

Staff Report



To	Joint Social Service Land Ambulance Committee
Service Area	Public Services
Date	Wednesday, June 12, 2024
Subject	Paramedic Service Response Performance 2023 and Performance Plan 2025

Recommendation

1. That the Joint Social Services and Land Ambulance Committee recommends to City Council that the Response Time Performance Plan for 2025, as outlined in the report Paramedic Service Response Performance 2023 and Performance Plan 2025, dated June 12, 2024, be approved.
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Executive Summary

Purpose of Report

To provide a report on the performance of the Guelph Wellington Paramedic Service's adherence to the 2023 Response Time Performance targets as set by Guelph City Council, as well as to present the proposed Response Time Performance Plan (RTPP) for the Paramedic Service for 2025.

Key Findings

Guelph Wellington Paramedic Service (GWPS) did not fully meet the targets and compliance rates as set by City Council for 2023. Contributing factors were the heightened call volumes and the complexity of calls, along with hospital offload delays, especially in the first quarter of the year.

Strategic Plan Alignment

Developing a Response Time Performance Plan is part of Building our Future and ensuring that we continue to build strong, vibrant, safe, and healthy communities that foster resilience in the people who live here.

Future Guelph Theme

People and Economy

Future Guelph Objectives

People and Economy: Support community well-being

Financial Implications

Based upon the performance outcomes in this report, staff are moving forward with the recruitment of the second paramedic shift as adopted in the 2024 Multi-Year Budget. Previous communication to City of Guelph Council indicated this investment was on pause until performance data was available given the 2025 budget impact

(50 per cent of the budget impact was included in 2024 and remainder in 2025) and the Mayor's 2025 Budget Direction.

The Paramedic Business Plan, in connection with the actual response time results, will serve to illustrate the appropriate timing for future expansion of Paramedic Services needed to achieve the response time targets.

Report

Response times to emergency calls serve as an important metric for Paramedic Services and is a significant Key Performance Indicator in the City's Annual Report. These response times have a direct correlation with patient outcomes, and they also influence community satisfaction and the perceived quality of service, as evidenced by the duration it takes for an ambulance to arrive at the scene of an emergency site. Emergency response times are influenced by the proximity of the nearest available ambulance to the emergency site. GWPS utilizes a sophisticated deployment strategy that relocates accessible ambulances to pre-determined areas as others are dispatched to emergency calls. As the number of available ambulances decreases, the deployment locations become more dispersed, resulting in increased response times.

Each year, Council determines the desired response times for the service for the upcoming year by October 31, and a proposed set of targets are included in this report. Annual performance results are reported to the Provincial Ministry of Health by March 31 of the following year.

Establishing response time targets aims to set a realistic expectation of ambulance response times in their community, ensuring accountability and transparency in delivering Paramedic Ambulance Services to residents of our area.

Performance targets are set in the form of a Response Time Performance Plan (RTPP), which establishes a target response time and compliance level to that target for each of five (5) categories of severity of patients' injury or illness. The categories are defined based on the Canadian Triage Acuity Scale (CTAS), which is a score shared by hospitals and other services across Canada.

The five levels of CTAS include:

- CTAS 1 – requires resuscitation (i.e. cardiac arrest)
- CTAS 2 – requires emergent care (i.e. major trauma)
- CTAS 3 – requires urgent care (i.e. mild shortness of breath)
- CTAS 4 – requires less urgent care (i.e. minor trauma)
- CTAS 5 – requires non-urgent care (i.e. sore throat)

There is a sixth response time that measures the time to deliver a cardiac defibrillator to the scene of a Sudden Cardiac Arrest (SCA). This can include public access defibrillators, Fire Departments, or other allied agencies arriving first. Actual response times, especially with public access defibrillators, are often difficult to capture consistently. This time is set by the Ministry of Health at six (6) minutes, but the expected compliance rates to that target are set by Council.

Performance in 2023

The chart below illustrates the compliance to the targets set by Council that GWPS was able to achieve in 2023. It indicates the service successfully met the compliance rates for the most critical injuries and illnesses (CTAS 1) and for the

least serious (CTAS 5). However, it did not reach the set targets for the other categories of CTAS 2, 3 and 4.

