



BUILDING MARKHAM'S
FUTURE TOGETHER



Master Fire Plan Cornell 2nd Crew



Objectives

- Obtain Council approval to move forward with the second crew at Station 99 in Cornell
- Define Responsibilities
- Explain fire and incident response service levels
- Illustrate existing response service levels by Ward
- Identify immediate and future resource requirements to provide a consistent level of service across the City to all residents

Master Fire Plan

- Master Fire Plan initiated 2010 - completed 2011
- Presented and received by Council March 2012
- Implementation plan received and approved by Council June 2012
- Master Fire Plan Updates December 2014, December 2017

Fire Chief's Responsibility

Fire Protection and Prevention Act 1997 (FPPA)

Responsibility to Council

6.(3) A Fire Chief is the person who is ultimately responsible to the Council of a municipality that appointed him or her for the delivery of fire protection services.

Once Council has approved the level of service, Council assumes responsibility while the Fire Chief is accountable to manage delivery of fire protection services and make recommendations for any changes or improvements.

Services Provided

- **Fire - Three Lines of Defense** - Fire Prevention Education, Fire Code Enforcement and Fire Response
 - Structural, vehicle, aircraft, ground cover
- **Emergency Services** - Other Types of Response
 - Medical, Hazardous Material, Technical Rescue, Police Assist, Vehicle Rescue, Ice/Water and, Elevator Rescue

National Fire Protection Association Standard 1710 Fire Response

City of Markham - Established Level of Service

- First in truck (4 firefighters) - 240 secs (4 minutes)
- 1st Alarm (16 firefighters) - 480 secs (8 minutes)
- The initial response goal is to meet the minimum travel times 90% of the time in the urbanized area
- The Master Fire Plan refers to the NFPA 1710 standard as the benchmark and target for response in the City of Markham

