



DILLON
CONSULTING

Town of LaSalle
**Fire Protection
Services Master
Plan**

Final Report

**Project # 18-8324
August, 2019**

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Acronyms, Abbreviations, Definitions

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Appendices

- A Community Risk Assessment
- B Council Educational Workshop
- C Verdict of the Coroner’s Jury



Acronyms, Abbreviations, Definitions

A.D.R.	Additional Data Repository
A.E.D.	Automated External Defibrillator
A.H.J.	Authority Having Jurisdiction
A.N.S.I.	American National Standards Institute
A.S.& E.	Academic Standards and Evaluation
B.C.	British Columbia
B.C.I.N.	Building Code Identification Number
C.A.F.C.	Canadian Association of Fire Chiefs
C.A.O.	Chief Administrative Officer
C.B.R.N.E.	Chemical, Biological, Radiological, Nuclear, and Explosive
C.E.M.C.	Community Emergency Management Coordinator
C.F.A.I.	Commission on Fire Accreditation International
C.F.O.	Chief Fire Officials
C.F.P.O.	Captain-Fire Prevention Officer
C.F.S.E.M.	Comprehensive Fire Safety Effectiveness Model
C.I.	Critical Infrastructure
C.O.	Carbon Monoxide
C.P.C.	Commission On Professional Credentialing
C.P.R.	Cardiopulmonary Resuscitation
C.P.S.E.	Centre for Public Safety Excellence
C.R.A.	Community Risk Assessment
C.R.R.P.	Community Risk Reduction Plan
C.R.T.C	Canadian Radio-television and Telecommunications Commission
D.A.R.E.	Drug Abuse Resistance Education
D.C.A.	Development Charges Act
D.F.C.	Deputy Fire Chief
E.A.S.	Emergency Alert System
E.M.C.P.A.	Emergency Management and Civil Protection Act
E.M.S.	Emergency Medical Service
E.O.C.	Emergency Operations Centre
E.R.C.A.	Essex Region Conservation Authority
E.R.F.	Effective Response Force
E.R.F.	Emergency Response Facility
E.R.P.	Emergency Response Plan
E.R.U.	Emergency Response Units
E.V.T.	Emergency Vehicle Technicians
E.W.E.M.S.	Essex Windsor Emergency Medical Services
F.M.P.	Fire Master Plan
F.O.I.	Freedom of Information
F.P.P.A.	Fire Protection and Prevention, 1997
F.P.S.M.P.	Fire Protection Services Master Plan
F.U.S.	Fire Underwriters Survey

G.I.S.	Geographic Information System
G.P.S.	Global Positioning System
H.A.Z.M.A.T.	Hazardous Materials
H.I.R.A.	Hazard Identification Risk Assessment
H.U.S.A.R.	Heavy Urban Search And Rescue
I.C.S.	Incident Command System
I.D.H.L.	Immediately Dangerous To Health
I.F.S.A.C.	International Fire Service Accreditation Congress
I.F.S.T.A.	International Fire Service Training Associations
I.L.E.C.S.	Incumbent Local Exchange Carriers
I.M.S.	Incident Management System
I.P.	Internet Protocol
I.R.I.T.	Initial Rapid Intervention Team
L.E.R.L	Lower Effectiveness Response Level
L.I.S.	Location Information Server
L.F.S.	LaSalle Fire Service
L.P.S.	LaSalle Police Service
M.C.A.N.S.	Monroe County Alert Notification System
M.C.G.	Municipal Control Group
M.C.S.C.S.	Ministry of Community Safety and Correctional Services
M.F.I.P.P.A.	Municipal Freedom of Information and Privacy Act
M.L.F.T.U.	Mobile Live Fire Training Unit
M.O.U.	Memorandum of Understanding
M.W.	Megawatt
N.G.	Next Generation
N.F.P.A.	National Fire Protection Association
N.I.S.T.	National Institute of Standards and Technology
O.A.F.C.	Ontario Association of Fire Chiefs
O.B.C.	Ontario Building Code
O.F.C.	Ontario Fire Code
O.F.M.E.M.	Office of the Fire Marshal and Emergency Management
O.F.S.S.	Ontario Fire Services Standards
O.G.s	Operating Guidelines
O.H.S.A.	Occupational Health and Safety Act, R.S.O. 1990
O.P.s	Operating Procedures
P.F.S.G.s	Public Fire Safety Guidelines
P.P.E.	Personal Protective Equipment
P.S.H.S.A.	Public Services Health & Safety Association
P.T.S.D.	Post-Traumatic Stress Disorder
R.I.T.	Rapid Intervention Team
R.T.C.	Regional Training Centre
S.C.B.A.	Self-Contained Breathing Apparatus
S.R.A.	Simplified Risk Assessment
S.W.O.C.	Strengths, Weaknesses, Opportunities and Challenges
T.G.	Technical Guideline

T.F.S.	Toronto Fire Services
T.O.	Training Officer
T.S.S.A.	Technical Standards & Safety Authority
U.E.R.L.	Upper Effectiveness Response Level
U.S.	United States
W.C.A.C.C.	Windsor Central Ambulance Communications Centre
W.E.C.H.U.	Windsor-Essex County Health Unit
W.F.R.S.	Windsor Fire & Rescue Services
W.H.M.I.S.	Workplace Hazardous Materials Information System
W.S.I.B.	Workplace Safety and Insurance Board

Executive Summary

This **Fire Protection Services Master Plan** (F.P.S.M.P.) was developed to provide Council with a strategic framework for the delivery of fire protection services within the Town of LaSalle over the next ten-year community planning horizon. The findings and recommendations contained within this F.P.S.M.P. have been informed by a **Community Risk Assessment** (C.R.A.) that was developed as a companion document to assess the existing fire risk within the community. Collectively the C.R.A. and F.P.S.M.P. provide a clear picture of the existing fire risks within the community, and the existing fire protection capabilities of the LaSalle Fire Service (L.F.S.).

The C.R.A. and F.P.S.M.P. have been developed in consideration of the municipality's legislative requirements as contained within the **Fire Protection and Prevention, 1997 (F.P.P.A.)**, and the **Occupational Health and Safety Act, R.S.O. 1990 (O.H.S.A.)**. In addition, current industry best practices, as defined by the Office of the Fire Marshal and Emergency Management (O.F.M.E.M.) and leading industry organizations such as the National Fire Protection Association (N.F.P.A.), have been referenced to guide and inform the recommendations presented.

Under the leadership of the Fire Chief, the LaSalle Fire Service (L.F.S.) senior management team currently oversees the delivery of a wide range of fire protection services through the application of the **Comprehensive Fire Safety Effectiveness Model** (C.F.S.E.M.) supported by the O.F.M.E.M. This model presents the primary objective of a fire department which is to provide the optimum level of fire protection services while ensuring an appropriate level of health and safety for firefighters. The C.F.S.E.M. prioritizes a strategy referred to as the **"three lines of defence."** These include:

- i. **Public Education and Prevention;**
- ii. **Fire Safety Standards and Enforcement; and**
- iii. **Emergency Response (Fire Suppression)**

Within the Province of Ontario the **"three lines of defence"** model has proven to be an effective strategy in reducing the number of fire-related fatalities and injuries, and reducing the overall impacts of fires while enhancing the safety of firefighters. In addition to options and recommendations, this F.P.S.M.P. will present **"strategic priorities"** that are intended to form the guiding principles in Council's decision making process with respect to the delivery of fire protection services, and optimize the use of the **"three lines of defence"** model in providing the most effective and efficient level of fire protection services, with the most value to the community.

As of July 1, 2019 all municipalities in Ontario will be required to complete a Community Risk Assessment as prescribed by the new **Ontario Regulation 378/18 - Community Risk Assessment**. With the support of Council this Fire Protection Services Master Planning process has proactively prepared

the Town to comply with this new legislation. Assessing community fire risk is an important element of understanding the local needs and circumstances, as required by the F.P.P.A., which can then be aligned to the service levels established by the municipality. The results of the C.R.A. have directly informed the analysis of the fire protection services across all divisions, with particular connections to fire prevention/public education, training and emergency response (e.g. suppression) and to directly inform the recommendations within this F.P.S.M.P.

The information presented within this F.P.S.M.P. will confirm that the L.F.S. is defined as a “*composite*” fire department, including the use of both full-time and paid-on-call volunteer firefighters. The analysis will identify that this composite fire department model has served the Town of LaSalle very well. However, this F.P.S.M.P. will also identify that the sustainability of utilizing paid-on-call volunteer firefighters to provide initial fire suppression services is becoming an increasing risk for the municipality. The recruitment and retention of volunteer firefighters (paid-on-call) has become a major challenge for municipalities across Canada. As such this F.P.S.M.P. introduces new strategies that target the sustainability of this historically beneficial model. This includes prioritizing the hiring of additional full-time firefighters to reduce the dependency on the paid-on-call volunteer firefighter as the initial providers of fire suppression services in a growing community.

The analyses within this F.P.S.M.P. also includes recommendations to further enhance the current fire prevention and public education programs and services provided by the L.F.S. by further optimizing the first two first lines of defence, including the application of fire safety standards and fire code enforcement. Recommendations are presented within this F.P.S.M.P. to seek Council’s support to further optimize these programs and services that have been identified as a strategic priority. Specifically, this strategy is intended to further target optimizing the current fire inspection program in high risk, and high-rise building occupancies, and identify additional staff resources to further develop and implement the department’s public education program.

Another theme within this F.P.S.M.P. will be the implementation of strategies to enhance the internal monitoring and evaluation of all programs and services provided by the department. These strategies will align with municipal best practices that support the use of performance benchmarks to establish and monitor service levels on a regular basis.

Subject to Council’s consideration, this F.P.S.M.P. is intended to inform the development of clear goals and objectives for each of the programs and services provided by the L.F.S. to be included within an updated ***Establishing and Regulating By-law***. This includes a clear description of the intended service level, process for implementation and requirements for the ongoing monitoring and reporting to Council and the community.

List of Recommendations

This report presents two types of recommendations. **Council Recommendations** include those that require a policy decision or financial commitment on behalf of the Town. **Operational Recommendations** can be administered and implemented by the Fire Chief within his current authority, possibly requiring further documentation and reporting to Council for approval.

Administration

Council Recommendations:

Council Recommendation #1: *That the strategic priorities identified within the proposed Fire Protection Services Master Plan be adopted to form the strategic framework for the delivery of fire protection services within the Town of LaSalle, including:*

- i. The Town of LaSalle is committed to identifying the optimal level of fire protection services through the use of a Community Risk Assessment to determine the fire safety risks present within the Town of LaSalle as the basis for developing clear goals and objectives for all fire protection services provided by the LaSalle Fire Service;*
- ii. Where applicable, the Town of LaSalle will seek to optimize the Ontario Comprehensive Fire Safety Effectiveness Model's first two lines of defence, including public education and fire prevention, and the utilization of fire safety standards and fire code enforcement, in developing clear goals and objectives for all fire protection services provided by the LaSalle Fire Service; and*
- iii. The Town of LaSalle will prioritize the utilization of strategies that support the sustainability of fire protection and emergency services that provide the most effective and efficient level of services resulting in the best value for the community.*

Operational Recommendations:

Operational Recommendation # 1: *That consideration be given to updating the LaSalle Fire Service mission, vision and core values as referenced within the proposed Fire Protection Services Master Plan.*

Operational Recommendation #2: *That subject to Council's consideration and approval of the proposed Fire Protection Services Master Plan that the Establishing and Regulating By-law No. 6073 be reviewed and updated as required.*

Operational Recommendation #3: *That the LaSalle Fire Service conduct a review of all services and programs that may be applicable for cost recovery within the User Fees and Charges By-law No. 7852.*

Operational Recommendation #4: *That consideration be given to initiating a review of the process for developing and communicating department policies and operating guidelines as described within the proposed Fire Protection Services Master Plan.*

Operational Recommendation #5: *That the LaSalle Fire Service consider updating the depth of analysis included within the department's Annual Report to Council and the public to include an update to the Community Risk Assessment and address the requirements of 'Ontario Regulation 377/18 – Public Reports', as referenced within the proposed Fire Protection Services Master Plan .*

Operational Recommendation #6: That a further review of the LaSalle Fire Services records management technology and processes be conducted as a component of the implementation process of the proposed Fire Protection Services Master Plan.

Fire Prevention/Public Education

Council Recommendations:

Council Recommendation #2: That the LaSalle Fire Services develop a strategy for the implementation of the proposed fire prevention/public education professional qualifications presented within the proposed Fire Protection Services Master Plan for all staff assigned to delivering the applicable fire prevention/publication programs and services.

Council Recommendation #3: That subject to Council's consideration and approval of an Implementation Plan that the proposed fire inspection schedule included within the proposed Fire Protection Services Master Plan be approved and included within the proposed Fire Prevention Policy.

Council Recommendation #4: That subject to Council's consideration and approval of an Implementation Plan that the proposed public education schedule included within the proposed Fire Protection Services Master Plan be approved and included within the proposed Fire Prevention Policy.

Operational Recommendations:

Operational Recommendation #7: That the LaSalle Fire Service update its current Fire Prevention Policy as described within the proposed Fire Protection Services Master Plan, and that subject to approval by Council it be included as an appendix to the Establishing and Regulating By-law.

Operational Recommendation #8: That consideration be given to developing additional fire prevention/public education Operational Guidelines as referenced within the proposed Fire Protection Services Master Plan.

Operational Recommendation #9: That consideration be given to expanding the current workload reporting of the Fire Prevention/Public Education Division as referenced within the proposed Fire Protection Services Master Plan.

Operational Recommendation #10: That L.F.S. develop a comprehensive Operating Guideline to provide staff direction on conducting Fire Safety Audits and for Fire Safety Audits to be referenced within the updated Fire Prevention Policy.

Operational Recommendation #11: That in consultation with the Office of the Fire Marshal and Emergency Management and the County of Essex Fire Chiefs Association, the LaSalle Fire Service consider options for hosting or attending an educational workshop related to Fire Safety Enforcement as presented within the proposed Fire Protection Services Master Plan.

Operational Recommendation #12: That the Town of LaSalle consider drafting a Memorandum of Understanding between the municipality's building and fire departments, which clearly defines the roles and responsibilities of personnel with respect to building and site plan review.

Operational Recommendation #13: That consideration be given to developing a comprehensive strategy for reviewing and managing false alarm calls that includes enhanced and targeted public education strategies, increased fire inspections and enforcement options.

Operational Recommendation #14: That consideration be given to enhancing the existing child/youth fire safety education program to target all children in the 0-14 age category as presented within the proposed Fire Protection Services Master Plan.

