



## **Administrative Report**

**To:** Warden MacDonald and Members of Essex County Council

**From:** Justin Lammers, Chief, Essex-Windsor Emergency Medical Services

**Date:** Wednesday, February 5, 2025

**Subject:** Essex-Windsor EMS Master Plan Update

**Report #:** 2025-0205-EMS-R001-JL

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### **Purpose**

The following report is to provide Essex County Council with a summary of the findings and recommendations from the Essex-Windsor EMS (EWEMS) master plan update, conducted by Operational Research in Health (ORH).

### **Background**

In 2019, Essex County Council received a 10-year Master Plan for EWEMS. The objective of that 10-year master plan was to forecast and project the needs of the service and the community, and to be used as a guiding document for the County of Essex and EWEMS moving forward. While most recommendations within the master plan were completed, in 2020, COVID-19 became the sole focus, and some recommendations remain incomplete.

In addition to COVID-19, our region has experienced historic growth, with quite robust growth anticipated in 2025 and beyond. In light of the above, Essex County Council approved funding to update the 10-year Master Plan to create a guiding document for the County of Essex and EWEMS to meet the needs of the community.

### **Discussion**

In April of 2024, EWEMS contracted ORH to update the 10-year Master Plan, with a request of ORH to answer the following questions:

1. How has the service profile changed since the original review?
2. What will ambulance call volumes look like over the next five (5) years?
3. What is the optimum number of, and location of, stations to align with the geographical profile of population and call volumes?

4. What are the frontline resource requirements (staffing and vehicles) to meet response time performance targets?
5. What are the support services staffing requirements to support frontline service delivery?
6. Is EWEMS service delivery aligned with best practices in other municipalities?
7. What is the impact on service delivery if operating under a Medical Priority Dispatch System (MPDS)?

EWEMS provided ORH with a list of stakeholders to solicit feedback, insights and data, including elected officials, CUPE 2974, other first responder organizations, local municipal partners, and healthcare systems partners. A Steering Committee was also created that included representation from the County of Essex and EWEMS, and meetings were held with the Steering Committee to provide regular updates. Additionally, ORH worked closely with the EWEMS Senior Leadership Team to clarify submitted data and to provide updates where necessary.

In regards to demand projections, an average annual call volume increase of 4.5% is projected for EWEMS from 2024 to 2030; this is 5.1% on average for the City of Windsor and 3.2% on average across the County of Essex. Population growth is the main driver of demand growth in the County of Essex, whereas demand rate changes are the main factor in Windsor.

A summary report, as presented to County Council by ORH, includes the following recommendations to maintain current response times:

1. Implement a hub and spoke model with a hub in Windsor. Investigate the potential for additional spokes in Windsor.
  2. Increase full-time staffing by forty-four (44) with a further twenty-two (22) part-time staff. Employ four additional District Chiefs by 2030 to maintain the 19:1 ratio. Follow the staffing enhancements as outlined in the trajectory modelling.
  3. Monitor demand increases and developments to understand whether any staffing enhancements need to be brought forward or held back.
  4. Monitor offload delays as modelling showed historic increases have had a significant impact on EWEMS resourcing requirements.
  5. Continue to advocate for the service-run MPDS model as this increases autonomy and unlocks potential efficiencies, such as reducing unnecessary ambulance responses via secondary triage in the communication centre, and reductions in transport rates.
  6. Undertake further clinical investigation of “treat and release” and “treat and refer” initiatives to reduce unnecessary ambulance transport.
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7. Investigate the need for a Service Delivery Review (SDR) to understand workflows and role portfolios in relation to best practices.

It is important to note that recommendation number two (2) speaks to the necessary full-time enhancements to maintain our current response times. As described in the attached summary report, additional enhancements are required to improve response times. However, if EWEMS is able to assume control of the Central Ambulance Communications Centre and replicate other provincial models, significantly fewer resources are needed.

