



# Committee Report

<b>To:</b>	Warden Hicks and Members of Grey County Council
<b>Committee Date:</b>	February 28, 2019
<b>Subject / Report No:</b>	PSR-CW-01-19
<b>Title:</b>	Response Time Performance Plan Results for 2018 and Analysis of Call Volumes and Response Times Over the Past 10 Years
<b>Prepared by:</b>	Kevin McNab
<b>Reviewed by:</b>	Kim Wingrove, Kevin Wepler
<b>Lower Tier(s) Affected:</b>	All Lower Tiers
<b>Status:</b>	Recommendation adopted by Committee of the Whole as presented as per Resolution <i>CW49-19</i> ; Endorsed by County Council on March 14, 2019 as per Resolution <i>CC24-19</i> .

## Recommendation

1. That Report **PSR-CW-01-19** be received for information; and
2. That the **2018 Paramedic Service response time performance results be submitted to the Ministry of Health and Long Term Care by March 31, 2019.**

## Executive Summary

The County of Grey Paramedic Service is committed to continuous improvements in performance and this is reflected in the response time targets that are developed and implemented annually. The County sets the response time performance targets in October for the upcoming calendar year. The County is required to report annually to the Ministry of Health by March 31st each year on the response time performance achieved under the previous year's plan.

For the 2018 calendar year the County was under the response time targets set for CTAS 2 and Sudden Cardiac Arrest call types. This is the second year in a row that the County was under the response time target for Sudden Cardiac Arrest and the third year in a row for CTAS 2 call types.

In 2018 the total patient call volume increased 7.35%. Over the past three years paramedic services has seen an increase in patient carrying call volume of 24.8%. The 2018 service volume for patient carrying calls now exceeds the number of calls being completed when the original response time targets were developed for the County in 2012. To meet response time

targets in the setting of continual yearly increases in call volumes will require additional resources, changes in targets or system service delivery.

By maintaining balanced emergency coverage, reducing responses to non-emergency calls, spreading of resources from days to nights and incremental increases in staffing the service has been able to reduce and maintain response times to code 4 emergency calls in the area of the 15 minute mark 90% of the time over the past 10 years.

The Ministry of Health and Long-Term Care (MOHLTC) is embarking on a journey to enhance and modernize the province's emergency health services (EHS) system. The province is investing in a new medical dispatch system that will help triage and prioritize 911 calls for paramedic services. Recent updates to the Ambulance Act will allow paramedics to assess patients and make decisions to manage those patients in new ways, under appropriate medical delegations and where deemed safe and appropriate to do so.

## Background and Discussion

The County of Grey Paramedic Service is committed to continuous improvements in performance and this is reflected in the response time targets that are developed and implemented annually. This report provides the results of the County's 2018 response time performance as well an additional analysis of response times by Lower Tier Municipality, increasing call volumes and the service's response time performance over the past 10 years.

The County sets the response time performance targets each October for the upcoming calendar year. The County is required to report annually to the Ministry of Health by March 31st of each year on the response time performance achieved under the previous year's plan. In 2012 the County determined the original response time performance targets based upon response times that the paramedic service was achieving at that time.

## Percentile Response Time Measurement

An important measurement of how a paramedic system is performing is indicated in the time in which it responds to emergencies. The response time is measured from the time the crew is first notified until the paramedic radios that they arrived at the scene of the emergency. A percentile response time measurement is the percentage of calls where paramedics arrive at the scene of an emergency in a specified time frame. For example if the response time performance plan was to arrive on scene within 15 minutes 90 % of the time and it was measured against 1000 calls, 900 calls would have to be under 15 minutes to meet the target.

## Response Time Performance 2018

The 2018 response time performance for the County of Grey Paramedic Services is identified in the chart below. The chart also indicates an average of the yearly reported response times for the previous 5 years.