Current 4 Minute Response

Ward 1	
4 mins	62%

Ward 2	
4 mins	64%

Ward 3	
4 mins	58%

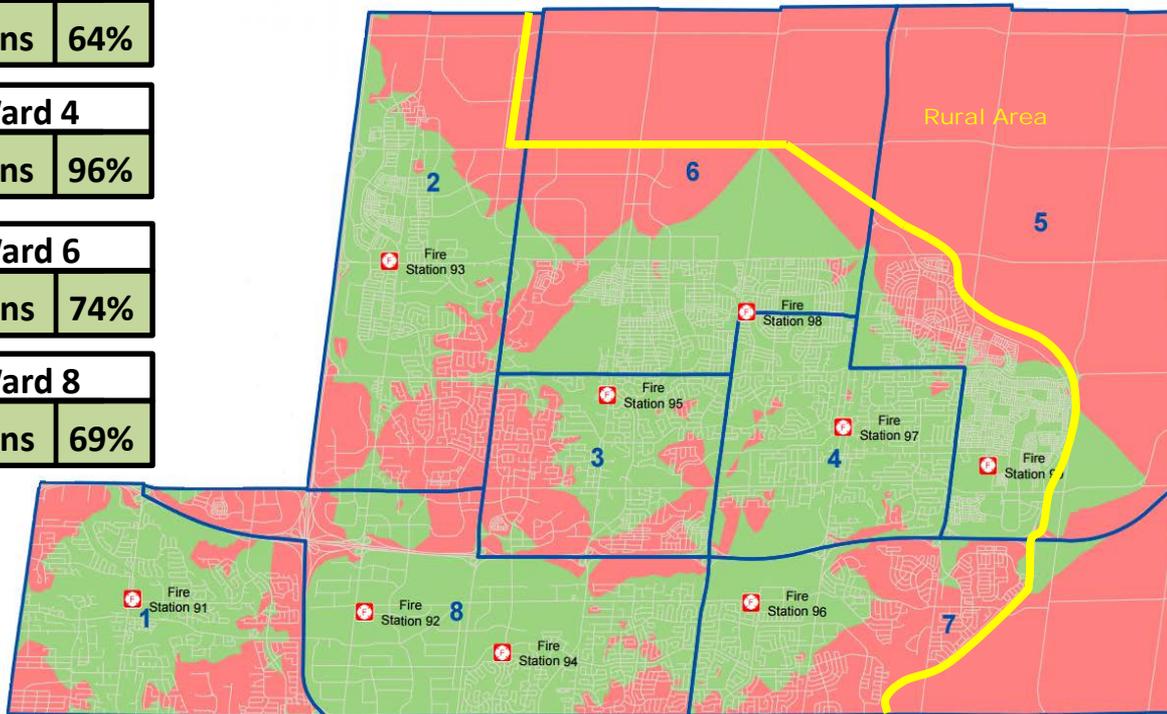
Ward 4	
4 mins	96%

Ward 5	
4 mins	57%

Ward 6	
4 mins	74%

Ward 7	
4 mins	39%

Ward 8	
4 mins	69%



GOAL
4 Firefighters
in 4 minutes
travel time
90% of the
time

Green Area
4 minute or less
response

Red Area
Greater than 4
minute response

Current 8 Minute Response

Ward 1	
8 mins	25%

Ward 2	
8 mins	46%

Ward 3	
8 mins	94%

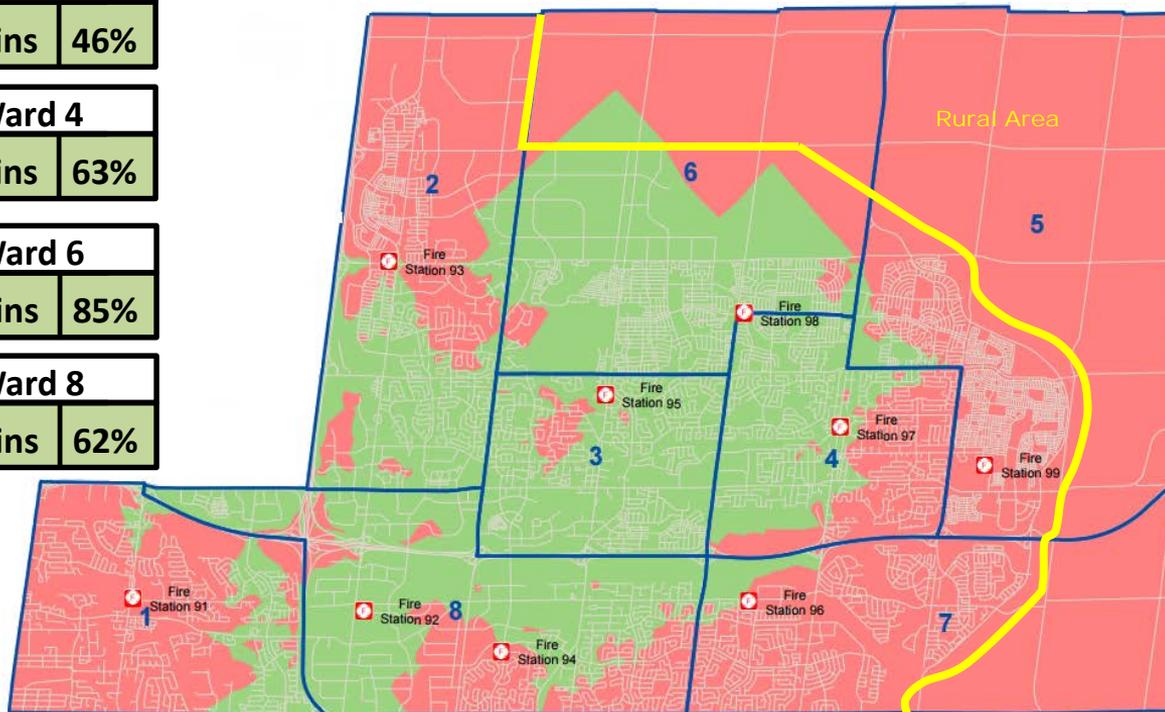
Ward 4	
8 mins	63%

Ward 5	
8 mins	5%

Ward 6	
8 mins	85%

Ward 7	
8 mins	6%

Ward 8	
8 mins	62%



GOAL

16 Firefighters
in 8 minutes
travel time
90% of the
time

Green Area

8 minute or less
response

Red Area

Greater than 8
minute response

NFPA 1710 Residential Fire

Initial 1st alarm to a reported fire in a typical 2000 ft², two-story single family dwelling without a basement and with no exposures ... recommendation is 16 firefighters.



