

I have been asked by the Belleville Professional Firefighters Association to review and provide comment upon the Comprehensive Core Service Review of Fire and Emergency Services for the City of Belleville prepared by POMAX Consulting in a final report dated June 2019.

My CV is attached as Appendix “A” to this review.

Before beginning the review, I have set out an overview of the Ontario Fire Service based upon my 43 years and 10 months of active service in various positions within the Ontario Fire Service, and my continued involvement in consulting since my retirement from active service.

Fire Services in Ontario - A Perspective

Municipal fire services in the Province of Ontario are governed by the provisions of the Fire Protection and Prevention Act, 1997 (FPPA). The FPPA consolidated most of the provincial legislation governing the full gamut of fire related activities and regulation in Ontario.

The FPPA specifically sets out the responsibilities for municipalities and mandates every municipality to establish a program that includes public education with respect to fire safety and certain components of fire prevention. The Fire Marshal for Ontario has determined that minimum compliance with the mandatory fire prevention and public education requirements must include:

- a simplified risk assessment
- a smoke alarm program with home escape planning
- distribution of public education materials
- inspections upon complaint or request

The FPPA further mandates that a municipality shall provide other fire protection services as it determines may be necessary according to its needs and circumstances. According to the legislation, a municipality has

two choices on the method employed to discharge these mandatory responsibilities. It may either:

- appoint a community fire safety officer or a community fire safety team;
or
- establish a fire department

Where a municipality chooses to address the mandated responsibilities by establishing a fire department, a further mandate is engaged which requires the municipality to provide fire suppression services, and in doing so has eliminated that service option from the sole determination of the municipality.

The FPPA goes on to empower the Fire Marshal with the ability to monitor and review the fire protection services provided by the municipality to ensure compliance with its responsibilities under the legislation. Where a municipality is not meeting its responsibilities, and it is the opinion of the Fire Marshal that a threat to public safety exists, the Fire Marshal is empowered to make recommendations to the municipality. Where the recommendations are not acted upon by the municipality the Fire Marshal may recommend to the Minister that a regulation be struck to remedy the threat to public safety.

While the provision for making a specific regulation has never been applied, it underscores the serious nature of complying with the mandatory provisions of the legislation.

Returning to the minimum requirements related to public education and fire prevention activities, it must be understood that these minimums were set out to apply to every municipality in Ontario, regardless of size. The mandate to provide “other fire protection services” according to needs and circumstances is based upon the reality that municipalities of different size and complexity present different levels of risk which require different levels of service.

A municipality’s needs are established by the municipal profile including population, building stock, geographic location, density, level of commercial and industrial activity, residential occupancy profile, etc. These needs can

be identified in detail through a community risk assessment. A municipality's circumstances, it is submitted, refers to its ability to fund activities through the tax base, to attract, train and retain qualified individuals to provide services, its water supply and distribution system, its roads and transportation routes and systems, etc.

The expectations in the legislation for the level of fire protection services is not the same for a small rural community with no high-rise buildings and a large, bustling urban centre with multiple high-rise and other complex buildings with high occupancy loads, with high and increasing population density, with multiple institutions housing at risk occupants and with significant traffic gridlock issues. The legislation anticipates that a municipality will meet its responsibilities for public fire safety.

Fire prevention and public education are the first focus of the legislation for the simple reason that the best method of fire safety is to prevent a fire from ever occurring. Equally important is to know what to do in the event of a fire. Both of these factors are affected by the size and complexity of the building housing occupants. The government of Ontario, like every developed jurisdiction in the world, has made provisions for the construction of different types of buildings and occupancies in the form of building codes. The Ontario Building Code, in the simplest terms, is concerned with structural integrity and fire safety in design and construction of a building. The Ontario Fire Code, in the simplest terms, is concerned with the fire safety components of a building from occupancy to demolition.

The requirements of both codes rely upon a certain level of inspection to ensure compliance. In the case of the Building Code, almost all of that inspection occurs before occupancy and use (0 to 2 years). In the case of the Fire Code, almost all of that inspection occurs, or should occur, once occupied and used, for the life of the building (2 to 100+ years or demolition). Both Codes require that certain protections and systems are in place so that the occupants of the building are protected and alerted in the event of a fire and that their ability to safely exit in the event of a fire is enhanced through code compliance.

In the case of the Building Code, there is little or no danger to the public for non-compliance during the construction stages. Code violations of new

construction are identified by regular inspection intervals during construction and compliance is ordered and required prior to occupancy. It is post occupancy non-compliance that can and does result in dangers and safety issues for occupants. For example, there are requirements in some buildings for fire alarm systems and for these systems to be monitored and maintained. Part of that maintenance includes regular testing and may include annual inspection, verification and testing by an independent contractor. If the testing is not done, it can create a circumstance where occupants would not be notified in the event of a fire. While it is the building owner's responsibility to maintain compliance, audits of that compliance must take place to ensure public safety. In small, rural communities, the onus on the fire service is minimal. In large urban communities, the onus is huge. Toronto, for example, is the largest urban community in Canada, and arguably the most complex. The requirement for regular inspections for Fire Code compliance are the most onerous and require a far greater capacity than any other city in the country.

In most municipalities, building departments are seen to be "zero cost" departments where the revenue from building permits and inspections covers the full cost of operating the department. The opposite is true in the case of fire departments and fire prevention services. In most cases, there is little or no revenue stream into fire services from the building permit fees even though most fire services inspect during the construction phase of buildings, often in tandem with municipal building inspectors. In one case, the inspection is attracting revenue, in the other it is not. In one case the inspection is relieving department budget pressure, in the other it is creating budget pressure. It is illogical that the inspections are not both paid for by the permit process.