<b>Call Type</b>	<b>Provider</b>	<b>Response Time Target</b>	<b>2018 Target</b>	<b>2018 Performance</b>	<b>5 Year Average</b>
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Call Type	Provider	Response Time Target	2018 Target	2018 Performance	5 Year Average
Sudden Cardiac Arrest (SCA)	Community Defibrillator or Paramedic Response	Six (6) minutes or less	40%	38.24%	44.03%
CTAS 1	Paramedic Response	Eight (8) minutes or less	60%	61.21%	64.14%
CTAS 2	Paramedic Response	Fifteen (15) minutes or less	90%	89.39%	89.68%
CTAS 3	Paramedic Response	Twenty (20) minutes or less	90%	96.87%	97.12% (20 min) 99.85% (30 min)
CTAS 4	Paramedic Response	Twenty (20) minutes or less	90%	96.90%	96.93% (20 min) 99.40% (30 min)
CTAS 5	Paramedic Response	Twenty (20) minutes or less	90%	97.16%	96.42% (20 min) 99.55% (30 min)

For the 2018 calendar year the County was under the response time targets set for CTAS 2 and Sudden Cardiac Arrest call types. This is the second year in a row that the County was under the response time target for Sudden Cardiac Arrest and the third year in a row for CTAS 2 call types.

In 2015 due to the previous above target performance the County improved the response time targets for arrival at CTAS 1 calls in 8 minutes from 50% to 60%. For CTAS 3 to 5 the response time commitment was also improved by reducing the time to respond from 30 minutes to 20 minutes 90% of the time.

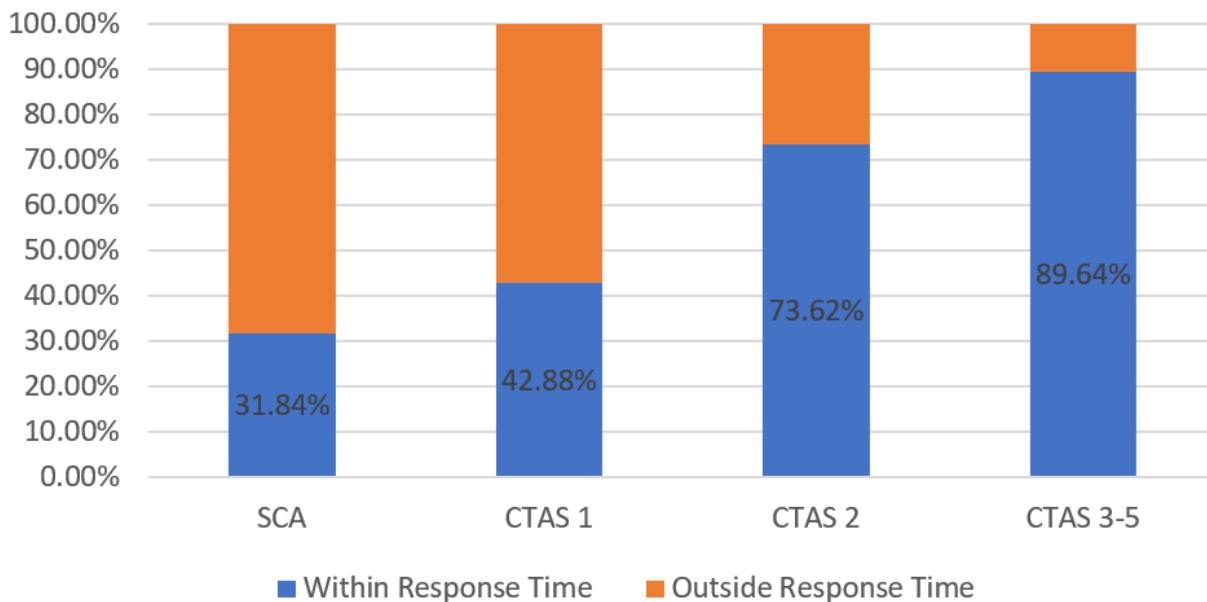
## Challenge of Meeting Targets in Rural Ontario

Across the Province call volumes for high priority life threatening calls make up a small portion of the overall call activity for paramedic services. Response to Sudden Cardiac Arrest and CTAS 1 calls make up less than 2 % of the total call volumes performed by Grey County Paramedic Services. Provincial targets are designed for a 4 to 5 minute travel time to a sudden cardiac arrest call and a 6 to 7 minute travel time to a CTAS 1 call. The low population density

and large geography makes it difficult to meet response time target criteria outside of the urban areas where the ambulances are located.

The following charts indicate the percentage of the population living within and outside the response time targets based upon paramedic base locations within the County of Grey.

