

**Review of  
Eastern Ontario Paramedic Services  
“Situational Overview”**

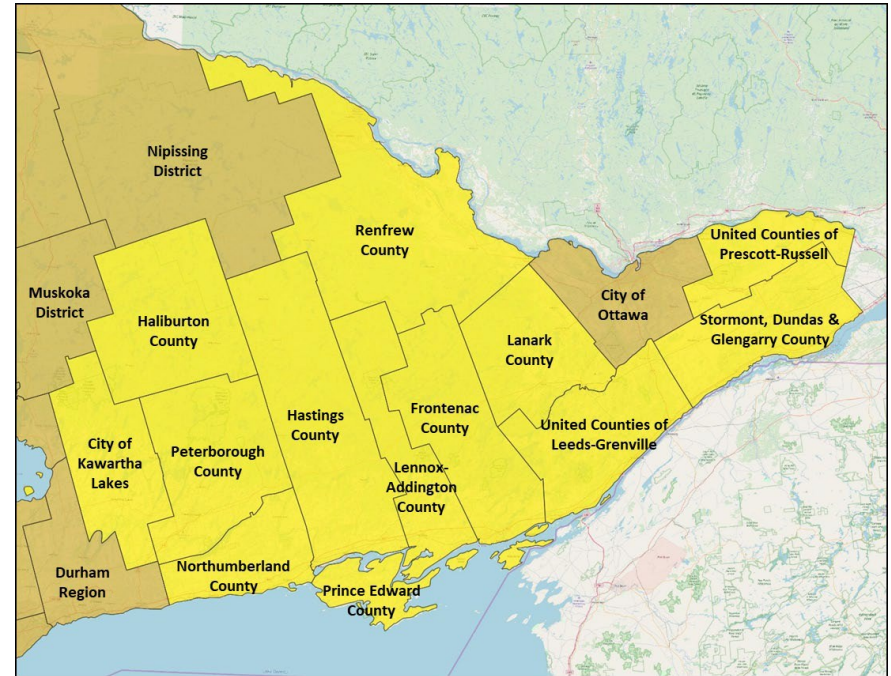
# Background & Objective

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**Ontario government is restructuring provincial health care delivery.**

**Restructuring may include integration of emergency health services (land-based paramedic services) into Ontario's health care system.**

**EOWC municipalities have managed paramedic services effectively and efficiently for almost 20 years and have a vested interest in helping to shape the future of paramedic services delivery.**

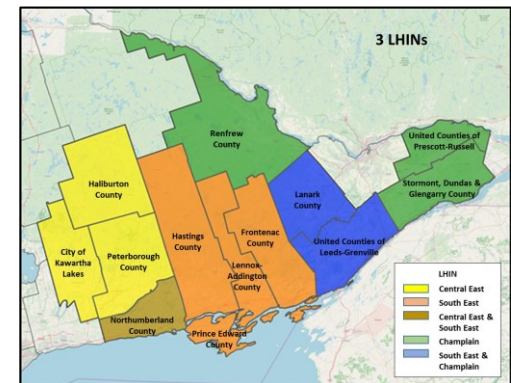
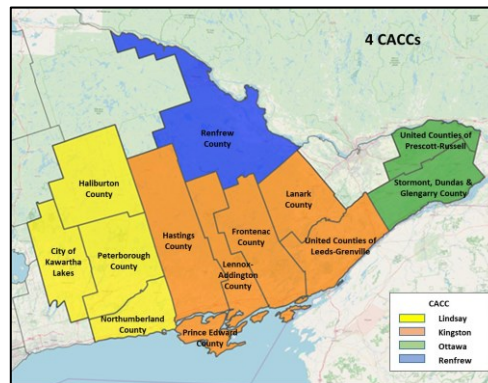
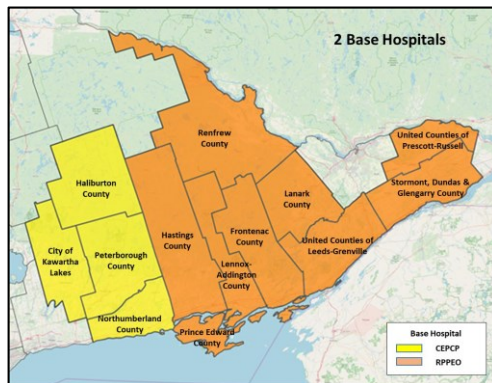
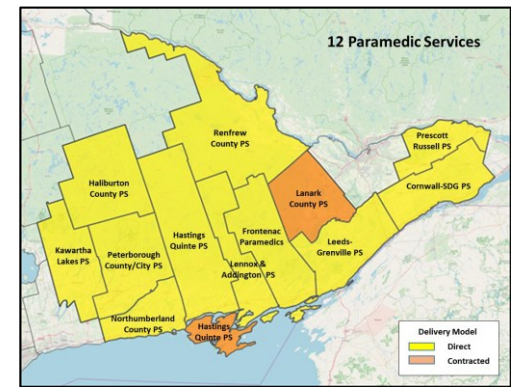
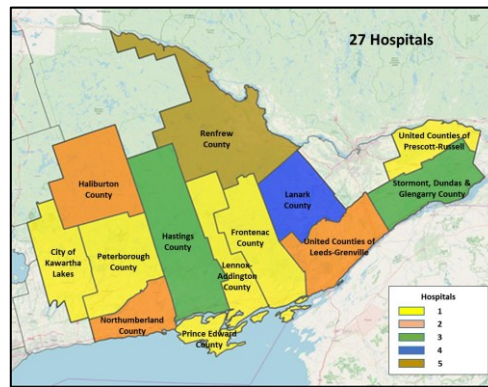
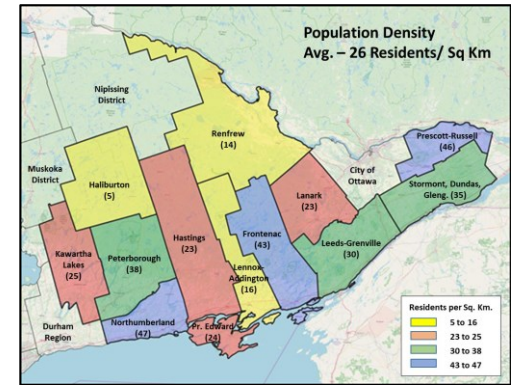
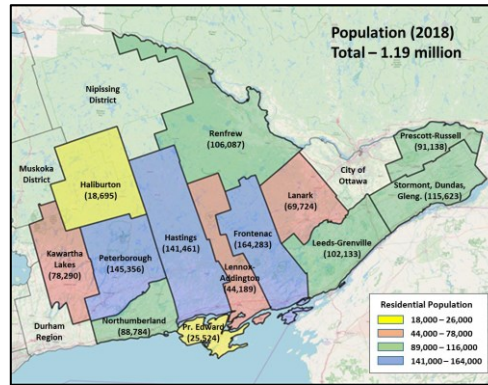


