

Fire Station Locations

Kawartha Lakes Fire Rescue Service

Core Service Review



Introduction

- Kawartha Lakes Fire Rescue has taken a performance management approach to review fire station locations
- The Master Fire Plan indicated station locations would be revisited in 2015
- The results of this study may be emotional, controversial and could result in stress and anxiety for both staff and the public

Previous and Ongoing Continuous Improvement Initiatives

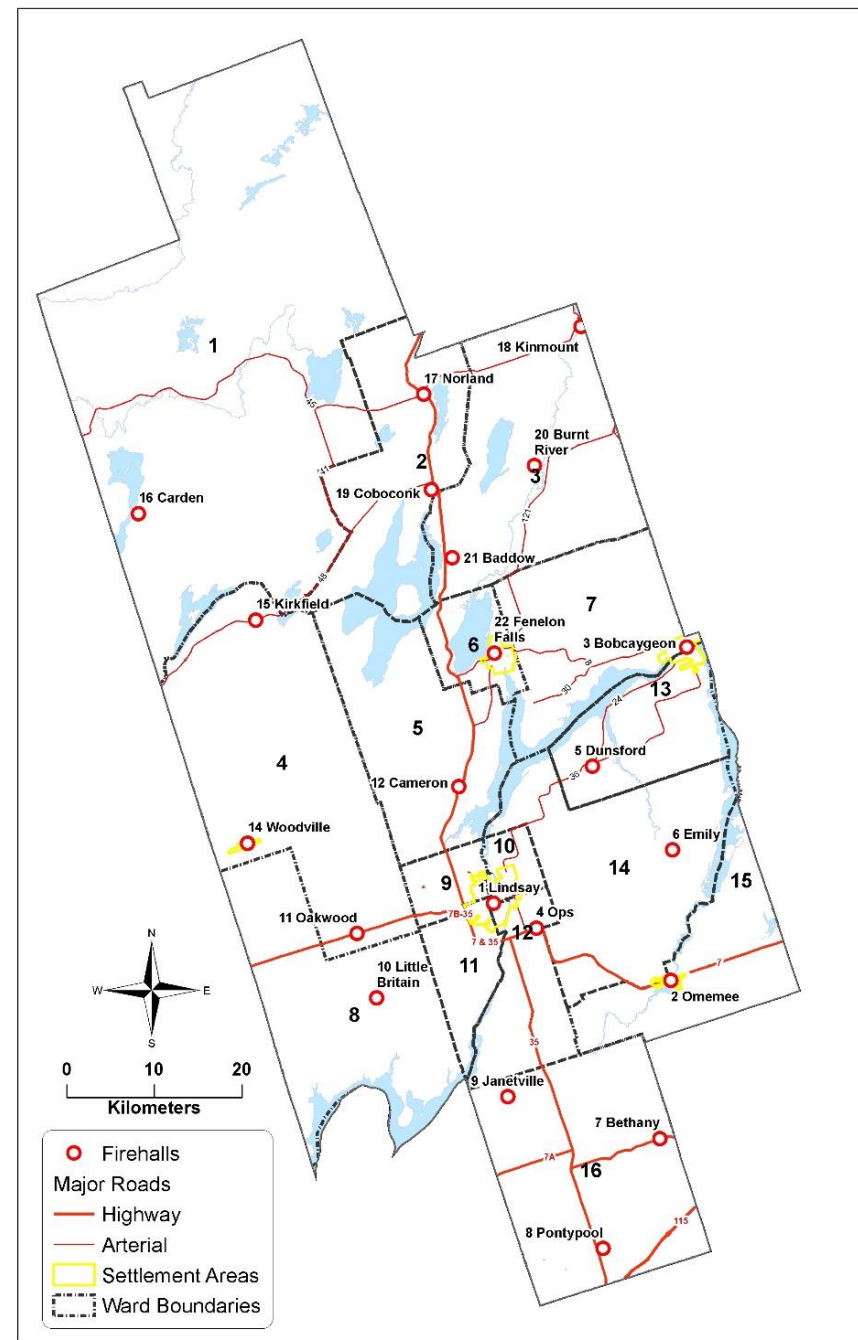
- The fleet size has been reduced by standardization resulting in \$9 million in cost avoidance
- Master Fire Plan (2009)
- Black Belt project was completed in 2013 reducing fire response to medical calls
- Core Service Review and Asset Management Plan will ensure the continuation of efficient, effective and sustainable Fire Services

