

KINGSTON FIRE & RESCUE

2014 ANNUAL REPORT

For information on programs and services, or to obtain a copy of the Kingston Fire & Rescue 2014 Annual Report, go to CityofKingston.ca/fire

The Kingston Fire & Rescue 2014 Annual Report is available in alternate formats by request.

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Message from the Commissioner

Kingston Fire & Rescue (KFR) provides critical services that help keep our community and citizens safe. Together, our firefighters and civilian staff serve the city through excellence in emergency management, fire prevention, education, and emergency response.

The team's dedication was demonstrated throughout 2014, most notably through initiatives that keep the department at the forefront of meeting our citizens' needs.

Recognizing the importance of being proactive in our approach to safety, KFR continues to focus on prevention through education, inspections and enforcement. As part of the "Wake-Up Kingston" program, firefighters visited nearly 2,000 homes in 2014, delivering information about fire prevention and safe practices. These visits resulted in over 600 smoke alarms either being installed or replaced.

Quality of service through sustainable measures and innovation remains a key objective and theme for KFR. In 2014, KFR completed its four-year operating plan (2015-2018). The plan sets out objectives and related strategies to continue to deliver effective and efficient services with a view to enhancing community and citizen safety.

The KFR four-year operating plan supports the City's vision and is aligned to Council's priorities.

As Commissioner responsible for Kingston Fire & Rescue, and on behalf of the City's Corporate Management Team, I would like to acknowledge and commend the Kingston Fire & Rescue team for its many accomplishments in 2014.

Denis Leger, Commissioner,

Transportation, Facilities and Emergency Services

Message from the Fire Chief

2014 was a busy and productive year for Kingston Fire & Rescue with many new initiatives and activities. This annual report provides an overview of some of the key activities and statistics relating to fire operations in 2014.

KFR is committed to providing the highest level of service to our community through a comprehensive delivery of services using three lines of defence: fire safety education, fire code enforcement and efficient emergency response.

Our first line of defence “fire safety education” continues to improve through ongoing and new initiatives including the implementation of a False Alarm By-law and the “Wake up Kingston” program. The False Alarm By-law encourages the maintenance and improved processes to reduce malfunctioning false alarms through a fee for service. The “Wake-Up Kingston” programs address safety and protection through focused education. These programs enhance the safety of occupants by educating and installing working carbon monoxide and smoke alarms in residential homes.

Our second line of defence “fire code enforcement” continues to focus on more of a comprehensive risk management and alignment of resources to enhance code enforcement efforts. A new records management system provides a comprehensive review of code enforcement activities to enhance our capacity.

Our third line of defence “efficient emergency response” was further developed in 2014 through enhanced training including additional incident response training and leadership training for company officers improving skillsets in dealing with emergency response operations.

Through a consolidated effort the three lines of defence improves fire safety, helps to reduce loss of property, injuries or deaths, and ensures firefighter health and safety.

