

Paramedic Services Committee Report

To: The Chair and Members of the Paramedic Services Committee

From: Russell King, Chief, Brant / Brantford Paramedic Services

Date: March 26, 2025

- **Report #:** RPT-0089-25
- Subject: Paramedic Services Statistical Package
- Purpose: For Information

Recommendation

That report RPT-0089-25 Paramedic Services Statistical Package be received as information.

Executive Summary

This report provides an overview of service metrics from January – February 2025.

Strategic Plan Priority

Strategic Priority 5 - Healthy, Safe, and Engaged Citizens

Impacts and Mitigation

Social Impacts

Paramedic Services has a significant social impact as it is responsible for providing land ambulance service in the Brant-Brantford area. This report outlines data related to service metrics and identifies ongoing challenges faced by the Service as it interacts with the broader healthcare system primarily operated by the province, including significant offload delays at the local hospital.

Environmental Impacts

There are no environmental impacts associated with this report.

Economic Impacts

There are no economic impacts associated with this report.

Report

Background

This report provides current year-to-date and historic service metrics for Brant / Brantford Paramedic Services (the Service) and outlines some of the challenges facing the Service including the significant strain on the Provincial healthcare system.

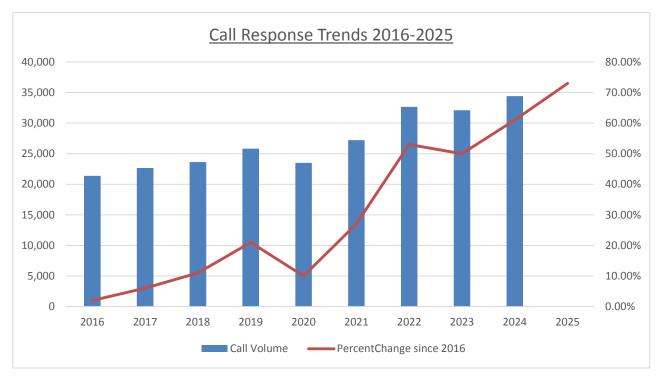
<u>Analysis</u>

The statistics presented in this report provide updates on calls responded to by the Service from January – February 2025 as well as comparable information from previous years. The Ministry of Health (MOH) has also added a new data set which has resulted in some adjustments to the end-of-year figures as noted below. The new data set provides more accurate information.

Call Response Trends 2016-2025

The charts below show that the number of calls has steadily increased across the 2016-2025 period. Across the ten-year period, the number of calls increased by 73% from 21,376 to a projected 36,989 in 2025.

Year	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025*
Number of Responses	21,376	22,657	23,623	25,818	23,491	27,219	32,651	32,114	34,406	36,989
Percentage Change Each Year	2%	6%	4%	9%	-9%	16%	20%	-2%	7%	7%
Percentage Change Since 2016	-	6%	11%	21%	10%	27%	53%	50%	61%	73%



As articulated in previous reports, several factors contribute to the rise in call volumes. Notable factors include the aging and growing population in the Brant-Brantford area. As outlined in the 2016 Service Action Plan, the age cohort with the highest likelihood of calling an ambulance is 75 years of age and older has increased from 6.9% in 2001 to 8.2% in 2021 and is forecasted to increase to 11.2% of the population by 2031. An aging population is not a trend limited to the Brant-Brantford area, and as such, continued systemic pressure will be placed on the Provincial Healthcare System.

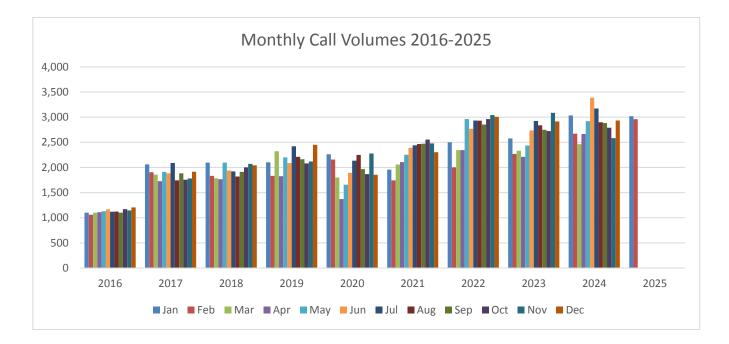
In addition to aging, the population continues to grow rapidly. Between 2016-2021 census data highlights that the population increased by 6.2% in the City of Brantford and 10.8% in the County of Brant. A higher population contributes to an increased demand for paramedic and emergency services.

To respond to heightened call volumes, the Service is exploring ways to support community health and wellbeing by adding resources to ensure coverage, as well as expansion of the Community Paramedic Program to reduce calls for service or transport to hospitals. However, it's important to note that the actions of the Service are limited as emergency medical services are heavily influenced by the Provincial Healthcare System and the systematic issues impacting it.