The Team

- Fire Chief Mark Pankhurst
- Deputy Chief Pat Twohey
- Deputy Chief Ron Raymer
- Valerie Knights
- James Auld
- Richard Holy
- Brenda Stonehouse
- Marvin Rubenstein, ApexPro Consulting Inc.
- Wayne Gould, D. Wayne Gould Consulting Services

Existing Fire Suppression Services

- 21 fire stations
- Lindsay station is staffed with a maximum of 3 full-time firefighters 24/365.
- Bobcaygeon and Omemee stations are staffed with a maximum of 3 full-time firefighters on weekdays. Volunteers cover the balance.
- The remaining 18 stations are served by volunteer firefighters.



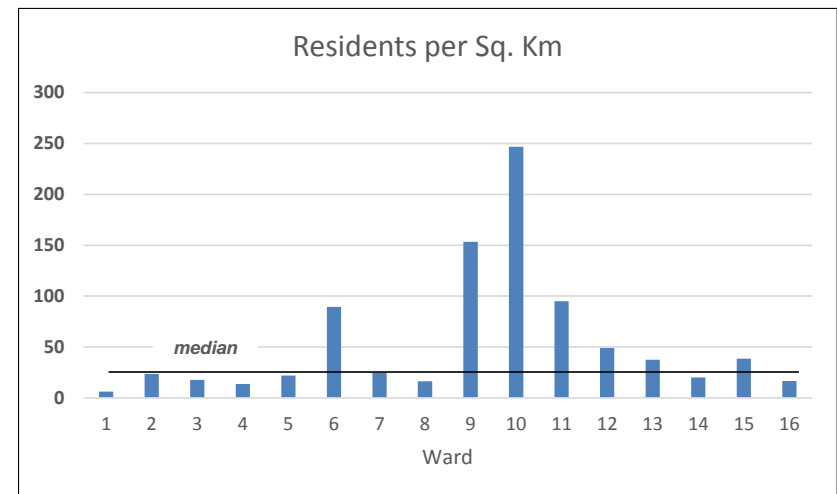
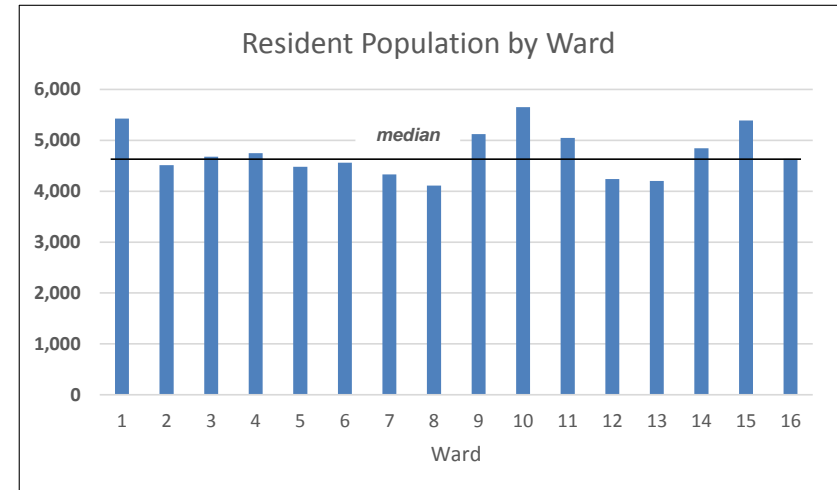
Existing Fire Suppression Services

Wards 3, 4 and 16 are each served by 3 fire stations (9 stations in total)

Ward 2 is served by 2 fire stations

Wards 9, 10, 11 and 12 are collectively served by 2 fire stations (Lindsay and Ops)

The remaining 8 wards are respectively served by 1 fire station each (8 stations in total)

