



# London Fire Department

Neighbourhood, Children & Fire Services

## **ORIENTATION PRESENTATION**

Community & Protective Services Committee

January 20<sup>th</sup>, 2015



# NCFS Mandate



**Working together to strengthen  
Londoners' quality of life...**

**community-wide...**

**neighbourhood by  
neighbourhood**

# Municipal Responsibilities



## ● *Fire Protection and Prevention Act 1997 (FPPA)*

### ● 2(1) Every municipality shall:

- (a) Establish a program for **public education** with respect to fire safety and **certain components of fire prevention**; and
- (b) Provide other **fire protection services** as it determines may be necessary in accordance with its needs and circumstances.

## Methods of providing services

- (2) In discharging its responsibilities under subsection (1), **a municipality shall**,
  - (a) appoint a community fire safety officer or a community fire safety team; or
  - (b) **establish a fire department.**

# Legislation & Standards



## References

- *Fire Protection and Prevention Act, 1997*
- *Ontario Fire Code*
- Public Fire Safety Guidelines
- *Technical Standards and Safety Act, 2000 (Propane)*
- *Occupational Health and Safety Act, as well as Section 21 Guidance Notes*
- WSIB
  - Standard injuries
  - Presumptive Re: Cancers
  - Post Traumatic Stress Disorder
- Ministry of Transportation
- Various Standards
  - National Fire Protection Association (NFPA)
  - Underwriter's Laboratories of Canada (ULC)
  - Canadian Standards Association (CSA)

# Service Categories



## ● Provincially Mandated

- **Fire Safety Education**
- **Fire Prevention & Fire Code enforcement**
  - Smoke and Carbon Monoxide Alarms
  - Vulnerable Occupancies
- **Fire and Rescue Services**
- Approve Fire Safety/Emergency Plans of Large Propane Sites
- Review Fire Safety/Emergency Plans of Smaller Propane Sites

## ● Council Directed

- Specialty Rescue
  - Hazmat, Technical Rescue, Water/Ice Rescue
- Mutual and Automatic Aid
  - County & London Airport
- Defibrillation (Cardiac Calls)
- Open Air Burns
- Fire Investigations

# Ontario Fire Protection Model



## The Three Lines of Defense

Residents of London & Visitors

Support Services

1st Line of Defense

3rd Line of Defense



Department Administration

2nd Line of Defense

# Quick Overview



## ● Budget

- 2014 Operating budget - \$55.390M of which:
  - **Labour cost** represents **95% - 96% or ~\$53.052M**
  - All **other operational costs 4% - 5% or ~ \$2.338M**

## ● Staff Breakdown

- 6 Non-Bargaining unit positions
- 393 Unionized employees

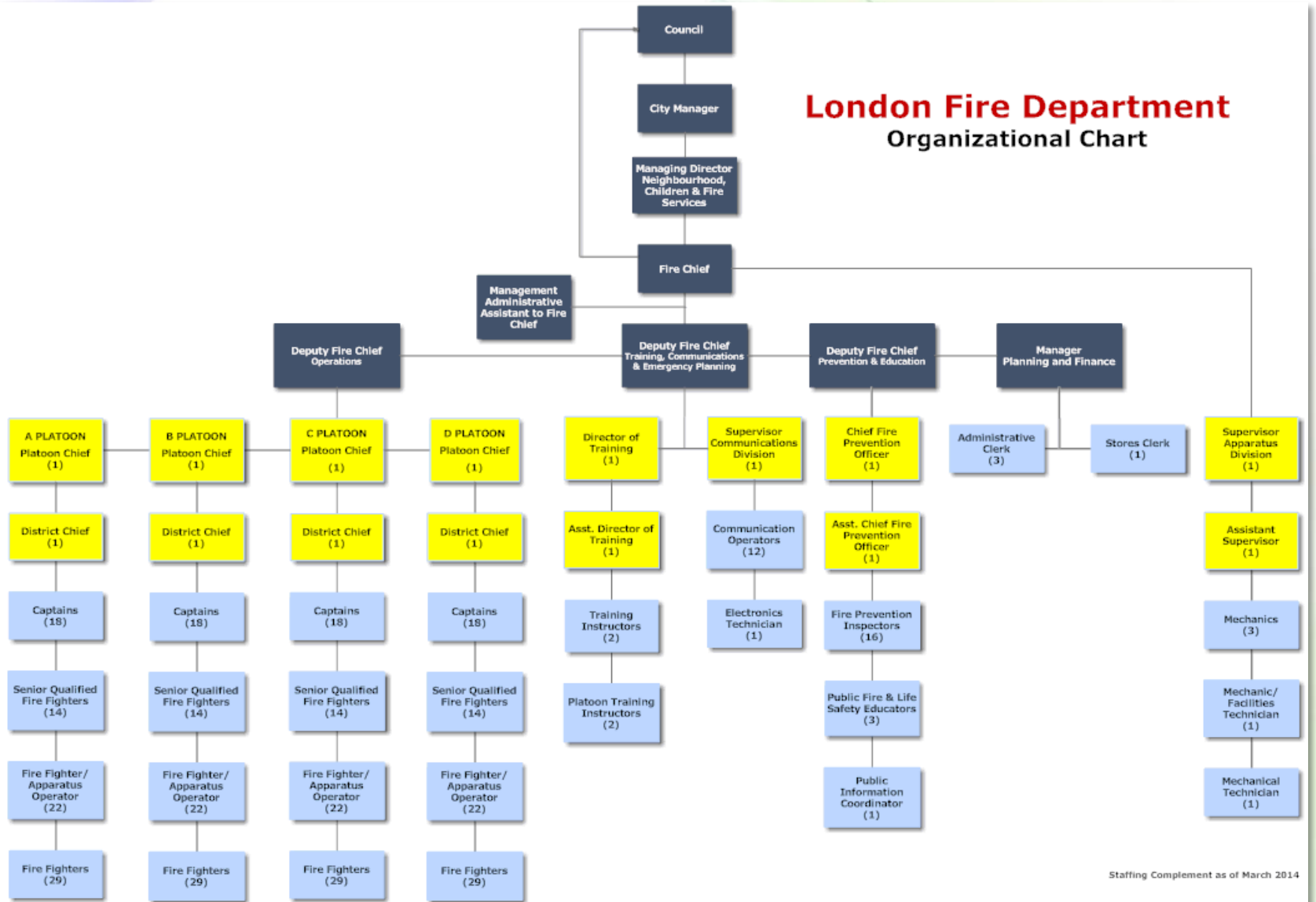
## ● Organizational Breakdown

- 2 Frontline operational divisions – 362 employees
  - Fire Fighting, Fire Prevention
- 5 Support divisions – 30 employees
  - Communications, Apparatus, Training, Clerical and Stores