Operational Recommendation #15: That consideration be given to enhancing the existing seniors' fire safety program as presented within the proposed Fire Protection Services Master Plan.

Operational Recommendation #16: That consideration be given to enhancing the existing marina public education program as presented within the proposed Fire Protection Services Master Plan.

Operational Recommendation #17: That consideration be given to enhancing the existing smoke alarm/carbon monoxide alarm program as presented within the proposed Fire Protection Services Master Plan.

Training

Operational Recommendations:

Operational Recommendation #18: That the department consolidate the current firefighter training initiatives into one Comprehensive Training Program including performance goals and objectives to be defined within a department Operational Guideline.

Operational Recommendation #19: That consideration be given to enhancing the LaSalle Fire Service's current paid-on-call volunteer firefighter recruitment referencing the volunteer firefighter recruitment and retention strategies presented within the proposed Fire Protection Services Master Plan.

Operational Recommendation #20: That the LaSalle Fire Service Company Officer Training Program be included within the proposed Comprehensive Training Program.

Operational Recommendation #21: That the LaSalle Fire Service consider maintaining the current County-based operating agreement to provide Technician Level hazardous materials response support.

Operational Recommendation #22: That consideration be given to revising the existing surface water and ice search and rescue services to reference shore-based (tethered) and vessel-based (tethered), and that surface water and ice search and rescue services levels identified in By-law No. 026-2018 be revised to shore-based (tethered at all times).

Operational Recommendation #23: That the LaSalle Fire Service consider revising its current confined space/trench rescue capabilities to Awareness Level, and the consideration be given to developing an automatic aid, or service agreement with a neighbouring community, or the private sector to provide Technical Level confined space/trench rescue response support.

Operational Recommendation #24: That a clearly defined Operational Guideline be developed to define the required training and roles and responsibilities of the LaSalle Fire Services in providing marine services, and that these services be included within the proposed Establishing and Regulating by-law.

Operational Recommendation #25: That consideration be given to consolidating all department policies, procedures and routine orders referring to the respiratory protection program into one Operational Guideline.

Operational Recommendation #26: That consideration be given to further enhancing the utilization of on-line training as a component of delivering the proposed Comprehensive Training Program.

Operational Recommendation #27: That live fire training be completed by all firefighters on an annual basis as identified within the proposed Fire Protection Services Master Plan as a component of the proposed Comprehensive Training Program.

Operations

Council Recommendations:

Council Recommendation #5: That the proposed fire suppression performance benchmark for initial response within the defined urban area included within the proposed Fire Protection Services Master Plan be utilized to monitor and report to Council and the community.

Council Recommendation #6: That the proposed fire suppression performance benchmark for depth of response within the Town of LaSalle identified within the proposed Fire Protection Services Master Plan be utilized to monitor and report to Council and the community.

Council Recommendation #7: That consideration be given to developing a Fire Station implementation strategy to transition to the proposed Scenario #4 Fire Station Location model presented within the proposed Fire Protection Services Master Plan.

Proposed Staff Resource Strategies

Council Recommendations:

Council Recommendation #8: That Council consider prioritizing the hiring of additional administrative / clerical support for the Fire Prevention/Public Education and Training Divisions of the LaSalle Fire Service as presented within proposed Fire Protection Services Master Plan.

Council Recommendation #9: That Council consider prioritizing the hiring of six additional full-time firefighters to support enhancing the initial response, and related fire protection services provided by the LaSalle Fire Services as presented within the proposed Fire Protection Services Master Plan.

Council Recommendation #10: That Council consider prioritizing the incremental hiring of 18 additional paid-on-call volunteer firefighters to support enhancing the fire suppression services provided by the LaSalle Fire Services as presented within the proposed Fire Protection Services Master Plan.

Council Recommendation #11: That the LaSalle Fire Service consult with the paid-on-call volunteer firefighters in developing and implementing an on call schedule as presented within the proposed Fire Protection Services Master Plan.

Council Recommendations #12: That the Town of LaSalle prioritize the development of a financial strategy to transition to a minimum staffing of four full-time firefighters on duty at all times as soon as fiscally possible.

Operational Recommendations:

Operational Recommendation #28: That the LaSalle Fire Service consider the implementation of a formalized Training Committee as referenced within the proposed Fire Protection Services Master Plan.

Operational Recommendation #29: That the LaSalle Fire Service consider the implementation the Training Instructors as referenced within the proposed Fire Protection Services Master Plan.

Operational Recommendation #30: That the LaSalle Fire Service consider the implementation of a formalized Fire Prevention/Public Education Committee as referenced within the proposed Fire Protection Services Master Plan.

Fleet and Facilities

Operational Recommendations:

Operational Recommendation #31: That the LaSalle Fire Service consider the purchase of additional sets of spare bunker gear in multiples sizes to accommodate the decontamination requirements following fire incidents.

Emergency Management

Operational Recommendations:

Operational Recommendation #32: That the Town of LaSalle consider revising the current Emergency Response Plan to more accurately define the responsibilities assigned to all members of the Municipal Control Group as referenced within the proposed Fire Protection Services Master Plan.

Fire Communications

Operational Recommendations:

Operational Recommendation #33: It is recommended that priority be given to establishing performance benchmarks for emergency call taking and dispatch services identified within NFPA 1221 - Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems which are reviewed through a regular process.

Operational Recommendation #34: That the Fire Chief discuss the approach to training all Communications Centre staff to the N.F.P.A. 1061 - Standard for Professional Qualifications for Public Safety Telecommunications Personnel – Level I qualifications and certification with the dispatch services provider.

1.0 Introduction

The preparation of this Fire Protection Services Master Plan (F.P.S.M.P.) was initiated by the Town of LaSalle (Town) as a component of its strategic community planning and growth development process. Initiating this Fire Protection Services Master Planning process is also consistent with industry best practices that recommend a review and update of a community's F.P.S.M.P. based on a ten-year planning horizon. The Town's last Fire Master Plan was completed in 2008.

The primary focus of the analyses contained within this F.P.S.M.P. is to provide a comprehensive review of the current fire protection services provided by the L.F.S. in comparison to the Town's legislative requirements as required by the **Fire Protection and Prevention Act 1997** (F.P.P.A.) and **Occupational Health and Safety Act, R.S.O. 1990** (O.H.S.A.). This analyses will be informed by comparison to current industry guidelines as authored by the **Office of the Fire Marshal and Emergency Management** (O.F.M.E.M.), industry standards as authored by the **National Fire Protection Association** (N.F.P.A.) and our knowledge of current industry best practices.

The **Ministry of Community Safety and Correctional Services** (M.C.S.C.S.) has announced that as of July 1st, 2019 the new **Ontario Regulation 378/18 Community Risk Assessment** will come into force as a component of the F.P.P.A. This new regulation requires every municipality to complete a Community Risk Assessment no later than July 1st, 2024. This Fire Protection Services Master Planning process has proactively completed a C.R.A. (**Appendix A**) that includes analysis of the nine mandatory profiles included within Ontario Regulation 378/18 that are intended to inform decisions about the provision of fire protection services within a community.

Under the leadership of the O.F.M.E.M. the Province of Ontario has developed what is known as the **"Comprehensive Fire Safety Effectiveness Model"** that includes a fire protection planning strategy known as the **"Three Lines of Defence"**. The analysis within this F.P.S.M.P. seeks to optimize the utilization of the three lines of defence components including:

- 1. Public Education and Prevention;**
- 2. Fire Safety Standards and Enforcement; and**
- 3. Emergency Response.**

In our experience the application of this strategy highlights the importance of recognizing that there are options to developing an effective community fire safety plan. Although emergency response (fire suppression) may be needed, there are other strategies that can be applied as elements of a broader community risk reduction strategy that can have a positive impact on reducing the need for emergency response (fire suppression) and optimizing public safety within the community.

2.0 Applicable Legislation, Guidelines, Standards and Industry Best Practices

In addition to the Community Risk Assessment the analysis and findings of this Fire Protection Services Master Planning process have been informed by the applicable legislation including the **Fire Protection and Prevention Act, 1997** (F.P.P.A.) the **Occupational Health and Safety Act, R.S.O. 1990** (O.H.S.A.), industry guidelines as authored by the **Office of the Fire Marshal and Emergency Management** (O.F.M.E.M.), industry standards as authored by the **National Fire Protection Association** (N.F.P.A.) and Dillon’s knowledge of current industry best practices as garnered from our experience in working with other municipalities across Canada.

2.1 Fire Protection and Prevention Act, 1997

Within the Province of Ontario the relevant legislation for the operation of a fire department by a municipality such as the Town of LaSalle is contained within the F.P.P.A. In addition to promoting fire prevention and public safety the F.P.P.A. is also the Act from which the **Ontario Fire Code (O.F.C.)** is regulated. While all legislation should be read and understood in its entirety, the following are applicable sections of the F.P.P.A. for reference purposes to this Fire Protection Services Master Planning process:

PART I DEFINITIONS	
Definitions	<p>1.(1) In this Act,</p> <p>“fire chief” means a fire chief appointed under section 6 (1), (2) of (4); (“chef des pompiers”)</p> <p>“fire code” means the fire code established under Part IV; (“code de prevention des incendies”)</p> <p>“fire department” means a group of firefighters authorized to provide fire protection services by a municipality, group of municipalities or by an agreement made under section 3; (“service d’ incendie”)</p> <p>“Fire Marshal” means the Fire Marshal appointed under subsection 8 (1); (“commissaire des incendies”)</p> <p>“fire protection services” includes fire suppression, fire prevention, fire safety education, communication, training of persons involved in the provisions of fire protection services, rescue and emergency services and the delivery of all those Services; (“services de protection contre les incendies”)</p> <p>“municipality” means the local municipality as defined in the Municipal Act, 2001; (“municipalite”)</p> <p>“prescribed” means prescribed by regulation (“prescript”)</p> <p>“regulation” means a regulation made under this Act; (“reglement”)</p> <p>“volunteer firefighter” means a firefighter who provides fire protection services either voluntarily or for a nominal consideration, honorarium, training or activity allowance; (“pompier volontaire”)</p>
Application of definition of firefighter	<p>(3) The definition of firefighter in subsection (1) does not apply to Part IX. 1997, c. 4, s. 1 (2)</p>

PART I DEFINITIONS	
Automatic aid agreements	<p>(4) For the purposes of this Act, an automatic aid agreement means any agreement under which,</p> <p>(a) a municipality agrees to ensure the provision of an initial response to fires and rescues and emergencies that may occur in a part of another municipality where a fire department in the municipality is capable of responding more quickly than any fire department situated in the other municipality; or,</p> <p>(b) a municipality agrees to ensure the provision of a supplemental response to fires, rescues and other emergencies that may occur in a part of another municipality where a fire department situated in the municipality is capable of providing the quickest supplemental response to fires, rescues and other emergencies occurring in the part of the other municipality. 1997, c. 4, s. 1 (4)</p>
PART II RESPONSIBILITY FOR FIRE PROTECTION SERVICES	
Municipal responsibilities	<p style="text-align: center;">2.(1) Every municipality shall</p> <p>(a) establish a program in the municipality which must include public education with respect to fire safety and certain components of fire prevention; and,</p> <p>(b) provide such other fire protection services as it determines may be necessary in accordance with its needs and circumstances.</p>
Services to be provided	<p>(3) In determining the form and content of the program that it must offer under clause (1)(a) and the other fire protection services that it may offer under clause (1)(b), a municipality may seek the advice of the Fire Marshal.</p>
Automatic aid agreements	<p>(6) A municipality may enter into an automatic aide agreement to provide or receive the initial or supplemental response to fires, rescues and emergencies.</p>
Review of municipal fire services	<p>(7) The Fire Marshal may monitor and review the fire protection services provided by municipalities to ensure that municipalities have met their responsibilities under this section, and if the Fire Marshal is of the opinion that, as a result of a municipality failing to comply with its responsibilities under subsection (1), a serious threat to public safety exists in the municipality, he or she may make recommendations to the council of the municipality with respect to possible measures the municipality may take to remedy or reduce the threat to public safety.</p>
Failure to provide services	<p>(8) If a municipality fails to adhere to the recommendations made by the Fire Marshal under subsection (7) or to take any other measure that in the opinion of the Fire Marshal will remedy or reduce the threat to public safety, the Minister may recommend the Lieutenant Governor in Council that a regulation be made under subsection (9).</p>
Regulation	<p>(9) Upon the recommendation of the Minister, the Lieutenant Governor in council may make regulations establishing standards for fire protection services in municipalities and requiring municipalities to comply with the standards.</p>
Fire departments	<p>(1) A fire department shall provide fire suppression services and may provide other fire protection services in a municipality, group of municipalities or in territory without municipal organization. 1997, c. 4, s. 5 (1).</p>
Same	<p>(2) Subject to subsection (3), the council of a municipality may establish more than one fire department for the municipality. 1997, c. 4, s. 5 (2)</p>
Exception	<p>(3) The council of a municipality may not establish more than one fire department if, for a period of at least 12 months before the day this Act comes into force, fire protection services in the municipality were provided by a fire department composed exclusively of full-time firefighters. 1997, c. 4, s. 5 (3)</p>
Same	<p>(4) The councils of two or more municipalities may establish one or more fire departments for the municipalities. 1997, c. 4, s. 5 (4)</p>

PART I DEFINITIONS	
Fire chief, municipalities	6. (1) If a fire department is established for the whole or part of a municipality or for more than one municipality, the council of the municipality or the councils of the municipalities, as the case may be, shall appoint a fire chief for the fire department.
Same	(2) The council of a municipality or the councils of two or more municipalities may appoint a fire chief for two or more fire departments.
Responsibility to council	(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.
Powers of a fire chief	(5) The fire chief may exercise all powers assigned to him or her under this Act within the territorial limits of the municipality and within any other area in which the municipality has agreed to provide fire protection services, subject to any conditions specified in the agreement.
PART III FIRE MARSHAL	
Appointment of Fire Marshal	8 (1) There shall be a Fire Marshal who shall be appointed by the Lieutenant Governor in Council.
Powers of Fire Marshal	<p>9.(1) the Fire Marshal has the power,</p> <ul style="list-style-type: none"> (a) to monitor, review and advise municipalities respecting the provision of fire protection services and to make recommendations to municipal councils for improving the efficiency and effectiveness of those services; (b) to issue directives to assistants to the Fire Marshal respecting matters relating to this Act and the regulations; (c) to advise and assist ministries and agencies of government respecting fire protection services and related matters; (d) to issue guidelines to municipalities respecting fire protection services and related Matters; (e) to co-operate with anybody or person interested in developing and promoting the principles and practices of fire protections services; (f) to issue long service awards to persons involved in the provision of fire protection services; and, (g) to exercise such other powers as may be assigned under this Act or as may be necessary to perform any duties assigned under this Act.
Duties of Fire Marshal	<p>9.(2) It is the duty of the Fire Marshal,</p> <ul style="list-style-type: none"> (a) to investigate the cause, origin and circumstances of any fire or of any explosion or condition that in opinion of the Fire Marshal might have caused a fire, explosion, loss of life, or damage to property; (b) to advise municipalities in the interpretation and enforcement of this Act and the regulations; (c) to provide information and advice on fire safety matters and fire protection matters by means of public meetings, newspaper articles, publications, electronic media and exhibitions and otherwise as the Fire Marshal considers available; (d) to develop training programs and evaluation systems for persons involved in the provision of fire protection services and to provide programs to improve practices relating to fire protection services; (e) to maintain and operate a central fire college; (f) to keep a record of every fire reported to the Fire Marshal with the facts, statistics and circumstances that are required under the Act; (g) to develop and maintain statistical records and conduct studies in respect of fire protection services; and, (h) to perform such other duties as may be assigned to the Fire Marshal under this Act.