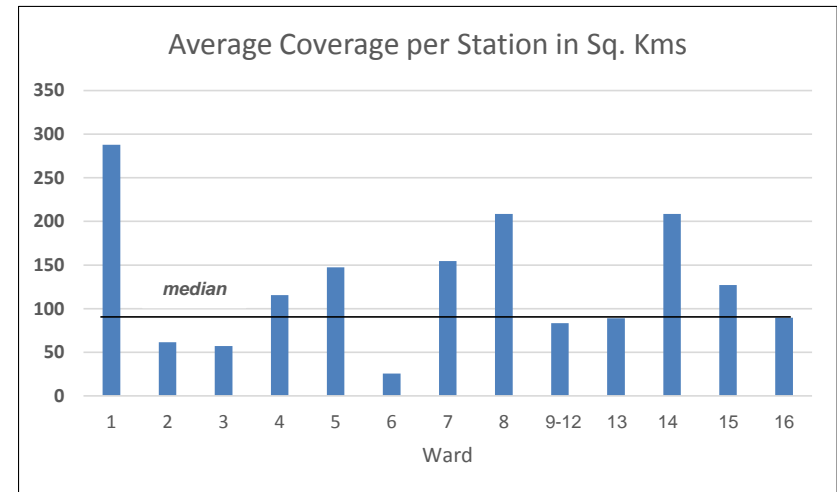
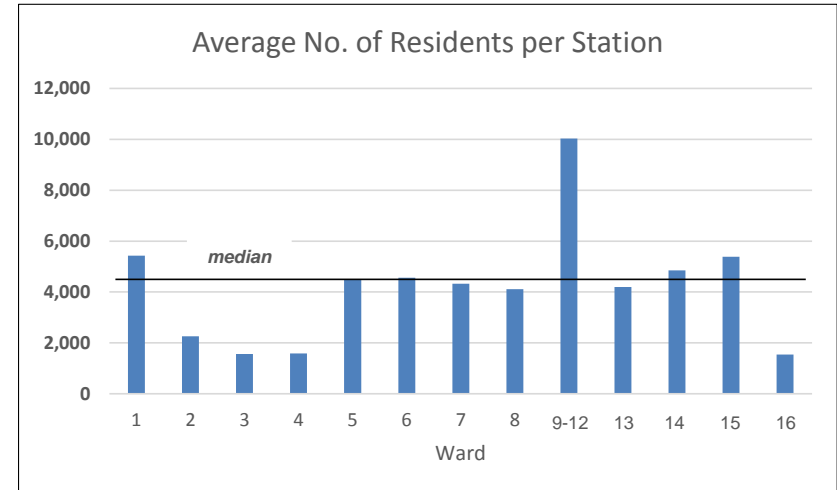


Existing Fire Suppression Services

Average no. of residents per station is derived from the ward population divided by the no. of local stations.

Average coverage per station is derived from the "net reachable area" divided by the no. of local stations.

Net reachable area was estimated by discounting inaccessible areas (i.e., lakes, rivers and major parks) from each ward's total sq. kms.



Industry Guidelines for Effective Fire Response

NFPA 1720

Applies to KLFRS where over 85 percent of the department membership are volunteer emergency services personnel

500-1,000 persons per 2.6 sq. Km

- Minimum of 10 FF's within 10 minutes 80% of the time
 - *Applies to Lindsay*

Less Than 500 persons per 2.6 sq. Km

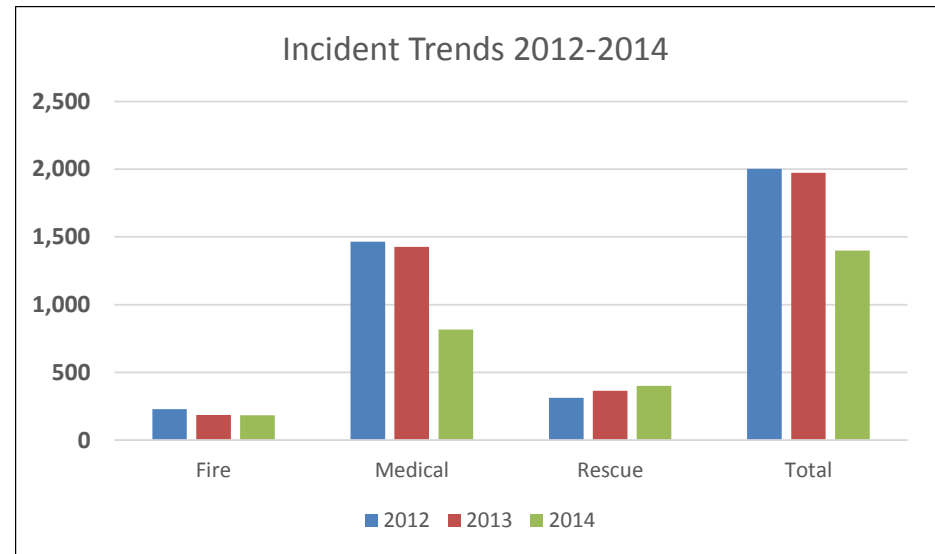
- Minimum of 6 FF's within 14 minutes 80% of the time
 - *Applies to other KL settlement areas*

