

Administrative Report

Office of the Chief, Essex-Windsor EMS

To: Warden Tom Bain and Members of County Council

From: Bruce Krauter Chief, Essex-Windsor Emergency Medical Services

Date: October 18, 2017

Subject: Essex Windsor EMS Resource Requirements

Report #: 2017-R007-EMS-1018-BK

Purpose

This report is to provide County Council historical and current information in regards to the data on EMS resource deployment and availability across Essex County, the City of Windsor and Township of Pelee. The report will highlight the legislated funding requirements for Upper Tier Municipalities (UTM), Land Ambulance call volume trends, unit hour utilization (UHU), response time requirements, service delivery trends and the utilization and requirement of municipal Fire Services as tiered medical responders.

Background

Legislated Funding Requirements

In 2000, the Province of Ontario downloaded the operation of Land Ambulance service to municipalities. For Windsor-Essex, the Land Ambulance Service evolved from three (3) independent services and one (1) provincially operated service to one (1) region-wide operated system. The County of Essex became the delivery agent for the provision of land ambulance services in the County, the City of Windsor and Township of Pelee. Prior to 2000, and the Provincial government's "Who does What" download initiative, Land Ambulance services were funded 100% by the Province of Ontario. Through the transition and devolution of service to municipalities, the funding agreement is currently based on a Land Ambulance Service Grant (LASG). The LASG funding formula is premised on 50% cost sharing with the Province of Ontario. The remaining balance is funded by the City of Windsor, the County of Essex and the Township of Pelee. The Provincial share is based on 50% of the prior year budget, adjusted for inflation. Accordingly, any enhancements introduced or service delivery costs (i.e. vehicles, medical devices, supplies, staff wages/benefits) greater than inflation are absorbed 100% in the current year by the municipality. For 2017, the provincial/municipal cost share is 47%/53%, respectively, with very nominal changes in service delivery.

The municipal share (remaining 53%) is allocated to the City of Windsor, County of Essex municipalities and the Township of Pelee based on weighted assessment, as prescribed by municipal regulation. The allocation of cost share is governed under the Ambulance Act under Regulation 129/99, Part II, Section 5(1) 3, which states;

"The delivery agent shall determine, for each municipality, the amount to be apportioned to the municipality in accordance with the following formula:

$$A = B \times (C \div D)$$

Where:

- A = the amount to be apportioned to the municipality,
- B = the costs associated with the provision of land ambulance services in the parts of the designated area comprised of municipalities,
- C = the sum of the weighted assessments for all of the properties in the municipality,
- D = the sum of the weighted assessments for all of the properties in all of the municipalities in the designated area."

Call Volume

Call volume has steadily increased over the past decade. Since 2008, patient contact calls (Code 1-4) have increased by over 18% (2.3% per year on average) and overall by 31% (3.9% per year) for all calls, which includes standby coverage calls.

Essex Windsor EMS enhanced ambulance service coverage in 2011/2012 for the areas of Learnington, Amherstburg and Windsor. The enhancement amounted to 14,960 vehicle staffing hours and began in July of 2011 and came into full placement January 1, 2012. (Appendix I).

The rationale for the 2011/2012 enhancement was cited as being:

- Increased call volume
- Increased response times
- Increase in off load delays

Since the full enhancement of 2012, call volumes have increased in total by 10% (2% per year on average), response times continue to increase and off load delays, a result of growth, changes in demographics and the continued systemic medical service deficiencies in Essex-Windsor, which continues to be a burden to the EMS system.

Call volume is also measured by municipal pickup. Although the patient may utilize EMS services in one municipality, it does not mean the person is a resident of that said municipality. In analyzing the electronic charting data, the following graph reflects historical patient contact volume of each the county Municipalities from 2012 to 2017 Projected





Comparatively, City of Windsor call volume data is reflected in the following graph:

Findings of the analysis indicates each municipal jurisdiction has experienced a call volume increase since 2012, with the exceptions being Essex and Lakeshore. In these cases there were decreases in volume in 2013 and 2014 but in both instances, increases were realized in 2015, 2016 and projected 2017. It should be noted that Kingsville, Lakeshore, LaSalle, Tecumseh and Windsor experience significant growth in call volume from 2012 to 2017 (P).

