

Land Ambulance 101

THURSDAY, FEBRUARY 25, 2016

Goals

- ▶ Provide an overview of the service
- ▶ Review the challenges facing the service
- ▶ Explain our strategy for the future of this service
- ▶ Answer any questions you may have about the service

Background

Key Players

Base Hospital

Provides medical direction and oversight to Land Ambulance Service

Dispatch

Fully responsible for the movement of our ambulances

Fully responsible for providing data

Fully responsible for triaging our calls

Fully responsible for management of our resources

Ministry of Health

Funds

Regulates

Legislates

Investigates

Governance

- ▶ In 1997 the province transferred responsibility to upper-tier municipalities
- ▶ County Council is designated delivery agent
 - ▶ Management Oversight Committee
 - ▶ Provided support and guidance to ambulance management on budget and operations
 - ▶ Base hospital, City of London

Service Provider History

- ▶ Middlesex had a choice to provide the service in-house or contract it out
 - ▶ April 2000 – Thames EMS (contractor) took over Thames Valley Ambulance and various county operators
 - ▶ 2012 – Middlesex-London Emergency Medical Service Authority established to deliver in-house service

Financial Information

Cost Sharing

- ▶ Funding shared between Province of Ontario, City of London and County of Middlesex
 - ▶ EMS is funded as follows:
 - ▶ 50% from the Province
 - ▶ 50% from County/City
 - ▶ 85% of which is based upon weighted assessment
 - ▶ 15% based upon location of the call (city or county)

The County share is approximately 7.9% and the City 42.1% of the operational cost of ambulance (88% of calls are from the city)

Budget

- ▶ Approved annually by County Council

▶ Key Comparators	2015 Budget	2016 Budget
▶ Middlesex – London	\$29,917,000	\$31,870,957
▶ Windsor – Essex	\$37,035,840	\$38,222,730
▶ Hamilton	\$39,953,960	\$43,529,540

Revenue

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Patient Contribution

- ▶ \$45.00 invoice to patient sent by hospital
 - ▶ \$30.00 goes to Hospital
 - ▶ \$15.00 goes to Province of Ontario
 - ▶ \$0.00 goes to MLEMS

Budget Pressures

- ▶ Special events demands
- ▶ PTSD Claims / Legislation
- ▶ Salary inflation (parity)
- ▶ Aging infrastructure
- ▶ Aging population
- ▶ Risk management
- ▶ 24/7 Impact
- ▶ Call Volume Growth

Codes

Code 1 (Deferrable): A routine call that may be delayed without detriment to the patient (e.g. a non-scheduled transfer; a minor injury)

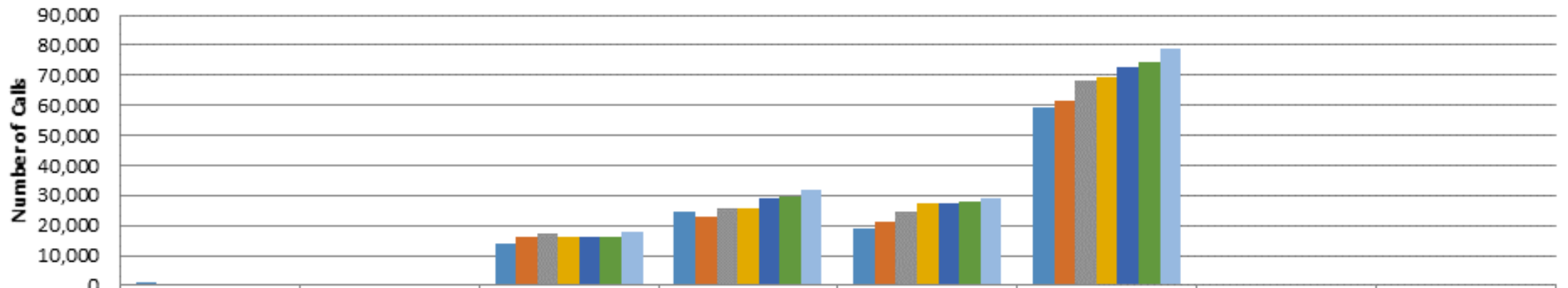
Code 2 (Scheduled): A call which must be done at a specific time, for example because of special treatment or diagnostic facility requirement (e.g. inter-hospital transfers or a scheduled meet with an air ambulance)

Code 3 (Prompt): A call that should be performed without delay (e.g. serious injury or illness)