To extend that concept of reimbursement for inspection services, we need to look at the cost of follow-up inspections by members of the fire services. The responsibility for Fire Code compliance rests with the building owner. The cost for fire inspection services for responsible, compliant building owners should be a part of the tax supported fire protection services. However, where there is non-compliance, the cost for subsequent inspections should be borne by the non-compliant owner and not the taxpayer. There is a cost for non-compliance. It can be realized through prosecution and fines, through inspection, order and re-inspection, or

through a combination of both. Cost for non-compliance is a critical component of the compliance incentive and transfers the cost to the responsible party.

In Ontario, public education, coupled with mandatory early warning through residential smoke alarms, has significantly reduced the number and rate of fire deaths in the province. School programs such as “Learn Not To Burn” have engaged young people of elementary school age as ambassadors of fire safety with their families. Fire services need to embrace public education as part of their organizational culture. It should become a workplace lifestyle rather than a fire service program. This involves a commitment from fire service management from recruitment right on through the working time and of every firefighter, full-time or volunteer. It needs to be built into the promotional process, the station and training routine and regular communications activities at all levels of the department. Officers and firefighters need to be encouraged and empowered to be active in public education every day, both on and off duty. Firefighters should be encouraged to get out into the community in their coverage areas at community events and in focused public education events and initiatives. Successful public education enlists and supports involvement of community members and leaders in delivering an appropriate and consistent message on fire safety. Messaging should be developed by the fire service staff assigned to the public education portfolio in collaboration and consultation with the public education staff at the OFM.

Successful public education requires an understanding of what the fire problem is in any community. While there are certainly generic messages related to general public safety topics about what to do in case of a fire in your home, it is critical to understand what is causing fires and contributing to fire deaths, injuries and damage if you want to prepare and promote focused public education. This requires personnel dedicated to fire investigation and fire cause determination.

Every community in Ontario that operates a fire service should have a level of internal investigation capacity that is proportional to the level of fire incidents in the community. Properly trained fire investigators can assist in identifying problem trends within the community; provide detailed reports to assist in either prosecution or defence in legal matters; assist in quantifying

accurately the economic impact of fire upon property in the community through investigation follow-up with the insurance industry; and identify operational issues for focused training. Fire investigation is a necessary function to provide effective and efficient fire safety education, fire prevention focus and support, safe fire suppression support, and critical risk management information and litigation support.

Fire incidents are dynamic events that are time sensitive for both effective intervention and ultimate consequence. It is critical for success to match up the necessary tools and equipment with the appropriate, well trained human resources operating in an efficient, safe, organized and well coordinated fashion. To achieve this requires the ability to understand the critical tasks that need to be performed for successful intervention operations at each and every risk type within the community. The Center for Public Safety Excellence / Commission on Fire Service Accreditation International (CPSE/CFAI) is a collaborative organization originally formed by the International Association of Fire Chiefs (IAFC) and the International City Management Association (ICMA) to promote excellence in fire and emergency services and assist them in improving and enhancing service to their communities. In their publication "Standards of Cover, 5th Edition", they set out a statement that describes the relationship between time and resources most aptly:

"If resources arrive too late or lack sufficient capabilities, the emergency will continue to escalate, drawing more of the agency's resources into a losing battle. What emergency response companies must do, if they are to save lives and limit property damage, is arrive within a short period of time with sufficient resources to do the job. To control an emergency before it has reached its maximum intensity requires geographic dispersion of technical assets and cost-effective clustering of service delivery points for maximum effectiveness against the greatest number and types of risk.

.....A high-risk occupancy requires timely arrival of fire companies for several reasons. More resources are required to rescue people trapped in a high-risk building with a high occupancy load than in a low-risk building with a low occupancy load. More resources are required to control fires in large, heavily loaded

structures than are needed for fires in small buildings with limited contents.”

In their publication, “Community Risk Assessment: Standards of Cover, 6th Edition”, CPSE/CFAI sets out in “Appendix A” sample Critical Task Templates fire suppression activities for moderate, high and maximum risk categories. Here are those three templates.

Example 1

Moderate Risk - Fire Suppression <i>(Single Family Residence < 2,500 Square Feet)</i>	
Critical Task	Minimum Personnel
Command	
Communication/Safety	
Driver/Pump Operator	
Water Supply/Hydrant	
Attack Line	
Standby/Rapid Intervention Team	
Search and Rescue	
Ventilation	
Forcible Entry/Support	
Back-up line	
Total	

Example 2

High Risk - Fire Suppression (Structures) <i>This classification could include incidents of any structure over 2,500 but under 10,000 Square Feet</i>		
Apparatus	Critical Tasks	Number of Staff Deployed
Primary	Establish command, perform size-up Pump operator Establish water supply and deploy attack line	
Primary (Pump/Rescue Or Quint)	Deploy back-up attack line Temporarily assume Rapid Intervention Team (RIT)	
Primary (Pump/Rescue Or Quint)	Incident safety officer, air monitoring	
	Accountability	
	RIT	
Secondary (Heavy Rescue)	Search and rescue	
Secondary (Aerial)	Forcible entry and ventilation	
Battalion Chief's car	Incident command	
Minimum Total		

Example 3

Maximum Risk - Fire Suppression <i>(High Rise Building)</i>	
Critical Task	Minimum Personnel
Incident Command With Aide	
Safety Officer	
Driver/Pump Operator	
Firefighter to Pump Room (if there is one)	
Two Handlines to the Fire Floor	
One Handline to Floor Above Fire	
Two Search and Rescue Teams	
Officer With Aide – Oversight on Fire Floor and Floor Above	
Initial rapid intervention crew	
Rapid intervention crew (Officer and firefighters)	
Evacuation Teams	
Elevator Operation	
Officer in Staging Area (Two Floors Below Fire)	
Firefighter Rehab Medical Team)	
Vertical Ventilation (Officer and firefighters)	
Lobby Operations Officer	
Base Operations Officer	
Transport Equipment to Staging	
Two EMS Crews (one of each crew must be ALS)	
Total (initial alarm)	

Once there is an appropriate station and apparatus location and deployment model in place matched to the risks, the strategy and tactics for operations fall to the incident commander operating in a controlled organizational model of incident command or incident management. The incident command system employed by fire services across North America is based upon the principles of “division of labour”, “unity of command”, and “span of control”. The command system provides for the strategic deployment of resources to tactical objectives in a planned fire attack. All of the pieces must be in place to ensure safe, successful operations.