**EOWC commissioned a Review of Eastern Ontario Paramedic Services with the following as principal objective .... “to perform an environmental scan of the existing paramedic services including 5-year predictive forecasts”.**

**APEXPRO Consulting Inc. was engaged to carry out the work. The analysis is based on information provided by EOWC municipalities and their paramedic services.**

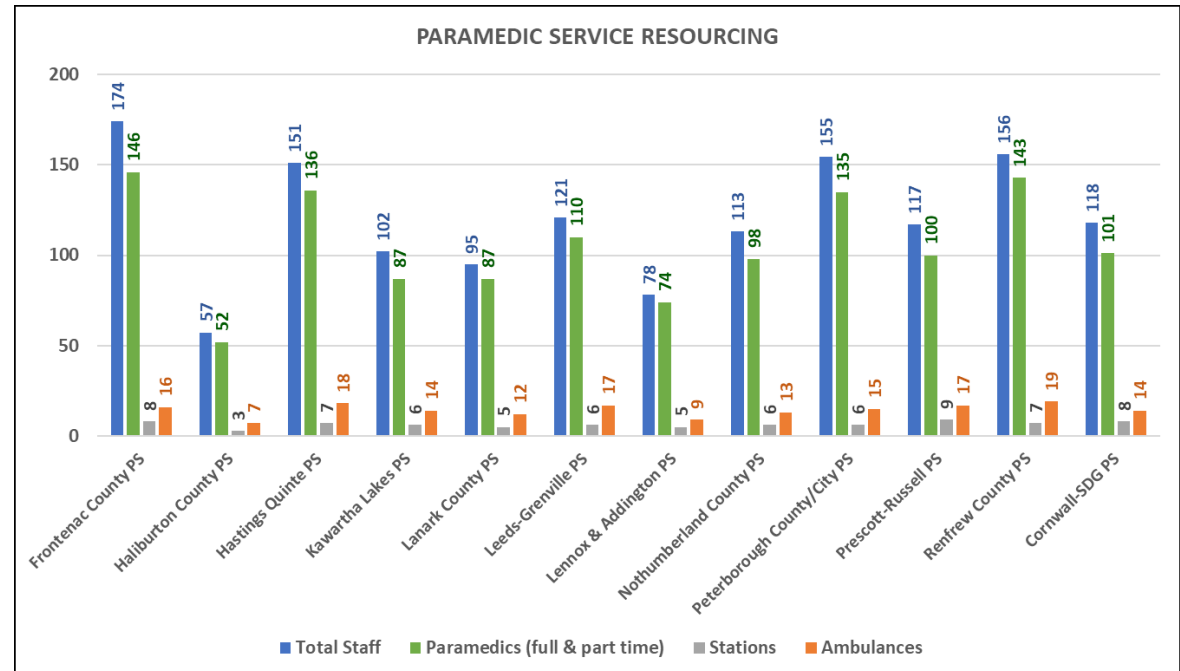
# EOWC Service Area

- 13 municipalities
- 45,877 sq. kms.
- 1.19 million residents
- Avg. of 26 residents per sq. km.
- 27 hospitals
- 12 paramedic services
- 2 Base Hospitals
- 4 CACC
- 3 LHIN



# EOWC Paramedic Services

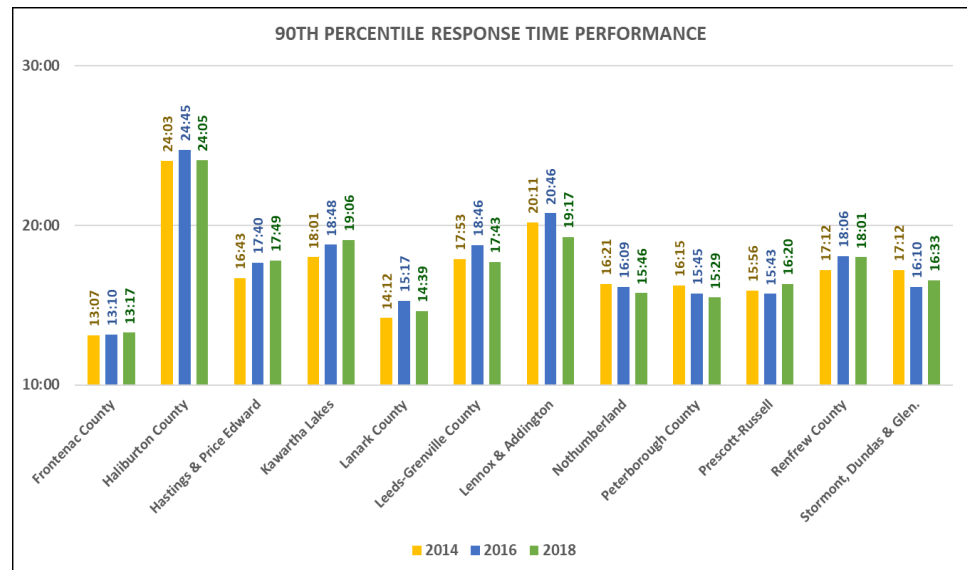
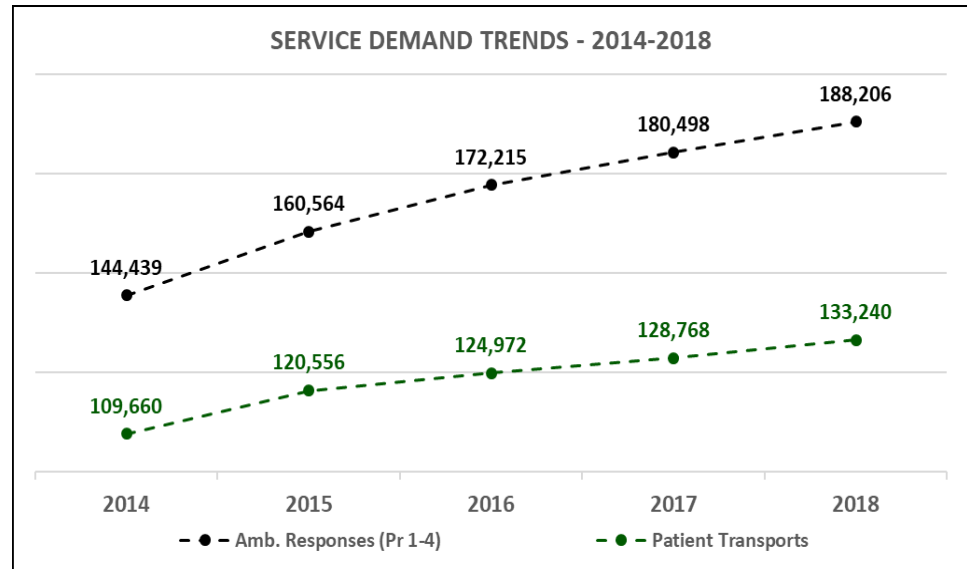
- 12 paramedic services
- 1,437 staff
- 1,269 paramedics
- 76 stations
- 171 ambulances
- All are responsive to local needs and integrated into the provincial health care system



- Most provide care at both primary and advanced life support levels
- All have Implemented RTPP by CTAS. All services perform well relative to targets.
- Operate from either fixed stations or central fleet centre. All use fluid deployment to maintain emergency coverage.