Monthly Call Volumes

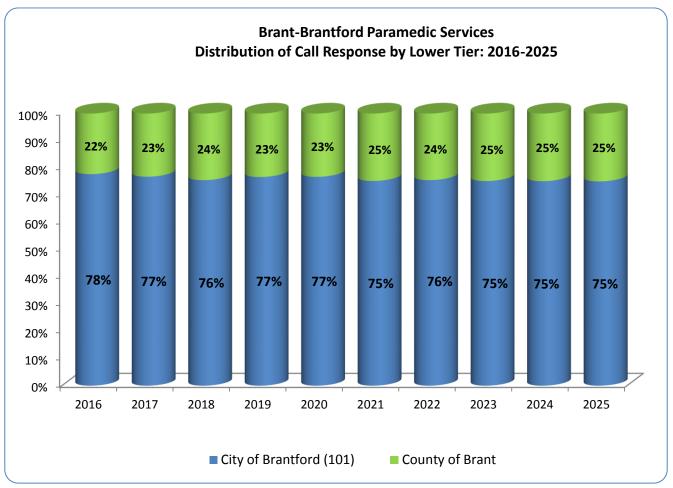
The graph below shows call volumes by month from 2016-2025. This data shows the increase in monthly call volumes for 2025

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	1,102	1,060	1,101	1,109	1,130	1,167	1,121	1,122	1,100	1,172	1,146	1,205
2017	2,062	1,905	1,859	1,729	1,911	1,883	2,091	1,745	1,883	1,756	1,781	1,917
2018	2,096	1,834	1,785	1,766	2,096	1,937	1,922	1,820	1,913	2,000	2,071	2,042
2019	2,103	1,833	2,323	1,828	2,202	2,088	2,421	2,213	2,165	2,081	2,118	2,449
2020	2,263	2,158	1,801	1,371	1,659	1,892	2,136	2,249	1,968	1,868	2,277	1,855
2021	1,956	1,744	2,059	2,106	2,252	2,391	2,441	2,467	2,471	2,555	2,480	2,303
2022	2,500	2,000	2,345	2,345	2,963	2,768	2,935	2,930	2,853	2,964	3,043	3,006
2023	2,576	2,269	2,331	2,210	2,439	2,736	2,923	2,840	2,748	2,724	3,087	2,914
2024	3,035	2,674	2,462	2,668	2,920	3 <i>,</i> 386	3,173	2,899	2,882	2,790	2,583	2,934
2025	3,020	2,959										



Geographic Distribution of Call Responses

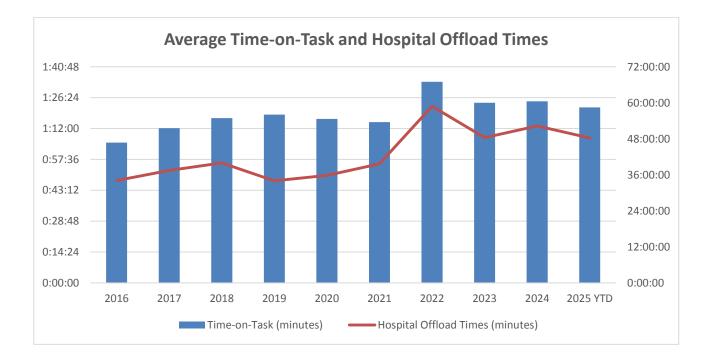
The chart below signifies the distribution of call responses within the County and City. Data shows that the distribution of call responses has remained stable over the past ten years with approximately 25% of calls coming from Brant and 75% from The City of Brantford.



Call Time and Offload Delays

Each call requires a certain time for response, treatment, patient transport to hospital, offload at the hospital, and cleaning of the ambulance and equipment prior to the resumption of service. This total time from response to returning to service is called "time on task." This measure is closely linked to the ability of the hospital to offload patients into care. The following table shows the average time on task and hospital offload times since 2016 and the relationship between these two measures.

Year	Time-on-Task (minutes)	Hospital Offload Times (minutes)
2015	1:04:33	33:35:00
2016	1:05:26	34:05:00
2017	1:12:10	37:28:00
2018	1:16:53	39:58:00
2019	1:18:28	34:01:00
2020	1:16:28	35:50:00
2021	1:14:59	39:40:00
2022	1:33:49	58:49:00
2023	1:23:59	48:22:00
2024	1:24:43	52:18:00
2025 YTD	1:21:51	48:16:00



In 2024, with continued provincial funding support, we have two dedicated offload nurses at the hospital, expanding on the project launched in February 2023. This initiative has shown positive results, temporarily reducing offload delays and code zeros. Additionally, offload times are trending downward, thanks to the added funding and assistance from the Ministry of Health and Long-Term Care (MOH-LTC) Special Advisory Group, which has been working closely with Brantford General Hospital.