2.2 Occupational Health and Safety Act, R.S.O. 1990

The **Occupational Health and Safety Act, R.S.O. 1990 (O.H.S.A.)** requires every employer to “take every precaution reasonable in the circumstances for the protection of the worker”. The O.H.S.A. provides for the appointment of committees, and identifies the “**Ontario Fire Services Section 21 Advisory Committee**” as the advisory committee to the Minister of Labour with the role and responsibility to issue guidance notes to address firefighter-specific safety issues within Ontario.

Firefighter safety must be a high priority considering all of the activities and services to be provided by a fire department. This must include the provision of department policies and procedures, or Operating Guidelines (O.G.s) or alternatively Operating Procedures (O.P.s) that are consistent with the direction of the O.H.S.A. Section 21 Guidance Notes for the fire service.

2.3 Office of the Fire Marshal and Emergency Management

As indicated within the F.P.P.A., the duties of the **Office of the Fire Marshal and Emergency Management** include responsibilities to assist municipalities in the interpretation of the Act, to develop training and evaluation systems and enforcement of the Act and its regulations. The O.F.M.E.M. has developed **Public Fire Safety Guidelines (P.F.S.G.s)** to assist municipalities in making informed decisions to determine local “**needs and circumstances**”¹ and achieve compliance with the F.P.P.A. At this time the O.F.M.E.M. is conducting a comprehensive review of all P.F.S.G. During this review process the O.F.M.E.M. has informed the fire service that the current P.F.S.G.s may be referred to for reference purposes². Where applicable this F.P.S.M.P. will identify relevant P.F.S.G.s for reference.

2.4 National Fire Protection Association

The **National Fire Protection Association (N.F.P.A.)** is an international non-profit organization that was established in 1896. The organization’s mission is to reduce the worldwide burden of fire and other hazards on the quality of life by providing and advocating consensus codes and standards, research, training, and education. With a membership that includes more than 70,000 individuals from nearly 100 nations, N.F.P.A. is recognized as one of the world’s leading advocates of fire prevention and an authoritative source on public safety.

N.F.P.A. is responsible for 300 codes and standards that are designed to minimize the risk and effects of fire by establishing criteria for building, processing, design, service, and installation in the United States, as well as many other countries. It’s more than 200 technical code and standard development

¹ Fire Protection and Prevention Act – Part II Responsibility for Fire Protection Services – Municipal Responsibilities – Section 2.(1) (b)

² Ministry of Community Safety and Correctional Services - Public Fire Safety Guidelines

http://www.mcscs.ius.gov.on.ca/english/FireMarshal/FireServiceResources/PublicFireSafetyGuidelines/OFM_Guidelines.html

committees are comprised of over 6,000 volunteer seats. Members vote on proposals and revisions in a process that is accredited by the American National Standards Institute (A.N.S.I.).

Over the past decade the Ontario fire service has been transitioning to the use of N.F.P.A. standards to guide many of the services they provide. An example of this would be the transition process from the previous Ontario Fire Services Standards to the N.F.P.A. Professional Qualifications (N.F.P.A. Pro-Qual) Standards announced by the O.F.M.E.M. in 2014. Where applicable this F.P.S.M.P. will identify the specific N.F.P.A. standards that have been referenced. **Table 1** lists a sample of standards by division that may be described or referenced throughout this F.P.S.M.P.

Table 1: Summary of Applicable N.F.P.A. Standards

Division	Applicable N.F.P.A. Standards
Fire Prevention	<ul style="list-style-type: none"> • <i>N.F.P.A. 1730- Standard on Organization and Deployment of Fire Prevention Inspection and Code Enforcement, Plan Review, Investigation, and Public Education Operations</i> • <i>N.F.P.A. 1031 – Standard for Professional Qualifications for Fire Inspector and Plans Examiner</i> • <i>N.F.P.A. 1035 – Standard for Professional Qualifications for Fire and Life Safety Educator, Public Information Officer, and Juvenile Firesetter Intervention Specialist</i> • <i>N.F.P.A. 1033 – Standard for Professional Qualifications for Fire Investigator</i>
Training	<ul style="list-style-type: none"> • <i>N.F.P.A. 1041 – Standard for Fire Service Instructor Professional Qualifications</i> • <i>N.F.P.A. 1403 - Standard on Live Fire Training Evolutions</i>
Operations	<ul style="list-style-type: none"> • <i>N.F.P.A. 1710 - Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments</i> • <i>N.F.P.A. 1720 - Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations and Special Operations to the Public by Volunteer Fire Departments</i> • <i>N.F.P.A. 1001 - Standard for Firefighter Professional Qualifications</i> • <i>N.F.P.A. 1021 – Standard for Fire Officer Professional Qualifications</i> • <i>N.F.P.A. 1142 - Standard on Water Supplies for Suburban and Rural Fire Fighting</i>
Communications	<ul style="list-style-type: none"> • <i>N.F.P.A. 1221 - Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems</i> • <i>N.F.P.A. 1061 - Professional Qualifications for Public Safety Telecommunications Personnel</i>
Mechanical	<ul style="list-style-type: none"> • <i>N.F.P.A. 1901 - Standard for Automotive Fire Apparatus</i> • <i>N.F.P.A. 1911 - Standard for the Inspection, Maintenance, Testing, and Retirement of In-Service Emergency Vehicles</i>

2.5 Industry Best Practices

Dillon’s fire and emergency services team remains current with industry best practices through a range of strategies that include attending conferences offered by the **Canadian Association of Fire Chiefs** (C.A.F.C.) the **Ontario Association of Fire Chiefs** (O.A.F.C.) and by participating in educational sessions offered by leading fire service organizations such as the N.F.P.A. to supplement our experience within the fire service. Our team is also exposed to a wide variety of policies and procedures and innovative practices through working with our municipal clients across the country. Our knowledge of current industry best practices is also informed by the following sections.

2.5.1 National Institute of Standards and Technology

The **National Institute of Standards and Technology** (N.I.S.T.) was founded in 1901 as a non-regulatory agency within the United States (U.S.) Department of Commerce. N.I.S.T.'s mission is to promote U.S. innovation and industrial competitiveness by advancing measurement science, standards, and technology in ways that enhance economic security and improve our quality of life.

In April of 2010, N.I.S.T. released their Technical Note #1661 **“Report on Residential Fireground Field Experiments”** reflecting a collaborative research analyses conducted by leading fire service agencies. The analyses within this report investigated the effects of varying crew sizes, apparatus arrival times and response times on firefighter safety, overall task completion and interior residential tenability using realistic residential fires.

The result of a similar study identified in Technical Note #1797 **“Report on High-Rise Fireground Field Experiments”** was released in April 2013 that assessed the deployment of firefighting resources to fires in high-rise buildings. These studies are both examples of the technical research and analyses that is taken into consideration in order to develop and update the N.F.P.A. standards referenced within this F.P.S.M.P.

2.5.2 Province of Ontario – Three Lines of Defence

Under the leadership of the O.F.M.E.M. the Province of Ontario has developed what is known as the **“Comprehensive Fire Safety Effectiveness Model”** that includes a fire protection planning strategy known as the **“Three Lines of Defence”**. The analysis within this F.P.S.M.P. seeks to optimize the utilization of the three lines of defence components including:

I. Public Education and Prevention:

Educating residents of the community on means for them to fulfill their responsibilities for their own fire safety is a proven method of reducing the incidence of fire. Only by educating residents can fires be prevented and can those affected by fires respond properly to save lives, reduce injury and reduce the impact of fires;

II. Fire Safety Standards and Enforcement:

Ensuring that buildings have the required fire protection systems, safety features, including fire safety plans, and that these systems are maintained, so that the severity of fires may be minimized;

III. Emergency Response:

Providing well trained and equipped firefighters directed by capable officers to stop the spread of fires once they occur and to assist in protecting the lives and safety of residents. This is the failsafe for those times when fires occur despite prevention efforts.

2.5.3 Commission on Fire Accreditation International

The **Centre for Public Safety Excellence** (C.P.S.E.) serves as the governing body for the two organizations that offer accreditation, education and credentialing: the **Commission on Fire Accreditation International** (C.F.A.I.) and the **Commission on Professional Credentialing** (C.P.C.).

The C.F.A.I. defines itself through its Mission: *“to assist the fire and emergency service agencies throughout the world in achieving excellence through self-assessment and accreditation in order to provide continuous quality improvement and the enhancement of service delivery to their communities.”*

The objective of the C.F.A.I. program is to define an accreditation system that is a credible, achievable, usable, and realistic model. The ultimate C.F.A.I. goal is to provide an accreditation process to improve the abilities of municipalities to both understand and recognize their respective community fire risks, provide balanced public/private involvement in reducing these risks and improve the overall quality of life for community members using the accreditation model. Of importance to this Fire Protection Services Master Planning process is the C.F.A.I. strategy that seeks to achieve **“continuous improvement”** in the delivery of fire protection services.

2.5.4 Province of British Columbia – Structural Firefighters Competency and Training Playbook

The Office of the Fire Commissioner in British Columbia, in consultation with the Fire Chiefs’ Association of British Columbia, and the British Columbia Fire Training Officers Association has developed the **Structure Firefighters Competency and Training Playbook** (Playbook). In our view, the most recent addition, amended in May of 2015, reflects a further example of best practices within the fire service industry. The Playbook is applicable to all fire services personnel within the Province of British Columbia as defined by their *Fire Services Act*. The principles of the Playbook indicate that it is the direct responsibility of the *“authority having jurisdiction”* (A.H.J.) to declare its firefighting service level. The declared fire suppression service level must then be established as a formal policy (by-law, policy or contract) and be fully reflected in operating guidelines within the fire department.

The service levels from which an A.H.J. may choose include: Exterior Operations Service Levels, Interior Operations Service Levels, and Full Service Level. In our view the Playbook provides valuable insight into identifying the options for fire suppression services that the Town of LaSalle may consider as part of this Fire Protection Services Master Planning process.

3.0 Fire Protection Services Master Planning Process

The development of this F.P.S.M.P. has been informed by ***P.F.S.G. 03-02-13 Master Planning Process for Fire Protection Services***. This includes analysis of community fire risk and future community growth. The efficiency and effectiveness of each division within the LaSalle Fire Service have been analysed, along with emergency response and station locations, staffing resources and deployment procedures, fire protection and education programs, apparatus and all related requirements, and service agreements. In our view the guiding principles of *P.F.S.G. 03-02-13* including the following are applicable to this Fire Protection Services Master Planning process:

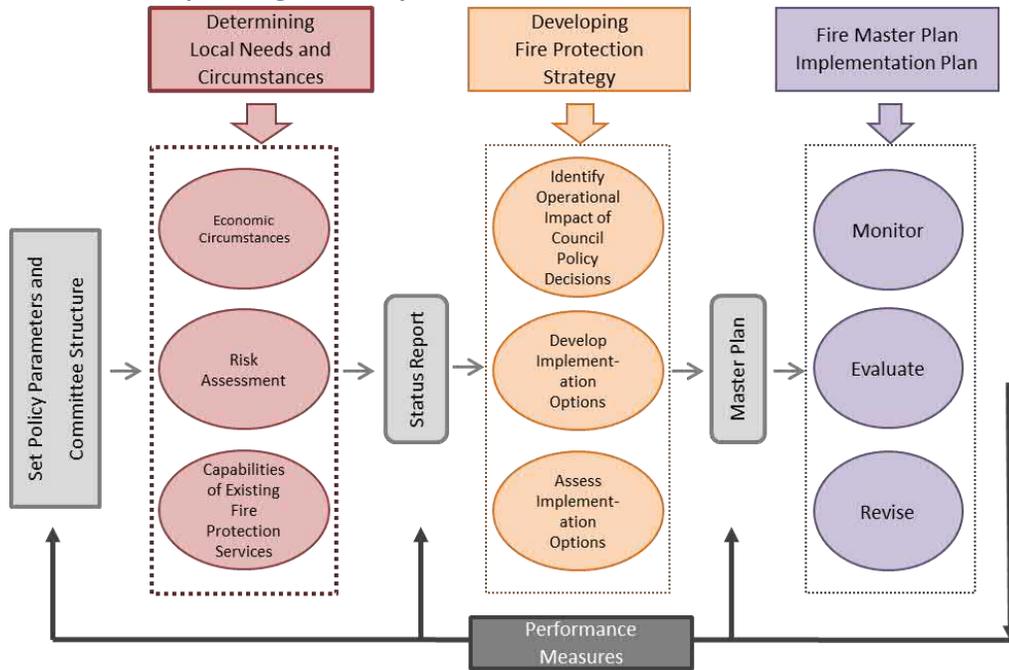
- The residents of any community are entitled to the most effective, efficient and safe fire services possible; and,
- Those responsible must work within these parameters in making recommendations for improving municipal fire services.

This Fire Protection Services Master Planning process has also been informed by ***P.F.S.G. 01-01-01 Fire Protection Review Process*** that identifies a number of factors to be considered in conducting the fire protection review process including:

- *The overall objective of any fire protection program is to provide the optimum level of protection to the community, in keeping with local needs and circumstances;*
- *Extensive research has demonstrated that there are a variety of factors that will have an impact on the fire department's capacity to fulfill this objective;*
- *Conversely, there are many different options that a municipality may pursue to improve the efficiency and effectiveness of its fire protection system;*
- *Local circumstances will have a profound effect on which factors are most important for any one municipality, and what options are available for its fire protection system;*
- *Selecting among these options is an extremely complex task; and*
- *Success will require a combination of specialized expertise in fire protection, and a thorough appreciation of your municipality's economic, social and political circumstances.*

Figure 1 reflects the framework for developing a F.P.S.M.P. for optimizing public fire safety.