Over the past number of years Line of Duty Death Fatality Reports for firefighters in the United States compiled by the National Institute for Occupational Safety and Health (NIOSH) identified the top 25 factors contributing to the circumstances related to the deaths. Among the top are:

- Command System, Organization Transfer of Command - staffing issues related to transfer of command

- Rapid Intervention Team - proper assignment and staffing

- Ventilation - often not done properly or not done at all because of staffing issues

- Staffing Inadequate or Delayed - offensive attacks are people intensive

Successful and safe intervention, and, successful and safe incident command require the appropriate numbers of staff and equipment for the performance of critical tasks.

Levels of service in any community, in the absence of specific and directed communications, are at an expectation level. Very often, that expectation level will be based upon news reports on fires in the community. In Belleville, with its variety of occupancies in the residential, commercial and industrial sectors, there are undoubtedly expectations that the level of fire

service response will match the requirements of the level of risk for the occupancy in the event of a fire. Where there are existing levels of service, or where there are changes in the level of service that can have an affect on the ability of a fire service to safely perform the critical tasks, including rescue, or which force a fire service to switch from offensive to defensive attack mode for particular risks, it is absolutely necessary to communicate those facts to the occupants of a building. That can be done by public education and posted communications advising that “defend in place” is no longer an option, for example. By virtue of the legislation and the service provided, it is my opinion that a duty of care has been established and the expectations of the public are based upon the articulation of that duty of care by the past practice related to level of service or by communication about the level of service, or conversely, by the lack of communication about the level of service. It is my opinion that liability issues can arise if there is not clear articulation of the impact and consequence of changes in the level of service and some direction to alternative measures.

The customers of the fire service are the public - both citizens and visitors - who occupy the buildings in the community or who are engaged in activities in the community at any time 24 hours per day, 365 days per year. Changes that in any way affect or could affect their safety must be communicated to them clearly and directly.

The Ontario government has acted lately to introduce regulations to the Fire Protection and Prevention Act mandating fire inspections and fire drills in vulnerable occupancies (care occupancy, care and treatment occupancy or retirement home; and mandating municipalities to conduct risk assessments.

In Belleville, the burden for all of this falls upon the Fire Chief, the Deputy Chief of Operations and the Deputy Chief of Administration.

Issues and Comment

I would like to preface my observations by first referring to page 1 and page 2 of the report under the heading Introduction. Page 1 sets out the “project Intent” and “What is a Core Services Review”. Page 2 contains a section under the heading "What a Core Services Review isn't" and specifically indicates that it isn't a Fire Master Plan.

I would like to point out that, in addition, it is not a community risk assessment. POMAX agrees with this assertion on page 46 of the report where they recommend that the fire service should complete a risk assessment as soon as possible.

Ontario Regulation 378/18, Community Risk Assessments under The Fire Protection and Prevention Act, 1997 provides:

Mandatory use

1. Every municipality, and every fire department in a territory without municipal organization, must,
 - (a) complete and review a community risk assessment as provided by this Regulation; and
 - (b) use its community risk assessment to inform decisions about the provision of fire protection services.

What it is

2. (1) A community risk assessment is a process of identifying, analyzing, evaluating and prioritizing risks to public safety to inform decisions about the provision of fire protection services.
 - (2) A community risk assessment must include consideration of the mandatory profiles listed in Schedule 1.
 - (3) A community risk assessment must be in the form, if any, that the Fire Marshal provides or approves.

When to complete (at least every five years)

3. (1) The municipality or fire department must complete a community risk assessment no later than five years after the day its previous community risk assessment was completed.

(2) If a municipality, or a fire department in a territory without municipal organization, comes into existence, the municipality or fire department must complete a community risk assessment no later than two years after the day it comes into existence.

(3) A municipality that exists on July 1, 2019, or a fire department in a territory without municipal organization that exists on July 1, 2019, must complete a community risk assessment no later than July 1, 2024.

(4) Subsection (3) and this subsection are revoked on July 1, 2025. When to review (at least every year)

4. (1) The municipality or fire department must complete a review of its community risk assessment no later than 12 months after,

(a) the day its community risk assessment was completed; and

(b) the day its previous review was completed.

(2) The municipality or fire department must also review its community risk assessment whenever necessary.

(3) The municipality or fire department must revise its community risk assessment if it is necessary to reflect,

(a) any significant changes in the mandatory profiles;

(b) any other significant matters arising from the review.

(4) The municipality or fire department does not have to review its community risk assessment if it expects to complete a new community risk assessment on or before the day it would complete the review.

SCHEDULE 1

MANDATORY PROFILES

1. Geographic profile: The physical features of the community, including the nature and placement of features such as highways, waterways, railways, canyons, bridges, landforms and wildland-urban interfaces.

2. Building stock profile: The types of buildings in the community, the uses of the buildings in the community, the number of buildings of each type, the number of buildings of each use and any building-related risks known to the fire department.

3. Critical infrastructure profile: The capabilities and limitations of critical infrastructure, including electricity distribution, water distribution, telecommunications, hospitals and airports.

4. Demographic profile: The composition of the community's population, respecting matters relevant to the community, such as population size and dispersion, age, gender, cultural background, level of education, socioeconomic make-up, and transient population.

