 through 11 below show the number of calls per emergency type category, how many times there was 4 staff on the first truck, the average number of total staff that eventually attended that call type and how long it took to launch the first truck after pager activation. Note specifically the average staffing each year.

A minimum of 8 staff is typically enough to work emergency events for Charts 9 and 10.

However, change Chart 9 to a heat warning day or Chart 10 into a multi-vehicle event and the average attending staffing shown is not enough.

	2016	2017	2018	2019
Chart 9 - All Fires (Excluding Structures)	91	77	90	83
First Response: 4 staff minimum (% of fire calls achieved)	80%	71%	82%	80%
Depth of Service: Average # of Total staff	7.86	7.50	7.74	7.19
Overall Department Average Assembly Time for fires in minutes	6:46	6:25	6:54	6:13

	2016	2017	2018	2019
Chart 10 - MVC Responses	111	115	102	125
First Response: Minimum 4 staff (% of calls achieved)	71%	72%	69%	73%
Depth of Service: Average # of Total staff	7.47	6.90	6.75	6.73
Overall Department Average Assembly Time for MVA in minutes	5:59	6:30	6:26	6:02

	2016	2017	2018	2019
Chart 11 - Fire Alarm Activations	102	93	119	106
First Response: Minimum 4 staff (% of calls achieved)	78%	75%	73%	70%
Depth of Service: Average # of Total staff	5.45	5.28	4.82	5.47
Overall Department Average Assembly Time for Alarms in minutes	6:20	6:33	6:25	6:45

*Note: Actual "Fire" Alarm Activations above includes smoke/ fire alarm malfunctions, accidental activation and perceived fire emergencies. It does not include carbon monoxide alarm activation/ malfunction or related perceived emergency.

Chart 11 above shows that any fire alarm call over a 4 year period only turns out a small compliment of staff. If the alarm activation is a real emergency, those staffing numbers are not enough to address it.

APPENDIX C

Staff Coverage Discussion

Although the staffing numbers shown above are averages for those 4 years, it reflects calls that occurred at any time of day and any day of the week. With the volunteer firefighter service model, we have no idea who is available to respond. Every call is a wait and see if there is enough staff.

However, in the daytime, Monday through Friday we know from experience and now from a stats analysis, that “if” our typical daytime staff is at home and available to respond, we only have around 20 volunteer firefighters across the municipality. That number drops between commute times in the morning and the evening as staff transition to and from work.

Weekday Response Analysis:

In fact a detailed analysis of all 2019 emergency responses during Monday through Friday, from 6AM to 6PM identified that:

- 41% of all Lakeshore emergency responses occurred in that timeframe
- 4 firefighters was the average staff attendance
- 7 minutes was the average time before a truck left the station

Those average response rates Monday through Friday indicate that a potential fire event at any residential building, or a multi-storey building in the Amy Croft area (Station 1 – Puce - Fire District) would require a 4 Lakeshore fire station response to get enough staff to start the event. This delay in initial staffing and response equates to a potential delay in rescue efforts, increased structural damage and content loss, longer time to control the fire, an increased risk for firefighter safety and a lengthy displacement of the occupants.

Based on average station assembly and travel times, a hotel event would be 30 minutes underway when the final crew from Station 4 arrives to make an average total of 16 firefighters. This leaves the remaining municipality covered by Station 5 (Comber) and a request for Mutual Aid standby coverage from Kingsville, Essex and Tecumseh.

Here’s why the staff numbers in Chart 11 are concerning. Any fire alarm activation call without details to say otherwise, is assumed to be an emergency event until the Fire Department is advised or observes otherwise. If on arrival the alarm is actually a working fire, the department average daytime response of 4 staff members for alarm calls is not enough to work the event, also considering on average the first truck out only has 4 staff 74% of the time.

Each fire station is staffed between 15 to 20 firefighters with the intent that a typical emergency will turn out enough people resources. A larger event, like a reported structure fire is an automatic 2 fire station response. However, as noted in the weekday timeframe analysis, those staffing resources are limited to 4 firefighters per station.