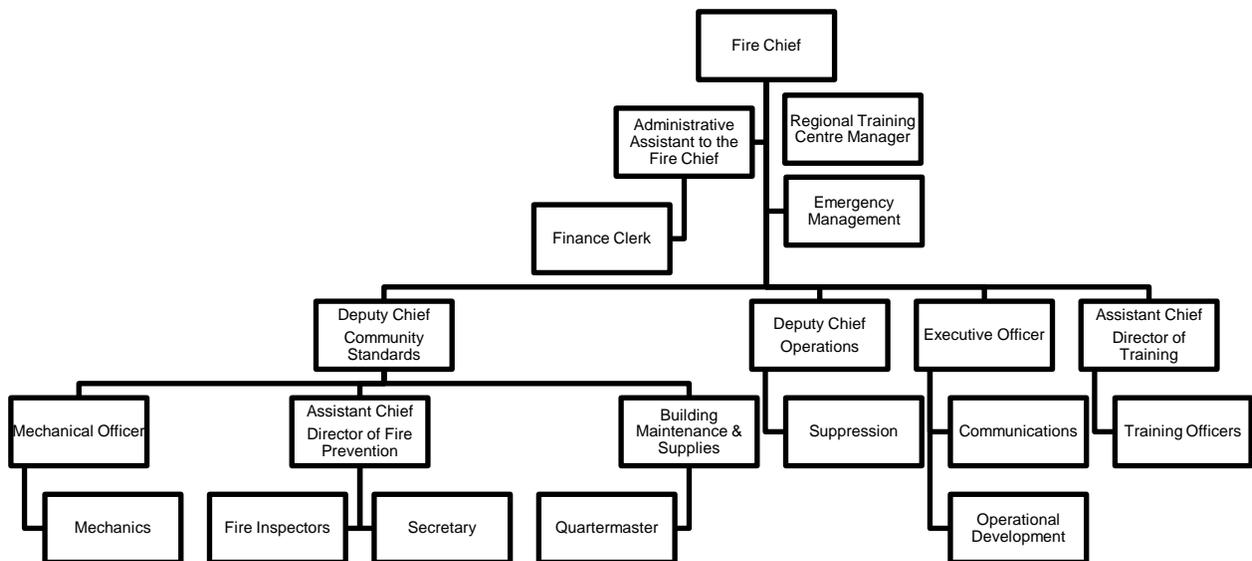
I would like to thank the exceptional men and women of Kingston Fire & Rescue who are dedicated and proud to serve the community’s citizens and guests.

Fire Department Organizational Structure

Kingston Fire & Rescue is organized into seven divisions:

- Administration Division
- Fire Prevention/Public Education
- Training and Staff Development
- Mechanical and Technical Maintenance
- Communication Division
- Emergency Operations
- Office of Emergency Management

The following is the Kingston Fire & Rescue Organizational Chart:



Administration Division

- Rhéaume Chaput Fire Chief
- Greg Robinson Executive Officer
- Don Corbett Deputy Fire Chief
- Neville Murphy Deputy Fire Chief
- John Cross Regional Training Centre Manager
- Scott Davis Emergency Management Coordinator
- Tara Perry Administrative Assistant to the Fire Chief
- Kim Benn Finance Clerk

The Chief's Office

The Fire Chief's office establishes departmental policies and priorities and is responsible for the overall management of the Kingston Fire & Rescue service. Among these responsibilities are: establishment of personnel standards and policies, work schedules, public relations and the continuous review of operations and performance.

Fiscal management of administrative processes, including oversight of the operating and capital projects, also fall under the Chief's scope of work. KFR finalized its four year (2015 -2018) operational plan which sets out strategies to manage growth and sustain efficient, effective operations which enhance citizen safety and well-being.

Innovation and sustainability remains an overarching theme for Kingston Fire & Rescue. The Chief's Office develops and implements new programs and initiatives in alignment with the overall City's key goals and priorities. The following are some of the initiatives that were conducted throughout 2014.

A False Alarm By-law was implemented to enhance the maintenance and operations of Fire Alarm Systems. The False Alarm by-law encourages the maintenance and improves processes to reduce malfunctioning false alarms through a fee for service.

KFR in partnership with the Steam House Pump Museum completed an "Ashes to Innovation" museum exhibit from June 3 - November 29 2014. The exhibit depicted the history of the fire service in Kingston over a 250 year period, highlighting major fires and changes in fire service innovations.

Working with internal and external Partnerships an application for federal funding was submitted for the Kingston Interoperability Safety and Security (KISS) Project. The proposed KISS project will provide a common operating picture that will enhance the overall abilities of emergency services to coordinate and address dynamic emergencies. The ability of Police, Fire and EMS to know in real time locations of multiple agency

resources and emergency tactical activities will result in enhanced safety of first responders and improved efficiency of emergency services.