# London Fire Department



## London Fire Department Organizational Chart



Staffing Complement as of March 2014



# Fire Prevention - Lines 1 & 2



## Deputy Fire Chief – Fire Prevention

Gary Bridge



### Quick Glance

**Location:** Station 1 – 2<sup>nd</sup> Floor  
400 Horton Street

**Staff:** 22

**Total Cost:** \$2.804

**Personnel:** \$2.604M

**Other Costs:** \$0.200M

### Supervisors

- 1 – Chief Fire Prevention Officer
- 1 – A. Chief Fire Prevention Officer

### Fire & Life Safety Education

- 3 – Public Fire & Life Educators
- 1 – Public Information Coordinator

### Code Enforcement/Investigations

- 14 – Fire Prevention Inspectors

### Plans Examination

- 2 - Fire Prevention Inspectors

# 1<sup>st</sup> Line of Defense



## ● Public Education

- Using community risk and needs assessments, the primary role of the Public Fire and Life Safety Educators is to :
  - **change human behaviour** through the development and delivery of fire safety programs, as well as the distribution of fire safety literature for the purposes of:
    - preventing fires from occurring; should a fire occur to ensure residents are alerted to a fire (“Working” Smoke Alarm) and escape plan safely (Home Escape Plan); and
    - reducing the incidence of fire, injuries and the loss of life.
- School and seniors education, Risk Watch, TAPP-C, Children’s Safety Village, risk reduction, etc.
- Award winning analytic driven Fire Safety Marketing Program

# 2<sup>nd</sup> Line of Defense



## ● Fire Prevention

- **Primary roles of a Fire Prevention Inspector** is to achieve an acceptable degree of resident and building safety by:
  - **Conducting fire and life safety inspections** ensure buildings meet applicable legislative and regulatory requirements;
  - **Reviewing, evaluating, approving, and, where necessary, enforcing fire safety plans** to ensure compliance with the Ontario Fire Code;
  - **Initiating and participating in the prosecution** of offenders of fire legislation;
  - **Issuing plan approvals for compliance equivalencies**, if designated, on submissions by architects and/or engineers so that alternative solutions are in compliance with objective of relevant codes and standards ;
  - **Investigating fires** to determine the cause and origin and/or assist the London Police and OFM where the cause is suspicious; and
  - **Reviewing new construction architectural** - fire safety aspects

# Results

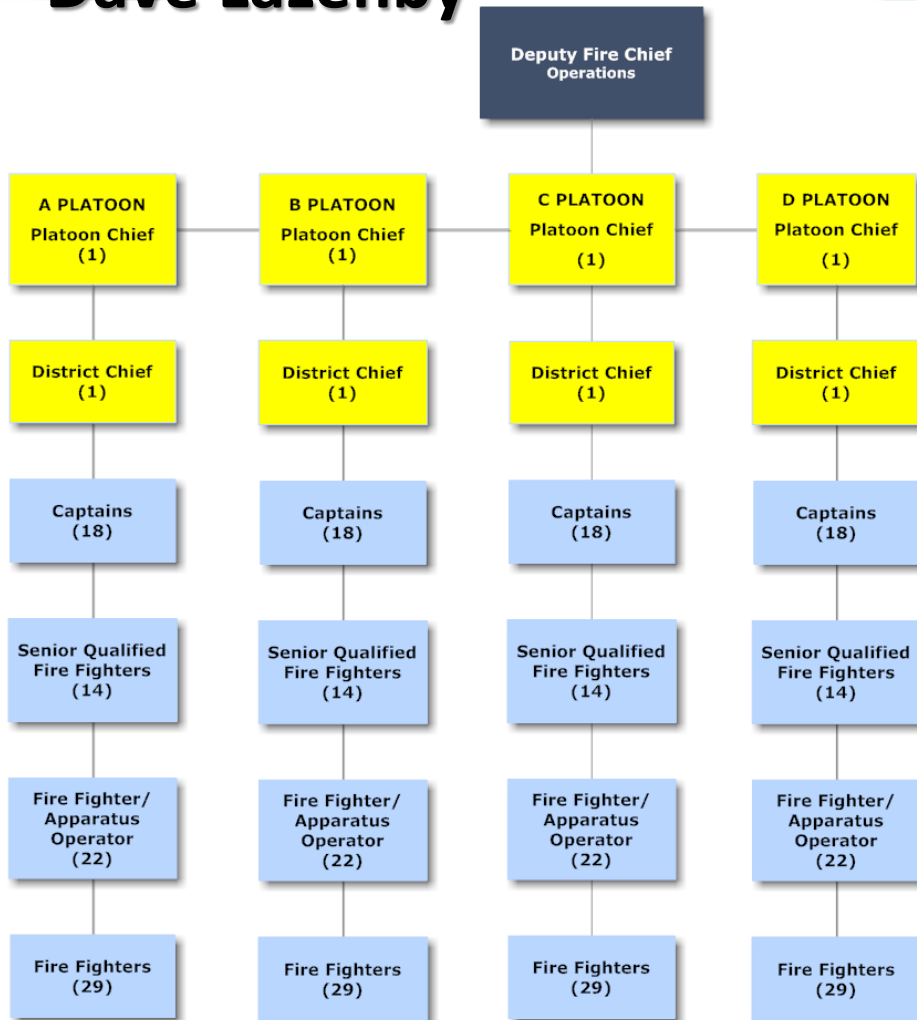


- **Residential Fires**

# 3<sup>rd</sup> Line of Defense



## Deputy Fire Chief – Operations Dave Lazenby



### Quick Glance

Location: 14 Stations

Staff: 340 (4 Platoon System – 85/Platoon)

Total Cost:

Personnel - \$46.075M

Other- \$1.355M

Vehicles:

3 - Engines

8 - Pumper Rescues

3 - 75 Ft. Quints

1 - 100 Ft. Aerial Platform

2 – 100 Ft. Aerials

2 – Command Cars

2 – Tankers

1 - Rescue

1 – Hazmat

1 – Air/Light – Tech Rescue

2 – Marine Units



## ● Fire & Rescue Services

- Fire extinguishment
- Rescues
- Motor Vehicle Collision (Medical Assistance and Extrications)
- Emergency Medical (Cardiac Emergencies)
- Natural Gas Emergencies
- Carbon Monoxide and Smoke Alarm calls
- Open Air Burn Complaints
- Agency Assistance
- **Smoke Alarm Campaign (Award winning)**
- ***After the Fire Program***

# Specialty Services



## ● Hazmat

- Response to emergency Hazardous Materials events to:
  - Identify the chemical;
  - Provide advice to the Incident Commander with respect to evacuation;
  - Protect life and property; and
  - Wherever possible mitigate the release of chemicals onto the ground, into waterways or into the air to prevent additional damage to the environment.