With a new 6 storey hotel followed by five – 6 storey condominiums and a proposed 8 storey apartment building, an initial weekday single fire station alarm response of 4 or less firefighters has a very limited potential of what we can do. Windsor Fire and Rescue was consulted to determine the number of fire alarm activations and their typical response team size to a similar hotel site. They attend an average of 12 fire alarm calls per year with a minimum staffing response to that building type of 15 firefighters.

If the Windsor Fire and Rescue hotel alarm experience holds similar for Lakeshore (which does not include the multiple 6 storey condos beside the hotel and the 8 storey apartment building) Lakeshore Fire would be deploying staff from multiple stations and implementing Mutual Aid standby on a frequent basis. Something for which the Mutual Aid system was not designed.

In an attempt to supplement that limited weekday single station staffing response, a second station will soon be automatically added to the dispatch protocol for weekday fire alarm activations. This will apply to the area from the Patillo Road corridor westward to Manning Road for any large building, high occupancy building, and multi-storey structures. If this adjustment doesn't turn out the staffing numbers required, then an automatic 3 station daytime response will be considered.

The current weekday volunteer firefighter service model is challenged to provide the firefighter resources needed to support some of the higher demand emergency response types. Administration anticipates a further reduction in available weekday staffing as explained in the commentary below.

The future 2021 Fire Master Plan update will identify staffing options for Council to consider.

Additional impacts to Fire Department services:

- Currently the volunteer firefighter average service years is 16
- Over the next 2 to 3 years we anticipate 20 people will leave the department
- 7 of those are high seniority and have been retired from their fulltime employment for at least 10 years and have provided the Monday to Friday daytime emergency response coverage at their stations when available
- Those 7 also deliver fire trucks for repairs, maintain Fire Department equipment, test 27,000 feet of fire hose annually, and contribute significantly to in-school fire prevention week activities
- The only other available staff might be shift workers or those on vacation

- There is no staff coming up to replace those daytime helpers.
- Puce and Belle River fire districts should experience increased call volumes from continued municipal growth. This can push the envelope of firefighter work/ life/ mental health balance and our ability to retain them.

A fulltime firefighter presence is the only way to ensure those resources exist.

APPENDIX D

Firefighter Mental Wellness Tracking

All Fire Department staff have some level of exposure to emergency events and the various associated traumas. Our staff can be exposed to customers who experience a heart attack, significant blood loss, impalement, dismemberment, vehicle collision entrapment, suicide and in more recently – potential exposure to Covid-19. The potential physiological impact from the event itself, witnessing the effect on customer loved ones or relating the situation to someone you know, are just examples of how continued situational exposures can impact staff mental wellness.

In 2016 Fire Administration presented the R2MR (Road to Mental Readiness) Program to all firefighting staff. The principles of the training are included in yearly training topics to help keep the teachings top of mind. Fire Administration recently had 2 representatives attend 4 days of peer support training offered to all regional emergency services through Essex-Windsor EMS. Those 2 reps will take the most appropriate skills and information provided to develop a Lakeshore Fire program best suited for our department firefighter peer support representatives.