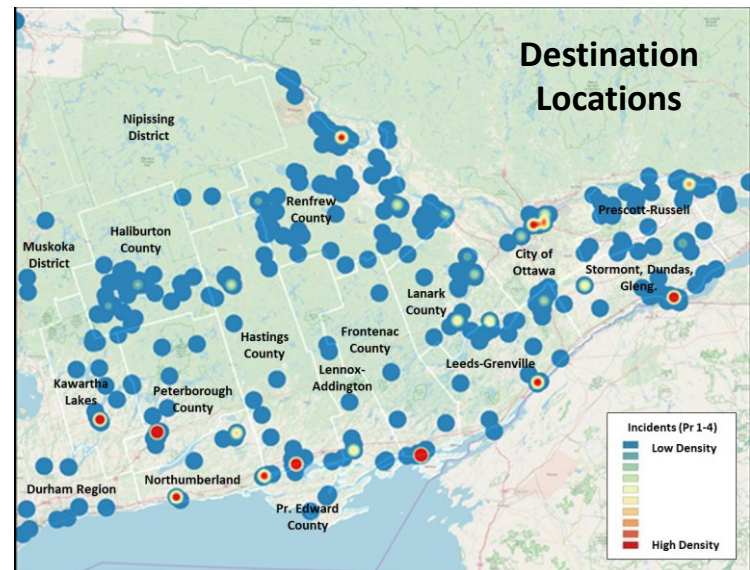
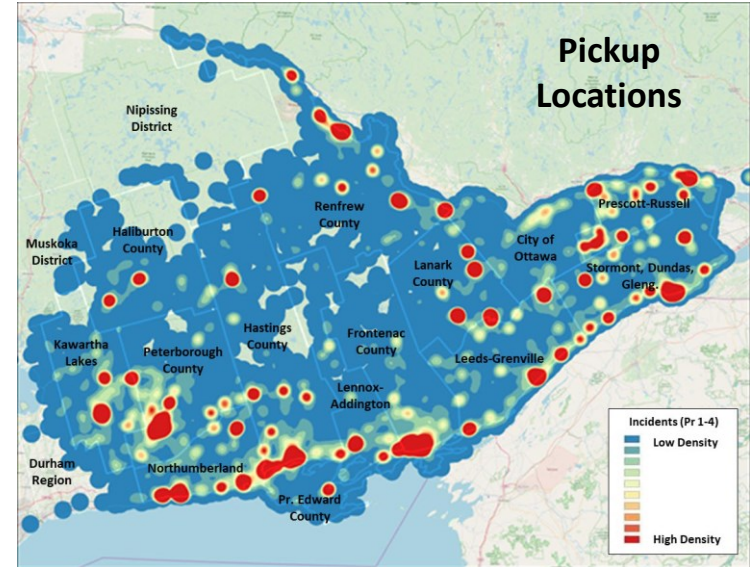
# Service Demand Trends 2014-2018

- EOWC response volumes (Pr 1-4) increased +30%
- Patients transports +22%
- In 2018, EOWC paramedic services also performed 100,000+ temporary Priority 8 standby's
- Most EOWC paramedic services have been able to effectively manage response time despite the substantial increase in call volume
- For most EOWC paramedic services, response time to highest priority medical emergencies currently ranges between 14:30 and 19:00.
- Note - 14:30 means that 90 percent of all calls are responded to in under 14 minutes and 30 seconds.



# Response Volume Profile (2018)

- Largest services by volume are Frontenac, Hastings-Quinte & Peterborough (each 12-13% of total)
- Smallest are Haliburton and Lennox & Addington (at 2 and 4% of total)
- The other paramedic services range between 6% and 8% of total.