## ● Technical Rescue

- Response to emergencies to:
  - Rescuing individuals injured or in danger from high buildings, bridges, cranes, etc. (above ground) or below ground such as from a river bank, ravine, etc.; and
  - Eventual goal to introduce trench rescue



## ● **Water/Ice Rescue**

- Response to water and ice emergencies for the purpose of:
  - Rescuing individuals in danger because of an entry into the river or a water body;
  - Assisting with body recoveries;
  - Assist London Police missing persons searches along the shores of the water bodies; and
  - Assist with evacuation during flooding.

## ● **Back Up Communications Operators**

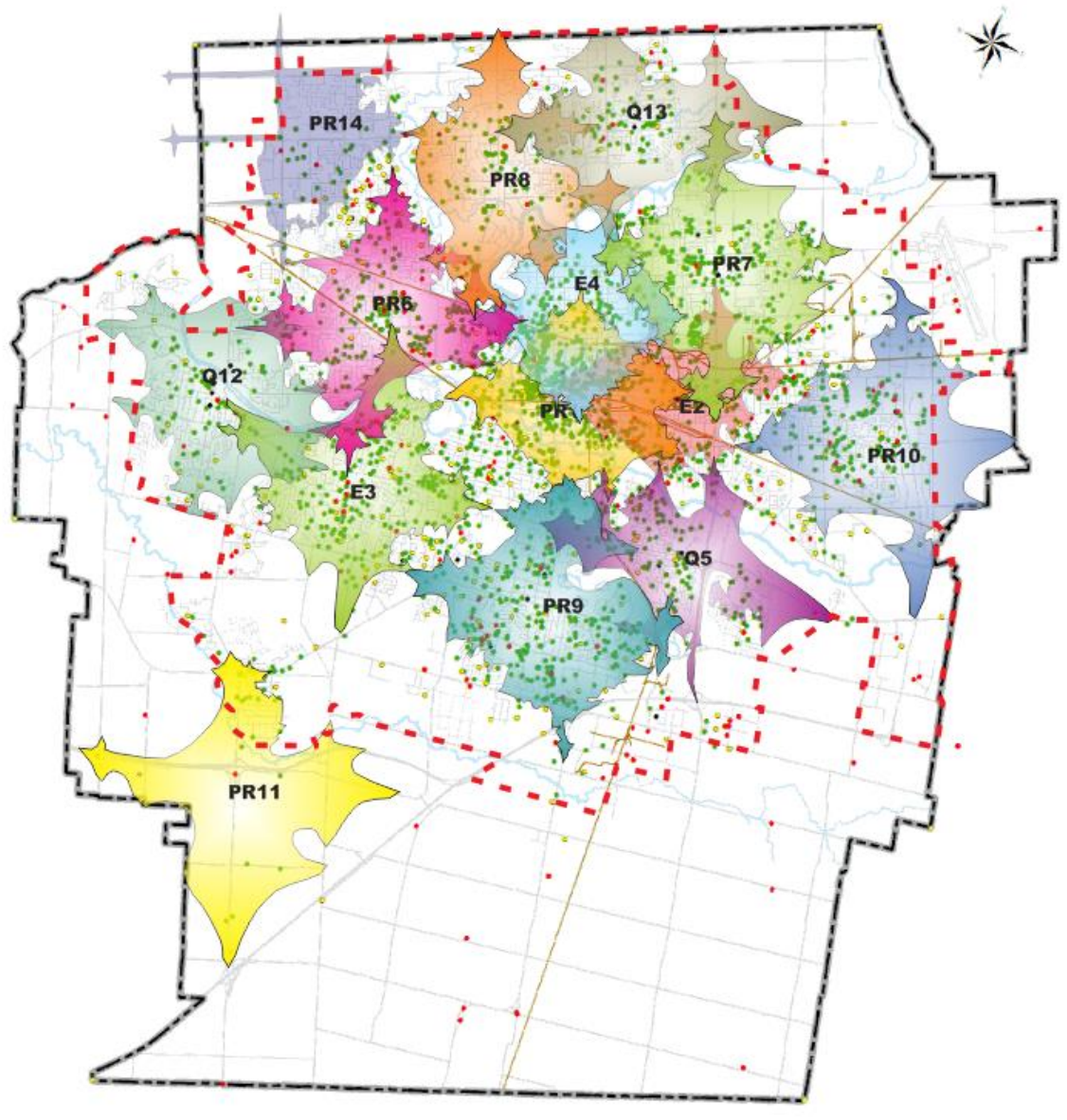
- Cross-trained fire fighters able to undertake the basic duties of the full-time Communication Operators to:
  - Either supplement the on-duty complement when there are staffing shortages; and
  - Provide assistance during larger scale, resource intensive events.



# 1<sup>st</sup> Due Response Coverage

## Engines

- Engine “E” – water, pump, hose and ground ladders
- Pumper Rescues “PR” include auto-extrication equipment
- Quints “Q” include a 75 Ft. aerial ladder
- Each coloured area represents a theoretical 240 second response area
- **2013 90th Percentile – 240 seconds**



# OMBI Comparative Performance

**How long does it take to respond to an emergency call from the time the station is notified to arrival on scene?**

Fig 10.4 Actual 90th Percentile Fire Station Notification Response Time (min:sec) (Urban and Rural)

Municipality	Station Notification Response Time 90th Percentile (min:sec) Urban (FIRE405)			Station Notification Response Time 90th Percentile (min:sec) Rural (FIRE406)		
	2011	2012	2013	2011	2012	2013
	CAL	07:15	07:14	07:08		
HAM	06:56	06:36	06:45	12:57	12:57	13:20
LON	06:13	06:07	06:05			
OTT	07:00	06:39	06:50	14:39	14:48	13:59
SUD		06:29	06:57	17:23	19:30	16:41
TBAY	06:32	06:27	06:40			
TOR	06:47	06:31	06:44			
WIND	06:29	06:31	06:58			
WINN	06:49	06:47	06:49			
MED	06:48	06:31	06:49	14:39	14:48	13:59

Source: FIRE405 – Urban; FIRE406 - Rural (Customer Service)

Comment: Hamilton, Ottawa and Greater Sudbury are the only municipalities with both Urban and Rural components  
In order to respond to emergencies, each municipality has a different mix of vehicle types and staffing modes, reflecting its fire and community risks.