Where travel distance exceeds 20 Km

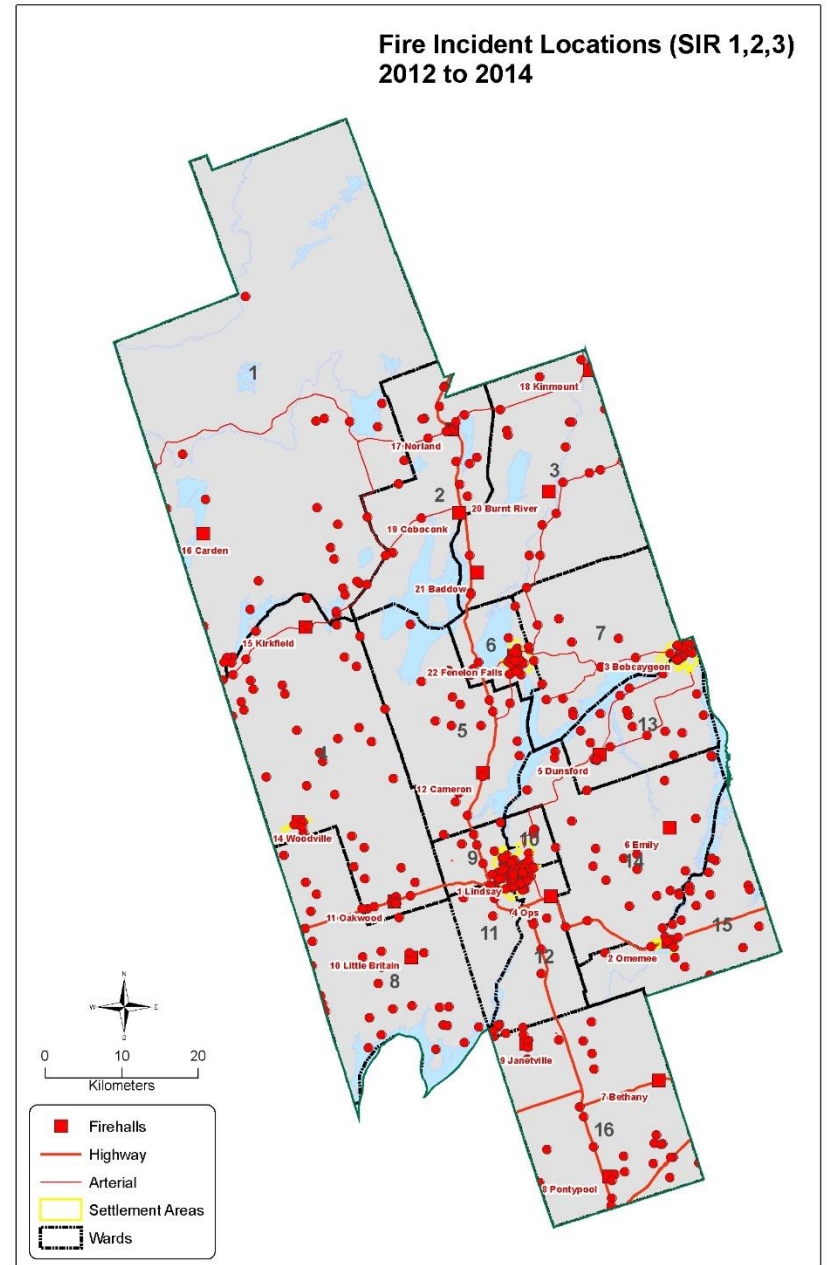
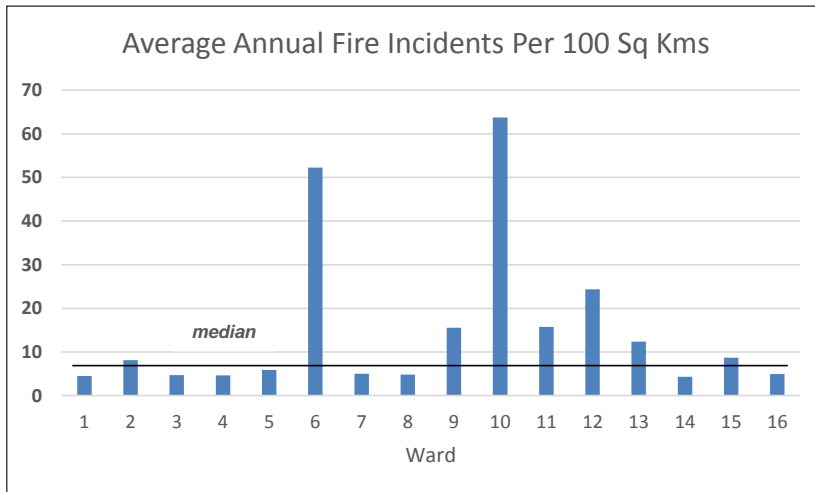
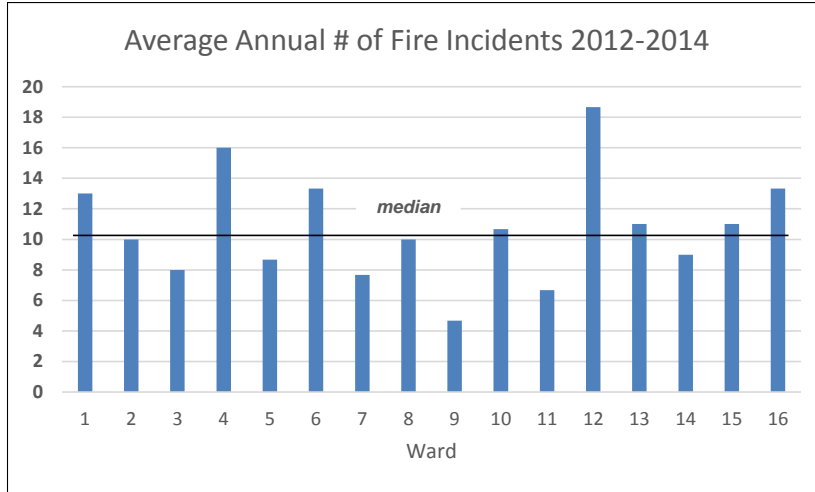
- Response time is directly dependent on travel distance. Minimum of 4 FF's 90% of the time.
 - *Applies to remote areas of the City*