Call Volume increases from 2012 to 2017 Projected are as follows:

Municipality	increase/decrease
	2012-2016
Amherstburg	2.7%
Essex	3.3%
Kingsville	13.7%
Lakeshore	14.6%
LaSalle	23.5%
Leamington	8.1%
Tecumseh	11.7%
Windsor	10.3%
Pelee Island	2.6%
Chatham-Kent	-39.8%

Ambulance call volume increases and decreases can be attributed to a multitude of factors. Some of the factors impacting Essex-Windsor EMS are:

- Aging population
- The downturn and subsequent rebound of the economy
- Retiree recruitment and settlement
- Increase in residential, retire and long term care developments
- Lower regional unemployment experience

These factors lead to an increase in call volume and impact on EWEMS resources.

Response Times

Response times are one of several indicators of performance of an EMS system. The 90th Percentile metric indicates the response time in minutes and seconds to respond to a Code 4 call, 90% of the time. In 2016, the 90th percentile was 10 minutes, 33 seconds and 2017, YTD 90th percentile is 10 minutes, 42 seconds; 17 seconds above the 1996 benchmark of 10 minutes, 25 seconds.

Annually, municipalities are required to develop and monitor response times, in accordance with the Provincial Response Time Performance Standard. In September 2016, report 2016-R005-EMS-0907-BK (Appendix II), Essex-Windsor's 2017 metrics were presented and approved by County Council.

The approved 2017 metrics and historical performance indicators are captured in the following chart:

CTAS	Time Min.	Target	2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 YTD
Sudden Cardiac Arrest	6	55%	60%	59%	55%	55%	54%
CTAS 1	8	75%	80%	75%	76%	77%	75%
CTAS 2	10	90%	87%	85%	85%	84%	85%
CTAS 3	12	90%	88%	86%	87%	87%	87%
CTAS 4	14	90%	93%	90%	91%	91%	92%
CTAS 5	14	90%	93%	91%	90%	90%	90%

Unit Hour Utilization

Unit Hour Utilization (UHU) is another performance indicator used to measure the use of resources over a period of time. The denominator of staffing hours of the resource (in our case, an ambulance) divided into the numerator, equates to the amount of time the resource is committed to responses. The result is a percentage of utilization that a specific resource is unavailable, or committed to a request for service.

The industry best business practice is to maintain a UHU of approximately 35%. Or conversely, this measure would indicate that a resource is available 65% of the time for response.

Reviewing 2016 data, the following UHU were found, for each station during the periods of 07:00-19:00 and 19:00-07:00, indicating a typical day period and typical night period. The UHU for Code 1-4 indicates those calls which are patient focused while Code 1-4 and Code 8 reflect the movement of patient carrying and coverage calls, or standbys. Highlighted in red are those stations and time periods exceeding the 35% benchmark. LaSalle, Tecumseh, Jefferson and Mercer/Dougal exceed the benchmark for the patient transport responses. Subsequent to the Code 1-4 benchmark, the Code 1-4 & 8 benchmark is exceeded in all bases except Essex. These

indicators are a reflection of how increased utilization in one area of the region depletes resources in all areas of the region.

	Amherstburg		Harrow		Kingsville	
	0700-1900 1900-0700		0700-	1900-	0700-	1900-0700
			1900	0700	1900	
Units hours	7644	5460	4368	4368	4368	4368
UHU Code 1-4	33.31%	21.46%	26.46%	13.88%	31.02%	15.64%
UHU Code 1-4 &	49.11%	27.41%	37.03%	22.03%	43.41%	25.02%
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	Leamington		Essex		Lakeshore	
	0700-1900	1900-	0700-	1900-	0700-	1900-
		0700	1900	0700	1900	0700
Units hours	8736	8736	4368	4368	4368	4368
UHU Code 1-4	32.94%	21.25%	27.06%	14.85%	30.35%	16.63%
UHU Code 1-4 &	48.79%	35.55%	34.24%	21.04%	36.31%	21.03%
8						

	LaSalle		Tecumseh		Jeff	Jefferson		Mercer/Dougal	
	0700-	1900-	0700-	1900-	0700-	1900-	0700-	1900-	
	1900	0700	1900	0700	1900	0700	1900	0700	
Units hours	7968	7968	7968	7968	9788	9788	25764	25764	
UHU Code 1-4	48.71%	33.37%	54.17%	33.37%	62.81%	39.64%	56.22%	30.90%	
UHU Code 1-4 & 8	58.42%	43.54%	64.48%	45.07%	73.15%	49.43%	62.20%	33.71%	

Fire Service Tiered Medical Response

In 1994, the Ontario Prehospital Advanced Life Support (OPAL) study commenced and from the findings of that study came the birth of equipping defibrillators on fire apparatus and training firefighters in the practice of medical tiered response. Over the past twenty three years the role and intent of Fire Service tiered medical response has not changed dramatically. The goal is to provide quick arrival of life saving interventions for the most critically injured. Fire services are required to respond to certain occurrences automatically, regardless of tiered medical response agreements. Those occurrences are, but not limited to; motor vehicle collisions, mass casualty incidents, industrial incidents and any form of entrapment, extrication or rescue.