5. Hazard profile: The hazards in the community, including natural hazards, hazards caused by humans, and technological hazards.

6. Public safety response profile: The types of incidents responded to by other entities in the community, and those entities' response capabilities.

7. Community services profile: The types of services provided by other entities in the community, and those entities' service capabilities.

8. Economic profile: The economic sectors affecting the community that are critical to its financial sustainability.

9. Past loss and event history profile: The community's past emergency response experience, including the following analysis:

The number and types of emergency responses, injuries, deaths and dollar losses.

Comparison of the community's fire loss statistics with provincial fire loss statistics.

Note: Each profile is to be interpreted as extending only to matters relevant to fire protection services.

What is important to bear in mind while considering my comments and while reviewing and considering the POMAX Report is section 1 of the Regulation which states:

1. Every municipality, and every fire department in a territory without municipal organization, must,

(a) complete and review a community risk assessment as provided by this Regulation; and

“(b) use its community risk assessment to inform decisions about the provision of fire protection services.”

I would submit to you that, given O.Reg 378/18, it would be most prudent to conduct a community risk assessment based upon all of the requirements of the regulation prior to making any major decision related to the provision and level of fire protection services. To do otherwise may be seen to be wanton and reckless if the required risk assessment leads to a different conclusion from the decision made in its absence. That would particularly be the case where the level of service were to be reduced when a risk assessment may point to the necessity of increasing the level of service.

NFPA 1710, 2020 Edition contains a definition of Community Risk Assessment

“3.3.14* Community Risk Assessment. A systematic approach that identifies, assesses, categorizes, and classifies the probabilities and consequences of a community’s fire and nonfire hazards and threats, taking into account all pertinent facts that increase or decrease risks in each first-due response zone.”

In its description of the Belleville Fire and Emergency Services the POMAX Report makes comment on Page 3 in respect of the full-time component and the volunteer component operating separately with the implication that they never operate in combination. The document entitled Belleville Fire Department Urban Deployment Guideline Table 1 indicates that Stations 3 & 4 would be utilized when necessary after an incident had surpassed the level of General Alarm within the urban area.

On page 6, it is unclear why public assistance incidents and elevator rescues would be excluded from the data analysis by POMAX.

At page 13 the Report references NFPA 1710 and NFPA 1720 and determines that Belleville Fire and Emergency Services is defined as a Combination Department within subsection 3.3.15.1 of NFPA 1720. However, in the latest NFPA 1710, 2020 Edition, Belleville would certainly be defined as a Career Department

“3.3.13 Career Fire Department. A fire department that utilizes full-time or full-time-equivalent (FTE) station-based personnel immediately available to comprise at least 50 percent of an initial full alarm assignment.”

This provision was added to NFPA 1710 in the 2020 Edition and may not have been available to POMAX when they were preparing their report.

The travel time requirements of NFPA 1710, 2020 Edition, are 240 seconds or 4 minutes for the first due engine, 360 seconds or 6 minutes for the second company with a minimum of 4 firefighters and 480 seconds or 8 minutes for the full initial response for a low to medium hazard and 610 seconds or 10 minutes and 10 seconds for a high hazard.

Page 14 of the POMAX Report makes reference to the travel time for the urban and rural station response compared to the requirements of NFPA in each instance. It is unclear whether the time set out for Station 1 and Station 2 is for the first arriving Pump from the Station area of the incident. It is presumed that it is. In any event, when it comes to NFPA 1710 and 1720, one should not be “cherry picking” sections. The impact of NFPA 1710 travel time cannot be viewed in isolation of the number of firefighters responding. For NFPA 1710, the required response for a single family dwelling would be a minimum of 16 or 17 (if an aerial device is used) firefighters on their assigned vehicles within 8 minutes at the 90th percentile. The numbers of firefighters go up from there as do the travel times depending upon the occupancy type and risk. For a strip mall or an apartment in a 3 storey garden style apartment the travel times would be the same as for the single family residence but the number of firefighters on first response would be 27 or 28 (if an aerial device is used). In the case of a high rise, the times for the first arriving engine and the second arriving unit would be the same but the time for the arrival of the total initial response would be increased to 610 seconds or 10 minutes and 10 seconds and the number of firefighters required would increase to 42 or 43 (if an aerial device is used). It should also be pointed out that NFPA 1710, 2020 Edition, 5.2.3.1 to 5.2.3.1.2.1 provides for minimum staffing for engine (pumper) companies of from four to six firefighters depending on the risk associated with the response area. And NFPA 170, 2020 Edition, subsections 5.2.3.2 to 5.2.3.2.2.1 provides for minimum staffing for ladder (aerial) companies of from four to six firefighters depending on the risk associated with the response area.

The NFPA 1710 requirements are based upon the operational safety for firefighters engaged in fire suppression operations and the requirements to carry out simultaneous, as well as sequential tasks to protect and rescue the occupants of a building and to extinguish and restrict the spread of the fire thereby reducing the impact in terms of fire deaths, injuries, fire damage and displacement of occupants. The failure to deploy sufficient resources to undertake and complete the critical tasks presents an increased risk to the firefighters and the occupants of the residence or building. In OFMEM “Public Fire Safety Guideline 04-08-10, Appendix C, Form 300 A” is a Critical Task Matrix setting out the range of human

resource requirements for each identified critical task at the different risk levels. It should be pointed out that the numbers of personnel align closely with the provisions of NFPA 1710.

That Critical Task Matrix is set out below.