Code 4 (Urgent): A call that must be performed immediately where the patient's 'life or limb' may be at risk (e.g. Vital Signs Absent patient or unconscious head injury)

Call Volume Growth/Predictions

Comparison year to year - Middlesex - London EMS



	Code 1	Code 2	Code 3	Code 4	Code 8	Total Calls	Percentage Increase year by year	Total Percentage Increase since 2008
■ 2008	887	366	14,135	24,744	19,012	59,144	0	0.00%
■ 2009	753	381	16,135	22,950	21,231	61,450	3.90%	3.90%
■ 2010	578	305	17,211	25,489	24,622	68,205	10.99%	14.89%
■ 2011	428	233	16,104	25,490	27,230	69,485	1.88%	16.77%
■ 2012	277	190	15,967	29,106	27,157	72,697	4.62%	21.39%
■ 2013	196	158	16,330	29,741	27,799	74,224	2.10%	23.49%
■ 2014	129	124	17,669	31,709	29,284	78,915	6.32%	29.81%

24/7 Station Challenge

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- ▶ MLEMS provided onsite staffing (24/7) within the City of London,
- ▶ Outside of London there were 5 stations, 2 of which were staffed fulltime and 3 that were staffed 12 hours a day, 7 days a week with paramedic callback as needed during the overnight hours
- ▶ The County of Middlesex preferred the callback system because it preserved vehicles in the County, and was more effective and efficient use of the land ambulance delivery, in an area with relatively low call volumes
- ▶ The union representing MLEMS paramedics lobbied and grieved to change the system to full time staffing at all stations
- ▶ City staff were briefed at various stages throughout the grievance process in regard to the potential settlement impact
- ▶ An agreement was reached to staff all MLEMS stations fulltime effective September 13, 2015
- ▶ Over the past 15 years, this initiative saved \$15M