Figure 1: Framework for Optimizing Fire Safety



3.1 Analysis and Recommendations

This F.P.S.M.P. has been informed by the findings of the Community Risk Assessment and a comprehensive analyses of the current fire protection services provided by the LaSalle Fire Service. This F.P.S.M.P. is intended to provide Council and senior staff with a strategic planning tool to assist in the decision making process for providing fire protection service over the next ten--year community planning horizon.

Options and recommendations for Council’s consideration and approval are presented to clearly communicate the level of fire protection services to be provided to the community including where applicable proposed performance measures for ongoing monitoring and evaluation of the services to be provided.

To provide guidance and clarity around approval and implementation of the recommendations presented within this plan a classification system has been included to identify the recommendations as either **“operational”** or **“council”** that are defined as follows:

Operational Recommendations: *These include recommendations that can be administered and implemented within the current authority assigned to the Fire Chief. In some cases this may require the Fire Chief to prepare further documentation and internal reporting to Council for approval. An example of this is updating the current Establishing and Regulating By-law. This is a process that can be led by the*

Fire Chief, and senior corporate staff and through normal reporting be brought to Council for consideration and approval.

Council Recommendations: *These include recommendations that require the consideration and approval of Council related to a potential operating or capital financing impact or to inform a municipal policy decision including setting a municipal service level or where further direction to corporate staff may be needed.*

3.2 Strategic Priorities

The purpose of this F.P.S.M.P. is to provide Council and senior staff with a strategic framework to assist in making decisions regarding the provision of fire protection services. This F.P.S.M.P. has been prepared with regard for the legislated and regulatory responsibilities of the municipality as contained within the ***Fire Protection and Prevention Act, 1997*** and the ***Occupational Health and Safety Act, R.S.O. 1990***.

Emphasis has been placed on the use of current industry best practices including current guidelines and standards as those authored by the ***Office of the Fire Marshal and Emergency Management*** and the ***National Fire Protection Association***. One of the primary roles of the O.F.M.E.M. is to provide assistance to municipalities through the provision of information and processes to support determining the fire protection services a municipality requires based on its ***“local needs and circumstances”*** as defined by the F.P.P.A..

In our experience, the Fire Protection Services Master Planning process is intended to provide a strong focus on developing and implementing strategies for providing the most effective and efficient delivery of fire protection services that provide the most value to a community. Through the experience of our clients we have found that identifying guiding principles, or strategic priorities to guide the decision making process a valuable tool for a municipal Council when considering the recommendations of a Fire Protection Services Master Plan.

Our analyses into preparing this F.P.S.M.P., including our review of the previous 2008 Fire Master Plan, related reports and plans, current operations of the L.F.S., and knowledge of current industry best practices have been utilized to identify the following strategic priorities for Council consideration as part of this F.P.S.M.P. process.

Council Recommendation #1: That the strategic priorities identified within the proposed Fire Protection Services Master Plan be adopted to form the strategic framework for the delivery of fire protection services within the Town of LaSalle, including:

- i. The Town of LaSalle is committed to identifying the optimal level of fire protection services through the use of a Community Risk Assessment to determine the fire safety risks present*

- within the Town of LaSalle as the basis for developing clear goals and objectives for all fire protection services provided by the LaSalle Fire Service;*
- ii. Where applicable, the Town of LaSalle will seek to optimize the Ontario Comprehensive Fire Safety Effectiveness Model's first two lines of defence, including public education and fire prevention, and the utilization of fire safety standards and fire code enforcement, in developing clear goals and objectives for all fire protection services provided by the LaSalle Fire Service; and*
 - iii. The Town of LaSalle will prioritize the utilization of strategies that support the sustainability of fire protection and emergency services that provide the most effective and efficient level of services resulting in the best value for the community.*

3.3 Stakeholder Consultation

Initiation of the Fire Protection Services Master Planning process began with the engagement of various consultation activities. Effective communication and consultation with stakeholders is essential to the success of the plan. It is essential for three reasons. First, information is collected on local needs and circumstances which feed directly into this F.P.S.M.P. The second reason is to ensure those responsible for implementing and affected by this Fire Protection Services Master Plan understand the basis on which certain decisions are made and why particular actions are required. Thirdly, it is an opportunity to obtain feedback from the public, including key stakeholders, as well as to educate the public stakeholders on fire prevention and the Fire Protection Services Master Planning process.

3.3.1 Internal Stakeholder Consultation

The internal stakeholder engagement process for this Fire Protection Services Master Plan included discussions, telephone and email communication and/or one-on-one interviews with the following individuals (in alphabetical order) and Dillon's project director, manager and coordinator:

- Mayor,
- Members of Council;
- Chief Administrative Officer (C.A.O.);
- Fire Chief;
- Deputy Fire Chief;
- Director of Finance;
- Director of Human Resources;
- President, LaSalle Firefighters Association;
- Staff Sergeant, LaSalle Police Services;
- Fire Prevention Officer; and
- Training Instructor.

3.3.2 Council Educational Workshop

In our experience, it is extremely beneficial to engage members of Council in an educational forum at the onset of this type of project. The Dillon Project Team conducted an educational workshop with members of Council. This educational workshop presented an overview of the project scope, a review of Council's legislative responsibilities with respect to the delivery of fire protection services, including the Fire Protection and Prevention Act 1997, and the Occupational Health and Safety Act. Following this meeting, interviews were held with individual councillors and a number of department staff, to garner their feedback regarding the Strengths, Weaknesses, Opportunities and Challenges (S.W.O.C.) within the L.F.S. The power point presentation delivered to Council can be found in **Appendix B** of this F.P.S.M.P.

3.3.3 External Stakeholder Consultation

A Public Information Centre was held on March 7th, 2019. Dillon staff and the fire service's senior management team (Fire Chief and Deputy Fire Chief) were present at the event to answer questions and receive input from the attending public. Information was presented to the public through the use of display boards, summarizing the community risk assessment and Fire Protection Services Master Planning process, as well as the purpose and scope of the project. The Public Information Centre provided members of the public the opportunity to ask questions and provide input regarding the needs, perceived risks and opinions related to the provision of fire protection services.

3.4 Related Plans and Reports

This F.P.S.M.P. has been developed with consideration to several related plans and reports including the Town's 2008 Fire Master Plan, Strategic Plan 2014-2018, and the 2015 Fire Protection Services Master Plan Interim Review.

3.4.1 Fire Master Plan (2008)

In 2008 Dillon Consulting was retained by the Town of LaSalle to prepare a Fire Master Plan. The findings and recommendations of the 2008 Fire Master Plan were presented to Council to strategically guide the delivery of fire protection services over the next ten-year community planning horizon. At that time the predicted twenty year community planning projections were utilized to inform the Fire Protection Services Master Planning process.

The 2008 Fire Master Plan included several recommendations related to the existing workspace and overall space needs of the fire service. The L.F.S. relocated from the former fire station located at 5950 Malden Road to the newly renovated station located at 1900 Normandy Street in 2013. This relocation solved the majority of workspace related challenges within the former station.

Recommendations related to workload and staff resources was another significant theme within the 2008 Fire Master Plan including the need for additional resources in the areas of administration, prevention, public education, training and fire suppression. With the support of Council the L.F.S. hired a

new full-time administrative assistant position in 2011, and a full-time Training Officer in 2012. However, the analysis within this F.P.S.M.P. will show that the realities of the Town's fiscal responsibilities have not allowed the L.F.S. to maintain the same speed of growth as that of the community, and specifically the 2008 Fire Master Plan recommendation to incrementally increase the minimum number of full-time firefighters on duty at all times.

3.4.2 Simplified Risk Assessment (2016)

The F.P.P.A. requires that a municipality develop and maintain a Simplified Risk Assessment (S.R.A.). The most recent S.R.A. for the Town of LaSalle was completed in 2016. This document complies with the F.P.P.A. and includes a priority setting worksheet that identified priority goals and objectives for both fire prevention and public education programs and services.

As of July 1st, 2019 the requirements for developing a Simplified Risk Assessment will be replaced by the new **Ontario Regulation 378/18 – Community Risk Assessment**. Where applicable this analysis within this Fire Protection Services Master Planning process has considered the Town's 2016 Simplified Risk Assessment.

3.4.3 Town of LaSalle Strategic Plan (2015-2018)

The Town of LaSalle has historically been committed to meeting the needs and interests of its residents and businesses and in 2015 initiated a strategic plan to effectively plan for its future. The 2015-2018 plan was guided by a single mission which was to be enabled through the achievement of key objectives over a three to five year timeframe. Five core strategic objectives were formulated in order to achieve the Town's overall mission of *"providing its residents, businesses and visitors with high quality programs and services in a proactive, open, accessible, environmentally and fiscally responsible manner."* As referenced in the 2015-2018 Plan, these included:

1. *Expanding and diversifying our assessment base;*
2. *Effectively communicating the activities and interests of the Town;*
3. *Managing our human and financial resources in a responsible manner;*
4. *Promoting and marketing LaSalle; and*
5. *Promote a healthy and environmentally conscious community.*

Specific actions were listed for each objective, the implementation of which was the responsibility of a strategic planning steering committee. Where applicable this Fire Protection Services Master Planning process has considered the 2015-2018 Town of LaSalle Strategic Plan.

3.4.4 Fire Master Plan Interim Review 2015

In 2015 the Fire Chief conducted a Fire Master Plan Interim Review. This review provides an in-depth analysis of the progress made by the L.F.S. since adoption of the 2008 Fire Master Plan. The findings and

recommendations of this 2015 Review are presented as either “*Recommended Priority Initiatives*” or as “*On-Going and Future Recommendations*” and include the following:

Recommended Priority Initiatives:

- *Add two additional Volunteer (paid-on-call) firefighters (1 to each of 2 Companies);*
- *Build a second fire station in the western area of the Town;*
- *Hire an additional full-time firefighter position to assist in the Fire Prevention Division;*
- *Actively support and participate in collaborative efforts to secure live-fire training facilities in the region; and*
- *Continue to pursue technology options for incident emergency response management.*

On-Going and Future Recommendations:

- *Relocate the current outdoor practical training facility to a suitable location and remove the dome structure from the current location;*
- *Increase minimum full-time first response staffing to two firefighters on duty at all times;*
- *Relocate current station to eastern area of Town; and*
- *Incremental increase full-time emergency response staffing to four personnel on duty at all times.*

Where applicable the analysis within this Fire Protection Services Master Planning process will consider the findings and recommendations of the Fire Master Plan 2015 Interim Review.

3.4.5 Verdicts of Coroner’s Juries (2016, 2017 and 2018)

Mandated under the *Coroners Act*, 1990, coroners specialize in death investigation for certain deaths as identified under the Act. In Ontario, the Office of the Chief Coroner has a mandate to: “***...serve the living through high quality death investigations and inquests to ensure that no death will be overlooked, concealed or ignored. The findings are used to generate recommendations to help improve public safety and prevent deaths in similar circumstances***”.³

As a result of a fatal fire in 2012 in Whitby, and a second fatal fire in the Town of East Gwillimbury in 2013, the Office of the Chief Coroner initiated an inquest to determine the events surrounding all of the fire-related deaths that occurred. It included all of the various aspects related to fire safety, before and during a fire situation, and local emergency services response to a fire. The intent of an inquest such as this is designed to focus public attention on the circumstances of a death through an objective examination of facts. The findings of this inquest resulted in 33 recommendations to a range of organizations and stakeholders within Ontario including municipalities.

³ Ministry of Safety & Correctional Services. *Office of the Chief Coroner*. February 8, 2016. http://www.mcscs.jus.gov.on.ca/english/DeathInvestigations/office_coroner/coroner.html (accessed November 2016)

A second inquest was initiated by the Office of the Chief Coroner in May 2017 into the deaths of a 30 year old firefighting student and a 51 year old firefighter, who both died during ice rescue training courses. These separate occurred five years apart, however the training instructor was the same in both tragedies. This inquest led to fifteen jury recommendations.

Our review of these, and other Coroner Jury recommendations further highlight the importance and relevance of the *“three lines of defence”* identified within this F.P.S.M.P. In our view, each of the Coroner’s Jury recommendations is important and directly related to the goal of enhancing public safety. **Appendix C** provides a summary of the Coroner’s Jury recommendations that in our view are applicable to this Fire Protection Services Master Planning process.

4.0 Community Risk Assessment

In May 2018, the Ministry of Community Safety and Correctional Services (M.C.S.C.S.) adopted **Ontario Regulation 378/18 – Community Risk Assessment** (C.R.A.) under the F.P.P.A. As of July 1st, 2019 this new regulation requires every fire department in the province to complete a Community Risk Assessment (C.R.A.). The C.R.A. is intended to inform decisions about the provision of fire protection services within a community.

The process of assessing community fire risk is receiving increased attention within the fire protection industry in North America. The methodology included within a C.R.A. is fundamental to the development of a strategic F.P.S.M.P. Assessing community fire risk is an important element of informing the understanding of **“local needs and circumstances”** as required by the F.P.P.A., which can then be aligned to the service levels established by the municipality. The results of a C.R.A. directly inform the recommendations within this F.P.S.M.P., and are used to identify existing service gaps across divisions, with particular connections to fire prevention, training and emergency response (e.g. suppression).

The Town of LaSalle C.R.A. is attached as an appendix to this F.P.S.M.P. and outlines the methodology and sources of information used to assess community fire risk in the Town of LaSalle. The C.R.A. has been prepared in collaboration with Fire Chief and senior staff of the L.F.S. The analysis and results of the assessment are described based on three primary report sections: profile assessments; Geographic Information System (G.I.S.) risk model; and future growth considerations.

The methodology to develop the C.R.A. can be broken down into three broad stages that begin with data collection (Stage 1). This is followed by Stage 2 which includes analyses within the context of the nine mandatory profiles included within **Ontario Regulation 378/18 – C.R.A.** The analyses results and conclusions are then identified as either a **“key risk”** or a **“key finding”**. Within the context of this C.R.A., a **“key risk”** is an analysis outcome for which there is sufficient and appropriate information to inform an assessment of fire risk based on probability and consequence. The analyses and information available provides the opportunity to quantify the fire risk through a risk assignment process that concludes there is an existing fire related risk to the community. This is referred to as a risk assignment process where a risk level of high, moderate, or low is assigned. In simple terms, risk is defined as:

$$\text{Risk} = \text{Probability} \times \text{Consequence}$$

Similar to a key risk, a **“key finding”** is a risk related conclusion of the analysis that will inform service levels and other strategies. However, it is not put through the risk assignment process, in part because there is not sufficient quantitative data to do so. For example, a number of **“key findings”** included

within the C.R.A. are those identified through mapping analysis which more meaningfully illustrate a spatial priority area.