Incident Trends

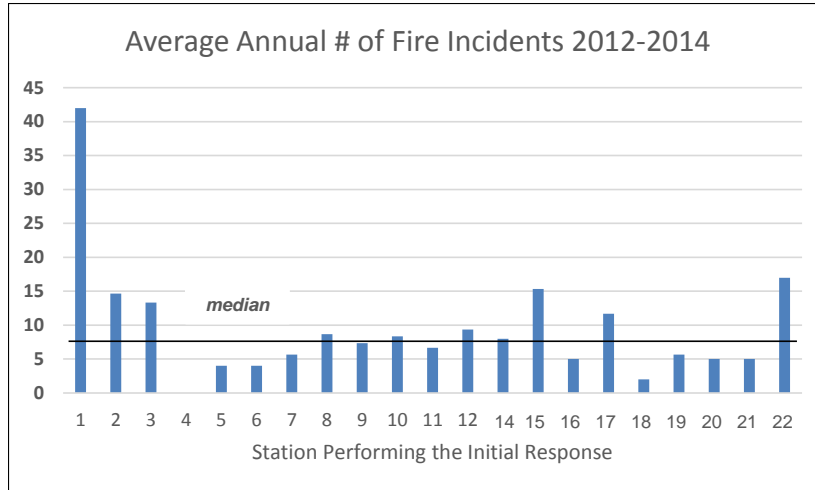
- Total of approximately 2500 incidents a year
- Fire, medical & rescue incidents account for about 1400 of the total
 - 13% fire
 - 58% medical
 - 29% rescue
- Changes in the tiered response agreement with Paramedic Service is resulting in fewer medical responses