The decision of municipal fire services to participate in tiered medical response is that of the individual municipality. Those participating services enter into a Tiered Response Agreement (TRA) which outlines the type of responses for activation, the roles of each partnering service, the items and cost of reimbursement for participating and continuing quality assurance programs provided (Appendix III). In Essex-Windsor, all fire services participate with the exception of the Municipality of Leamington.

In reviewing fire service tiered medical response data consideration must be given to the composition of each fire service. Fire services can be composed of a full time service, composite service and volunteer (part time) service. Each composition is a factor in determination of tiered medical response participation and the level, or frequency of responses. Full time services are those with a full time compliment of staff, available 24/7/365. The City of Windsor Fire Service is a full time service and therefore respond to a greater variety of responses. A composite fire service is one where there is a small contingent of full time staff on site 24/7/365. When a response is required the full time staff are then complimented by volunteer staff. The Town of LaSalle is a composite service. A volunteer service is one which is comprised of personnel which are called upon when a request is made. These persons normally live or work in close proximity to the fire station and respond from their respective locations. These responses can happen at any given time of day.

Understanding the composition of the various services can give appreciation to the demands placed on the local fire services, especially the volunteer services when the demand for tiered medical response increases. The following chart highlights 2016 TRA responses by municipal fire service. The chart also indicates: the percentage of responses which meet the criteria of the TRA; the percentage of responses as per fire service mandated responses and the percentage of responses where EMS was outside the respective catchment areas.

Municipality	Number of Fire Service Notifications, with EMS arrival	Percentage of usage per TRA	% usage as per TRA, MVA, Fire, MCI and EMS transport	% Responses for EMS outside area, as per TRA all codes
Amherstburg	160	45%	16%	46%
Essex	134	49%	13%	22%
Kingsville	119	61%	28%	47%
Lakeshore	216	64%	23%	44%
Leamington	51	65%	35%	18%
LaSalle	71	56%	15%	35%
Tecumseh	190	68%	29%	57%
Windsor	2,214	71%	10%	1%
Pelee Island	3	67%		

The above analysis indicates that Fire Service utilization for Tiered Response is high when responding when EMS is outside of the particular area, with the exception of Windsor and Learnington. If EMS is in the area, local fire service utilization for Tiered Medical Response, MVA, Fire and MCI is manageable.

Hospital Off Load Delay

Hospital Off Load Delay (OLD) is defined as the period of time where ambulance staff are unable to release a patient from their care at a hospital due to the unavailability of emergency hospital staff. This delay has a continual negative impact on the EMS system, impacting response times, and adding significant service delivery costs. Although strides have been taken to decrease patient demand on the hospital emergency departments, the increasing call volume continues to add to the pressure. Both sites of Windsor Regional Hospital (Ouellette and Metropolitan) and the Erie Shores Healthcare (formerly Leamington District Memorial Hospital) are experiencing increases in off load delays year over year.

To help combat the burden of OLD placed on municipal EMS service delivery, the MOHLTC introduced funding, through municipalities, for nursing staff in hospital emergency departments, titled the Dedicated Off Load Nurse (DON) grant funding. For Essex-Windsor, the amount of \$982,000 will provide a nurse 24/7/365 at both the Ouellette and Metropolitan campuses of Windsor Regional Hospital in 2017/18. This funding is not expected to continue into

2018/19 fiscal year, as the Province is moving to a "Pay for Performance" model to address the off load issue. At the writing of this report, it is unknown how the "new" model will impact EMS or emergency department delivery across the region.

Municipality of Chatham-Kent Deployment Strategies

Report 2017-R003-EMS-0517-BK (Appendix IV) discussed the possible impacts of deployment strategies that Chatham-Kent EMS had proposed and how they relate to future responses to the Town of Lakeshore, more specifically the locations of Stoney Point and Lighthouse Cove. The Tilbury Chatham-Kent EMS (CKEMS) station has historically provided coverage to these locations. In 2016, CKEMS serviced 96 responses to the Lakeshore/Leamington area, with an average response time of 11 minutes. In the report it was projected that if CKEMS moved the Tilbury resource to the east, as proposed, response to Stoney Point/Lighthouse will increase to approximately 20 minutes, based on the deployment of current resources.

