EMERGENCY SERVICES COMMITTEE AGENDA

Emergency Services Committee Meeting
Wednesday, June 27, 2018
Tom Davies Square

COUNCILLOR RENE LAPIERRE, CHAIR

Gerry Montpellier, Vice-Chair

4:00 p.m. EMERGENCY SERVICES COMMITTEE MEETING
COMMITTEE ROOM C-11

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DECLARATIONS OF PECUNIARY INTEREST AND THE GENERAL NATURE THEREOF

PRESENTATIONS

1. Report dated June 8, 2018 from the Interim General Manager of Community Safety regarding Emergency Management Program Update Overview . **4 - 9**
(ELECTRONIC PRESENTATION) (FOR INFORMATION ONLY)

- Latoya McGaw, Emergency Management Officer
- Michael MacIsaac, Executive Deputy Chief of Emergency Services

(This report provides Emergency Services Committee with a high level overview of the Emergency Management Program situated within the Community Safety Department of the City of Greater Sudbury.)

2. Report dated June 8, 2018 from the Interim General Manager of Community Safety regarding Fire Services – Water/Ice Rescue. **10 - 19**
(ELECTRONIC PRESENTATION) (FOR INFORMATION ONLY)

- Brian Morrison, Assistant Deputy Chief

(Greater Sudbury Fire Services responds to water/ice rescue incidents as identified in By-Law 2014-84, which establishes and regulates Fire Services. Fire Marshal Communique issued in accordance with the recommendations from a coroner's inquest, encourages municipalities to review their bylaws. Also, new provincial legislation requires certification to NFPA Standard 1006 for all technical rescue activities by January 1, 2021.)

CONSENT AGENDA

(For the purpose of convenience and for expediting meetings, matters of business of repetitive or routine nature are included in the Consent Agenda, and all such matters of business contained in the Consent Agenda are voted on collectively.

A particular matter of business may be singled out from the Consent Agenda for debate or for a separate vote upon the request of any Councillor. In the case of a separate vote, the excluded matter of business is severed from the Consent Agenda, and only the remaining matters of business contained in the Consent Agenda are voted on collectively.

Each and every matter of business contained in the Consent Agenda is recorded separately in the minutes of the meeting.)

CORRESPONDENCE FOR INFORMATION ONLY

C-1. Report dated June 8, 2018 from the Chief of Fire and Paramedic Services, General Manager of Community Safety regarding Community Safety Department Update. **20 - 38**
(FOR INFORMATION ONLY)

(This report provides a summary of the Community Safety Department statistics and a briefing on current and upcoming activities.)

C-2. Report dated June 8, 2018 from the Interim General Manager of Community Safety regarding Ontario's Emergency Health Services - Sector Overview. **39 - 93**
(FOR INFORMATION ONLY)

(This report provides an overview on data and information generated by the Health Analytics Branch in consultation with the Emergency Health Regulatory and Accountability Branch.)

ADDENDUM

CIVIC PETITIONS

QUESTION PERIOD AND ANNOUNCEMENTS

NOTICES OF MOTION

ADJOURNMENT

Presented To:	Emergency Services Committee
Presented:	Wednesday, Jun 27, 2018
Report Date	Friday, Jun 08, 2018
Type:	Presentations

For Information Only

Emergency Management Program Update Overview

Resolution

For Information Only

Relationship to the Strategic Plan / Health Impact Assessment

This report refers to Quality of Life and Place, Responsive, Fiscally Prudent, Open Governance and Sustainable Infrastructure within the Strategic Plan.

Report Summary

This report provides Emergency Services Committee with a high level overview of the Emergency Management Program situated within the Community Safety Department of the City of Greater Sudbury.

Financial Implications

There are no financial implications associated with this report.

Signed By

Report Prepared By
Latoya McGaw
Emergency Management Officer
Digitally Signed Jun 8, 18

Manager Review
Michael MacIsaac
Executive Deputy Chief of Community Safety
Digitally Signed Jun 8, 18

Financial Implications
Jim Lister
Manager of Financial Planning and Budgeting
Digitally Signed Jun 10, 18

Recommended by the Department
Joseph Nicholls
Interim General Manager of Community Safety
Digitally Signed Jun 8, 18

Recommended by the C.A.O.
Ed Archer
Chief Administrative Officer
Digitally Signed Jun 10, 18

City of Greater Sudbury Emergency Management Program

Purpose

This report provides an overview of the City of Greater Sudbury's Emergency Management Program in alignment with the presentation to Emergency Services Committee. This report further outlines actions taken to comply with the annual requirements of the Emergency Management and Civil Protection Act and Ontario Regulation 380/04.

Background

Legislation mandates that all municipalities and provincial ministries have an Emergency Management Program.

The Emergency Management and Civil Protection Act (EMCPA) requires all Ontario municipalities and provincial ministries to develop, implement and maintain an Emergency Management Program. The Act establishes the minimum standards for emergency management programs required by municipalities and specifies the requirement in the Act for mandatory emergency management programs. Emergency Management programs require several key elements:

- Conducting of an annual Hazard Identification and Risk Assessment (HIRA)
- Establishment of a Municipal Emergency Control Group
- Identification of Critical Infrastructure
- Preparation of an Emergency Response Plan
- Establishment of an Emergency Operations Centre (EOC)
- Conducting annual exercise and training for Municipal Emergency Control Group
- Public Education and Awareness
- Appointing a Community Emergency Management Coordinator (CEMEC)

Emergency Management is the responsibility of the Ministry of Community Safety and Correctional Services (MCSCS). Falling within the Office of the Fire Marshal and Emergency Management (OFMEM) annual year-end audits of all municipal emergency management programs in Ontario are performed. An annual statement of compliance must be submitted by the Community Emergency Management Coordinator (CEMC) and Head of Council, declaring that the Municipality has completed all the annual requirements.

The overarching aim of Emergency Management programs in Ontario is to create disaster resilient communities. The City of Greater Sudbury's Emergency Management Section (CGS EM) is responsible for developing, implementing and maintaining Greater Sudbury's Emergency Management program; ensuring the City obtains and maintains compliance with the regulation as outlined in the EMCPA. Meeting the requirements of the Act is achieved through collaboration with internal and external partners and engagement in training and workshops. Throughout the year, CGS EM undertakes several coordinated activities that not only satisfy but exceeds the annual compliance requirements.

City of Greater Sudbury Emergency Management Program Activities

Ontario's Emergency Management Glossary of Terms defines Emergency Management as: "organized activities undertaken to prevent, mitigate, prepare for, respond to and recover from actual or potential emergencies." Based on these five pillars of emergency management (Prevention, Mitigation, Preparedness, Response, & Recovery), highlights of CGS EM's program activities include:

a) Prevention, Mitigation and Preparedness

i. Critical infrastructure Management

Legislation requires municipalities to identify all critical infrastructure assets within its geographic boundaries regardless of ownership. Greater Sudbury's Emergency Management Program Committee reviews the categories of critical infrastructure within the City's boundaries and works with the City's Geographical Information Systems (GIS) staff to identify and map the location of these assets. The City's GIS database provides access to over 150 GIS layers including various sectors of critical infrastructure.

ii. Hazard Identification Risk Analysis (HIRA)

A Hazard Identification Risk Assessment (HIRA) is essential to emergency management programs in that it represents a systematic tool that can be used to assess the risks of various hazards. According to Emergency Management Ontario there are three reasons why a HIRA is useful to emergency management professionals:

1. It helps emergency management professionals prepare for the worst and/or most likely risks.
2. Allows for the creation of exercises, training programs, and plans based on the most likely scenarios.

3. Saves time and resources by isolating hazards that cannot occur in the designated area.

A review of the HIRA for Greater Sudbury is undertaken yearly to ensure that the listed hazards remain relevant and prioritized appropriately.

iii. Planning – Response Plans

Emergency response plans are legislated for municipalities under the *EMCPA* and must be reviewed on an annual basis. The Emergency response plan details the methods in which the City mobilizes its resources during an emergency and ensures all City organizations, emergency response services, and key agencies are fully aware of their respective roles and responsibilities during an emergency. This plan outlines how the City will respond to, recover from and mitigate the impact of a disaster. The Emergency Response Plan is posted on the City's website.

iv. Training and Exercise

Municipal emergency management programs are required to conduct an annual training and exercise for employees of the municipality with respect to the provision of necessary services and the procedures to be followed in emergency response and recovery. To meet the 2017 legislative requirements for the Community Control Group (CCG), the Emergency Management team selected **"IMS 100 – Introduction to the Incident Management System (IMS) for Ontario"** as the training component. The Incident Management System is a standardized, coordinated approach to managing incidents that provides functional interoperability at all levels of emergency management.

The CGS Emergency Management also provided training to staff and community stakeholders in partnership with OFMEM. In 2017, Emergency Management provided training to over 100 staff and community partners. This includes special training for staff who work at the EOC and Mobile Command Unit (MCU) during activation.

The annual compliance exercise was held on July 12, 2017 and focused on activation of CCG members utilizing the Incident Management component of our public emergency notification system, Sudbury Alerts. The exercise scenario was a potential tailings dam breach in the community of Copper Cliff. The purpose of this exercise was to bring awareness to CCG members of the hazard as well as clarify roles and responsibilities and improve coordination, team work and performance.

In 2018 "Exercise Deepwater" happens in early June. Gathering the CCG member and alternates in the EOC for this tabletop exercise will allow for a fulsome review of our roles and responsibilities as well as providing for a test of our Emergency Plans.

v. Communication, Public Education and Awareness

Emergency Management has enhanced its web presence by expanding its use of the City's Facebook and Twitter accounts. This has allowed us to increase our reach to specific target audiences as well as increase public awareness about the emergency management program and services offered to residents.

In 2017 Sudbury Alerts was launched. In partnership with Vale, Sudbury Alerts is a local mass notification system based on an internationally used software platform. When an alert is launched every phone number in the yellow and white pages will receive a call notifying the recipient of the hazard and what to do during the emergency. Additionally, residents can create a profile and choose additional methods of communication including not only voice but text and email alerts. To assist in promoting this initiative, postcards were mailed to all households across the City to provide residents with information regarding Sudbury Alerts.

For Emergency Preparedness Week over the last two years, Emergency Management worked with City divisions and community partners to achieve the following initiatives:

- First public test of Greater Sudbury's emergency public notification system, Sudbury Alerts in 2017 followed up with a second annual test in 2018. Building upon the challenges realized in 2017 adjustments were made and the results of the 2018 test were much better.
- Enhancement to our Emergency Preparedness website which saw 10,434 pageviews over a three-month period. Public awareness messaging campaign reaching a daily circulation of over 65,000 residents and visitors utilizing Bell Park, Kingsway and Regent Street outdoor advertising boards
- Sudbury Alerts Department Challenge - department challenge to encourage staff to register for the emergency notification service, Sudbury Alerts

Emergency Management has participated in numerous community events such as Walden Winter Carnival, New Sudbury and Valley East Days, Cavalcade of Colours, and Children's Water Festival. These events provided

an opportunity for the dissemination of emergency preparedness information to residents as well as tours of the Mobile Command Unit.

b) Response and Recovery

Emergency Management continues to provide on-call service to respond to significant events within the City. For the year 2017, the Emergency Operations Centre was activated zero times. The Mobile Command Unit, a tri-service (Police, Fire, and Paramedic Services) unit used to support an emergency site and allow for efficient communications between first responders and the EOC, was deployed to six incidents in the City.

Conclusion

The Office of the Fire Marshal and Emergency Management has received documentation confirming the City of Greater Sudbury has completed all the necessary elements to achieve compliance in accordance with the Emergency Management and Civil Protection and Ontario Regulation 380/04.

As a part of the City's dedication to its citizens, staff will continue to work with stakeholders and neighbouring municipalities to help ensure emergency management capacity through a collaborative and comprehensive emergency management program.

Presented To:	Emergency Services Committee
Presented:	Wednesday, Jun 27, 2018
Report Date	Friday, Jun 08, 2018
Type:	Presentations

For Information Only

Fire Services – Water/Ice Rescue

Resolution

For Information Only

Relationship to the Strategic Plan / Health Impact Assessment

This report refers to operational matters.

Report Summary

This report, for information only, was prepared to provide the Emergency Services Committee with a supplementary update to a communication to Council on November 26, 2017 regarding the current status of Greater Sudbury Fire Services' response to water/ice rescue incidents. A review was conducted to identify opportunities and gaps of the ice/water rescue program. It was determined that the Service was not fully compliant with requirements under the Canada Shipping Act as it relates to small commercial vessel operations. As a result, steps have been taken to become fully compliant with the Canada Shipping Act and Transport Canada's requirements for the operation of small commercial vessels.

Financial Implications

There are no financial implications associated with this report.

Signed By

Report Prepared By
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Assistant Deputy Chief
Digitally Signed Jun 8, 18

Division Review
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Financial Implications
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Recommended by the Department
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Fire Services – Water/Ice Rescue

Background

The City of Greater Sudbury is the largest municipality in Ontario based on land mass. Within the City limits, there are 330 lakes over 10 hectares in size. Approximately 12.2% of the City consists of lakes, rivers and creeks. Lake Wanapitei is the largest city-contained lake in the world at 13, 257 hectares, maximum depth of 142 meters and 160 kilometers of shoreline.

There are seven significant river systems (Spanish, Onaping, Wahnapitae, Whitson, Rapid, Vermilion, Nelson) and a number of large creek systems (Sandcherry, Junction) running through the City limits. These rivers and creeks have high seasonal water flows, sections of whitewater, a number of Hydro One and VALE hydro dams and other water control structures. Junction Creek flows through the City core and includes a one kilometer stretch of tunnel waterway.

Ice and water rescue events are low frequency but high risk when they occur (11 events between January 1, 2017 and May 28, 2018). These events often occur at night, in adverse weather, unknown water, ice and snow conditions. The consequences of these incidents can be life threatening to both the victims and the rescuers, if not responded to quickly. Successful rescues require appropriate equipment, competent vessel operators, crew and rescuers.

On November 26, 2017, an incident involving two boaters stranded on an island on Lake Wanapitei occurred. Following that incident, an after-action review of the ice/water rescue program was conducted and gaps were identified. It was determined that Greater Sudbury Fire Service was not fully compliant with Transport Canada legislation regarding vessel operations. As a result of the review:

- The Chief/General Manager of Community Safety has now been appointed as the Authorized Representative under The Canada Shipping Act.
- Firefighters operating and crewing Fire Service vessels are now trained, certified and in compliance with Transport Canada's requirements.
- Opportunities to improve response capability have been identified.
- Vessel safety equipment and electronics have been upgraded.
- All vessels have been registered with Transport Canada as commercial workboats.

Legislative Requirements

By-law 2014-84, a By-law of the City of Greater Sudbury to Establish and Regulate the City of Greater Sudbury Fire Services, establishes four components of water rescue across all fire beats. These components, as approved by Council, are:

- **Water Shore Based – Level 1:** Rescue of persons from water by reaching or throwing rescue lines (no water entry).
- **Water Surface – Level 2:** Rescue of persons from the surface of the water through the use of a rescue boat.
- **Swift Water – Level 2:** Rescue of persons from watercourses with any current greater than 0.5 m/sec (1 knot).
- **Ice and Cold Water:** Rescue of persons in water that is below 21°C (70°F) including use of shoreline techniques and rescue boats.

Ontario Regulation 379/18, new legislation under the Fire Protection and Prevention Act, 1997, will require mandatory certification of all firefighters to National Fire Protection Association (NFPA) standards. This will include all aspects of ice and water rescue identified in NFPA Standard 1006. The NFPA standards are considered best practice, internationally recognized and evidence-based. This regulation is the result of numerous coroner's inquests identifying the need to implement mandatory certification of fire service personnel to ensure public and firefighter safety (Fire Marshal's Communiqués 2017-06 and 2018-02). Further information concerning the implementation of this new regulation and the impact on the delivery of fire services will be provided to Council at a future date.

The Occupational Health and Safety Act (OHSA) requires that employers provide information, instruction and supervision to their workers to protect their health and safety. Vessels are considered workplaces under this act. OHSA Section 21 Guidance Note GN#6-3 states, "when using boats, ensure that the boat has the appropriate safety equipment and that the operator is competent to operate the vessel in the conditions encountered".

The Canada Shipping Act, federal legislation administered by Transport Canada, requires that all commercial vessels be properly registered, certified to commercial vessel standard, and equipped with mandatory safety and VHF radio equipment. Transport Canada considers all government-owned or operated vessels as commercial vessels. There are no exemptions for fire vessel operation. Commercial vessel operators and crew must be trained and certified to standards based on the size of the vessel and the size of the waterbody the vessel operates on.

Under the Canada Shipping Act, every Canadian vessel must have a person designated as the "Authorized Representative". The Chief/General Manager of

Community Safety has been designated as the "Authorized Representative" for Fire Service vessels. Under the Act, the "Authorized Representative" of a Canadian vessel shall: a) ensure that the vessel and its machinery and equipment meet the requirements of the regulations; b) develop procedures for the safe operation of the vessel and for dealing with emergencies; and c) ensure that the crew and passengers receive safety training.

Discussion

Greater Sudbury Fire Services conducts water rescue boat activities with three Zodiac boats on trailers, equipped with 25 hp outboard motors and located at Stations 1 (Van Horne), 10 (Azilda), and 16 (Val Therese). A 6.7 metre Stanley Pulsecraft aluminum boat, powered by a 150 hp outboard motor, is located at Station 22 (Skead) and is docked at a private marina on Lake Wanapitei generally from mid-May to mid-October. This vessel (Marine 22) was manufactured in 2005 by Connor Industries in Parry Sound. The vessel has primarily been operated by volunteer firefighters from Station 22 with support from Career Station 3 (Leon). Following the after-action review, this vessel and trailer received a complete inspection and refurbishing at Connor Industries. The electronics have been upgraded, including the installation of a marine radio with Digital Select Calling (DSC) capability. DSC is a system designed to replace voice calling in emergency situations. Vessels equipped with this system can send and receive distress signals that include GPS location coordinates. Distress calls can also be pre-defined when they are sent, i.e "fire", "disabled and sinking", "man overboard."

Marine 22, although functional, is not the most appropriate watercraft for rescue work. The vessel has high vertical sides that make re-boarding of casualties difficult and would likely require rescuers to leave the vessel and enter the water to assist with casualty re-boarding. The boat is equipped with a mechanical bow ramp that can be lowered to water level; however, the boat manufacturer has advised that it should not be lowered in any type of wave action as the free surface water entering the boat could cause it to capsize.

Marine 22

← Vertical side view

Bow ramp view →

Inflatable Zodiac boats are best suited for rescue, trailer easily and can be rapidly deployed. The current Zodiac boats used by Fire Services however, are too small for effective rescue work on the larger bodies of water in the City of Greater Sudbury.

Efficient and safe water rescue in the City of Greater Sudbury will require a rationalization of the existing vessel fleet in terms of best locations to provide emergency response from and appropriate selection of watercraft to conduct that response.

Sudbury Fire Zodiac with two rescuers and a vessel operator

The acquisition of a rigid hull inflatable boat (RHIB) of a size and configuration for quick and safe response to emergencies needs to be considered. As quoted by the Canadian Coast Guard Search and Rescue, "The CCG utilizes RHIBS as standard vessels for SAR (search and rescue) across our fleet. Rescue services from Canada to Australia, Great Britain to the United States rely on Rigid Hull Inflatable Boats to service inland, bay, near coastal and ocean rescues, law enforcement and environmental missions. It is because these vessels offer such a wealth of different mission platform support, and stability in adverse conditions, that they have become indispensable tools of the International Search and Rescue (SAR) Community**."**

In addition to using boats for ice/water rescue situations, Greater Sudbury Fire Services also utilizes "human-powered" craft including Rapid Deployment Craft (RDCs) and RIT-Craft. These craft are carried on all five career response trucks, inflated upon arrival on scene, and rapidly deployed over ice or into water. They are designed for multi-season use and can be easily paddled or dragged by the rescuers. In addition, these craft can be towed by a boat, all-terrain vehicle or snowmobile. RDCs and RIT-Craft enhance rescue capabilities in swift water and poor ice conditions while providing a safe working platform that enables swift casualty retrieval.

Rapid Deployment Craft

Training

Water and ice technical rescue is provided at an enhanced level by all career stations, the Val Therese composite station, and some volunteer firefighters in the Azilda and Skead stations. Awareness level is provided to the remaining volunteer stations. In addition to the training components of rescue, Fire Services must comply with the federal government requirements related to the operation of vessels and the use of marine radios.

Under the Canada Shipping Act, the majority of lakes and rivers in the City of Greater Sudbury are classified as Sheltered Waters Voyage. The exception is Lake Wanapitei, which because of its size, is classed as Near Coastal Voyage, Class 2. In order to be the operator of a commercial vessel less than eight metres in length on Lake Wanapitei, the operator must possess a Transport Canada Small Vessel Operators Proficiency Certification (SVOP, 26 hours classroom) and a Marine Emergency Duties Certification (MED A3, 8 hours classroom) issued by Transport Canada. Search and rescue boats operate in conjunction with the Canadian Joint Forces Rescue Co-ordination Centre in Trenton for all air and water emergencies, and to communicate with other boaters using marine radios. As such, operators must possess a Restricted Operator's Certificate, Maritime (ROCM, 8 hours classroom) in order to utilize marine radios. Industry Canada is the federal regulating body for radio communications.

Operators of commercial vessels less than eight metres in length on Sheltered Waters, require a Transport Canada Pleasure Craft Operators Card (PCOC), MED A3 and a RCOM for marine radio communications.

Crew members on commercial vessels less than eight metres in length, operating in Sheltered Waters or Near Coastal Voyage Class 2 waterways, require: a PCOC, MED A3 certification, and if operating a marine radio, a ROCM.

Additional Transport Canada requirements for all vessel operators and crew include: First Aid certification at either the Marine Level or Standard First Aid Level; emergency equipment practice; person overboard drills; and, agency specific training.

In April of 2018, 27 volunteer firefighters at the Azilda, Skead and Garson stations received MED A3 and ROCM training. Garson station, although not designated as an ice/water rescue station, is the closest responding volunteer station to provide assistance to Skead station.

In May of 2018, volunteer firefighters at the Skead and Garson stations were offered SVOP training which would certify them to operate vessels on Lake Wanapitei. Nine volunteers received the training, two from Skead and seven from Garson. During the same time period, 70 career firefighters received SVOP, MED A3 and ROCM training.

It is important to note that complying with Transport Canada's proficiency requirements does not achieve the necessary training for conducting technical water rescue. It only meets the legal requirements to operate a small commercial vessel and/or crew the vessel. This can be considered as the non-emergency requirement. The training of firefighters for the actual rescue of persons on water, in swift water and on ice is a separate component that requires extensive training and a maintenance component that is in adherence to the NFPA 1006 standard. This can be considered as the emergency requirement. In April and May of this year, 13 instructor-level career firefighters received this training consistent with the NFPA 1006 standard.

Conclusion

In a municipality containing a significant number of waterbodies and river systems, the public has an expectation that Fire Services will respond to water-related emergency situations. City Council has established the level of response to be provided under the Establishing and Regulating By-Law #2014-84.

Greater Sudbury Fire Services is now fully compliant with the Canada Shipping Act and Transport Canada's requirements for the operation of small commercial vessels. However, as Council may be aware, the Government of Ontario has recently legislated training requirements for firefighter and technical rescue. Additional information on the impact of this requirement will be provided to Council in a future report.

Reference documents

- 2017-06e Municipal Bylaws Swift Water Rescue
- 2018-02e NFPA 1006, Standard for Technical Rescue

Fire Marshal's
COMMUNIQUÉ
du commissaire des incendies

October 10, 2017

No. 2017-06

MUNICIPAL ESTABLISHING AND REGULATING BYLAWS

In accordance with recommendations from the jury of the coroner's inquest into the deaths of Gary Kendall and Adam Brunt, the Office of the Fire Marshal and Emergency Management (OFMEM) is providing information to Ontario fire departments about establishing and regulating bylaws for fire department services, and encouraging them to review their respective establishing and regulating bylaw in regard to "ice / cold 'swift' water rescue services", if applicable in their jurisdiction.

The administration and governance of a fire department may be guided by an establishing and regulating bylaw, other municipal bylaws[1], council resolutions, agreements, policies, operating guidelines, and the interaction of the fire department with other municipal services, departments, committees and officials. Through bylaws and resolutions, municipal council has the means to identify the core services of the fire department, and the types and level of fire protection services it provides, based on local needs and circumstances.