The third and final stage of the C.R.A. brings all of the risk assessment outcomes together and frames how they can be used through three layers to inform this F.P.S.M.P.

4.1 Key Risks

Risk is defined as the product of probability and consequence. Of the risk analysis outcomes presented throughout the C.R.A. some have been labelled as a **“key risk”**. Within the C.R.A. these risks have risk levels assigned. This informs the F.P.S.M.P. in two ways: first, it will help guide the prioritization of the fire risk analysis outcomes when it comes to the development of and implementation of the F.P.S.M.P. and second, it informs the risk model developed for assessing emergency response capabilities. The findings of this layer are presented within this F.P.S.M.P. in the table format displayed below:

C.R.A. Key Risks Analysis Outcomes	C.R.A.
	Identified Risk Level
Identified Key Risk	Low/Moderate/High

4.2 Risk Categorization

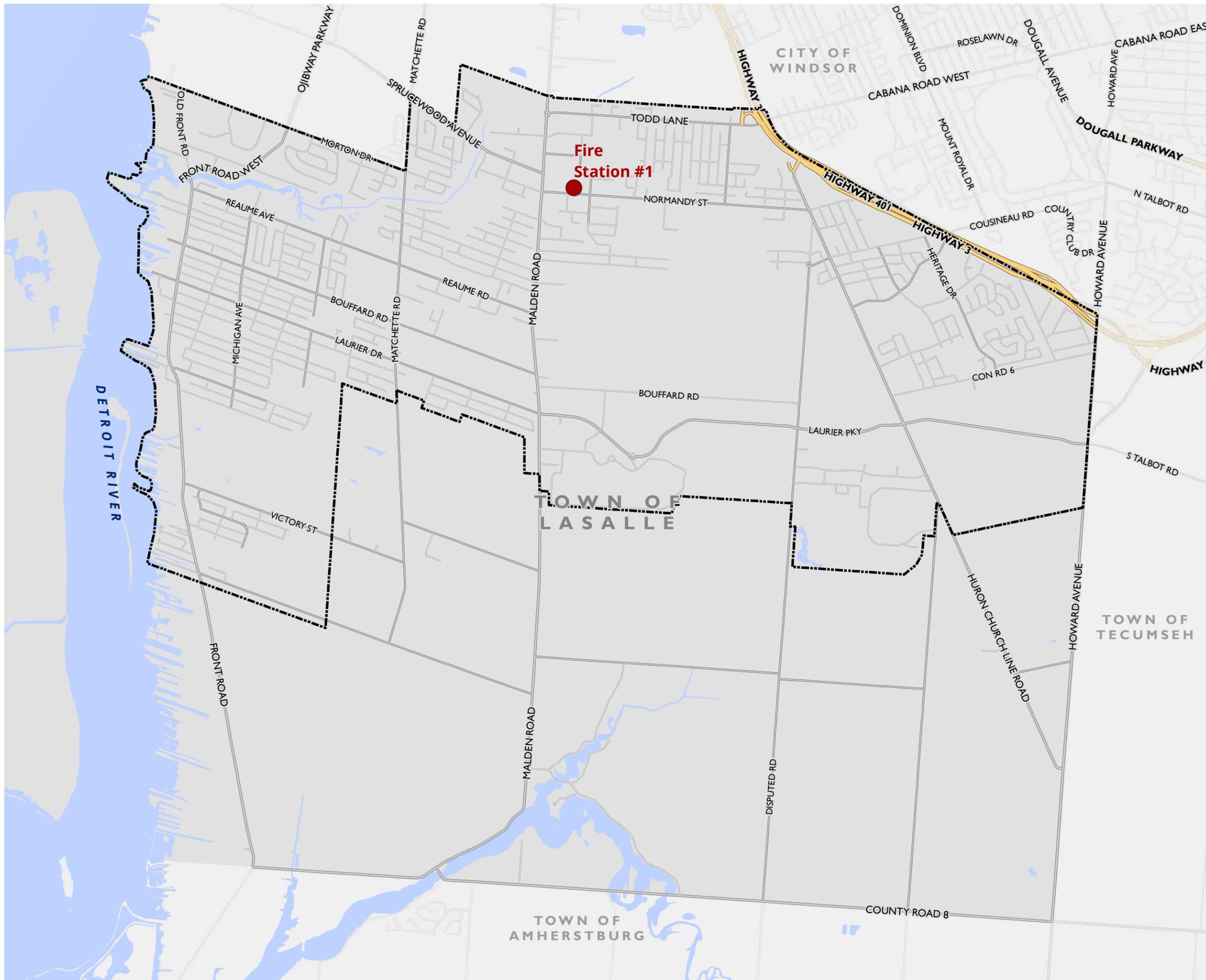
When it comes to aligning service levels with risks that define local needs and circumstances, it is important to recognize that not all risk analysis outcomes align with the services provided by a fire department in the same way. For this reason, within the C.R.A., the risk outcomes – **“key risks”** and **“key findings”** -are categorized based on how they can be used to inform the activities, strategies, and services provided by L.F.S. This categorization is then directly used within this F.P.S.M.P. The categories used for this process are based on the three lines of defence: Public Fire Safety Education; Fire Safety Standards and Enforcement, and Emergency Response and presented in similar table format:

C.R.A. Key Risks/Key Findings Analysis Outcomes	LINE OF DEFENCE
	For consideration
Identified Key Risk or Key Finding	1 st , 2 nd , or 3 rd Line of Defence

5.0 Administration Division

This section of the F.P.S.M.P. describes the roles and responsibilities of the Administration Division which provides strategic direction and overall administration and management to the LaSalle Fire Service. This section also presents the current department organizational structure, vision and mission, by-laws and agreements, policies and guidelines, records management, performance measures and proposed strategic priorities.

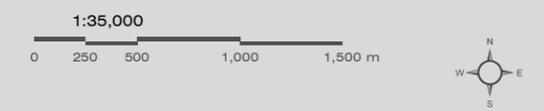
The Administration Division of the LaSalle Fire Service consists of the Fire Chief, Deputy Fire Chief and one Administrative Assistant. The Administration team operates from Station No. 1 (Headquarters) located at 1900 Normandy Street as illustrated in **Figure 2**. Core services of the Division include, but are not limited to information and records management, human resource management, capital and operational budgeting, ensuring legislative compliance, administering agreements with neighbouring municipalities, establishing and maintaining department policies and operational guidelines and the overall delivery of fire protection services within the community.



TOWN OF LASALLE

**FIGURE 2
STATION LOCATIONS**

- Fire Station
- Urban Boundary



MAP DRAWING INFORMATION:
 DATA PROVIDED BY MNR, TOWN OF LASALLE
 MAP CREATED BY: GM
 MAP CHECKED BY: SC
 MAP PROJECTION: NAD 1983 UTM Zone 17N



PROJECT: 188324
 STATUS: DRAFT
 DATE: 2019-06-05

5.1 Department Vision, Mission, and Values Statements

The O.F.M.E.M. identifies the importance of fire department vision and mission statements as core components to be considered in the Fire Protection Services Master Planning process. P.F.S.G. 03-02-13 “*Master Planning Process for Fire Protection*” identifies that mission statements are intended to be short, clear and powerful in defining an organization's purpose and primary objectives. They are intended to express why the organization exist to both internal and external stakeholders. A mission statement should identify what an organization does, who it does it for, and how it does it. In contrast, vision statements although also defining an organization's purpose, are intended to express the future goals and objectives. A vision statement should identify a vision for the future that all individuals within the department can work towards. Vision statements can often remain the same while mission statements can evolve as the organization changes. The current mission statement of the L.F.S. is:

“We are a caring team dedicated to promoting safety, and providing positive outcomes to fellow citizens in a time of need.”

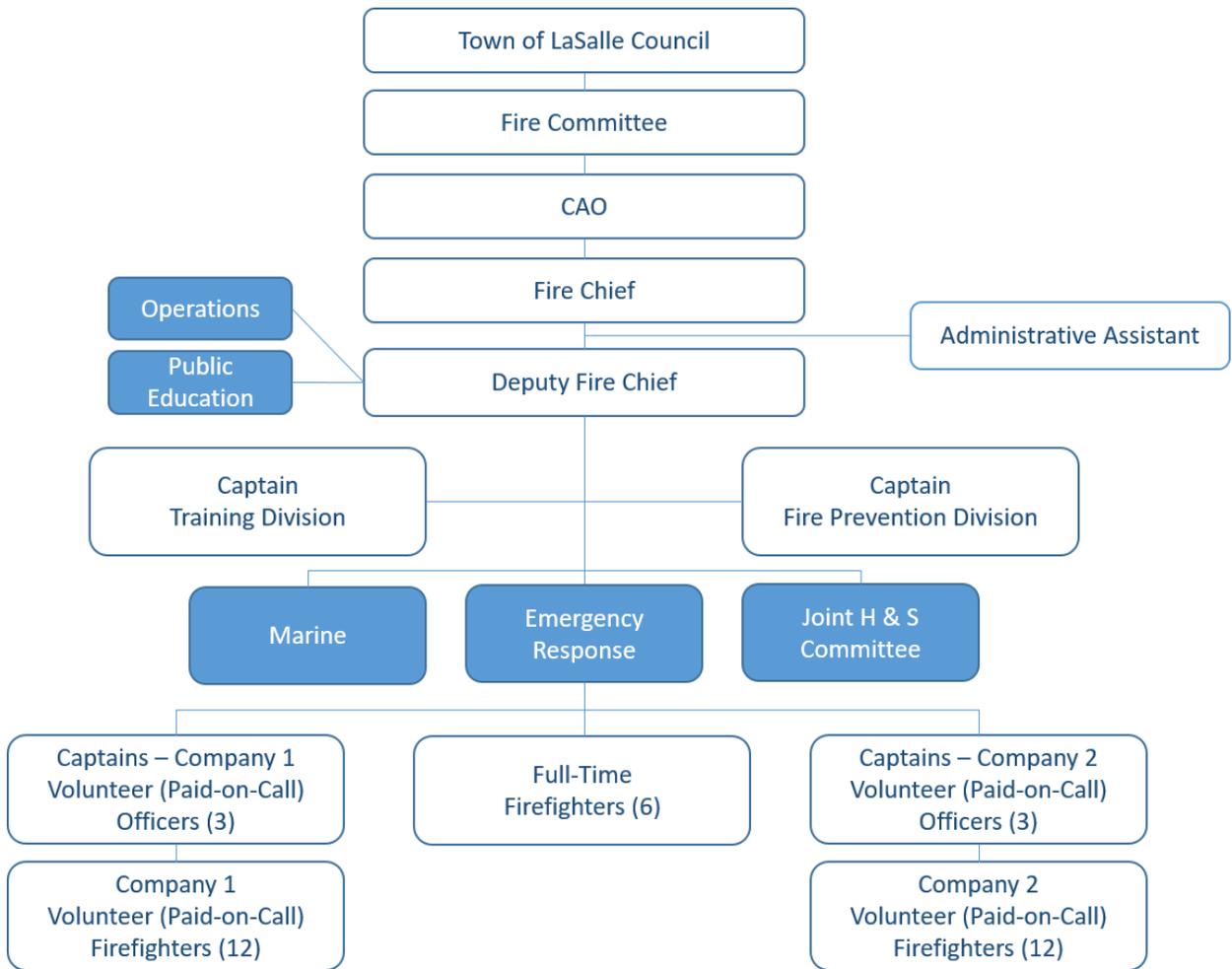
This mission statement is guided by the department’s core values that are stated as ***“respect, integrity and teamwork.”*** At this time the L.F.S. does not have a vision statement. In our experience the Fire Protection Services Master Planning process can lead to a review of a fire department’s mission, vision and goals. It is recommended that subject to Council’s consideration and approval of this F.P.S.M.P. that the L.F.S. review the department’s current mission statement and core values and consider developing a vision statement.

Operational Recommendation # 1: That consideration be given to updating the LaSalle Fire Service mission, vision and core values as referenced within the proposed Fire Protection Services Master Plan.

5.2 Existing Organizational Structure

The LaSalle Fire Service is comprised of eleven full-time staff (which includes six dedicated full-time firefighters) and 30 paid-on-call volunteer firefighters. Our research into preparing this F.P.S.M.P. indicates that the current services and programs provided by the L.F.S. can be associated with six core divisions including administration, fire prevention/public education, training, operations, apparatus and equipment and communications. Staff are assigned to various divisional roles and responsibilities which have been illustrated in the most recently approved organizational model shown in **Figure 3**.

Figure 3: LaSalle Fire Service Existing Organizational Structure (2018)



(Source: LaSalle Fire Service- 2018)

5.3 Existing Staff Resources

The existing distribution of staff resources of the L.F.S. is presented in **Table 2**.

Table 2: Existing L.F.S. Staff Resources

Role / Division	Full-time Staff Resources	Full-time (L.P.F.F.A.)	Paid-On-Call (Volunteer)
Administration Division			
Fire Chief	1		
Deputy Fire Chief	1		

Role / Division	Full-time Staff Resources	Full-time (L.P.F.F.A.)	Paid-On-Call (Volunteer)
Administrative Assistant	1		
Fire Prevention Division			
Captain - Fire Prevention		1	
Training Division			
Captain - Training		1	
Fire Suppression (Emergency Response)			
Captain			6
Firefighters		6	24

5.4 Senior Management Team

The senior management team within LaSalle Fire Service includes the Fire Chief and Deputy Fire Chief supported by the Administrative Assistant. The Fire Chief is responsible for the leadership and direction of the L.F.S. including the overall operation of all divisions, budget, purchasing, emergency planning, labour relations, as well as developing, recommending and implementing strategies to sustain and enhance the level of fire protection services to the community.