Fire Incidents by Ward



Fire Incidents by Station

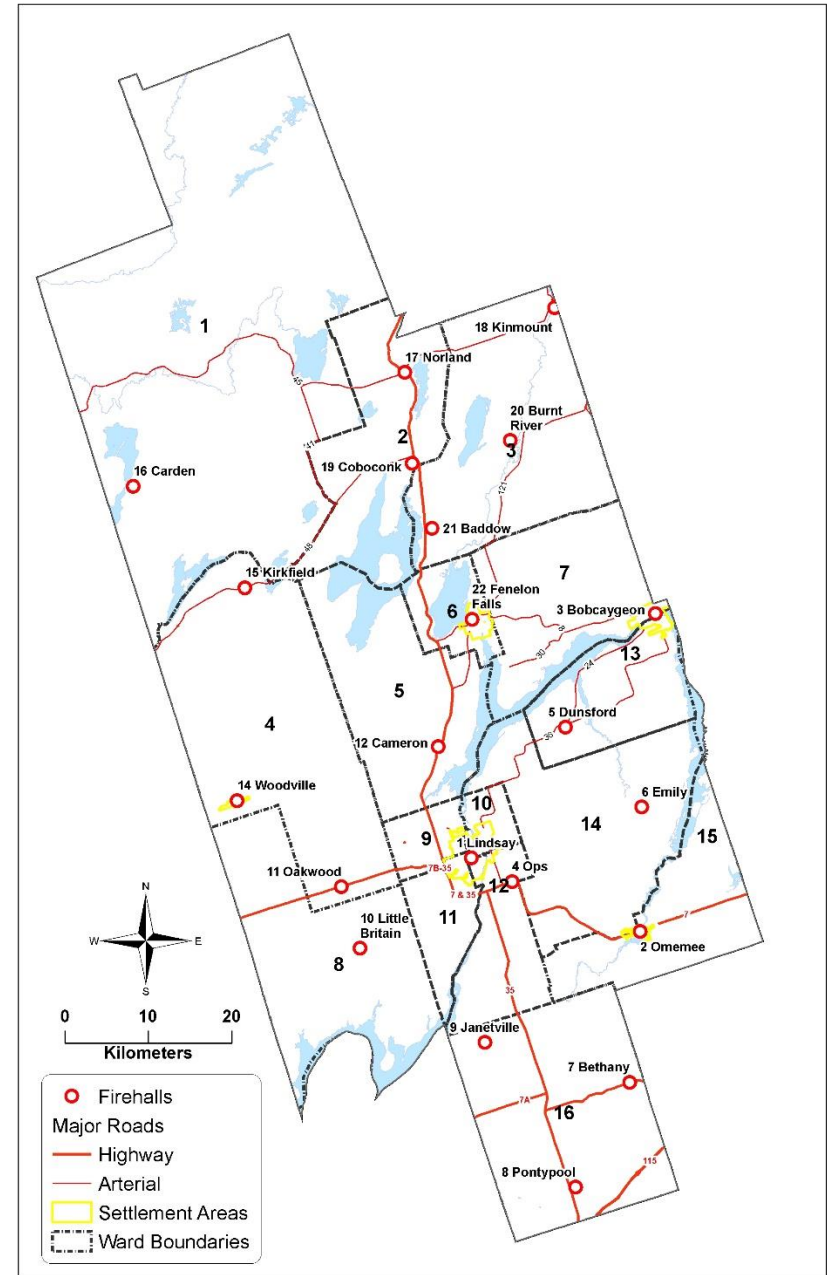


The following is intended to address the absence of an assigned value to the Ops Station (#4).

For record keeping, the practice is to assign incidents to the station that performs the initial response. Since the Ops Station is not an initial response station there is no assigned value.

This notwithstanding, in conformance with standard practices to deploy 3 stations to a fire incident, the Ops station responds to numerous fire incidents as a 2nd-in resource (typically in support of Lindsay Station #1).

In addition the Ops station provides heavy rescue and hazmat response services.



Time to Initial Response

- A mapping simulation based on the existing 21 fire stations assuming 4 minute turnout and travel at the posted network speed results show 78% of the City's geographic area is within a potential initial response of 15 minutes
- For Lindsay over 80% is within a potential initial response of 10 minutes

Observations

- Fire coverage in Wards 3, 4 and 16 appears to be disproportionate to the municipality as a whole
- Collectively house 19% of the population and cover 27% of the total area yet are served by 43% of the fire stations (9 of 21)
- Coverage averages 99 sq kms per station
 - average area coverage in the other wards is 2 times higher

Options

1. Status Quo

2. Transition from inherited model of 21 stations to an efficient and effective Fire Service response strategy.

- Reorganize to 19 stations through a phased approach.

