



Manitoulin-Sudbury DSB

Presentation to:

The Municipality of St. Charles

August 13, 2014

Manitoulin-Sudbury DSB

- ▶ Thank you for this opportunity to present on how the DSB relates to your Municipality
- ▶ Topics of discussion
 1. A perspective of Manitoulin-Sudbury DSB
 2. The EMS Department
 3. The future of Ontario health care
 4. Challenges & Opportunities in EMS:
 - I. Community Paramedicine
 - II. 5-Year Staffing Enhancement Plan
 - III. Non-Urgent Patient Transportation
 - IV. Ambulance Response Time Performance Plan
 - V. EMS Costs
 5. Questions?

DSB Coverage Area

- Encompasses the Districts of Manitoulin and Sudbury (excluding the City of Greater Sudbury).
- An area of over 45,000 sq. km



Area Perspective

The geographic area we service is larger than 9 US states.

- ▶ Rhode Island (4,002 sq km)
- ▶ Delaware (6,447 sq km)
- ▶ Connecticut (14,357 sq km)
- ▶ New Jersey (22,588 sq km)
- ▶ New Hampshire (24,216 sq km)
- ▶ Vermont (24,901 sq km)
- ▶ Massachusetts (27,336 sq km)
- ▶ Hawaii (28,311 sq km)
- ▶ Maryland (32,133 sq km)

Global Perspective

Manitoulin-Sudbury is larger than 117 countries in the world

- ▶ Vatican (.44 sq km)
- ▶ Monaco (2 sq km)
- ▶ Bermuda (54 sq km)
- ▶ Liechtenstein (160 sq km)
- ▶ Singapore (710 sq km)
- ▶ Lebanon (10,452 sq km)
- ▶ Jamaica (10,991 sq km)
- ▶ Fiji (18,272 sq km)
- ▶ Israel (20,770 sq km)
- ▶ Rwanda (26,338 sq km)
- ▶ Haiti (27,750 sq km)
- ▶ Belgium (30,528 sq km)
- ▶ Taiwan (36,193 sq km)
- ▶ Switzerland (41,284 sq km)
- ▶ Netherlands (41,850 sq km)
- ▶ Denmark (43,094 sq km)

Distance Challenges

From	To	Distance (km)	Time (hh:mm)
Toronto	Detroit	393	4:16
Toronto	Sudbury	385	4:55
Toronto	Pittsburgh	516	5:21
Toronto	Montreal	544	6:18
Gore Bay	Foleyet	514	7:35
Toronto	New York City	788	8:38
Toronto	Chicago	840	8:53
Toronto	SSM	685	8:56
Toronto	Quebec City	793	9:03
Toronto	Timmins	702	9:06
Toronto	Washington	782	9:18
Toronto	Boston	886	9:39
Meldrum Bay	Missinaibi Prov Park	602	10:40

