

2016-2030 KFD STRATEGIC PLAN



An evidence based, flexible & dynamic approach for
the City of Kelowna's Fire Service

Kelowna
Fire Department



PURPOSE OF PRESENTATION

- ▶ Provide an overview of the KFD Strategic Plan including:
 - ▶ Vision, Mission and Strategic Goals
 - ▶ Analysis and Assessment Factors
 - ▶ Innovations & Enhancements
 - ▶ Support for service delivery option & recommendations

PRESENTATION OUTLINE

- ▶ Why a KFD Strategic Plan?
 - ▶ Strategic Framework/Goals
 - ▶ Methodology & Process
- ▶ Options
- ▶ Innovations & Enhancements
- ▶ Summary of Recommendations & Costs

WHY A KFD STRATEGIC PLAN?

▶ Vision

- ▶ To be the best mid-sized Fire Service in North America

▶ Values

- ▶ BEST: Balance, Excellence, Service & Teamwork

▶ Mission

- ▶ Leading the Development of a Safe, Vibrant & Sustainable Fire Service

WHY A KFD STRATEGIC PLAN?

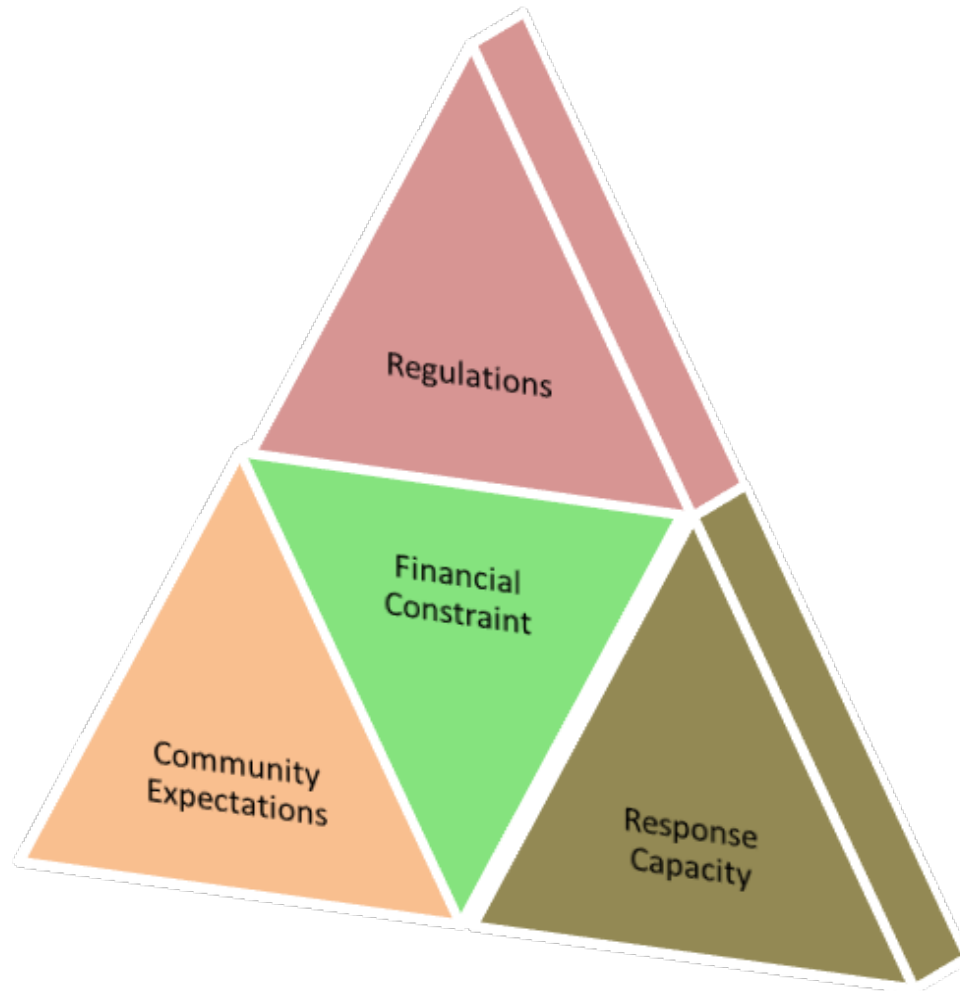
▶ Strategic Goals

- ▶ Risk Based levels of service
- ▶ Innovative and Non-traditional
- ▶ Realistic and achievable performance targets
- ▶ Alignment with Corporate goals and objectives
- ▶ Accountability measures
- ▶ Implementation based upon priorities