We have recently received confirmation from the Ministry of Health for an additional one-time funding of \$628,234 for 2024-25 to further support the Dedicated Offload Nurse Program, securing its funding until March 31, 2025. We also anticipate the funding to continue in 2025-26. The Brantford General Hospital has now enhanced staffing within the Emergency Department, to increase offload nursing capacity in the coming months, aiming to sustain these improvements and further boost service efficiency.

Rising hospital offload times increase the amount of time an ambulance and its paramedics commit to a call and as a result diminish the Service's resources and capacity. Hospital offload times have increased significantly over the years while call volumes are reaching record levels. Combined with ongoing staffing shortages of physicians and nurses this has resulted in an inadequate hospital bed capacity. Rising offload times coupled with these increased calls for service have created a demand for paramedic and emergency services that has increased dramatically beyond the natural growth of the municipalities. The Ministry of Health, Emergency Health Services Division, continues to engage with the local healthcare system to facilitate improvements to offload delays experienced in the emergency room of the hospital. The Service and Brant Community Healthcare System (BCHS) senior staff meet regularly to discuss and enact mitigation strategies to minimize the impact to ambulance capacity.

The Service has explored additional options supported by temporary provincial funding, including Community Paramedic Programs and Long-Term Care initiatives. These efforts have helped manage over 5,000 calls annually while also diverting a significant number of patients from hospital emergency departments, reducing strain on the healthcare system.

System Usage

A 24-hour staffed ambulance with a paramedic crew is estimated on average to be able to manage 3,832 calls annually, which has been adjusted to account for an increase in offload delays. As the Service approaches and exceeds 100% of its capacity, its ability to address service calls decreases and responses to emergencies and/or high periods of service demands are hindered. This results in increased occurrences of Code Zeros (when there are no ambulances in the community), increased response times due to ambulances responding from adjacent communities, and the potential that a critically ill citizen may not have an ambulance available when required.

The table below outlines the extent to which available Service resources are being utilized.

Year	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Annual Vehicles Deployed (Average)	5.5	6	6.5	6.5	7	7	7.5	8	8.5	99
Annual Call Volume	21,376	22,657	23,623	25,818	23,491	27,219	32,651	32,114	34,406	36,989
Call Volume per Vehicle	3,887	3,776	3,634	3,972	3,356	3,888	4,353	4,014	4,048	4,110
Call Volume Capacity	99%	95%	96%	104%	89%	104%	116%	107%	106%	107%

As outlined in the table above, the Service is still exceeding maximum call volume per vehicle which leaves no buffer to respond to large-scale incidents. The Service's call volume continues to rise due to the growing and aging population which limits primary care resources in the community, urgent care options, and increases propensity to call an ambulance. Evaluating opportunities to enhance capacity across jurisdictions is required to meet the growing needs of the community. Call volume capacity is expected to decrease with the addition of a 12-hour ambulance on July 1, 2025, as approved by Committee and Council.

Response Time Achievement

The Service's ability to provide lifesaving responses to citizens facing a medical emergency is based on the achievement of rapid response times to the most critical types of medical emergencies. The Service has set response time standards in accordance with guidelines from the Ministry of Health.

The 2025 Benchmark for Sudden Cardiac Arrest was adjusted to 60% by Council (RPT-0371-24 Response Time Targets and Performance Plan) and will begin to be measured against that standard in November 2024.

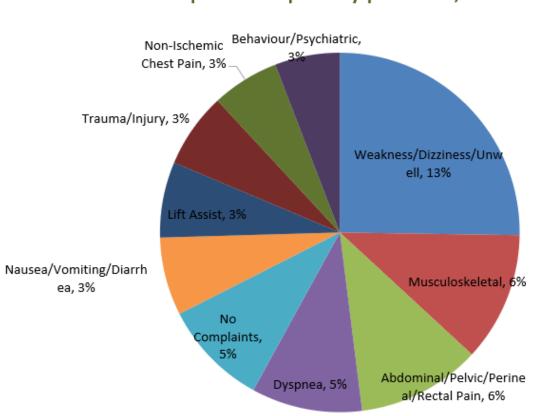
Response Time Standards	Benchmark	2025	2024	2023	2022	2021	2020
Sudden Cardiac Arrest	60%	39%	55%	44%	31%	41%	52%
Standard - Defibrillator on Scene within 6 minutes							
CTAS 1 patients – Resuscitation - Threat of Life	65%	76%	71%	65%	63%	66%	73%
Standard - less than 8 minutes response time							
CTAS 2 patients – Emergent – Threat of Life or Limb	80%	79%	81%	79%	91%	96%	96%
Standard - less than 10 minutes response time							
CTAS 3 patients – Urgent – Potential for Life or Limb	90%	92%	93%	91%	87%	94%	75%
Standard - less than 15 minutes response time							
CTAS 4 patients - Less Urgent	90%	88%	91%	91%	84%	93%	74%
Standard - less than 15 minutes response time							
CTAS 5 patients – Non-Urgent	90%	91%	91%	97%	86%	92%	95%
Standard - less than 15 minutes response time							

Call Types

The table below outlines the distribution of the top ten types of calls for 2025. Calls are classified in 109 possible categories. Across all call categories, reports of feeling weak, dizzy, and unwell were the most common final problem reported to date in 2025.