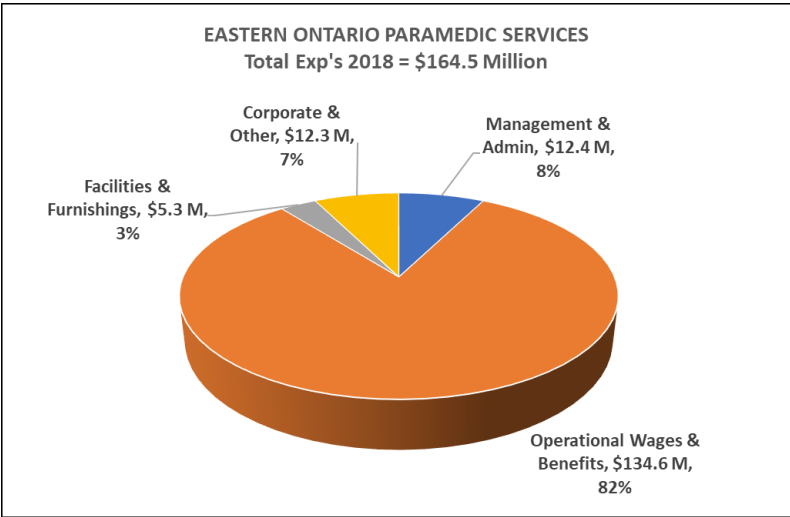


# Financial Metrics (2018)

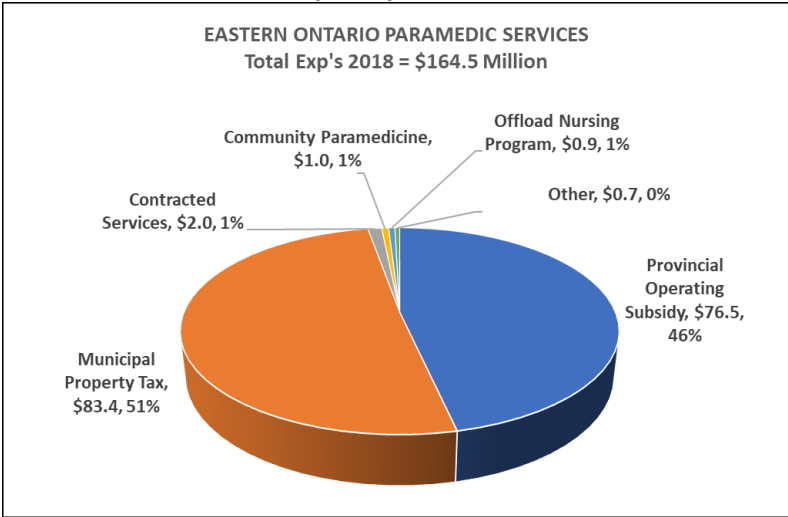
- Operating costs total \$164.5 million.
- Averages:
  - \$138 per capita
  - \$874 per call
  - \$229 per amb-hour
- Op'l wages and benefits account for 82%
- Provincial contributions cover 46% / municipal share 51%

Paramedic Service	Minimum	EOWC Region	Maximum
Responses (Pr 1-4) per 100 Capita	14.1	15.8	19.2
Staffed Amb. Hrs per 100 Capita	46	60	84
Cost per Capita	\$111	\$138	\$177
Cost per Call (Pr 1-4)	\$661	\$874	\$1,141
Cost per Amb. Hour	\$206	\$229	\$249

**Expenditures (2018) - \$164.5 Million**



**Revenues (2018) - \$164.5 Million**

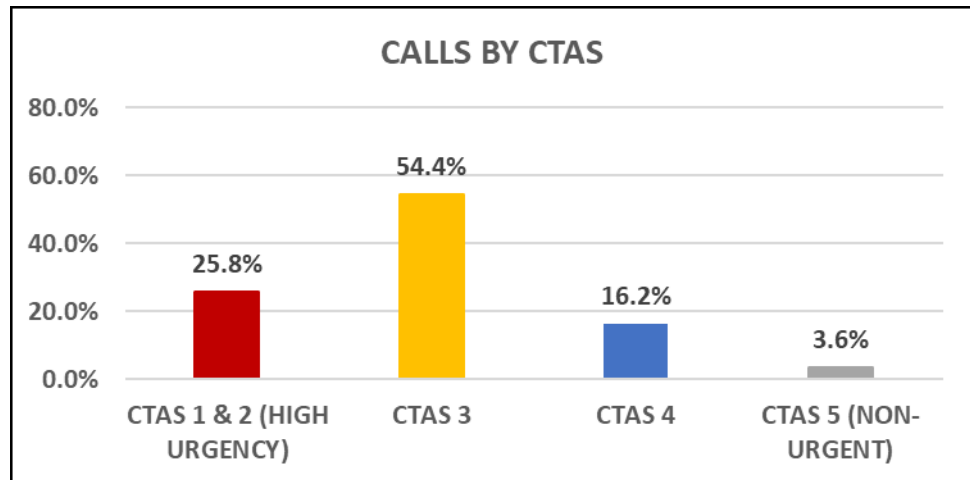
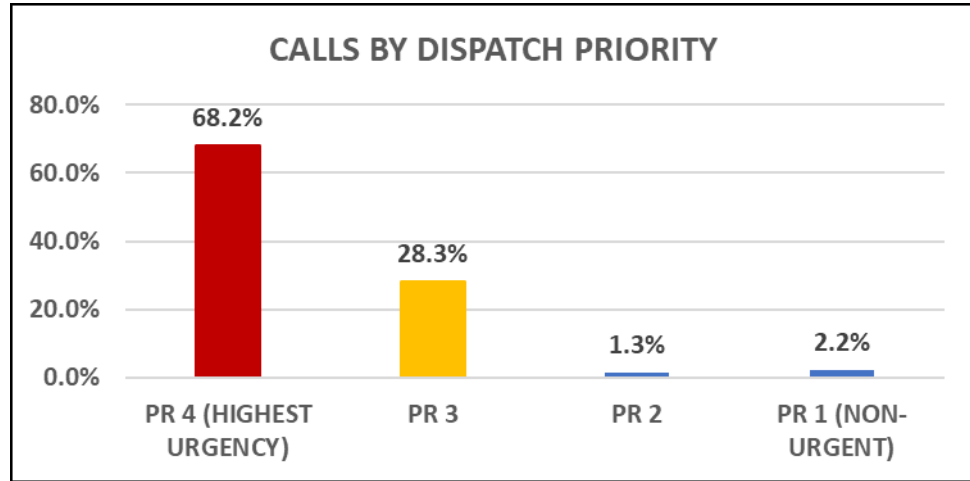


# Call Priority Distribution (2018)

In 2018 CACC dispatched 68% of all rural eastern Ontario paramedic service responses as Priority 4 medical emergencies (with lights and siren).

CTAS-based evidence shows that less than 26% of the calls required urgent medical intervention.

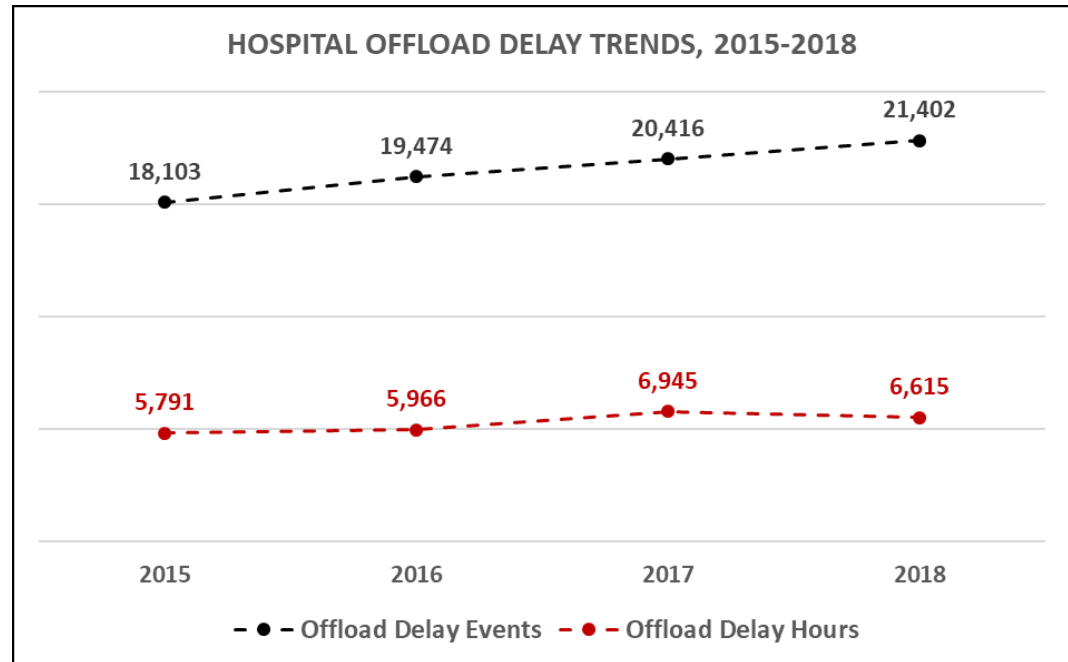
In 2017, MOHLTC announced their intent to implement a new, more discriminating dispatch tool which, when implemented, will improve call screening and response times to calls of highest urgency.