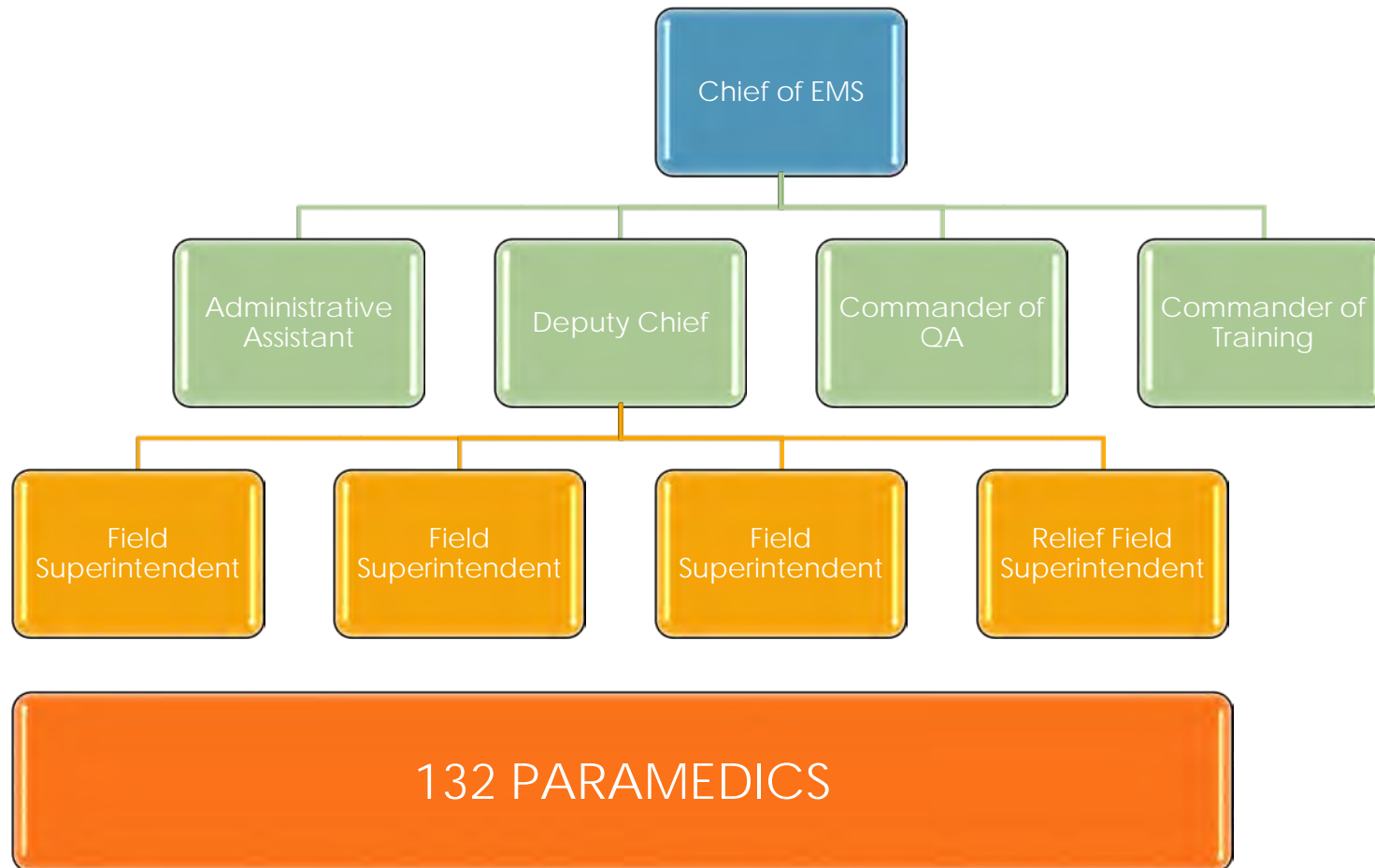
Key EMS Responsibilities

- ▶ Provide a service that includes all aspects of land ambulance operations including:
 - Personnel, vehicles, and equipment
 - Type of service (on-site versus on-call)
 - Quantity and level of service
- ▶ Responsible for all costs associated with the provision of these services:
 - 50/50 cost share with province on “Approved Costs”
- ▶ Ensure compliance with all governing legislation including numerous standards and regulations which cross through different realms of provincial ministries.

EMS Operations

- ▶ 23 ambulances and 4 ERV's
- ▶ Currently, 70 full time and 62 part time Primary Care Paramedics employed
- ▶ Shifts are 8, 10 or 12 hours in duration with a mix of full on-site and on-call components.
- ▶ 7 day a week supervisory coverage:
 - ▶ Mon-Fri 17 hours on-site (7am-midnight) and 4 hours on-call
 - ▶ Sat, Sun & Holidays 10 hours on-site (7am-5pm) and 14 hours on-call