On December 2nd 2014 the distracted driving campaign “Stop Texting” was launched. This campaign is focused on reducing motor vehicle collisions caused by distracted driving.

KFR conducted 14 presentations on the major fire that occurred in Kingston on December 17, 2013 at 663 Princess Street. The presentations shared lessons learned and best practices related to this large scale high intensity fire response.

KFR and Technical Standards & Safety Authority (TSSA) partnered to deliver a Carbon Monoxide education and awareness program in November 2014. The campaign was unique using research and analytics to coordinate the distribution of carbon monoxide safety materials to households in Kingston. The materials were designed to inform residents of carbon monoxide issues and safety. The program also focused on specific postal code areas where KFR suppression staff attended door to door reinforcing the awareness materials. The research measured the effectiveness of the campaign, examined recall of the materials and determined the impact and perceptions of the campaign.

Fire Prevention/Public Education

The Fire Protection and Prevention Act, 1997 (FPPA) was proclaimed into law on October 29, 1997 and introduced a new framework for the provision of fire protection in Ontario. KFR continues to implement customer focused changes to enhance this mandate.

KFR is committed to reducing the loss of life and property and the protection of the environment. This is achieved through the three lines of defence. The first line is through public fire and life safety education. We continue to provide core educational, fire, and life safety messages to numerous groups and organizations. The following information highlights some of the initiatives conducted throughout 2014.

Distracted driving has become a major cause of motor vehicle collisions; it has surpassed impaired driving as the cause of fatalities in Ontario. Distracted driving has a direct impact on KFR operations with increased demands for emergency response and extrications. We partnered with Kingston Police, Frontenac Paramedics Service and other partners to launch a campaign to reduce distracted driving entitled “stop texting”. The launch of this program occurred on December 2nd 2014 and is focused at distracted driving in particular texting while driving. This tri-service initiative has been well received and continues to grow in supporting the reduction of distracted driving.

Our “Wake-Up Kingston” working smoke alarm campaign was expanded to include carbon monoxide safety. The Ontario Fire Code was changed to reflect carbon monoxide (Co) alarms as part of the implementation of the Hawkins Gignac Act, 2013, which received Royal Assent in December 2013. This Act amended the Fire Protection and Prevention Act, 1997 (FPPA) to allow the regulation of CO alarms through amendments to the Ontario Fire Code. In partnership with Technical Standards & Safety Authority (TSSA) we delivered a Carbon Monoxide education and awareness program. The campaign was unique using research and analytics to coordinate the distribution of carbon monoxide safety materials to households in Kingston. Our “Wake-Up Kingston” inspection program commenced in June and was active for 15 weeks concluding early-September. The “Wake-Up Kingston” program was conducted by on duty firefighters who attended residential homes throughout selected areas of the city. This program focuses on older building stock areas and is part of KFR’s risk management process in cooperation with on duty firefighters not attending to other emergency responses or other duties.

Long Term Care and Group Home Facilities

The City of Kingston has numerous health care and group homes that are considered vulnerable occupancies. Fire Prevention ensured that all of these facilities were completely inspected and fully in compliance with the Ontario Fire Code. Fire drills and training were also conducted at these facilities to enhance fire safety and ensure that staff was in compliance to regulations under the Ontario Fire Code.

False Alarm By-Law

In January of 2014 a false alarm by-law was implemented to enhance the maintenance and operations of fire alarm systems. The false alarm by-law imposes that when Kingston Fire & Rescue responds to a false alarm, the owner or occupant of the property from which the false alarm originated shall be required to pay to the Corporation of the City of Kingston the prescribed fee. The fee is based on the number of repeat false alarms responded to and is reset every January 1st of each year. In 2014, the first year of implementation, a total of 520 false alarms were received under the criteria of the false alarm by-law.