## Population within response times



	Within Response Time	Outside Response Time	Response Time (accounting for 1 minute reaction time)
SCA	31.84%	68.16%	5 Min
CTAS 1	42.88%	57.12%	7 Min
CTAS 2	73.62%	26.38%	14 Min
CTAS 3-5	89.64%	10.36%	19 Min

The following chart details the 2018 response time performance broken down by Lower Tier Municipalities within the County of Grey.

Municipality	SCA 6 Min - 40%	CTAS 1 8 Min - 60%	CTAS 2 15 Min 90%	CTAS 3 20 Min 90%	CTAS 4 20 Min 90%	CTAS 5 20 Min 90%

Municipality	SCA 6 Min - 40%	CTAS 1 8 Min - 60%	CTAS 2 15 Min 90%	CTAS 3 20 Min 90%	CTAS 4 20 Min 90%	CTAS 5 20 Min 90%
	Percentage of Calls meeting Response Time Standard					
County of Grey 2018	38.24	61.21	89.39	96.87	96.90	97.16
Blue Mountains	25.00	57.14	93.51	97.23	100	100
Chatsworth	14.29	7.69	45.12	91.06	89.29	96.88
Georgian Bluffs	12.50	53.33	92.09	95.87	94.59	100
Grey Highlands	12.50	39.13	70.89	83.85	89.47	85.19
Hanover	75.00	90.48	98.73	100	100	92.59
Meaford	42.86	50.00	93.67	96.9	97.37	100
Owen Sound	84.62	97.37	97.05	99.08	99.53	100
Southgate	0	9.09	83.67	94.9	93.1	100
West Grey	37.50	64.29	84.35	98.41	95.83	96.97

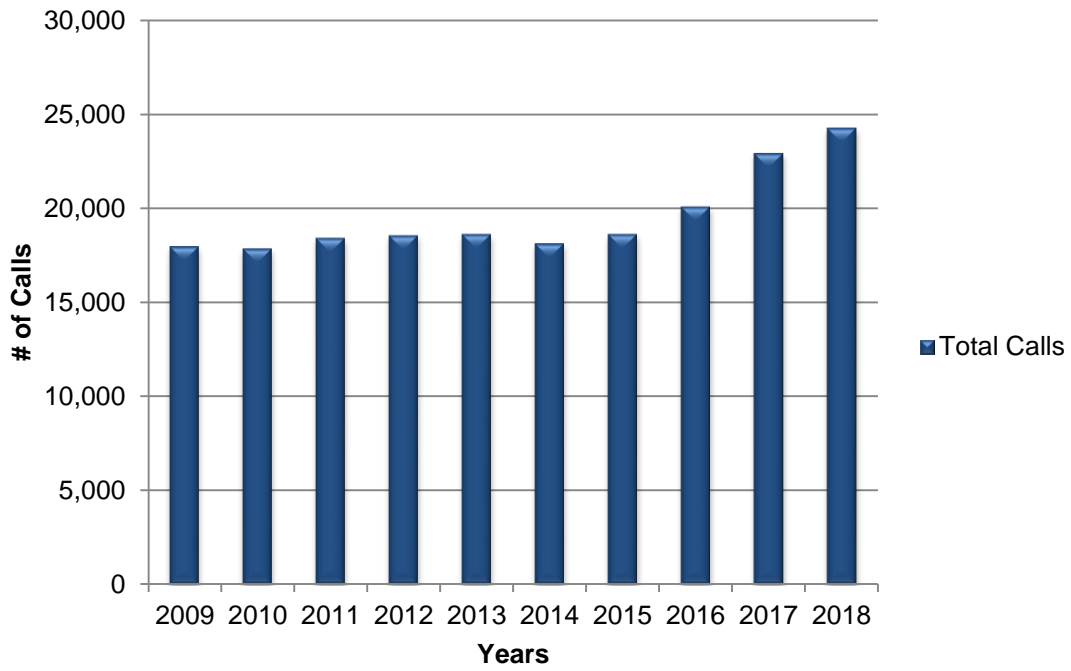
It is recognized by staff that The Township of Chatsworth and Grey Highlands overall response times are consistently lower than the other Lower Tier Municipalities within the County. It is anticipated that the building of the new Chatsworth Base will help reduce response times in that area. Grey Highlands should be considered for future enhancements when our next system improvement occurs.