EMS Department Chart



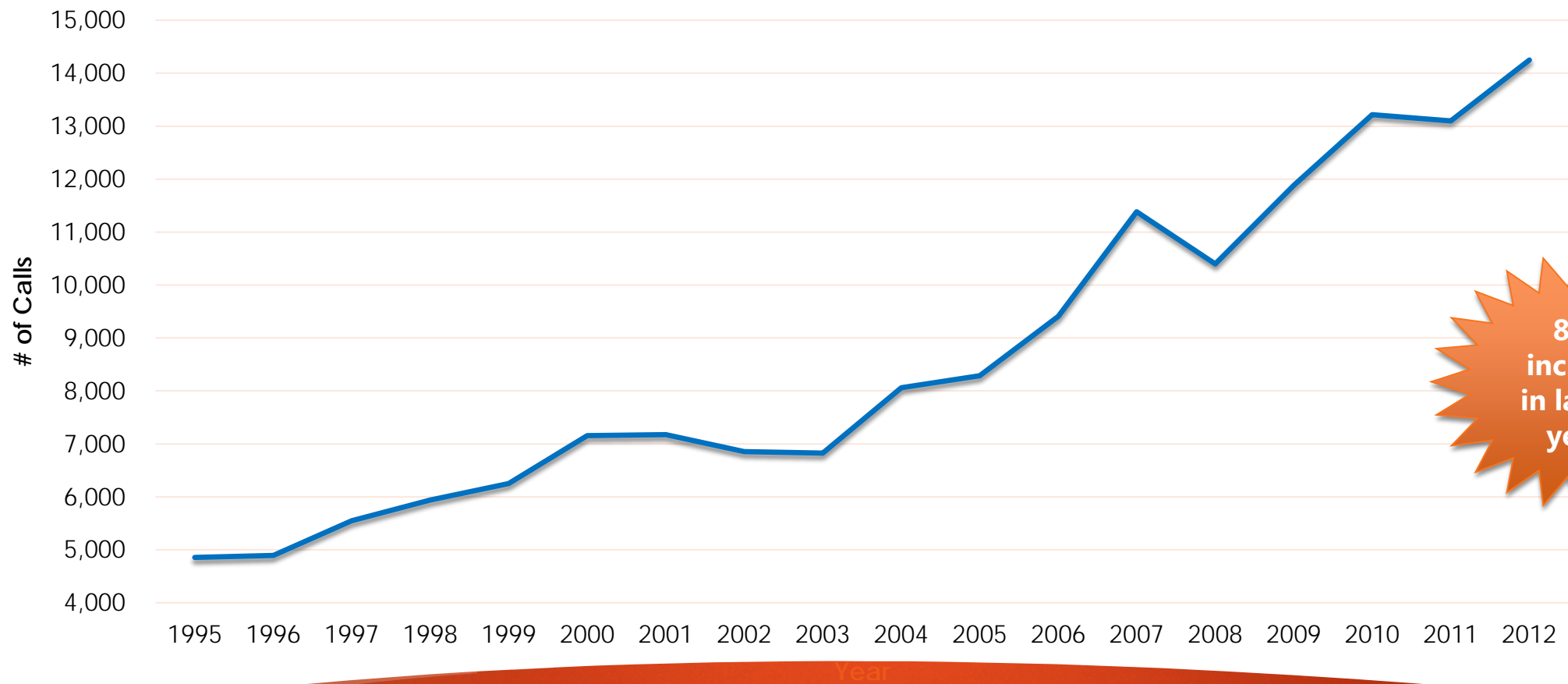
Supportive Systems

- ▶ 4 volunteer Emergency First Response Teams
 - ▶ Cartier, Cockburn Island, French River Delta, & Tehkummah
- ▶ 13 tiered response agreement mostly with Municipal based Fire Services but also with certain Police forces.
- ▶ Maintenance agreements with Municipalities and community organizations to oversee 139 Automatic External Defibrillators throughout our districts

Primary Care Paramedic

- ▶ Manitouslin-Sudbury DSB employs over 130 Primary Care Paramedics
- ▶ A graduate of a 2 year community college diploma program consisting of in class theory and clinical practice in hospital and pre-hospital settings.
- ▶ Hold an Provincial MOHLTC EMCA/AEMCA certificate
- ▶ Certified by a Base Hospital Medical Director to administer:
 - ▶ Glucagon, Gravol, Benedryl, & Epinephrine via injection,
 - ▶ Glucose, Ibuprofen, Acetaminophen & ASA orally,
 - ▶ Nitroglycerin sublingually, and
 - ▶ Salbutamol via inhalation.
- ▶ Additionally certified by a Base Hospital Physician to perform semi-automatic external cardiac defibrillation.