A major factor influencing response times is the number of calls for assistance. In 2023, the number of responses dipped slightly from a peak in 2022, yet they were still over four per cent higher than in 2021 and more than 17 per cent higher than in 2020. Call volumes have been on an upward trend for more than the past decade, a pattern observed not only for paramedic services in Ontario but also on an international scale.

Paramedic calls for assistance have not only become more numerous but also increasingly complex, as residents in the area present with more extensive medical histories and concerns. These complexities necessitate additional time to thoroughly gather information, treat, and care for the patients that paramedics encounter.

In the past, paramedic service delivery faced significant challenges due to prolonged offload delays at Guelph General Hospital. These delays occur when paramedics arrive at the Emergency Department, but hospital staff are unable to take over the patient's care within 30 minutes. As a result, paramedics are required to stay at the hospital for an extended period to care for the patient. Throughout 2023, the service and the staff at Guelph General Hospital worked collaboratively to reduce the incidences and length of hospital delays. Although delays persisted in the first quarter of 2023 and impacted response times, their impact lessened starting in May. While delays continued throughout the rest of that year, their impact was not as significant. Offload delays continued into 2024 but with less frequency and for shorter durations. Staff are cautiously optimistic that the processes put in place will remain effective into the future.

The table below displays Council's approved RTPP for 2023, and GWPS's compliance with its response time targets. The Paramedic Service was required to report these results to the Ontario Ministry of Health by March 31, 2024.

CTAS Category	Response Time Target	2023 Target Compliance as approved by Council (July 2022)	2023 Actual Compliance Rate
Level 1	8 minutes (set by MOH)	65 per cent	71 per cent
Level 2	10 minutes	75 per cent	74 per cent
Level 3	15 minutes	90 per cent	88 per cent
Level 4	15 minutes	90 per cent	85 per cent
Level 5	20 minutes	90 per cent	91 per cent
Sudden Cardiac Arrest	6 minutes (set by MOH)	65 per cent	61 per cent

The RTPP serves as a good retrospective measurement of performance, yet it is not as beneficial for planning purposes. The Service needs to attempt to arrive at all calls as quickly as possible because the severity of the patient's condition, or their CTAS level, cannot be verified before a paramedic arrives on the scene.

The RTPP measures the response time of the service as a whole including the mix of urban and rural areas. In rural areas, response times are typically longer due to the greater distances between calls. Consequently, the report is less helpful in assessing performance in a subsection of the response area.

In an attempt to provide a clear picture of responses in the Wellington County Townships, performance can be measured and compared to past performance by calculating the average and 90th percentile response times to code 4 (life-threatening or limb-threatening, lights and sirens) responses.