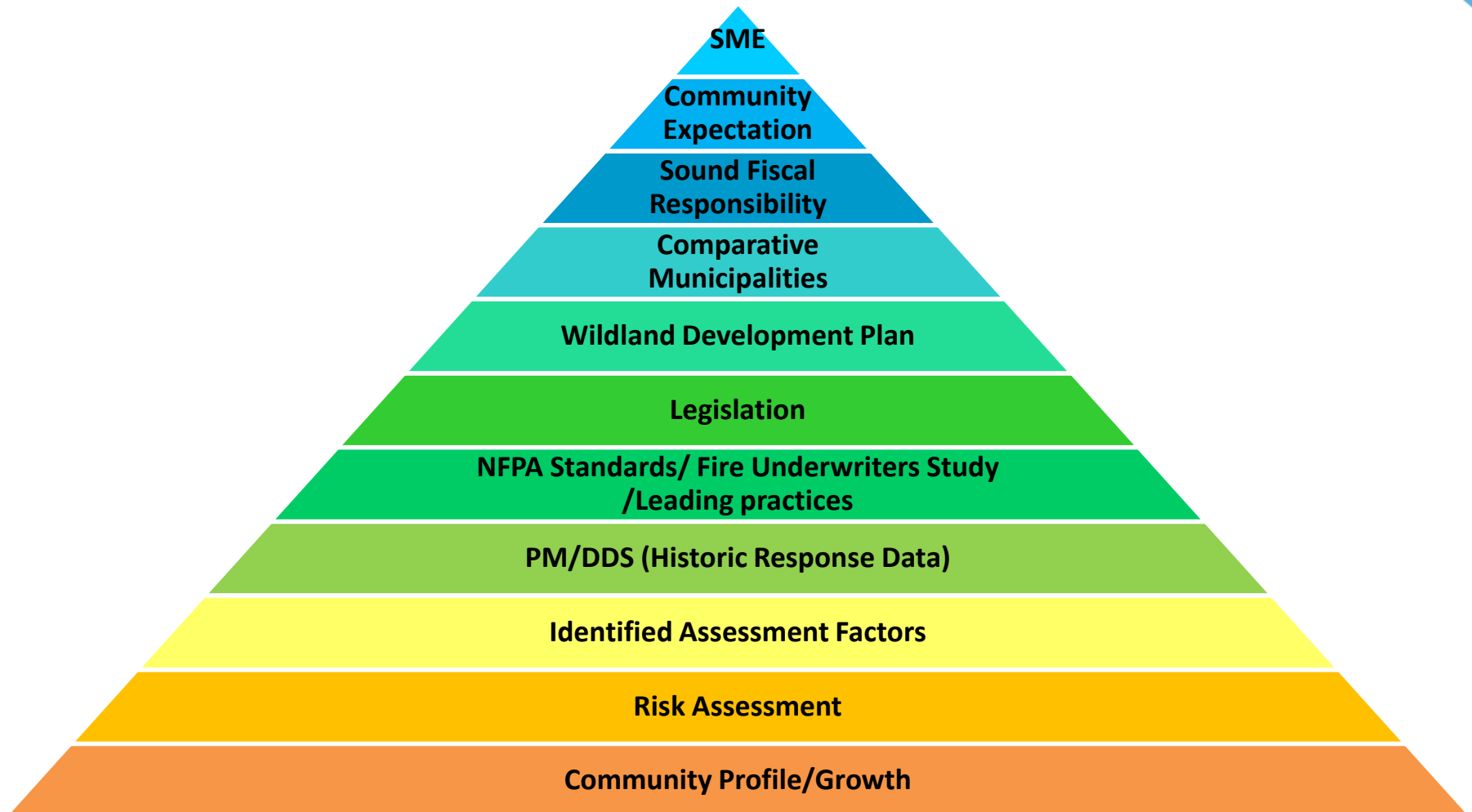
OVERVIEW: WHY A KFD STRATEGIC PLAN?

- ▶ Comprehensive analysis: all KFD Services
- ▶ Guide KFD & City of Kelowna in Service Delivery
- ▶ Focus on Outputs & Emergency Response
- ▶ Emphasis: Scientific Analysis & Evidence Based Decisions

METHODOLOGY & PROCESS



METHODOLOGY & PROCESS CON'T



PREDICTIVE MODELING DYNAMIC DEPLOYMENT SYSTEM (PM/DDS)

- ▶ Risk tolerance decisions: historical data and other related factors
- ▶ Geographical Response
- ▶ Dynamic Deployment
- ▶ Risk Based Response

SUMMARY OF ASSESSMENT FACTORS

- ▶ Emergency response performance targets will be evidence based data with consideration for:
 - ▶ City Footprint
 - ▶ Residential Construction types
 - ▶ Interface Risks
 - ▶ Rate of Growth & Demographics
 - ▶ Industrial & Commercial Activities
 - ▶ Transportation & Traffic
 - ▶ Water Flows

SUMMARY OF ASSESSMENT FACTORS CON'T

- ▶ Geographic Coverage, risk based responses & dynamic deployments
- ▶ Evidence based data
- ▶ Provincial standards & legislation
- ▶ Service Effectiveness