Please note that, under section 14 of the *Municipal Act, 2001*, when there is a conflict between a bylaw and a provincial or federal statute or regulation, the latter prevails.

An establishing and regulating bylaw is a municipal council document outlining policy for fire departments. It can be used to show how the municipality delivers fire protection services it has determined are necessary according to its needs and circumstances, as is required by the *Fire Protection and Prevention Act, 1997* (FPPA). An establishing and regulating bylaw can state the type and level of fire protection services provided and may include policy direction in the following areas:

- legislative/regulatory requirements that may affect the delivery of fire protection services (e.g., FPPA, *Occupational Health and Safety Act*, and *Environmental Protection Act*);

[1] These bylaws may include bylaws to authorize or regulate the following: records retention; service delivery agreements (e.g., for inspections or investigations); open air burning; fees for service; cost recovery for demolition during fire suppression and fire investigations; safe handling, storage, sale and discharge of fireworks; and anything requiring council authorization by law.

- Fire Marshal directives;
- best practices (e.g., Ontario Fire Service Section 21 Advisory Committee guidance notes, National Fire Protection Association standards);
- general functions and core services to be delivered;
- goals and objectives of the fire department;
- general responsibilities of fire department personnel;
- organizational structure;
- authority to proceed beyond established response areas;
- authority to apply costs to property owners for fire investigations; and
- authority to effect necessary fire department operations, in consultation with the municipality's legal resources.

When setting or amending the levels of service in the establishing and regulating bylaw, municipal council, in consultation with the fire chief, should keep in mind the following considerations:

- the current needs and circumstances of the municipality;
- requirements and expectations, such as the following:
  - training requirements based on current standards and practices;
  - acquisition and maintenance of appropriate equipment; and
  - appropriate record keeping.
- the extent of fire department funding necessary to achieve and maintain the stated levels of service.

The OFMEM recommends that municipal councils review their establishing and regulating bylaws annually to ensure the level of services they are providing are in accordance with the current needs and circumstances of their municipality.

Fire chiefs are encouraged to share the present communiqué with municipal councils and clerks, as appropriate.

Enquiries regarding establishing and regulating bylaws should be directed to Field and Advisory Services; staff members can be reached by telephone at 1-844-638-9560 (toll free) or by e-mail at OFMEM-FAS-AA@ontario.ca.

Fire Marshal's
COMMUNIQUÉ
du commissaire des incendies

January 12, 2018

No. 2018-02

NFPA 1006, *STANDARD FOR TECHNICAL RESCUER PROFESSIONAL QUALIFICATIONS*

In light of the recommendations from the jury of the coroner's inquest into the deaths of Gary Kendall and Adam Brunt, the Office of the Fire Marshal and Emergency Management (OFMEM) is providing information and guidance to Ontario fire departments about NFPA 1006, *Standard for Technical Rescuer Professional Qualifications*, published by the National Fire Protection Association (NFPA).

The purpose of this standard is to specify minimum job performance requirements for service as a rescuer in an emergency response organization. The standard states "Each performance objective shall be performed safely, competently, and in its entirety".

A municipality is responsible for the delivery of fire protection services it has determined are necessary according to its needs and circumstances, as is required by the *Fire Protection and Prevention Act, 1997* (FPPA). Municipalities are encouraged to have an establishing and regulating bylaw[1] for fire department services and to state in this bylaw the type and level of fire protection services it provides. In addition, municipalities are responsible for ensuring their personnel have appropriate training.

Technical rescue is inherently dangerous and technical rescuers are frequently required to perform activities in adverse conditions. Accordingly, the OFMEM recommends that fire departments complete a stringent site assessment for all technical rescue operations and training. When developing training activities for technical rescue, municipalities should use and reference recognized standards for professional standards, equipment and safety, such as the NFPA 1006 and NFPA 1670 standards.

Although training and certification based on the NFPA 1006 standard is not mandatory in Ontario, the OFMEM strongly recommends that the NFPA 1006 standard and other relevant NFPA standards be used as guides when undertaking rescue operations and when designing training for such operations.

Enquiries regarding the information above should be sent to the Academic Standards and Evaluations Unit, OFMEM, by e-mail to ofmtestingandcertification@ontario.ca.

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[1] For further information on establishing and regulating bylaws, see Fire Marshal's Communiqué 2017-06, *Municipal Establishing and Regulating Bylaws.*

For Information Only

Community Safety Department Update

Presented To:	Emergency Services Committee
Presented:	Wednesday, Jun 27, 2018
Report Date	Friday, Jun 08, 2018
Type:	Correspondence for Information Only

Resolution

For Information Only

Relationship to the Strategic Plan / Health Impact Assessment

This report refers to operational matters.

Report Summary

This report for information was prepared to provide the Emergency Services Committee with statistical information regarding number of calls for Fire and Paramedic Services along with good news stories and an update on Emergency Management. Report prepared by: Jesse Oshell, Assistant Deputy Fire Chief; Paul Kadwell, Acting Deputy Chief Paramedic Services; and Latoya McGaw, Emergency Management Officer.

Financial Implications

There are no financial implications associated with this report.

Signed By

Report Prepared By
Michael MacIsaac
Executive Deputy Chief of Community Safety
Digitally Signed Jun 8, 18

Financial Implications
Jim Lister
Manager of Financial Planning and Budgeting
Digitally Signed Jun 10, 18

Recommended by the Department
Joseph Nicholls
Interim General Manager of Community Safety
Digitally Signed Jun 8, 18

Recommended by the C.A.O.
Ed Archer
Chief Administrative Officer
Digitally Signed Jun 12, 18

Fire Services Update Report

Presented to: Emergency Services Committee on June 27, 2018

This report aims to provide The City of Greater Sudbury Emergency Services Committee with an update on good news stories and relevant statistics as well as recent business activities within the Fire Services Division of the Community Safety Department.

Fire Services is responsible for delivering proactive public safety and response programs to prevent emergencies wherever possible and to preserve and enhance life, property, and the environment where response is required.

Good News Stories

Water rescue response compliance

Marine 22, the Lake Wanapitei boat, received an upgrade to the trailer, vessel electronics (new Garmin GPS unit and Marine radio installation), and safety equipment. In keeping with added training and ability in terms of water rescue (noted later in this report within the Training section), this boat will continue to support water based rescue in the largest lake in the world completely contained within the boundaries of a single city.

Fire Operations

Fire Operations are the response branch of the Fire Service, responding to emergency and non-emergency incidents. Response incidents fall into four general categories; medical responses, technical rescues, hazardous material responses, and of course fires. The Operations group is made up of both Volunteer and Career responders.

Fire Services Statistics

January 1, 2018 – April 30, 2018

Major Fire Loss Incidents		
Date	Location	Estimated Loss
January 3, 2018	Laurier St West, Sudbury	$150, 000
February 8, 2018	Glendale Ct, Sudbury	$225, 000
February 9, 2018	Ferguson Ave, Capreol	$130, 000
February 10, 2018	Radar Rd, Hanmer	$115, 000
March 3, 2018	Paul St, Whitefish	$350, 000
March 3, 2018	Edith St, Sudbury	$330, 000
March 15, 2018	Dearbourne Dr, Sudbury	$150, 000
April 23, 2018	Dupuis Dr, Sudbury	$240, 000
	TOTAL Estimated Loss for all 88 Fires	$2, 295, 052

Data Source: Fire House

Incident Type	2018 Totals	2017 Totals
Fires	88	82
Fire Alarms	362	362
Vehicle Collisions	408	244
Open Air Burning Response	17	39
Medical Assistance	222	226
Other Incidents (brush/bush fires, assisting other agencies, no incident found on arrival, etc.)	412	425
Total	1509	1378

Data Source: Fire House

Public Fire Safety Education/Fire Prevention

Public Fire Safety Education and Fire Prevention work hand in hand to proactively deliver programs aimed at ensuring safe communities. Public Education provides directed and focused fire safety programs to reduce risk where fire code enforcement has a diminished impact and where emergency response is delayed due to the City's geography.

Fire Prevention Section conducts inspections, and enforces various sections of municipal by-laws and provincial legislation. The Section's goal is to reduce the possibility and severity of fire or explosion, by

providing tools, resources and leadership to the community, with a focus on disadvantaged and vulnerable citizens.

Film Production Safety

On May 7th the Fire Prevention Section was present with Fire Suppression to oversee the safety of workers and residents while Jelly Bean Productions Inc. performed a controlled explosion of a car for a movie project ongoing in the downtown area. Fire Prevention had been involved in the planning as well, working with the effects coordinator to ensure the complicated scene was filmed safely. Fire personnel and equipment were on standby on a cost recovery basis.



Public Safety Education

Since March 1, the Fire Prevention Section has arranged and participated in 34 public presentations and contacts, ranging from fire safety sessions to vehicle displays to TAPP-C (The Arson Prevention Program for Children) interventions.

The Section continues its mandate to educate, inspect, and enforce to ensure a safer city.

Fire Fleet/Logistics

Fleet provides logistical and maintenance support to ensure fire vehicles, equipment and buildings are maintained and repaired in accordance with applicable legislation, regulations, policy and manufacturers' suggested standards.

Apparatus Purchases

The Greater Sudbury Fire Service has recently gone to market for the purchase of a front-line Aerial device to replace the 15 year old one in service. The accepted lifespan in frontline service for this type of vehicle in a city like Greater Sudbury is generally 10 years. Additionally, the Service is requesting tender applications for the purchase of two Tanker vehicles. Once successful bids are identified, the build time for an aerial is approximately 18 months with the tanker build time estimated at 6-8 months. The City of Greater Sudbury Fire Service, with 73 front line apparatus, has one of the largest fire fleets in the province and requires a replacement of more than three apparatus per year for regular attrition.

Bush Fire Season

The Fleet/Logistics Section has been working diligently and within budget to prepare portable pumps and repairing or replacing bush hose, and giving attention to any other necessary equipment in anticipation of the 2018 bush fire season.

Bush Fire Calls

Jan 1 - Jun 7 2017	Jan 1 - Jun 7 2018	Variance
110	120	+10

Note: Total bush fire calls in all of 2017 was 351.
(Brush/bush fires are included in Open Air Burning/Other Incidents)

Training

Training involves the development and delivery of fire service related training programs, including recruit training, officer development, emergency care, equipment operator training, fire suppression, and fire prevention. They also oversee operation of fire training grounds.

Recent changes to Provincial Legislation regarding certification of firefighters requires training for firefighters to comply with the National Fire Protection Association (NFPA) Standards. This new standard requires additional support from the Training Division as identified in the "*Proposed Changes to Fire Protection and Prevention Legislation"* report provided to the Emergency Services Committee on May 16, 2018. The proposed regulations identified in this report were passed into law in May 2018.

Swiftwater Rescue Training

Thirteen career firefighters received instruction and re-certification as Train-the-Trainer Instructors in swiftwater rescue training and swiftwater rescue boat operations from training partner, Raven Rescue.

Volunteer firefighters (19) at Azilda, Skead and Garson stations received training and certification through Transport Canada affiliated instructors for commercial vessel operations. Training included certification for marine radio operations and marine emergency duty. Volunteers (8) that may respond to Lake Wanapitei also received Small Vessel Operator Proficiency certification. These training modules meet Sudbury Fire Services legal obligation to operate and crew commercial vessels. 70 career firefighters also received the Transport Canada training.

Paramedic Services Update Report

Presented to: Emergency Services Committee on June 27, 2018

This report aims to provide the City of Greater Sudbury Emergency Services Committee with an update on good news stories and relevant statistics as well as recent business activities within the Paramedic Services Division of the Community Safety Department.

Greater Sudbury Paramedic Services is responsible for the delivery of a performance-based paramedic service that is in compliance with legislative and regulatory requirements, ensuring pre-hospital emergency medical care and transportation to those individuals suffering injury or illness focuses on clinical excellence, response time performance, patient outcomes, patient satisfaction, continuous quality improvement, and a healthy work environment conducive to professional growth.

Good News Stories

Big Bike for Heart and Stroke:

Members from Paramedic Services (along with other Community Safety staff members) participated in the Big Bike event for Heart and Stroke. The team raised $1,045. This fund raising event helps fund research that is saving lives and supporting heart disease and stroke survivors and their families. All members celebrated their accomplishment as they pedaled for twenty minutes, throughout our community.

Paramedic Retires:

On April 29, Advanced Care Paramedic, Claude Ferguson retired after 32 years of service. Claude was in the first class of Paramedics from Sudbury to attend the Michener Institute of Education at University Health Network (UHN) and graduate as an Advanced Care Paramedic. Over his career, he not only mentored countless new Paramedics providing great advice on how to be a better Paramedic but he has also worked at the college level training would be Paramedics in the finer skills associated with the profession. Claude was able to further utilize his mentoring skills as a Relief Field Superintendent over much of his career at the City of Greater Sudbury. In 2011, Claude was recognized with the Leonce Seguin Award which is awarded to a Paramedic "demonstrating commitment to furthering his knowledge and skills through continued education, progressively responsible positions in the field of frontline emergency care and as a community and professional volunteer." We wish Claude the best in his retirement and know that he will continue to promote our Service within the community.

Paramedic Services receives Police Services Community Partnership Award

On May 17, 2018, members of the Health Promotions Community Paramedicine Program attended the Community and Police Awards Gala to receive the Community Partnership Award. This award was given to Paramedic Services in recognition of the work in the proactive approach to prevention and diversion of 911 callers that affect Paramedic and Police Services along with Health Sciences North. This award also recognizes our work in collaborating with various community partners to ensure citizens in need in our community receive care from the appropriate services.

*lt-rt Bruno Blouin Harris Radio (award sponsor); Aaron Barney PCP; Rebecca Poulin PCP; Chief of Police, Paul Pederson

Paramedic Services Statistics

January 1– April 30, 2018

	* Priority Dispatched						
	1	2	3	4	2018 TOTAL	2017 TOTAL	% Change
Q1	241	579	1510	4034	6315	6011	5.1%
April	65	154	491	1319	2019	2080	-2.9%

Data Source: Interdev iMedic

** Priority Dispatched Definitions*

Priority 1	Deferrable/Non-Emergency	a non-urgent call which may be delayed without being physically detrimental to the patient
Priority 2	Scheduled Transfers	any call which must be done at a specific time due to the limited availability of special treatment or diagnostic/ receiving facilities. Such scheduling is not done because of patient preference or convenience.
Priority 3	Prompt Emergency	any call which may be answered with moderate delay. All patients classified in this priority group are stable or under professional care and are not in immediate danger.
Priority 4	Urgent Emergency	refers to situations of a life or limb threatening nature and time is crucial.

Paramedic Operations

The operations section provides pre-hospital emergency medical care and transportation as well as non-urgent transportation between health-care facilities, the airport and residences.

Spring Hire

Paramedic Operations hired six part-time frontline Paramedics. These competent individuals were selected after several rounds of intensive recruitment including interviews and scenario exercises. We are confident these recruits will provide the highest level of Paramedic service to our community. The new hires are currently involved with orientation and will placed into regular deployment by the summer.

A competition for the Commander of Paramedic Services position has been completed and the successful applicant was Shawn-Eric Poulin. Shawn-Eric has many years of experience in the pre-hospital field, along with being an instructor at College Boreal. With his background and knowledge, he will be a great asset to our management team.

Community Event

During the week of April 23-29, Sudbury hosted a national midget hockey championship, the 2018 Telus Cup. Throughout the tournament, Sudbury Paramedic Services were on site to provide Paramedic support.

Professional Standards

Professional Standards is responsible for the delivery of quality assurance programming consisting of clinical and service delivery auditing with the goal of improving patient safety and ensuring high quality clinical care thereby reducing risks. By also managing the electronic patient care record system, including quality assurance oversight, Professional Standards coordinates legal proceedings and maintains compliant handling of patient medical records within various legislative and regulatory requirements. Lastly, Professional Standards represents Paramedic Services amongst stakeholders within the community and participates in research studies to advance and ensure integration into the health-care framework.

Opioid Surveillance Working Group

Paramedic Services is part of a community working group tasked with development of an early alert system for opioid related emergencies in our community. Members of this group include Greater Sudbury Paramedic Services, Health Sciences North, Greater Sudbury Police Services and Public Health Sudbury & Districts. The last meeting of this group occurred on April 20th, 2018. Paramedic Services provided a presentation regarding pre-hospital opioid data tracking which was very well received. The working group requested to have access to this real time data for enhanced monitoring of opioid emergencies as an alert for our community. This early warning can allow community service agencies and opioid users to be informed, prepared and empowered with real

time knowledge of local opioid misuse trends. The next meeting of this working group will occur on June 1, 2018.

The following data represents the findings of Paramedic Services in relation to opioid emergencies.

Paramedic Services Suspected Opioid Calls				
	2015	2016	2017	2018
January	1	4	4	3
February	4	1	7	10
March	5	2	5	11
April	7	3	4	12
May	7	1	2	6
June	4	11	0	
July	6	3	14	
August	3	9	9	
September	6	6	12	
October	4	10	17	
November	6	9	12	
December	5	7	6	
TOTAL	58	66	92	13

Paramedic Administered Naloxone				
	2015	2016	2017	2018
January	0	2	0	1
February	1	1	2	7
March	0	0	1	7
April	2	1	0	7
May	2	2	0	2
June	0	0	1	
July	0	0	5	
August	1	3	4	
September	0	2	7	
October	1	3	7	
November	2	0	9	
December	1	1	3	
TOTAL	10	15	39	8

Clinical Diversion

Paramedics are able to offer an option of transport destination to appropriate 9-1-1 call patients that divert them from the Emergency Department. This program assists our health care system by ensuring the right patient receives the right care at the right time. The options of destination are either the normal protocol to the Emergency Department; Withdrawal Management Services; Crisis Intervention Services, or Crisis Intervention Mobile Team response at the patients' home. Within this reporting period Paramedic Services completed the following patient diversions:

- **17** patients to Withdrawal Management Services
- **11** patients to Crisis Intervention Services/Mobile Crisis Intervention Team

Greater Sudbury Paramedic Services has been recognized by fellow colleagues within the Province for our Crisis Intervention and Withdrawal Management Services diversion protocols. Municipalities such as Sault Ste. Marie, Hamilton and London have all looked at our diversion program framework and now have replicated or are in the process of using this model for their own diversion programs.

Paramedic Services is currently looking to expand our alternative health pathways and are working with primary community care providers that provide cultural considerations as part of their care, namely family health teams and nurse practitioner clinics. We have also provided updated training this Spring to our Paramedics to improve knowledge and use of this alternative health pathway. These are programs that align with the Ontario government's Patients First 4 Key Pillars; providing

access to the right patient, connecting patients to the right care, providing education and protection of our health care system by ensuring the fiscally responsible path has been chosen.

Logistics

The Logistics Section provides cleaning, management and maintenance of the Paramedic vehicle fleet, City heliports, specialized vehicles, and patient care equipment with the goal of ensuring vehicles and equipment are sanitized and stocked in accordance with all legislative requirements.

Workplace Improvement Project Updates

- Work has continued with the City IT and Fleet Divisions and our current asset and inventory software provider (OPIQ), which will maximize efficiency with fleet repairs, testing software additions to automatically report when vehicles are repaired and ready to be placed back in operation, limiting down time to a minimum.
- Medical stock and equipment dispensing machine installations are currently underway at all of our satellite stations. They are a SMART system with central security control and inventory management.
- Planning is underway for the second phase of our employee wellness program, further reduce repetitive strain injuries. This next phase is to evaluate power stair chairs which are used for patient extrication; and this will in turn reduce back and shoulder strains and other injuries.
- Project planning is also underway for Equipment Vehicle Technician (EVT) workspace improvements at HQ. We are currently reviewing options to maximize efficiency for returning and issuing medical equipment flow to be processed for next shift.

New Summer Uniform Issue

Based on feedback from staff, we have purchased new summer uniform shirts to reduce heat stress which Paramedics experience during warmer weather. This performance rated shirt has reflective properties for safety and uniquely identifies the paramedic. This uniform addition further demonstrates our commitment to health and safety.

Training

Training involves the development and delivery of paramedic education that includes: continuing medical education, orientation for new hires and those returning following extended absences, and remedial education to address identified gaps in knowledge, skill or critical decision making. Additionally, participation on national and international clinical research initiatives aims at improving pre-hospital clinical care.

Training Programs

Our Training Section delivers training for paramedics and logistics staff and provides advice and training programs to the Peer Support Team. Below is a summary of the various training initiatives our Training Section has developed, delivered or participated in within this reporting period.

- The Training Section is currently conducting Paramedic Spring Training Rounds. Operational training sessions are held in the spring and fall of the year. This spring's session includes legislative and operational training programs, new equipment orientation, customer service training and an update on the Neonatal Resuscitation Program. Greater Sudbury is one of the few Services in Ontario to certify Paramedics in this important program.
- Training Officers also assisted with the testing of new Paramedic candidates and after the successful hiring of six new Primary Care Paramedics, they will assist with the new hire orientation program set to begin the end of May.

Community Paramedicine

The Community Paramedicine Section, while technically overseen by Operations section, utilizes Paramedics in non-traditional roles providing home visits, clinical interventions, and preventative health initiatives with the goal of reducing demand for Emergency Department visits, hospital admissions and to keep our at risk aged population healthy and at home and attempting to aid our vulnerable populations by directing them to suitable community resources.

Care Transitions Community Paramedic Program

The Care Transitions Community Paramedic (CTCP) Program has been active since January 12, 2015 and has seen 436 unique patients since inception. This program is provided by two full time specially trained Advanced Care Paramedics who are able, through an expanded scope of practice, provide education and medical interventions for three targeted chronic diseases (Congestive Heart Failure, Chronic Obstructive Pulmonary Disease, and Diabetes). This education and clinical treatment program improves the patients' quality of life at home, decreases reliance on emergency response of Paramedic Services and readmissions to the hospital.

February 1 to May 11, 2018:

- **201** current active patients received **235** scheduled home visits February through to May 11, 2018.
    - Phone Consultations = **26**
    - Initial visits = **30**
    - Follow-up = **140**
    - Just in time (JIT) = **35**

- Referrals to other care agencies = **32**
- Just-in-Time Visits (JIT) are more urgent visits that occur when the patient contacts the CTCP outside of the patients' scheduled appointment requesting assistance for a new symptom or an exacerbation of a medical condition. The Paramedic will see this patient immediately before any of the scheduled appointments for the day.
- The CTCP program was closed **8** days through February to May 11, 2018 due to lack of staffing coverage for sick days, vacation, and training.
- Survey results from 2018 indicate 100 % would recommend the Care Transitions Program and 100 % are satisfied with the service provided by Care Transitions Community Paramedics.

Health Promotion Community Paramedic Program

The Health Promotion Community Paramedic (HPCP) program is a compilation of various prevention and health education initiatives that work to ensure our most vulnerable populations are linked to community health services and can obtain healthy lifestyle education and prevention information. The initiatives provided include Paramedic Referrals; Wellness Clinics targeting older adults and homeless populations; Rapid Mobilization Table (RMT) response; collaboration with community partner groups to work toward healthy and safe communities; case management of frequent 9-1-1 users and annual Free Bystander Hands-Only CPR training sessions for our citizens. The goals of the above initiatives are to ensure our vulnerable populations are able to remain living healthfully at home for longer without reliance on Paramedic Services or the local Emergency Department.

February 1 to May 11, 2018 *:

- 69 Paramedic Referrals to NE LHIN Home and Community Care
- 30 Shelters Clinics
- 24 Older adult Clinics (CP@Clinic)
- 23 RMT working group responses & 4 presentations to RMT by Paramedic Services one of which Paramedic Services was the lead agency (*Jan 1 to March 31 this data is only available to us quarterly, next data set available for the end of June)
- 13 Community Health Concern Reports

Bystander Hands-Only CPR Blitz

Thirteen CPR Blitz sessions were held the City of Greater Sudbury throughout February and March of 2018 in partnership with Sudbury branch of the Heart and Stroke Foundation. Twenty-eight Paramedics volunteered their time for these sessions. We taught 334 Sudbury citizens the lifesaving skill of Hands-Only Bystander CPR and Automated External Defibrillator (AED) use. The survey results for these sessions were overwhelmingly positive. 100% of participants would take this course again

and felt that they would confidently know what to do if faced with witnessing a sudden cardiac arrest. In total since 2014, we have taught 1,121 citizens of Greater Sudbury these lifesaving skills.