5.4.1 Fire Chief

The responsibilities and authority of the Fire Chief are clearly defined within the Fire Service Establishing and Regulating By-law (*By-law No.6073*). The Fire Chief reports directly to the C.A.O. and Town Council under the regulatory duties of the Fire Protection and Prevention Act, 1997. The Fire Chief is ultimately responsible for administering and operating the overall delivery of the fire protection services which are defined in the Establishing and Regulating By-Law as pertaining to fire suppression, fire prevention, fire safety education, communication, training of persons involved in the provision of fire protection services, rescue and emergency services. The key responsibilities and authority of the Fire Chief as summarized in the most recent job description (July 2018) include but are not limited to the following:

- *Supervision, recruitment, hiring, promotion, discipline, professional development and performance management of all unionized and non-union full-time staff, and volunteer (paid-on-call) departmental staff;*
- *Develop, recommend and implement strategic and operational plans for the LaSalle Fire Service, including annual goals and objectives which support Council's strategic direction and policies;*
- *Develop, implement and maintain operational policies and procedures to ensure a high quality of service consistent with departmental strategic direction, applicable legislation, industry best practices, and aligned with the strategic direction of the Corporation;*

- *Develop, present, and administer capital and operating budgets, and exercise responsibility for budgetary control measures and compliance with municipal procurement policies;*
- *Direct and administer the requirements for procurement and maintenance of all equipment and fleet apparatus;*
- *Participate as a management member in the collective bargaining process, and interpret & administer the provisions of the collective agreement for unionized staff;*
- *Prepare and review tenders and requests for proposals for major projects, and make appropriate recommendations to Council regarding award of projects;*
- *Ensure compliance with Occupational Health and Safety legislation and guidelines as applicable, including oversight and participation in the Joint Health and Safety Committee;*
- *Respond as a senior command officer to significant fire and related emergency incidents, and municipal emergency events, including outside normal working hours;*
- *Direct and supervise the fire safety inspection program, building plans and planning reviews, code enforcement, and fire investigation activities;*
- *Possess and maintain a competent working knowledge of the legislative framework related to municipal fire service and emergency response operations, and maintain compliance with relevant legislation, codes, and standards, including the Fire Protection and Prevention Act, National Fire Protection Association Standards, the Ontario Fire Code, the Ontario Building Code, Occupational Health & Safety Act, Ministry of Labour Section 21 Guidance Notes, Emergency Management & Civil Protection Act, Office of the Fire Marshal guidelines and directives including Public Fire Safety Guidelines, Municipal Freedom of Information & Protection of Privacy Act*
- *Direct enforcement of applicable legislation as required;*
- *Review, maintain compliance, and enforce municipal By-laws pertaining to fire protection, and recommend amendments and municipal fire safety regulation where appropriate;*
- *Promote and communicate a culture of community fire safety and a positive public image with internal and external stakeholders through various means of public education and all forms of media relations;*
- *Conduct performance appraisals with senior staff;*
- *Coordinate with officers and senior staff on a regular basis to review and monitor current operational effectiveness, training and professional development of all department operations and staff to ensure optimal service delivery. Implement effective programs to introduce appropriate changes and emerging best practices, equipment, and technology as appropriate;*
- *Conduct community risk assessments and provide technical expertise in the development and implementation of proactive planning strategies to maintain adequate level of service consistent with municipal development, and the strategic goals and direction of the corporation;*
- *Administer and direct the Town's Emergency Management program & serve as chair of the Emergency Management Program Committee. Perform all other required duties of the municipality's Community Emergency Management Coordinator including annual training of municipal staff and coordinate the required annual emergency exercise. Establish & maintain programs and public education to promote emergency preparedness;*

- *Prepare and present administrative reports for Council;*
- *Attend various senior management meetings and bi-weekly Council meetings;*
- *Participate as a member of the municipal senior management team in corporate strategies and initiatives;*
- *Attend meetings and scheduled events as necessary to provide advice, regulatory direction, community assistance, or representation on behalf of the fire service, including outside normal working hours; and*
- *Attend conferences and seminars to enhance professional development, and to keep abreast of current and changing industry best practices, trends, and regulation.*

Current industry best practices to comply with the F.P.P.A. include the provision of an appointment by-law for Council to designate the roles and responsibilities of senior positions within a fire department including the Fire Chief and Deputy Fire Chief. The Town of LaSalle By-Law No. 7727 appoints the current Fire Chief to his position.

5.4.2 Deputy Fire Chief

The Deputy Fire Chief (D.F.C.) reports directly to the Fire Chief, assisting in the overall operations of the Fire Service, and assumes command and management of the department in the Chief's absence. According to the most recent job description, this position is directly responsible for overseeing the daily operation of the department, the development and administration of public education programs, management representation and co-ordination of Health and Safety programs and oversight and direction of the Training Division.

The D.F.C. assists in the coordination and delivery of the Town's Emergency Management Program and functions as an alternate Community Emergency Management Coordinator. Additional key responsibilities summarized in the most recently dated job description (March 2012) include but are not limited to the following:

- *Function in the role of Acting Fire Chief, in the absence of, and as directed from time to time by the Chief;*
- *Attend incidents and provide incident command on-call duties including afterhours 24/7;*
- *Investigate citizen complaints;*
- *Manage programs, inventory, and records of all public fire education activities, property, and equipment;*
- *Provide direction, assistance, and support to the Training Division;*
- *Conduct performance appraisals with Officers and direct reports;*
- *Direct and supervise the day-to-day service delivery operations, fleet maintenance, and management of staff including participation in recruitment, selection, promotion and discipline processes;*
- *Assist the Fire Chief in the preparation of annual operational and capital budget submissions. Conduct routine departmental purchasing, procurement, and exercise operating budget control;*

- *Preparation of specifications for major capital purchases;*
- *Assist the Fire Chief with emergency planning for the municipality, and function as an Alternate Emergency Management Coordinator. Act in the role of Community Emergency Management Coordinator in the Fire Chief's absence and/or as required during municipal Emergency Incidents;*
- *Attend meetings as required, including outside business hours, to represent the department and provide regulating guidance, advice and community assistance as appropriate to various internal and external stakeholders groups;*
- *Attend Council meetings and other management meetings in the absence of, or at the direction of the Fire Chief;*
- *Recommend and assist in drafting department policies and guidelines;*
- *Maintain working knowledge of applicable Health & Safety legislation and compliance with regulations and Section 21 Guidance Notes;*
- *Administer and enforce compliance with other relevant legislation such as the Fire Protection and Prevention Act, Ont. Fire Code, Provincial Offences Act, Emergency Management & Civil Protection Act;*
- *Review various legislation and standards and recommend changes or updates to departmental policies, collective agreement, working agreements or contracts to maintain compliance or best practices including National Fire Protection Association, Fire Protection and Prevention Act, Office of the Fire Marshal & Emergency Management, Ministry of Labour, Occupational Health & Safety Act, and other authoritative bodies;*
- *Participate and assist the Fire Chief in the preparation of Council reports;*
- *Conduct research and assessment of products, procedures, and best practices to advance the department's effectiveness in the delivery of high quality service, consistent with the strategic direction of the municipality;*
- *Act as department liaison with various regulatory agencies and partner organizations; and*
- *Carry out other tasks/assignments as directed by the Fire Chief.*

By-law No. 7726 appoints the current Deputy Fire Chief for the Town of LaSalle.

5.4.3 Duty Chief Coverage

Our research indicates that since the 2008 Fire Master Plan the department has initiated *Operational Guideline #1-009 – Duty Chief Coverage* whereby either the Fire Chief or Deputy Fire Chief are available as required during non-business hours. This is a common industry best practice to ensure that a senior qualified officer is available to ensure the continuity of services and due diligence of the Town is maintained. The current criteria for notifying the Duty-Chief includes the following:

- *Any incident involving a fatality or critical injury (with exception of VSA's and medial assist calls);*
- *Working structure fires;*
- *Any incident where a firefighter requires medical attention and/or transported by ambulance;*
- *Any collision involving fire department apparatus; and*

- *Any Mutual Aid requests.*

The Duty-Chief must also be informed either directly or through the dispatch centre in the following instances:

- *Request for the use of in-service apparatus or equipment (i.e. T202, thermal imaging camera);*
- *Failure or breakdown of in-service apparatus or equipment of a significant nature that would impact our response capability (i.e. jaws of life, emergency generator); and*
- *Call in of staff or circumstances requiring commitment of personnel beyond normal practice (i.e., assisting police with searches, marine incidents, fire investigations after hours etc.).*

Based on our knowledge of the operations and administration of the L.F.S. it is recommended that this practice be sustained.

5.4.4 Administrative Assistant

The Administrative Assistant reports directly to the Fire Chief providing administrative support to the Fire Chief and Deputy Fire Chief and clerical support to both the Fire Prevention Officer and the Training Officer. The most recent job description provided by the L.F.S. (dated July 2018) outlines the following duties of this administrative position. Duties include:

- *Preparing Fire Committee, Joint Health & Safety and Emergency Management Program Committee agendas and minutes using e-agenda software; as well as, taking meeting minutes;*
- *Provide Administrative support for the Emergency Management Program Committee and the C.E.M.C.;*
- *Function as a Lead Scribe for Emergency Management Control Group. Includes coordination and delivery of training; as well as, resource materials for scribes and Emergency Operations Centre;*
- *Represent the municipality and department professionally, as first point of contact, through effective and courteous communication with clients and the public both written and verbal*
- *Prepare and proofread correspondence such as letters, documents, tenders, advertisements, e-mails and memos;*
- *Prepare and process Payroll and employee attendance reports for all full-time as well as paid-on-call staff;*
- *Month end reporting on all departmental activity;*
- *Maintain departmental records management system (FirePro) and coordinate all departmental records, and central filing system. Create and maintain Laser fiche checklists and forms for daily records management;*
- *Manage and maintain departmental social media accounts and website to support Public Fire Safety Education and coordinate departmental communications with Corporate Communications Officer;*
- *Assist in the production of Fire Safety and Emergency Management Public Education materials such as handouts, PowerPoint presentations, and electronic messaging;*

- *Function as a point of contact and provide departmental support in maintaining mass notification public alerting system and Town of LaSalle Emergency Response Plan;*
- *Trained on and able to initiate emergency messaging through the Town’s Mass Notification System;*
- *Provide after-hours clerical and emergency communications support to the chief officers as required during significant events;*
- *Process requests for Investigation reports under the direction of the Fire Chief and in accordance with M.F.I.P.P.A. and act as department liaison with Clerk’s office on F.O.I. requests;*
- *Research, edit and prepare data for Council reports, budgets, labour relations, fire prevention, training and public education;*
- *Prepare and/or manage confidential, sensitive documents and information pertaining to employee files, labour relations and personnel matters and information covered under M.F.I.P.P.A.;*
- *Coordinate and arrange registrations, bookings and travel arrangements for all department staff for conferences, training events and seminars;*
- *Participate as a member of the Essex County, and provincial Fire Chiefs Administrative Assistants Association to conduct and share research and data in support of the Essex County and provincial Fire Chiefs Associations;*
- *Coordinate all clerical and communication components of all various recruitment and promotional processes within the department;*
- *Maintenance of policy manuals, operational guidelines, training manuals, and other documents.*
- *Attend training as required in areas such as emergency management related software and procedures, social media, as well as basic emergency medical response skills; and*
- *All other duties as assigned.*

5.5 Municipal By-laws

The *Municipal Act*, R.S.O. 1990 requires a municipality to enact a number of by-laws to operate a municipality and specifically their fire services. In addition to meeting this legislative responsibility by-laws provide the community with important information regarding the level of service that a municipality intends to provide. By-laws also provide municipal staff with the authorization to provide these services, as well as the responsibility to achieve the prescribed service level. By-laws common to a municipal fire service include the Establishing and Regulating By-law, appointment by-laws, and fees for service by-laws.

5.5.1 Establishing and Regulating By-law No. 6073

The *Municipal Act*, R.S.O. 1990 c., as amended, and the *Fire Protection and Prevention Act*, 1997, S.O. 1997, c.4 as amended, permit the council of a municipality to enact a by-law to establish and regulate a fire department. An Establishing and Regulating By-law for a fire department should provide clear and accurate policy direction reflecting how a municipal council intends fire protection services to function and operate. P.F.S.G. 01-03-12 “*Sample Establishing and Regulating By-law*” prepared by the O.F.M.E.M. provides a description of the primary issues to be addressed, as well as a template for developing an

Establishing and Regulating By-law. The primary areas identified by the O.F.M.E.M. that should be included in an Establishing and Regulating By-law include the following:

- *General functions and services to be provided;*
- *The goals and objectives of the department;*
- *General responsibilities of department members;*
- *Method of appointment to the department;*
- *Method of regulating the conduct of members;*
- *Procedures for termination from the department;*
- *Authority to proceed beyond established response areas; and*
- *Authority to effect necessary department operations.*

The Town of LaSalle's current Establishing and Regulating By-law No. 6073 for the LaSalle Fire Service was approved by Council on April 10, 2001. Our review indicates that the current by-law has been amended on several occasions the most recent being on March 8th, 2016.

Our review indicates that the current by-law references many of the primary areas identified by the O.F.M.E.M. However, in our experience, and in response to the analysis presented within this F.P.S.M.P. there are several areas where the Town should consider further amendments. For example, the analysis within this F.P.S.M.P. includes recommendations for Council's consideration in adopting more defined service levels in many areas such as fire inspection and public education programs. Subject to Council's consideration and approval, these defined service levels should be included within an updated Establishing and Regulating By-law.

Operational Recommendation #2: That subject to Council's consideration and approval of the proposed Fire Protection Services Master Plan that the Establishing and Regulating By-law No. 6073 be reviewed and updated as required.

5.5.2 User Fees and Charges By-law No. 7852

The current rates and fees by-law became effective January 12, 2016. This by-law enables a municipality to recover costs for the provision of fire protection, building, planning and various other services. By-law No. 7852 Schedule E (updated January 2018) identifies the services provided by the LaSalle Fire Service for which fees are charged. Recoverable rates and fees currently used by the L.F.S. include but are not limited to the following key areas:

- *Issuance of permits;*
- *Requests for inspection;*
- *False alarm response;*
- *Motor vehicle accident response; and*
- *Fire apparatus and crew – standby and demonstrations.*

Our review indicates that the current rates and fees schedule is generally consistent with current rates. The rates approved by the Ministry of Transportation for cost recovery of responding to motor vehicle accidents on provincial highways should be reviewed each year, as there is an annual Consumer Price Index increase applies to these rates. In our experience there are a number of additional services and programs that other municipalities recover costs for such as the review and approval of Fire Safety Plans or providing fire extinguisher training. Many municipalities also require a permit for open air burning as described within the Town's Recreational Fire By-law No. 7170. Subject to Council's consideration and approval of the proposed F.P.S.M.P. the L.F.S. should consider a further review of the current rates and fees schedule.

Operational Recommendation #3: That the LaSalle Fire Service conduct a review of all services and programs that may be applicable for cost recovery within the User Fees and Charges By-law No. 7852.

5.5.3 Fireworks- By-law No. 8013

By-law No. 8013 regulates the sale and discharge of fireworks within the Town of LaSalle. The by-law excludes permanent sales locations from purchasing a fireworks sales permit. However, temporary sales units that sell consumer fireworks require firework sales permits under this by-law. Our review indicates that this by-law is consistent with current municipal best practices.