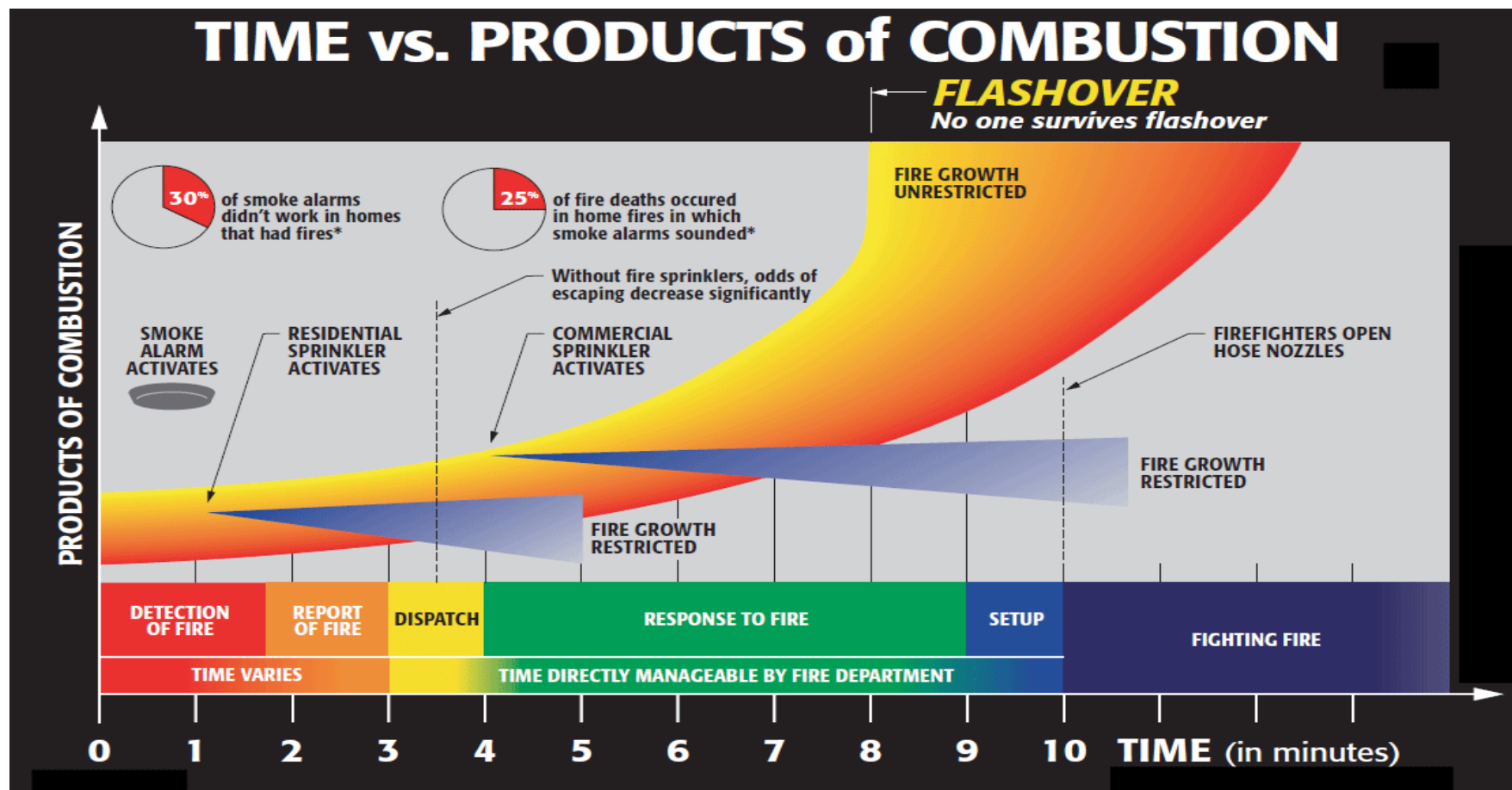
SUMMARY OF ASSESSMENT FACTORS CON'T

- ▶ Comparative Communities
- ▶ Distribution and Concentration
 - ▶ Last Career Station built 1975
- ▶ Realistic Response Targets (Financial, Risk & Safety)
- ▶ Training Standards
- ▶ Role of Paid On Call (POC)

CURRENT SYSTEM

- ▶ Staff
 - ▶ 122 Career (96 Firefighters)
 - ▶ 45 POCs
- ▶ Minimum Duty Strength
 - ▶ Career: 19 Firefighters & 2 Dispatchers
- ▶ 7 Fire Stations (4 Career, 3 POCs)
- ▶ Engines (4 Firefighters)
- ▶ Effective Response Force
 - ▶ 16 Firefighters - Single Family Residential
- ▶ Alarm Assignment & Critical Tasks

INDUSTRY BENCHMARKS



COMMUNITY COMPARATIVE ANALYSIS

City	Population	Area (sq.km.)	Career FF/ population	Call Volume	Stations Career/ POC	Firefighters Career/ POCs	Busiest Response Zone
Kelowna	124,000	214	1:1292	9,560	4/3	96/45	3165
Delta	100,000	184	1:621	6,027	6/0	161/0	1819
Kamloops	99,000	311	1:952	7,349	5/2	104/40	2820
Prince George	78,000	318	1:750	5,495	4/0	104/0	2907
Saanich	111,000	103	1:1133	4,171	3/0	98/0	1612
Nanaimo	100,500	88	1:1241	7,067	4/1	81/51	1828
Abbotsford	138,000	370	1:1683	6,227	4/4	82/106	2080
Coquitlam	140,000	140	1:864	6,169	4/0	162/12	2664