Research Study Participation

CARPE Study – McMaster University – Common Assessments for Repeated Paramedic Service Encounters

The primary objective of this study is to investigate outcomes associated with older adults that are assessed in a Community Paramedicine program. This includes frequent 9-1-1 calls, functional decline, social isolation, disease progression, and mortality. Through participation in this study we seek to determine if a Community Paramedic using a standardized assessment tool can identify risk factors associated with these outcomes. A standardized assessment tool that captures the full breadth of Paramedic observations will be important to improve care planning and for identifying changes in patient status.

CP@Home – McMaster University

The HPCP program is also working toward becoming part of a frequent 9-1-1 user program where those who rely on Paramedic Services to assist with unmet needs at home will be targeted for home visits by the HPCP. These visits will include assessments, education and community program links/referrals with an aim to lessen the reliance on the emergency health care system and refocus help to derive from community health care services. This program is a sister program to CP@Clinic and is called CP@Home. It is a research study through McMaster University. We are currently waiting for training from McMaster University, and the Collective Research Agreement review from our legal department. We have confirmation that our Central Ambulance Communications Centre will be able and willing to supply patient phone numbers for these identified multiple callers we would like to enroll in the program.

CP@Clinic – McMaster University

Moving forward, the HPCP program is looking to expand older adult clinics into an outlying City of Greater Sudbury community. Currently, a community scan is being completed to assess the most logical location. We are waiting on our City legal department review and recommendations of our Collaborative Research Agreement with McMaster University.

Emergency Management Update Report

Presented to: Emergency Services Committee on June 27, 2018

This report aims to provide the City of Greater Sudbury Emergency Services Committee with an update on good news stories, relevant statistics, and recent business activities within the Paramedic Services Division of the Community Safety Department.

The Emergency Management Department provides leadership, guidance, and direction to ensure the City is safe. Governed by the Emergency Management and Civil Protection Act, (EMCPA) with guidance from the Office of the Fire Marshal and Emergency Management, City Council, and the Greater Sudbury Emergency Management Advisory Panel, the primary focus of the Emergency Management Section is to contribute to the safety of citizens through the effective management of community risks and emergencies.

Good News Stories

OFMEM – EM Engagement Session

Office of the Fire Marshal and Emergency Management (OFMEM) concluded its regional engagement sessions in Greater Sudbury on March 26th with Community Emergency Management Coordinators (CEMCs) and other Emergency Management partners of Northern Ontario.

During this full-day session, participants were provided with an update on the progress regarding Provincial Emergency Management programming. This annual meeting also served as an opportunity for CEMCs to provide feedback on the Province's program review.

A workshop on the renewal of the Hazard Identification & Risk Assessment (HIRA) program, a legislative required under the Emergency Management and Civil Protection Act, was also included in this session.

Health Emergency Management Opioid Workshop

Greater Sudbury's Emergency Management Section was among more than 40 community agencies from Sudbury and Manitoulin districts who participated in an emergency scenario involving Opioid overdoses.

Hosted by Public Health Sudbury & Districts and Public Health Ontario, the workshop provided an opportunity for community stakeholders to work together to ensure the City and surrounding communities are prepared for emergencies such as a potential mass casualty event related to opioid overdoses.

The findings of the workshop will be used in the development of a local interagency emergency response plan in relation to opioid misuse that will support an effective and timely multi-agency response to, and community recovery from, a mass casualty event secondary to an opioid crisis.

Throughout the session, those in attendance were able to learn about opioids, test emergency response plans, clarify roles and responsibilities, and identify strengths and areas for improvement within their existing emergency response plans.

Cambrian College Tour of the Emergency Operations Centre (EOC)

Students of Cambrian College's Security Management course visited Greater Sudbury's Emergency Operations Centre (EOC) on April 9th to gain understanding of how the learning objectives from the Basic Emergency Management (BEM) course apply in our community and how the City of Greater Sudbury prepares and responds to emergencies.

The City's EOC is a central command and control facility responsible for carrying out the principles of emergency preparedness and emergency management. The EOC functions at a strategic level in an emergency situation, ensuring the continuity of operations for the City.

Launch of Emergency Preparedness (EP) Week

City of Greater Sudbury recognizes the first full week of May every year as Emergency Preparedness (EP) Week (May 6-12, 2018). The provincial theme this year is "Be Emergency Ready-Stay Connected" promoting emergency preparedness and the annual testing of the City's emergency public notification system, Sudbury Alerts.

Emergency Preparedness Week is a Canada-wide initiative aimed at increasing awareness of individual and family preparedness in the event of an emergency or natural disaster.

The City of Greater Sudbury launched Emergency Preparedness Week with a proclamation from Mayor Brian Bigger. In attendance were members of City Council, City Departments, and emergency management community partners.

Sudbury Alerts Annual Testing

The City of Greater Sudbury in partnership with VALE, Glencore, Greater Sudbury Police Services, Greater Sudbury Utilities, and Public Health Sudbury & Districts launched Sudbury Alerts in February 2017. This notification system will alert residents of a potential hazard or concern that is considered an imminent threat to public safety. The system, built by Everbridge, a worldwide leader in critical communications, allows residents to receive emergency alerts on their home phone, cell phone, TTY service, fax machine, or email. Sudbury Alerts will act in conjunction with the City's Emergency Management Program for the protection and safety of residents.

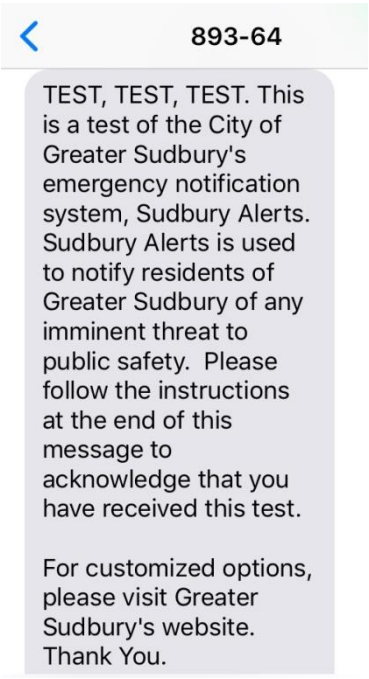
In conjunction with Emergency Preparedness Week which runs May 6-12th, 2018, the City of Greater Sudbury's (CGS) Emergency Management Section completed a successful test of our emergency notification system, Sudbury Alerts.

At 10:06 a.m. on May 9th, the first notification (English) was sent to 76,055 contacts; some with multiple contact choices, resulting in many more actual contact attempts. As of May 9 at 3:00 p.m., 10,162 residents confirmed receipt of notification.

At 10:08 a.m., the second notification (French) was sent to 60 contacts and as of May 9 at 3:00 p.m., 73% (44 residents) confirmed receipt of the notification. The test would not have been successful were it not for the corrective actions implemented since our last annual test in 2017.

These actions include:

- Bilingual Messaging – Residents who have created profiles on Sudbury Alerts via the member portal on the City's website or residents, who are signing up for Sudbury Alerts, now have the option of selecting their preferred language.
- Reduced impact to City's telephone infrastructure – Call throttling rules were applied to the 14 most commonly used telephone exchanges in the City (i.e. 522, 983, 674 and 675). This allows telephone providers to deliver notifications while avoiding congestion on the network.
- Our Information Technology Section has worked closely with our local telephone providers to ensure the phone number for the Audio Bulletin Board remains white-listed.



Impact to City services was minimal in comparison to the last annual test. The following are preliminary observations from this latest test:

- From 10 a.m. to 3 p.m., 58 calls were received by the City's 3-1-1 Call Centre by residents inquiring about the notification they

had received. At peak there was a 3-minute queue and an average time of 1 min 7 sec per call. The Call Centre reported that there was approximately 30 minutes of "busier than normal" time starting at 10:15 a.m. No calls were received by 911 Communications Centre regarding test notifications sent to residents.

- No known impact to City's telephone infrastructure.
- One of the goals for this test was to raise public awareness of Sudbury Alerts and encourage resident to sign up for the service. Over 400 residents have since signed up to receive notifications.

Sudbury Alerts currently has 69,000 publicly listed residential and business phone numbers in addition to 7,568 residents who have signed up via the member portal on the City's website.

Presented To:	Emergency Services Committee
Presented:	Wednesday, Jun 27, 2018
Report Date	Friday, Jun 08, 2018
Type:	Correspondence for Information Only

For Information Only

Ontario's Emergency Health Services - Sector Overview

Resolution

For Information Only

Relationship to the Strategic Plan / Health Impact Assessment

This report refers to operational matters.

Report Summary

The Ministry of Health & Long Term Care has produced a report on data and information generated by the Health Analytics Branch in consultation with the Emergency Health Regulatory and Accountability Branch. The self defined goal of the report was to inform the Ministry and its partners the role of the Emergency Health Service sector in connection with the broader healthcare system. Generally, this report provides a highly data driven and informative overview of the Ambulance system within Ontario over a substantial period of time.

Financial Implications

There are no financial implications associated with this report.

Signed By

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Ontario's Emergency Health Services Sector Overview

Purpose

To inform Council on a recent report received from the Ministry of Health & Long Term Care (MOHLTC) in relation to Emergency Health Services. The report provides an overview on data and information generated by the Health Analytics Branch in consultation with the Emergency Health Regulatory and Accountability Branch.

Background

According to the report itself, it was developed to inform ministry and partners about the role and scope of the Emergency Health Service sector as well as its connection to the broader health care system. It provides a high-level overview and analysis of the Ambulance system in Ontario. This is the first report of its kind that Administration has ever received. The report is highly data driven and relies on information from a wide variety of sources from many different time periods of up to 12 years ago. It contains information on funding, staffing, dispatch data for both air and land ambulance services and emergency department visits.

Analysis

The report contains eight separate sections in relation to the topics listed above. Additionally, there is a list of abbreviations and appendices with greater details and supplementary data. Where Figure numbers are referenced herein, they can be found within the attached MOHLTC report, Ontario's Emergency Health Services Sector Overview (March 2018). The eight sections are detailed below with high level insights as detailed on page 4 of the report Ontario's Emergency Health Services Sector Overview (March 2018):

Section 1: Overview

- Ontario has the largest ambulance system in Canada, employing over 8,000 land and air paramedics within 57 paramedic service providers and 1,000 ambulance communications officers in 22 land ambulance dispatch centres.
- The system is jointly managed by municipalities, the ministry, and Ornge, the non-profit organization responsible for all aspects of Ontario's air ambulance program.
- The MOHLTC regulates ambulance operations, certifies ambulance services and monitors operations through regular inspections and evaluations.

- The Ministry designates eight Base Hospitals who oversee paramedics' performance in relation to controlled acts.

Section 2: Emergency health services funding

- Ministry funding increased from $712 million to $916 million (28.6%) between fiscal years 2010/11 and 2016/17. During the same period, municipal funding increased from $468 million to $605 million (29.4%).
- Combined the MOHLTC and Municipalities spent $1.52 billion in the Emergency Health Services sector in 2016/17 fiscal year.
- In the 2016/17 fiscal year, 79% of the money spent on EHS was for land ambulance services (Figure 2.2).
- The ministry funds up to half of each municipality's land ambulance service costs and covers 100% of all other ambulance service costs.

Section 3: Resources

- There were 8,469 paramedics working in Ontario in July 2017 (Table 3.2) in 1,753 vehicles (Table 3.5). Paramedic Services has a total of 135 Paramedics working in Greater Sudbury.
- There are three levels of paramedic designations in Ontario: Primary Care Paramedic (PCP), Advanced Care Paramedic (ACP), and Critical Care Paramedic (CCP). They account for 79%, 20% and 1% of Ontario paramedics, respectively (calculated from data in Figure 3.2). In Greater Sudbury the overall breakdown is PCP 41.5% and ACP 58.5%. CCP's typically work in the province for Ornge.
- Staffing requirements for each region are established by municipal council and the paramedic services chief based on the individual needs of the municipality.
- 67% of Ontario's paramedics worked full-time in July 2017 (Figure 3.2). In Greater Sudbury the number is 63.7%.

Section 4: Regulation and oversight

- The ministry is responsible for oversight of ambulance service certification and investigation of complaints.
- On average, 12% of ambulance service reviews required a re-visit due to unmet certification criteria (calculated from data in Table 4.1). Since inception Greater Sudbury Paramedic Services has never experienced a re-visit.
- The most common complaint type received between 2007 and 2016 was about the quality of patient care (Table 4.4).

Section 5: Patient characteristics

- North West (116 per 1,000 population) and North East (93 per 1,000 population) LHINs had the highest rates of ambulance utilization in the 2016/17 fiscal year. Central LHIN had the highest percent increase in ambulance utilization over the past ten years (Figure 5.2).
- The rate of ambulance use for patients aged 65+ is over four times higher than the rates for those under the age of 65 (Figure 5.4). In Greater Sudbury patients aged 65 and greater make up over 48% of our call volume over the last three years.
- Patients who arrived at the Emergency Department via ambulance were assigned, on average, a higher CTAS level than non-ambulance arrivals. Approximately 91% of arrivals by ambulance were triaged to CTAS levels I-III in 2016/17 (Figure 5.6).
- There were 2,025 Ontarians who made 12 or more trips to the Emergency Department via ambulance in 2016/17. The most common diagnoses among these users were related to mental health and addictions (Figure 5.10).

Section 6: Land ambulance dispatch and patient transport

- The number of 911 ambulance calls increased by 30.6% between 2007 and 2016 (Figure 6.2). Sudbury CACC (dispatches primarily Greater Sudbury and Manitoulin-Sudbury) has experienced a 9.6% increase in calls over the same period.
- There were approximately 1.75 million ambulance dispatches in 2016 (Figure 6.3).
- The number of ambulance transports increased by 243,272 between 2007 and 2016 (Figure 6.4).
- City of Greater Sudbury Paramedic Service has an average response time for the highest priority calls (Code 4's) of 5 min 49 sec. This represents the fourth best in the province only after Weeneebayko First Nation, Chippewas of Rama First Nation, and Sault Ste. Marie.

Section 7: Emergency department utilization

- In 2016/17, 16.5% of Emergency Department visits arrived at the hospital by ambulance (Table 7.1).
- From 2007/08 to 2016/17, the number of Emergency Department visits arriving by ambulance increased from 626,523 to 965,896, or 54.2% (Figure 7.1).
- The 90th percentile ambulance offload time has decreased from 61 minutes in 2008/09 to 42 minutes in 2016/17 (Figure 7.3).

Section 8: Air ambulance utilization

- Ornge operates Ontario's air ambulance program out of nine air bases and three land bases across the province.

- In fiscal year 2016/17, Ornge completed 20,830 transports. Approximately 97% were patient transports, and the rest were organ transports between facilities (Table 8.2).
- Approximately half of Ornge transports were deemed "emergency", the highest priority level, from fiscal year 2012/13 to 2016/17. Over a quarter were considered "non-urgent" during the same period (Figure 8.1).
- Over 60% of Ornge transports originated in northern Ontario (calculated from data in Figure 8.4), with 808 transports originating from the Sudbury base which is a rotor wing base.

Conclusion/Next Steps

This high level report provides a great resource for review of the health and function of the ambulance system in Ontario. We will provide comment to the MOHLTC that these types of reports have value and that we would welcome future editions.

Resources Cited

Ontario Ministry of Health & Long Term Care. (March 2018). Ontario's Emergency Health Services Sector Overview.

Ontario's Emergency Health Services

Sector Overview

Health Analytics Branch
Health System Information Management Division
Ministry of Health and Long-Term Care

March 2018

Ontario

About the Health Analytics Branch

The **Health Analytics Branch (HAB)**, in the Ministry of Health and Long-Term Care, provides high quality information, analyses, and methodological support to enhance evidence-based decision making in the health system. As part of the Health System Information Management (HSIM) Division, HAB manages health analytics requests, identifies methods, and creates reports and tools to meet ministry, LHIN, and other client needs for accurate, timely, and useful information. **Health Analytics Branch: Evidence you can count on.**

About the Emergency Health Regulatory and Accountability Branch

The **Emergency Health Regulatory and Accountability Branch (EHRAB)**, in the Ministry of Health and Long-Term Care, sets standards, measures performance, and oversees key functions of Ontario's land and air emergency ambulance services. In cooperation with its partners, EHRAB continuously reviews and improves standards and practices to ensure Ontario's paramedics and ambulance services are equipped with the education, training and tools required to provide patients the best and most appropriate care in alignment with Ontario's *Patients First* agenda.

For more information, please contact:
ehssectorreport@ontario.ca

Report Contents

Introduction

This report provides a high-level overview and analysis of the emergency health system. The report includes information on funding, staffing, land and air ambulance dispatch data, and emergency department visits.

Background

Ontario's Emergency Health Services Sector Overview report was developed to inform the ministry and its partners about the role and scope of the emergency health services (EHS) sector as well as its connection to the broader health care system. The Health Analytics Branch developed this report in consultation with the ministry's Emergency Health Regulatory and Accountability Branch.

Report format

This report begins with a summary of key findings ordered by topic, followed by eight sections containing detailed analyses and supplementary information on key areas of the EHS sector. Quantitative results from EHS data are summarized in tables and figures to help illustrate the report's findings. Data sources are indicated in the footnote at the bottom of each page.

A list of the abbreviations used in this report is shown to the right. All abbreviations are defined the first time they appear in the report text.

Appendices at the end of the report contain information on the data sources and methodology, a glossary of key terms, and supplementary tables and figures.

Abbreviations

ACO: Ambulance communications officer

ACP: Advanced care paramedic

ADRS: Ambulance Dispatch Reporting System

AOT: Ambulance offload time

CACC: Central ambulance communications centre

CCLA: Critical care land ambulance

CCP: Critical care paramedic

CTAS: Canadian Triage and Acuity Scale

DDA: Designated delivery agent

ED: Emergency department

EHRAB: Emergency Health Regulatory and Accountability Branch (Ministry of Health and Long-Term Care)

EHS: Emergency health services

ERV: Emergency response vehicle

HAB: Health Analytics Branch (Ministry of Health and Long-Term Care)

LHIN: Local Health Integration Network

MOHLTC: Ministry of Health and Long-Term Care

OCC: Ornge Communication Centre

PCP: Primary care paramedic

PTAC: Provincial Transfer Authorization Centre

SA: Standing agreement carriers

TPS: Toronto Paramedic Services

UTM: Upper-tier municipality

REPORT HIGHLIGHTS

Section 1: Overview

- Ontario has the largest ambulance system in Canada, employing over 8,000 land and air paramedics and 1,000 ambulance communications officers.
- The system is jointly managed by municipalities, the ministry, and Ornge, the non-profit organization responsible for all aspects of Ontario's air ambulance program.

Section 2: Emergency health services funding

- Ministry funding increased from $712 million to $916 million (28.6 percent) between fiscal years 2010/11 and 2016/17. During the same period, municipal funding increased from $468 million to $605 million (29.4 percent).
- The ministry spent $916 million on the EHS sector in the 2016/17 fiscal year (excluding one-time funding and ministry IT costs). During the same period the municipalities spent $604 million (Table 2.1 and Figure 2.1).
- In the 2016/17 fiscal year, 79 percent of the money spent on EHS was for land ambulance services (Figure 2.2).
- The ministry funds up to half of each municipality's land ambulance service costs and covers 100 percent of all other ambulance service costs.

Section 3: Resources

- There were 8,469 paramedics working in Ontario in July 2017 (Table 3.2).
- There are three levels of paramedic designations in Ontario: Primary Care Paramedic, Advanced Care Paramedic, and Critical Care Paramedic. They account for 79 percent, 20 percent and 1 percent of Ontario paramedics, respectively (calculated from data in Figure 3.2).
- Staffing requirements for each region are established by municipal council and the paramedic services chief based on the individual needs of the municipality.
- 67 percent of Ontario's paramedics worked full-time in July 2017 (Figure 3.2).

Section 4: Regulation and oversight

- The ministry is responsible for oversight of ambulance service certification and investigation of complaints.
- On average, 12 percent of ambulance service reviews required a re-visit due to unmet certification criteria (calculated from data in Table 4.1).
- The most common complaint type received between 2007 and 2016 was about the quality of patient care (Table 4.4).

Section 5: Patient characteristics

- North West and North East LHINs had the highest per population rates of ambulance utilization in the 2016/17 fiscal year. Central LHIN had the highest percent increase in ambulance utilization over the past ten years (Figure 5.2).
- The rate of ambulance use for patients aged 65+ is over four times higher than the rates for those under the age of 65 (Figure 5.4).
- Patients who arrived at the ED via ambulance were assigned, on average, a higher CTAS level than non-ambulance arrivals. Approximately 91 percent of arrivals by ambulance were triaged to CTAS levels I-III in 2016/17 (Figure 5.6).
- There were 2,025 Ontarians who made 12 or more trips to the ED via ambulance in 2016/17. The most common diagnoses among these users were related to mental health and addictions (Figure 5.10).

Section 6: Land ambulance dispatch and patient transport

- The number of 911 ambulance calls increased by 30.6 percent between 2007 and 2016 (Figure 6.2).
- There were approximately 1.75 million ambulance dispatches in 2016 (Figure 6.3).
- The number of ambulance transports increased by 243,272 between 2007 and 2016 (Figure 6.4).

Section 7: Emergency department utilization

- In 2016/17, 16.5 percent of ED visits arrived at the hospital by ambulance (Table 7.1).
- From 2007/08 to 2016/17, the number of ED visits arriving by ambulance increased from 626,523 to 965,896, or 54.2 percent (Figure 7.1).
- The 90th percentile ambulance offload time has decreased from 61 minutes in 2008/09 to 42 minutes in 2016/17 (Figure 7.3).

Section 8: Air ambulance utilization

- Ornge operates Ontario's air ambulance program out of nine air bases and three land bases across the province.
- In fiscal year 2016/17, Ornge completed 20,830 transports. Approximately 97 percent were patient transports, and the rest were organ transports between facilities (Table 8.2).
- Approximately half of Ornge transports were deemed "emergency", the highest priority level, from fiscal year 2012/13 to 2016/17. Over a quarter were considered "non-urgent" during the same period (Figure 8.1).
- Over 60 percent of Ornge transports originated in northern Ontario (calculated from data in Figure 8.4).

Section 1: Overview

This section provides a summary of Ontario's ambulance services, management, and delivery model.

An Introduction: Ambulance Services in Ontario

Ambulance service delivery

Ontario's emergency health services (EHS) system is a series of interrelated land and air emergency medical services and programs designed to provide timely medical response and pre-hospital care. Ontario has the largest ambulance system in Canada, employing over 8,000 land and air paramedics and 1,000 ambulance communications officers.

Ontario's 22 land ambulance dispatch centres serve as communication hubs for receiving emergency calls and dispatching paramedics. Dispatchers use computer-aided technology to assign each call to the closest available and most appropriate ambulance in service through one of the 65 paramedic service providers. In 2016, dispatchers and paramedics responded to over 1.4 million emergency calls, dispatched ambulances over 1.7 million times, and transported over one million patients to emergency departments (EDs).

Ornge is a non-profit organization responsible for all aspects of Ontario's air ambulance program.

Ontario's air ambulance services are managed by **Ornge**. Air paramedics operate out of nine air and three land bases with a fleet of 19 aircrafts and 13 land vehicles. Ornge paramedics work across the province, performing over 18,000 patient and 450 organ transports each year.

Ontario's *Ambulance Act* governs all certification of land and air ambulance operators, as well as due process for investigating complaints and inspecting ambulance bases to ensure compliance with relevant legislation.

System oversight and regulation

The dispatch and emergency response system is jointly managed by the municipalities, the ministry, and Ornge.

Municipalities are responsible for operating and maintaining land ambulance services including establishing levels of service, developing ambulance deployment strategies and operational policies, and identifying staff and ambulance resource requirements. They work locally to develop emergency plans and ensure that the regulations and standards of Ontario's *Ambulance Act* are followed.

Base hospitals train and oversee land paramedics by quality monitoring their patient care, providing medical direction, and continuing their medical education.

The ministry oversees the land ambulance system by regulating ambulance operations, certifying ambulance services, and ensuring paramedics have the proper qualifications. Ambulance services are monitored, inspected, and evaluated by the ministry which also investigates related complaints. The ministry also designates Ontario's eight **base hospitals** to oversee paramedics' performance of controlled medical acts.

Ornge is responsible for all air ambulance operations, medical oversight of air paramedics, air dispatch, and authorizing air and land ambulance transfers.

The ministry holds Ornge accountable under a regulatory framework and performance agreements.

EHS funding is shared between the ministry and municipalities. The ministry grants each municipality up to 50 percent of its land ambulance service costs, and provides full funding for the operation of air ambulance services, dispatch centres, base hospitals, and service provision to First Nations and territories without municipal organization.