Recommendation seven (7) speaks to investigating the need for an SDR to understand workflows and role portfolios in relation to best practices. As EWEMS aligns a new leadership team, with substantial growth and change on the horizon, it is important to ensure that the administrative side of the organization is operating as efficiently as possible.

Working with ORH, there is the ability to perform an SDR that will provide the following:

1. Documentary review of organizational structures and non-union job descriptions within those structures
2. Review of all organizational non-operational response-based Key Performance Indicators (KPIs) and current performance levels against them
3. Review the current role of digitalization in relation to support services and consider the implications of any future digital strategy over the next ten (10) years
4. Review the current budgetary position
5. Participate in stakeholder interviews with staff and managers across all support services and senior operational leadership team
6. Carry out a benchmarking exercise against appropriate other service providers to identify best practices
7. Consider the output of the operational modelling that has been conducted to factor in future-proofing existing structures, systems and processes
8. Outcome report with findings and recommendations

EWEMS accepts this Master Plan update as a guiding document to support the growth of EWEMS over the next five (5) years. The recommendations are considered relative to changes within the industry and community, relative to demographics, population, and local healthcare delivery. Most recommendations are quite extensive and will require new capital resources. Due to the current shortage of Paramedics within the Province of Ontario, along with supply chain constraints, EWEMS will continue to recruit and bring all recommendations for future enhancements to County Council as required.

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## Financial Implications

This report includes a recommendation to conduct a Service Delivery Review to understand workflows and role portfolios in relation to best practices in EMS. The cost of this review is estimated at \$55,000 (plus HST) and was not included in the 2025 budget. This expense would be equally shared between the County and the City, with each contributing \$27,500 (plus HST). County Administration recommends including this review in the draft 2026 Budget.

In addition to the Service Delivery Review, the recommendations outlined in this report, if pursued, would represent a significant financial investment. To maintain the current levels of service while accommodating the anticipated growth in the region, the total financial requirement over the next six years is projected at \$11,192,218. Of this amount, the County would be responsible for \$5,596,109, covering 50% of the initial cost in the first year of the additions and approximately 25% in subsequent years.

A detailed annual breakdown of the anticipated costs, based on the consultant's recommendations to maintain status quo, is provided in the chart below.

Year	Additional # of Vehicles	Total Cost of Vehicles	Additional Number of Staff	Total Cost of Staff	Total Annual Increase in Costs (Staff & Vehicles)	County Portion (50% in year of addition)	Comments
2025	2	792,158	8	1,383,271	2,175,429	1,087,715	Additional 12 Hour Shifts at LaSalle and Tecumseh
2026	2	792,158	8	1,383,271	2,175,429	1,087,715	Additional 12 Hour Shifts at Leamington and Dougall
2027	2	794,292	8	1,383,271	2,177,563	1,088,781	Additional 12 Hour Shifts at Amherstburg and temporarily at Kingsville (limited capacity in Essex)
2028	1	397,146	8	1,390,362	1,787,508	893,754	Hub opens, with 2 additional 12 hour shifts. All Additional shifts with the hub system will now start from the hub.
2029	1	397,146	8	1,390,362	1,787,508	893,754	Add two 12 hour shifts at the hub
2030	1	397,146	4	691,635	1,088,781	544,391	Add one 12 hour shift at the hub
<b>Totals</b>	<b>9</b>	<b>3,570,047</b>	<b>44</b>	<b>7,622,172</b>	<b>11,192,218</b>	<b>5,596,109</b>	
Notes:							
Costs for Ambulances are using 2026 quote (equipment= 2024 actuals and 2025 budgeted)							
Costs for Staff are using 2025 rates							
The County Portion is at 50% in the year of the increase. The following year the County Cost would shift down to 25%.							
The dollar amounts referenced above are for illustrative purposes only.							