Fire Prevention Week - October 5th to 11th, 2014

Fire Prevention Week was established to commemorate the Great Chicago Fire, the tragic 1871 conflagration that killed more than 250 people, left 100,000 homeless, destroyed more than 17,400 structures and burned more than 2,000 acres. The fire began on October 8, but continued into and did most of its damage on October 9, 1871. The theme for 2014 was “Smoke Alarms Save Lives: Test Yours Every Month”.

KFR provided numerous activities and educational events to enforce the fire prevention week theme including a pancake breakfast that was a tremendous success. We were able to reach out and educate over 1000 people at the pancake breakfast. In partnership with Queens University an evacuation drill was conducted at 14 student residence buildings which involved approximately 4,300 students. This drill highlighted the importance of escape planning and early warning by having working smoke alarms on every level of their residence.

Community Events

In addition to fire prevention week, KFR participated in numerous provincial wide safety campaigns and was actively involved in “Spring into Summer ...Spring into Safety,” “Swing into summer safety,” “Peace of mind for your piece of Heaven –Cottage safety” and “12 days of holiday safety”. During the year our firefighters, fire prevention staff and ‘Sparky’® the Fire Safety Dog, our fire safety mascot, attended many other community, organization and social events, such as the annual night time Santa Claus Parade reaching thousands of community members.

School Programs

Educational programs remain the most effective way to prevent fires. Kingston Fire & Rescue continues to focus on a proactive approach of reducing fires by providing an assortment of fire safety education programs to students and youth. KFR focuses on providing valuable fire safety information to selected grades.

Media Resources

Kingston Fire & Rescue maintains a comprehensive web site, with an enormous selection of fire safety and fire service information at: www.cityofkingston.ca/fire.

Kingston Fire & Rescue continues to build on its social media presence with ongoing development of the Kingston Fire & Rescue Facebook page and twitter account. KFR is also actively engaged with local media ensuring timely and appropriate messages are relayed to the public.

Code Enforcement

The enforcement “line of defence” is delivered primarily by the fire prevention division. This is accomplished by enforcement of various codes, performing routine fire safety complaint and request inspections.

KFR also conducts target inspections based on selected areas of risk identified within the community. The targeted inspection approach provides a proactive approach to addressing enforcement and risk.

The enforcement element addresses mandated code compliance issues, enforcing municipal by-laws, issuing orders and court action as required. The enforcement component reviews and approves various permits, construction plans, site plans and subdivision/development agreements.

Our fire inspectors strive for voluntary compliance to the Ontario Fire Code however there are times, when this is not possible. In these instances, the fire code violations are pursued in Provincial Offences Court.

Fire Cause and Investigations

All fires are investigated for cause and origin and when required a comprehensive investigation is completed. In 2014 investigators conducted various investigations identifying fire safety risks, preventable behaviours and deliberate fire causes. Joint investigations are regularly conducted with the Kingston Police Service, Office of the Fire Marshal and other agencies to identify fire origins.

Community Development

Kingston Fire & Rescue is actively engaged in supporting the development community with a focus on improving service delivery to ensure fire safety is imbedded in all development in Kingston. In 2014 KFR prevention provided numerous building plan reviews, technical circulations, pre-consultation and ongoing support field Inspections.

Training and Staff Development

The Training Division consists of an Assistant Chief and three Training Officers. They work in concert with all divisions of KFR as well as representatives from external agencies, other fire services and educational institutions to deliver excellent training and knowledge to all staff.

There were some major changes in the training requirements for KFR personnel 2014. The Ontario Fire College has migrated towards NFPA standards for firefighter professional qualifications. This has required that all KFR firefighters to apply for the grandfather clause and become certified under the new system. Approximately 300 KFR firefighters training records and work experience were reviewed in detail by the training division to ensure the firefighters qualified and applied for this grandfather certification under the new system. The Training Division offers a high level of specialized training, supplemented by on-shift instructors, external instructors, educational institutions and in-house fire service staff. In 2014, hazardous materials operations, Instructor 1 (NFPA 1041), confined space, first aid, CPR, pump operations, class A live fire, class B live fire, foam operations, water shuttle, incident command training, leadership training with Chief Rick Lasky, report writing and legislation were some of the courses and programs delivered internally by the training division.