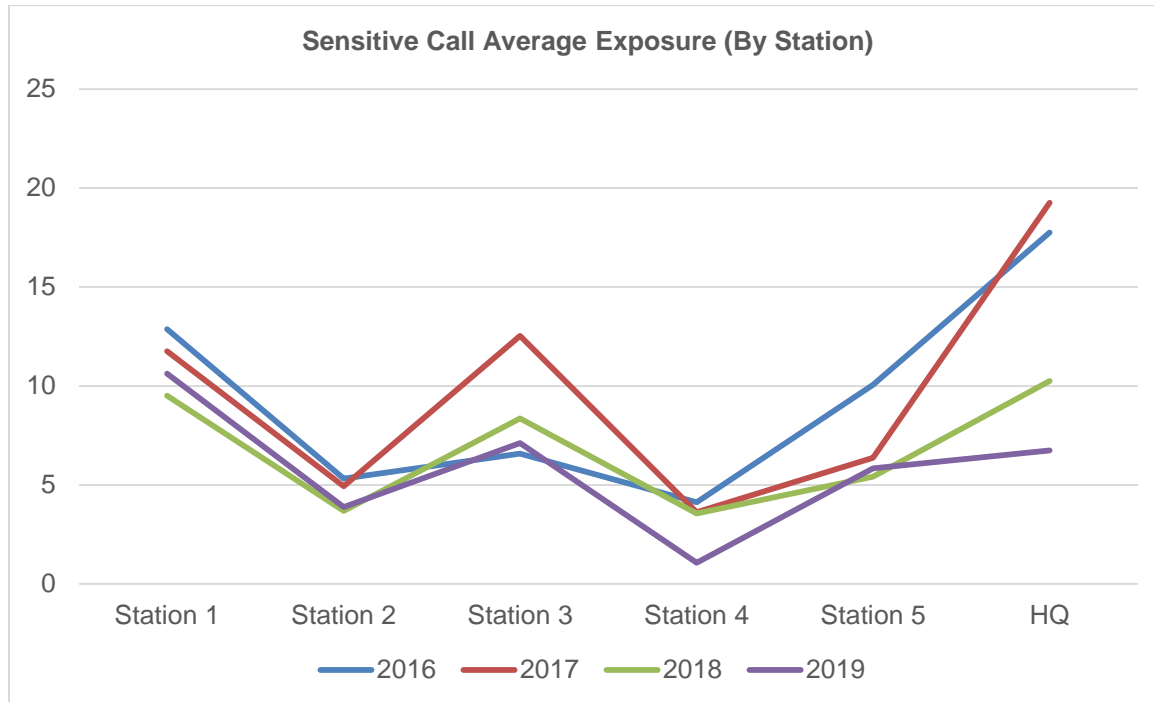
Fire Administration also began proactive tracking of first responder exposure to mental wellness events. In other words, since 2016, any emergency response call that had the potential to impact mental wellness has been tracked for each Fire Department member. Each “sensitive” call type is rated based on 1 of 4 categories:

- Assisted EMS in the ambulance on the way to hospital or assisted with body removal,
- Sights/ sounds/ hands on contact with the patient,
- On scene no exposure,
- Not on scene.

The frequency of sensitive call volume exposure is monitored and may result in a proactive discussion with involved staff to remind them of the events they have attended and the possible impact it could have on their mental wellness. Even our clerical support person can be impacted through her exposure to every fire report, downloading scene pictures and hearing office conversations from command staff.

Fire Service exposure to traumatic events can add to a staff member’s already stressed home and/ or work life. Lakeshore Fire is committed to the overall mental health of our team through these proactive measures and providing on scene support, post incident follow up and ensuring staff are aware of our Peer Support Team, Employee Assistance Plan, and access to local apps and resources available to them.

When it comes to mental health, we must look out for and support each other. Although there is always opportunity to do more, supporting the size of a volunteer firefighter model over the geography that we cover can be challenging.



The graph above demonstrates the average number of sensitive calls that firefighters attended at each station each year. Not every firefighter went to every sensitive call. Using Station 1 as an example, in 2016 (blue), of the 16 staff at that station, they were exposed on average 13 times to a sensitive call that year or a total of 45 sensitive calls over a 4 year period.

The HQ part of the graph represents the average number of sensitive calls that command staff attended across the 5 fire districts. In other words the 3 command staff (Chief, Deputy, and Assistant Deputy) were each exposed to an average of 54 calls over the same 4 year period.

Some high attendance firefighters at Station 1 have been involved in over 100 sensitive calls in the last 4 years. This points to a hidden challenge that the volunteer firefighting group faces with an increasing population area and the potential for more sensitive emergency response exposure. As a volunteer firefighter, you respond when available. A high attendance firefighter could see more sensitive calls than their fulltime city counterparts who work 7 – 24 hour shifts in a month.

