

Information Report



To County of Wellington Social Services Committee

From Stephen Dewar, Chief and General Manager, Guelph-Wellington Paramedic Service

Date September 13, 2023

Subject **Paramedic Service Response Performance 2022 and Performance Plan 2024**

Executive Summary

Purpose of Report

To provide a report on the performance of the Guelph Wellington Paramedic Service against the 2022 Response Time Performance targets and to provide the Response Time Performance Plan (RTPP) for 2024 as set by Guelph City Council.

Key Findings

In 2022 Guelph Wellington Paramedic Service (GWPS) was unable to fully meet the targets and compliance rates as set by Guelph City Council. Causes included pressures from increased call volumes and the impact of hospital offload delays.

Report

Response times to emergency calls are an important indicator for Paramedic Services. Patient outcomes can be directly related to those times, and overall community satisfaction and perception of the service delivered can also be affected by the time it takes for an ambulance to arrive at the scene of an emergency.

Emergency response times are influenced by the proximity of the nearest available ambulance to the emergency site. GWPS employs 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, leading to longer response times.

Guelph City Council determines the desired response times for the service for the upcoming year by October 31, and the actual annual performance results are reported to the Provincial Ministry of Health by March 31 of the following year.

The purpose of setting response time targets is to provide the residents of our area with a reasonable expectation of ambulance response times in their community and to provide some accountability and transparency around the provision of the Paramedic Ambulance Service.

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 medical emergencies. The categories are based on the severity of the patient's illness or injury and 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 2022

The chart below reveals that GWPS fell short of meeting all but one of the response targets set for 2022. One of the challenges that hindered service delivery was the frequent and lengthy hospital offload delays experienced 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. In 2022, GWPS paramedics spent approximately 11,000 hours caring for patients who were in offload delay.

The incidents and length of offload delays have recently decreased. Data from May through August of 2023 shows a significant reduction in paramedic time lost to delays, thought to be the result of efforts and changes implemented at Guelph General Hospital. GWPS has worked closely with GGH to refine the processes around transfer of patient care, and early data suggests that this is having a positive impact on response times. While hospital and GWPS staff are cautiously optimistic that the improvements can be maintained, there is concern about the impacts of the upcoming flu season and the potential next wave of COVID-19.

Response times in 2022 were also affected by other factors. one of which was an eight (8) percent increase in call volumes compared to 2021, causing the number of patient-related calls to exceed 30,000 for the first time. This trend of rising call volumes is also being observed in most paramedic services in Ontario and in fact, worldwide.

The table below illustrates City of Guelph Council’s approved RTPP for 2022, and GWPS’s compliance with its response time targets. The Paramedic Service was required to report these results to the Ontario Ministry of Health in March 2023.

CTAS Category	Response Time Target	2021 Target Compliance (October 2021)	2022 Actual Compliance Rate
Level 1	8 minutes (set by MOH)	65%	63%
Level 2	10 minutes	75%	71%
Level 3	15 minutes	90%	88%
Level 4	15 minutes	90%	83%
Level 5	20 minutes	90%	92%
Sudden Cardiac Arrest	6 minutes (set by MOH)	65%	48%

The RTPP is a good retrospective measurement of performance but is less useful as a planning tool. 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.

The Provincial Ambulance Dispatch System is currently being upgraded with a new triage software that is expected to assist in identifying and focusing on higher-priority calls for assistance. This software, referred to as the Medical Priority Dispatch System (MPDS), is expected to be in place in late 2024.

Response Time Improvement Strategies

Efforts to improve response times to emergency calls are ongoing alongside the dynamic deployment methodology for available ambulances outlined in this report. 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 lessening the burden on the hospital system.

In addition, 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.

Efforts to maintain response times have included incremental enhancements to the paramedic service over several years to address the increasing call volumes. An additional 12 hours of paramedic ambulance service, seven days per week was added in January of 2022.

During a recent Joint Council Workshop, it was noted that the response times of the paramedic service in the City of Guelph and the County of Wellington could be enhanced by refining the efficiency, layout, and location of the paramedic stations. The initiative to improve this is currently ongoing.

Compliance to Targets in Townships

At the recent Joint Council workshop, a question was raised about the response time performance as compared to targets in each of the lower-tiered townships. It was discussed at that time that the targets are set and designed for the larger area and include results in urban areas where faster response times are possible and in rural areas where geography creates challenges to responses. While the overall results are somewhat comparable with the results of other municipalities as posted by the Provincial Ministry of Health, response times in other lower-tiered townships are not shared and therefore only comparable to past performance.

The results for the Townships are included as an appendix to this report as per the request made at that meeting.

2024 Response Time Performance Plan

GWPS Staff predict 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 mainly 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, did not recommend 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 set for 2024 by City of Guelph Council include:

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

Summary

In 2022 Guelph Wellington Paramedic Service saw a continuation of the trend of increasing numbers of emergency calls. The higher call volumes along with hospital offload delays have led to higher response times to emergency calls. The service did not meet the performance targets set by City of Guelph Council.

Despite the continuing pressures, City of Guelph Council has accepted the recommendation to set the targets for 2024 at the same levels as in 2022 and 2023.