KFR also continues the transition to web based education and e-learning training. The delivery of web based education reduces cost and provides for more learning opportunities for personnel. We are also continuing with our transition to electronic textbooks, which provides a more cost effective way to deliver educational materials for staff development. Tablets are utilized for students to access textbooks and other electronic resources reducing the number of hard copy books required.

The eLearning blue card command certification program continues to be built upon. This certification program provides Company Officers and Command Officers knowledge on how to standardize local incident operations. The program uses a blended learning experience of online and in-class simulation training which focuses on the five major structural types that fires typically occur in.

Recruit Training

KFR provides volunteer and career recruits with an in-house training program that encompasses the training requirements and qualifying standards mirrored by NFPA 1001 Firefighter I and Firefighter II. This program must be completed and an examination passed before the recruits are assigned to active duty. A formal graduation ceremony is held for family and friends at the completion of the program.

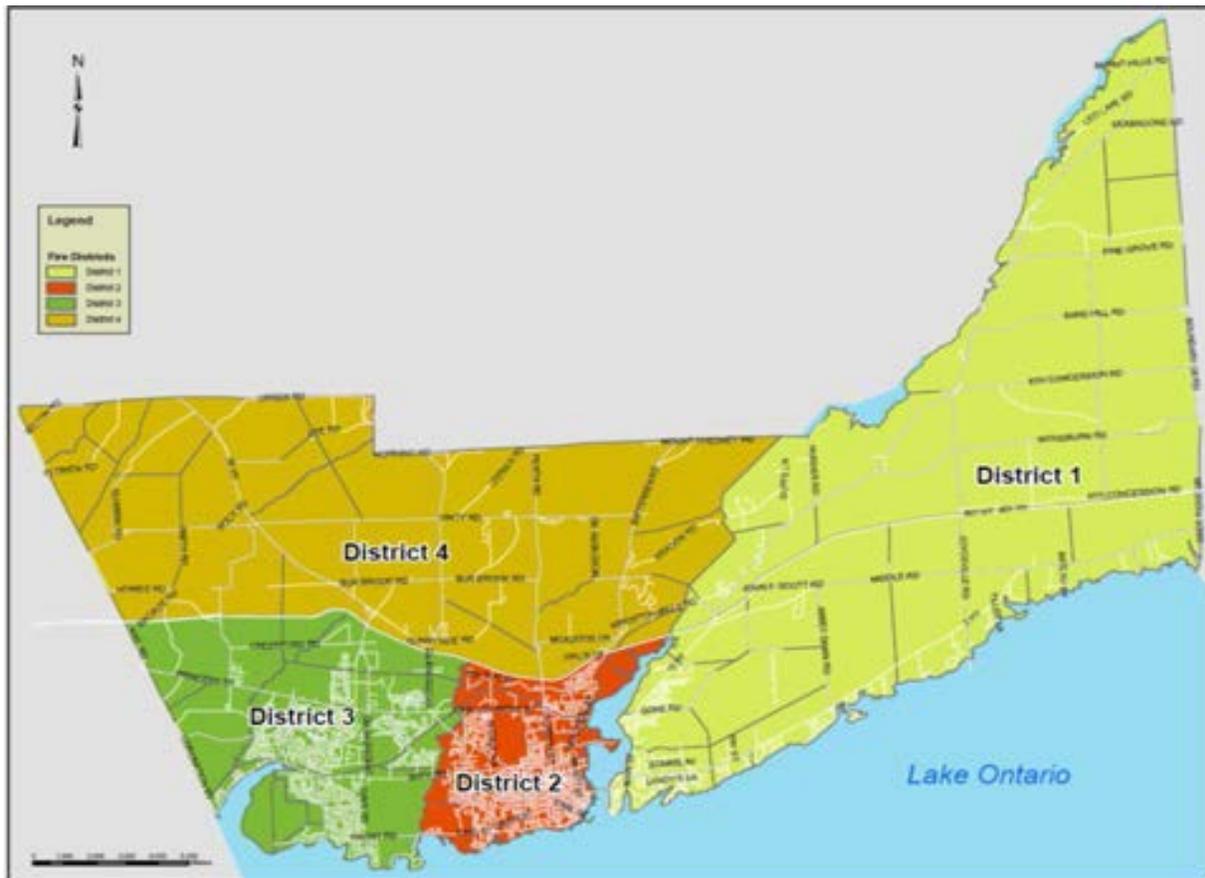
Emergency Operations

Kingston Fire & Rescue is a composite force of 120 career and 160 volunteer suppression personnel. KFR respond to emergency incidents such as fires, motor vehicle collisions, medical assistance, and hazardous materials spills. Upon arrival at all emergency incidents the primary response objectives are preservation of life safety, fire incident control and property and environmental conservation. These objectives enable our suppression personnel to have clear and consistent direction during an emergency incident.

Fire suppression personnel also provide the public with fire safety education and support prevention in fire cause determination. In 2014 fire suppression personnel assisted fire prevention with the “Wake Up Kingston” program by conducting door to door smoke alarm inspections in defined areas of the city. They tested and ensured that working smoke alarms were on every level of the home.

For the purpose of emergency response the City of Kingston is divided into four districts with a total of ten strategically located fire stations.