# Staffing Rationale

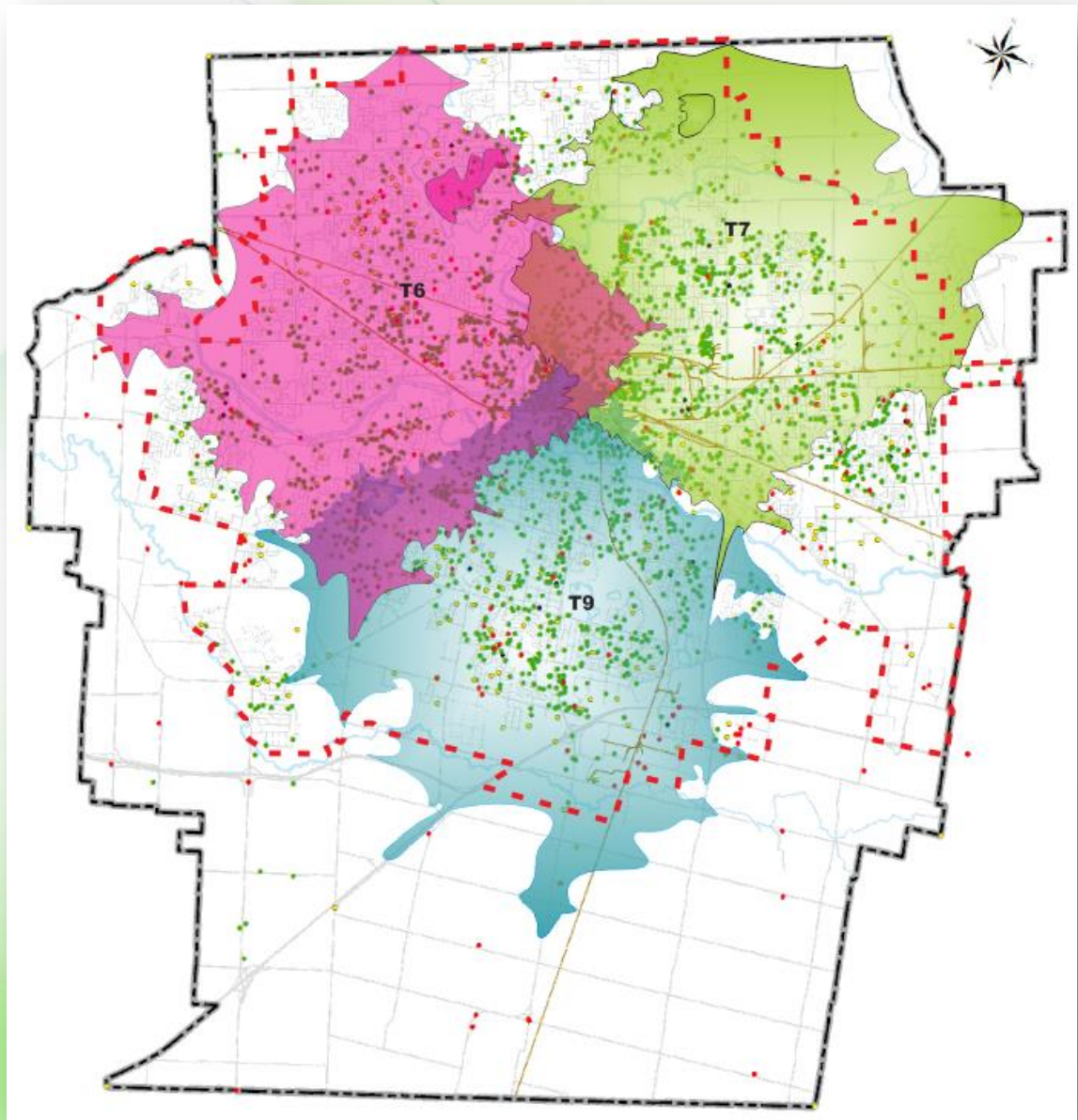
CRITICAL TASKS	STAFF
Establishment of incident command outside of the hazard area for the overall coordination and direction of the initial full alarm assignment with a minimum of one individual dedicated to this task	1
Establishment of an uninterrupted water supply of a minimum of 400 gpm (1520 L/min) for 30 minutes with supply line(s) maintained by an operator	1
Establishment of an effective water flow application rate of 300 gpm (1140 L/min) from two handlines, each of which has a minimum flow rate of 100 gpm (380 L/min) with each handline operated by a minimum of two individuals to effectively and safely maintain the line	4
Provision of one support person for each attack and backup line deployed to provide hydrant hookup and to assist in laying of hose lines, utility control, and forcible entry	2
Provision of at least one victim search and rescue team with each such team consisting of a minimum of two individuals	2
Provision of at least one team, consisting of a minimum of two individuals, to raise ground ladders and perform Ventilation	2
Establishment of an IRIC consisting of a minimum of two properly equipped and trained individuals	<u>2</u>
	<b>SUB-TOTAL</b>
	<b>14</b>
If an aerial device is used in operations, one person to function as an aerial operator and maintain primary control of the aerial device at all times	<u>2</u>
	<b>TOTAL STAFF REQUIRED</b>
	<b>15</b>

# Aerial Coverage

## Aerials

- Aerial platform at Station 7 – 100 Ft.
- Aerials at Stations 6 and 9 – 100 Ft.
- The coloured area represents a theoretical 480 second response area