Section 2:
Emergency health services funding

This section describes how ambulance services in Ontario are funded. It includes the total amount spent on emergency health services by the Ministry of Health and Long-Term Care and municipalities, and a breakdown of the total amount spent by activity.

Ontario's EHS funding is governed by the *Ambulance Act*, which divides responsibility between the province and individual municipalities — upper-tier municipalities (UTMs) and designated delivery agents. The province pays for the land ambulance dispatch system, service provision to First Nations, and service provision to territories without municipal organization. Ontario also funds the air ambulance program and base hospitals.

Municipalities are responsible for the cost and provision of land ambulance services within their boundaries. To assist the municipalities, the province provides a grant of 50 percent of the costs based on the municipality's previous year council-approved budget plus an incremental increase.

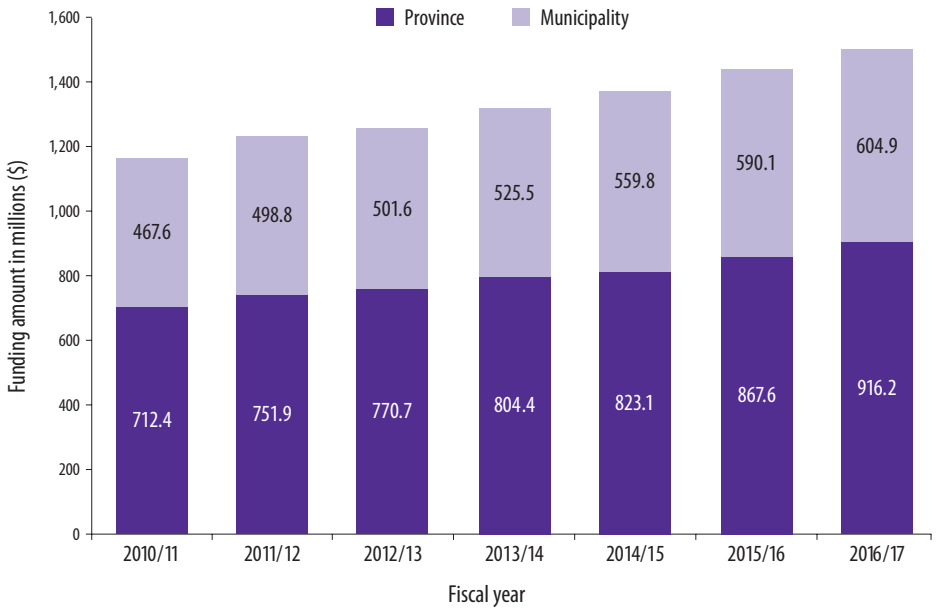
Key findings

- Ministry funding increased from $712 million to $916 million (28.6 percent) between fiscal years 2010/11 and 2016/17. During the same period, municipal funding increased from $468 million to $605 million (29.4 percent).
- The ministry spent $916 million on the EHS sector in the 2016/17 fiscal year (excluding one-time funding and ministry IT costs). During the same period the municipalities spent $605 million (Table 2.1 and Figure 2.1).
- In the 2016/17 fiscal year, 79 percent of the money spent on EHS was for land ambulance services (Figure 2.2).
- The ministry funds up to half of each municipality's land ambulance service costs and covers 100 percent of all other ambulance service costs.

Table 2.1: Total funding and year-over-year change, fiscal years 2010/11 to 2016/17

Year	Province		Municipalities	
	Funding ($, millions)	Year-over-year change (%)	Funding ($, millions)	Year-over-year change (%)
2010/11	712.4	—	467.6	—
2011/12	751.0	5.4%	498.8	6.7%
2012/13	770.7	2.6%	501.6	0.6%
2013/14	804.4	4.4%	525.5	4.8%
2014/15	823.1	2.3%	559.8	6.5%
2015/16	867.6	5.4%	590.1	5.4%
2016/17	916.2	5.6%	604.9	2.5%

Figure 2.1: EHS allocated funding, fiscal years 2010/11 to 2016/17



Data source: Emergency health service financial data records. Table excludes one-time funding and Ministry IT costs.

Combined, the province and municipalities spent $1.52 billion on the EHS sector in the 2016/17 fiscal year. Table 2.2 and Figure 2.2 provide a breakdown of the funding by five major activities. Descriptions of the five activities are provided below.

LAND AMBULANCE

Ministry and municipality funding for the provision of land ambulance services.

AIR AMBULANCE + CRITICAL CARE LAND AMBULANCE (CCLA)

Ministry funding provided to Ornge for the provision of air ambulance and CCLA services.

DISPATCH

Ministry funding for the operation and staffing of 22 land ambulance communications centres.

MINISTRY SYSTEM OVERSIGHT

Salaries, wages and benefits for ministry employees and funding for transportation, communications, services and supplies, and equipment for the ministry.

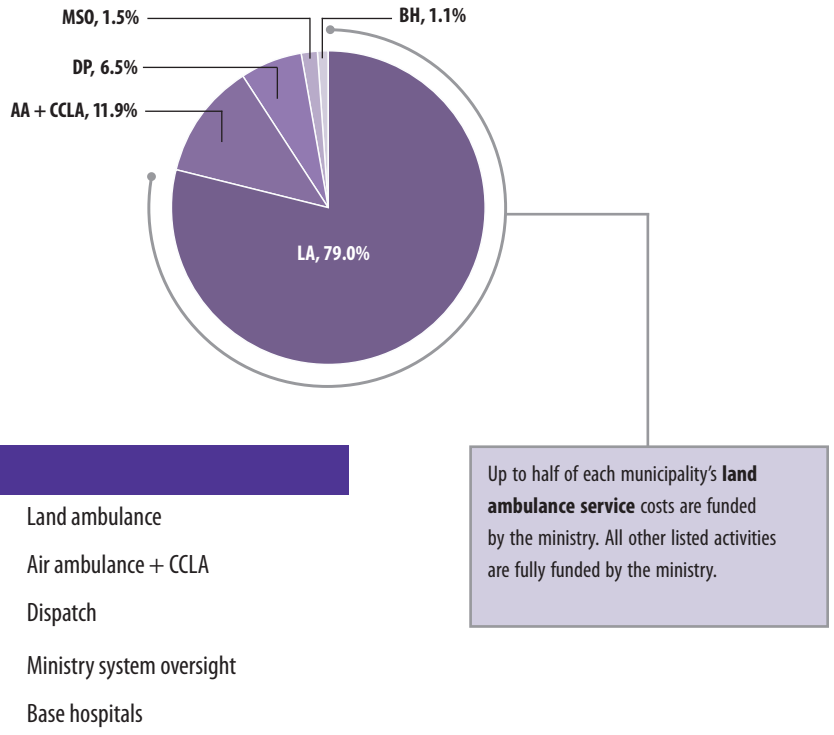
BASE HOSPITALS

Ministry funding to support paramedic certification, quality assurance, paramedic continuing medical education, and controlled medical act delegation.

Table 2.2: EHS funding breakdown by activity, fiscal year 2016/17

Activity	Funding ($ millions)
Land ambulance	1,201.6
Air ambulance + CCLA	181.4
Dispatch	98.5
Ministry system oversight	23.1
Base hospitals	16.4
Total	**1,521.1**

Figure 2.2: Distribution of EHS funding by activity, fiscal year 2016/17



Data source: Emergency health services financial data records. Table excludes one-time funding and Ministry IT costs.

Section 3: Resources

This section provides information on Ontario's paramedic staffing, designations, and resources.

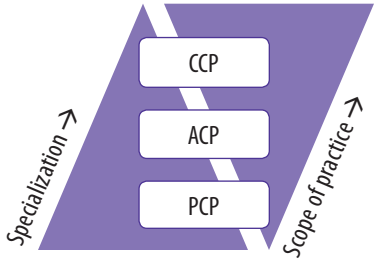
Ontario's EHS rely on the coordination of a complex system of land and air resources through effective communication, transportation, and medical training. 911 calls are received and actioned through centralized communication centres by Ambulance Communications Officers (ACOs) and their supervisors. Paramedics serve as the field operatives, tasked with patient transportation and providing medical assistance. This section explores the roles, demographics, and employment types of EHS employees, as well as the physical resources they use to conduct their work.

Paramedic designations

Paramedics are employed by UTMs, designated delivery agents (DDAs) and First Nations ambulance service operators to provide medical care for emergency patients and safe transportation for patients travelling between hospitals. There are three levels of paramedic designations in Ontario:

- **Primary Care Paramedic (PCP)**
- **Advanced Care Paramedic (ACP)**
- **Critical Care Paramedic (CCP)**

Paramedics provide basic life support, such as wound management, and are authorized to perform controlled acts and advanced medical procedures according to their role. Table 3.1 outlines differences in the scope of each role.



Key findings

- There were 8,469 paramedics working in Ontario in July 2017 (Table 3.2).
- There are three levels of paramedic designations in Ontario: Primary Care Paramedic, Advanced Care Paramedic, and Critical Care Paramedic. They account for 79 percent, 20 percent, and one percent of Ontario paramedics, respectively (calculated from data in Figure 3.2).
- Staffing requirements for each region are established by municipal council and the paramedic services chief based on the individual needs of the municipality.
- 67 percent of Ontario's paramedics worked full-time in July 2017 (Figure 3.2).

Table 3.1: Breakdown of paramedic responsibilities, by designation

PCP	• Medication administration (e.g., naloxone, nitroglycerin, etc.) • Electrocardiograms (12-lead) • Blood glucometry • Non-automated external cardiac defibrillation • Termination of resuscitation • Additional controlled acts and advanced medical procedures
ACP	Includes all of the above, as well as: • Additional medication administration • Endotracheal intubation • Intravenous therapy • Intraosseous therapy • Additional controlled acts and advanced medical procedures
CCP	Includes all of the above, as well as: • Additional medication administration • Chest x-ray interpretation • Urinary catheter insertion • Intravenous blood product administration • Additional controlled acts and advanced medical procedures

Paramedic qualification and training

All paramedics must complete a PCP diploma program (or equivalent) and pass the provincial MOHLTC Advanced Emergency Medical Care Assistant (AEMCA) theory exam. Successful candidates can then seek employment and complete base hospital testing to become authorized to perform delegated acts.

PCPs may supplement their qualifications with the ACP and CCP designations through additional training, testing, and certification. Paramedic training is primarily offered at Colleges of Applied Arts and Technologies, although some approved programs are offered through private career colleges and other institutions.

A paramedic may also undergo aeromedical training to qualify for practicing onboard an air ambulance. Currently, Ornge is the designated provider of air ambulance services and is responsible for the provision of CCLA services in Ontario.

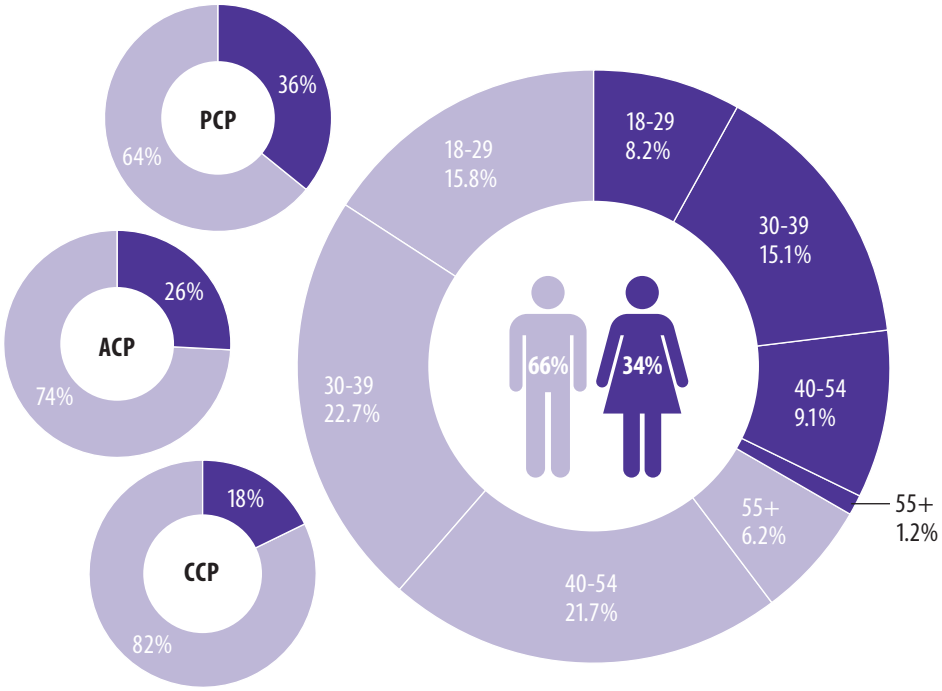
Alternatively, paramedics may enter the Ontario workforce through equivalency processes which recognize paramedics licensed in other Canadian provinces/territories or jurisdictions. Other healthcare professionals with experience and qualifications equivalent to an Ontario paramedic graduate may also qualify. Table 3.2 categorizes paramedics working in Ontario in July 2017 by service type, designation, and full-time vs. part-time employment.

Table 3.2: Total number* of land and air paramedics in Ontario, by designation, July 2017

Service	Designation	Part-Time	Full-Time	Total
Land	PCP	2,668	3,920	**6,588**
	ACP	110	1,522	**1,632**
	CCP†	0	36	**36**
	Total	**2,778**	**5,478**	**8,256**
Air	PCP	16	86	**102**
	ACP	4	42	**46**
	CCP	3	62	**65**
	Total	**23**	**190**	**213**
Total	PCP	2,684	4,006	**6,690**
	ACP	114	1,564	**1,678**
	CCP	3	98	**101**
	Total	**2,801**	**5,668**	**8,469**

* Paramedics working for two or more ambulance service providers are only included once in this table.
† CCLA operated under Ornge.

Figure 3.1: Paramedic demographics by age, sex, and designation, July 2017



The majority of paramedics are male PCPs working in land ambulance services. Full-time employees outnumber their part-time coworkers roughly two-to-one, with a higher ratio among air paramedics than land paramedics.

Air ambulance services account for little more than three percent of the paramedic workforce, as of 2017. This reflects the lower call volume for air emergency services, as shown in Section 6: Land ambulance dispatch and patient transport and Section 8: Air ambulance utilization.

The largest age cohort for paramedics is 30–39 for both men and women. However, men aged 40–54 also have substantial representation at just over one fifth of all paramedics, while the number of female paramedics significantly drops over the age of 40.

Data source: Ambulance Service Identification Card Program, July 2017. Paramedics working for two or more ambulance service providers are included only once in this report.

Paramedic staffing

Paramedic staffing requirements for each region are established by municipal council and the ambulance services chief based on the individual needs of the municipality[1]. Paramedic staffing is largely dependent on the size and population of an ambulance services' catchment area.

Approximately 67 percent of all Ontario paramedics are full-time employees. Ambulance services' dependence on part-time labour varies across service areas. Figure 3.2 shows the percentage of part-time and full-time paramedics in Ontario in 2017.

The percent of land ambulance paramedics that worked full-time in 2017 ranged between 15 and 100 percent. Figure 3.3 illustrates the percentage of land ambulance paramedics working full-time in each service area in 2017.

Figure 3.2: Part-time and full-time paramedic staffing in Ontario, 2017

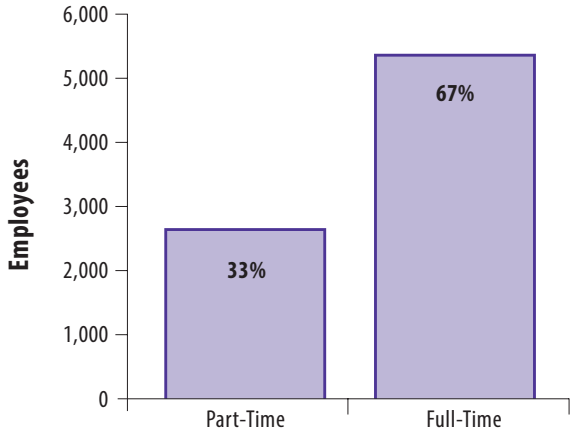
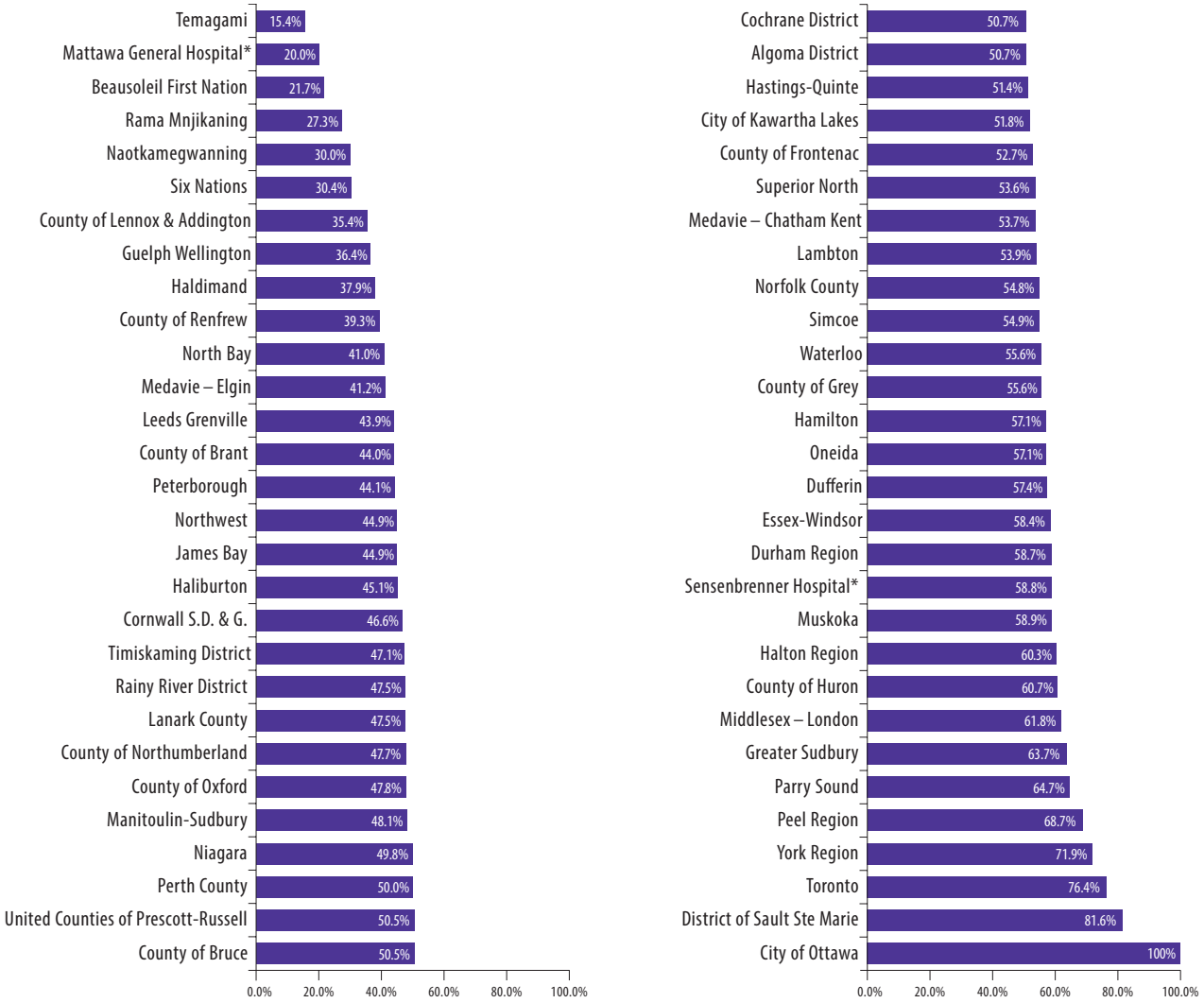


Figure 3.3: Percent of land ambulance paramedics working full-time, by ambulance service, 2017



*Mattawa General Hospital is subcontracted to provide ambulance services by the District of Nipissing. Sensenbrenner Hospital is subcontracted to provide ambulance services by the District of Cochrane.

Data source: Ambulance Service Identification Card Program, July 2017. Paramedics working for two or more ambulance service providers are included only once in this report. **1.** Ontario's Ambulance Act, subsection 6(1)(b).

Table 3.3 below assigns each ambulance service to a Local Health Integration Network (LHIN). Four ambulance services (highlighted in the table below) provide services in more than one LHIN. They are Peel Region, Halton Region, Toronto, and Lanark County. A table showing the inverse (LHINs by ambulance service) can be found in Appendix C – Supplementary Tables and Figures.

Table 3.3: Ambulance services by LHIN

LHIN	Ambulance service
Erie St.Clair	Essex-Windsor Lambton Medavie – Chatham Kent
South West	County of Bruce County of Grey County of Huron Medavie – Elgin Middlesex-London Norfolk Oneida County of Oxford Perth County
Waterloo Wellington	Guelph-Wellington Waterloo
Hamilton Niagara Haldimand Brant	County of Brant Haldimand Halton Region Hamilton Niagara Norfolk County Six Nations
Central West	Dufferin City of Toronto Peel Region
Mississauga Halton	Halton Region City of Toronto Peel Region
Toronto Central	City of Toronto
Central	City of Toronto York Region
Central East	City of Kawartha Lakes County of Northumberland Durham Region City of Toronto Peterborough Haliburton
South East	County of Frontenac Hastings-Quinte Lanark County Leeds Grenville County of Lennox and Addington
Champlain	City Of Ottawa Cornwall S. D. & G. Lanark County United Counties of Prescott-Russell County of Renfrew
North Simcoe Muskoka	Beausoleil First Nation Simcoe Muskoka Rama Mnjikaning
North East	Algoma District Greater Sudbury Cochrane District James Bay Manitoulin-Sudbury Mattawa General Hospital Naotkamegwanning North Bay Parry Sound District of Sault Ste. Marie Sensenbrenner Hospital Temagami Timiskaming
North West	Northwest Rainy River Superior North

* Mattawa General Hospital is subcontracted to provide ambulance services by the District of Nipissing. Sensenbrenner Hospital is subcontracted to provide ambulance services by the District of Cochrane.

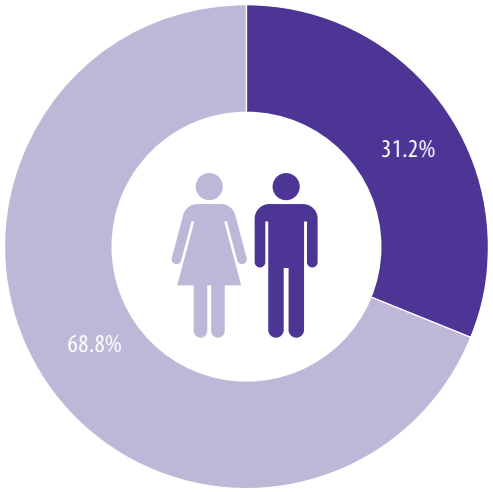
ACO responsibilities and training

ACOs work in ambulance communications centres and receive and process 911 emergency and non-emergency requests for ambulance services. ACOs are responsible for prioritizing incoming calls, collecting patient information, providing pre-arrival instructions to patients, deploying ambulance resources, and communicating patient updates to paramedics.

All ACOs are required to attend a seven week training program in land ambulance dispatching at a ministry-operated dispatch training centre. Upon completion of this program, ACOs are required to pass an examination and return to their home dispatch centre for further coaching and training. ACOs must also hold valid first aid and targeted responder CPR certification and obtain a Restricted Radio Operator Certificate.

Table 3.4 and Figure 3.4 present the number of communications officers working at the 22 land ambulance Central Ambulance Communications Centres (CACCs) and Ornge's air ambulance communications centre.

Figure 3.4: Communications officers* by sex, July 2017



*Demographic data are not available for Communication supervisors, so they are excluded from this analysis.