Current Response

MFES: 16

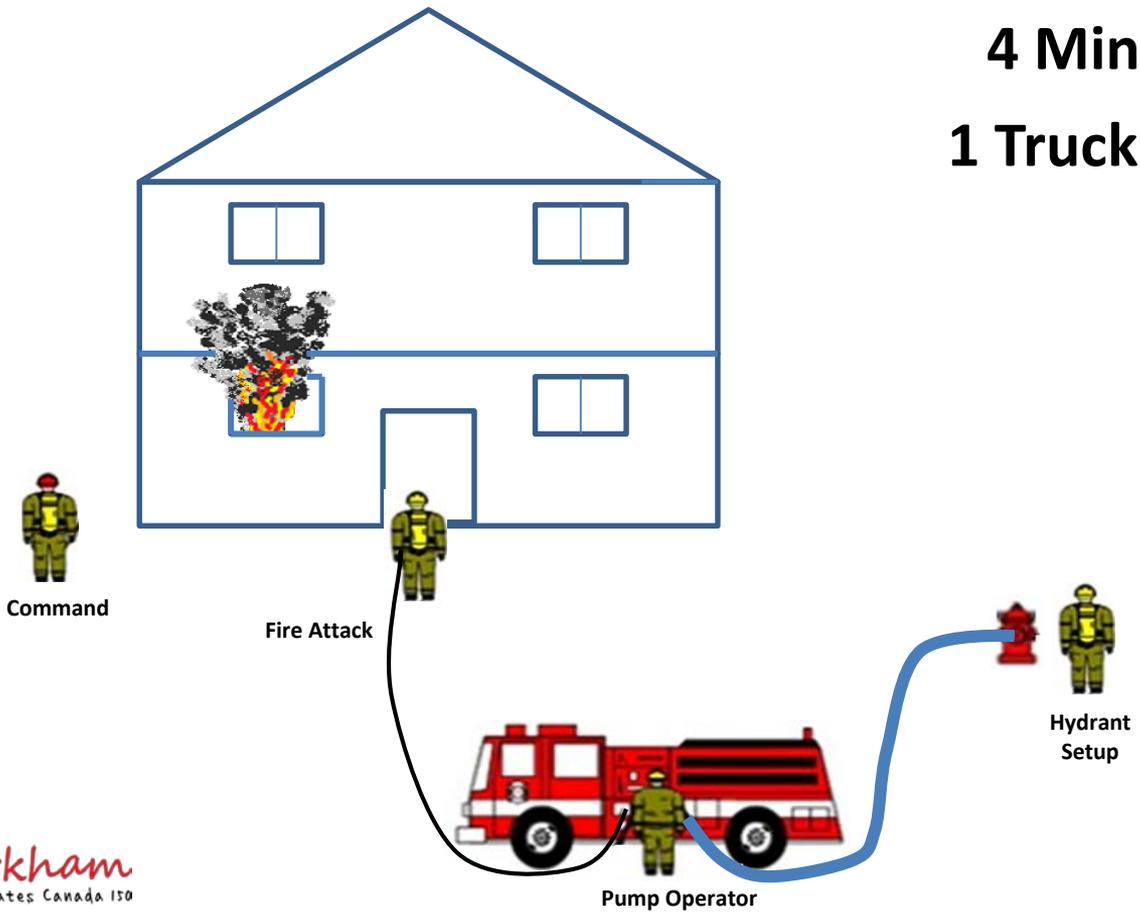
NFPA: 16



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4 Minute Response
1 Truck = 4 firefighters