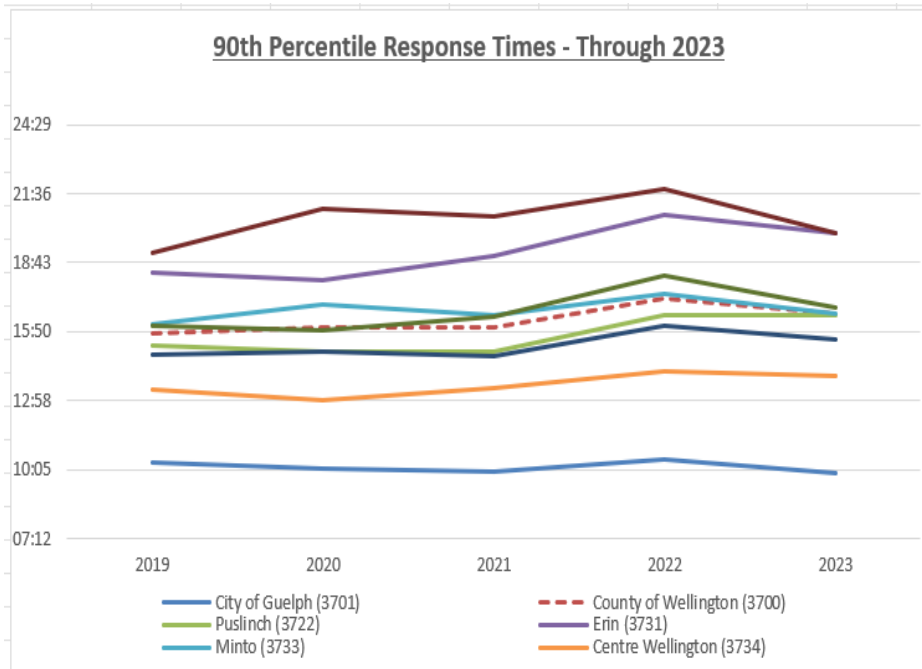
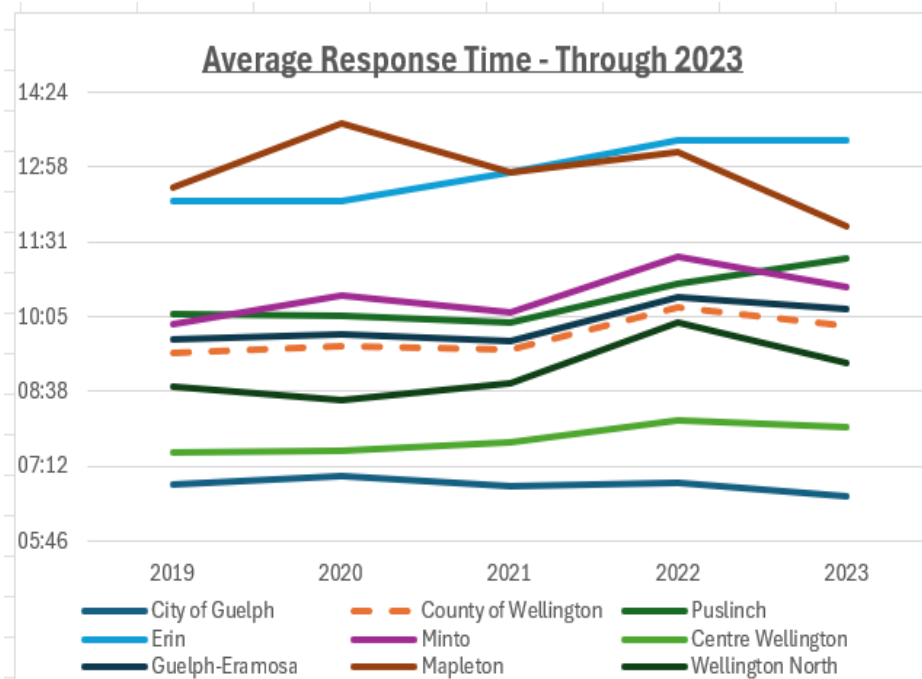
The average response time provides a reasonable expectation of the approximate response time for paramedics, and the measurement changes more rapidly in response to changes implemented by the service. The 90th percentile response time is a proxy for the longest response time. It is a standardized performance testing metric that measures the longest response time but eliminates the highest 10 per cent, from the perspective that those calls will likely have a related circumstance such as a wrong address given or a patient that could not initially be found.

Note that this data does not include responses to calls that are categorized as 'Code 3' calls – described as urgent but not life-threatening and no lights and sirens are used. An example of a Code 3 call would be for a patient with ongoing abdominal pain in a long-term care facility.

These results can be analyzed on an annual basis yet comparing them to the performance of paramedic services in different regions is challenging. Other municipalities do not publish these measures, and the performance would be dependent on a comparable geography, road infrastructure, distance from a hospital, and distance from an urban area.