On September 14, 2017 EWEMS was advised that Chatham-Kent has implemented a deployment change for its ambulance resource in Tilbury. It is understood that the Tilbury resource is moving to Merlin when Chatham requires coverage, potentially impacting response times for the northeasterly sections of Lakeshore. It is further understood that the Tilbury resource may be moved into Chatham to address call volumes, potentially impacting response times in Tilbury, as well as Lakeshore.

Since September 14, 2017, EWEMS has been monitoring the situation on a day by day basis, monitoring response times and identifying response time deficiencies to the affected northeasterly sections of Lakeshore. Cases of abnormally long response times were identified to be occurring in the Comber, Stoney Point and Lighthouse Cove area. On September 27, 2017, EWEMS redeployed current resources in an attempt to maintain response times as per the County's response time target plan and provide adequate coverage to Essex County residents. The following resource deployments have been temporarily put into action;

During day time periods

- a) South District Chief will respond from Civic Centre. Suspend station rounds during daytime periods.
- b) Essex ERV deployed to West End Essex County Roads yard, Howard and Middle Side Road.

- c) City ERV deployed to Lakeshore Ruscom Fire hall.
- d) Second North DC to be utilized in Lakeshore when resources depleted.
- e) VPN will be placed into emergency coverage when Red Status is met.

If staffing becomes critical the two ERV's can be combined to staff an ambulance.

These temporary and important measures may have impacts to the 2017 budget, with possible increased fuel and maintenance on vehicles, increases to missed and late lunches and increases to wages and salaries. EWEMS continues to monitor the situation and will deploy resources as required to maintain coverage.

EWEMS understands and appreciates that Chatham-Kent has the right to deploy their ambulance resources as they desire. EWEMS remains concerned however with respect to the haste in which this change was made and the lack of communication with Essex County Administration on the impacts of the deployment. As of this date, EWEMS has made numerous attempts to schedule a meeting to discuss the proposed CKEMS strategies and decisions, but a time cannot be secured.

Discussion

Essex Windsor EMS has implemented and is currently involved in mitigation strategies and programs to reduce service delivery impacts. Provided in the discussion below are a series of interventions that have been implemented to address service delivery and response times.

Vulnerable Patient Navigator Program

In the fall of 2016, the Vulnerable Patient Navigator (VPN) program was introduced. The program is designed to seek out patients with high ambulance call volumes (911) and determine if additional/alternative supports throughout the community can be secured to improve patient care, service and remediate call volumes and cost. Since the inception of the VPN, over 110 patients have moved through the program. Of the 110, 60% reduced their use of 911. The 44 remaining are continually monitored, educated, facilitated and navigated through the health care system.

The benefits of the VPN in 9 months are:

- A reduction of 911 responses by 60% for enrolled VPN patients.
- The 911 response reduction calculates into a cost avoidance of \$1,327 per patient.
- The 911 response reduction reallocates 400 hours into unit utilization service.
- The 911 response reduction calculates into a reduction of 246 Emergency Department visits.
- It is estimated that Emergency Department visit reduction equates to a health care system cost savings of \$13,333 per patient.

Beyond the financial savings, the VPN has gained a greater connection to other health care organizations, allied agencies and community groups that benefits and strengthens the VPN role and function. These strengths will benefit the future changes anticipated with changes to legislation.

These connections have developed into community strategy tables where the most vulnerable of our communities are assisted in receiving the right care, at the right time and by the right resource.

ePCR Data Exchange Business Proof of Concept

In 2015, EWEMS and the MOHLTC began the Business Proof of Concept (BPOC) in which electronic data is exchanged directly between the Ministry's communications centre and EWEMS electronic data systems in each ambulance. The goal of the BPOC is to reduce time on task, clean data, provide precise mapping to reduce response time and reduce administrative work of data reconciliation. January 2017 saw the 100% rollout of the ePCR Data exchange project and the goals and objectives have been met.

The following are the findings of the first 6 months of use:

- 1. Reduced clearing of hospital time, by 8%
- 2. Reduced transmission time of patient chart, by 18%
- 3. Reduced quality assurance effort, by 50%
- 4. Paramedic satisfaction on report completion, 94%
- 5. Paramedic satisfaction on exchange capability, 88%

The results indicate the overall improvement to performance, time on task, reduction in response times and administrative time on task.