Table 3.4: Number of communications officers by communications centre, July 2017

Centre name	Communications officer		Communications supervisor		Total
	Part-time	Full-time	Part-time	Full-time	
Mississauga	44	34	0	1	**79**
London	19	31	0	5	**55**
Wallaceburg	11	12	0	3	**26**
Windsor	20	15	0	4	**39**
Hamilton	23	33	0	6	**62**
Cambridge	19	26	0	4	**49**
Niagara	16	23	0	7	**46**
Georgian	36	36	0	3	**75**
Oshawa	18	19	0	3	**40**
Toronto	25	133	0	14	**172**
Lindsay	17	14	0	3	**34**
Ottawa	3	75	0	8	**86**
Renfrew	10	9	0	4	**23**
Kingston	18	18	0	4	**40**
Sudbury	17	17	0	5	**39**
Sault Ste. Marie	8	8	0	5	**21**
Timmins	5	16	0	4	**25**
North Bay	9	9	0	4	**22**
Muskoka	5	7	0	4	**16**
Parry Sound	5	10	0	2	**17**
Thunder Bay	13	9	0	2	**24**
Kenora	10	8	0	5	**23**
Ornge Communications Centre	5	51	0	0	**56**
Total	**356**	**613**	**0**	**100**	**1,069**

Data source: Ambulance Service Identification Card Program, July 2017.

Land paramedic vehicles

Land paramedic services operate a fleet of 1,753 vehicles for patient transport. A variety of vehicles are available for use, depending on the emergency. Ambulances are used to transport patients who suffer acute illness with risk to their life and patients who require a stretcher or medical attention during transport.

An emergency response vehicle (ERV) is a vehicle other than an ambulance that can respond to a medical emergency and address the patient on site. These vehicles include emergency response units which address emergency medical incidents on a regular basis, and emergency support units which assist in event of a major emergency medical incident.

Special purpose ambulances are equipped with specific functionality to address a number of specific non-standard medical emergencies. Finally, administrative vehicles are used for efficient transport of EHS personnel to and from emergency locations or hospitals. Table 3.5 below displays the number of each vehicle type within the land services fleet.

Table 3.5: Total number of land emergency vehicles, 2014

Vehicle	# of units
Ambulances	1,171
Emergency response units	331
Emergency support units	59
Special purpose ambulance	62
Administrative vehicles	130
Total paramedic service fleet	1,753

Data source: Municipality Annual Service Plans. There is a three-year certification cycle and these numbers are updated at that time.

Air paramedic vehicles

The Ornge fleet consists of 19 aircraft and 13 land vehicles, including:

8 Airplanes

Pilatus Next Generation PC-12

11 Helicopters

Leonardo AW-139

13 Ambulances

Crestline Commander

All aircraft are positioned to deliver services based on operational requirements. There are nine air bases and three land bases which have designated CCLA and Paediatric teams on standby. The map below shows the location of Ornge's bases. More information about air ambulance services can be found in Section 8: Air ambulance utilization.

Base	Location
1	Ottawa
2	Toronto
	Mississauga
	Toronto Paramedic Services (Ornge sub-contract)
3	Peterborough
4	London
5	Sudbury
6	Timmins
7	Moosonee
8	Thunder Bay
9	Sioux Lookout
10	Kenora

Section 4:
Regulation and oversight

This section provides information on regulatory operations that ensure ambulance service providers comply with the applicable legislation. Data are presented summarizing results from inspections and investigations for Ontario's ambulance service providers.

Oversight

Ontario's *Ambulance Act* stipulates that municipalities and DDAs are responsible for the direct delivery of land ambulance services. Enforcement and administration of the legislation governing the provision of ambulance services is the responsibility of the ministry. The ministry's core regulatory responsibilities include certification of ambulance services and investigation of complaints. This section describes these processes in detail and provides a summary of the data collected for fiscal year 2016/17.

Certification

The ministry establishes standards for ambulance services and is responsible for ensuring compliance with those standards. The ministry's Emergency Health Regulatory and Accountability Branch (EHRAB) evaluates candidate ambulance service operators to ensure compliance with the Land and Air Ambulance Certification Standards. Only land and air ambulance providers that have been certified by the ministry can operate an ambulance service in Ontario.

Compliance with legislated standards is determined through a formal inspection process called an Ambulance Service Review, which focuses on three main areas:

- **Patient care**
- **Quality assurance**
- **Administration**

A renewed certificate is issued to service providers that successfully meet the following two criteria:

1 A score of 90% or more for patient care (which represents 70% of the overall inspection)

2 An overall score of 90% or more (weighted 70% patient care, 20% quality assurance, and 10% administration)

Key findings

- The ministry is responsible for oversight of ambulance service certification and investigation of complaints.
- On average, 12 percent of ambulance service reviews required a re-visit due to unmet certification criteria (calculated from data in Table 4.1).
- The most common complaint type received between 2007 and 2016 was about the quality of patient care (Table 4.4).

In addition to the Ambulance Service Review inspection, three other types of inspections are conducted:

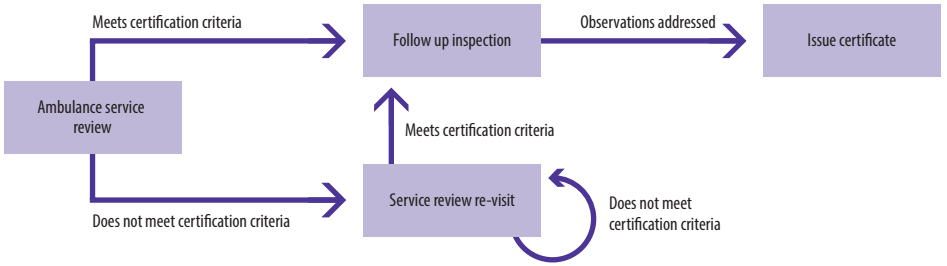
Service review re-visit: Conducted if a service does not meet the certification standards during an Ambulance Service Review.

Follow up inspection: Conducted after a service has met the certification standards, but with observations, to confirm that planned actions to address the observations from the Ambulance Service Review have been completed.

Unannounced inspection: Conducted without prior notice, on certified services throughout the three year certificate period.

The diagram below illustrates the certification process.

Figure 4.1: Certification process flow chart



On average, 12 percent of ambulance service reviews resulted in a mandatory re-visit due to unmet certification criteria. Figure 4.2 shows the number of service reviews and re-visits over the past five years, while Table 4.1 shows the five-year totals, including number of observations and the percentage of reviews requiring a re-visit.

Figure 4.2: Number of service reviews and re-visits, by service type, fiscal year 2012/13 to 2016/17

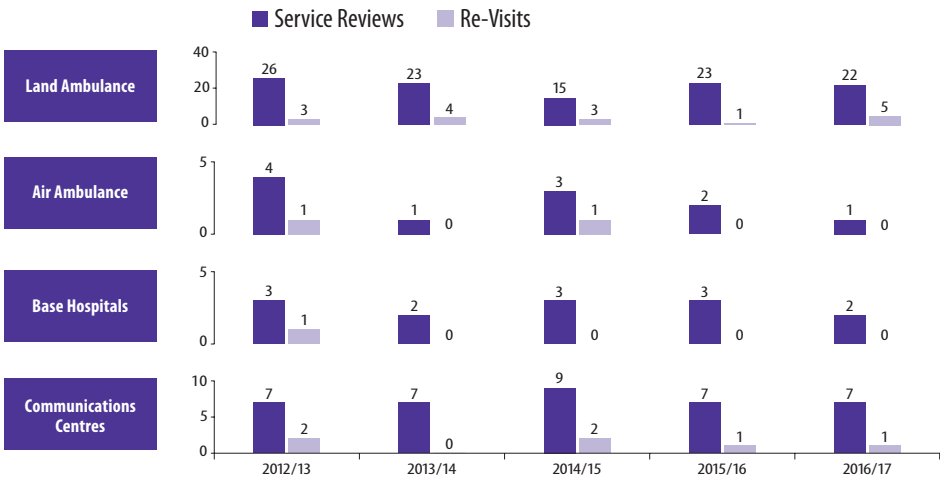


Table 4.1: Total number of inspections, observations and re-visits, by service type, fiscal year 2012/13 to 2016/17

Service type	Service reviews	Re-visits	% service reviews requiring a re-visit	Observations	
				Review	Re-visits
Land	109	13	12%	883	91
Air	11	2	18%	100	15
Base	13	1	8%	80	2
Communication centres	37	5	14%	463	47

Data source: Ambulance Service Review (ASR) log and Ambulance Service Review Program.

Investigations

The ministry conducts investigations to determine if there were any contraventions of the *Act*, its regulations, or legislated standards. It does not conduct investigations into matters covered under any other provincial or federal legislation, such as the cause of injury or death, or the actions of other allied agencies (e.g., fire, police).

Any citizen may inform Investigation Services of any incident related to land or air ambulance services or ambulance communications services in Ontario, where they have reason to believe that the activities of paramedics, ambulance communications officers or other ambulance or communication service staff may be in contravention of the *Act*, regulations, or standards.

After an investigation is conducted it is classified as one of the following:

SUBSTANTIATED

Investigations that can be validated and supported by evidence based on the complaint received.

UNSUBSTANTIATED

Investigations where no evidence can be found to support the complaint received.

OTHER

The complaint was previously investigated and no new concerns were raised.

A substantiated complaint often results in an operational or procedural change to mitigate further incidents. A copy of the investigation report is provided to the service operator and, if necessary, the presiding Coroner. A copy is also provided to the affected patient or his/her family member upon request.

As shown in Table 4.2, the number of investigations opened per year has shown a general decline since 2012. Just under one third of investigations over the same time period were determined to be unsubstantiated. Note that some investigations were completed the year after they were opened.

Table 4.2: Total number of investigations opened and completed, average time to complete, and classification, 2012 to 2016.

Year	Investigations opened	Investigations completed	Average time to complete (days)	Percentage substantiated	Percentage unsubstantiated	Percentage other
2012	267	243	47.0	60.5%	32.9%	6.6%
2013	256	267	34.0	64.8%	28.8%	6.4%
2014	130	185	41.9	62.2%	34.6%	3.2%
2015	137	114	31.5	58.8%	33.3%	7.9%
2016	123	135	46.3	48.1%	28.1%	23.7%

For each complaint submitted, Investigation Services records the source and assigns a type based on the cause of the complaint. Tables 4.3 and 4.4 show the ten most common complaint sources and types over the past ten years.

Table 4.3: Ten most common complaint sources, 2007 to 2016

Rank	Complaint source	Number received
1	Field office	556
2	EMS service	393
3	Headquarters	396
4	Investigation services unit	254
5	3rd party/non-family/by-stander	216
6	CACC	79
7	Paramedic	66
8	Ornge	51
9	Coroner	38
10	Other	21

Table 4.4: Ten most common complaint types, 2007 to 2016

Rank	Complaint type	Number received
1	Quality of patient care	542
2	*Ambulance Act* contravention	303
3	Quality of ambulance service	281
4	Quality of ambulance dispatch	234
5	Quality of ambulance response	179
6	Quality of air ambulance response	126
7	Quality of air ambulance service	85
8	Quality of air ambulance dispatch	74
9	Request for information	66
10	Possible Criminal Code of Canada contravention	51

Data source: Ambulance Service Review (ASR) log.

Section 5:
Patient characteristics

This section describes the patients that use Ontario's ambulance services, including their age, sex, number of visits, and reason for visit.

In fiscal year 2016/17, 617,818 unique patients used ambulance services for care and transportation to the ED (Table 5.1). This represents a 40 percent increase in the number of unique patients over the past ten years (Figure 5.1). Central LHIN has the lowest rate of ED visits where the patient arrived by ambulance, and North West LHIN has the highest rate for both fiscal years 2007/08 and 2016/17 (Figure 5.2).

Key findings

- North West and North East LHINs had the highest per population rates of ambulance utilization in 2016/17, while Central LHIN had the highest percent increase in ambulance utilization over the past ten years (Figure 5.2).
- The rate of ambulance use for patients aged 65+ is over four times higher than the rates for those under the age of 65 (Figure 5.4).
- Patients who arrived at the ED via ambulance were assigned, on average, a higher CTAS level than non-ambulance arrivals. Approximately 91 percent of arrivals by ambulance were triaged to CTAS levels I-III in 2016/17 (Figure 5.6).
- There were 2,025 Ontarians who made 12 or more trips to the ED via ambulance in 2016/17. The most common diagnoses among these users were related to mental health and addictions (Figure 5.10).

Table 5.1: Unique patients who arrived at the ED by ambulance, 2007/08 to 2016/17

Fiscal year	Number of patients who arrived at ED via ambulance	Average number of trips per person
2007/08	441,393	1.38
2008/09	462,987	1.40
2009/10	482,281	1.40
2010/11	504,938	1.42
2011/12	519,564	1.44
2012/13	539,119	1.45
2013/14	553,506	1.47
2014/15	573,551	1.49
2015/16	589,082	1.51
2016/17	617,818	1.52

Figure 5.1: Key facts about patients who arrived by ambulance

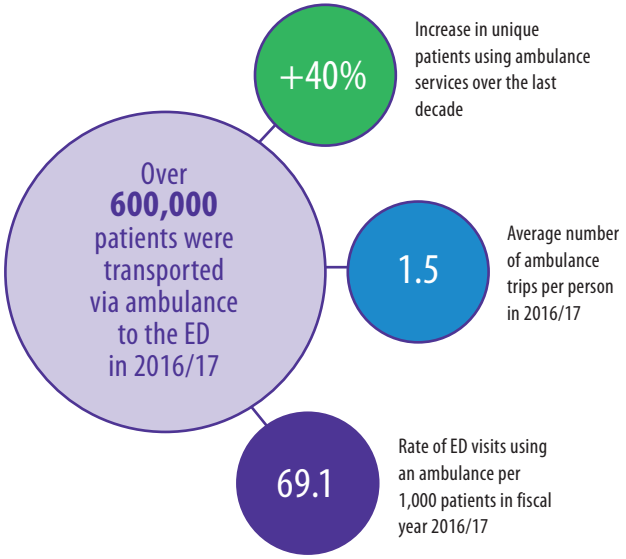
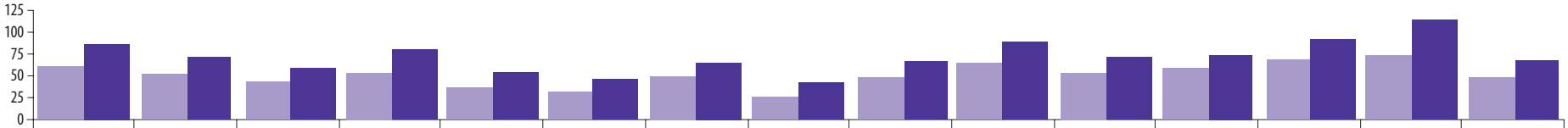


Figure 5.2: Number of ED visits where the patient arrived by ambulance per 1,000 population, by LHIN, fiscal year 2007/08 compared to fiscal year 2016/17



	Erie St. Clair	South West	Waterloo Wellington	HNHB	Central West	Mississauga Halton	Toronto Central	Central	Central East	South East	Champlain	North Simcoe Muskoka	North East	North West	Ontario
2007/08	61.7	53.0	43.5	54.0	37.2	32.4	49.9	26.0	49.2	65.7	54.2	59.1	68.7	74.3	49.1
2016/17	88.1	72.5	60.4	81.5	55.0	47.3	66.4	43.5	68.1	90.7	72.7	75.3	93.5	116.1	69.1
% Growth	42.8%	36.9%	39.0%	50.9%	48.0%	46.2%	33.0%	67.3%	38.4%	37.9%	34.1%	27.4%	36.2%	56.2%	40.7%

Per population rate: In this report, "rate" refers to the number of ED visits where the patient arrived by ambulance divided by the total population (LHIN or province) then multiplied by 1,000. Rates can be interpreted as X number of ED visits where the patient arrived by ambulance for every 1,000 people. A per population rate allows for objective comparisons across geographies. **Data Source:** National Ambulatory Care Reporting System (NACRS).

Patient age and presenting complaints

In fiscal year 2016/17, nearly 50 percent of visits where the patient arrived by ambulance were made by patients aged 65+ (Figure 5.3). This percentage was over four times higher than the percentage for any other age group (Figure 5.4).

Table 5.2 below shows the top five reasons for patients seeking emergency medical care, by age group. Mental health and substance abuse were among the most common complaints for patients aged five to 64 years.

Table 5.2: Top five presenting complaints among ED visits where patient arrived by ambulance, by age group, fiscal year 2016/17

0 to 4 years	5 to 18 years	19 to 44 years
1. Seizure	1. Seizure	1. Abdominal pain
2. Fever	2. Head injury	2. Substance misuse/intoxication
3. Shortness of breath	3. Lower extremity injury	3. Seizure
4. Head injury	4. Abdominal pain	4. Depression/suicidal/self-harm
5. Cough/congestion	5. Depression/suicidal/self-harm	5. Overdose ingestion
45 to 64 years	**65 to 74 years**	**75+ years**
1. Chest pain — cardiac features	1. Shortness of breath	1. Shortness of breath
2. Abdominal pain	2. General weakness	2. General weakness
3. Shortness of breath	3. Chest pain — cardiac features	3. Abdominal pain
4. General weakness	4. Abdominal pain	4. Chest pain — cardiac features
5. Substance misuse/intoxication	5. Syncope/pre-syncope	5. Lower extremity injury

Figure 5.3: Distribution of ED visits where patient arrived by ambulance, by patient age and sex, 2016/17

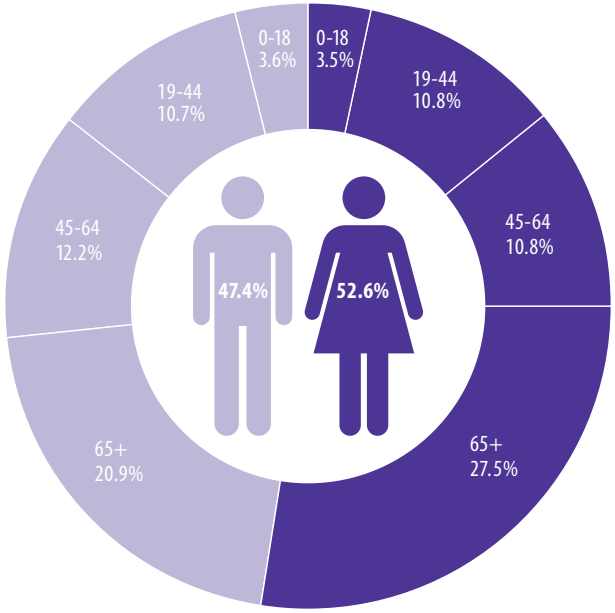
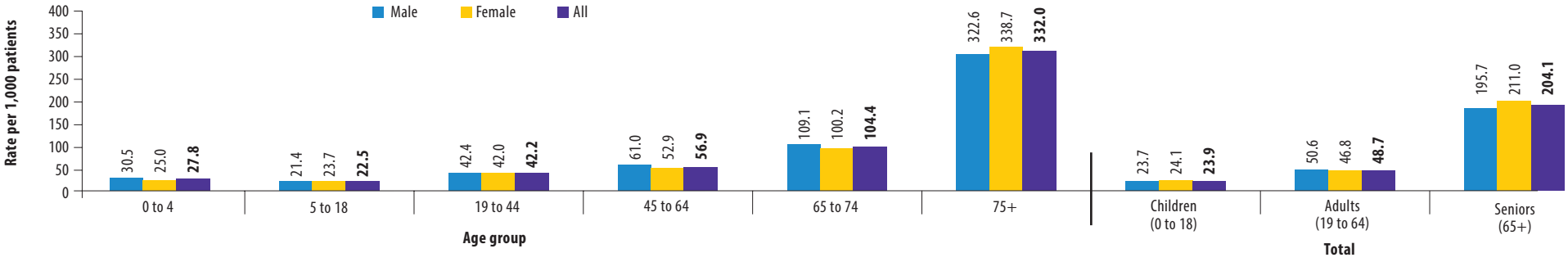


Figure 5.4: Number of ED visits where the patient arrived by ambulance per 1,000 population, by age group, 2016/17



Per population rate: In this report, "rate" refers to the number of ED visits where the patient arrived by ambulance divided by the total population (LHIN or province) then multiplied by 1,000. Rates can be interpreted as X number of ED visits where the patient arrived by ambulance for every 1,000 people. A per population rate allows for objective comparisons across geographies and age groups. **Data Source:** National Ambulatory Care Reporting System (NACRS).

The Canadian Triage & Acuity Scale (CTAS) is a tool used to prioritize the urgency of an ED patient's required care (Figure 5.5). Patients are triaged according to the type and severity of their presenting symptoms. A higher percentage of patients who arrived at the ED by ambulance were classified as requiring urgent care (CTAS I-III) compared to those who did not arrive by ambulance (Figure 5.6). Over the past ten years, the percentage of patients who arrived at the ED by ambulance classified as less urgent (CTAS IV-V) decreased from 15.5 percent to 8.7 percent (Figure 5.7).

Figure 5.5: CTAS classifications

CTAS I	**Resuscitation** — conditions that are threats to life or imminent risk of deterioration, requiring immediate aggressive interventions.
CTAS II	**Emergent care** — conditions that are a potential threat to life or limb function requiring rapid medical intervention or delegated acts.
CTAS III	**Urgent care** — conditions that could potentially progress to a serious problem requiring emergency intervention.
CTAS IV	**Less-urgent care** — conditions related to patient age, distress, or potential for deterioration or complications that would benefit from intervention or reassurance within 1-2 hr.
CTAS V	**Non-urgent care** — conditions in which investigations or interventions could be delayed or referred to other areas of the hospital or health care system.

Figure 5.6: CTAS distributions for ED visits where patient arrived by ambulance compared to patients who did not arrive by ambulance, fiscal year 2016/17

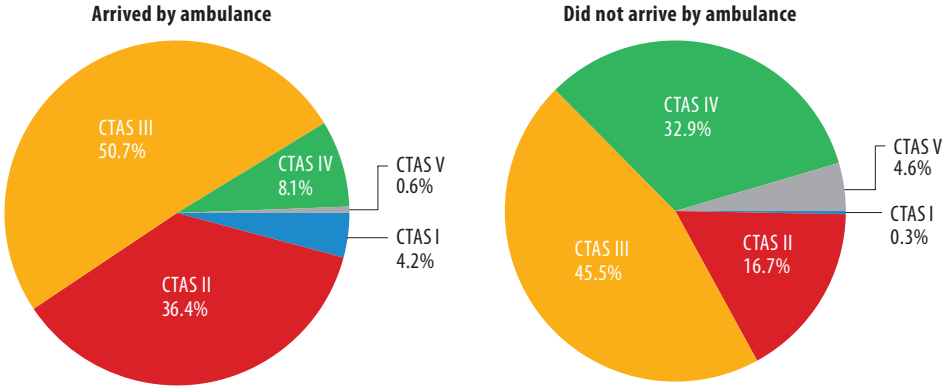
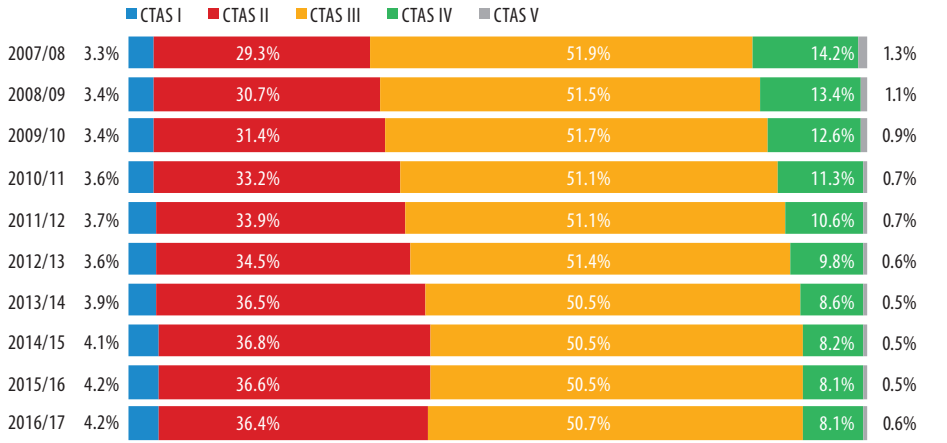


Table 5.3: Percentage of ED visits where patient arrived by ambulance, by CTAS and age group, fiscal year 2016/17

Age Group	CTAS I	CTAS II	CTAS III	CTAS IV	CTAS V	Total
0 to 4	5.8%	42.8%	41.2%	9.6%	0.7%	100.0%
5 to 18	3.7%	36.2%	47.9%	11.6%	0.6%	100.0%
19 to 44	3.8%	36.5%	49.4%	9.6%	0.7%	100.0%
45 to 64	4.6%	39.0%	47.9%	7.9%	0.7%	100.0%
65 to 74	5.0%	38.2%	49.6%	6.7%	0.5%	100.0%
75+	3.7%	33.7%	54.7%	7.4%	0.5%	100.0%

Figure 5.7: CTAS distributions for ED visits where patient arrived by ambulance, fiscal year 2007/08 to 2016/17



Data Source: National Ambulatory Care Reporting System (NACRS).