The following is a City of Kingston Fire & Rescue District Map:



In 2014 Kingston Fire & Rescue responded to a total of 3,553 emergency incidents in which there were 143 structure fires with a total dollar loss of \$3,584,702 and no fatalities. The implementation of a false alarm by-law has reduced the number of malfunctioning alarm systems attributing to the decrease in responses in 2014 by 274 in comparison to 2013 responses.

In 2014 the total fire loss dollar was estimated at \$3,584,702. This is a major decrease from 2013 which was an abnormality as a result of a major construction site fire on December 17, 2013. The reduction of dollar loss, excluding the December 17, 2013 dollar loss, can also be attributed to the active fire prevention and enforcement programs currently in place.

The following is a chart of the 2014 incident responses and dollar loss:

District	District Fire Dollar Loss	District Stations	Station Incidents
#1	\$534,105	Station #1 1648 Joyceville Rd	69
		Station #2 3505 Brewers Mills Rd	21
		Station #3 211 Gore Rd	273
District	District Fire Dollar Loss	District Stations	Station Incidents
#2	\$1,183,007	Station #4 271 Brock Street	891
		Station #5 171 Railway Street	613
		Station #6 262 Palace Rd	687
District	District Fire Dollar Loss	District Stations	Station Incidents
#3	\$627,490	Station #7 905 Woodbine Rd	660
		Station #10 127 Days Rd	197
District	District Fire Dollar Loss	District Stations	Station Incidents
#4	\$1,210,100	Station #8 1485 Unity Rd	86
		Station #9 2835 Hwy 38	40
District	District Fire Dollar Loss	District Stations	Station Incidents
Mutual Aid (responses outside of the City of Kingston)			16

The following provides an overview of 2009-2014 emergency response statistics:

Year	Emergency Incidents	Fire Loss Dollar
2014	3,553	\$3,584,702
2013	3,827	\$40,020,885
2012	3,693	\$4,825,674
2011	3,775	\$2,086,412
2010	3,769	\$4,425,412
2009	3,888	\$2,581,920

Mechanical and Facility Maintenance

The Mechanical Division is comprised of two mechanics and one mechanical officer, who report to the Deputy Chief responsible for facilities and assets. The division also receives support from three assistant motor mechanic firefighters. The Mechanical Division is responsible for the maintenance and repair of all Kingston Fire & Rescue fire apparatus and equipment.