The Service

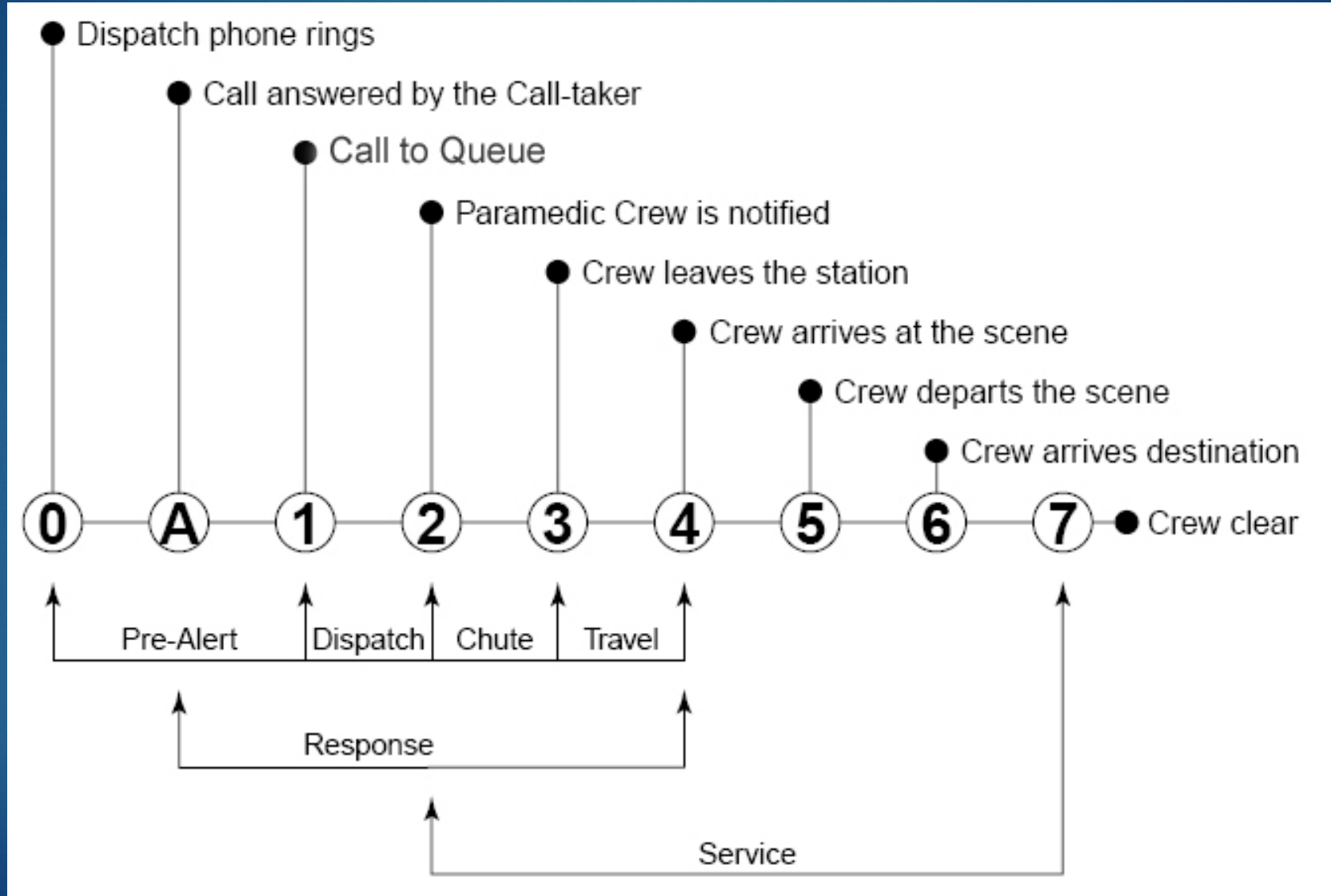
Overview of a Call

Sirens are not used on every call

They are used at the discretion of the operator when proceeding to a response.

<https://www.youtube.com/watch?v=xPRB5W9gfLU>

Anatomy of a Call



Glossary of Terms

- ▶ AED: Automatic External Defibrillator – An electronic device that applies an electric shock to restore the rhythm of a fibrillating heart
- ▶ CACC: Central Ambulance Communications Centre
- ▶ Chute Time: The time it takes an ambulance to depart once notified of a call
- ▶ Offload Delay: Offload delay measures the offload of patients at local hospitals, which can impact the resources required and availability to respond to calls
- ▶ Response Time: Response time means the time measured from the time of notice is received to the earlier of either the arrival on-scene of a person equipped to provide any type of defibrillation to sudden cardiac arrest patients or the arrival on-scene of the ambulance crew

Response Time Standards

- ▶ 2013 was the first year of new approach to measuring ambulance response time
- ▶ Ministry started to publicly report response times by municipality on their website in 2014
- ▶ Chosen Target Compliance levels are set by individual municipalities, preventing “apples to apples” comparisons between similar services

Paramedic Training

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- ▶ We have Advanced Care Paramedics (ACP), Primary Care Paramedics (PCP) and Primary Care IV (PCP-IV) Paramedics
- ▶ Paramedics are second only to physicians in the number of medical delegated acts they perform
- ▶ Continuing medical education yearly to maintain their license and skills
- ▶ Two year college degree (PCP) and 1 additional year for ACP
- ▶ Provincial Certification
- ▶ Base Hospital Certification
- ▶ Overseen by Base Hospital

Critical Care Land Ambulance

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- ▶ In the 1990's a Critical Care Land Ambulance was operated in London to transfer patients that required critical care during transport
 - ▶ This vehicle was discontinued during the late 1990's by the province
- ▶ ORNGE is funded \$15 million dollars annually to provide Critical Care Land Transfer service in Ontario
- ▶ ORNGE operates Critical Care Land units in Ottawa, Peterborough and in Toronto through a contract with Toronto EMS
- ▶ There is no Critical Care Land Transfer unit in Southwestern Ontario