Critical Task Matrix (Form 300A)									
Fireground Critical Tasks		Low Risk		Moderate Risk		High Risk		Extreme Risk	
		LERL	UERL	LERL	UERL	LERL	UERL	LERL	UERL
Incident Response (Note: Where zero or no number has been assigned, the task may be performed at the direction of the incident commander.)	Incident Command*	1	1	1	1	1	1	1	1
	Pump Operator	1	1	1	1	1	1	1	1
	Attack Line (Confine & Extinguish)	2	2	2	2	2	2	2	2
	Additional Pump Operator(s)	0	0	0	2	2	4	4	6
	Additional Attack Line (Confine & Extinguish) + Backup	0	0	0	4	4	8	8	12
	Search & Rescue	0	0	2	4	2	6	2	8
	Initial Rapid Intervention Team (IRIT)	0	0	4	6	8	16	12	22
	Ventilation	0	2	2	2	2	4	2	8
	Water Supply – pressurized	0	1	1	1	1	1	1	2
	Water Supply – non-pressurized	0	3	1	4	2	6	4	8
	Forcible Entry Team	0	0	0	0	0	1	0	1
	Utilities	0	1	1	1	1	1	1	1
	Laddering (Ground Ladders)	0	2	0	2	0	4	0	6
	Laddering (Aerial or elevating device operator)	0	0	0	2	0	2	0	2
	Exposure Protection			0	4	2	6	2	6
	Incident Safety Officer			0	1	1	1	1	1
	Accountability			1	1	1	1	1	1
	Entry Control			0	2	1	4	1	4
	Rehabilitation			0	1	1	1	1	1
	Salvage			0	2	2	2	2	2
	Lighting					0	2	0	2
	Directing Occupants					0	4	0	4
	Scribe					1	1	1	1
	Sector Officers					1	4	1	4
	Air Management (air refilling station, etc.)							1	2
Other or Additional Response Considerations	Logistics Officer								
	Administrative and/or Finance Officer								
	Planning Officer								
	Evacuations (large scale)								
	Communications (dispatch)								
	Public Information Officer								
	Overhaul								
Summary	Additional Firefighters								
	Incident Response Range	4	13	16	43	36	83	49	108
	Total Fire Department including External								
	Fire Call Incident Response Range (+, -, within)								
Notes: <ul style="list-style-type: none"> • LERL = Lower Effective Response Level & UERL = Upper Effective Response Level, [together form the critical staffing range] • This tool provides a range of staffing requirements only. Actual numbers may vary depending on the fire risk that exists in the municipality. Tasks performed on fireground based on decisions made by Incident Commander. • Planning moderate, high and extreme risk occupancies/locations will further validate staffing requirements. • Simultaneous events will require further consideration due to additional personnel requirements beyond the scope of this matrix. * Incident Command will assume responsibilities of the incident safety officer, accountability and entry control when no person has been assigned.									

Where a fire department is unable to provide sufficient numbers of personnel at an incident scene to carry out the required tasks for safe and effective operations, I submit that it is incumbent upon that fire department to inform the citizens and the occupants of the building type of the fire suppression operations limitations. Those limitations should also be fully outlined to the Council of the municipality when they are determining the level of service to be provided. In addition, Council should be informed of the possible and probable consequences of not having the required number of firefighters to perform the required critical tasks for each of the risk type occupancies, in order that Council is making an informed decision about the level of fire suppression services.

Where a fire department is unable to provide sufficient numbers of personnel at an incident scene to carry out the required tasks for safe and effective operations, and it deploys less than the appropriate resources and relies upon the Incident Commander to determine which tasks and in what sequence those tasks are to be performed, I submit that it is incumbent upon the Fire Chief of the department to provide Standard Operating Guidelines (SOGs) for every level of risk for which there are insufficient resources. In addition, those Standard Operating Guidelines or the letter of transmittal in the distribution of those SOGs should indicate that the Fire Chief is aware of the lack of sufficient resources and is requiring the Incident Commander to choose the tasks to be performed, in any event, based upon the SOGs. There should be an appropriate number of SOGs developed to cover every eventuality in removing a critical task from the simultaneous requirement and moving it to the sequential requirement.

The SOGs are absolutely a necessity given the current requirements under provincial (Occupational Health and Safety Act) and federal (Criminal Code of Canada) legislation as they relate to giving direction to those persons under their authority and the legal duty to take steps to prevent harm. It is in everyone's interest that the direction is clear when it comes to performing less than the required number of critical tasks required for any incident. The Fire Chief should set out all of the potential scenarios for the risk types in Belleville and indicate what direction he would give and what task priority he would assign and why, in order to help establish SOGs.

At Page 27 of the Report, POMAX indicates that the core services of a fire department are:

prevention

education

suppression

rescue

public assistance

The Fire Protection and Prevention Act, 1997, defines fire protection services as:

“fire protection services” includes,

(a) fire suppression, fire prevention and fire safety education,

(b) mitigation and prevention of the risk created by the presence of unsafe levels of carbon monoxide and safety education related to the presence of those levels,

(c) rescue and emergency services,

(d) communication in respect of anything described in clauses (a) to (c),

(e) training of persons involved in providing anything described in clauses (a) to (d), and

(f) the delivery of any service described in clauses (a) to (e) “

The OFMEM Public Fire Safety Guideline PFSG04-12-13 (currently under review) sets out a summary of the core services that a fire department might provide and is attached as Appendix “B”.

The core services are certainly more expansive than expressed in the Report.

Pomax’s recommendations from their Executive Summary are as follows.

Operations

The volunteer and career sections of the fire department be combined in fact as well as name so that in one or two generations Belleville Fire and Emergency Services will be able to operate as one department.

As a critical part of setting the stage for delivery of core services, Belleville Fire and Emergency Services must develop new vision and mission statements that establish prevention and education, rather than suppression, as the primary purpose of the fire service.

Comment:

In terms of response, Volunteer stations 3 and 4 are included in the Belleville Fire Department Urban Deployment Guideline Table 1, Urban Component - Stations #1 and #2. The Guideline calls for Stations 3 and 4 to be deployed, if needed, after the General Alarm level and before Mutual Aid.