Option 1 - Description

- Continue with 21 fire stations where they are currently located

Option 1 - Benefits

- No change in service

Option 1 - Risks

- Many buildings need significant improvements or replacement
- Costs will continue to increase for equipment and staffing

Option 2 – Transition to 19 stations

- Transition to 2 stations in Ward 3 (Kinmount, Baddow, Burnt River)
- Transition to 2 stations in Ward 4 (Kirkfield, Woodville, Oakwood)
- Change the scope of Project FS1408 Bethany Firehall Replacement to a single truck station

Ward 3

- Consolidate Baddow with Fenelon Falls and Coboconk
- The ward would be served by Kinmount and Burnt River
- Burnt River, Coboconk and Fenelon Falls would cover the Baddow responses

Ward 3

- Existing pumper/rescue & tanker could be surplus or redeployed
- Capital cost avoidance for trucks approximately \$500,000
- Future building repair capital cost avoidance \$89,672
- Baddow volunteers may choose to redeploy or transfer to Burnt River, Fenelon Falls or Coboconk

Ward 4

- Transition to 2 stations by consolidating Oakwood and Little Britain stations in a new location
- New station constructed in a location beneficial to both areas preferably mid way between Oakwood and Little Britain

Ward 4

- Capital cost avoidance for one truck is approximately \$500,000
- Future building repair capital cost avoidance \$376,444

Ward 16

- Project FS1408 Bethany Firehall Replacement was put on hold in 2015 pending the results of the station location study.
- It is recommended that the project go forward in 2016 however scaled back to a single truck station.
- Closing Bethany station is not recommended as it would result in a drop from 94% coverage within 15 minutes in Ward 16 to 76% coverage which falls short of NFPA 1720.

Ward 16

- Cost avoidance for trucks is approximately \$500,000
- Cost avoidance for the building is approximately \$500,000 to \$750,000

Future Capital Repair Costs

Station	5 Year	10 Year	Total
Baddow	38,672	51,000	89,672
Little Britain	105,216	98,500	203,716
Oakwood	103,816	68,912	172,728
Bethany	93,996	73,380	167,376

Building Operating Costs (2013 and 2014 average)

Station	
Baddow	\$7,393
Little Britain	\$10,252
Oakwood	\$18,691
Bethany	\$14,176

Option 2 Total Cost Avoidance – Capital and Operating

Future Building Capital Repair Costs	Annual Building Operating Costs	Future Truck Capital Avoidance	Future Building Replacement Cost Avoidance
633,492	24,000	1,500,000	500,000 to 750,000

Total operating savings and cost avoidance for implementing Option 2

\$2,907,492

Other Financial Considerations

- Potential real estate value of surplus property and buildings
- Development Charges

Option 2 - Benefits

- Opportunity to reorganize the inherited Fire Service model to provide long term sustainability and affordability
- Continue to meet industry response time standard of NFPA1720 for most areas of the City with the exception of remote areas of the community where travel distance is greater than 20 Kms from a fire station and/or the road system or geography make these areas inaccessible
- Apparatus will be surplus and/or reassigned
- Reduction in operating and future capital costs

Option 2 - Risks

- Response times may increase slightly in some areas however they would still be within industry standard of NFPA1720
- In Ward 3 there would be approximately a 2% reduction in the number of residences that will not qualify for a discount from their insurance company as they would be greater than 8km from a fire station
- In Ward 4 and 8 there would be approximately 2.8% reduction in the number of residences that will not qualify for a discount from their insurance company as they would be greater than 8km from a fire station
- A realignment of the fire response zones will be necessary
- Volunteers may not be willing to redeploy to another station
- Staff and Public perception – sense of community and ownership

Future Considerations

- Possible transition to 1 station in Ward 2 by consolidating Norland and Coboconk stations in a new location
- Possible transition to one station in Wards 13/14 by consolidating Dunsford and Emily

Next Steps

- Consultation with the public
- Explore facility/complex multi use opportunities (big picture)
- Report to Council for decisions later this year date TBD

Questions?