Critical Care Land Ambulance

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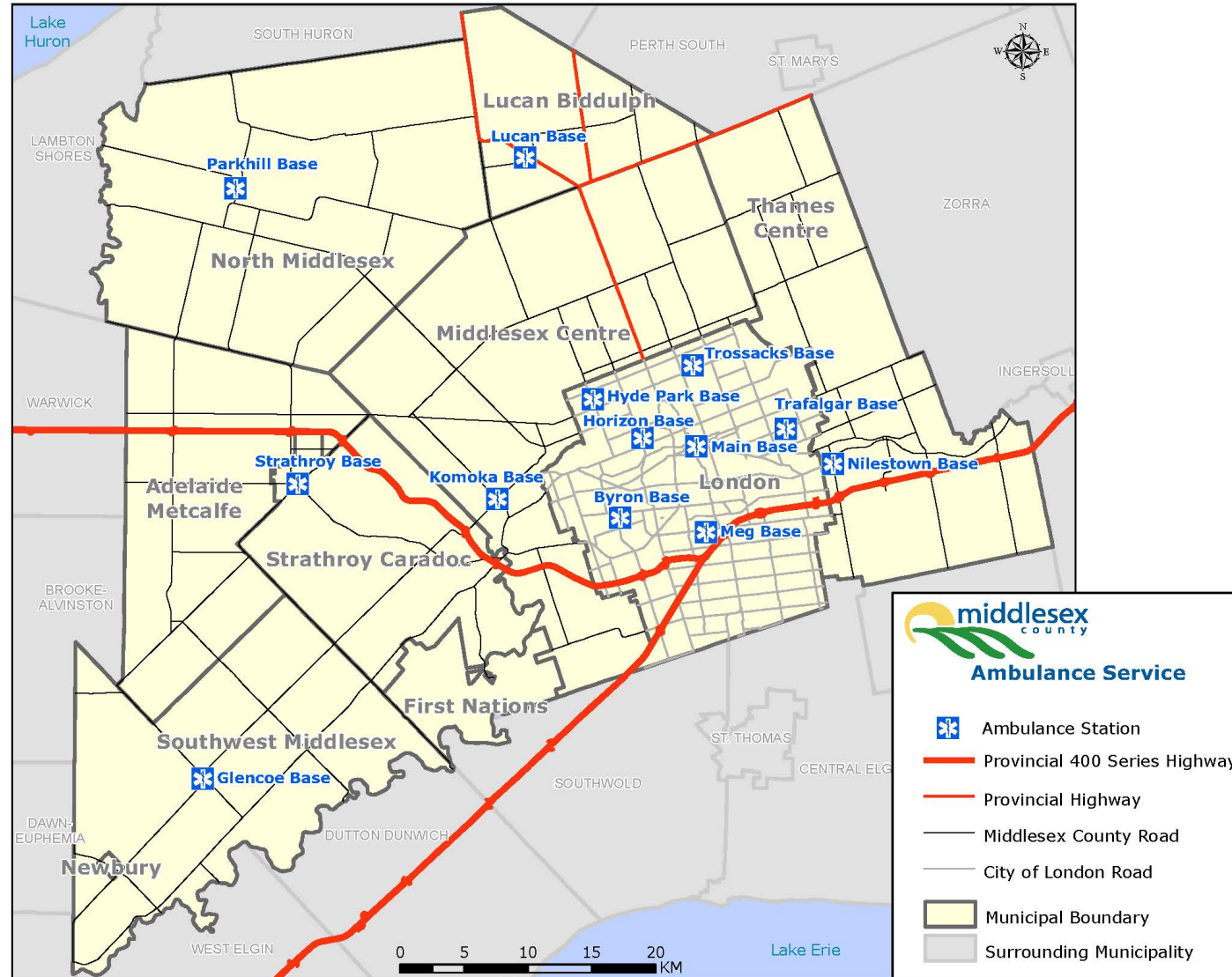
- ▶ Currently MLEMS completes the majority of Critical Care Land Ambulance transfers within our geographic area, with no provincial funding
- ▶ Ontario's Auditor General requested that ORNGE complete an independent review of Critical Care Land Ambulance Service in Ontario
- ▶ This report was completed in June, 2013 and is currently being reviewed by the Minister of Health
- ▶ MLEMS advanced the position that:
 - ▶ The Province establish a critical care land transfer unit in Southwestern Ontario
 - ▶ That the Province consider funding MLEMS (100%) to provide services

Service Delivery Challenges

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- ▶ Bariatric Patients
- ▶ Off-load delays
- ▶ Community-based Care
 - ▶ Uses EMS as safety net as patients are being released quicker & sicker
- ▶ Aging Population
- ▶ Mental Health

Station Locations



Deployment Protocol

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- ▶ When system is overwhelmed in City of London, ambulances are pulled in from County stations, and neighbouring counties are contacted to help cover County, if needed

Offload Delays

- ▶ Normal hospital turnaround requires time to transfer patient care, complete electronic charting, clean and resupply ambulance
- ▶ Turnaround Goal is 30 minutes
- ▶ Inability of hospitals to accommodate EMS patients in a timely fashion impacts the EMS resources required to respond to calls and maintain response time standards
- ▶ On average, twenty-one 24 hour ambulance days were lost monthly to offload delay during 2013



Emergency Room Improvements

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- ▶ The “Toyota Process”

Looking Ahead

Ambulance Strategic Plan

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- ▶ Why we did it?
 - ▶ Looking for a proactive document that looked forward for next 10 years
 - ▶ Guide System for the next 10 years for both resources and facilities
- ▶ Executive Summary
 - ▶ “In October 2013, ORH Consultants were commissioned to produce a 10-Year Resources and Facilities Master Plan for MLEMS. The purpose of the study was to inform station numbers and locations, as well as resources requirements, to maintain a high level of response performance over a 10-year horizon. As part of this study an appraisal of the current management structure and operations was required to assess scope for increased efficiency.”