RESPONSE TIME COMPARATIVE ANALYSIS

Community	Fire: minutes 90%
Kelowna	9:31 inside PGB 14:30 outside PGB
Coquitlam	6:00
Nanaimo	5:00 (note:83%)
Kamloops	7:00 (Rural 14:00 in 80%)
Abbotsford	5:00 (11:00 POC 80%)
Saanich	8:00 (80%)
New Westminster	5:00
Richmond	7:28
Langley	8:00
Delta	5:20 (NFPA)

SERVICE AREA GAPS

▶ Inside PGB:

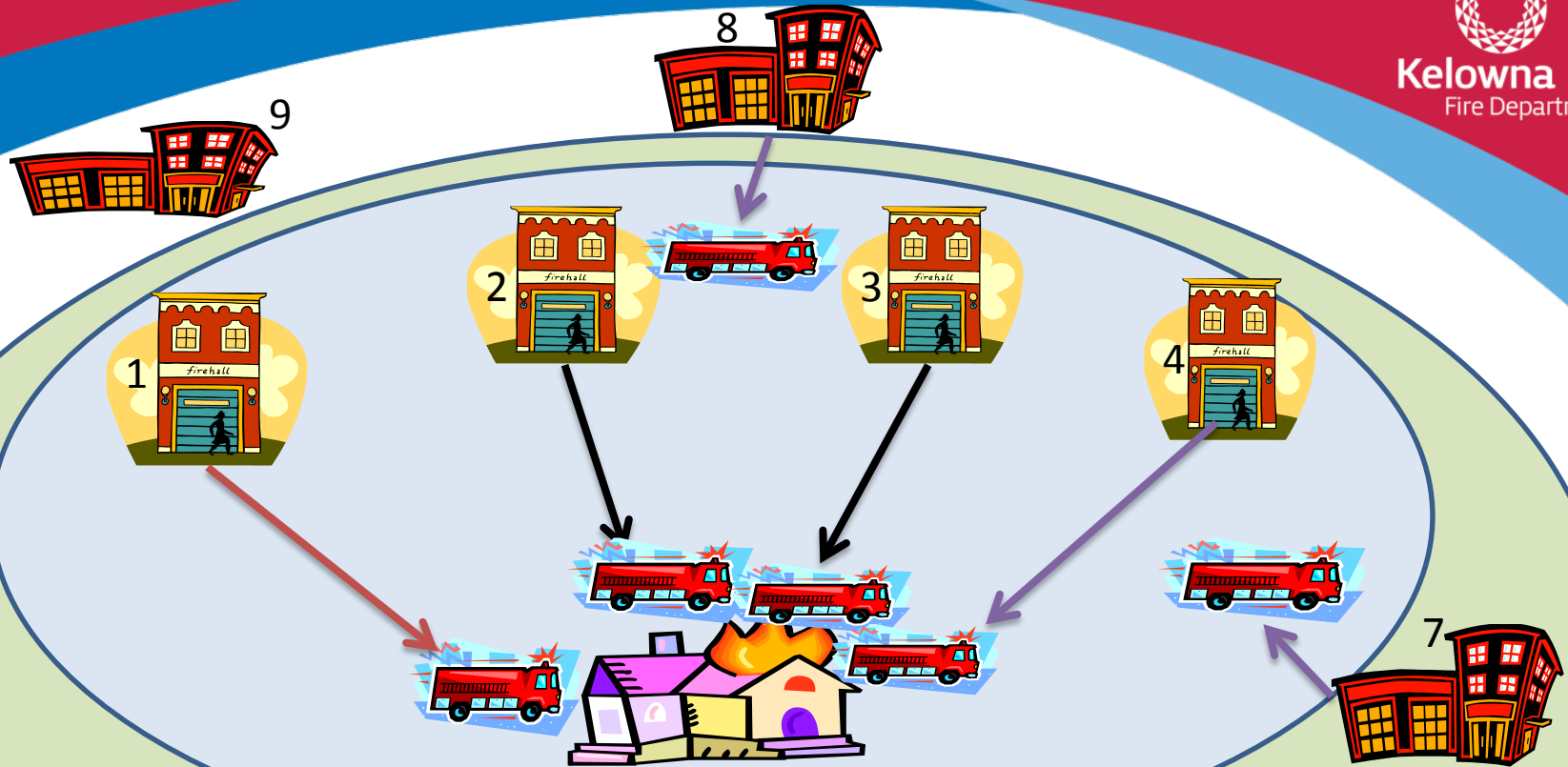
- ▶ Glenmore/UBCO/YLW area
- ▶ Lakeshore/Pandosy/Gordon for call volume or risk

▶ Outside PGB:

- ▶ McKinley
- ▶ North Glenmore
- ▶ Lake Country (contracted area)

RESPONSE STATISTICS

- ▶ 5 year average: 9676 per year
- ▶ Permanent Growth Boundary (PGB) is 93% total calls
- ▶ 5 year average dollar loss \$11.9 million
 - ▶ Highest is multi-family at \$5.7 million
 - ▶ Single family homes, vehicles and outdoor at \$2.38 million



4 career firefighters & safety officer recalled

POC recalled, Duty Chief, Off Duty PC, 15
career firefighters, mechanic, 3rd dispatcher

Permanent Growth Boundary



Rural Areas

OPTIONS

- ▶ Phased in Staffing of Station 5 - Convergent Support Model
- ▶ Status Quo - Traditional Centralized Support Model

PHASED IN STAFFING OF STATION 5 - CONVERGENT SUPPORT MODEL

- ▶ **Response Capacity:** Incrementally move towards 5 career Stations, 5 Engine companies, mobile Rescue unit of 2 Firefighters in 2019, and 3 POC Stations
 - ▶ Renovate Station 8: Coverage in 2017
 - ▶ Advantages
 - ▶ Enhanced performance targets, PM/DDS
 - ▶ Cost reductions/offsets
 - ▶ Dynamic and risk based deployments
 - ▶ Disadvantages
 - ▶ Cost increases

STATUS QUO: Traditional Centralized Support Model

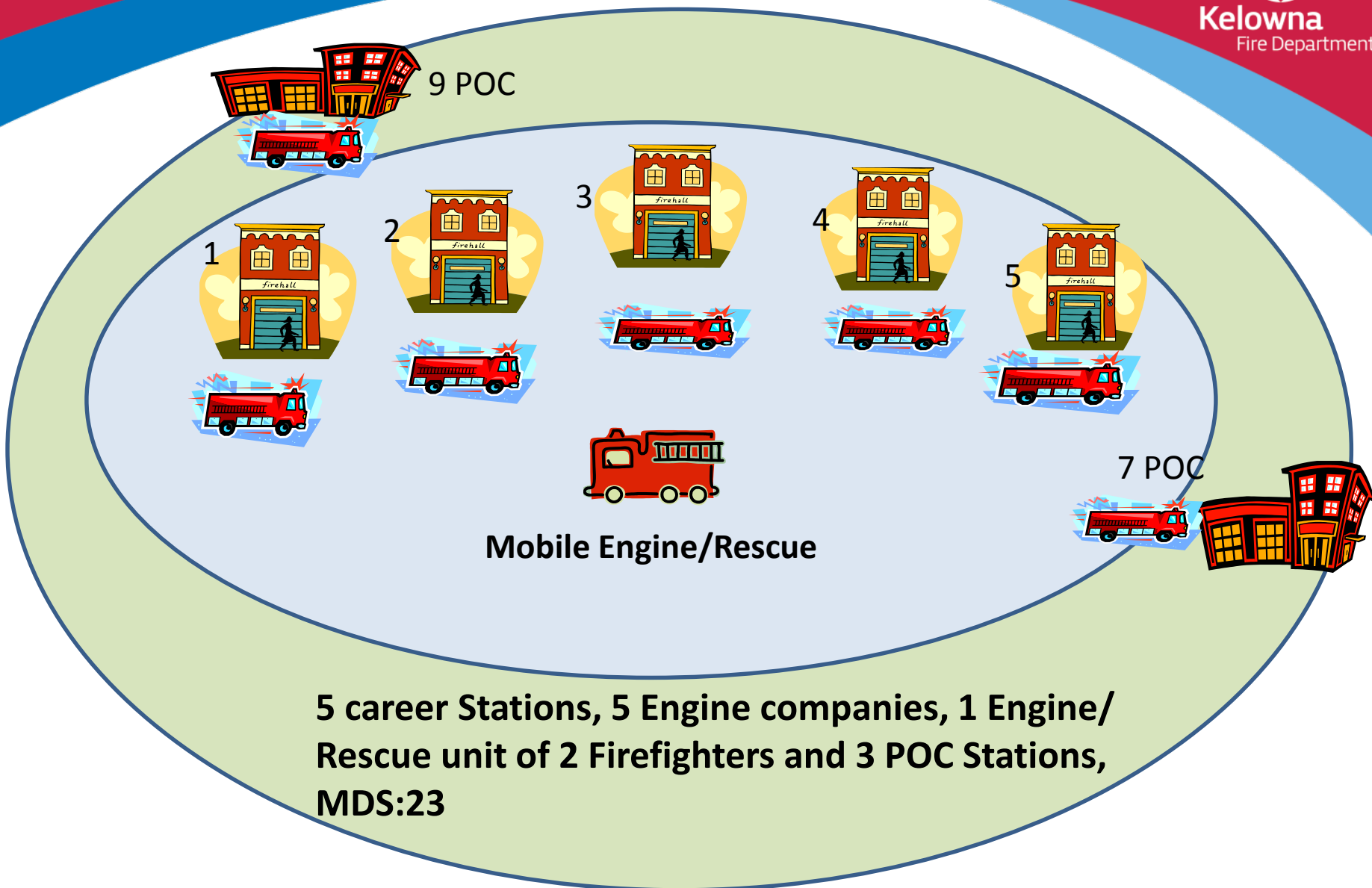
- ▶ **Response Capacity:** 4 Career Stations, 4 Engine Companies, and Rescue unit of 2 Firefighters and 3 POC stations
 - ▶ **Advantages:**
 - ▶ Cost containment
 - ▶ Dynamic Deployment/Risk Response
 - ▶ POCs critical support resource
 - ▶ **Disadvantages:**
 - ▶ Service Gaps
 - ▶ Traditional service delivery system
 - ▶ Degradation in service delivery