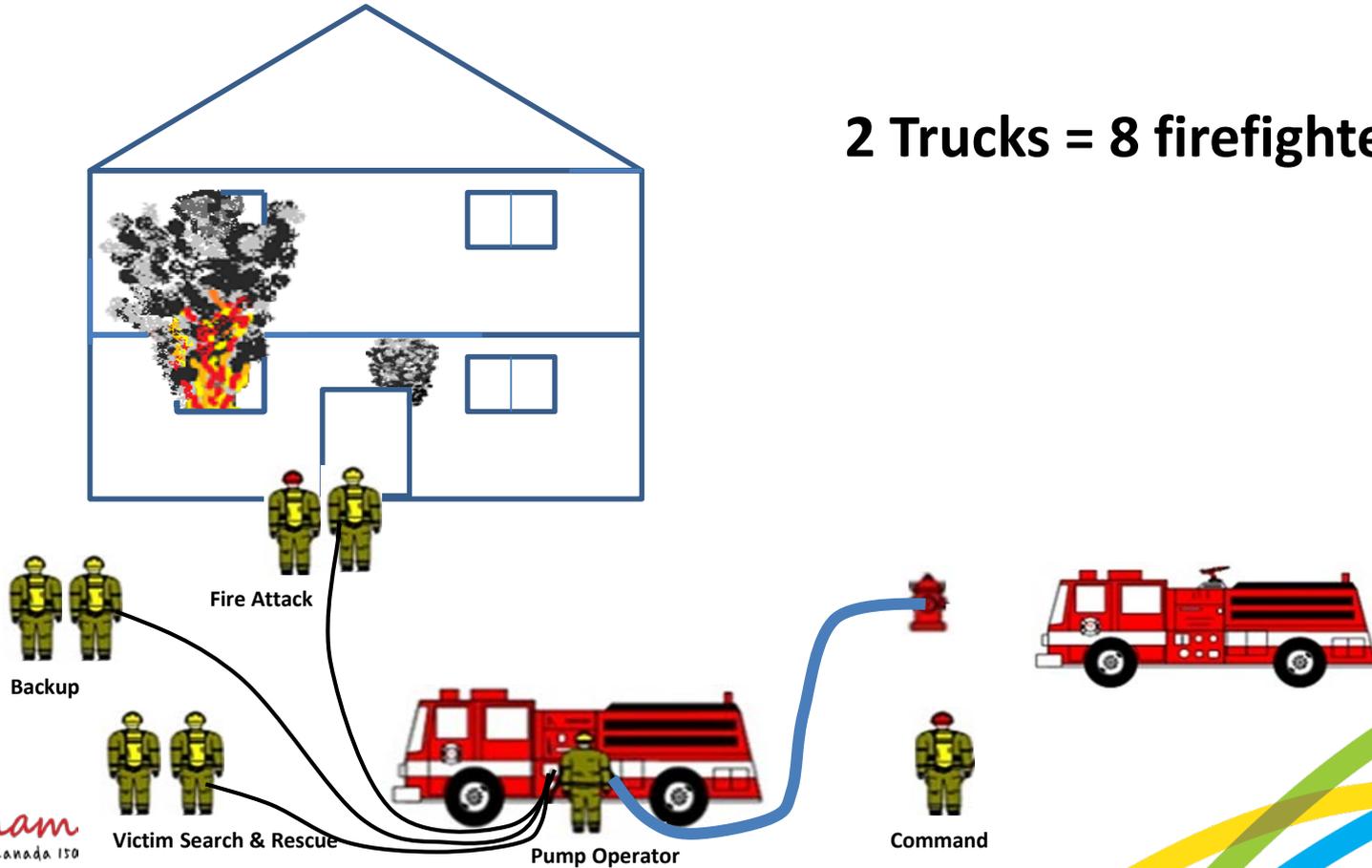