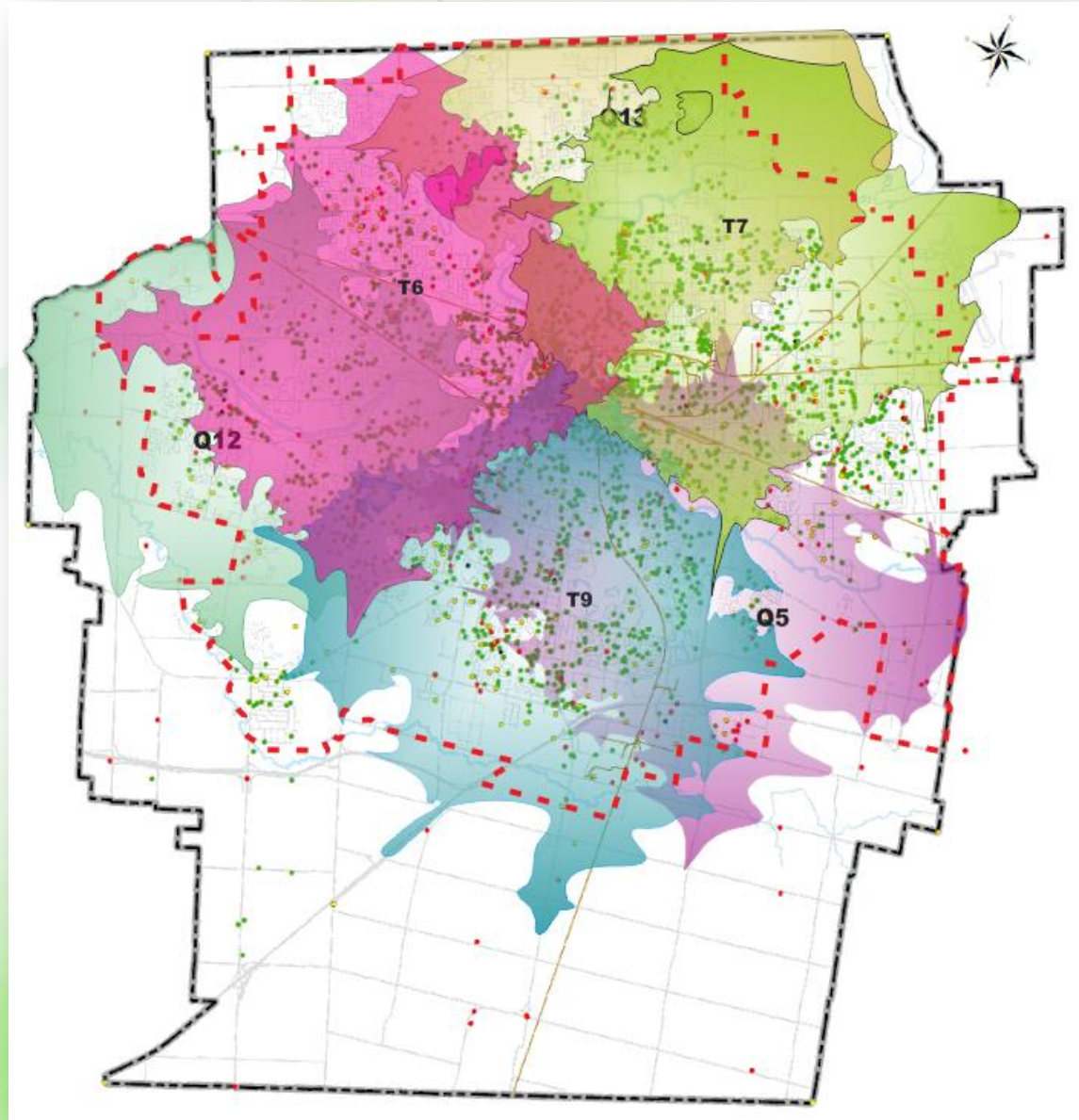
- **2013 90th Percentile to assemble 15 firefighters on scene – 441 seconds**



# Combined Aerial/Quint Coverage

## ● Aerials & Quints

- Aerial shown a "T"
- Quints shown as "Q"