The Fire Master Plan, which was suspended by Council, included recommendations for a combined response area along with station placements. That document should be reviewed in conjunction with a risk assessment.

POMAX suggests the development of a mission and vision statement which basically excludes any reference or inference related to suppression. Once again, the suspended Fire Master Plan contained a mission statement, a vision statement and had set out the core values of the

department. That mission statement included a commitment to serving the community in all aspects of fire protection services. It should be revisited.

Fire Chief Alan Brunacini was one of the most respected members of the fire service in North America. His leadership elevated the Phoenix Fire Department to the highest level of respect. His mission statement was simple but spoke volumes - "Prevent Harm - Survive - Be Nice". It encompassed all aspects of the Phoenix Fire Department without being specific in exclusion or inclusion.

Fire Prevention and Public Education

Revamp prevention and public education based on the comments provided in that section (section 3.2).

Implement a time management program for division personnel.

Senior department management and personnel in the division should develop a fire prevention policy that identifies priorities and schedules for prevention and public education.

Develop a fire prevention policy intended to move the department from a reactive to a proactive fire prevention stance that addresses the needs and circumstances of Belleville.

Develop the administrative skills and knowledge of personnel responsible for the operation of the division.

Fire prevention officers who wish to return to the fire suppression division should be considered for a change in role when vacancies occur.

Vacant fire prevention positions should be filled by educators rather than firefighters. Prevention and education candidates do not need to be firefighters to fulfill the role because the skills and aptitudes of firefighters are very different to those of educators or inspectors.

Fire administration should designate separate prevention and educator positions within the existing complement of five. We suggest three prevention officers and two public educators. Please see the community risk profile in section 4. Conducting a community risk assessment will assist with determining the complement of prevention officers and educators within the existing division allocation.

If the individual currently filling the senior prevention officer's role is one of the staff members who wish to return to the suppression division, the senior prevention officer's role should thereafter be filled by someone with the administrative aptitude, skills, and background to oversee education and prevention functions and staff, or the position should be eliminated and prevention and education staff should report to a deputy.

Comment:

I find the content of the POMAX Report to be somewhat confusing, and in a couple of cases, contradictory, when it comes to Fire Prevention and Public Education on the whole. The Report criticizes the lack of planning, policy and programs within Fire Prevention and infers that somehow this lies at the feet of the Senior Fire Prevention Officer. Yet, there is a Deputy Chief of Administration that has the responsibility for Fire Prevention in the Belleville Fire and Emergency Services Organization Chart found following page 4 of the Report.

If there is a need for planning, policy, programs, strategies, schedules and events, wouldn't that fall directly in the area of responsibility of the Deputy Chief? Certainly the policy and level of service would have to be determined by the Fire Chief and the Deputy Fire Chief and approved by City Council. In interviews with the Association President and the Senior Fire Prevention Officer it appears that, apart from an SOG/SOP for investigations, there are no written guidelines in respect of any of the things that the Report addressed. When asked about the meetings with the Deputy Chief about Fire Prevention matters, the response was that there were none. Most communication with the Senior Fire Prevention Officer was done by email.

The Report indicates that the fire prevention activities meet the minimum requirements of the legislation and the regulations. Apart from the requirements of the legislation and regulations, there is no schedule of cyclical inspections according to hazard or risk. The suspended Fire Master Plan referenced the NFPA recommendations for an inspection schedule and commented on the prudence and due diligence of scheduling according to NFPA.

The recommended frequency for fire safety inspections varies by the type of occupancy. Generally they are classified by degree of hazard. NFPA recommends the following inspection schedule.

Hazard Classification	Example Facilities	Recommended Inspection Frequency
Low	Apartment common areas, small stores and offices, medical offices, storage of other than flammable or hazardous materials.	Annual
Moderate	Gas stations, large (>12,000 square feet) stores and offices, restaurants, schools, hospitals, manufacturing (moderate hazardous materials use), industrial (moderate hazardous materials use), auto repair shops, storage of large quantities of combustible or flammable material.	Semi-annual
High	Nursing homes, large quantity users of hazardous materials, industrial facilities with high process hazards, bulk flammable liquid storage facilities, a facility classified as an "extremely hazardous substance" facility by federal regulations (SARA Title III)	Quarterly

Source: National Fire Protection Association

Although NFPA is not a legislated requirement it is the standard utilized in most cases for legal issues. It would be prudent to work towards achieving compliance in an effort to demonstrate due diligence.

The POMAX Report recommends reducing the Fire Prevention Officers to three positions and assigning two Fire Prevention Officers to Public Education. Later in the Report, in the Training Section, there is a recommendation to reduce from three down to two Fire Prevention Officers by reassigning one of the positions to an additional full-time Training Officer.

It is difficult to understand how reductions in staff will lead to more scheduled inspections and help improve what is described as just meeting the minimum requirements of the legislation. Although the Report does suggest that a risk assessment will assist in determining the numbers of staff required.

There is no explanation related to implementing a time management program. That may be a worthwhile consideration once a risk assessment has been completed, a fire prevention policy is put in place by the Chief and Deputy Chief, programs are developed and personnel assigned to the programs, a comprehensive schedule of cyclical inspections based on risk and hazard is developed and sufficient staff are employed to do more than the minimum requirements of the legislation and regulations.

The Report emphasizes, for good reason, the importance of Public Education. However, the Report seems to visualize Public Education as a stand alone function of fire prevention services performed by specifically trained and qualified individuals with “educator” backgrounds. As stated in the Perspective at the outset, fire services need to embrace public education as part of their organizational culture. It should become a workplace lifestyle rather than a fire service program. This involves a commitment from fire service management from recruitment right on through the working time of every member of the department and of every firefighter, full-time or volunteer.