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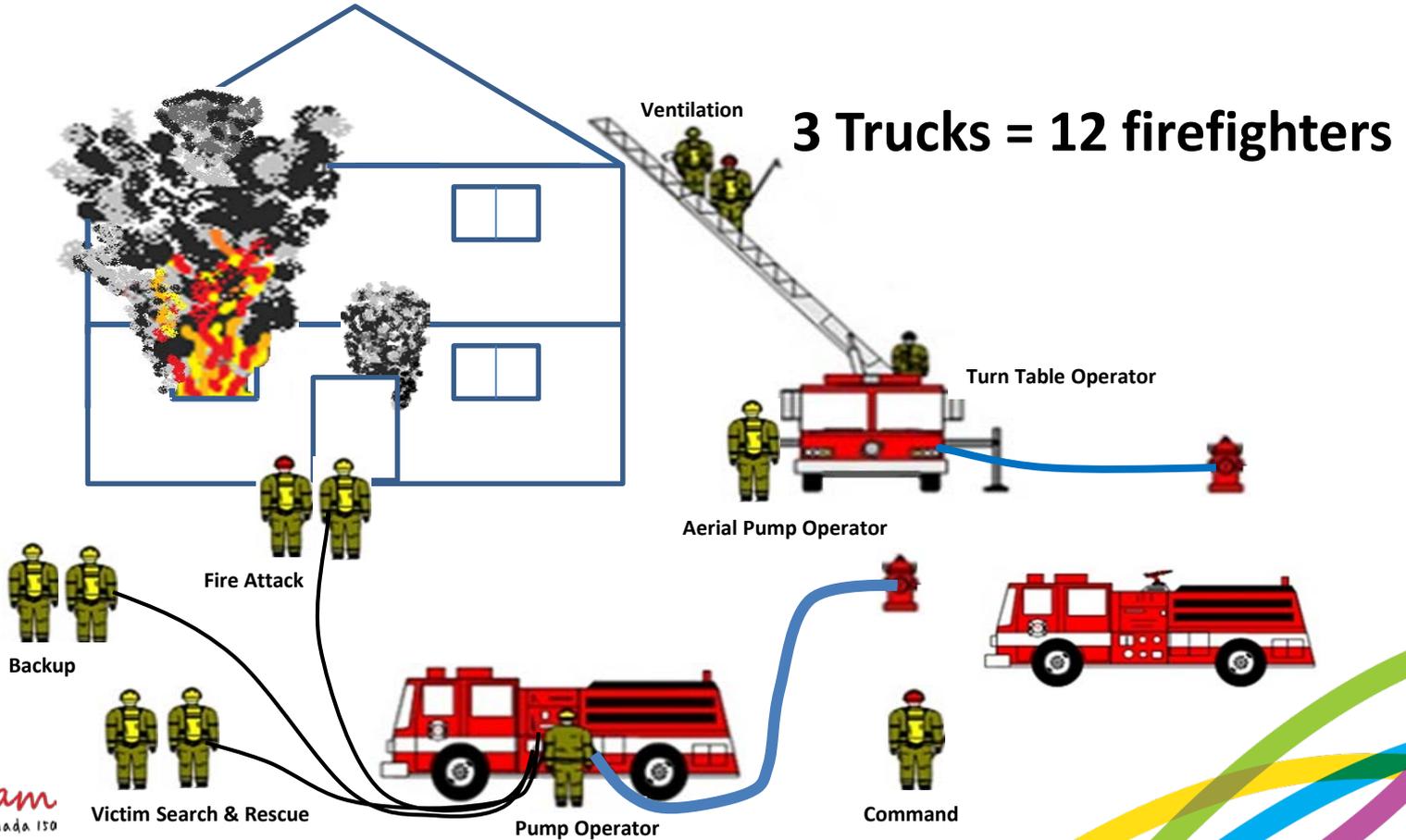


