



County Council

Meeting Date: October 26, 2021

Submitted by: Neal Roberts, Chief, Middlesex-London Paramedic Service

SUBJECT: INCREASING CALL DEMAND AND SYSTEM PRESSURES

BACKGROUND:

Middlesex-London Paramedic Service closely monitors changes in call demand and service levels to ensure that the paramedic services are delivered as efficiently as possible and that resources are available to respond to large scale emergencies and can react to surges in call demand.

The COVID-19 pandemic created anomalies across paramedic services globally. This unprecedented event impacted call demand and resource utilization for Middlesex-London Paramedic Service just as it did other paramedic services and healthcare providers.

As more has become known about COVID-19 and as the world has learned to work within the pandemic, there has been restoration of pre-COVID call demand levels. Middlesex-London Paramedic Service has compiled a review of recent and forecasted call demand and systemic pressures impacting the delivery of paramedic services.

ANALYSIS:

Call demand declined in direct correlation to the 3 waves of the COVID-19 pandemic. With each subsequent wave, the impact to call demand was less. Call demand has returned to pre-COVID levels and continues to increase at the accelerated rates that were experienced in 2019 prior to the onset of the COVID-19 pandemic.

By the end of 2021, call demand (for Codes 1-4 calls) is expected to exceed that of 2020 by 7.87%

Unit Hour Utilization (UHU) measures total responses in relation to unit hours. Industry average for UHU is 0.3 to 0.5, once UHU exceeds 0.5 capacity to respond to surges in emergency calls or large-scale events becomes compromised and challenging. This additional pressure increases overtime and makes it difficult for crews to achieve rest periods.

UHU within the City of London remains above thresholds at 0.53 and due to the increasing demands on the County of Middlesex the UHU for the service has increased to 0.5 overall with several periods that reach as high as 0.68.

Offload delays at LHSC between April 2020 and July 2021 have increased by 3,287%. Offload delays in July of 2021 showed a 167% increase from July of 2017 (the year with the next highest rate of offload delays).

Over the course of 2021, Middlesex-London Paramedic Service has lost more than 11,168 hours to offload delay. This results in an average loss of (2) 24-hour ambulances from the 911 system every day of the year at a cost of more than \$1.6 million to date.

Call demand is forecasted to continue to increase steadily reaching 93,706 emergency calls over the next 5 years.

Middlesex-London Paramedic Service ambulances operate under a fluid model in which units from low demand areas or areas where they are not currently engaged in emergency calls are moved to engage in emergency calls in areas of higher demand. This means that when a citizen of Middlesex County or the City of London calls 911, the closest ambulance responds, regardless of the station from which they were deployed.

This impacts the units stationed in Middlesex County when demand in the City of London is high and outstrips the resources available to respond. Units from the County of Middlesex are drawn in to the City of London to respond to emergency calls, just as when call demand in the County of Middlesex is high, units from the City of London are moved to the County of Middlesex to provide coverage and respond to emergency calls.

As call demand outstrips resources, this fluid deployment also pulls resources from our neighbouring counties (Oxford, Elgin, Oneida, Perth, Huron and Lambton) resulting in increased pressure for these counties as they service cross-border calls for Middlesex.

During times of elevated and sustained call demand, Middlesex-London Paramedic Service has been required to staff additional ad-hoc ("up-staff") units to ensure that emergency calls continue to be serviced. Beginning in May of 2021, Middlesex-London Paramedic Service began having to add these temporary additional units in to the 911 system. In 2021 to date, Middlesex-London Paramedic Service has been required to "up-staff" 188 paramedic resources (94 ambulances) for a total of 1,150 hours.

The addition of three (3) 12-hour units, strategically deployed over times of peak volume and the highest demand, would provide temporary relief to some of the pressures faced from increasing call demand until the end of the year.

The addition of these hours will bridge the gap until County Council can review and approve any potential permanent enhancements in 2022 and would:

- Provide relief to pressures from increasing call demand

- Help keep paramedic resources in the County of Middlesex during periods of high call demand
- Increase coverage over peak periods where paramedics are having trouble securing breaks and ending their shifts
- Decrease response times by having additional units to disperse through the County of Middlesex and the City of London

The total cost to implement three (3) additional 12-hour units until the end of 2021 is not expected to exceed approximately \$310,000.

RECOMMENDATION:

That Middlesex County Council approve additional staffing for Middlesex-London Paramedic Service from October 26 until Dec 31st for the addition of three (3) 12-hour ambulances at a cost up to \$310,000. This additional budget amount will need to be covered by the County of Middlesex and the City of London.