## Increasing Emergency Call Volumes

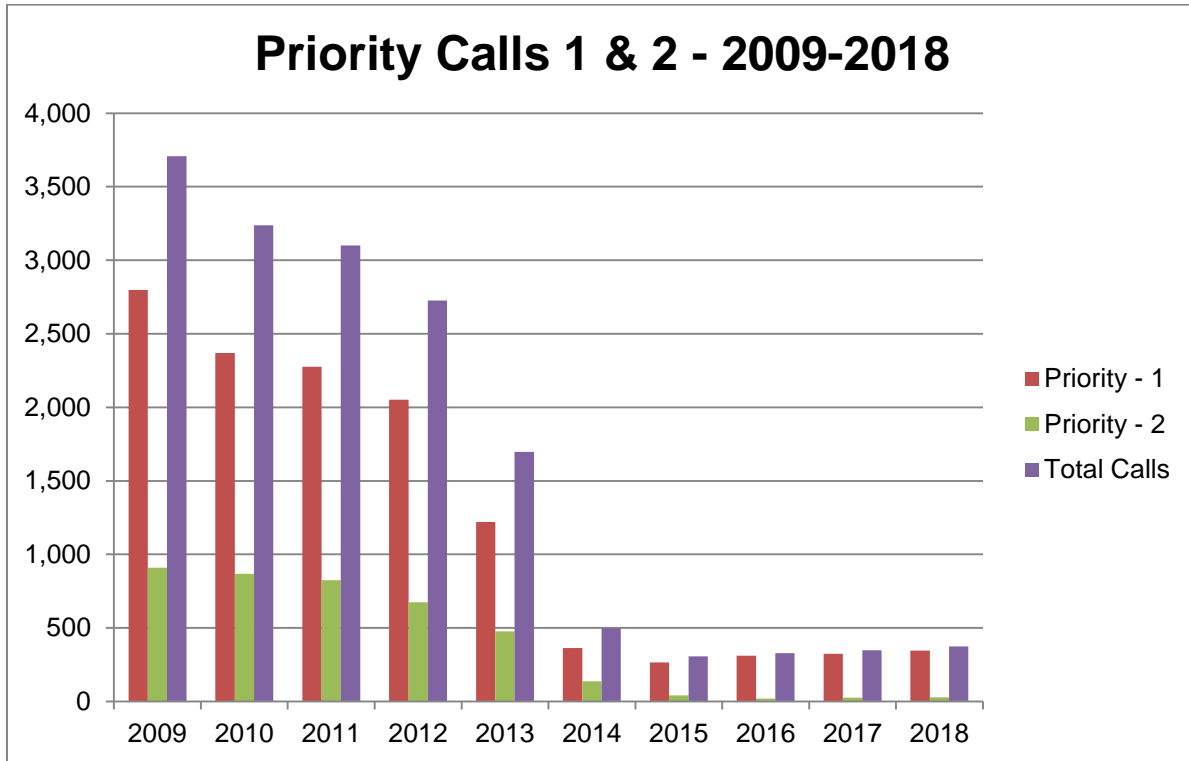
It is important to recognize that call volumes have been increasing at an average of 6.6% for code 3 and 4.9% for code 4 calls annually over the past 10 years. In 2012 the total volume for non-emergency and emergency calls was at a total of 10,934. Non-emergency call volumes at that time were 2,726. Since 2012 paramedic services has concentrated its ability to respond to emergency calls while reducing its ability to respond to non-emergency calls. In 2018 the non-emergency call volume was 345 while the emergency call volume was 11,369 for a total of 11,743 calls. In 2018 the total patient call volume increased 7.35%. Over the past 3 years patient call volume has increased 24.8%. The 2018 service call volume now surpasses the number of calls when the original response time targets were developed for the County in 2012. To meet response time targets in the setting of continual yearly increases in call volumes will require additional resources, changes in targets or system service delivery.