2 Trucks = 8 firefighters





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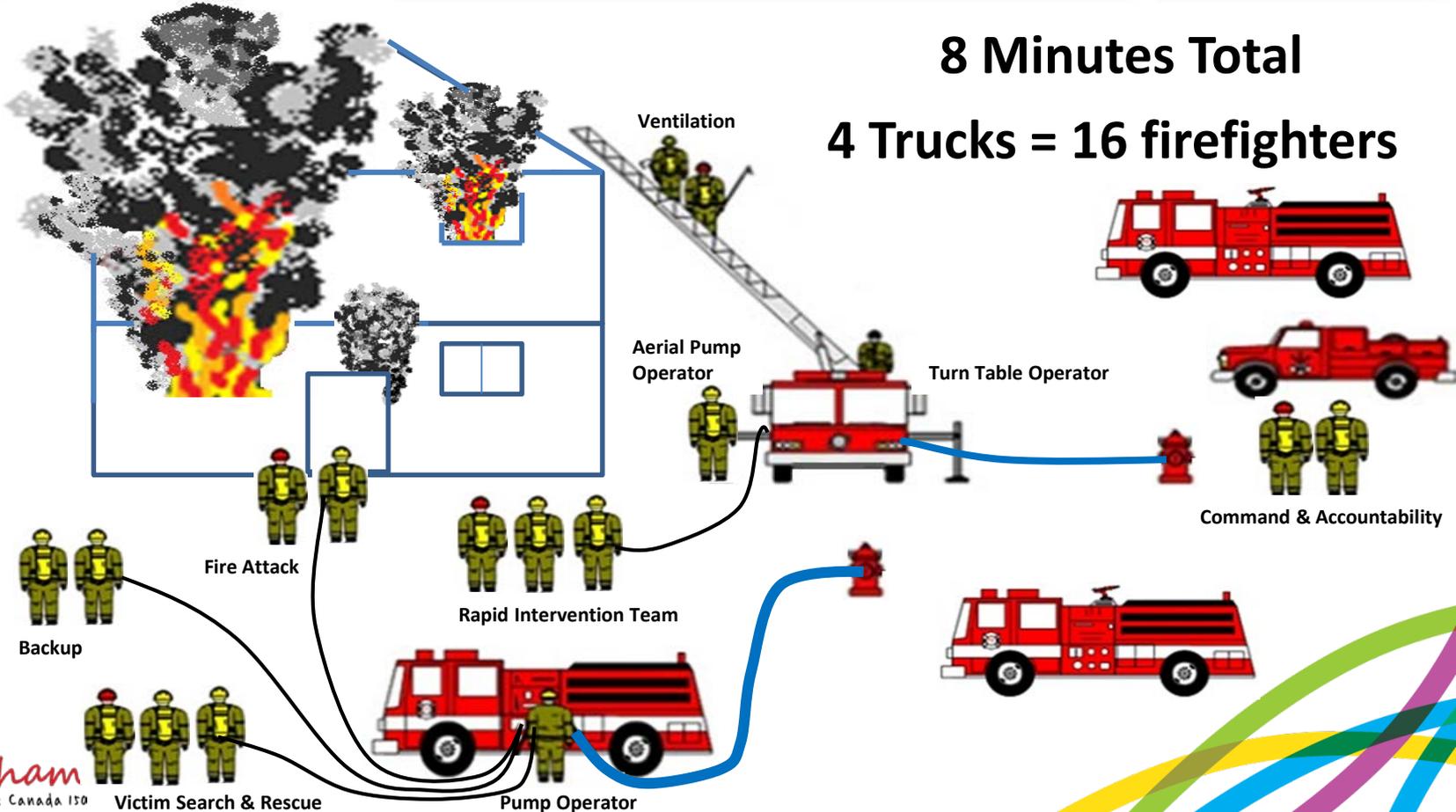


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8 Minutes Total

4 Trucks = 16 firefighters





Lauraview Fire - Ward 6



Hartwell Fire - Ward 2



Service Level Review

- 4 minute response deficiencies improve only as additional stations are built and staffed with a crew.
- 8 minute response deficiencies will only improve when additional crews are added to existing stations and when additional stations are built.
- Three most significant fire response deficiencies:
 1. Ward 5 Fire Response 5%
 2. Ward 7 Fire Response 6%
 3. Ward 1 Fire Response 25%

Cornell Second Crew Impact

8-Minute Response (16 Firefighters)