STAFFING OPTIONS

Staffing Options	2017	2018	2019	2020	Comments
Option A	12		8	New Station 5 completed	<p>Addresses geographic and risk coverage in Glenmore/UBC/YLW area.</p> <p>The ability of Station 1 to mobilize the 2 Firefighter Rescue unit for risk and dynamic deployments particularly in the KLO/Gordon/Pandosy areas is delayed until 2019</p>
Option B	8	4	8	New Station 5 completed	<p>Provides partial geographic coverage and risk in Glenmore/UBC/YLW area. May require increased overtime or reduced service levels depending upon available staffing.</p> <p>The ability of Station 1 to mobilize the 2 Firefighter Rescue unit for risk and dynamic deployments particularly in the KLO/Gordon/Pandosy areas is delayed until 2019</p>

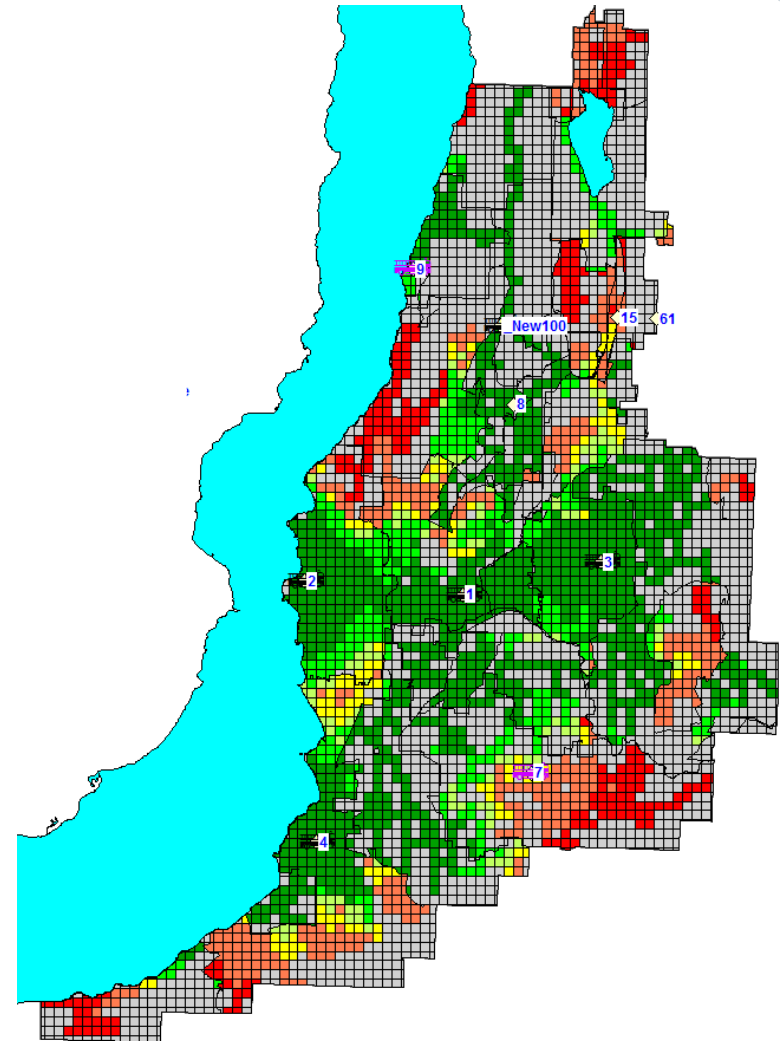
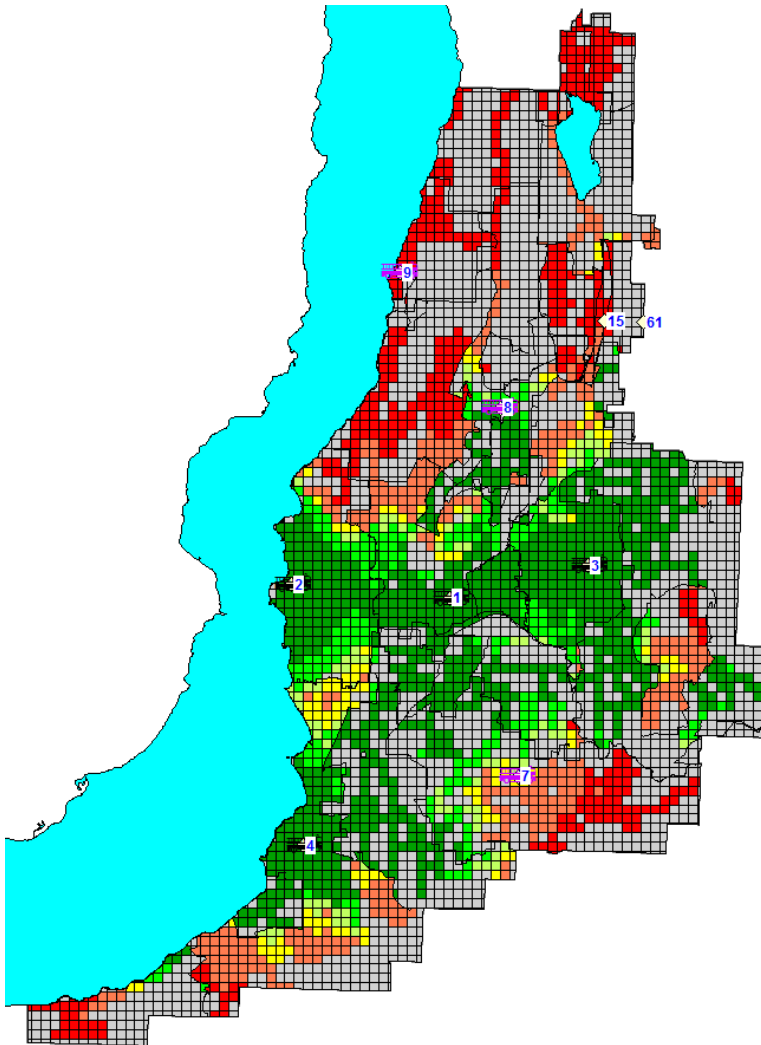