## Total Call Volumes by Year Code 1,2,3,4 and 8 the Past 10 Years

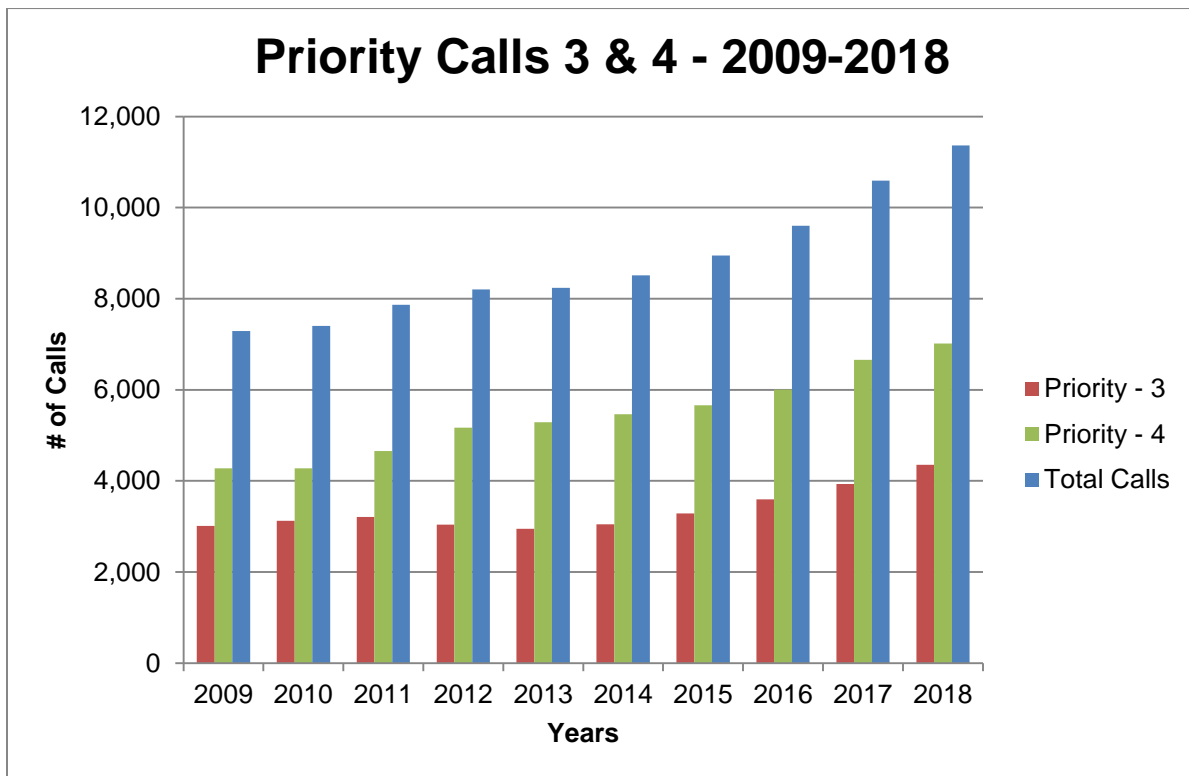
## Total Calls 2009-2018



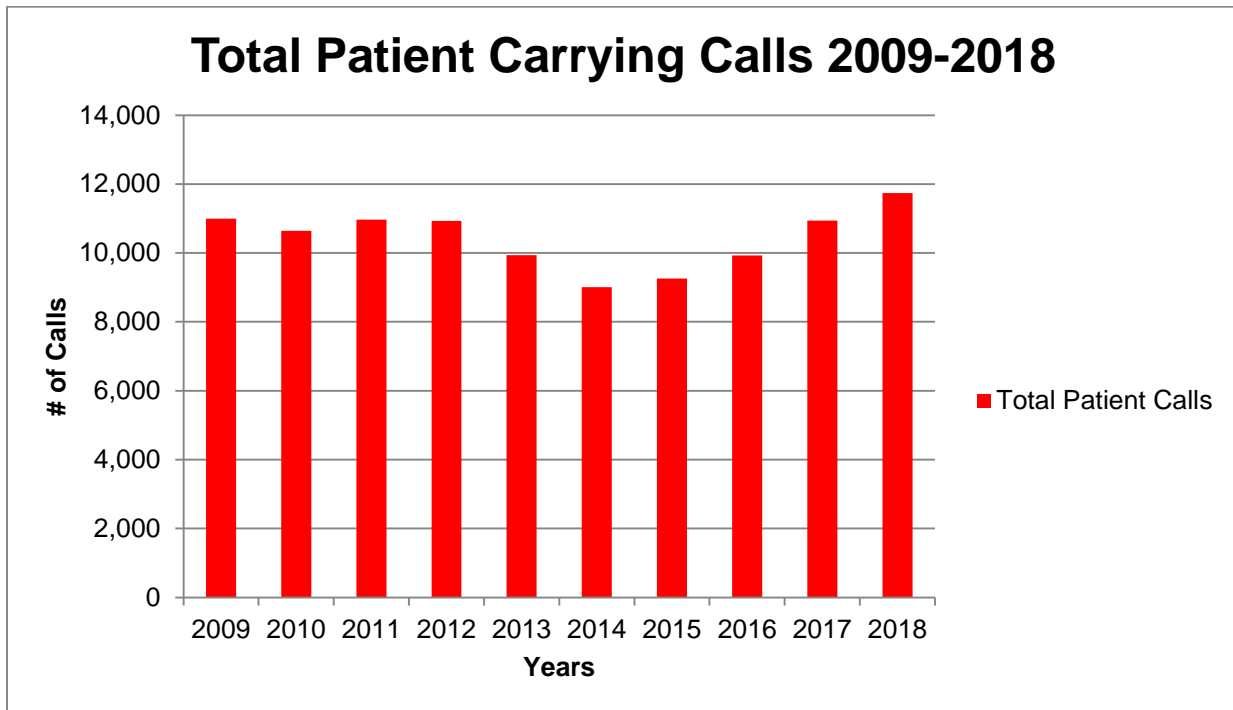
## Non-Emergency Call Volumes the Past 10 Years