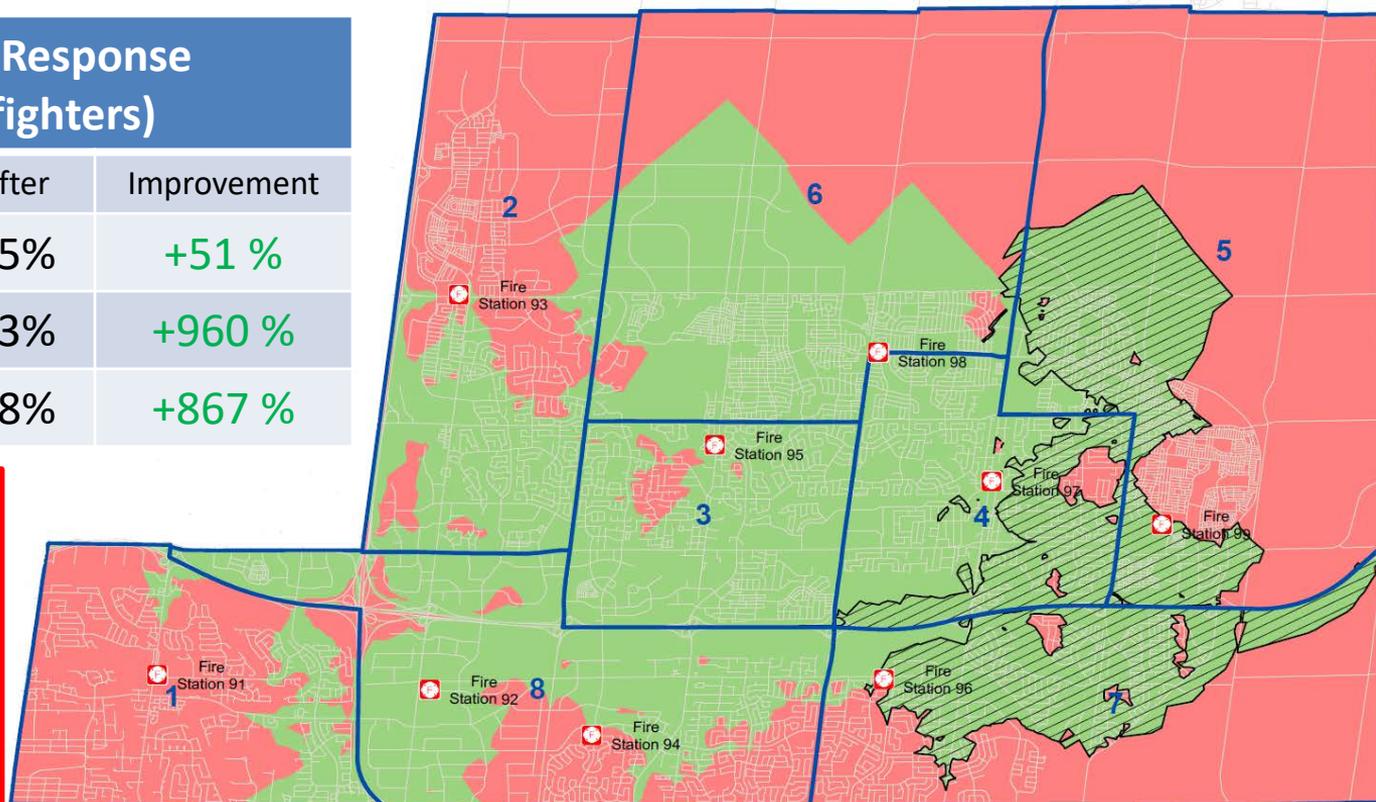
Ward	Existing	After	Improvement
4	63% → 95%		+51 %
5	5% → 53%		+960 %
7	6% → 58%		+867 %

Green Area

8 minute or less
response

Red Area

Greater than 8
minute response



Summary

The Master Fire Plan provides recommendations for future stations, apparatus and staff based on growth in an effort to achieve a consistent and equitable level of service with the minimum resources necessary to respond to a fire.

As Fire Chief it is my duty to report information and make recommendations that provide Council an opportunity to make informed decisions. Due to continued growth and taking into consideration the fire response deficiencies in Ward 5 and 7 and in order to work toward a consistent and equitable level of service for the residents I recommend that Council approve the recruitment of the 2nd crew for Station 99 Cornell.

I will provide a report to Council during the 2nd quarter of 2019 addressing the remaining deficiencies in fire response and a plan to provide a consistent level of service across the City including future requirements for stations and resources.



Questions