Ambulance Strategic Plan

Key Recommendations

- ▶ Continue to pursue strategies to take over coordination of the dispatch function
- ▶ Adopt the optimal 12 station location strategy and timeframe as proposed
- ▶ Increase ambulance hours each year, in line with the modelling in this report (3.3% increase per year for the next 10 years)
- ▶ Increase the ops superintendent numbers to roster 2 around the clock
- ▶ Make the PAD and public education coordinator role permanent

New Station Development

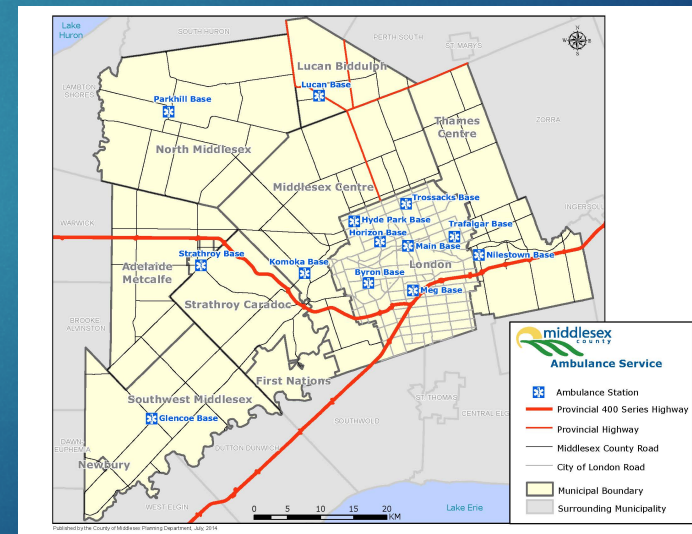
- ▶ EMS has been operating out of 13 stations
- ▶ Prior to system start up in 2000, most of these stations were already in use for many years
- ▶ Many of the EMS stations today are not meeting current industry standards
- ▶ EMS is incurring more and more facility repair costs due to the age of the current EMS facility infrastructure



New Station Development

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- ▶ Consideration is being given to looking at replacing the aging EMS Facility infrastructure.
- ▶ Facilities that require replacement consideration include:
 - ▶ Meg Drive Station, London
 - ▶ Trafalgar Station, London (currently in a trailer for past 4years)
 - ▶ Trossacks Station, London
 - ▶ Nilestown Station
 - ▶ Strathroy Station
 - ▶ Parkhill Station
 - ▶ Glencoe Station



The Role of Dispatch

- ▶ The Province of Ontario funds and operates the Central Ambulance Communications Centre (CACCC) for the MLEMS service area
- ▶ One of 22 CACCCs in the Province, only 4 of which are municipally operated. Province only directly operates 11 of the 22 CACCCs
- ▶ Middlesex County Council passed a resolution to request Ministry of Health transfer control of London Central Ambulance Communication Centre to County
- ▶ There is no performance agreement between London Central Ambulance Communication Centre and MLEMS

Community Paramedicine

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During 2015, MLEMS developed a Community Paramedicine (CP) program aimed to fill health care service gaps and improve access to additional support services for seniors and patients with complex and/or chronic issues

Provides paramedics with the additional training and tools to identify patients for electronic referral to multiple agencies for additional external supports.
420 referrals completed on service-wide implementation. (Apr-Dec, 2015)

Allows paramedics to make an informed decision and provide electronic notification to the CP lead for a follow-up assessment (phone or home visit).
250 follow-ups completed on service-wide implementation. (Apr-Dec, 2015)

CP developed, criteria based protocol allowing paramedics to make a clinical decision to activate the CMHA Crisis Mobile Team for on-scene point-of-care crisis intervention for patients suffering from Mental Health and Addictions issues
47 activations on city-wide implementation. (Apr-Dec, 2015)

Non-Emergency Transport

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St. John Ambulance

Survivor Day

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How you can help?

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- ▶ Think about us when making policy
 - ▶ Speed bumps
 - ▶ examples
 - ▶ Construction
 - ▶ Red light cameras
 - ▶ Public events policy
 - ▶ Opticom
 - ▶ Dispatch
 - ▶ London Plan
 - ▶ Lobbying

Questions