**GUELPH WELLINGTON PARAMEDIC SERVICE
RESPONSE TIME TRENDS: 2019-2023**

		2019	2020	2021	2022	2023
Combined	Number of Code 4 calls	16,626	15,506	17,264	18,045	17,091
	90th percentile	12:07	12:29	12:36	14:00	13:18
	Average	07:02	07:28	07:39	08:08	07:48
City of Guelph	Number of Code 4 calls	10,749	9,843	11,052	11,251	11,031
	90th percentile	10:24	10:08	10:00	10:32	09:58
	Average	06:51	07:00	06:49	06:53	06:38
County of Wellington	Number of Code 4 calls	5,877	5,663	6,212	6,794	6,060
	90th percentile	15:48	16:00	16:00	17:14	16:35
	Average	09:23	09:30	09:28	10:15	09:54
Puslinch	Number of Code 4 calls	812	647	781	839	774
	90th percentile	15:15	15:00	15:00	16:32	16:32
	Average	10:08	10:06	09:58	10:43	11:13
Erin	Number of Code 4 calls	645	682	598	643	531
	90th percentile	18:17	18:00	19:01	20:42	19:58
	Average	12:18	12:18	12:52	13:29	13:28
Minto	Number of Code 4 calls	596	582	629	672	608
	90th percentile	16:11	17:00	16:33	17:24	16:35
	Average	09:57	10:30	10:10	11:14	10:39
Centre Wellington	Number of Code 4 calls	1,836	1,785	1,985	2,057	1,948
	90th percentile	13:25	13:00	13:31	14:11	13:59
	Average	07:28	07:30	07:39	08:06	07:57
Guelph-Eramosa	Number of Code 4 calls	897	851	995	1,193	896
	90th percentile	14:53	15:00	14:49	16:07	15:30
	Average	09:38	09:44	09:37	10:28	10:14
Mapleton	Number of Code 4 calls	308	305	334	413	406
	90th percentile	19:09	21:00	20:38	21:49	19:59
	Average	12:35	13:49	12:52	13:16	11:50
Wellington North	Number of Code 4 calls	783	811	890	977	897
	90th percentile	16:07	15:52	16:29	18:10	16:51
	Average	08:45	08:29	08:49	09:59	09:11



Response Time Improvement Strategies

Initiatives to improve response times to emergency calls continue, complemented by the dynamic deployment methodology for available ambulances outlined in this report. Additionally, the Community Paramedicine Program is also in place to offer non-emergency services to high-risk individuals in the community, effectively reducing the occurrence of emergencies and ensuring appropriate care is given to avoid hospitalizations. There is evidence that this program is achieving its objectives and alleviating the burden on the hospital system.

Furthermore, recent Provincial legislation has changed, allowing paramedics to transport certain patients to alternate destinations instead of the Emergency

Department; staff have been utilizing this opportunity. This minor shift has resulted in a small but significant decrease in the number of patients presenting to the hospital, leading to better patient flow and fewer offload delays.

Enhancements to Guelph Wellington Paramedic Service included in the 2024 – 2027 City of Guelph Multi-Year Budget are designed to improve the response time results and improve the equity by which services are delivered across the coverage area.

Recommendations for the 2025 Response Time Performance Plan

Staff anticipate a continued increase in emergency call volumes in 2024 with the associated increase in pressures on response times. The effects of hospital offload delays are challenging to anticipate and beyond the control of City staff. However, staff are optimistic about their partnership with Guelph General Hospital administration and their recent pledge to intensify their efforts and work together to minimize the frequency of these delays.

Despite the pressures and uncertainties, staff are not recommending a reduction in the response time targets and the associated reduced services to our residents. Staff will continue to strive to optimize response times and provide services as efficiently and effectively as possible.

The RTPP targets and compliance rates recommended for 2024:

Canadian Triage Acuity Scale Levels	Response Time Target	Compliance Rate Recommended to Council for 2025
CTAS Level 1	8 minutes (set by the Province)	65 per cent
CTAS Level 2	10 minutes	75 per cent
CTAS Level 3	15 minutes	90 per cent
CTAS Level 4	15 minutes	90 per cent
CTAS Level 5	20 minutes	90 per cent
Sudden Cardiac Arrest	6 minutes (set by the Province)	65 per cent

Financial Implications

Based upon the performance outcomes in this report, staff are moving forward with the recruitment of the second paramedic shift as adopted in the 2024 Budget. Previous communication to City of Guelph Council indicated this investment was on pause until performance data was available given the 2025 budget impact (50 per cent of the budget impact was included in 2024 and remainder in 2025) and the Mayor’s 2025 Budget Direction.

Response time performance is a key data set that supports budget investment and is a measurable goal of the City of Guelph Strategic Plan. The Paramedic Business Plan, in connection with the actual response time results, will be used to demonstrate the recommended timing of future paramedic services expansions required to meet response time targets over this period.

Consultations and Engagement

The Response Time Performance Plan will be provided to the Ontario Ministry of Health, where it will subsequently be posted on their website. It will also be posted on the City’s website: [Guelph Wellington Paramedic Services](#)

Attachments

None

Departmental Approval

None

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