# Hospital Offload Delay (OLD)

- OLD events across rural eastern Ontario increased by 18% (2015-2018)
- OLD hours increased by 14%
- Current 6,615 hours of OLD requires over 21,000 hours of staffed ambulance coverage.
- Equates on average, to 4.8 12-hour shifts a day.



- Services most impacted are Prescott Russell where OLD averages 0.8 12-hour shifts a day; and Peterborough County/City paramedic service where OLD averages 0.7 12-hour shifts a day.

# CCO Transfer of Care Statistics

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Total ED visits generally declined between 2016 and 2018

- Central East LHIN by -4%
- South East LHIN increased by +3%
- Champlain LHIN by -6%
- Province-wide by -1%

ED arrivals by ambulance increased

- Central East LHIN by +3%
- South East LHIN increased by +8%
- Champlain LHIN by +1%
- Province-wide by +4%

ED offload times have mostly increased with variations by month.

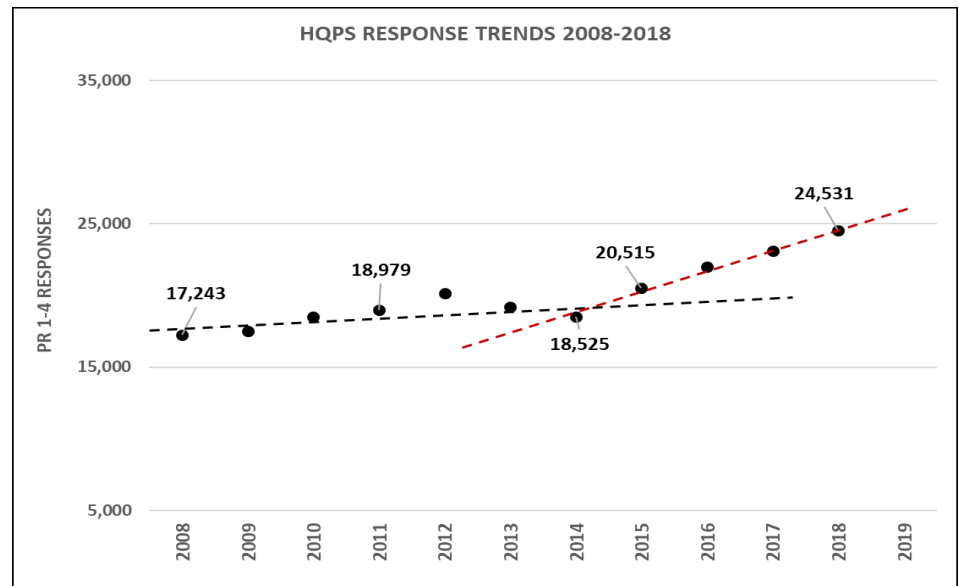
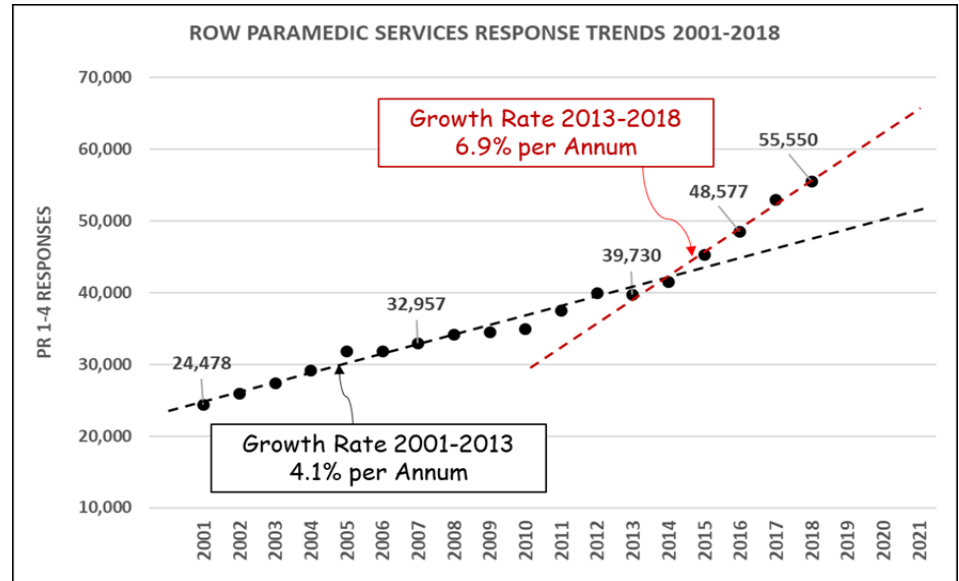
These trends are consistent with the Ontario government's 'Ageing at Home Strategy' program which has substantially increased paramedic services workload.

# Ageing at Home Strategy

Ontario government's Ageing at Home Strategy 2010, is intended to provide seniors with a continuum of community-based services that will allow them to stay healthy and live independently in their homes.