Fire Administration participated in a 1.5 year Ministry of Labour Mental Health Coalition that was funded through a provincial grant. Essex-Windsor EMS Chief Bruce Krauter initiated the idea that saw representatives from all the regional emergency services, Canadian Mental Health Association, Family Services Employee Assistance Plan and other associated agencies meet to discuss mental health challenges for first responders. From that committee came several initiatives that included: regional training opportunities, development of an Equine-Facilitated Psychotherapy program, mental health videos and development of a regional first responder mental health app. The

intent was to further reduce the stigma and discrimination associated with first responder mental wellness and provide education, tools and contacts to build personal resiliency and support network awareness. Those goals and ongoing efforts continue today.

APPENDIX E

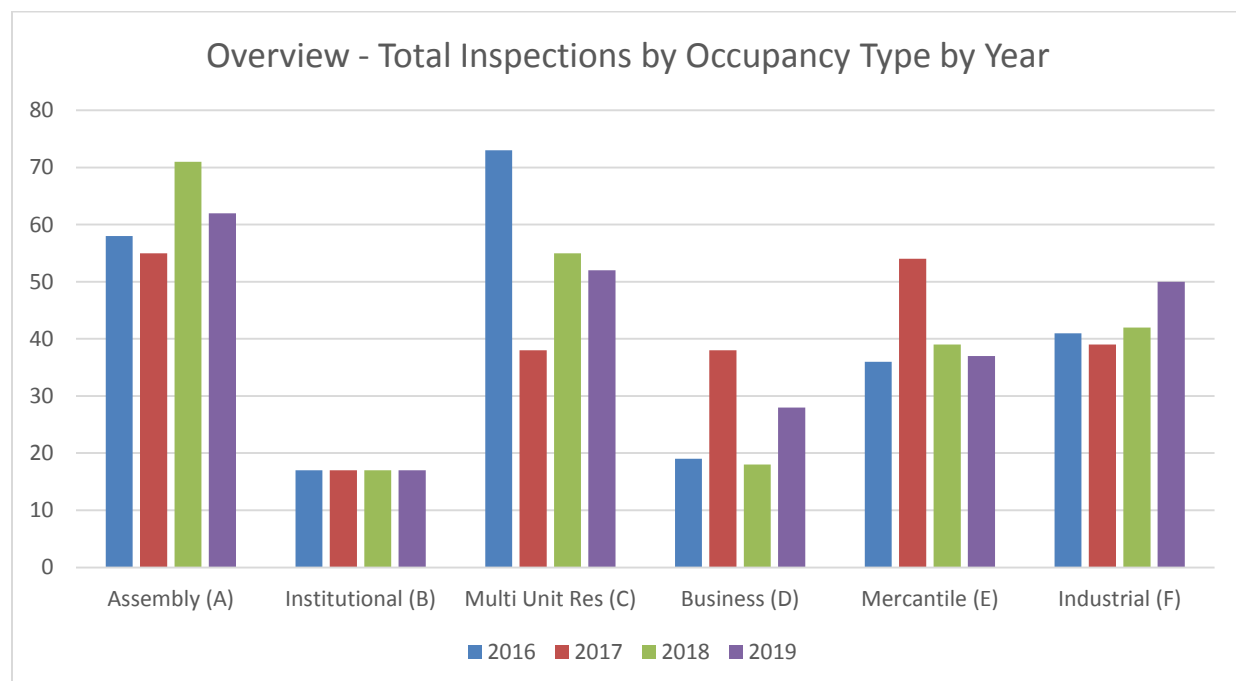
Part B: Fire Inspection and Code Enforcement:

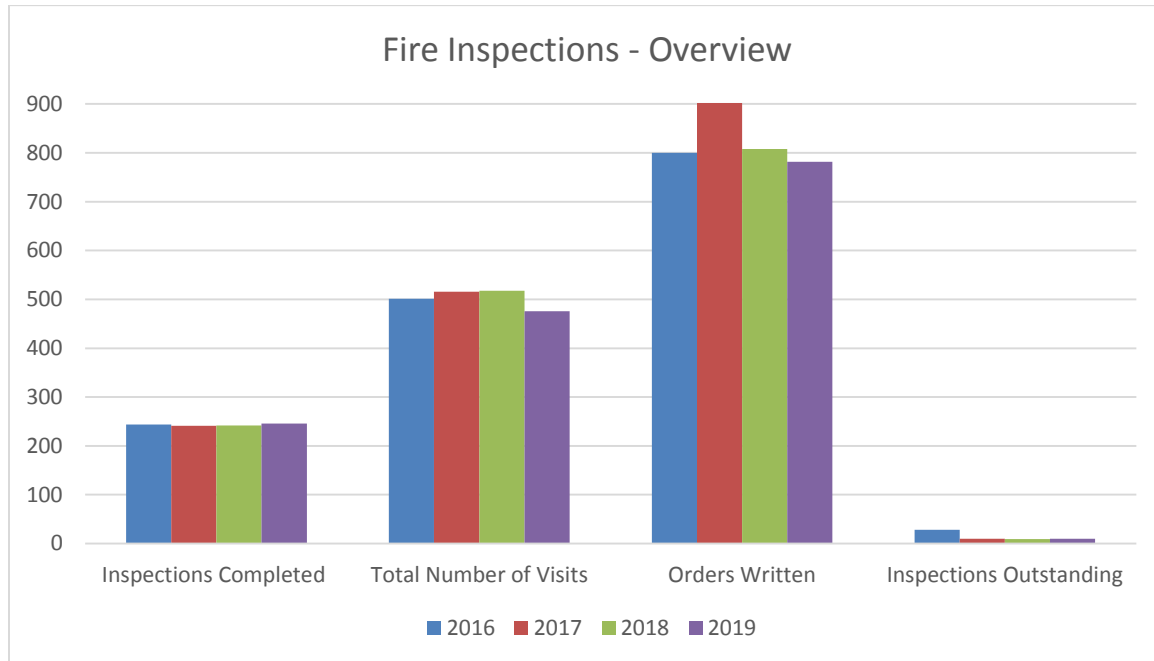
When a new building is constructed or renovated it must meet the requirements of the Ontario Building Code that include fire protection and life safety requirements. Once a building is approved by the building department for occupancy, it then becomes the responsibility of the Fire Department through the Ontario Fire Code to ensure all the fire protection and life safety devices are maintained for the life of that building.

Lakeshore's fire inspection program is "risk based" that started on high occupancy building types (schools, churches, long term care facilities, restaurants) and the high risk employment occupancies that could impact the community should the business be impacted by fire.

Depending on the occupancy type, the site inspections are based on 1, 2 and 3 year cycles. Some occupancy types must remain as annual inspections because of the associated fire risks and fire code requirements. The following 2 graphs illustrate the occupancy types that were inspected, the number of annual inspections, the number of visits to complete the inspection and the number of fire code deficiencies identified.

Through this 4 year report timeframe, there have been 973 site inspections that identified 3298 fire code deficiencies.





These statistics will vary from year to year depending on which occupancies are in the cycle (complexity), the time it takes to inspect the facility (size), the number of life safety devices that require third party confirmation they work (inspector time to review those documents), the number of deficiencies found, associated technical research, follow up visits and associated paperwork.

During this 4 year period, the Lakeshore Fire Department issued:

- 22 Inspection Orders
- 14 Provincial Offences Act Part 1 Tickets (total fines \$5,040)
- 1 Provincial Offences Act Part 3 Fine (\$4,350)

A snapshot of the 250 inspections completed in 2019 showed that a total of 4.4 million square feet of space was inspected which impacted almost 24,000 people in our community. Attached is the “2019 Fire Inspection Locations” map visually showing where those inspections occurred across the municipality.

The home Smoke Alarm check program was completed by fire crews during emergency response calls and through the fire inspection program. It resulted in 2226 site inspections and a 97% compliance rate.

Overall the fire inspection program has provided significant benefits for the community. Besides ensuring Fire Code compliance and a chance to educate the customer, it has identified hazardous sites, arranged Fire Department access through lock boxes, discovered buildings that have undergone illegal change of use, and provided information critical to Fire Department emergency response.