Referral source and discharge disposition

In most cases, patients who arrived at the ED by ambulance chose to go to the hospital or were referred by their family members. For 4.5 percent of ED arrivals by ambulance, the patient was referred by another hospital or residential care setting, such as a long-term care home (Figure 5.8). While the homeless accounted for less than one percent of all ED visits where the patient arrived by ambulance, the percentage among hospitals reached a maximum of 16.1 percent in 2016/17 (Table 5.4). In 2016/17, the percentage of ED patients admitted to the hospital was higher among patients who arrived by ambulance (30.8 percent) compared to patients who arrived by other means (6.3 percent) (Figure 5.9).

Figure 5.8: Referral source for ED visits where patient arrived by ambulance, fiscal year 2016/17

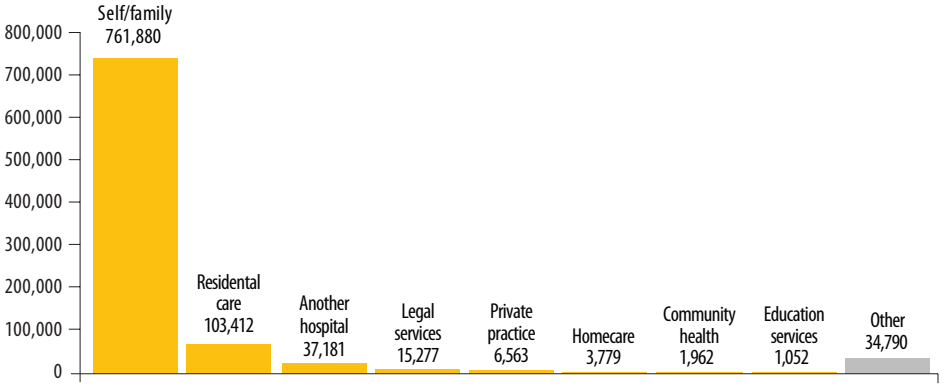


Figure 5.9: ED visit disposition for patients who arrived by ambulance compared to patients who did not arrive by ambulance, fiscal year 2016/17

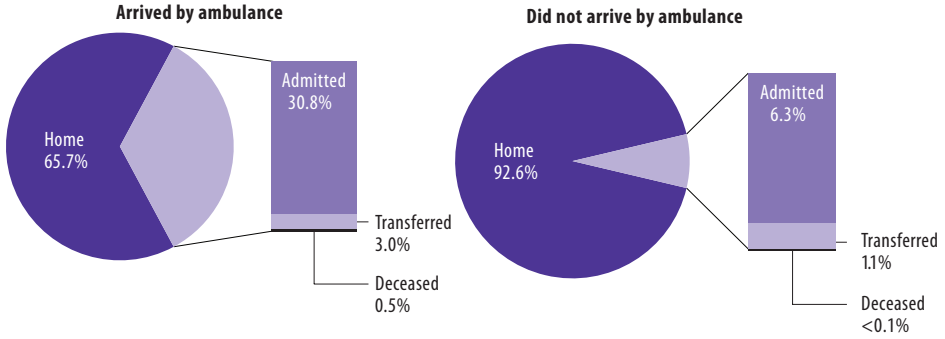


Table 5.4: Hospitals that provide care to a higher percentage of homeless patients, fiscal year 2016/17

City	Hospital	Hospital Type	Percent of all arrivals by ambulance where the patient is homeless
Toronto	St. Michael's Hospital	Teaching hospital	16.1%
Toronto	University Health Network – Toronto General	Teaching hospital	10.7%
Toronto	Sinai Health System – Mount Sinai	Teaching hospital	10.6%
Toronto	University Health Network – Toronto Western	Teaching hospital	5.8%
Red Lake	Red Lake Margaret Cochenour Memorial Hospital	Low-volume	4.3%
Toronto	St. Joseph's Health Centre	Very high-volume	2.7%
Ingersoll	Alexandra Hospital	Low-volume	2.6%
Hamilton	St. Joseph's Healthcare Hamilton – Charlton Campus	Very high-volume	2.6%
Kitchener	Grand River Hospital – Kitchener-Waterloo	Very high-volume	2.3%
Ottawa	Hopital Montfort	Teaching hospital	1.9%
London	London Health Sciences Centre – Victoria	Teaching hospital	1.9%
Windsor	Windsor Regional Hospital – Ouellette Campus	Very high-volume	1.9%
Barrie	Royal Victoria Regional Health Centre	Very high-volume	1.8%
St. Catharines	Niagara Health System – St. Catharines	Very high-volume	1.6%
Toronto	Toronto East Health Network	Very high-volume	1.6%

Data Source: National Ambulatory Care Reporting System (NACRS).

Frequent users of ambulance services

Frequent user is defined in this report as a patient who made 12 or more trips to the ED using an ambulance within a 12 month period.

In fiscal year 2016/17, there were 2,025 frequent users in Ontario. The percentage of unique patients in each LHIN who were frequent users ranged from 0.16 percent in Mississauga Halton to 0.98 percent in North West (Table 5.6).

The most common diagnosis during ED visits by frequent users was "mental health due to substance use". Figure 5.10 shows the ten most common diagnoses for frequent users, which account for over 50 percent of all frequent users' diagnoses.

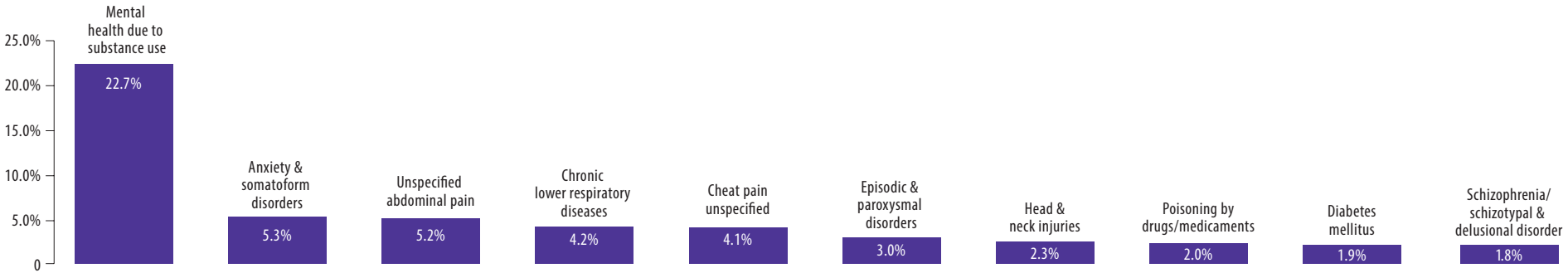
Table 5.5: Key facts about frequent ambulance users

In 2016/17, **2,025** unique patients were classified as frequent users	
Annual number of ambulance trips	43,773
Average number of ambulance trips	21.6 per patient
Percent female	45.9%
Average age	52.2 years
Average ED length of stay	7.1 hours

Table 5.6: Number and percentage of unique patients by LHIN and frequency of ED visits by ambulance, fiscal year 2016/17

Patient LHIN	Single visits		2 to 3 visits		4 to 11 visits		12+ visits (frequent users)		Total
	#	%	#	%	#	%	#	%	
Erie St. Clair	26,303	72.9%	7,604	21.1%	2,085	5.8%	98	0.27%	36,090
South West	34,213	74.2%	9,504	20.6%	2,264	4.9%	136	0.29%	46,117
Waterloo Wellington	24,478	76.8%	5,974	18.7%	1,354	4.2%	83	0.26%	31,889
HNHB	56,602	74.0%	15,771	20.6%	3,895	5.1%	252	0.33%	76,520
Central West	30,005	81.1%	5,798	15.7%	1,089	2.9%	86	0.23%	36,978
Mississauga Halton	33,406	79.2%	7,202	17.1%	1,506	3.6%	69	0.16%	42,183
Toronto Central	39,247	75.1%	10,014	19.2%	2,758	5.3%	265	0.51%	52,284
Central	44,987	79.0%	9,708	17.0%	2,177	3.8%	105	0.18%	56,977
Central East	54,647	75.4%	14,188	19.6%	3,391	4.7%	225	0.31%	72,451
South East	20,201	71.8%	6,286	22.3%	1,583	5.6%	84	0.30%	28,154
Champlain	43,980	72.4%	13,178	21.7%	3,466	5.7%	162	0.27%	60,786
North Simcoe Muskoka	17,452	73.9%	4,849	20.5%	1,231	5.2%	71	0.30%	23,603
North East	23,981	72.8%	6,892	20.9%	1,936	5.9%	120	0.36%	32,929
North West	10,481	70.1%	3,300	22.1%	1,017	6.8%	147	0.98%	14,945
Ontario	**464,377**	**75.2%**	**121,272**	**19.6%**	**30,144**	**4.9%**	**2,025**	**0.33%**	**617,818**

Figure 5.10: Top ten diagnoses for ED visits where the patient was identified as a frequent user, fiscal year 2016/17



Data Source: National Ambulatory Care Reporting System (NACRS).

Section 6: Land ambulance dispatch and patient transport

This section focuses on the number of 911 calls received, the number of ambulances dispatched, and the number of patients transported to the hospital.

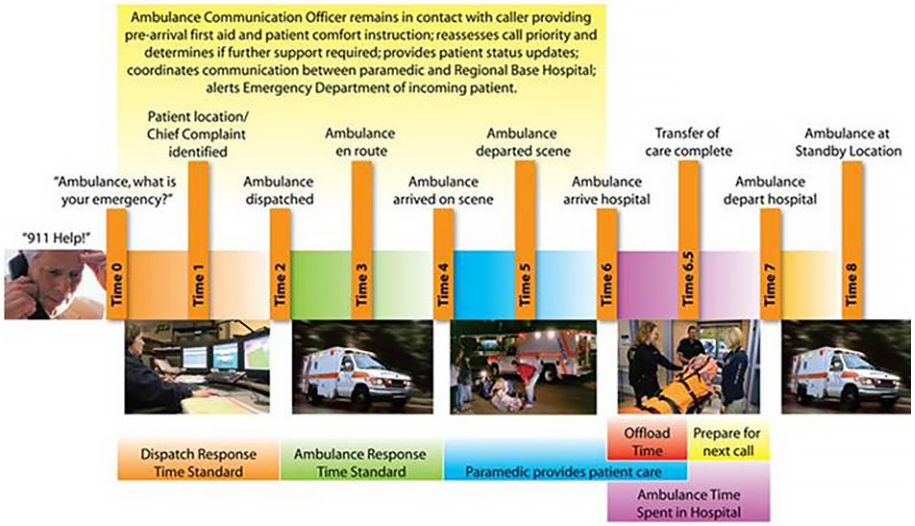
Key findings

- The number of 911 ambulance calls increased by 30.6 percent between 2007 and 2016 (Figure 6.2).
- There were approximately 1.75 million ambulance dispatches in 2016 (Figure 6.3).
- The number of ambulance transports increased by 243,272 between 2007 and 2016 (Figure 6.4).

Timeline of events

Response to a 911 call involves the coordinated actions of communications officers, paramedics, and hospital staff. The process can be broken down into ten steps, defined in the diagram below from Time 0 to Time 8. Monitored time intervals are colour coded and labelled below the timeline.

Figure 6.1: Chronology of an emergency call for an ambulance



More information on ambulance offload time (Time 6 to Time 6.5) can be found in Section 7: Emergency department utilization.

Dispatch priority codes

For most patients, first contact with an emergency health services provider is made by calling 911. At this point, calls are assigned a priority code, which may change while carrying out the call. Dispatch priority codes are listed below.

CODE 1: DEFERRABLE CALL

A non-emergency call which may be delayed without being physically detrimental to the patient.

CODE 2: SCHEDULED CALL

A non-emergency call performed at a specific time due to limited availability of special treatment or diagnostic/receiving facilities.

CODE 3: PROMPT CALL

May be responded to with moderate delay. The patient is stable or under professional care and not in immediate danger.

CODE 4: URGENT CALL

Immediate attention required; possible threat to life, limb, or function.

CODE 8: STANDBY CALL

Vehicle or crew needed for emergency coverage or in anticipation of a call.

Note: Codes 5-7 are not assigned.

Emergency call volume

In Ontario, the total number of 911 calls for an ambulance increased by 30.6 percent between 2007 and 2016 (Figure 6.2). Over the same period, the percent change in the number of calls at the CACC level ranged from a 6.7 percent decrease in Parry Sound to a 55.6 percent increase in Niagara (Table 6.2).

Figure 6.2: Total number of 911 calls received by Ontario CACCs, 2007 to 2016

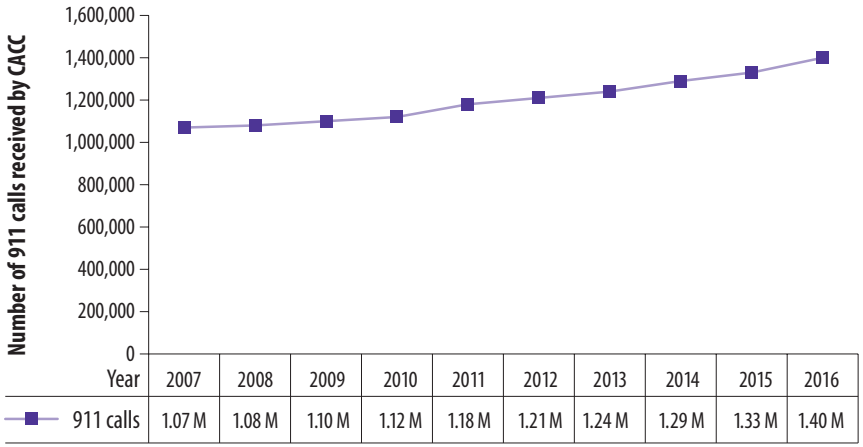


Table 6.1: Percentage of calls by priority code, 2007 to 2016

Year	Code 1	Code 2	Code 3	Code 4
2007	5.8%	6.9%	18.8%	68.5%
2008	5.2%	5.7%	20.4%	68.7%
2009	4.7%	4.8%	24.2%	66.3%
2010	4.3%	4.2%	25.0%	66.4%
2011	4.1%	3.9%	25.2%	66.8%
2012	3.9%	3.0%	25.3%	67.8%
2013	3.7%	2.8%	26.0%	67.5%
2014	3.3%	2.6%	26.5%	67.6%
2015	3.2%	2.4%	26.7%	67.7%
2016	3.0%	2.1%	26.8%	68.0%

Table 6.2: Percent change in the number of 911 calls received, by CACC, 2007 to 2016

CACC	911 Calls		Percent change
	2007	2016	
Parry Sound	3,701	3,453	-6.7%
Muskoka	7,166	9,323	30.1%
Renfrew	11,002	12,920	17.4%
Kenora	14,251	18,056	26.7%
Timmins	13,145	19,070	45.1%
North Bay	17,013	19,749	16.1%
Sault Ste. Marie	14,437	20,037	38.8%
Wallaceburg	18,979	24,350	28.3%
Thunder Bay	23,723	30,170	27.2%
Sudbury	30,817	33,775	9.6%
Lindsay	30,394	39,411	29.7%

CACC	911 Calls		Percent change
	2007	2016	
Windsor	38,095	50,291	32.0%
Niagara	36,739	57,149	55.6%
Oshawa	49,777	58,551	17.6%
Kingston	49,657	63,536	27.9%
Cambridge	51,373	68,518	33.4%
Hamilton	69,088	93,711	35.6%
London	79,535	98,126	23.4%
Georgian	93,881	128,958	37.4%
Ottawa	90,968	132,326	45.5%
Mississauga	88,686	133,486	50.5%
Toronto	232,270	280,208	20.6%

In some cases a 911 call for an ambulance triggers a notification for fire and/or police assistance on the scene. Police are notified whenever an ambulance is dispatched to the scene of a crime or in the event of a possible hazard, such as a violent person. In 2016, police were notified for 13.3 percent of all calls.

Emergencies are reported to fire services if the event is included under municipally-approved tiered response agreements. These events include cardiac arrest, structural hazards, reports of multi-vehicle collisions, and environmental emergencies (e.g., nuclear, chemical, or biological releases). In 2016, fire services were notified for 20.2 percent of all calls. Half of the CACCs also dispatch fire trucks directly. In 2016, fire trucks were dispatched for 2.9 percent of calls received by these CACCs.

Data Source: Ambulance Dispatch Reporting System (ADRS).

Ambulance dispatch

In 2016, the average dispatch response time — the time between when a 911 call was placed and when an ambulance was dispatched (T0 and T2 in Figure 6.1) — for the highest priority calls (Code 4 – Urgent), ranged between roughly one and a half minutes and three minutes. Table 6.3 below presents the average dispatch response time for emergency calls for all 22 CACCs.

The total number of ambulance dispatches in Ontario increased 33.6 percent between 2007 and 2016 (Figure 6.3). At the CACC level, the percent change in the number of ambulance dispatches ranged from a decrease of 6.7 percent in Parry Sound to an increase of 62 percent in Mississauga (Table 6.5). Table 6.4 below describes the percentage of dispatches by priority code.

Table 6.3: Average dispatch response time for emergency calls, 2016

CACC	Average dispatch response time
Muskoka	1 min 38 sec
North Bay	1 min 46 sec
Thunder Bay	1 min 49 sec
Wallaceburg	1 min 53 sec
Oshawa	1 min 56 sec
Timmins	1 min 57 sec
Parry Sound	1 min 57 sec
Kingston	1 min 59 sec
Windsor	2 min 4 sec
Niagara	2 min 4 sec
Renfrew	2 min 6 sec
Lindsay	2 min 8 sec
Sudbury	2 min 9 sec
London	2 min 12 sec
Hamilton	2 min 14 sec
Sault Ste. Marie	2 min 17 sec
Ottawa	2 min 22 sec
Georgian	2 min 26 sec
Kenora	2 min 27 sec
Mississauga	2 min 31 sec
Cambridge	2 min 35 sec
Toronto	3 min 1 sec

Table 6.4: Percentage of ambulance dispatches by priority code, 2007 to 2016

Year	Code 1	Code 2	Code 3	Code 4
2007	5.5%	6.4%	18.0%	70.0%
2008	4.8%	5.2%	19.8%	70.2%
2009	4.4%	4.4%	23.4%	67.8%
2010	3.9%	3.8%	23.9%	68.4%
2011	3.7%	3.5%	24.1%	68.8%
2012	3.4%	2.7%	24.3%	69.6%
2013	3.2%	2.5%	25.0%	69.3%
2014	3.0%	2.3%	25.6%	69.1%
2015	2.9%	21.%	25.9%	69.1%
2016	2.7%	1.9%	26.1%	69.3%

Figure 6.3: Number of ambulance dispatches in Ontario, 2007 to 2016

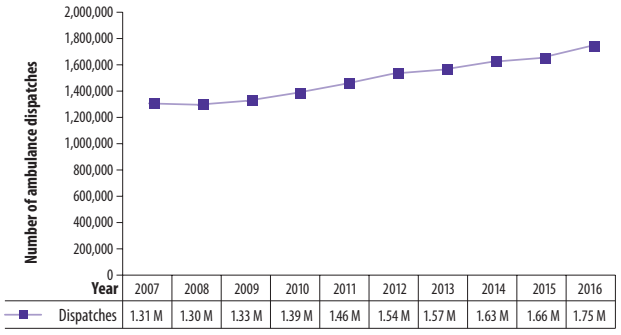


Table 6.5: Percent change in the number of ambulance dispatches, by CACC, 2007 to 2016

CACC	Ambulance dispatches		Percent change
	2007	2016	
Parry Sound	4,243	3,963	-6.6%
Muskoka	8,957	10,363	15.7%
Renfrew	13,619	16,871	23.9%
Timmins	14,406	20,296	40.9%
Kenora	15,853	20,963	32.2%
North Bay	18,970	22,280	17.4%
Sault Ste. Marie	15,670	23,834	52.1%
Wallaceburg	21,712	27,275	25.6%
Thunder Bay	28,792	34,521	19.9%
Sudbury	40,098	40,840	1.9%
Lindsay	34,100	46,660	36.8%
Windsor	47,662	61,291	28.6%
Niagara	51,994	65,736	26.4%
Oshawa	53,134	71,533	34.6%
Kingston	56,744	71,955	26.8%
Cambridge	59,139	82,337	39.2%
London	90,846	112,019	23.3%
Hamilton	86,637	118,145	36.4%
Georgian	115,593	169,838	46.9%
Mississauga	108,509	175,787	62.0%
Ottawa	115,120	179,335	55.8%
Toronto	302,773	371,768	22.8%

Data Source: Ambulance Dispatch Reporting System (ADRS).

Ambulance service response time

In 2016, the average length of time between when an ambulance was on route and when it arrived on scene (T3 and T4 in Figure 6.1), for the highest priority calls (Code 4 – Urgent), ranged between roughly four minutes and just over 12 minutes. Table 6.4 presents the average response times for all municipalities in 2016.

Table 6.6: Average response time from 'on route' to 'on scene', by municipality, 2016

Municipality	Average response time
Weeneebayko First Nation	3 min 54 sec
Chippewas of Rama First Nation	4 min 31 sec
Sault Ste. Marie	5 min 35 sec
City of Greater Sudbury	5 min 49 sec
County of Middlesex	5 min 52 sec
Naotkamegwanning First Nation	5 min 54 sec
District of Cochrane	5 min 58 sec
Region of Durham	6 min 1 sec
County of Dufferin	6 min 2 sec
County of Lambton	6 min 4 sec
Region of Niagara	6 min 10 sec
County of Essex	6 min 12 sec
Beausoleil First Nation	6 min 14 sec
County of Norfolk	6 min 18 sec
County of Oxford	6 min 20 sec
City of Hamilton	6 min 23 sec
Region of Halton	6 min 26 sec
City of Ottawa	6 min 26 sec
Oneida Nation of Thames First Nations	6 min 31 sec
County of Elgin	6 min 32 sec
Region of Waterloo	6 min 35 sec
County of Perth	6 min 40 sec
District of Thunder Bay	6 min 43 sec
County of Wellington	6 min 45 sec
Region of York	6 min 50 sec
Chatham-Kent	6 min 54 sec
Region of Peel	6 min 58 sec
County of Frontenac	7 min 0 sec
District of Nipissing	7 min 0 sec
County of Brant	7 min 2 sec
County of Grey	7 min 3 sec
City of Toronto	7 min 11 sec
County of Peterborough	7 min 13 sec
County of Haldimand	7 min 23 sec
County of Simcoe	7 min 27 sec
District of Algoma	7 min 41 sec
City of Cornwall	7 min 47 sec
County of Lanark	7 min 47 sec
County of Prescott and Russell	7 min 51 sec
Six Nations of the Grand River First Nation	7 min 55 sec
Wikwemikong First Nation	7 min 59 sec
County of Hastings	8 min 1 sec
County of Northumberland	8 min 7 sec
County of Huron	8 min 11 sec
City of Kawartha Lakes	8 min 13 sec
District of Timiskaming	8 min 27 sec
District of Muskoka	8 min 41 sec
County of Renfrew	8 min 53 sec
County of Leeds & Grenville	9 min 16 sec
County of Lennox and Addington	9 min 40 sec
District of Rainy River	10 min 3 sec
County of Bruce	10 min 9 sec
County of Prince Edward	10 min 25 sec
District of Kenora	11 min 5 sec
Town of Parry Sound	11 min 7 sec
Manitoulin/Sudbury District	11 min 46 sec
County of Haliburton	12 min 17 sec

Data Source: Ambulance Dispatch Reporting System (ADRS).

Patient transport

In Ontario, the total number of patients transported to a hospital increased 28.3 percent between 2007 and 2016 (Figure 6.4). Over the same time period the percent change in the number of patients transported at the CACC level ranged from a 19.1 percent decrease in Parry Sound to a 51.4 percent increase in Niagara (Table 6.8).