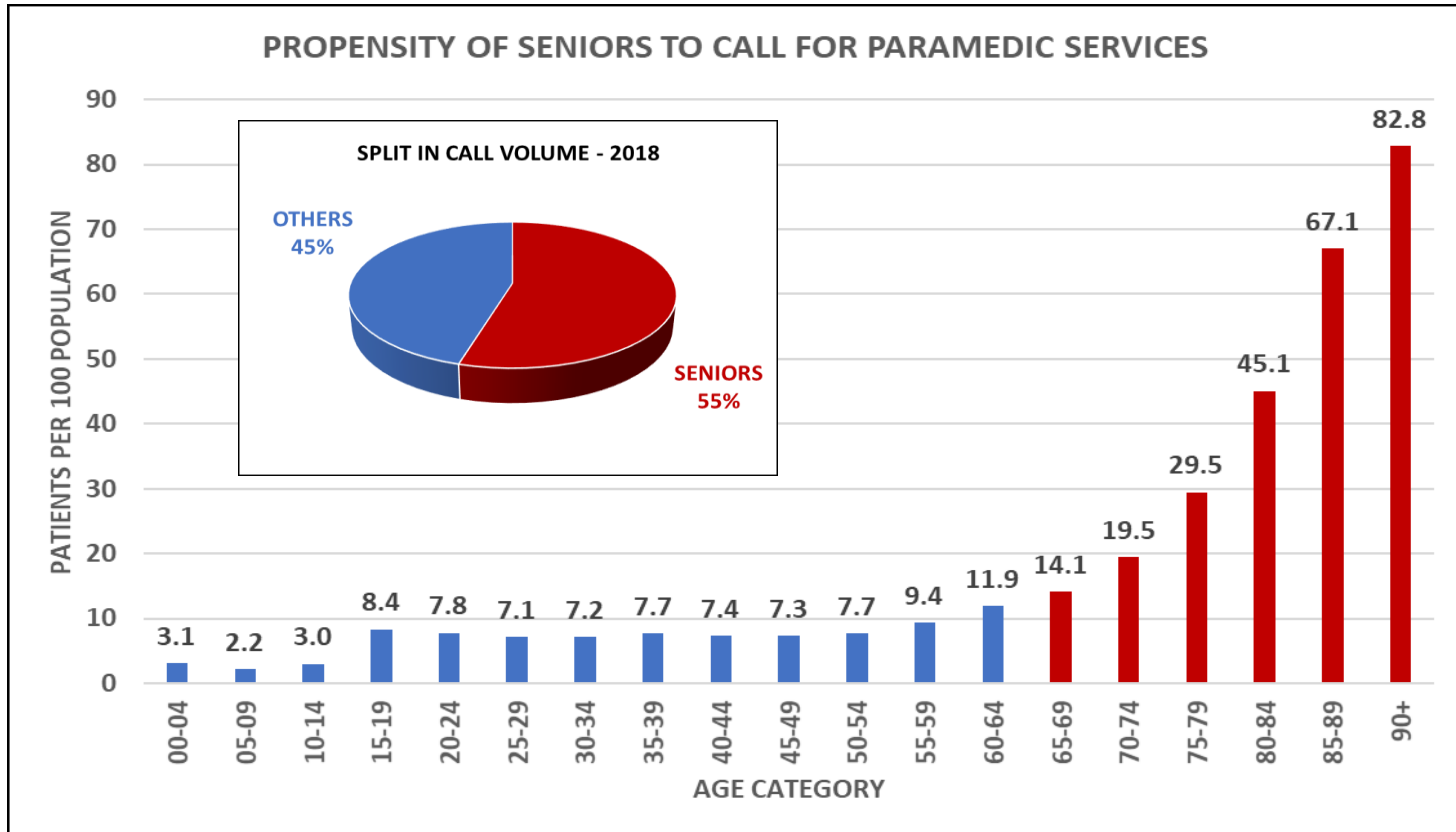
Also is intended to manage (reduce) the number of patients who are occupying acute care beds in hospitals but would be better cared for in their own homes or long-term care homes.

Funding did not extend to paramedic services whereas, the Ageing at Home Strategy has substantially increased paramedic services workload.



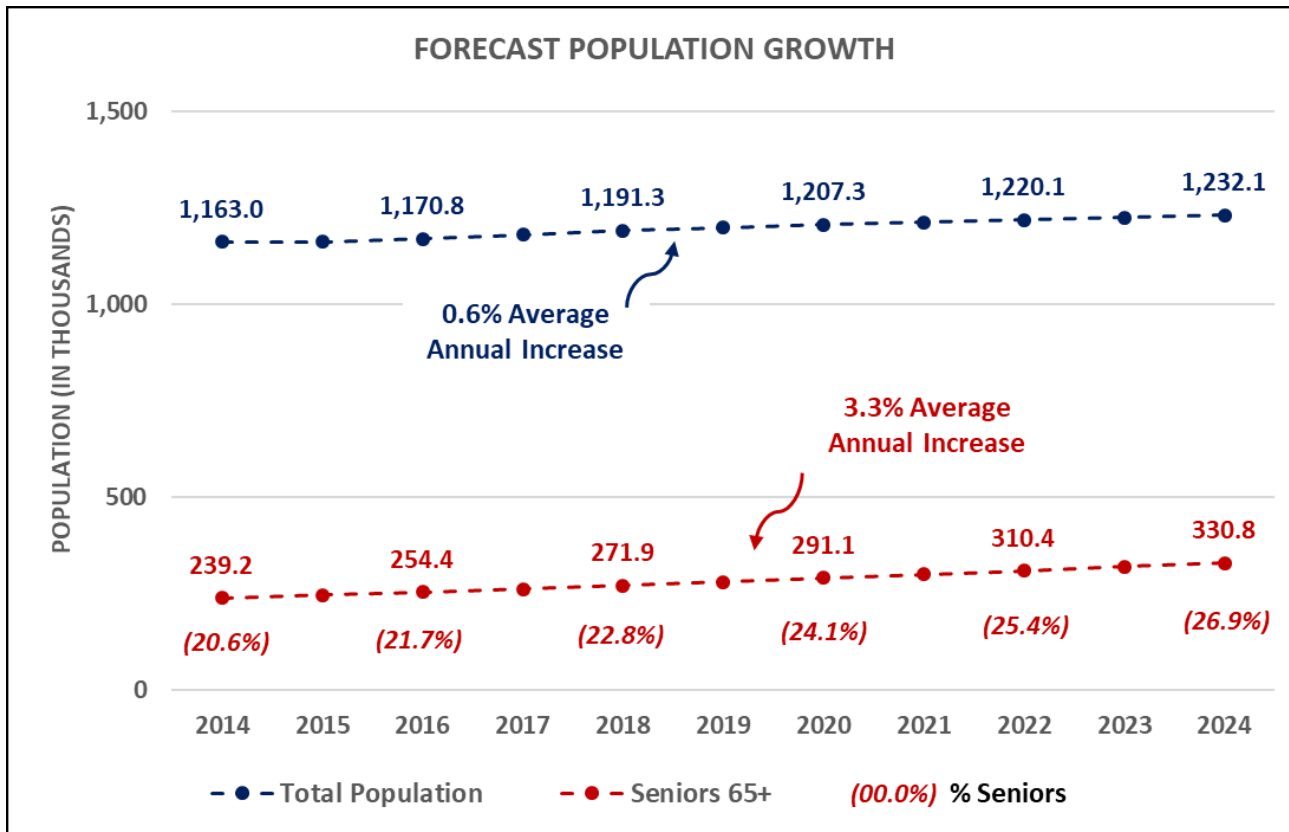
# Seniors Dependence on Paramedic Services

In 2018, seniors (aged 65+) accounted for 22.8% of total population, and they generated 55% of all ambulance responses.