## Emergency Call Volumes the Past 10 Years



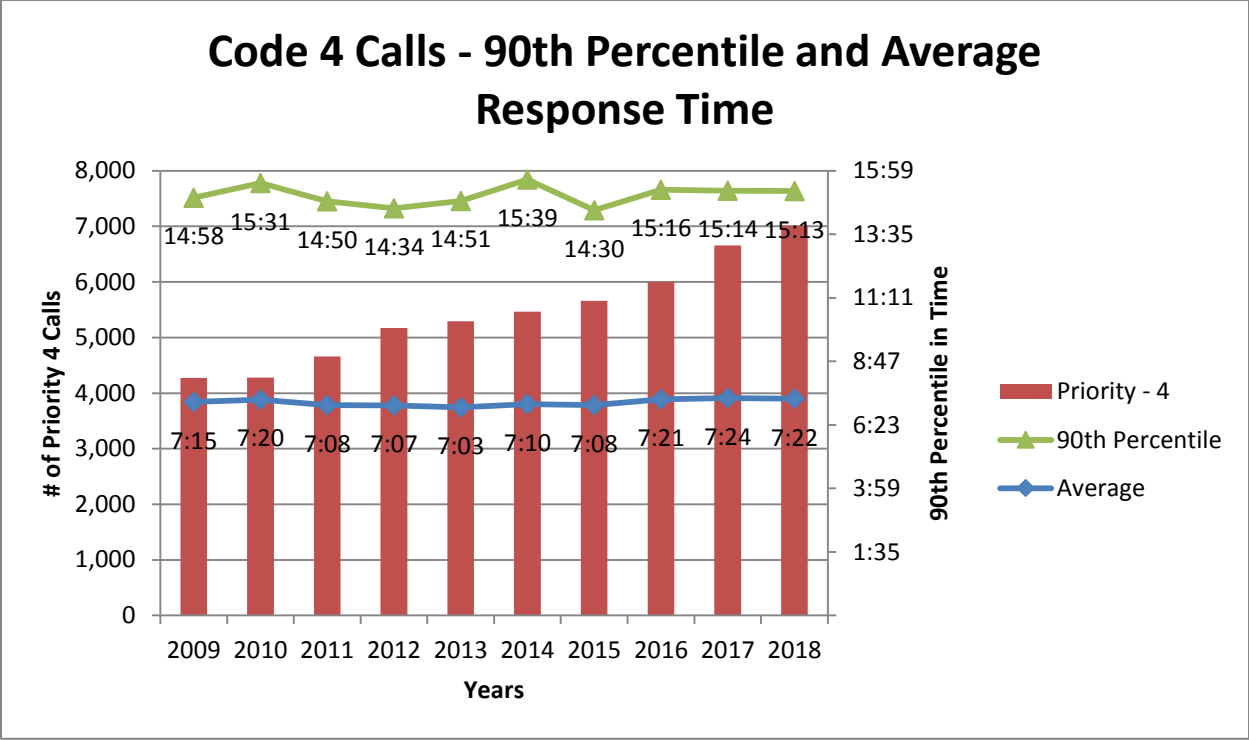
## Total Patient Call Volumes the Past 10 Years