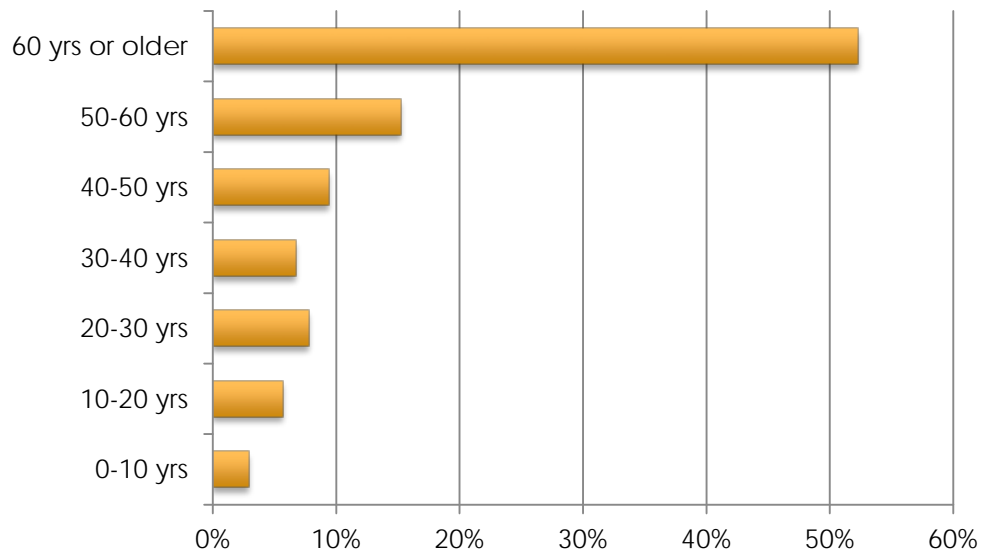
**83%
increase
in last 10
years**

Call Volumes

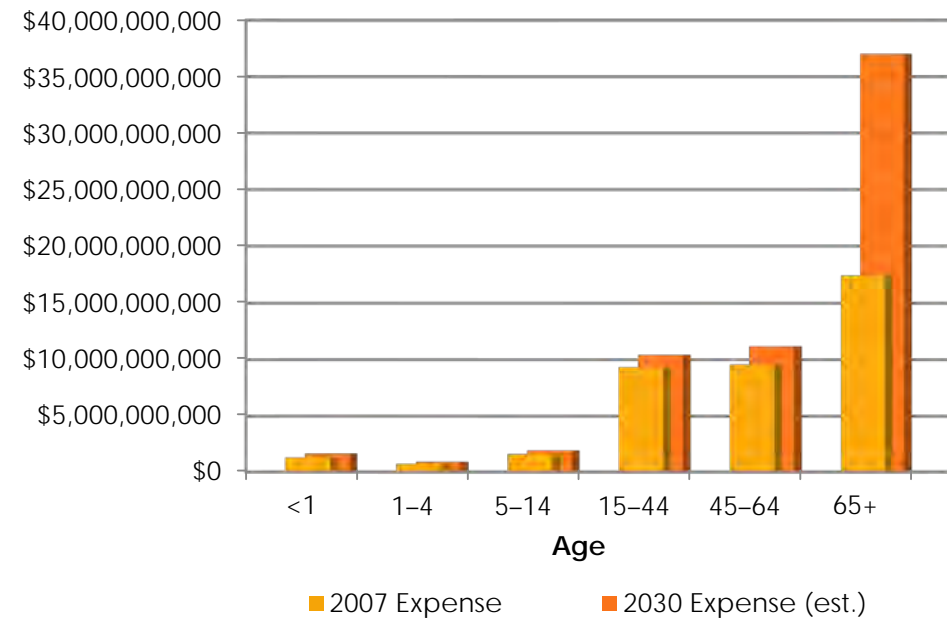
- Consistently on the Rise

Ontario's Healthcare Future

DSB Composition of Calls by Age



Ontario's Health Care Demographic & Fiscal Future



Community Paramedicine

- ▶ Community Paramedicine (CP) is gaining in popularity and becoming important in terms of the greater healthcare model within Ontario.
- ▶ CP encompasses many different programs involving non-traditional paramedic roles mostly developed through partnerships with other health agencies
- ▶ Many goals of CP programs that effect broader healthcare including:
 - ▶ Improved patient access to the right services
 - ▶ Improved health outcomes among older adults with chronic conditions, functional impairments, and social frailty
 - ▶ Increased patient and caregiver satisfaction
 - ▶ Decreased demand for emergency department visits among non-urgent cases
 - ▶ Decreased demand for hospital admissions
 - ▶ Improved cost-effectiveness

Community Paramedicine continued...

- ▶ While we have been participating in a provincial EMS Community Paramedicine Working Group for over a year now, this issue has risen to the forefront with the announcement earlier this year by the MOHLTC of \$6 million in one-time funding to go towards new and existing programs within the province.
- ▶ CP can be broken down into 5 categories with a great focus on prevention:
 1. Paramedic Referrals
 2. Circle of Care Partnerships
 3. CP Clinics
 4. CP Directed Home Services
 5. CP Community Education

Community Paramedicine continued...