Respectfully Submitted by:



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Attachment 1: Response Time Performance in Wellington County Townships.

Note that 'na' indicates that there were no calls of that level during the month in the area.

GUELPH WELLINGTON PARAMEDIC SERVICE RESPONSE TIME PERFORMANCE PLAN: 2019-2022																	
Combined - 30,204 Responses in 2022																	
CTAS Response Time Performance Plan	Agreed Benchmark	2019	2020	2021	2022	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CTAS 1 (response <=8 mins)	65%	68%	68%	65%	63%	67%	58%	69%	54%	64%	67%	69%	50%	70%	62%	69%	58%
CTAS 2 (response <=10 mins)	75%	76%	73%	76%	71%	73%	na	74%	77%	69%	67%	66%	70%	72%	68%	78%	73%
CTAS 3 (response <=15 mins)	90%	89%	90%	89%	86%	88%	86%	87%	89%	86%	83%	83%	87%	88%	85%	88%	82%
CTAS 4 (response <=15 mins)	90%	87%	87%	87%	83%	87%	81%	84%	86%	86%	82%	82%	85%	84%	80%	84%	81%
CTAS 5 (response <=20 mins)	90%	92%	93%	94%	92%	95%	89%	91%	91%	91%	88%	96%	93%	90%	91%	92%	95%
City of Guelph - 18,606 responses in 2022																	
CTAS Response Time Performance Plan	Agreed Benchmark	2019	2020	2021	2022	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CTAS 1 (response <=8 mins)	65%	78%	79%	78%	78%	93%	83%	80%	71%	88%	76%	63%	63%	91%	86%	68%	65%
CTAS 2 (response <=10 mins)	75%	83%	83%	85%	82%	85%	na	84%	87%	77%	78%	76%	79%	82%	81%	88%	82%
CTAS 3 (response <=15 mins)	90%	93%	94%	93%	92%	95%	94%	91%	92%	90%	89%	89%	92%	92%	90%	94%	92%
CTAS 4 (response <=15 mins)	90%	90%	90%	91%	88%	91%	89%	89%	89%	88%	87%	85%	90%	89%	84%	89%	91%
CTAS 5 (response <=20 mins)	90%	95%	97%	97%	94%	94%	89%	87%	100%	97%	89%	98%	100%	94%	93%	96%	95%
County of Wellington - 11,598 Resonces in 2022																	
CTAS Response Time Performance Plan	Agreed Benchmark	2019	2020	2021	2022	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CTAS 1 (response <=8 mins)	65%	50%	47%	49%	42%	38%	14%	44%	20%	27%	50%	74%	17%	36%	29%	70%	50%
CTAS 2 (response <=10 mins)	75%	60%	56%	58%	53%	53%	na	56%	55%	56%	50%	51%	57%	52%	45%	62%	55%
CTAS 3 (response <=15 mins)	90%	82%	82%	81%	77%	78%	69%	81%	84%	78%	73%	76%	81%	81%	77%	79%	69%
CTAS 4 (response <=15 mins)	90%	81%	81%	79%	74%	76%	66%	75%	78%	81%	73%	76%	78%	74%	74%	71%	67%
CTAS 5 (response <=20 mins)	90%	89%	89%	90%	89%	96%	88%	96%	91%	84%	88%	93%	84%	84%	82%	88%	95%
Puslinch - 1,401 Responses in 2022																	
CTAS Response Time Performance Plan	Agreed Benchmark	2019	2020	2021	2022	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CTAS 1 (response <=8 mins)	65%	33%	45%	65%	47%	50%	0%	na	na	na	0%	50%	0%	100%	33%	100%	100%
CTAS 2 (response <=10 mins)	75%	56%	44%	50%	48%	57%	na	33%	52%	74%	47%	36%	45%	62%	33%	50%	55%
CTAS 3 (response <=15 mins)	90%	85%	83%	82%	77%	82%	67%	83%	80%	82%	76%	83%	81%	79%	71%	68%	70%
CTAS 4 (response <=15 mins)	90%	78%	80%	80%	75%	75%	63%	58%	75%	67%	100%	82%	92%	57%	80%	83%	74%
CTAS 5 (response <=20 mins)	90%	97%	92%	86%	84%	100%	100%	100%	100%	50%	50%	100%	0%	80%	80%	100%	100%
Erin - 1,119 Responses in 2022																	
CTAS Response Time Performance Plan	Agreed Benchmark	2019	2020	2021	2022	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CTAS 1 (response <=8 mins)	65%	36%	12%	34%	6%	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	na	0%
CTAS 2 (response <=10 mins)	75%	34%	28%	35%	30%	38%	na	17%	53%	14%	29%	36%	27%	16%	12%	37%	60%
CTAS 3 (response <=15 mins)	90%	69%	71%	64%	58%	59%	55%	55%	66%	64%	50%	65%	64%	66%	48%	60%	51%
CTAS 4 (response <=15 mins)	90%	72%	62%	58%	53%	50%	100%	86%	25%	57%	50%	60%	75%	58%	56%	43%	18%
CTAS 5 (response <=20 mins)	90%	88%	71%	86%	85%	100%	100%	100%	100%	100%	100%	0%	na	na	100%	67%	67%
Minto - 1,228 Responses in 2022																	
CTAS Response Time Performance Plan	Agreed Benchmark	2019	2020	2021	2022	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CTAS 1 (response <=8 mins)	65%	25%	47%	20%	27%	0%	0%	100%	0%	0%	na	100%	na	0%	0%	100%	50%
CTAS 2 (response <=10 mins)	75%	56%	43%	48%	34%	23%	na	22%	25%	23%	30%	54%	33%	31%	67%	40%	31%
CTAS 3 (response <=15 mins)	90%	81%	84%	78%	77%	82%	61%	89%	86%	83%	69%	67%	76%	88%	74%	79%	62%
CTAS 4 (response <=15 mins)	90%	82%	78%	81%	76%	73%	55%	100%	77%	100%	100%	60%	83%	91%	50%	80%	74%
CTAS 5 (response <=20 mins)	90%	86%	88%	93%	91%	100%	67%	100%	100%	88%	100%	100%	67%	100%	80%	100%	100%
Centre Wellington - 3,716 Responses																	
CTAS Response Time Performance Plan	Agreed Benchmark	2019	2020	2021	2022	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CTAS 1 (response <=8 mins)	65%	71%	68%	71%	66%	33%	33%	67%	100%	67%	100%	100%	na	50%	40%	50%	80%
CTAS 2 (response <=10 mins)	75%	73%	71%	71%	70%	69%	na	75%	63%	72%	69%	59%	76%	66%	67%	80%	70%
CTAS 3 (response <=15 mins)	90%	89%	90%	88%	88%	91%	84%	92%	93%	90%	82%	83%	89%	87%	87%	92%	86%
CTAS 4 (response <=15 mins)	90%	86%	91%	89%	83%	78%	86%	88%	83%	93%	80%	83%	85%	80%	90%	67%	83%
CTAS 5 (response <=20 mins)	90%	89%	93%	93%	89%	100%	67%	86%	86%	83%	85%	100%	93%	94%	89%	82%	100%