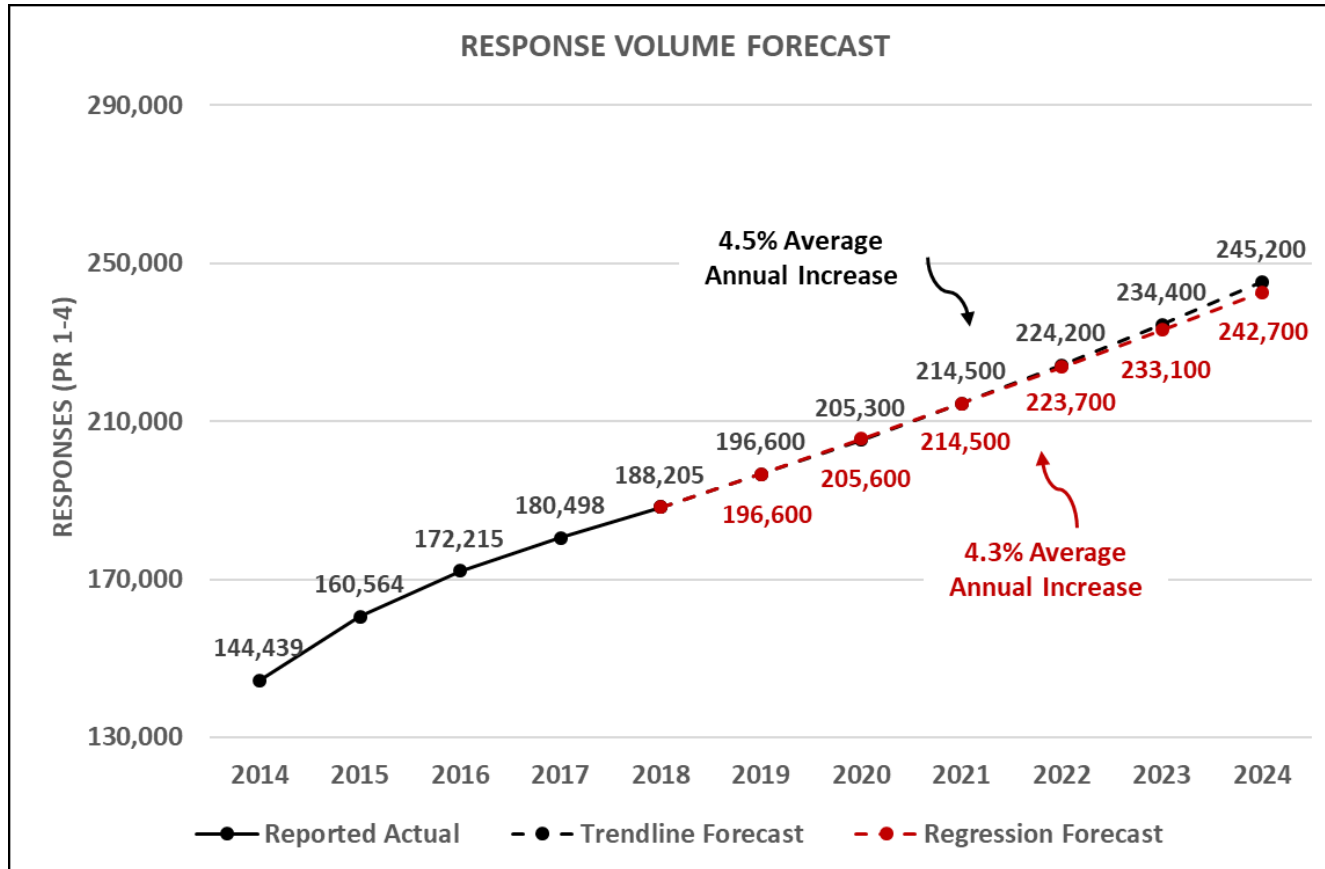
# Forecast Population Growth

Seniors as percent of total population is forecast to increase from current 22.8% to 26.9% by 2024, substantially increasing paramedic service resourcing needs.



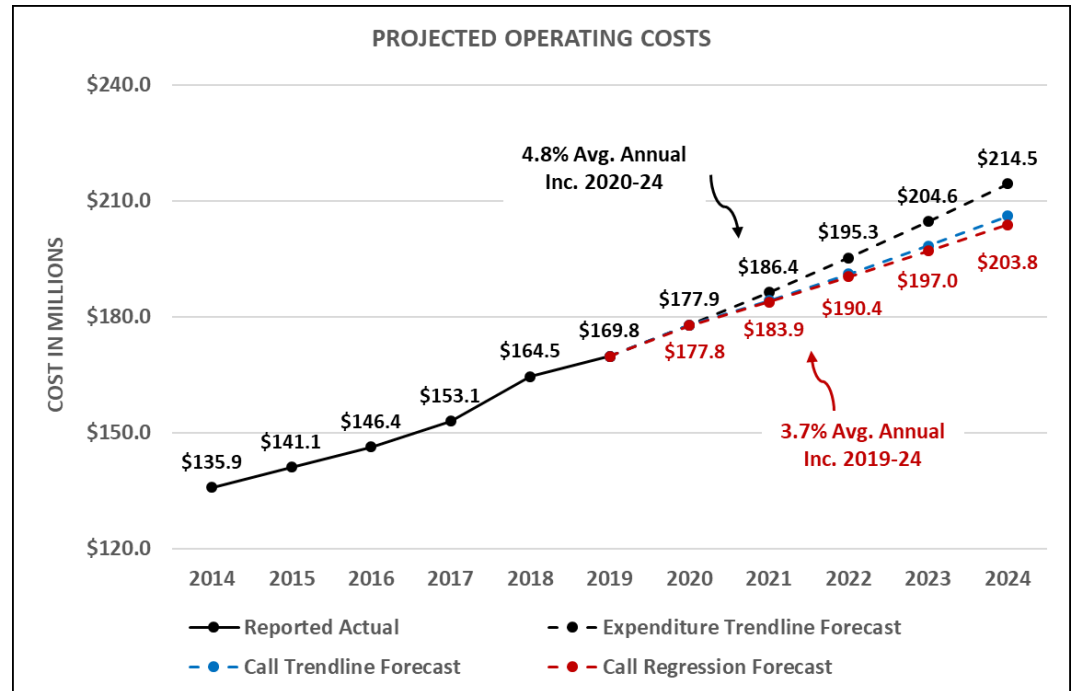
# Response Volume Forecasts

Response volumes are projected to increase at a rate of 4.3% to 4.5% per annum to 2024.