The Report references an article containing an interview with Russ Sanders, the former Fire Chief Of Louisville, Kentucky. The article is in Appendix D of the Report and is entitled “Interview: How I cut civilian deaths without spending more money.” If you read the document you will find that Russ Sanders does not see Public Education in the same light as the authors of the POMAX Report, but rather sees Public Education as set out in the foregoing paragraph and in the Fire Service Perspective at the beginning of this response to the POMAX Report.

Developing administrative skills and knowledge of personnel responsible for the operation of the division seems to be a worthwhile recommendation, particularly if it includes the Deputy Chief of Administration and the Fire Chief. To play on a hackneyed expression, “the buck stops” there. It is up to the Chief and the Deputy Chief to set the policy and expectations of the division based upon the minimum legal requirements and the level of service approved by Council on the recommendations from the Fire Chief. To suggest that it falls upon the person appointed as Senior Fire Prevention Officer flies in the face of logic and the concept of municipal operations.

Suggesting that fire prevention positions be filled by educators rather than firefighters is a rather odd recommendation. The POMAX Report makes a bold statement in support of this recommendation that “prevention and education candidates do not need to be firefighters to fulfill the role because the skills and aptitudes of firefighters are very different to those of educators or inspectors”. Really? According to whom? According to what authority? That bold statement smacks of some large element of arrogance. In my almost 44 years of fire service at the municipal and provincial level, I have observed an almost limitless level of skill and aptitude in firefighters across Canada and the United States. To suggest that they do not have the capacity to be an educator or an inspector is a bit insulting to my mind.

Firefighting experience and the knowledge of fire behaviour is a distinct advantage and is an aptitude that lends itself to understanding the importance of code compliance and public education to life safety. On the other hand, experience in education or inspection provides an important background on how to effectively communicate ideas or how to process issues related to code violations. In each case, those with one area of experience must learn what the other has knowledge and experience in to become an effective fire prevention officer. In every case that is handled by personal education and on the job experience, in much the same way every career pursuit is handled. The suggestion that one is better than the other makes absolutely no sense, particularly in the light of no evidence or authority. It is suspiciously speculative, to my mind.

While disagreeing with the suggestion to designate three fire prevention officers and two public educators for reasons that have already been stated, waiting for the completion of a risk assessment to assist in determining the fire prevention needs makes total sense and is compatible with the OReg 378/18. What does not make sense is the suggestion or implication in the POMAX recommendation that the risk assessment will verify the existing division allocation, which clearly to everyone’s observation, is simply meeting the minimum requirements of the legislation. That observation was made by POMAX and the Fire Master Plan.

In terms of the recommendation related to the senior fire prevention officer position as it relates to administrative aptitude and skills, it seems that recommendation ignores the fact that there is no policy direction, no planning direction, no performance direction, no meetings with and little if any interaction with those who bear the responsibility for all of that in the Belleville Fire and Emergency Services organization chart, i.e. The Fire Chief and the Deputy Chief of Administration. In the absence of all of this, it seems that the current direction to the senior fire prevention officer and any future senior fire prevention officer is to merely show them to their desk and say “okay, do everything that needs to be done”. Once again, the risk assessment will assist in informing the Deputy Chief of Administration, the Fire Chief and Council of what the policy and direction of fire prevention activities should be based upon the needs and circumstances of the City of Belleville.

Internal Training

Create a formal training curriculum.

Implement a local or commercial record-keeping system for training programs for both volunteer and career firefighters.

Our understanding is that training activity can be documented in Belleville Fire and Emergency Services’ record management system but that some staff are reluctant to use that feature. That feature should be used to ensure accurate tracking of training completion.

Consider a second full-time training position, possibly by reassigning a complement from a fire prevention officer’s position, thereby providing consistent training officer support to both the career and volunteer sections of the combined fire service. This does not mean an additional position should be put into place to compensate for a reassigned position.

Although firefighter training requires specific knowledge about firefighting and rescue techniques, candidates for the position(s) should also have formal training in adult education techniques.

Implement continuing education.

We are pleased that \$200,000 has been allocated to the fire service capital fund for land acquisition for a training facility although it was deferred, during city budget discussions, to 2020. In any event, Belleville Fire and Emergency Services and the city should move as quickly as possible to find a site to build a training facility, considering the length of time it will take to commission a building.

Comment:

Once more, it seems to be rather contradictory to say, on the one hand Belleville Fire and Rescue Services must do more in the area of fire prevention and public education than just the minimum required by legislation; and then, to recommend reducing the complement of fire prevention personnel by one in order to add a training officer.

In terms of the suggestion that there should be formal training in adult education techniques for the training officer candidates, it should be pointed out that a wealth of information and training is available through the office of the Ontario Fire Marshal and the Ontario Fire College. If anything, the Belleville Fire and Emergency Services should be encouraging and supporting members in their efforts to gain knowledge through the fire service specific programs that are being offered.

The Ontario Fire College Course Outline for 2020-2021 is attached as Appendix "C".

Emergency Response

Greater efficiency and public protection can be accomplished by realigning emergency response areas as recommended in section 2.3.

Plans to relocate station 2 to northwest of the current location should be initiated. Relocating station 2 will maintain or improve coverage into areas of Belleville north of Highway 401 and improve first vehicle response to southwest Belleville. Second vehicle coverage to south and southeast

Belleville may take an additional 60 seconds but will still be within standards for second-on-scene apparatus. Efforts to reduce call handling and turnout time may mitigate the additional time for second vehicle arrival into the south and southeast (please see Dispatching recommendations below).

Comment:

The suspended Fire Master Plan (FMP) went into some detail about station placements, staffing and combined response. It doesn't appear from their Report that POMAX reviewed the FMP. In addition, it included a schedule along with station location and staffing recommendations. The FMP recognized that additional full-time firefighters were required to provide a better response capability for Belleville that included an additional career station. The recommendations also included the addition of 4 Platoon Chiefs, 4 civilian personnel, 14 career firefighters and 10 volunteers.