5.5.4 Recreational Fire By-law No. 7170

The Ontario Fire Code Division B, Article 2.4.4.4. prohibits open air burning unless it is approved by the Chief Fire Official (Fire Chief), or the burning consists of a small, confined fire that is supervised at all times and used to cook food on a grill or barbecue. By-law No. 7170, known as "Recreational Fire By-law" dated June 15, 2010 is a by-law to prescribe times for setting fires and precautions to be observed to prevent the spread of fires as required by the Ontario Fire Code. This by-law details the requirements and conditions for open air burning, and establishes fines for those who violate the provisions of the By-law. Set fines and rates are included in the By-law.

To further assist residents in understanding the restrictions related to "Open Air Burning" such as a campfire the L.F.S. as developed a "Quick Reference Sheet" that identifies the conditions and requirements associated with having an open air fire. In our view this information and the by-law are consistent with current municipal best practices.

5.5.1 Mutual Aid By-law No. 7379

By-law No. 7379 which passes February 28, 2012, authorized the Town of LaSalle Fire Service to participate in the County of Essex Mutual Aid Plan and Program. This by-law enables the fire service to enter outside of the limits of the municipality's response area to respond to calls for assistance from other fire departments named within the County of Essex Mutual Aid Plan and Program. Further information related to the current Mutual Aid Plan is included within Section 4.6.1 of this plan.

5.6 Agreements

Within the service there are multiple approaches to sharing services or procuring services including mutual aid, automatic aid, and fire protection agreements. The following types of agreements utilized by the L.F.S. were identified.

5.6.1 Mutual Aid Agreements

Mutual aid agreements are predetermined plans that allow a participating fire department to request assistance from a neighbouring fire department. Public Fire Safety Guideline 04-05-12 “Mutual Aid”, provided by the O.F.M.E.M. identifies the information required to develop and approve these agreements.

There are two main scenarios when mutual aid agreements are enacted:

1. *A fire department may ask for mutual aid assistance when it is at the scene or has information that immediate assistance is required.*
2. *Fire departments may immediately request a simultaneous response from a participating fire department where distance and/or conditions dictate.*

5.6.1.1 County of Essex Mutual Aid Plan

The L.F.S. is an active participant in the County of Essex Mutual Aid Plan. Other participants include the Town of Amherstburg, the Town of Essex, the Town of Kingsville, the Town of Lakeshore, the Town of Leamington, the Town of Tecumseh, and the City of Windsor. The plan cites the minimum conditions for participation in the program, activation procedures, appointment processes for coordinators and alternates, roles and responsibilities of those participating in the plan among other provisions.

Department Operational Guideline #5-009 describes the procedures and responsibilities for the L.F.S. to respond to mutual aid calls.

5.6.2 Automatic Aid Agreements

In contrast to mutual aid agreements, automatic aid agreements are programs designed to provide and/or receive assistance from the closest available resource, irrespective of municipal boundaries, on a day-to-day basis. P.F.S.G. 04-04-12 “Automatic Aid” describes the concept of these types of agreements.

The advantage of implementing an automatic aid program is that the person/persons experiencing the emergency receive fire services from the closest available provider (municipality) by supplying seamless integrated fire suppression services through the elimination of traditional municipal service boundaries. Automatic aid agreements provide benefits such as:

- *An enhancement of the level of public safety;*
- *A reduction of the critical element of time between the commencement of a fire and the application of an extinguishing agent to the fire by dispatching the closest available fire suppression resources;*

- *The reduction of life, property and environmental losses; and*
- *The improvement of public and fire-fighter safety.*

Automatic Aid Agreements are typically created between two neighbouring communities to reduce initial response times by deploying firefighters from the closest fire station, regardless of municipal boundaries; to deploy additional firefighters to enhance the depth of response capabilities of the requesting fire department; or alternatively, to request a specific type of apparatus such as a tanker or an aerial apparatus to support the response of the requesting fire department.

Our research indicates that the L.F.S. is currently not engaged in any automatic aid agreements.

5.6.3 Fire Protection Agreements

While similar to mutual aid agreements, fire protection agreements (or automatic aid agreements) have two fundamental differences: 1) fire suppression services under a fire protection agreement are dispatched automatically (under a mutual aid agreement, such services must be requested); and 2) one party may agree to compensate the other for services received from the other. Fire protection agreements are designed to provide/receive constant, seamless assistance from the closest available resource, without consideration of municipal boundaries.

Fire protection agreements provide a huge advantage to the general public in terms of enhancing the level of public safety. By supplying seamless service through the elimination of artificial service boundaries, in the case of an emergency, the person experiencing the emergency receives fire services from the closest available provider. There are additional benefits to fire protection agreements which include:

- *reduction of the critical element of time elapsed between the commencement of a fire and the application of an extinguishing agent to the fire by dispatching the closest available assistance;*
- *reduction of life, property and environmental losses; and*
- *improvement of public and firefighter safety by providing more resources in a timely manner.*

Our research indicates that the L.F.S. is currently not engaged in any fire protection agreements.

5.6.4 Tiered Response Agreement (Essex Windsor Emergency Medical Services – E.W.E.M.S.)

A Medical Tiered Response Agreement signed March 19, 2018 establishes the criteria through which the E.W.E.M.S. can initiate a medical tiered response request for fire services. This agreement defines the emergency medical levels of service that the LaSalle Fire Service along with neighbouring municipal fire services will provide in the context of the county based provision of ambulance services. The L.F.S. agrees to respond to medical emergencies when tiered by the Windsor Central Ambulance Communications Centre (W.C.A.C.C.) in accordance with response criteria specified in the agreement.

This agreement encompasses the following emergency call types:

- Multi-casualty incidents;
- Industrial accidents;
- Entrapment, extrication and other rescues; and
- Motor vehicle collision requiring E.W.E.M.S.

The LaSalle Fire Service is to be tiered to calls in which their assistance is required for the following circumstances:

1. For situations involving cardiac respiratory arrest wherein an individual experiences sudden loss of heart function or loss of breathing;
2. When volume demand increases to the point at which E.M.S. resources are limited; and
3. When E.M.S. is on scene and requires the assistance of the fire service for life assistance, extrication, access to a scene that requires the resources of the fire service, hazardous scenes and motor vehicle collisions.

The current training plan of the L.F.S. includes annual training and certification in cardiopulmonary resuscitation (C.P.R.) and the use of an automated external defibrillator (A.E.D.) in addition to basic first aid. Our research also indicates that the Essex Windsor E.M.S. provides the L.F.S. with annual grant funding of \$1,000 for the maintenance, replacement and training of defibrillators.

5.7 Development Charges

The Town of LaSalle collects and administers development charges in compliance with the *Development Charges Act* (D.C.A.). The D.C.A. was recently amended by the *Smart Growth for Our Communities Act*, 2015 which received Royal Assent on December 3, 2015. The D.C.A. enables a municipality to impose fees on development and re-development to cover the increased cost of providing physical and social services due to population growth. Under the D.C.A., fire protection services are one of the non-discounted municipal services. This enables municipalities to fully recover the cost of growth-related increases in services (as opposed to funding through municipal revenue streams). Municipalities recover costs by enacting development charges by-laws.

By-law No. 7074 outlines the Town's current development charges on certain residential and non-residential development.

5.8 Operational Guidelines & Policy Memos

Current industry best practices reflect the use of policy documents as a tool to communicate very detailed direction to staff related to how specific tasks are to be completed to safely and effectively deliver fire protection services. Alternatively, Operating Guidelines are used to communicate guidance

to staff on how specific tasks should be completed to safely and effectively deliver fire protection services. In comparison, **“policy documents”** are intended to provide minimal room for interpretation or application whereas **“operating guidelines”** recognize that there can be a need for interpretation or variance as a result of the conditions that may present.

5.8.1 L.F.S. Policy Memos

Our research indicates that the current practices of the L.F.S. represent a potential overlap, or intermixing of intended department policies with operating guidelines. For example, the purpose of *Operational Guideline #1-001- Statement of Intent* is described as *“This document is intended to establish policies and procedures by which information is transferred to all levels of the LaSalle Fire Service”*. This document then describes the procedures for the use of *“Operating Guidelines”* that are consistent with industry best practices related to these types of documents, there is no reference to the term or intent of a *“policy”*.

As part of the data collection process for this F.P.S.M.P. the L.F.S. provided a set of *“Policy Memos”* that upon review more accurately reflect the information that would typically be found in a policy type document. The data collection process also references that the department has developed a Policy Manual. However, these document are titled as a *“Memo”* and in some instances appear to be a simple communication of direction between staff versus very specific changes to policy within the department.

In our view the L.F.S. would benefit from a review of current *“policy”* setting documentation to ensure clear direction is being provided and recorded in a format consistent with defining department policies.

5.8.2 L.F.S. Operational Guidelines

Operational guidelines ensure that all personnel are trained and able to perform the required tasks to safely and effectively deliver fire protection services that provide for operational consistency and continuity. P.F.S.G. 04-69-13 *“Co-ordination, Development, Approval, and Distribution of Standard Operating Guidelines for Various Disciplines”* describes the intent of Operating Guidelines that can be summarized as to:

- *Enhance safety;*
- *Increase individual and team effectiveness;*
- *Improve training efficiency;*
- *Improve orientation for entry-level staff;*
- *Improve risk management practices;*
- *Prevent/ avoid litigation;*
- *Create objective post-incident evaluations; and*
- *Permit flexibility in decision making.*

Operating Guidelines should be developed and informed by the intended goals and objectives of the activity, service or program indicated. Operating guidelines should be developed through research of applicable legislation and industry best practices. These documents should also include a standard format that includes the date of last revision, date of approval and signature of the Fire Chief as the authorizing person. Operating guidelines should be formatted with an index that references primary divisions (e.g. fire prevention, suppression and training). Operating guidelines should provide a clear framework to guide decision making to achieve the intended goals and objectives. There should be no overlap between a department policy and an operating guideline.

The L.F.S. has developed an extensive number of Operational Guidelines (O.G.s) that are categorized into larger groupings in the areas of:

- Fire Prevention;
- Firefighter Conduct;
- Fire Ground Operations;
- Initial Response;
- Marine Operations;
- Post Incident Operations;
- Protective Operations;
- Self-Contained Breathing Apparatus (S.C.B.A.)
- Specialized Incident Response;
- Station Duties;
- Structure Administration;
- Training;
- Uniform And Grooming; and
- Vehicle Operations.

Our review indicates that the current practices of the L.F.S. in regards to the development, review and utilization of Operational Guidelines is consistent with current industry best practices. Implementing a process to ensure that department “policy and guidelines” are clearly defined, recorded and communicated to all staff is recommended.

Operational Recommendation #4: That consideration be given to initiating a review of the process for developing and communicating department policies and operating guidelines as described within the proposed Fire Protection Services Master Plan.

5.9 Annual Reports

The O.F.M.E.M.’s “*Optimizing Public Fire Safety*” model recognizes the importance of ongoing monitoring, evaluation, and revisions to the fire protection services approved by Council. Fire services

across the province have utilized Annual Reports to Council as a tool to provide a high degree of accountability and transparency on behalf of the Fire Chief in reporting to the community and Council on the level of fire protection services provided. This regular reporting process is also an ideal opportunity to report on key performance indicators, update the Community Risk Assessment and fire related by-laws. The process can also provide further value in identifying changes or trends within the community.

The Fire Service Annual Report for 2017 was reviewed through the data collection process of this project. The report outlines fire loss and response trends, a summary of fire safety initiatives and an overview of activities and recent developments within each departmental division.

In 2017, there were eight fires within residential dwellings, five fires in non-residential structures, four vehicle fires and a total reported dollar loss of \$506,100. No fatalities were recorded and only one fire-related injury was experienced as a result of a vehicle fire. Although the municipality's fire loss numbers were lower than provincial averages for 2017, total call volume increased by 10% from the previous year.

Multiple improvements were made within the department, including the implementation of a new radio communications system, the utilization of mobile technology and tablets to support various departmental applications, and the acquisition of a Mobile Live Fire Training Unit to enhance live-fire training initiatives. An inter-departmental municipal team worked collaboratively to provide residents with a mass notification system to distribute updates and messaging for emergency events within the community.

Within the Fire Prevention Division, educational programming was delivered to an audience of over 1,744 persons collectively in 2017 through targeted public education programs for students, displays at various events throughout the community, adult educational activities and numerous other fire safety programs. In 2017, the LaSalle Fire Service inspected 348 smoke alarms in 129 homes of which resulted in 30 smoke alarms being replaced or installed and 22 batteries replaced.

Collaborative relationships with various community partners provided new recruits, and LaSalle fire personnel alike, with unique training opportunities. Live fire training sessions were made available at a facility in Essex and auto extrication training sessions were held in a towing yard in Tecumseh. Furthermore, the LaSalle Fire Service participated in a joint emergency exercise on the Detroit River along with Canadian and American agencies.

The report indicates that there is opportunity to improve upon the existing paid-on-call response model which has experienced significant turnover recently due to a number of contributing factors. The current response model will be assessed further within this F.P.S.M.P.

In summary, the 2017 L.F.S. Annual Report provides a valuable tool for informing Council and the public on a wide range of matters related to the delivery of fire protection services within the community. We recommend that the L.F.S. continue to develop and present an Annual Report to Council and the public. Based on our current understanding of the new **Ontario Regulation 377/18 – Public Reports** that comes into force on January 1st, 2020 the L.F.S. Annual Report would be an appropriate tool for communicating the required information.

Operational Recommendation #5: That the LaSalle Fire Service consider updating the depth of analysis included within the department’s Annual Report to Council and the public to include an update to the Community Risk Assessment and address the requirements of ‘Ontario Regulation 377/18 – Public Reports’, as referenced within the proposed Fire Protection Services Master Plan.

5.10 P.T.S.D. Prevention Plan

As per the Supporting Ontario’s First Responders Act, it is presumed that a Post-Traumatic Stress Disorder (P.T.S.D.) diagnosis of certain workers including first responders is work-related. Fire departments are required to provide the Ministry of Labour with information about their workplace P.T.S.D. prevention plans.

The L.F.S. has initiated a prevention plan to reduce the effects of P.T.S.D. which includes education, training and strategies to help cope with occupational stress. Implementation of these initiatives was achieved through the delivery of specialized training involving P.T.S.D. peer support /mental health first aid and through a Road to Mental Readiness training program which was provided to all fire service personnel. This is accompanied by a Health and Wellness Initiative that promotes health and nutrition awareness as well as regular professional medical screening.