Figure 6.4: Number of patients transported to hospital, 2007 to 2016

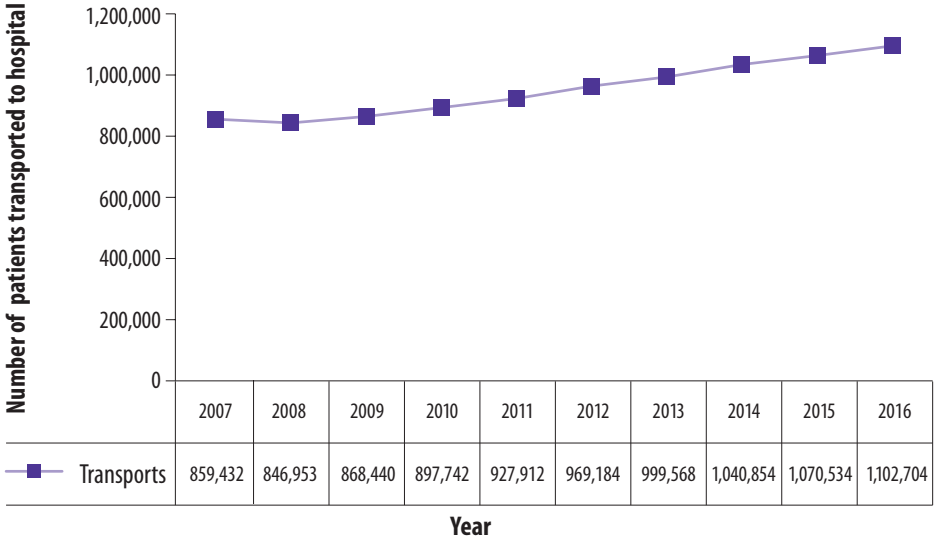


Table 6.7: Percentage of patients transported to hospital, by priority code, 2007 to 2016

Year	Code 1	Code 2	Code 3	Code 4
2007	7.3%	8.5%	20.6%	63.6%
2008	6.1%	6.8%	21.5%	65.6%
2009	5.4%	5.8%	24.4%	64.3%
2010	4.9%	5.1%	24.9%	65.2%
2011	4.6%	4.6%	25.2%	65.6%
2012	4.3%	3.6%	25.2%	66.9%
2013	4.0%	3.2%	26.0%	66.8%
2014	3.6%	3.1%	26.2%	67.2%
2015	3.5%	2.9%	26.1%	67.5%
2016	3.3%	2.6%	26.1%	68.1%

Table 6.8: Percent change in the number of patients transported, by CACC, 2007 to 2016

CACC	2007 patient transports	2016 patient transports	Percent change
Parry Sound	3,369	2,724	-19.1%
Muskoka	7,432	7,622	2.6%
Renfrew	8,423	9,366	11.2%
Kenora	12,619	13,205	4.6%
Sault Ste. Marie	12,546	16,404	30.8%
North Bay	15,801	16,707	5.7%
Timmins	12,598	17,254	37.0%
Wallaceburg	15,323	18,964	23.8%
Thunder Bay	18,915	22,742	20.2%
Sudbury	28,559	27,741	-2.9%
Lindsay	26,193	33,064	26.2%
Windsor	31,492	39,842	26.5%
Niagara	28,668	43,391	51.4%
Oshawa	31,173	45,158	44.9%
Kingston	43,486	53,741	23.6%
Cambridge	42,400	54,713	29.0%
Hamilton	55,582	73,294	31.9%
London	71,160	83,545	17.4%
Ottawa	73,524	100,288	36.4%
Mississauga	67,261	101,574	51.0%
Georgian	71,407	102,383	43.4%
Toronto	177,627	218,982	23.3%

Data Source: Ambulance Dispatch Reporting System (ADRS).

Section 7:
Emergency department utilization

This section describes emergency department utilization in Ontario with a focus on visits where the patient arrived at the hospital by ambulance.

Emergency department arrivals by ambulance

From 2007/08 to 2016/17, the volume of visits to Ontario ED increased from 4.8 million to almost 5.9 million annual visits, an increase of 21.6 percent. During the same period, the percentage of ED visits where the patient arrived by ambulance increased 54.2 percent, from 626,523 visits in fiscal year 2007/2008 to 965,896 visits in 2016/17 (Figure 7.1).

The percentage of ED visits where the patient arrived by ambulance varied by LHIN. In fiscal year 2016/17, the Hamilton Niagara Haldimand Brant (HNHB) and Central West LHINs had the highest percentages of visits where the patient arrived by ambulance, with 21.7 percent and 20.1 percent, respectively. Conversely, the lowest percentages were seen in South West (12.5 percent) and North East (11.4 percent) LHINs (Table 7.1).

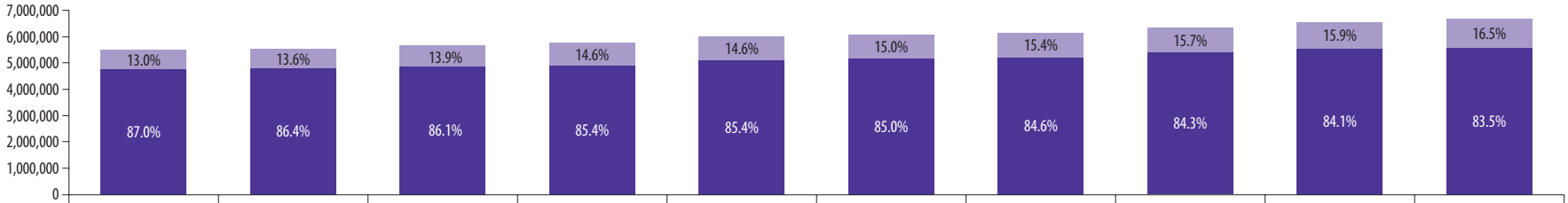
Key findings

- In 2016/17, 16.5 percent of ED visits arrived at the hospital by ambulance (Table 7.1).
- From 2007/08 to 2016/17 the number of ED visits arriving by ambulance increased from 626,523 to 965,896, or 54.2 percent (Figure 7.1).
- The 90th percentile ambulance offload time has decreased from 61 minutes in 2008/09 to 42 minutes in 2016/17 (Figure 7.3).

Table 7.1: Percentage of ED visits where the patient arrived by ambulance, by LHIN, fiscal year 2016/17

LHIN of hospital	Total number of ED visits	Percentage of visits arriving by ambulance		
		Initial ED visit	ED to ED transfers	All arrivals by ambulance
Erie St. Clair	288,075	18.9%	0.1%	19.0%
South West	593,097	12.1%	0.4%	12.5%
Waterloo Wellington	283,246	16.2%	0.1%	16.3%
HNHB	550,393	21.0%	0.6%	21.7%
Central West	262,415	20.1%	0.0%	20.1%
Mississauga Halton	354,590	16.0%	0.2%	16.2%
Toronto Central	576,030	19.1%	0.6%	19.7%
Central	465,763	16.3%	0.1%	16.4%
Central East	624,789	17.0%	0.2%	17.1%
South East	259,266	16.0%	1.3%	17.3%
Champlain	681,329	14.4%	0.5%	14.9%
North Simcoe Muskoka	259,420	14.5%	0.1%	14.6%
North East	454,717	11.3%	0.2%	11.4%
North West	216,265	12.7%	0.1%	12.8%
Ontario	**5,869,395**	**16.1%**	**0.4%**	**16.5%**

Figure 7.1: Proportion of ED visits where the patient arrived by ambulance, fiscal year 2007/08 to 2016/17



	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
Arrived by ambulance	626,523	664,812	692,434	738,406	768,047	803,701	833,690	877,249	912,022	965,896
Did not arrive by ambulance	4,199,476	4,207,210	4,292,062	4,323,871	4,501,745	4,537,174	4,580,110	4,702,014	4,841,339	4,903,499

Data Source: National Ambulatory Care Reporting System (NACRS).

Ambulance arrivals by hospital type

Hospitals were categorized into five main types to assess differences in the proportion of ED visits where the patient arrived by ambulance. Four categories are based on annual total ED visit volume and the fifth distinguishes teaching hospitals, which are high-volume hospitals involved in academic research.

TEACHING HOSPITALS
Provide training for medical interns and residents in affiliation with a medical or health sciences school. They perform acute and complex patient care and have membership in the Council of Academic Hospitals of Ontario.

VERY HIGH-VOLUME COMMUNITY HOSPITALS
Treat over 50,000 annual ED visits.

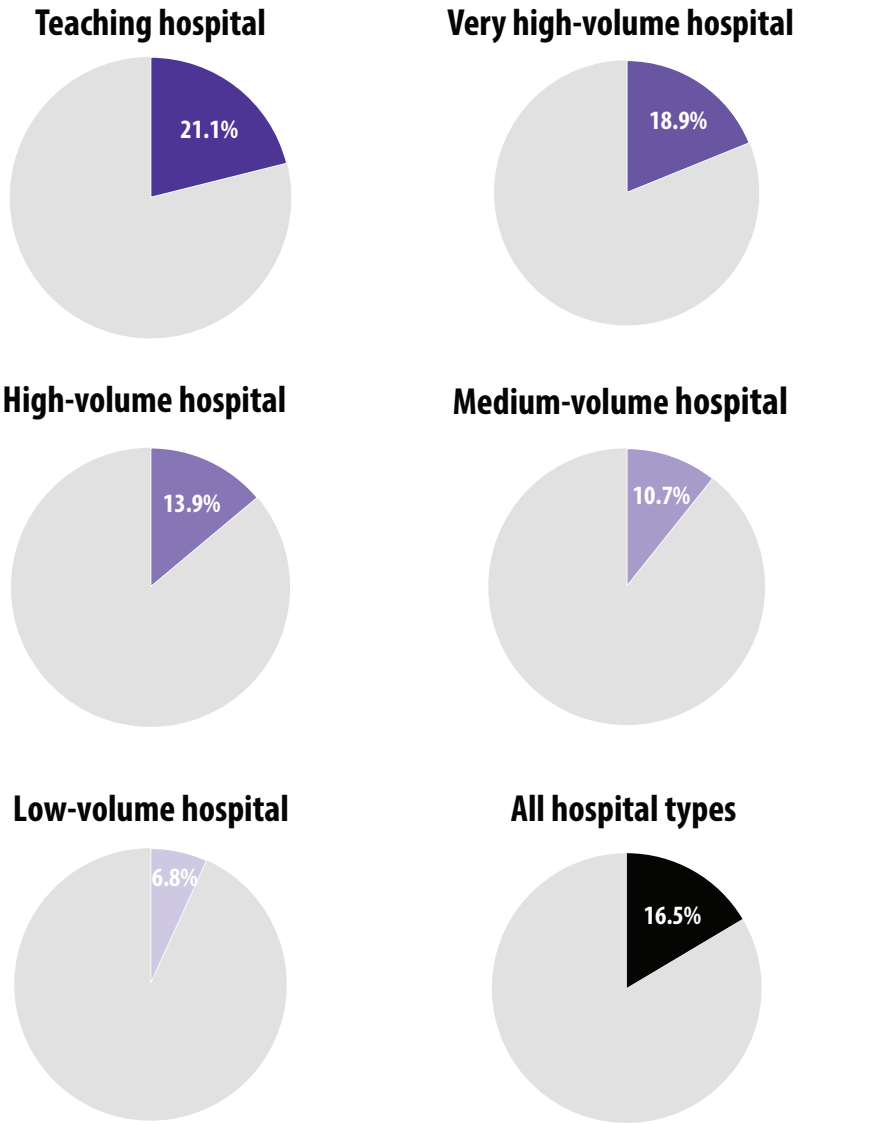
HIGH-VOLUME COMMUNITY HOSPITALS
Treat between 30,000 to less than 50,000 annual ED visits.

MEDIUM-VOLUME COMMUNITY HOSPITALS
Treat between 20,000 to less than 30,000 annual ED visits.

LOW-VOLUME COMMUNITY HOSPITALS
Treat less than 20,000 annual ED visits. In general, these hospitals are the only hospitals available in a given community.

The percentage of ED visits where the patient arrived by ambulance varies by hospital type, and shows a positive correlation with the hospitals' volumes. In 2016/17, teaching hospitals had the highest percentage of visits where the patient arrived by ambulance followed by high-, medium- and low-volume hospitals (Figure 7.2).

Figure 7.2: Percentage of ED visits where the patient arrived by ambulance, by hospital type, fiscal year 2016/17



Data Source: National Ambulatory Care Reporting System (NACRS). Hospital descriptions referenced from http://www.ontariowaittimes.com/er/En/Definitions.aspx?view=1.

Ontario hospitals were ranked according to the percentage of ED visits where the patient arrived by ambulance in 2016/17. Table 7.2 shows the ten highest and lowest ranking hospitals, as well as their rank in terms of total ED visit volume. The top ten hospitals account for nearly 20 percent of all ED visits that arrived by ambulance in 2016/17. Seven of the top ten are teaching hospitals and the remaining three are very high-volume. The ten lowest ranking hospitals are all classified as low-volume, meaning they receive fewer than 20,000 ED visits per year.

Table 7.2: Top and bottom ten hospitals for percentage of ED visits where patient arrived by ambulance, fiscal year 2016/17

Rank		City	Hospital	Hospital Type	Total ED visits	Arrivals by Ambulance	
By % Arrival by ambulance	By Overall ED volume					#	%
1	59	Hamilton	Hamilton Health Sciences – Juravinski	Teaching	41,707	13,621	32.7%
2	51	Hamilton	Hamilton Health Sciences – General	Teaching	48,556	15,073	31.0%
3	41	London	London Health Sciences Centre – University	Teaching	55,047	16,947	30.8%
4	34	Kingston	Kingston Health Sciences Centre – Kingston General	Teaching	59,739	18,103	30.3%
5	63	Windsor	Windsor Regional Hospital – Ouellette Campus	Very high-volume	55,064	16,560	30.1%
6	15	Ottawa	The Ottawa Hospital – Civic Campus	Teaching	82,240	22,347	27.2%
7	35	Windsor	Windsor Regional Hospital – Metropolitan	Very high-volume	59,718	16,075	26.9%
8	28	Hamilton	St. Joseph's Healthcare Hamilton – Charlton Campus	Very high-volume	64,999	17,441	26.8%
9	30	Toronto	University Health Network – Toronto Western	Teaching	63,105	16,483	26.1%
10	11	Ottawa	The Ottawa Hospital – General Campus	Teaching	86,981	22,001	25.3%
155	144	Chesley	South Bruce Grey Health Centre – Chesley	Low-volume	6,848	261	3.8%
156	113	Minden	Haliburton Highlands Health Services – Minden	Low-volume	15,352	577	3.8%
157	93	Petrolia	Bluewater Health – Petrolia	Low-volume	19,732	678	3.4%
158	107	Almonte	Almonte General Hospital	Low-volume	16,123	551	3.4%
159	129	Seaforth	Seaforth Community Hospital	Low-volume	10,989	364	3.3%
160	137	Blind River	North Shore Health Network – Pavillon	Low-volume	10,312	338	3.3%
161	157	Richards Landing	North Shore Health Network – Richard's Landing	Low-volume	3,332	104	3.1%
162	131	Cochrane	Lady Minto Hospital	Low-volume	10,789	317	2.9%
163	164	Hornepayne	Hornepayne Community Hospital	Low-volume	1,591	36	2.3%
164	111	Deep River	Deep River and District Hospital	Low-volume	15,552	318	2.0%

Top ten

Bottom ten

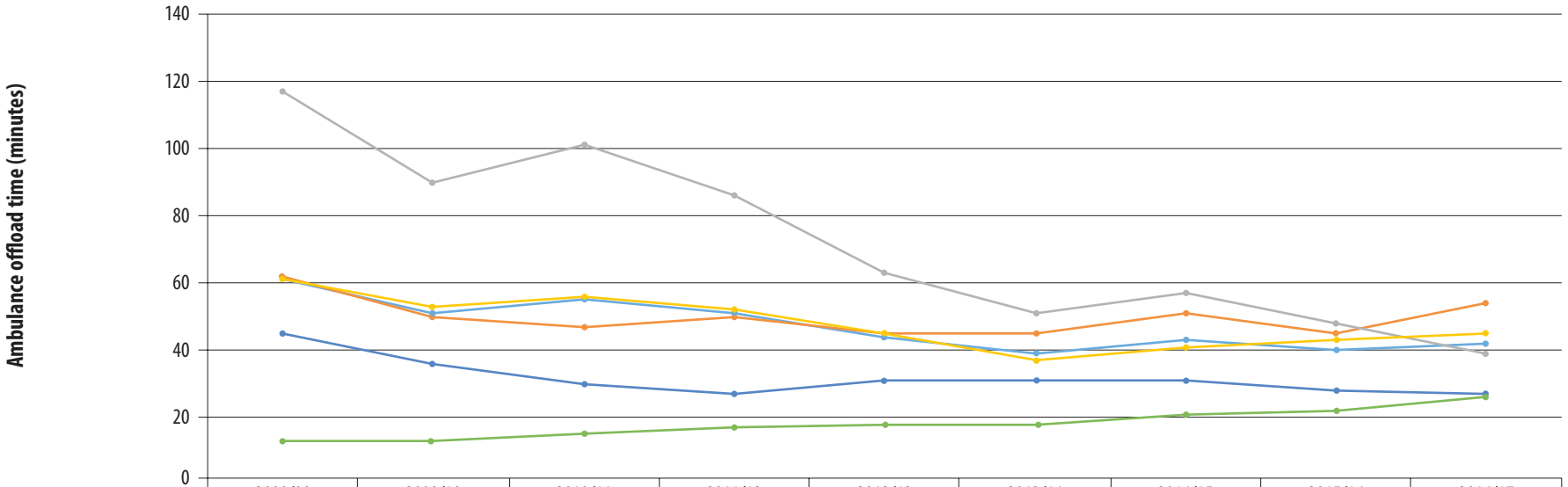
Data Source: National Ambulatory Care Reporting System (NACRS).

Ambulance offload time

Ambulance offload time (AOT) is the time it takes from when an ambulance arrives at the hospital to when patient care is transferred from paramedics to hospital staff. AOT is calculated as the time between T6 and T6.5 in Figure 6.1 in this report. Figure 7.3 below shows the 90th percentile AOT for all of Ontario and for select, previously described hospital types between fiscal years 2008/09 and 2016/17. The 90th percentile AOT in Ontario decreased from 61 minutes in 2008/09 to 42 minutes in 2016/17. This means that in 2016/17, the transfer of care between an ambulance and the hospital was completed in 42 minutes or less for 90 percent of visits.

The 90th percentile AOT decreased for all hospital types, with the exception of low-volume hospitals. The largest decrease in AOT was observed for very high-volume hospitals.

Figure 7.3: 90th percentile ambulance offload time, fiscal year 2008/09 to 2016/17



	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
Ontario	61	51	55	51	44	39	39	40	42
Teaching hospital	62	50	47	50	45	45	45	45	54
Very high-volume hospital	117	90	101	86	63	51	57	48	39
High-volume hospital	61	53	56	52	45	37	41	43	45
Medium-volume hospital	45	36	30	27	31	31	31	28	27
Low-volume hospital	13	13	15	17	18	18	41	22	26

Data Source: Access to Care, Cancer Care Ontario.

Section 8:
Air ambulance utilization

This section provides information on Ontario's air ambulance program including responsibilities, service locations, and analysis of transport volumes by fiscal year.

SECTION 8: AIR AMBULANCE UTILIZATION

The ministry provides funding to Ornge, a corporation governed by an independent board of directors, to operate Ontario's air ambulance program. Ornge is responsible for all air ambulance operations including contracting flight service providers, medical oversight of air paramedics, air dispatch, and authorizing air and land ambulance transfers. Under Ornge's performance agreement, it must uphold the aviation requirements established by Transport Canada and the Ontario government's standards and requirements for air operators, as enforced by the Ministry of Natural Resources and Forestry.

Ontario's air ambulance program provides the following services:

AIR AMBULANCE FLIGHTS
Ornge and a pool of five certified air ambulance Standing Agreement (SA) carriers provide scene calls and inter-facility transports across Ontario.

CCLA
Ornge performs CCLA transports and provides funding to the Toronto Paramedic Services (TPS) to operate a companion program called the Critical Care Transport Unit (CCTU).

ORNGE COMMUNICATIONS CENTRE (OCC)
This centre coordinates all requests for transports that require an asset from Ornge, or one of the SA carriers.

BASE HOSPITAL FUNCTION
Provides medical direction and advice, paramedic aero-medical certification and training, air quality assurance, continuing education, and patient care guidance to air ambulance paramedics.

ORGAN RECOVERY SERVICES
Ornge is contracted through the Ontario Trillium Gift of Life Network to recover organs from hospitals for transplants, and to transport physicians who assist with organ recovery.

PROVINCIAL TRANSFER AUTHORIZATION CENTRE (PTAC)
Operated by Ornge, the PTAC screens and authorizes inter-facility patient transfers in the province to help control the spread of infectious diseases.

Key findings

- Ornge operates Ontario's air ambulance program out of nine air bases and three land bases across the province.
- In fiscal year 2016/17, Ornge completed 20,830 transports. Approximately 97 percent were patient transports, and the rest were organ transports between facilities (Table 8.2).
- Approximately half of Ornge transports were deemed "emergency", the highest priority level, from fiscal year 2012/13 to 2016/17. Over a quarter were considered "non-urgent" during the same period (Figure 8.1).
- Over 60 percent of Ornge transports originated in northern Ontario (calculated from data in Figure 8.4).

Service delivery model

Ornge delivers air ambulance services through the combined resources of its own aviation fleet and a pool of contracted SA carriers. Currently, Ornge has contracts with five SA carriers that perform fixed-wing patient transports on a fee-for-service basis. All contracted SA carriers are certified air ambulance operators capable of performing fixed-wing transport services with primary and/or advanced level care. SA carriers perform both non-urgent and urgent/emergent transfers with access to 16 aircrafts across six locations, including Northern Ontario.

Service locations

Ornge service teams operate out of nine air bases and three land bases across Ontario. Table 8.1 shows the locations of Ornge's air, **CCLA** and **paediatric** service teams as well as the level of care they are qualified to provide.

Ornge's CCLA program provides inter-facility transfers for critically ill, but stable, patients where the level of care required is greater than that available through municipal ambulance services.

Ornge's Paediatric Transport Team consists of paramedics and nurses specially trained to take care of patients under the age of 18.

Table 8.1: Ornge base locations, services and designated levels of care

Bases	Service teams	Designated level of care
Ottawa	Rotor-wing	CCP
Ottawa	CCLA	CCP
Toronto	Rotor-wing	CCP
Mississauga	CCLA and paediatric	CCP
TPS (Ornge sub-contract)	CCLA	CCP
Peterborough	CCLA	CCP
London	Rotor-wing	CCP
Sudbury	Rotor-wing	CCP
Timmins	Fixed-wing	CCP
Moosonee	Rotor-wing	PCP
Thunder Bay	Fixed-wing and rotor-wing	CCP
Sioux Lookout	Fixed-wing	CCP
Kenora	Rotor-wing	ACP

Air ambulance transports

In the 2016/17 fiscal year, Ornge completed 20,830 transports. The bulk of these requests (96.9 percent) were to transport a patient, and the remaining 3.1 percent were to transport organs between facilities. The total number of transports Ornge completed increased 14.9 percent between fiscal year 2012/13 and 2016/17 (Table 8.2).

Table 8.2: Number of transports, fiscal year 2012/13 to 2016/17

Fiscal year	Patients	Organs	Total
2012/13	17,832	302	18,134
2013/14	17,603	324	17,927
2014/15	18,035	447	18,482
2015/16	18,330	408	18,738
2016/17	20,181	649	20,830

Data Source: Ornge Computer Aided Dispatch System (Flight Vector)

Transports by priority level

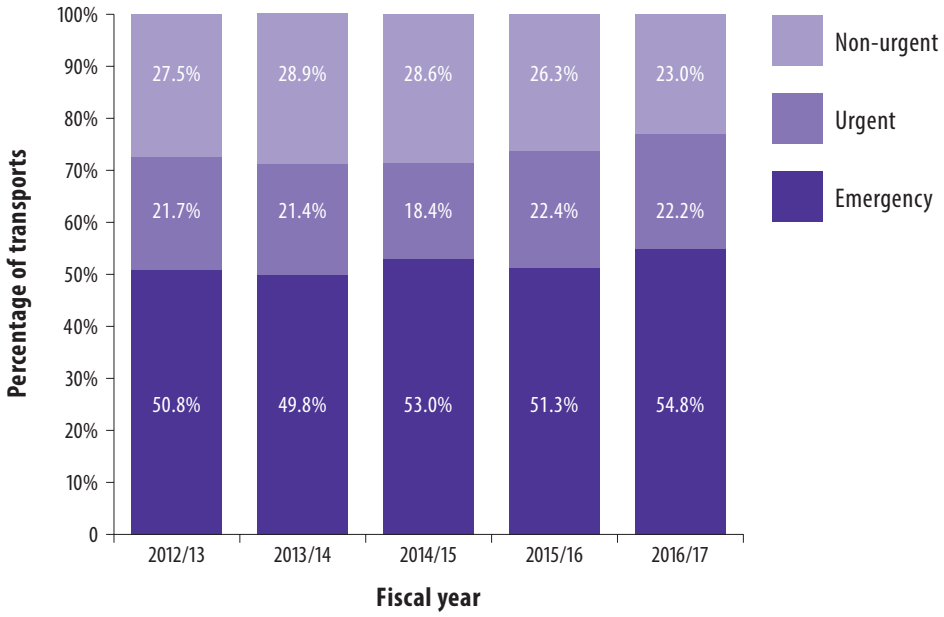
Transports are prioritized as either non-urgent, urgent, or emergency. Figure 8.1 illustrates the transport volume by level of urgency. Approximately 50 percent of all transports were classified as "emergency" from fiscal year 2012/13 to 2016/17.