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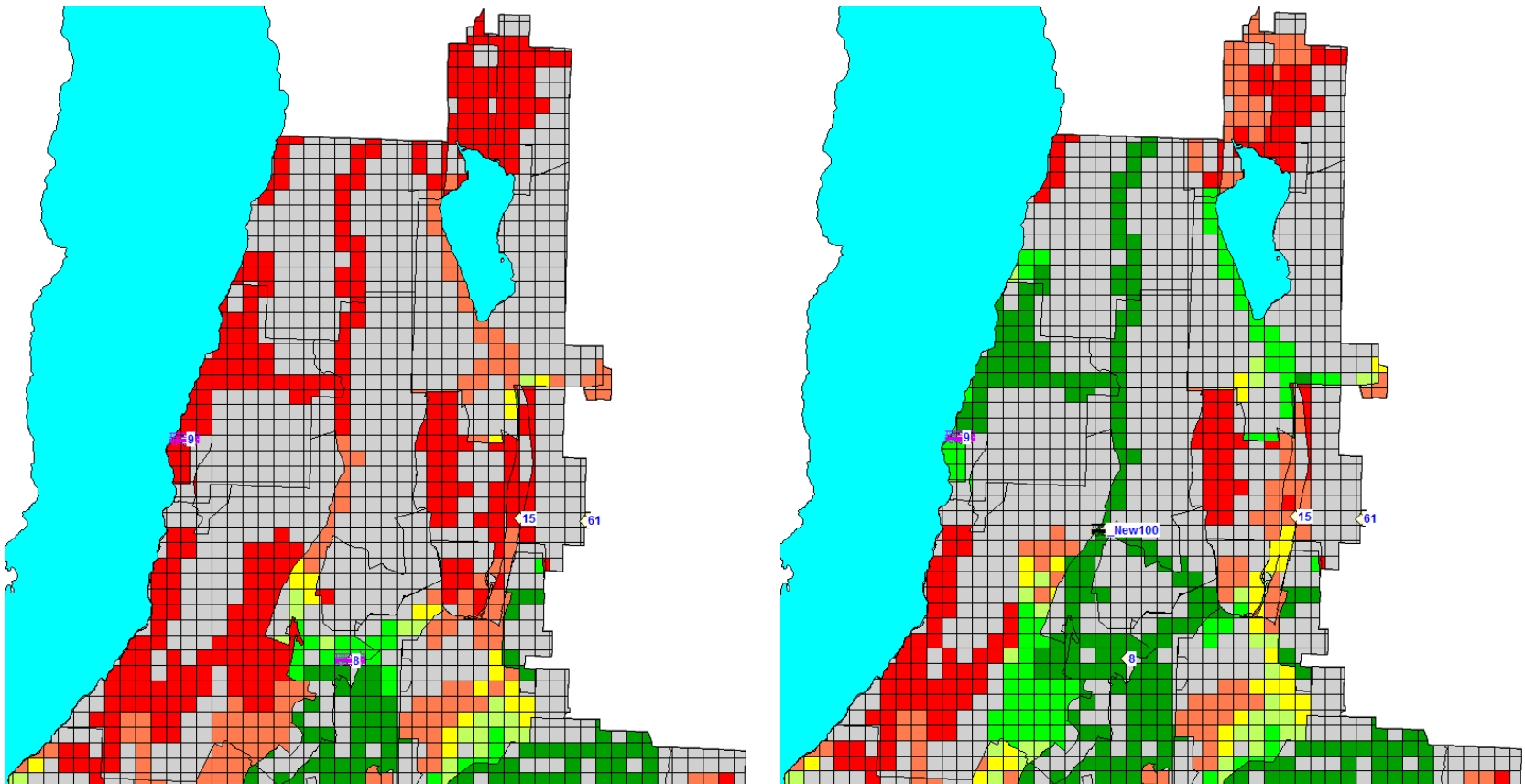