- ▶ On April 17th a proposal was submitted partnering with Algoma and Cochrane DSSAB's
- ▶ A strong proposal for a number of reasons:
 - ▶ Joint proposal leverages partnerships and eliminates the "reinvention of the wheel"
 - ▶ EMS Partners make up over 25% of Ontario as a whole
 - ▶ 35 letters of support from community groups collected in less than one month
 - ▶ The provincial lead on the seniors care strategy, Dr. Sinha, stated in a report:
 - ▶ *LHIN's and local EMS programs should explore the development and expansion of Community Paramedicine programs across Ontario, especially in northern and rural communities. These programs could better support high-users of EMS to avoid emergency department (ED) visits and hospitalizations and potentially delay entry into a long-term care home as well.*
- ▶ Awaiting an announcement on the funding (post provincial election)



EMS 5-Year Staffing Plan

- ▶ The EMS 5-Year Staffing Plan aims to review current statistics and call volumes to determine the potential need for enhanced staffing levels to affect a greater good to the citizens in our districts
- ▶ Currently there are 2 basic models of staffing:
 - ▶ 24 hour/7 day a week
 - ▶ on-site/on-call composition
- ▶ In June of 2011 the DSB Board approved in principle the initial 5-Year EMS station staffing plan for the Manitoulin-Sudbury DSB area
- ▶ The first step of the plan was financially approved and in the fall of 2011 Mindemoya went to 24/7 on site coverage
- ▶ The second step of the plan was not approved and the EMS 5-Year Staffing Plan underwent a review
- ▶ In the fall of 2013 the first step of the new plan was approved resulting in both the Massey and Noëlville stations gaining to 20 hours of on site coverage 7 days a week
- ▶ The annual cost of the enhancements proposed in the 5-Year EMS Staffing Plan would require an additional municipal investment of approximately 1% per year



Non-Urgent Patient Transportation

- ▶ Under Ontario's regionalized system of healthcare, patients often require diagnostics, treatment, or specialist care not available within the rural hospital setting
- ▶ In the absence of an alternative means of transport Ambulance are utilized taking them outside their communities for lengthy periods of time
- ▶ Southern Ontario has alternative, for profit Medical Transportation Services
- ▶ We have been fortunate over the last year to be participating in a NE-LHIN sponsored pilot project whereby in conjunction with our local hospital partners we have been operating a non-ambulance transportation system for patients requiring transportation between medical facilities
- ▶ Our pilot project is helping to inform a broader consultants report dealing with the issue throughout North Eastern Ontario and the results should be available soon

Ambulance Response Time Performance Plan

- ▶ 2013 a new response time plan was enacted
- ▶ The plan is an improvement from the archaic former system of measuring against 1996 response times
- ▶ It does now deal with patient acuity as opposed to strict call type as dispatched however it is highly aggressive and more tuned to an urban model of response
- ▶ There are 6 separate criteria under review this new plan but the first 2 deal with the most critical patient
- ▶ The MOHLTC has set the time benchmark (based upon medical knowledge) and DSB is required to set the % of time they will achieve this benchmark



Ambulance Response Time Performance Plan continued

- ▶ **Designated Delivery Agent (DDA) - SUDDEN CARDIAC ARREST**

15% of the time, within 6 minutes from the time ambulance dispatch conveys the call information to the paramedic, **Manitoulin-Sudbury DSB** will endeavour to have a responder equipped and ready to use an AED at the location of a patient determined to be in sudden cardiac arrest.