The response capability would have been moving closer to the NFPA 1710 requirements referred to earlier. The FMP provided some options for a relocated Station 2 to provide coverage for the 401 corridor referred to by POMAX, but would have done so with the addition of a new Station 3 with career staff supplemented by volunteers.

The Association engaged the International Association of Fire Fighters to do a GIS Station location and response analysis. That study recommended additional staffing along with new career staffed stations 3 and 4. This would provide for career firefighters at every station supplemented by volunteer firefighters once career resources are depleted.

Once again, the completion of a risk assessment will allow for all of the studies and reports to be reviewed in the light of the risk profile for the City of Belleville and will allow Council to make an informed decision about the level of service to be provided. Again, as a point of information, it is submitted, that wherever the City of Belleville Fire and Emergency Services are unable to assemble the number of firefighters to engage in and carry out the critical tasks required for the safe offensive fire suppression operations including rescue, there should be a public education plan

developed to advise the occupants of the risk categories where the fire response falls short and what to do as a result.

Dispatching

Evaluate, through observation and job shadowing, whether 24-hour shifts are detrimental to dispatch staff, clients, and public safety.

Evaluate the logistics and opportunities to replace probationary firefighters, as they move from dispatch to the suppression division, with civilian professional full-time radio operators / dispatchers.

- Concurrent with this recommendation, to accommodate circadian rhythm, new hires should work no more than a 12-hour shift.
- Process map call taking and turnout activity to determine the causes of protracted times.

Comment:

Any move to replace firefighters with full-time radio operators/dispatchers should involve the dispatchers as additions to the existing staff and the firefighters currently performing dispatch functions should become additions to the current understaffed response complement on each platoon.

Organization and Administration

The City of Belleville should update its Establishing and Enabling Bylaw as soon as possible observing the content of the Office of the Ontario Fire Marshal's communiqué referenced here.

Job descriptions and expectations for all positions should be drafted as soon as possible and should include critical objectives for fulfilling roles and responsibilities.

Implement a chief business officer position in the fire department, for a minimum of two years, to assist the chief and deputies with refocusing and

reorganization.

Make all efforts to exempt the administrative assistant's position from the bargaining unit.

Comment:

There are provisions under the Fire Protection and Prevention Act, 1997 and the Ontario Labour Relations Act, 1995 which set out how determinations are made about which positions are excluded from bargaining units. POMAX has made no reference to those legislative provisions for any of the positions that they are suggesting should be excluded and whether any of the criteria for exclusion are met.

The chief business officer recommendation is mystifying. There is no reference to any other department in Ontario having a position of chief business officer. I suspect that is because there are none. It is submitted that all of the duties and responsibilities of a chief business officer are those duties and responsibilities that should fall within the job description of a Deputy Chief of Administration. It may be worthwhile to open up some continuing education opportunities for the Deputy Chief of Administration to acquire the skills and knowledge that the Report found lacking.

In terms of the need to refocus and reorganize the department, it is submitted that the completion of a community risk assessment as required by the legislation would assist in providing a "road map" for any refocusing and reorganization which, of course, would follow the direction set by Council when they determine the level of service after being informed of the community needs by the risk assessment.

Protective Services Advisory Committee

We notice that there are a number of departmental advisory committees within the city's organization such as the planning advisory committee, transit advisory committee, and others. Our experience is that most fire services that we have had as clients work through an advisory committee composed of council and public representatives. Indications from these clients are that process and changes are expedited when an advisory

committee is in place rather than bringing all issues directly to council. Further, it is reported that council time is sometimes avoided since some matters are brought from the advisory committee to council as recommendations within resolutions.

The city should strongly consider implementing a Protective Services (fire) and Emergency Operations Advisory Committee.

Comment:

An advisory committee may be useful, however, it must be with the understanding that the committee cannot replace the Fire Chief as the sole person responsible to the council of the municipality for the delivery of fire protection services and cannot “mute” or inhibit the Fire Chief from providing recommendations on the level of service and the requirements for the appropriate delivery of that level of service. To do so may put the committee in a position of a violation of the legislation.

Conclusion:

Much of the POMAX Report refers to the need for a community risk assessment. Yet, many of the recommendations made by POMAX do not appear to be dependent upon the results of a community risk assessment. Indeed, if the recommendations were to be undertaken prior to a risk assessment, they may have to be abandoned or substantially altered at the completion of the risk assessment. In the meantime, many of the recommendations, particularly those related to fire prevention and public education, could have a serious negative impact on the ability of Belleville Fire and Emergency Services fulfilling the mandatory requirements of the legislation.

The one area where there seems to be consensus is in the inadequacy of fire response capability according to NFPA Standard 1710, 2020 Edition, and the number of firefighters required to perform the critical tasks for fire suppression operations, including rescue, at a single family residential occupancy, and at every occupancy type and risk type greater than a single family residence.

Although the POMAX Report does not recommend it, it would be prudent for the City of Belleville to up-staff the career stations to provide for a minimum of 17 first response firefighters on duty to be able to meet the needs of fire suppression, including rescue, for a fire involving a single family residence. Further, it would be prudent to revise the Urban Deployment Guideline Table 1 (Appendix “D”) as a result of a staffing increase, and, to develop an automatic upgrade policy whenever there is confirmation of a fire at any occupancy larger than a single family residence (i.e. moving to 2nd, 3rd, 4th and 5th Alarm conditions in the Guideline Table 1.)

A community risk assessment should be undertaken as soon as practicable, so that Council has the required information to establish the necessary level of service and to be able to informatively prepare an appropriate Establishing and Regulating By-Law.