Non-urgent: Scheduled or routine transports

Urgent: Non-life threatening, but prompt transport required

Emergency: Life or limb-threatening condition or a medically unstable patient

Figure 8.1: Transport volume by urgency, fiscal year 2012/13 to 2016/17

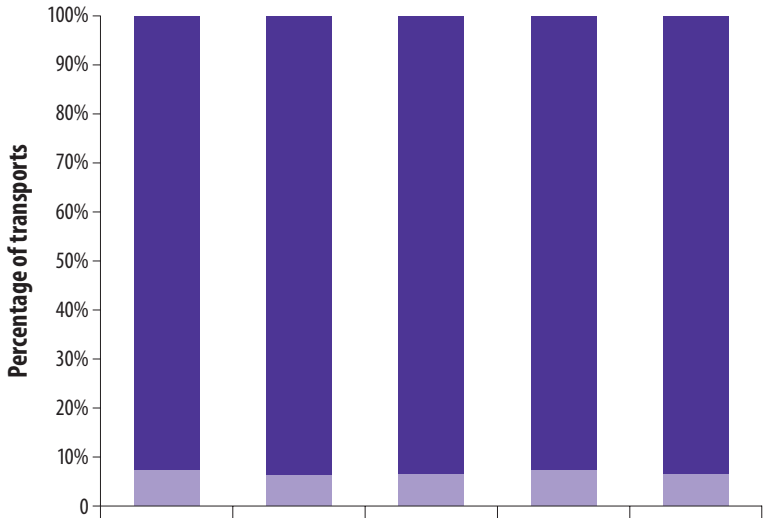


Transports by type

The majority of all transports are inter-facility transfers, meaning a patient is transported between two healthcare facilities. The remaining transports are classified as on-scene or modified scene. On-scene response occurs when Ornge is dispatched directly to a scene in order to transport a patient to a provincial trauma centre as quickly as possible.

Modified scene response occurs when Ornge is dispatched to a scene where the local land ambulance has already begun transporting the patient to a hospital. The air ambulance may then follow the land ambulance to a nearby landing site to transport the patient, if needed. Figure 8.2 illustrates air ambulance transport volume by type.

Figure 8.2: Transport volume by type, fiscal year 2012/13 to 2016/17

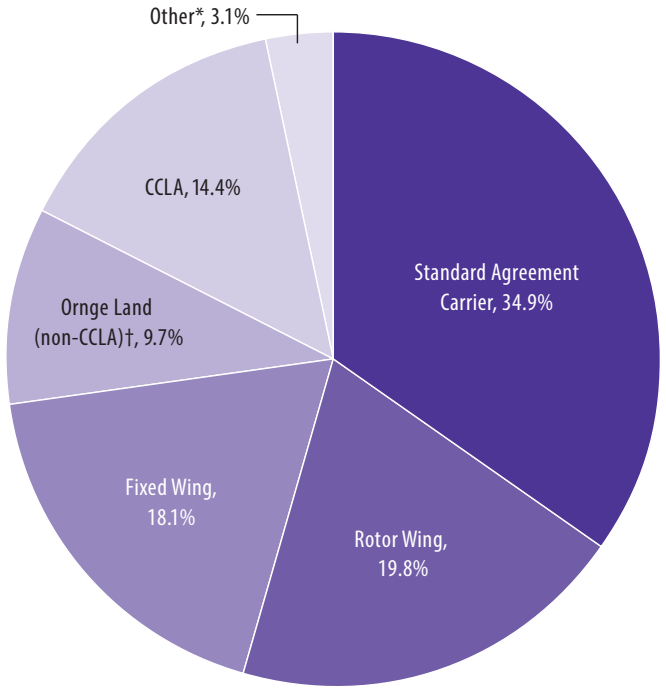


	2012/13	2013/14	2014/15	2015/16	2016/17
Inter-facility transfers	92.8%	93.7%	93.6%	92.8%	93.6%
On-scene/modified scene	7.2%	6.3%	6.4%	7.2%	6.4%

Transports by method

Over one third of Ornge dispatched transports were performed by SA carriers in fiscal year 2016/17. Approximately 23 percent of the transports were on land and conducted by Ornge's CCLA program and non-CCLA land vehicles[1]. Figure 8.3 shows the methods used to transport organs and patients during the 2016/17 fiscal year .

Figure 8.3: Ornge transports by method, fiscal year 2016/17



† Seven vehicles are used for a variety of circumstances in a backup or supplementary capacity at existing air ambulance bases in Toronto, London, Sudbury, Sioux Lookout, and Thunder Bay.

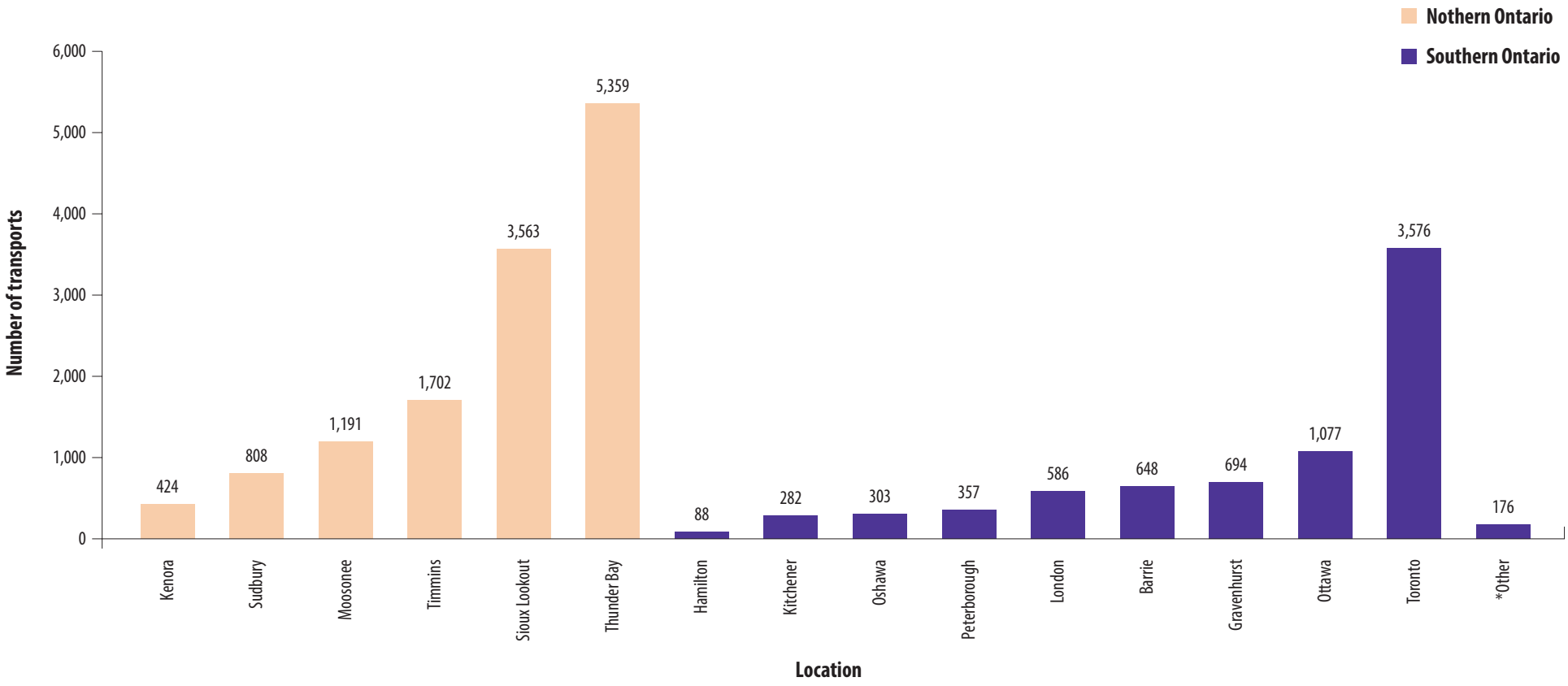
* Other methods include transports by contract organ carriers (2.2%), scheduled flights (<0.1%), local land paramedic service with Ornge medics (0.8%), and Manitoba Life flights (0.1%)

Data Source: Ornge Computer Aided Dispatch System (Flight Vector). **1.** Ornge has seven vehicles in a backup or supplementary capacity at existing air ambulance bases in Toronto, London, Sudbury, Sioux Lookout, and Thunder Bay.

Transports by region

Air ambulance transports were analyzed by the region of origin. In 2016/17, nearly 63 percent of Ornge's transports originated from a base in northern Ontario. Figure 8.4 shows the number of transports Ornge conducted from each region. The orange and purple bars represent Ornge bases in northern and southern Ontario, respectively.

Figure 8.4: Transport volume (land and air) by region, fiscal year 2016/17



*Other includes Local EMS (167), Scheduled flights on commercial carriers (6), Out of province (3).

Data Source: Ornge Computer Aided Dispatch System (Flight Vector).

Appendix A:
Methodological notes and data sources

APPENDIX A: METHODOLOGICAL NOTES AND DATA SOURCES

Methodological notes

This report uses data from multiple sources, as described below. As land and air ambulance dispatch data do not capture patient health card number, it is not possible to track patients throughout their journey from 911 call to treatment in an ED.

Data sources

Described below are some of the key data sources used in this report, by section

Section 2: Emergency health services funding

Integrated Financial Information System (IFIS)
IFIS is an enterprise-wide financial system used to obtain year-end/year-to-date actuals, financial commitments and obligations, procurements, and allocations.

Section 3: Resources

Ambulance Service Identification Card Program
This source includes information on each emergency medical attendant, paramedic, and ambulance communications officer in Ontario. These data were used to identify the number of paramedics and communications officers in addition to their type of employment (part-time, full-time), age and sex.

Annual Service Plans
Information on patient demographics, number of paramedics and paramedic fleet type submitted by municipalities and designated delivery agents to the ministry.

Ornge Computer Aided Dispatch System (Flight Vector)
Flight Vector includes administrative, clinical, demographic and transport data such as destination, asset used and level of care provided by the flight paramedic.

Section 4: Regulation and oversight

Ambulance Service Review Program (ASR)
ASR is a web-based tool that captures inspection and certification data for land ambulance services.

Section 5: Patient characteristics

National Ambulatory Care Reporting System (NACRS)
NACRS contains administrative, clinical and demographic data for ambulatory care services (emergency departments, day procedures, outpatient clinics) in Ontario hospitals. The analyses in this report were limited to unscheduled emergency department visits.

Section 6: Land ambulance dispatch and patient transports

Ambulance Dispatch Reporting System (ADRS)
ADRS is a web-based application that houses administrative and demographic data on ambulance calls received by Ontario's CACCs.

Section 7: Emergency department utilization

National Ambulatory Care Reporting System (NACRS)
As described for Section 5.

Section 8: Air ambulance utilization

Ornge Computer Aided Dispatch System (Flight Vector)
As described for Section 3.

Appendix B:
Key terms and abbreviations

APPENDIX B: KEY TERMS AND ABBREVIATIONS

Key Terms

Advanced Care Paramedic (ACP): Paramedics who have completed additional education and training beyond that of a Primary Care Paramedic. They are certified under a base hospital medical director to perform additional controlled acts and advanced medical directives.

Ambulance Communications Officer (ACO): Ambulance Communications Officers work in ambulance communications centres and receive and process 911 emergency and non-emergency requests for ambulance services.

Ambulance offload time (AOT): The time it takes for patient care to be transferred from the ambulance to the hospital. Calculated as the time between when the ambulance arrives at the hospital (Time 6 in Figure 6.1) and the time when transfer of care is complete (Time 6.5 in Figure 6.1).

Ambulance service response time: The time it takes for an ambulance to arrive on scene. Calculated as the time between when the ambulance is on route (Time 3 in Figure 6.1) and when it arrives on scene (Time 4 in Figure 6.1).

Base hospital: Base hospitals train and oversee land paramedics by monitoring their patient care, providing medical direction, and continuing their medical education.

Canadian Triage and Acuity Scale (CTAS): The Canadian Triage and Acuity Scale is a tool used to prioritize the urgency of a patient's required care. Patients are triaged according to the type and severity of their presenting symptoms.

Critical care land ambulance (CCLA): Ornge's CCLA program provides responsive and safe inter-facility transfers for critically ill, but stable, patients where the level of care required is greater than that available through municipal ambulance services.

Critical Care Paramedic (CCP): Paramedics who have completed additional education and training beyond that of an Advanced Care Paramedic. They are certified under a base hospital medical director to perform additional controlled acts and advanced medical directives.

Dedicated offload nurses program: Dedicated nurses in hospital emergency departments responsible for offloading patients from ambulances to reduce ambulance offload time and allow paramedics to be available to respond to other calls.

Designated delivery agent (DDA): Agent responsible for providing land ambulance services in a given geographic area.

Dispatch standard response time: The time it takes for an ambulance to be dispatched. Calculated as the time between when a request for service is received (Time 0 in Figure 6.1) and an ambulance is dispatched (Time 2 in Figure 6.1).

Frequent users: Patients who made 12 or more visits to ED using an ambulance within a 12 month period.

APPENDIX B: KEY TERMS AND ABBREVIATIONS

Local Health Integration Network (LHIN): Agencies established by the MOHLTC in 2006 that plan, fund, and manage health services locally. Ontario's 14 LHINs are:
1 – Erie St. Clair (ESC)
2 – South West (SW)
3 – Waterloo Wellington (WW)
4 – Hamilton Niagara Haldimand Brant (HNHB)
5 – Central West (CW)
6 – Mississauga Halton (MH)
7 – Toronto Central (TC)
8 – Central (C)
9 – Central East (CE)
10 – South East (SE)
11 – Champlain (CH)
12 – North Simcoe Muskoka (NSM)
13 – North East (NE)
14 – North West (NW)

Ornge: Ornge is a non-profit body responsible for all air ambulance operations including the contracting of flight service providers, medical oversight of all air paramedics, air dispatch and authorizing air and land ambulance transfers.

Paediatric service team: Ornge's paediatric transport team, comprised of paramedics and nurses specially trained to take care of patients under the age of 18.

Per population rate: For the purpose of this report, the number of individuals who visited an emergency department divided by the total population (LHIN, or province) then multiplied by 1,000. Rates can be interpreted as X number of individuals visited an emergency department for every 1,000 people. A per population rate allows for objective comparisons across geographies.

Primary Care Paramedic (PCP): Paramedic who has completed a paramedic diploma program (or equivalent) and passed the provincial Advanced Emergency Medical Care Assistant theory exam. They are certified under a base hospital medical director to perform controlled acts.

Standing agreement (SA) carriers: Certified air ambulance operators capable of performing fixed-wing transport services with primary and/or advanced level of care.

Upper-tier municipality (UTM): A federation of local municipalities within a geographic border. Upper-tier municipalities provide services such as transit, policing and health and social services.

APPENDIX B: KEY TERMS AND ABBREVIATIONS

Abbreviations

ACO: Ambulance communications officer

ACP: Advanced care paramedic

ADRS: Ambulance Dispatch Reporting System

AOT: Ambulance offload time

CACC: Central ambulance communications centre

CCLA: Critical care land ambulance

CCP: Critical care paramedic

CTAS: Canadian Triage and Acuity Scale

DDA: Designated delivery agent

ED: Emergency department

EHRAB: Emergency Health Regulatory and Accountability Branch (Ministry of Health and Long-Term Care)

EHS: Emergency health services

ERV: Emergency response vehicle

HAB: Health Analytics Branch (Ministry of Health and Long-Term Care)

LHIN: Local Health Integration Network

MOHLTC: Ministry of Health and Long-Term Care

OCC: Ornge Communication Centre

PCP: Primary care paramedic

PTAC: Provincial Transfer Authorization Centre

SA: Standing agreement carriers

TPS: Toronto Paramedic Services

UTM: Upper-tier municipality

Appendix C:
Supplementary tables and figures

APPENDIX C: SUPPLEMENTARY TABLES AND FIGURES

Table C.1 below assigns each LHIN to an ambulance service and is the inverse of Table 3.3. Rows highlighted in orange represent ambulance services that cross LHIN boundaries.

Table C.1: LHIN by ambulance services.

Ambulance service	LHIN
Algoma District	North East
Beausoleil First Nation	North Simcoe Muskoka
City Of Ottawa	Champlain
City of Kawartha Lakes	Central East
City of Toronto	Central West Mississauga Halton Toronto Central Central Central East
Cochrane District	North East
Cornwall S.D. & G.	Champlain
County Of Northumberland	Central East
County of Brant	Hamilton Niagara Haldimand Brant
County of Bruce	South West
County of Frontenac	South East
County of Grey	South West
County of Huron	South West
County of Lennox and Addington	South East
County of Oxford	South West
County of Renfrew	Champlain
District of Sault Ste. Marie	North East
Dufferin	Central West
Durham Region	Central East
Essex-Windsor	Erie-St.Clair
Greater Sudbury	North East
Guelph-Wellington	Waterloo Wellington
Haldimand	Hamilton Niagara Haldimand Brant
Haliburton	Central East LHIN
Halton Region	Hamilton Niagara Haldimand Brant Mississauga Halton
Hamilton	Hamilton Niagara Haldimand Brant
Hastings-Quinte	South East
James Bay	North East
Lambton	Erie-St.Clair
Lanark County	South East Champlain
Leeds Grenville	South East
Manitoulin-Sudbury	North East
Mattawa General Hospital	North East
Medavie – Chatham Kent	Erie-St.Clair
Medavie – Elgin	South West
Middlesex-London	South West
Muskoka	North Simcoe Muskoka
Naotkamegwanning	North East
Niagara	Hamilton Niagara Haldimand Brant
Norfolk	South West
Norfolk County	Hamilton Niagara Haldimand Brant
North Bay	North East
Northwest	North West
Oneida	South West
Parry Sound	North East
Peel Region	Central West Mississauga Halton
Perth County	South West
Peterborough	Central East
Rainy River	North West
Rama Mnjikaning	North Simcoe Muskoka
Sensenbrenner Hospital	North East
Simcoe	North Simcoe Muskoka
Six Nations	Hamilton Niagara Haldimand Brant
Superior North	North West
Temagami	North East
Timiskaming	North East
United Counties of Prescott-Russell	Champlain
Waterloo	Waterloo Wellington
York Region	Central

*Mattawa General Hospital is subcontracted to provide ambulance services by the District of Nipissing. Sensenbrenner Hospital is subcontracted to provide ambulance services by the District of Cochrane.

City of Greater Sudbury Charter

WHEREAS Municipalities are governed by the Ontario Municipal Act, 2001;

AND WHEREAS the City of Greater Sudbury has established Vision, Mission and Values that give direction to staff and City Councillors;

AND WHEREAS City Council and its associated boards are guided by a Code of Ethics, as outlined in Appendix B of the City of Greater Sudbury's Procedure Bylaw, most recently updated in 2011;

AND WHEREAS the City of Greater Sudbury official motto is "Come, Let Us Build Together," and was chosen to celebrate our city's diversity and inspire collective effort and inclusion;

THEREFORE BE IT RESOLVED THAT Council for the City of Greater Sudbury approves, adopts and signs the following City of Greater Sudbury Charter to complement these guiding principles:

As Members of Council, we hereby acknowledge the privilege to be elected to the City of Greater Sudbury Council for the 2014-2018 term of office. During this time, we pledge to always represent the citizens and to work together always in the interest of the City of Greater Sudbury.

Accordingly, we commit to:

- Perform our roles, as defined in the Ontario Municipal Act (2001), the City's bylaws and City policies;
- Act with transparency, openness, accountability and dedication to our citizens, consistent with the City's Vision, Mission and Values and the City official motto;
- Follow the Code of Ethical Conduct for Members of Council, and all City policies that apply to Members of Council;
- Act today in the interest of tomorrow, by being responsible stewards of the City, including its finances, assets, services, public places, and the natural environment;
- Manage the resources in our trust efficiently, prudently, responsibly and to the best of our ability;
- Build a climate of trust, openness and transparency that sets a standard for all the City's goals and objectives;
- Always act with respect for all Council and for all persons who come before us;
- Ensure citizen engagement is encouraged and promoted;
- Advocate for economic development, encouraging innovation, productivity and job creation;
- Inspire cultural growth by promoting sports, film, the arts, music, theatre and architectural excellence;
- Respect our historical and natural heritage by protecting and preserving important buildings, landmarks, landscapes, lakes and water bodies;
- Promote unity through diversity as a characteristic of Greater Sudbury citizenship;
- Become civic and regional leaders by encouraging the sharing of ideas, knowledge and experience;
- Work towards achieving the best possible quality of life and standard of living for all Greater Sudbury residents;

Charte
de la Ville du Grand Sudbury

ATTENDU QUE les municipalités sont régies par la Loi de 2001 sur les municipalités (Ontario);

ATTENDU QUE la Ville du Grand Sudbury a élaboré une vision, une mission et des valeurs qui guident le personnel et les conseillers municipaux;

ATTENDU QUE le Conseil municipal et ses conseils sont guidés par un code d'éthique, comme l'indique l'annexe B du Règlement de procédure de la Ville du Grand Sudbury dont la dernière version date de 2011;

ATTENDU QUE la devise officielle de la Ville du Grand Sudbury, « Ensemble, bâtissons notre avenir », a été choisie afin de célébrer la diversité de notre municipalité ainsi que d'inspirer un effort collectif et l'inclusion;

QU'IL SOIT RÉSOLU QUE le Conseil de la Ville du Grand Sudbury approuve et adopte la charte suivante de la Ville du Grand Sudbury, qui sert de complément à ces principes directeurs, et qu'il y appose sa signature:

À titre de membres du Conseil, nous reconnaissons par la présente le privilège d'être élus au Conseil du Grand Sudbury pour le mandat de 2014-2018. Durant cette période, nous promettons de toujours représenter les citoyens et de travailler ensemble, sans cesse dans l'intérêt de la Ville du Grand Sudbury.

Par conséquent, nous nous engageons à :

- assumer nos rôles tels qu'ils sont définis dans la Loi de 2001 sur les municipalités, les règlements et les politiques de la Ville;
- faire preuve de transparence, d'ouverture, de responsabilité et de dévouement envers les citoyens, conformément à la vision, à la mission et aux valeurs ainsi qu'à la devise officielle de la municipalité;
- suivre le Code d'éthique des membres du Conseil et toutes les politiques de la municipalité qui s'appliquent à eux;
- agir aujourd'hui pour demain en étant des intendants responsables de la municipalité, y compris de ses finances, biens, services, endroits publics et du milieu naturel;
- gérer les ressources qui nous sont confiées de façon efficiente, prudente, responsable et de notre mieux;
- créer un climat de confiance, d'ouverture et de transparence qui établit une norme pour tous les objectifs de la municipalité;
- agir sans cesse en respectant tous les membres du Conseil et les gens se présentant devant eux;
- veiller à ce qu'on encourage et favorise l'engagement des citoyens;
- plaider pour le développement économique, à encourager l'innovation, la productivité et la création d'emplois;
- être une source d'inspiration pour la croissance culturelle en faisant la promotion de l'excellence dans les domaines du sport, du cinéma, des arts, de la musique, du théâtre et de l'architecture;
- respecter notre patrimoine historique et naturel en protégeant et en préservant les édifices, les lieux d'intérêt, les paysages, les lacs et les plans d'eau d'importance;
- favoriser l'unité par la diversité en tant que caractéristique de la citoyenneté au Grand Sudbury;
- devenir des chefs de file municipaux et régionaux en favorisant les échanges d'idées, de connaissances et concernant l'expérience;
- viser l'atteinte de la meilleure qualité et du meilleur niveau de vie possible pour tous les résidents du Grand Sudbury.