- ▶ **EMS Designated Delivery Agent - CTAS 1**

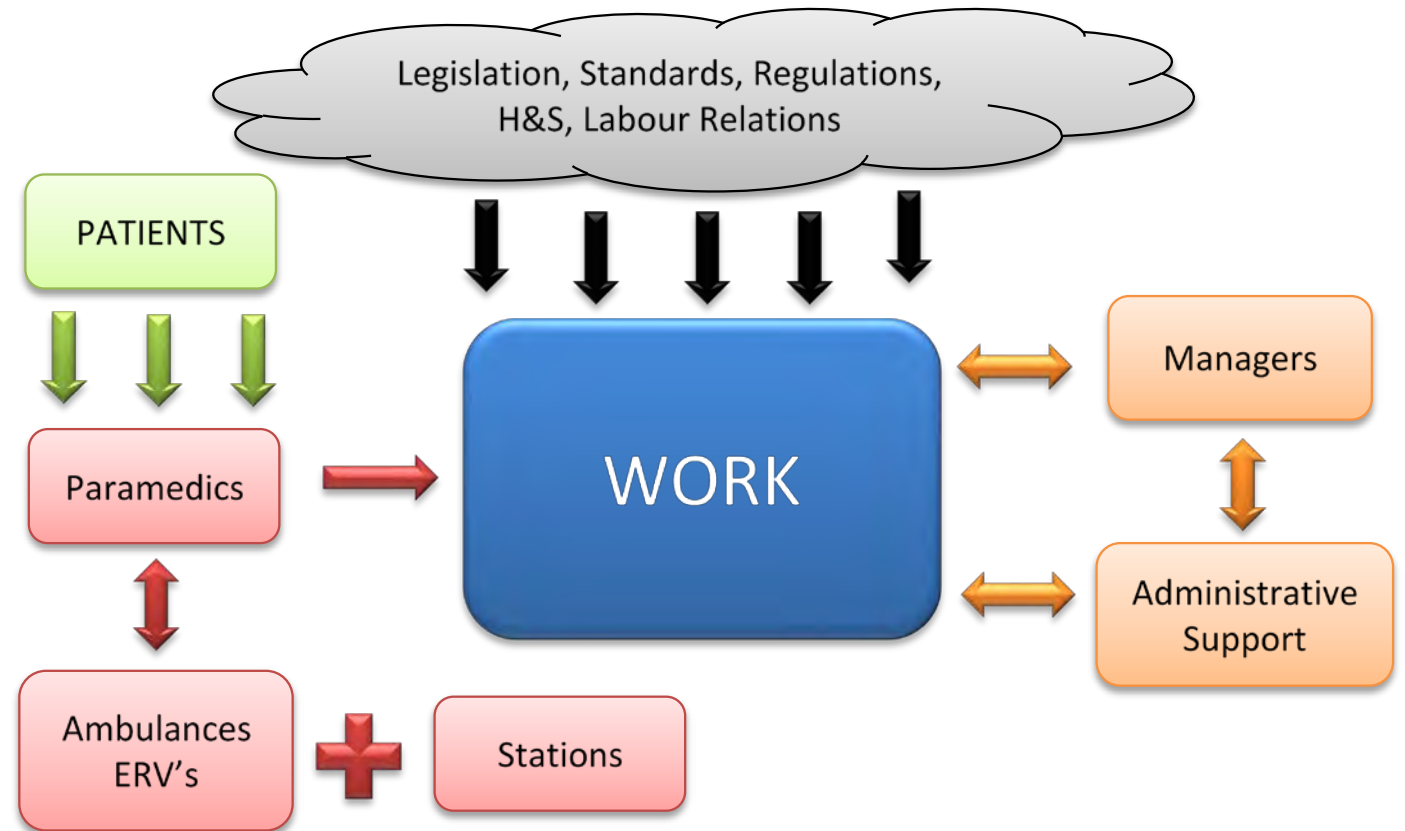
25% of the time, within 8 minutes from the time ambulance dispatch conveys the call information to the paramedic, **Manitoulin-Sudbury DSB** will endeavour to have a PARAMEDIC as defined by the Ambulance Act and duly equipped at the location of a patient determined to be CTAS 1.

EMS Costs

- ▶ The Issues of the year 2000 – Municipal download & College Diploma Program
- ▶ Paramedic shortage throughout the province sparking wage increases
- ▶ Paramedic wages have settled averaging a 2.09% yearly increase across the province over the last 5 years (DSB 2.00%)
- ▶ Conversely over the same time period, OPP averaged a 3.29% increase while Fire Services provincially averaged 3.41% yearly increases
- ▶ Interest Arbitration – since Paramedics cannot wage effective strikes due to essential services agreements, they are eligible for interest arbitration

EMS Costs – concept of work

- There is a lot of work associated with running an Ambulance Service
- Many pressures result in a system that must adapt and progress as required



EMS Costs

RATIOS	Northern Average	Average without Sudbury & Thunder Bay	Manitoulin-Sudbury DSB
Managers per Station	0.8 to 1	0.8 to 1	0.58 to 1
Ambulances per Station	2.7 to 1	2.8 to 1	1.92 to 1
Managers per Administrative Support	3.1 to 1	3.4 to 1	7.0 to 1
Manager per Paramedic	0.3 to 1	0.3 to 1	0.27 to 1
Total Staff per Administrative Support	14.7 to 1	16.6 to 1	33.0 to 1

- ▶ Essentially looking at the ratios suggests that we are doing more with less as compared to our Northern Ontario neighbours
- ▶ The current state of the EMS department is not overinflated and in reality can be considered quite lean in comparison to our closest colleagues
- ▶ The EMS Department of Manitoulin-Sudbury DSB accounts for a large portion of the overall DSB budget and thus municipal apportionment and it is important that taxpayers get value for money spent

QUESTIONS?



THE FORGOTTEN SERVICE