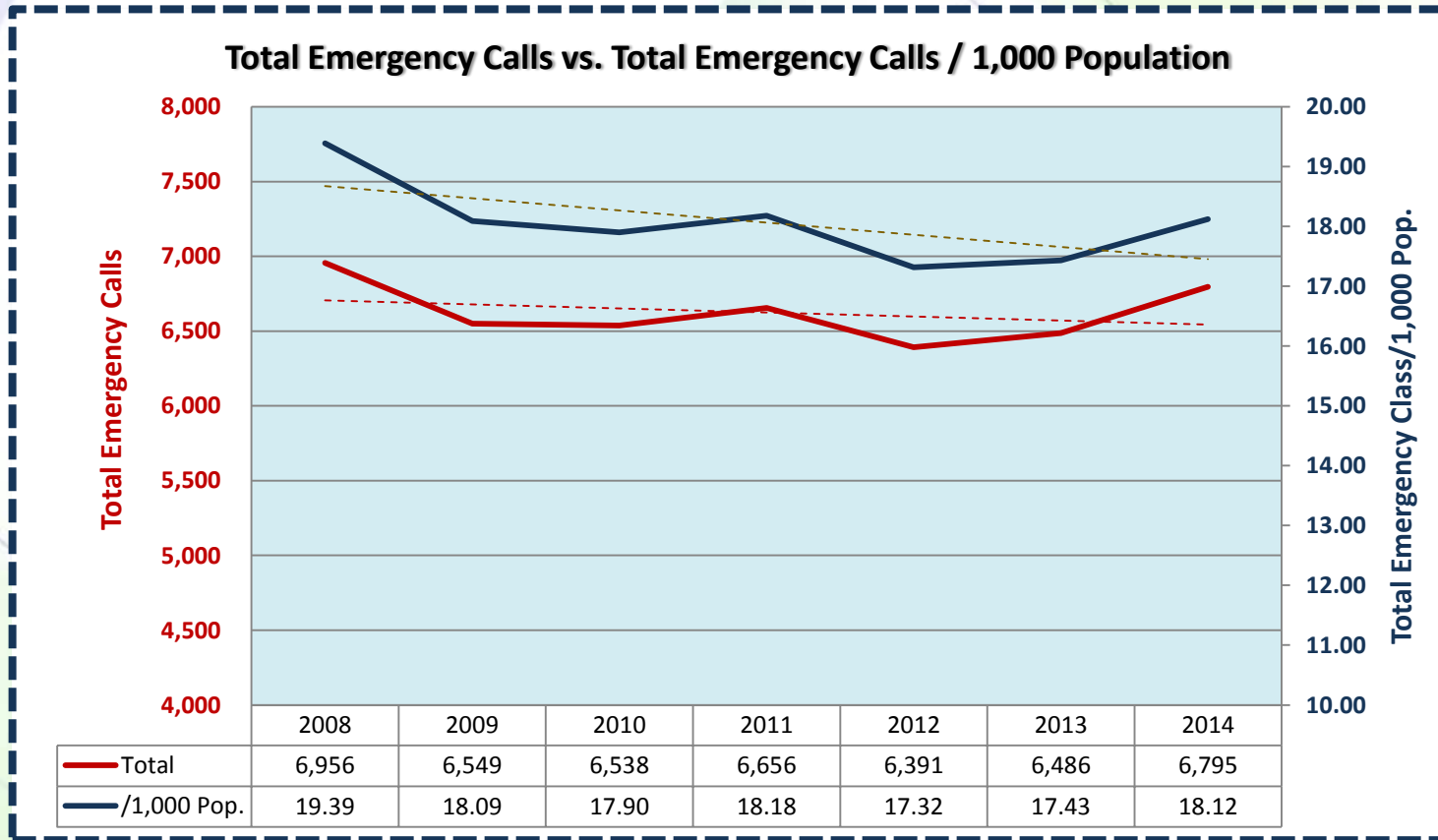
# Emergency Call Breakdown



	2008	2009	2010	2011	2012	2013	2014
<b>EMERGENCY</b>							
<b>Fire Related</b>	3,841	3,585	3,282	3,489	3,216	3,170	3,386
% of Overall Call Volume	44.95%	42.01%	38.38%	40.77%	38.72%	38.02%	38.13%
<b>EMS Calls</b>	1,489	1,515	1,672	1,628	1,769	1,801	1,921
% of Overall Call Volume	17.43%	17.75%	19.55%	19.03%	21.30%	21.60%	21.64%
<b>Motor Vehicle Collisions</b>	1,243	1,071	1,187	1,187	1,098	1,163	1,098
% of Overall Call Volume	14.55%	12.55%	13.88%	13.87%	13.22%	13.95%	12.37%
<b>SPECIALIZED SERVICES</b>							
<b>Hazmat</b>	349	351	372	325	288	325	366
% of Overall Call Volume	4.08%	4.11%	4.35%	3.80%	3.47%	3.90%	4.12%
<b>Technical Rescue</b>	9	10	9	12	14	9	8
% of Overall Call Volume	0.11%	0.12%	0.11%	0.14%	0.17%	0.11%	0.09%
<b>Water/Ice Rescue</b>	25	17	16	15	6	18	16
% of Overall Call Volume	0.36%	0.26%	0.24%	0.23%	0.09%	0.28%	0.24%
<b>Total Emergency Calls</b>	<b>6,956</b>	<b>6,549</b>	<b>6,538</b>	<b>6,656</b>	<b>6,391</b>	<b>6,486</b>	<b>6,795</b>
<b>% of Overall Call Volume</b>	<b>81.40%</b>	<b>76.74%</b>	<b>76.46%</b>	<b>77.78%</b>	<b>76.94%</b>	<b>77.79%</b>	<b>76.53%</b>
<b>% Change Year over Year</b>		<b>-5.85%</b>	<b>-0.17%</b>	<b>1.80%</b>	<b>-3.98%</b>	<b>1.49%</b>	<b>4.76%</b>