## Historical Analysis of Code 4 Calls and 90<sup>th</sup> Percentile Response

In 2004 when the County assumed the direct delivery of the paramedic service there were 12 ambulances on shift during weekdays, 9 ambulances on weekend days and 5 ambulances on nights. The response time reported to the Ministry of Health from September to December of that year was 17:00 minutes. To improve response times the service instituted guidelines for minimum emergency coverage and balanced emergency coverage. Over the years the service also reduced its ability to complete non-emergency calls and concentrated on its core responsibility of responding to emergency calls. In 2011 due to increasing call volume an additional 12 hour ambulance was added in The Town of The Blue Mountains on weekends and holidays during ski season. In 2013 an 8 hour per day ambulance was taken off of the Monday to Friday shift and with the addition of 2 FTE paramedics a 12 hour night ambulance was added to Dundalk. In 2015 an additional 8 hour per day ambulance was combined with two additional FTE paramedics to add an additional 12 hour night ambulance to Craighleith. In January 2019 an 8 hour per day ambulance was taken off of the Monday to Friday shift to add a 7 day per week 12 hour per day first responder/patient navigator. This position will also provide navigation services for frequent users of the 911 system. The paramedic will support the coordination of the most appropriate health care resource (s), improve access to existing community and primary care services and reduce non-essential emergency department visits in the future. Today there are 9 ambulances and 1 emergency first response unit on shift 7 days per week and 7 ambulances on nights. By maintaining balanced emergency coverage, reducing responses to non-emergency calls, spreading of resources from days to nights and incremental increases in staffing the service has been able to reduce and maintain response times to code 4 calls in the area of the 15 minute mark 90% of the time over the past 10 years.





## Addressing Increasing Call Volumes and Response Time Performance

### *Enhancing Emergency Services Ontario*

The Ministry of Health and Long-Term Care (MOHLTC) is embarking on a journey to enhance and modernize the province’s emergency health services (EHS) system. The purpose is to improve and sustain quality coordinated care across the patient’s journey to accessing care.

The province is investing in a new medical dispatch system that will help triage and prioritize 911 calls for paramedic services. This new system will be implemented at the Mississauga site first before spreading across the Province. This system will better prioritize calls based on patient need and redirect low acuity patients to locations other than emergency departments in instances where it would be safe and appropriate to do so.

Recent updates to the Ambulance Act will allow paramedics to assess patients and make decisions to manage those patients in new ways, under appropriate medical delegations and where deemed safe and appropriate to do so. Options include providing some forms of treating and referring the patient to continuing care (e.g., primary, home and/or community-based) or releasing the patient, without the need for transport to the emergency department. Consideration can also be given in the use of vehicles other than ambulances, for instance “emergency response vehicles”, for use by services to respond to low acuity calls in a Treat & Refer/Treat & Release model where patient transport is not deemed required. Previously, paramedics were bound by law to transport patients to hospital facilities only. Providing more flexibility will allow patients to receive the most appropriate care while reducing unnecessary

trips to emergency departments. This approach will also assist in having ambulances available to respond to emergencies by not having their services tied up on low acuity calls.

## Staffing Considerations

The community paramedic program is currently staffed 5 days a week on a 12 hour shift. The primary role of this position is to treat patients with chronic diseases within their home. If the community paramedic is the closest vehicle to an emergency call they will first respond in the capacity of a primary care paramedic until an ambulance arrives. The community paramedic is currently working out of the Chatsworth base allowing for first response at the beginning and end of each shift. An option to increase first response coverage is staffing the community paramedic vehicle 7 days a week. Staff will continue to work with the Southwest LHIN to advocate for funding of the community paramedic program for 7 days a week coverage.

## Legal and Legislated Requirements

Land Ambulance Response Time Standard Reg 257/00 Part VIII

Upper tier municipalities are responsible, either directly or through selected operators, for ensuring that patient care and transport are carried out in accordance with applicable legislation, standards and procedures. They are also responsible for the supervision of staff, maintenance of vehicles and equipment and the provision of a quality assurance program.

## Financial and Resource Implications

None

## Relevant Consultation

External:

Internal: CAO, Finance

## Appendices and Attachments

None