Final Primary Problem	Percentage of Total Calls
Weakness/Dizziness/Unwell	13%
Musculoskeletal	6%
Abdominal/Pelvic/Perineal/Rectal Pain	6%
Dyspnea	5%
No Complaints	5%
Nausea/Vomiting/Diarrhea	3%
Lift Assist	3%
Trauma/Injury	3%
Non-Ischemic Chest Pain	3%
Behaviour/Psychiatric	3%

Other categories include 99 other possible categories of call types. Each other type represents less than 2%



Top 10 Final primary problems, 2025

Code Zero Events

The table below illustrates the number of code zeros experienced each year from 2019-2025. Code 0 usually results in an ambulance being dispatched from another jurisdiction, unless a Service ambulance can be cleared for response immediately following the call. Code 0 data from October 2023 onward is from a new and more accurate data set.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2019	71	62	102	45	74	57	76	70	55	56	53	70
2020	75	116	25	23	18	25	7	83	36	14	12	12
2021	14	15	27	29	23	24	33	40	49	48	77	22
2022	54	22	26	31	93	80	70	62	86	85	134	87
2023	53	43	36	29	30	51	38	33	46	159	225	165
2024	169	120	102	96	165	220	205	226	186	80	83	88
2025	117	110										

Lost Vehicle Hours

The data in 2024 showed a decrease in lost vehicle hours due to The Ministry of Health, Emergency Health Services Division engaging with the Brant Community Healthcare System (BCHS) and BBPS senior staff regularly to discuss and enact mitigation strategies to minimize the impact to ambulance capacity.

2025	TOTAL LOST HOURS in ED OFFLOAD	TOTAL CODE 0	LONGEST EPISODE (minutes)	AVERAGE TRANSPORTS PER DAY	AVERAGE TIME PER CALL in ED 90%
JAN	161:47:43	117	145	36.58	0:49:22
FEB	187:10:53	110	270	35:36:00	0:55:09
MAR					
APR					
MAY					
JUN					
JUL					
AUG					
SEP					
ОСТ					
NOV					
DEC					

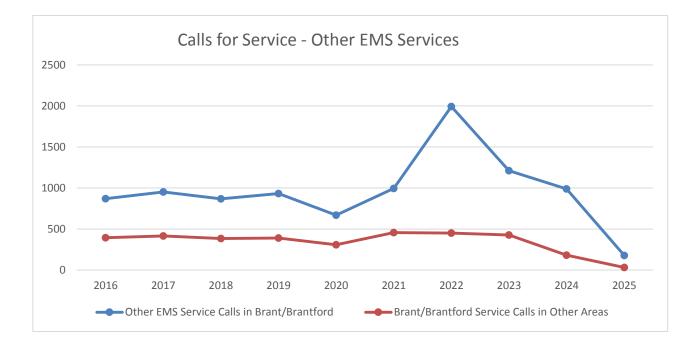
This table below indicates "Lost Vehicle Hours" for 2025.

Call for Service – Other EMS Services

In instances where a Brant-Brantford paramedic cannot respond to a call, other EMS services in surrounding jurisdictions respond. Similarly, when other jurisdictions cannot respond to a call, Brant-Brantford Paramedics respond. The table below identifies the number of occurrences that happened from 2015-2024.

Data shows that the number of calls has declined in 2024 with the new 24/7 dedicated offload nurse program and adding additional paramedic vehicles.

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025 YTD
Other EMS Service Calls in Brant / Brantford	869	952	868	932	669	994	1,992	1210	989	177
Brant / Brantford Service Calls in Other Areas	393	415	385	390	309	456	451	427	182	31



Summary and Recommendations

While the Service continues to perform as efficiently as possible, systemic challenges continue to place limitations on its ability to effectively respond to call demand. Staff will continue to investigate efforts to mitigate issues within municipal authorities such as resource availability, but obstacles are generated by limited local healthcare capacity and will require significant funding and legislative changes by the province.

Attachments

N/A

Reviewed By

Cindy Stevenson, General Manager, Emergency & Protective Services

Copied To Alison Newton, Chief Administrative Officer By-law and/or Agreement By-law Required No Agreement(s) or other documents to be signed by Mayor and /or Clerk No