# Emergency Calls per Capita

## ● Fire Fighting



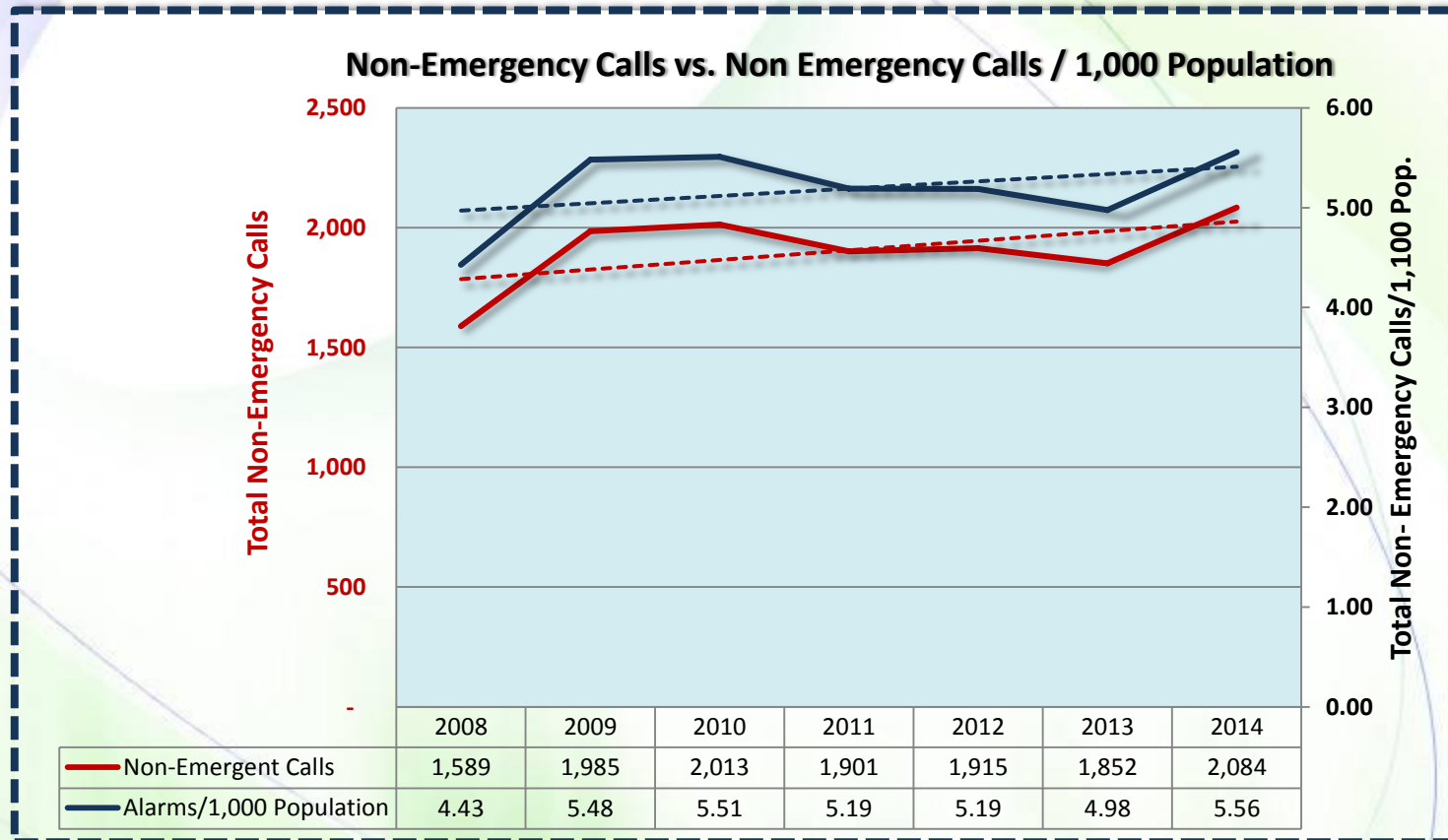
# Non-Emergency Call Breakdown



	2008	2009	2010	2011	2012	2013	2014
<b>NON-EMERGENCY</b>							
<b>Open Burn Complaint</b>	383	467	461	477	636	374	402
% of Overall Call Volume	4.48%	5.47%	5.39%	5.57%	7.66%	4.49%	4.53%
<b>Carbon Monoxide Alarm</b>	808	1,078	1,120	989	840	826	933
% of Overall Call Volume	9.46%	12.63%	13.10%	11.56%	10.11%	9.91%	10.51%
Assist Other Agencies	353	364	361	355	403	454	534
Elevator Rescue, NO EMS						58	66
LFD MVA	0	15	10	10	4	0	12
Airport Event	2	0	0	0	0	1	1
Mutual Aid	4	2	2	1	1	0	2
Public Service Response	39	41	40	44	12	115	117
Client Complaints	0	18	19	25	19	24	17
<b>Assistance Type Calls</b>	<b>398</b>	<b>440</b>	<b>432</b>	<b>435</b>	<b>439</b>	<b>652</b>	<b>749</b>
% of Overall Call Volume	4.66%	5.16%	5.05%	5.08%	5.29%	7.82%	8.44%
<b>Total Non-Emergency Calls</b>	<b>1,589</b>	<b>1,985</b>	<b>2,013</b>	<b>1,901</b>	<b>1,915</b>	<b>1,852</b>	<b>2,084</b>
% of Overall Call Volume	<b>18.60%</b>	<b>23.26%</b>	<b>23.54%</b>	<b>22.22%</b>	<b>23.06%</b>	<b>22.21%</b>	<b>23.47%</b>
% Change Year over Year		24.92%	1.41%	-5.56%	0.74%	-3.29%	12.53%
<b>Totals Calls - All Types</b>	<b>8,545</b>	<b>8,534</b>	<b>8,551</b>	<b>8,557</b>	<b>8,306</b>	<b>8,338</b>	<b>8,879</b>
% Change Year over Year		-0.13%	0.20%	0.07%	-2.93%	0.39%	6.49%

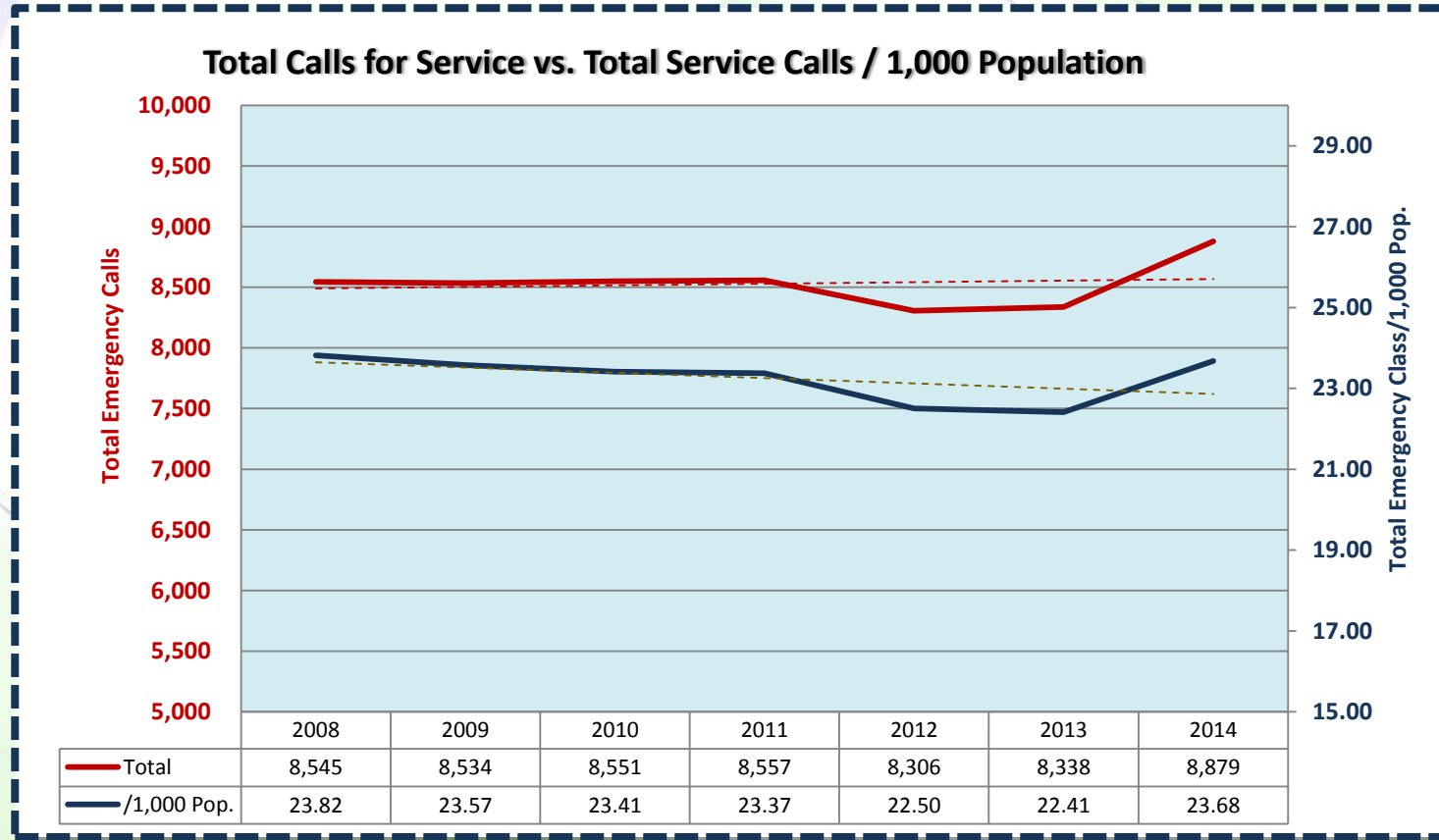


# Non-Emergency Calls per Capita



# Results – Total Calls for Service

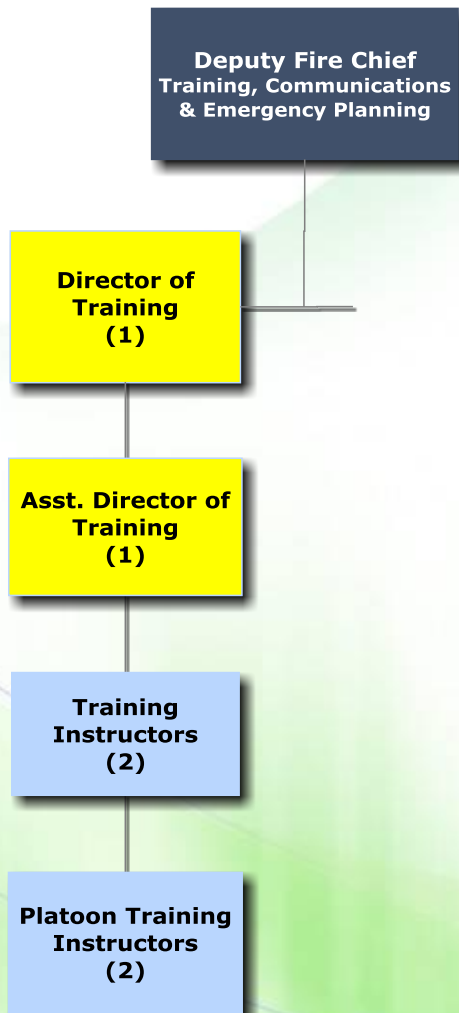
## ● Fire Fighting



# Training Division



## Deputy Fire Chief – Training & Communications Vacant - Recruiting



### Quick Glance

**Location:** Station 1 – 3<sup>rd</sup> Floor  
400 Horton Street  
Station 9 – Training Complex  
746 Wellington Rd. S

**Staff: 6**

**Total Cost: \$0.877M**  
Personnel - \$0.777M  
Other- \$0.100M

### Supervisors

1 – Director of Training  
1 – Asst. Director of Training

### Training Staff

2 – Training Instructors (Mon – Fri)  
2 – Platoon Training Instructors  
(4 days on, 4 days off)