The Mechanical Division is also responsible for annual testing and inspection of vehicles and equipment, the preventative vehicle maintenance program and assisting with research of apparatus replacement specifications. A detailed mechanical operations program continued to be developed in 2014 with the goal of bringing the fleet up to a 'predictive maintenance' level of service. This predictive maintenance program will greatly reduce emergency repairs and improve reliability of KFR apparatus. Some mechanical and facility activities in 2014 included:

- Procurement and replacement of four service vehicles, one fire investigation unit, one tanker and a 75 foot aerial ladder apparatus.
- Refurbishment of 100 foot ladder truck including replacement engine.
- Performed or coordinated annual service test on KFR equipment including ladders, SCBA, and gas powered equipment mounted on apparatus.
- Performed required inspections at facilities, verified the body and manufacturing details/issues for new apparatus purchases.
- Purchased and installation of diesel exhaust extraction system at 5 fire stations.

Communication Division

KFR is a Public Safety Answering Point (PSAP) for numerous fire departments. The Communication Centre is equipped with the latest communication systems. The Computer Aided Dispatch system interfaces with many other systems such as station alerting, digital paging, digital telephone and radio recording, station rip and run, vehicle computers, automated vehicle location and blackberry's, all of this provides a high level of automation.

The goal of the Communication Centre is to provide the highest degree of professionalism throughout the entire delivery of services by meeting legislated responsibilities and industry best practices. The combination of skilled and dedicated Communication Technicians and state of the art technology ensures that the citizens receive the best possible service. The Communication Centre consists of 10 full-time Communication Technicians that work 12 hour rotating shifts. The Communication Technicians are supported by six call takers.

In 2014 the Communication Division supported and dispatched for Kingston Fire & Rescue, Howe Island Fire Department, Wolfe Island Fire Department, South Frontenac Fire Service, Central Frontenac Fire Service and North Frontenac Fire Service. It also served as the fire coordination centre for all mutual aid events in the County of Frontenac and the County of Lennox and Addington. The Communication Centre is also responsible for implementing the Kingston Fire & Rescue response plan. The response plan is a comprehensive program detailing how fire resources are deployed within the City of Kingston. Some communication activities in 2014 included:

- Communication Technicians attended the Association of Public Communication Officers Conference.
- Provided call taking and Computer Aided Dispatch training for our call takers.
- Implemented MIR3, an automated notification system for the Municipal Control Group and other personnel.
- Preparation for assuming dispatching services for all Fire Departments in L&A County and a new 911 telephone system.
- Implemented interim radio procedures and equipment such as; digital vehicle repeaters, emergency man down alarms, new portable radios.
- Provided training and improvements to our backup communication site.
- Preparation for implementation of "PulsePoint", a lifesaving initiative.
- Installed six emergency vehicle pre-emption intersection traffic control systems.

In 2014 the Communication Centre received 13,408 telephone calls requesting emergency service and dispatched fire resources to 4693 emergency incidents. The Centre also received 45,962 non-emergency administration telephone calls.

Regional Training Centre

The Regional Training Centre (RTC) operates under a unique partnership between the City of Kingston and Kingston Fire & Rescue. Located at 3 Terry Fox Drive, the Regional Training Centre is a state of the art fire/industrial training facility designed to give realistic training to in-service firefighters and for external stakeholders and industrial customers.

The RTC officially opened in June of 2013 and is scheduled to be completed in four phases. As it continues to grow and develop to meet the demands and opportunities of the region the RTC has been well received by external stakeholders, the industrial community and emergency services. The RTC provides the tools to prepare first responders, and external organizations for emergency response, specialized job skills and incident management techniques.

In 2014 the second phase of development was completed. This phase included props for trench rescue, building collapse, confined space, high angle rescue, HAZMAT/ train derailment, roof/ventilation and propane emergencies. The addition of external props has added a new dimension to the training centre and has provided additional partnership opportunities.