Emergency Department Diversion Strategies

In 2015, EWEMS, Windsor Regional Hospital (WRH) and Erie Shores HealthCare (ESHC), partnered to develop a low acuity emergency department diversion strategy. The strategy involves transporting low acuity patients (CTAS 4 & 5) from the areas of Amherstburg, LaSalle and Tecumseh to ESHC. Since the inception, we have not realized a dramatic decrease in transport to WRH. The main reason is that these patients have diseases or complaints that require transportation in accordance with EWEMS destination decision protocol (Appendix V).

EWEMS, WRH, ESHC and the ESC LHIN are currently in discussions to amend the strategy to utilize all of the regional health care resources to their fullest while ensuring the right care, at the right time and at the right location.

MOHLTC proposed revision to the Ambulance Act and Ambulance Communications Triage Tool

EWEMS is legislated to follow the Ambulance Act, the Regulations and Standards that are encompassed within the Act. On October 4, 2017, Bill 160, Strengthening Quality and Accountability for Patients Act, 2017 received Second Reading in Ontario Legislature. Bill 160 is an Omnibus Bill which includes changes or amendments to the Ambulance Act. The amendments to the Act will allow for the ability of paramedics to triage a patient on scene, determine the correct treatment facility or determine if a referral to another community resource is the best course of action for the patient illness or injury. The current legislative requirements allow only for a paramedic to transport to a determined health care facility, such as hospital emergency department. This practice, as we are experiencing, leads to off load delays and Emergency Department crowding. EWEMS welcomes these amendments and anticipates that with standards, regulation and guidance these changes will assist in reducing off load delays within our emergency departments.

Bill 160 amends the Ambulance Act and provides the ability for two select municipalities to pilot the ability to allow certified paramedics, who are also firefighters, to practice as paramedics when working on the Fire Service vehicles. The amendment would allow firefighters to treat and refer patients without EMS arrival. It would appear that the objective of the pilot projects is to determine if this practice would increase the ability of patients to seek treatment quicker, at the right place and at the right time. These pilots are proposed to be modelled after current medical tiered response agreements but with increased knowledge, equipment, training and municipal costs required. It is understood that the pilot sites chosen must be full time services and in large metropolitan areas. At this time it is understood that the City of Windsor and County of Essex are not interested in expressing interest in the pilot projects.

In June 2017 the Minister of Health and Long Term Care announced that changes will be forthcoming to the Ambulance Act and to the Ambulance Communications dispatch triage tool. These changes were confirmed when the Ontario Improving Transparency in Health Care Announcement, September 27, 2017 (Appendix VI). The Windsor Central Ambulance Communication Centre (CACC) is owned and governed by the MOHLTC. The role of the CACC is to receive ambulance requests and transfer that information to EWEMS resources.

There has been a longstanding issue that the current triage tool is outdated, not based on medical evidence and is found to over prioritize ambulance responses. This over prioritization leads to resources being deployed in an urgent manner when the problem may only require a prompt response or delayed response. The current practice leads to over utilization of resources. Essex Windsor EMS welcomes and looks forward to the changes in the land ambulance dispatch tool.

Findings

It is found that call volume has increased a total of 10% across the service since the last service enhancement of 2012. Coupled with the continual pressure of off load delays, the unit hour utilization is far above the best industry business practice of 35%. Response times are impacted negatively, as resources are utilized to cover more than one area and then must travel greater distances to respond to a call. In respect to the UHU, when multiple stations are at or above 65%, the result is the entire region suffers and has minimal to no available resources.

For Essex-Windsor, minimal coverage is defined as 12 units available, one in each station or a system operational status of yellow. Our next operational status is red, when only six ambulances are available for deployment and lastly black status, when there are no ambulances available to respond to calls. In 2017, yellow status occurs regularly during all days. Red status is less frequent, approximately one to three times per month, but any pressure to the system, such as a large motor vehicle collision, large storms or public gatherings can place the service into red status. Black status is less frequent and usually only lasts for a short period, 5-10 minutes. In any event, the growing frequency in the lack of available resources for deployment is a concern.