Beyond maintaining the status quo, the consultant's analysis identifies the resources needed to achieve a 75% response rate for Priority 4 Non-Transport (P4NonT) calls within 8 minutes. The chart below details the

additional anticipated costs, in addition to the status quo above, to highlight potential costs of improving service should Council choose that direction. Implementing this enhanced service level over six years is estimated to require a total additional investment of \$15,292,577 with the County contributing \$7,646,289.

Year	Additional # of Vehicles	Total Cost of Vehicles	Additional Number of Staff	Total Cost of Staff	Total Annual Increase in Costs (Staff & Vehicles)	County Portion (50% in year of addition)	Comments
2028	2	794,292	8	1,390,362	2,184,654	1,092,327	2 additional 12 hr shifts Hub
2029	6	2,382,876	24	4,171,086	6,553,962	3,276,981	6 Additional 12 hr shifts Hub
2030	6	2,382,876	24	4,171,086	6,553,962	3,276,981	4 additional 12 hrs Hub; 12 hrs at Kingsville+Leamington
<b>Totals</b>	<b>14</b>	<b>5,560,044</b>	<b>56</b>	<b>9,732,533</b>	<b>15,292,577</b>	<b>7,646,289</b>	
Notes:							
Costs for Ambulances are using 2026 quote (equipment= 2024 actuals and 2025 budgeted)							
Costs for Staff are using 2025 rates							
The County Portion is at 50% in the year of the increase. The following year the County Cost would shift down to 25%.							
The dollar amounts referenced above are for illustrative purposes only.							

The discussion section above also emphasizes a recommendation for a hub-and-spoke model, which would entail land acquisition, design, construction, and related activities. However, the financial costs for these components are currently unknown, and no estimates are provided in this report due to the many variables involved, making speculation impractical.

It is important to note that this report is mainly for information purposes only. If EWEMS decides to move forward with any of the recommendations a follow-up report will be presented to Council. This subsequent report will outline the specific recommendations being advanced and provide detailed financial implications. The financial details included in this report are intended to provide context and illustrate the potential future impacts of the proposed recommendations.

Additionally, it is worth highlighting that the County is currently conducting a Development Charges study. If County Council decides to implement development charges for County services, the anticipated growth in EMS services could be included as an option in this framework and would be another revenue source.

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**Consultations**

- Andrew Greggan, Operational Research in Health (ORH)
- Essex Windsor EMS Senior Leadership Team
- Melissa Ryan, Director, Financial Services/Treasurer
- Sandra Zwiers, Chief Administrative Officer

**Strategic Plan Alignment**

<b>Working as Team Essex County</b>	<b>Growing as Leaders in Public Service Excellence</b>	<b>Building a Regional Powerhouse</b>
<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Scaling Sustainable Services through Innovation</li> <li><input checked="" type="checkbox"/> Focusing "Team Essex County" for Results</li> <li><input checked="" type="checkbox"/> Advocating for Essex County's Fair Share</li> </ul>	<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Being an Employer with Impact</li> <li><input checked="" type="checkbox"/> A Government Working for the People</li> <li><input checked="" type="checkbox"/> Promoting Transparency and Awareness</li> </ul>	<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Providing Reliable Infrastructure for Partners</li> <li><input checked="" type="checkbox"/> Supporting Dynamic and Thriving Communities Across the County</li> <li><input checked="" type="checkbox"/> Harmonizing Action for Growth</li> <li><input type="checkbox"/> Advancing Truth and Reconciliation</li> </ul>

**Recommendation**

That Essex County Council receive report number 2025-0206-EMS-R001-JL, Essex-Windsor EMS Master Plan Update, for information.

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## Approvals

Respectfully Submitted,

*Justin Lammers*

Justin Lammers, Chief, Essex-Windsor Emergency Medical Services

Concurred With,

*Melissa Ryan*

Melissa Ryan, CPA, Director, Financial Services/Treasurer

Concurred With,

*Sandra Zwiers*

Sandra Zwiers, MAcc, CPA, CA, Chief Administrative Officer

<b>Appendix</b>	<b>Title</b>
A	EWEMS Master Plan Update