In addition to the completion of phase two the position of “Manager of the Regional Training Centre” was created. This new position provides a concentrated focus on the marketing, development and implementation of the RTC with both external and internal stakeholders. In 2014 the RTC hosted and provided “live fire” training to our first external customers – Industrial Fire Brigades from Atomic Energy of Canada and INVISTA Canada.

The live fire props within the training centre are designed to simulate several key types of fires. The propane live fire training props include a vehicle, assorted gas containment failures, a residential room and content fires all of which provide for skills development. The training ranges from pump operations to incident command, forcible entry, search and rescue, ventilation and fire attack to be practiced in a practical and safe environment. Combining all of the skills in a sequential, comprehensive manner is the key to be able to function efficiently and skillfully on a fire scene.

The RTC has an auto extrication area that can allow vehicles to be in a ditch, on their side or in a variety of other positions that are common occurrences when responding to collisions. Due to the dynamic designs and changes in safety components of vehicles firefighters continually train in basic and advanced auto extrication techniques. Training is achieved with the assistance of community partners that allow staff to improve practical skills by providing vehicles for extrication training.

Office of Emergency Management

The City of Kingston's Office of Emergency Management (OEM) has developed a comprehensive emergency management system which has enabled the City to effectively protect its citizens from the wide range of hazards that threaten the area. The success of this system is built on an all-hazards approach to emergency management and strong partnerships within the emergency management community. Each year, the City of Kingston's Office of Emergency Management (OEM) designs, coordinates and implements a wide variety of initiatives and ongoing activities to ensure compliance with provincial legislation and to strengthen the Corporation's ability to prepare for, respond to, and recover from, major emergencies affecting the Corporation and the residents of Kingston.

Some of the Key services the OEM provides are:

- Mitigation and planning for large-scale, all –hazards emergencies and disasters.
- Coordination of support for large-scale emergencies and disasters.
- Development, maintenance and execution of the City of Kingston's Emergency Plan.
- Liaison with local, county, provincial, and federal agencies and departments.
- Coordination with multi-jurisdictional exercises and training.
- Management of resources to assist responders and the affected population.
- Administration of provincial legislated requirements.
- Provide community education and training.

In 2014 we continued to work on ways to improve our ability to respond to, recover from, and mitigate disasters that may affect the residents of Kingston

Emergency preparedness is a team effort. With the ever-present threat of natural and human-caused disasters, successful and coordinated responses to these events demonstrate the ongoing commitment and dedication of City employees, community agencies and residents to be ready to respond to any emergency within the City of Kingston.

City of Kingston's OEM strives to build and maintain strong relationships with local emergency management partners and stakeholders. Ensuring trusted collaboration exists between local and regional stakeholders is critical in the planning and response to complex situations and disasters.

These collaborative relationships are built upon and maintained through educational seminars, ongoing planning meetings, shared training and continued contact throughout the year.

The Emergency Operations Centre (EOC) is located at Kingston Fire & Rescue headquarters and is a secure central location from which the City of Kingston can provide interagency coordination and executive decision making in support of the incident. The EOC does not command or control the on-scene response, but rather carries out the coordination function through information collection/evaluation, priority setting and resource management. The EOC also plays a critical role in support of the on-scene response.

The EOC is also heavily utilized, outside of disaster response as a state-of-the-art training facility for City staff and partner agencies. Training and exercises for emergency response is an integral part of community preparedness. The City of Kingston's OEM coordinates and participates in multiple activities every year. Training and exercises are specifically tailored to the responsibilities of the personnel involved in incident management.

The Province of Ontario performs a compliance audit each year of all municipal emergency management programs in Ontario. In 2014, the City of Kingston met all the essential level emergency management program requirements and the City is well positioned to meet and exceed the annual program compliance requirements in 2015