The above scenarios puts pressure both on EWEMS and our partner Fire Services. As per the agreements, any responses where EMS is coming from a defined distance may activate a tiered medical response. With the increased call volume, existing resources and sustained offload delay issues, EMS is regularly required to deploy resources to cover larger areas (Code 8s) impacting response times and thus greater utilization for tiered fire services. EWEMS appreciates and understands the added pressures to those volunteer services that rely on persons with other jobs to support their respective fire services. EWEMS is aware that recruitment and retention of those services is becoming more difficult for all volunteer services with the added pressure.

Increased call volume and higher UHU increase financial impacts to the EWEMS budget, as follows:

- Paramedic shift overrun (overtime)
- Increased transportation costs in relieving crews while on overrun
- Paramedic missed and late lunch costs under the collective agreement
- Vehicle fuel and maintenance with increased coverage requirements

Although the mitigations strategies, outlined above, have been put in place and are realizing positive results, the current call volume increase and systemic health related deficiencies have outpaced the resource availability. This out-pacing is leading to increased pressures to not only EWEMS, but partner agencies, such as Fire Services. Minister Hoskins' announcement of June 5, 2017, is welcomed, as changes are required in the dispatch triage tool and the practice of paramedic treatment, transport and referral. Unfortunately, these changes are not expected to be in place and active for another year or more and it is uncertain, at this stage, what positive impacts may result for Essex-Windsor. In that time period, call volume is expected to increase by at least another 2% to 4%.

EWEMS has researched the costing of increasing additional resources and the ability to add such resources within the current system. To increase the staff for one ambulance, 24 hours a day, 7 days a week, a compliment of 12 Paramedics are required. Inclusive of wages, benefits, vacation and ongoing training the cost is approximately \$1,500,000. The physical resources required are approximately \$286,000, inclusive of ambulance, stretcher, defibrillator, computer, patient care devices and medical supplies. The following proposal would require a total of 23 FTE Paramedics to the current compliment of staff.

Reviewing the current resource deployment, infrastructure availability, station capacity, call volume and UHU the following EWEMS service enhancements should be considered for the 2018 budget cycle:

Location	Staffed hours	Rationale	Paramedic costs	Resource costs
Jefferson	8,140 hrs/yr	Enhance staffing hours to provide 3 ambulances to 24 hrs/day	\$700,000	N/A
Dougall	17,520 hrs/yr	Enhance hours to provide a second ambulance 24 hrs/day	\$1,500,000	\$286,000
Lakeshore	8,760 hrs/yr	Enhance coverage of Stoney Point Lighthouse with Early Response Unit coverage	\$750,000	\$80,000
Total Costs	34,420 vehicle staffing hours		\$2,950,000	\$366,000

This proposal will help elevate adverse impacts to the current staffing compliment (WSIB, STD, LTD), reduce the UHU to a level in line with best industry practice, reduce response times to meet the Response Time Standards Plan and mitigate costs currently realized for over time, meal claims, transportation and vehicle fuel and maintenance. This proposal addresses current and proposed CKEMS deployment changes impacting the residents in the northeasterly sections of Lakeshore (specifically Stoney Point and Lighthouse Cove). Depending on future CKEMS deployment, future consideration should be given to a facility in the northeast area (St Joachim) to house any resource permanently for this area. Should a new facility be required, the estimated costs for a new station build is approximately \$1,800,000.

Essex Windsor EMS also proposes that a ten (10) year EMS Master Plan be completed in 2018. Once the plan is complete, it would become the guiding principle and document for the future of EWEMS. EWEMS would then have the ability to plan, budget and adjust operations as per the plan. The plan would not be the only guiding force, consideration must be given to the changing demographics, economies, best business practice, provincial legislation and overall regional performance indicators. Research indicates that an EMS Master Plan will cost approximately \$150,000.

Recommendation

It is the recommendation of Administration that a proposed Essex Windsor EMS service enhancement, including the development of an Essex Windsor EMS ten year Master Plan be considered in the 2018 budget deliberations.

Respectfully Submitted

Bruce Krauter

Originally Signed by Bruce Krauter, Chief, Essex-Windsor Emergency Medical Services

Concurred With,

Robert Maisonville

Originally Signed by Robert Maisonville, Chief Administrative Officer

Appendix No.	Title of Appendix
Ι	2011 Essex Windsor EMS Budget

Appendix No.	Title of Appendix
II	2017 Response Time Standards Plan Report
III	County of Essex Tiered Medical Response Agreement
IV	Municipality of Chatham-Kent Deployment Report
V	EWEMS Destination Decisions Protocol
VI	Ontario Improving Transparency in Health Care
	Announcement, September 27, 2017