New Station 5 POC/Career

PM/DDS: STATION 5 COMPARISON



PM/DDS: STATION 5 COMPARISON



ENHANCEMENTS & INNOVATION

- ▶ PM/DDS
- ▶ Response system: Scientific Data
- ▶ Dynamic Deployment: Avoids Station 6
- ▶ Risk Based Response
- ▶ Elimination of \$1.2 million ladder truck
- ▶ Response time is midrange
- ▶ Potential Cost Reduction/Offset of \$420,000 annually

SUMMARY OF RECOMMENDATIONS

1. Parcel of land for Station 5
2. Turnout Time: 1:40 mins (Fire) 1:20mins (FMR)
3. Balance geographic coverage/incident volume (risk based responses)
4. Response Time Targets: PGB 7:40 mins in 90% Outside PGB 11:40 mins 90%

SUMMARY OF RECOMMENDATIONS CON'T

5. Contract Review with District of Lake Country
6. Evaluate the need for additional Fire Inspector
7. Opportunity to incorporate a Training Area: New Station 5
8. Continue to Market KFD Dispatch Services

SUMMARY OF COSTS

- ▶ Capital Costs Estimated to be Approximately \$9.1 million
- ▶ Operational costs including incremental staffing options is in the range of \$3.1 million per year over the next 14 years
- ▶ Staffing option B is \$38,000 less than option

YEARLY TAX PERCENTAGE INCREASE

KELOWNA FIRE DEPARTMENT Tax Percentage Increase Fiscal Years 2016 - 2030

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Total Yearly Tax % Increase**															
12_0_8	0.00%	0.29%	0.45%	0.73%	0.86%	0.14%	0.12%	0.08%	0.05%	0.05%	0.05%	0.05%	0.05%	0.05%	0.05%
8_4_8	0.00%	0.09%	0.49%	0.84%	0.85%	0.16%	0.13%	0.08%	0.05%	0.05%	0.05%	0.05%	0.05%	0.05%	0.05%

* Based on estimation only

^Tax % Increase - based on each year's incremental change divided by the prior year's increase plus the five year tax demand from Financial Plan, using the 2019 Tax Demand with a 3% increase thereafter.

OPTION COMPARISON: STRATEGIC GOALS

Strategic Goals: Criteria	Current traditional centralized support model	Recommended Convergent Support Model
Risk based levels of service for all areas of the City	No: 2 areas with identified service gaps KLO/Pandosy and Glenmore/UBCO/YLW areas.	Yes: addresses indetified service gaps with full implementation. Service gap in KLO/Pandosy area not addressed until full staffing of station 5 and then dynamic deployment will be utilized until Station 6 is required.
Innovative and Non-traditional	Traditional geographic coverage deployment model	Non-traditional, innovative convergent model. Using PM/DDS technology dynamic and risk based responses integrated with geographic coverage.
Realistic and achievable performance targets	None formally established. Current response system is 9:31 minutes inside PGB, 14:30 minutes outside PGB. Well beyond comparative communities, industry guidelines and leading practices. Increase risks for public, firefighters and property loss.	Yes: based upon PM/DDS analytics response system targets will be: 7:40 minutes in 90% inside PGB, 11:40 minutes outside PGB.

OPTION COMPARISON: STRATEGIC GOALS CON'T

Strategic Goals: Criteria	Current traditional centralized support model	Recommended Convergent Support Model
Alignment with Corporate goals and objectives	<p>No: Shortfall in Corporate Framework & Plan</p> <ul style="list-style-type: none"> • A well run City • A safe City 	<p>Yes: achieves performance excellence through continuous improvement Provides rapid fire emergency response throughout the City.</p>
Establishes accountability measures	<p>No: Performance targets not monitored corporately at this time. Current system capacity if adopted can be monitored.</p>	<p>Yes: Performance target objectives will be continuously monitored for achievement or adjustment.</p>
Optional implementation based upon priorities	<p>Not applicable</p>	<p>Yes: part of Corporate annual budget approval process.</p>

CONCLUSION

- ▶ Leading technology
- ▶ Multiple layers of data, evidence analysis
- ▶ Realistic, Innovative and Efficient
- ▶ Balances Firefighter and Public Safety with Fiscal realities

Thank you