# Training Division



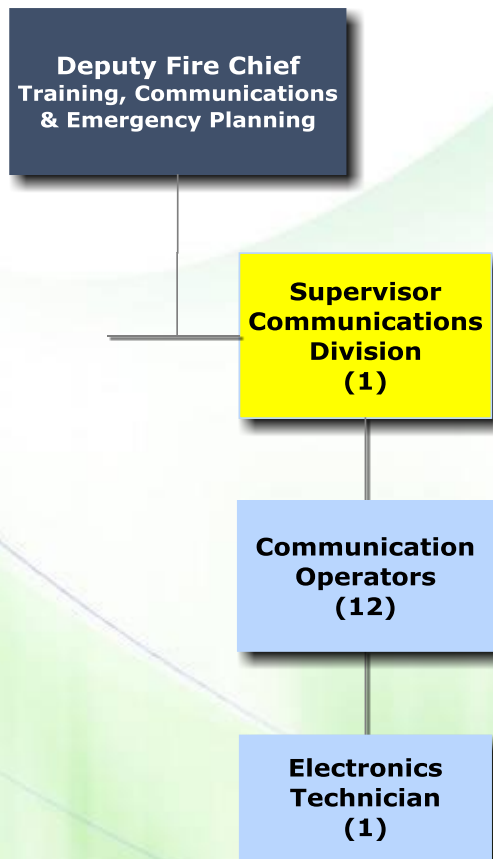
## ● Training

- Develop & Deliver Training Programs
  - Skills Maintenance
  - New Equipment and Vehicles
  - New Legislated Requirements
  - Officer Development and Qualification
  - Driver Training and Pump Operations
  - Recruit Training

# Communications Division



## Deputy Fire Chief – Training & Communications Vacant - Recruiting



### Quick Glance

**Location:** Station 1 – 3<sup>rd</sup> Floor  
400 Horton Street

**Staff:** 14

**Total Cost:** \$1.794M

Personnel - \$1.584M

Other- \$0.210M

1 - Supervisor

### Dispatch Service

12 – Communication Operators

### Other

1 – Electronics Technician

Note: 16 Firefighters have been trained as Backup Communications Operators

# Communications Division



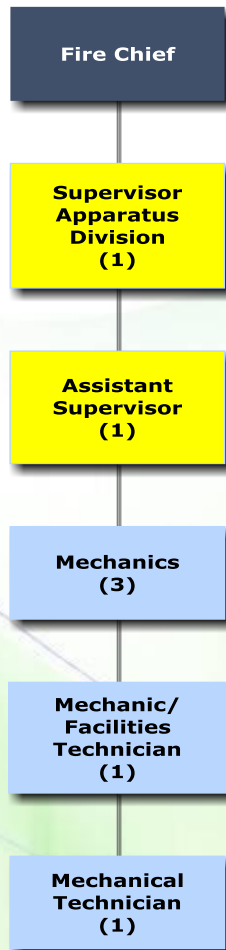
## ● Communications

- Accept City of London 911 Calls transferred from Police/CACC
- Dispatch City of London Fire Department
- Answer City non-emergent calls (i.e. system checks, system repairs, open air burns, etc.)
- 2014 – Processed 33,456 events (*~30% increase in 7 years*)
- Maintain and update Computer-Aided Dispatch System (CAD)
- Test, inspect, maintain and repair
  - 120 - Portable Radios;
  - 48 – Mobile; and
  - 36 - Base Station Radios
  - CO Monitors and Other Hazmat Monitoring/Test Equipment
  - Assist with Municipal Radio Infrastructure

# Apparatus Division



## Fire Chief - Apparatus John Kobarda



### Quick Glance

**Location:** Station 2  
1101 Florence Street

**Staff: 7**

**Total Cost: \$1.459M**  
Personnel - \$0.895M  
Other- \$0.564M

#### Supervisors

- 1 – Supervisor
- 1 – Asst. Supervisor

#### Mechanical Repair

- 3 – Mechanics
- 1 – Mechanic/Facility Technician

#### Specialty Equipment

- 1 – Mechanical Technician

# Apparatus Division

## ● **Fleet Maintenance**

- Preventative Maintenance and Annual MTO Inspections
- Major and Minor Repairs
  - 29 Diesel Powered Front Line Fire Apparatus
  - 34 Trucks, Vans and Cars
  - Snow Blowers & Mowers
  - 3 Rescue Boats
- Annual ladder, pump and hose testing to standards
- Inspect, Test, Maintain & Repair - 135 SCBA, 440 Air Cylinders, 5 Breathing Air Compressors
- Inspect, Maintain & Repair – 11 sets of Hydraulic & Pneumatic Extrication Equipment



# Clerical/Stores Division



## Manager of Planning & Finance Gwen Francis



### ● Quick Glance

#### Location

Station 1 - 400 Horton Street  
Clerical – 3<sup>rd</sup> Floor  
Stores – 1<sup>st</sup> Floor

#### Staff: 3

#### Clerical

3 – Administrative Clerks

#### Stores

1 – Stores

# Management Team



- **Primary Manager Contacts**

- **Business Unit Manager & Apparatus Division**

**John Kobarda, Fire Chief**

- **Fire and Rescue Operations & Special Services**

**David Lazenby, Deputy Fire Chief**

- **Fire Prevention and Education**

**Gary Bridge, Deputy Fire Chief**

- **Training, Communications & Special Projects**

**Vacant, Deputy Fire Chief**

- **Planning, Finance, Facilities & Administrative Projects**

**Gwen Francis, Manager - Planning & Finance**

# National & Provincial Recognition



## Canadian Marketing Award

Canadian Marketing Association (CMA) recognized LFD's 2013 Fire Safety Marketing Campaign that contributed to a significant reduction in residential fires through the combined use of strategic fire safety advertising and marketing analytics



## First Alert Award

Although the London Fire Department is the 6<sup>th</sup> largest in the Province, in 2014 First Alert recognized it for distributing the highest volume of smoke alarms and making London a safer city

## Fire Marshal's Public Safety Council Award

A "fire safety" partnership between London Hydro and the London Fire Department resulting in approximately the homes of low income Londoner's being more energy efficient and fire safe





**Thank You!**