# Projected Operating Costs

- Operating cost for EOWC paramedic services was \$164.5 M in 2018.
- Budget for 2019 is a combined total of \$169.8 M
- Operating cost is projected to increase by 3.7% to 4.8% per annum to 2024
- Main cost drivers:
  - Service demand growth
  - Rapidly ageing population
  - Increasing outpatient care role due to provincial Ageing at Home strategy
  - Increasing amount of time in external jurisdictions (patient transports & cross-boundary)
  - Increasing levels of Hospital Offload Delay
  - Costs associated with PTSD and mental health support systems
  - CACC's current triage system which overly dispatches responses as medical emergencies.



Figures shown are total costs without adjustment for provincial subsidy or other revenue sources. The figures are presented in current year dollars.

# Summary

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- All EOWC paramedic services are fully compliant with provincial legislation, regulations, standards and principles for land ambulance services operating in Ontario.
- All are responsive to local needs and integrated into the provincial health care system
  - Provide reasonable ambulance resourcing accessible to all residents.
  - Provide patient transport between health care facilities for medically essential services.
  - Operate seamlessly across jurisdictions as directed by provincially managed CACC.
  - With community partners, provide health care support to the elderly and vulnerable.
- Most provide care at both primary and advanced life support levels.
- All have Implemented RTPP by CTAS. All services perform well relative to targets.
- Operate from either fixed stations or central fleet centre. All use fluid deployment to maintain emergency coverage.
- Proactively collaborate with one-another and with peers across the country, to maintain leading edge service design, and to coordinate decision-making and delivery.
- *All provide aspects of community paramedicine programs. Some informally. Many via provincially funded programs including patient referrals and home visits. These services have improved overall patient wellness and reduced 911 calls and repeat hospital admissions.*
- All EOWC paramedic services have in place, arrangements for fire department medical support. Most are in the form of tiered response agreements. Some are informal.
- Primary responsibility is EMS; albeit, they also provide an essential public safety role in conjunction with police, fire and emergency management.



# Summary *(cont'd)*

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- All are responsive to changing needs. Examples of innovations introduced by some/all:
  - Public access defibrillation (PAD) programs
  - Expanded PCP scope of practice
  - PRU for enhanced coverage and response time performance
  - AVL, e-PCR and other technological innovations
  - Dedicated Offload Nurse (DON) staffing programs
  - Trauma / by-pass protocols
  - Wireless remote monitoring for patients with chronic illness
  - Tactical, rural-remote and hazardous incident medical response teams
  - PTSD and road to mental health support systems
  - Remotely piloted aircraft system (drone)
- Current / future paramedic services demand challenges
  - Relatively rapid ageing of population
  - Increasing outpatient care role due to provincial Ageing at Home strategy
  - Increasing amount of time in external jurisdictions (patient transports & cross-boundary)
  - Increasing levels of Hospital Offload Delay
  - Costs associated with PTSD and mental health support systems
  - CACC's current triage system which overly dispatches responses as medical emergencies.
- Based on history EOWC paramedic services are well positioned to respond to current / future challenges.

## Review of Eastern Ontario Paramedic Services “Situational Overview” – Key Messages

### **Background**

The Eastern Ontario Wardens’ Caucus (EOWC) is an incorporated not-for-profit organization comprised of the heads of Council of eleven (11) Counties and two (2) single- tier municipalities in Eastern Ontario. The EOWC works to support and advocate on behalf of the 750,000 taxpayers across rural Eastern Ontario, living within the 13 upper-tier and single-tier municipalities and 90 local municipalities in the region.

The EOWC has a long history of working collaboratively with the Province of Ontario in order to promote shared interests. The EOWC prides itself on its relationship with government, and furthermore, its ability to speak with a unified voice and bring together the entire region of Eastern Ontario at one table. By doing so, we gather the necessary research and provide a portrait of the “situation on the ground,” and help better inform the provincial ministries of the current municipal realities.

In order to be proactive and better positioned to inform provincial discussions on the review of public health care in Ontario, the EOWC commissioned a review of Eastern Ontario Paramedic Services. The primary focus of the review was “to perform an environmental scan of the existing paramedic services including five-year predictive forecasts”.

### **Key Findings**

Based on the review, the EOWC has concluded that governance changes are not the solution to improving Ontario’s paramedic service. The following are key findings from the review that suggest three key areas on which the Province should focus:

#### **1. The dispatch system needs to be fixed**

We learned from the review that while over 68% of ambulance calls are dispatched as “highest urgency”, fewer than 26% are actually found to be of highest urgency when paramedics arrive. Addressing this disparity in the dispatch system will help improve and ensure that the deployment of resources meets actual need.

## 2. Hospital offload delays must be addressed

We learned from the review that, despite an overall decline in Emergency Department visits at hospitals, the time spent by Eastern Ontario paramedics in hospital offload delay is increasing annually. In Eastern Ontario alone, time lost to hospital offload delay averages 4.83 ambulance shifts per day, at an annual cost of approximately \$4.8 million.

## 3. Community Paramedicine programs must be funded

We also learned from the review that while seniors age 65+ account for only 22.8% of the population, they generate 55% of all ambulance responses. With an aging demographic, this statistic is anticipated to increase, not decrease, with seniors age 65+ expected to reach 26.9% of the population by 2024, thus substantially increasing paramedic service resourcing needs.

Ontario's Aging at Home Strategy (2010) was intended to provide seniors with a continuum of community-based services that would allow them to live independently in their own homes and reduce the number of patients occupying acute care beds in hospitals. However, funding for the strategy did not extend to paramedic services, for which demand has substantially increased since the strategy's implementation.

Community paramedicine programs that exist in the province have already been shown to reduce hospital visits by seniors. It is suggested that properly funded community paramedicine programs will allow the province to use existing well-trained paramedic resources to reduce hospital visits and calls for emergency service.

## Conclusion

The EOWC is a strong and reputable municipal partner. We will continue to work collaboratively with the Province to inform the review of public health care in Ontario, including paramedic services. The EOWC strives to provide front-line insight and deliver well-researched solutions. We look forward to sharing best practices and recommendations with the Province during the renewed consultations on strengthening and modernizing public health and emergency health services in Ontario. The EOWC municipalities have managed and substantially funded paramedic services effectively and efficiently for almost 20 years which is why the review of Paramedic Services is a key priority for the EOWC. The EOWC has a vested interest in helping shape the future of paramedic services delivery in order to ensure the best possible care for Eastern Ontario residents.