Guelph-Eramosa - 1,848 Responses in 2022

CTAS Response Time Performance Plan	Agreed Benchmark	2019	2020	2021	2022	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CTAS 1 (response <=8 mins)	65%	45%	35%	39%	29%	50%	0%	100%	0%	0%	na	75%	0%	0%	na	100%	25%
CTAS 2 (response <=10 mins)	75%	52%	54%	54%	45%	48%	na	45%	44%	46%	50%	46%	49%	45%	38%	50%	32%
CTAS 3 (response <=15 mins)	90%	85%	83%	87%	75%	76%	69%	78%	90%	63%	67%	67%	83%	80%	81%	76%	69%
CTAS 4 (response <=15 mins)	90%	81%	82%	82%	71%	75%	64%	64%	94%	77%	50%	74%	52%	63%	72%	81%	82%
CTAS 5 (response <=20 mins)	90%	88%	94%	90%	90%	100%	100%	100%	100%	100%	100%	67%	75%	67%	67%	100%	100%

Mapleton - 530 Responses in 2022

CTAS Response Time Performance Plan	Agreed Benchmark	2019	2020	2021	2022	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CTAS 1 (response <=8 mins)	65%	0%	45%	20%	33%	na	na	0%	0%	na	0%	100%	0%	na	0%	na	na
CTAS 2 (response <=10 mins)	75%	33%	29%	34%	38%	18%	na	33%	50%	0%	29%	50%	56%	25%	38%	57%	25%
CTAS 3 (response <=15 mins)	90%	56%	55%	57%	70%	63%	64%	56%	67%	63%	69%	82%	71%	86%	75%	91%	48%
CTAS 4 (response <=15 mins)	90%	79%	60%	47%	64%	100%	0%	50%	0%	100%	100%	75%	67%	100%	60%	50%	40%
CTAS 5 (response <=20 mins)	90%	77%	71%	88%	89%	0%	100%	100%	na	50%	100%	100%	na	na	na	na	100%

Wellington North - 1,756 Responses in 2022

CTAS Response Time Performance Plan	Agreed Benchmark	2019	2020	2021	2022	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CTAS 1 (response <=8 mins)	65%	69%	63%	80%	54%	50%	na	0%	20%	50%	50%	50%	na	100%	100%	67%	na
CTAS 2 (response <=10 mins)	75%	68%	72%	73%	62%	59%	na	80%	70%	66%	50%	62%	76%	68%	37%	63%	71%
CTAS 3 (response <=15 mins)	90%	79%	80%	78%	75%	70%	65%	80%	82%	83%	74%	78%	73%	79%	80%	77%	67%
CTAS 4 (response <=15 mins)	90%	76%	77%	75%	70%	82%	69%	73%	87%	75%	63%	83%	79%	92%	60%	71%	48%
CTAS 5 (response <=20 mins)	90%	91%	88%	84%	89%	100%	100%	100%	80%	100%	100%	100%	89%	60%	80%	80%	89%

Source: ADRS canned reports, MOHLTC Data Warehouse.