In 2017 the L.F.S. prepared a P.T.S.D. Prevention Plan and submitted it to the Ministry of Labour. The P.T.S.D. Prevention Plan includes the program’s goals and objectives, a P.T.S.D. policy statement, an anti-stigma policy, an overview of P.T.S.D (causes, risk factors, signs & symptoms, etc.), prevention procedures, intervention procedures, training and responsibilities of all staff. Our review indicates that the department’s P.T.S.D. Prevention Plan is a comprehensive document addressing the P.T.S.D. policies and procedures.

5.11 Departmental Records Management

An important component of fire department administration is overseeing records management and reporting. Records management plays a role in every division of a department for a variety of reasons including, but not limited to, operations emergency response, firefighter training records, as well as measuring the effectiveness of fire prevention and public education programs.

P.F.S.G. 04-60-12 “Records Management” provides a comprehensive overview of an effective and efficient records management program. It includes the appropriate use and protocol, by division, of the records management systems in place; record retention schedules; standards for record quality; protocols for record security and integrity of hard-copy and electronic records; and outline other applicable codes, standards or industry best practices that apply (e.g., *Municipal Act, 2001, Municipal Freedom of Information and Protection of Privacy Act, 1990*).

The department currently utilizes the FirePro software solution for records management including emergency response incident reports, fire inspection records and training records. The department also utilizes Word and Excel formats to create additional documentation within the department including activities such as operating guideless, department memos and other required communication. Our research indicates that the department is currently involved in a review of the current records management process including the record filing process as part of a corporate initiative to align all municipal reporting.

The analysis within this F.P.S.M.P. includes recommendations to initiate revised, and/or additional documentation to support compliance with new provincial regulations and to track and monitor recommended performance benchmarks in several areas. In our experience this may require the department to reconsider its current records management technology, and processes to ensure there is effective integration of information and efficiency within the system. It is recommended that subject to Council’s consideration and approval of this F.P.S.M.P. that a further review of the department records management technology and processes be conducted to ensure the optimal efficiency and effectiveness are in place for all department division records management needs.

Operational Recommendation #6: That a further review of the LaSalle Fire Services records management technology and processes be conducted as a component of the implementation process of the proposed Fire Protection Services Master Plan.

5.12 Administration Division Summary and Recommendations

Our review of the Administration Division, including the roles and responsibilities of the Fire Chief and Deputy Fire Chief, reflects an organization that is in transition. We define this organizational transition as a fire department that is evolving from its historical roots into a modern fire service attempting to sustain and expand its historical levels of service within an environment of community growth and change.

With the support of Council and senior corporate staff the L.F.S. has made significant progress towards implementing the recommendations of the previous 2008 Fire Master Plan. However, the realities of the community’s fiscal responsibilities have not allowed the department to maintain the same speed of growth as that of the community. As a result this Fire Protection Services Master Planning process has identified that the senior staff team is required to become more involved in managing their areas of

responsibilities on a reactive basis rather than having the time to develop a more pro-active and strategic approach. In our view the senior staff team recognizes the need for change and the importance of this Fire Protection Services Master Planning process to provide insight into the path forward.

To further support the senior staff team this F.P.S.M.P. identifies recommendations that focus on managing incremental changes within the department that support a strategic path towards further identifying the core services required based on the findings of the Community Risk Assessment and providing the most cost effective and efficient level of fire protections services that provide the most value to the community. This includes a recommendation to adopt the proposed strategic priorities to guide the delivery of fire protection services within the Town of LaSalle over the next ten-year community planning horizon.

Information related to the proposed staff resourcing needs of the Administration Division is included within **Section 9.0 – Proposed Staff Resource Strategies** of this F.P.S.M.P. As a result of the review of the Administrative Division, the following recommendations are presented for Council’s consideration and approval:

Council Recommendations:

Council Recommendation #1: *That the strategic priorities identified within the proposed Fire Protection Services Master Plan be adopted to form the strategic framework for the delivery of fire protection services within the Town of LaSalle, including:*

- I. The Town of LaSalle is committed to identifying the optimal level of fire protection services through the use of a Community Risk Assessment to determine the fire safety risks present within the Town of LaSalle as the basis for developing clear goals and objectives for all fire protection services provided by the LaSalle Fire Service;*
- II. Where applicable, the Town of LaSalle will seek to optimize the Ontario Comprehensive Fire Safety Effectiveness Model’s first two lines of defence including public education and fire prevention, and the utilization of fire safety standards and fire code enforcement in developing clear goals and objectives for all fire protection services provided by the LaSalle Fire Service; and*
- III. The Town of LaSalle will prioritize the utilization of strategies that support the sustainability of fire protection and emergency services that provide the most effective and efficient level of services resulting in the best value for the community.*

Operational Recommendations:

Operational Recommendation # 1: *That consideration be given to updating the LaSalle Fire Service mission, vision and core values as referenced within the proposed Fire Protection Services Master Plan.*

Operational Recommendation #2: That subject to Council's consideration and approval of the proposed Fire Protection Services Master Plan that the Establishing and Regulating By-law No. 6073 be reviewed and updated as required.

Operational Recommendation #3: That the LaSalle Fire Service conduct a review of all services and programs that may be applicable for cost recovery within the User Fees and Charges By-law No. 7852.

Operational Recommendation #4: That consideration be given to initiating a review of the process for developing and communicating department policies and operating guidelines as described within the proposed Fire Protection Services Master Plan.

Operational Recommendation #5: That the LaSalle Fire Service consider updating the depth of analysis included within the department's Annual Report to Council and the public to include an update to the Community Risk Assessment and address the requirements of 'Ontario Regulation 377/18 – Public Reports', as referenced within the proposed Fire Protection Services Master Plan .

Operational Recommendation #6: That a further review of the LaSalle Fire Services records management technology and processes be conducted as a component of the implementation process of the proposed Fire Protection Services Master Plan.

6.0 Fire Prevention/Public Education Division

The minimum legislative requirements for the delivery of fire protection services are outlined within the F.P.P.A., and include *“Establish a program in the municipality which must include public education with respect to fire safety and certain components of fire prevention”*⁴ and *“Provide such other fire protection services as it determines may be necessary in accordance with its needs and circumstances.”*⁵

To further assist municipalities in understanding the definition of what the minimal acceptable fire prevention and public education programs are, the O.F.M.E.M. developed ***P.F.S.G. 04-40-03 and 04-40-12 Selection of Appropriate Fire Prevention Programs***. Although the P.F.S.G.s are currently under review, they continue to provide valuable insight into identifying the minimal acceptable fire prevention and public education programs including:

- *Simplified Risk Assessment;*
- *A smoke alarm program;*
- *Fire safety education material distributed to residents/occupants; and,*
- *Inspections upon complaint, or when requested to assist with code compliance.*

In our view, one of the reasons that the O.F.M.E.M. is currently conducting a review of all P.F.S.G.s is to update them to reflect changes to applicable legislation impacting the delivery of fire prevention and public education programs. Examples of these include revised smoke alarm requirements, new carbon monoxide alarm requirements and the new regulation requiring all municipalities to develop a C.R.A.

The analysis within this section has been informed by our knowledge of the current applicable legislation, including the new Ontario Regulation 378/18: Community Risk Assessments, the P.F.S.G.s developed by the O.F.M.E.M., and the applicable standards developed by the N.F.P.A. Collectively, this information is applied within this F.P.S.M.P. in defining the local *“needs and circumstances”*, as required by the F.P.P.A., for the delivery of fire prevention and public education programs within the Town of LaSalle.

Integrating risk analysis into the Fire Protection Services Master Planning process, as provided by the new ***Ontario Regulation 378/18: Community Risk Assessments***, empowers a municipality with the opportunity to assess alternative community risk reduction strategies. These may include options such as enhancing a fire inspection program within a specific building occupancy classification; developing a specific public education program for an identified at-risk demographic with the community, such as

⁴ F.P.P.A., 1997 Part II, Section 2. (1) (a)

⁵ F.P.P.A., 1997 Part II, Section 2. (1) (b)

seniors; or introducing local requirements for residential sprinklers. These types of risk reduction strategies recognize that there are proactive alternatives to increasing fire suppression capability within a community.

Evaluating community risk and identifying risk reduction strategies is also consistent with the optimization of the **“three lines of defence”** and the strategic priorities of this F.P.S.M.P. that include:

- i. ***The Town of LaSalle is committed to identifying the optimal level of fire protection services through the use of a Community Risk Assessment to determine the fire safety risks present within the Town of LaSalle as the basis for developing clear goals and objectives for all fire protection services provided by the LaSalle Fire Service; and***
- ii. ***Where applicable the Town of LaSalle will seek to optimize the Ontario Comprehensive Fire Safety Effectiveness Model’s first two lines of defence, including public education and fire prevention, and the utilization of fire safety standards and fire code enforcement, in developing clear goals and objectives for all fire protection services provided by the LaSalle Fire Service.***

6.1 Fire Prevention and Public Education Industry Best Practices

The fire prevention and public education services provided by the Town of LaSalle should be guided by industry best practices and the most current legislative requirements. Primarily, these include the ***Ontario Comprehensive Fire Safety Effectiveness Model*** and ***N.F.P.A. 1730 Standard on Organization and Deployment of Fire Prevention Inspection and Code Enforcement, Plan Review, Investigation, and Public Education Operations to the Public (2016 Edition)***.

6.1.1 Comprehensive Fire Safety Effectiveness Model

The Comprehensive Fire Safety Effectiveness Model (C.F.S.E.M.) developed under the leadership of the O.F.M.E.M. included consultation with fire services and Fire Chiefs across the province. This model includes the **“three lines of defence”** and recognizes that the optimization of their strategies can have a positive impact in optimizing public safety within a community.

The first two lines of defence are applicable to the assessment of fire prevention and public education services currently provided by the L.F.S. in response to the identified **“key risks”** and **“key findings”** identified by the C.R.A. The first two lines of defence include:

“I. Public Education and Prevention:

Educating residents of the community on means for them to fulfill their responsibilities for their own fire safety is a proven method of reducing the incidence of fire. Only by educating residents can fires be prevented and can those affected by fires respond properly to save lives, reduce injury and reduce the impact of fires; and

II. Fire Safety Standards and Enforcement:

Ensuring that buildings have the required fire protection systems, safety features, including fire safety plans, and that these systems are maintained, so that the severity of fires may be minimized.”

Information reported by the O.F.M.E.M. indicates that from 2013 to 2017 the number of fire losses, described as any structure fire with an injury, fatality or dollar loss reported, have declined from 7,191 in 2013 to 6,679 in 2017 resulting in a decrease of 7.12%.⁶ This occurred during a period of time when the population and number of structures across Ontario continued to grow.

Through engagement with Fire Chiefs across the province and staff from the O.F.M.E.M., there is consensus that the efforts of fire departments dedicated to optimizing the first two lines of defence are largely responsible for reducing fire losses and improving the overall level of fire protection within the community.

6.1.2

N.F.P.A. 1730: Standard on Organization and Deployment of Fire Prevention Inspection and Code Enforcement, Plan Review, Investigation, and Public Education Operations to the Public (2016 Edition)

In 2016, N.F.P.A. finalized ***the N.F.P.A. 1730 Standard on Organization and Deployment of Fire Prevention Inspection and Code Enforcement, Plan Review, Investigation, and Public Education Operations***. The stated purpose of the standard is to “*specify the minimum criteria addressing the effectiveness and efficiency of the fire prevention organization functions of fire prevention inspection and code enforcement, plan review, investigation, and public education operations by fire departments and other organizations based on an approved community risk reduction plan*”.⁷ The standard establishes its criteria through five main chapters:

- 1) *Community Risk Assessment;*
- 2) *Fire Prevention Inspection and Code Enforcement Activities in Existing Occupancies;*
- 3) *Plan Review;*
- 4) *Investigations; and*
- 5) *Public Education Programs.*

N.F.P.A. 1730 recognizes the benefit of having a Community Risk Reduction Plan (C.R.R.P.) in place that is based on the local needs and circumstances of the community, with resources in place to meet those needs. A department is to establish local needs and circumstances through a Community Risk Assessment. Recently filed by the Ministry of Community Safety and Corrections (now known as the

⁶ Source: Office of the Fire Marshal Fire Loss Summary Reporting, 2013-2017.

⁷ Source: “Organization and Deployment of Fire Prevention Inspection and Code Enforcement, Plan Review, Investigation and Public Education Operations,” N.F.P.A. 1730, page 4.

Ministry of the Solicitor General), Ontario Regulation 378/18 comes into effect on July 1, 2019, making Community Risk Assessments mandatory for every municipality with respect to fire protection services. O.Reg. 378/18 includes the seven profiles outlined in N.F.P.A. 1300 Standard Community Risk Assessment and Community Risk Reduction Plan Development namely: demographics; geography; building stock; response; fire; hazards; and economics. In addition, the new regulation requires municipalities to develop critical infrastructure, public safety response and community services profiles as part of its Community Risk Assessment.

A Community Risk Reduction Plan is then used to assign resources and develop programs that are consistent with identified risk. This includes inspection activities, plans review, investigations, and public education programs. For example, the N.F.P.A. 1730 standard identifies a minimum inspection frequency cycle which could be refined based on the local context. The supporting appendices of N.F.P.A. 1730 provide exercises to identify staffing resource needs, taking into account required tasks and time demands.

The analysis and methodology included within this F.P.S.M.P. integrates the intent of developing a C.R.R.P. as referenced within N.F.P.A. 1730. Where applicable, this F.P.S.M.P. will present risk mitigation strategies to optimize the use of the *“three lines of defence”* in response to the findings of the C.R.A. to enhance the existing fire prevention and public education programs and services.

6.1.3 N.F.P.A. Fire and Life Safety Ecosystem

The N.F.P.A. Fire and Life Safety Ecosystem is a framework of eight elements that work in conjunction with one another towards the minimization of risk. Together, they promote the prevention of fires and other hazard-related loss, injuries and fatalities. The eight components that comprise this framework include: government responsibility, development and use of current codes, reference standards, investment in safety, skilled workforce, code compliance, preparedness and emergency response. This ecosystem is premised on the notion that the cause of all life safety incidents can be traced back to the breakdown of one or more of these components. N.F.P.A. is dedicated to protecting lives and property through the implementation of this ecosystem. The Fire and Life Safety Ecosystem recognizes that fire prevention is multifaceted and there are various key components that need to work in tandem in order to cultivate an environment and culture of fire safety.

6.2 Existing Fire Prevention and Public Education Staff Resources

The Fire Prevention Division and all activities and programs therein are the responsibility of the Captain-Fire Prevention Officer (C.F.P.O.) who, in addition to having fire prevention roles and responsibilities, also serves as a Captain within the existing fire suppression deployment model. On matters relating to fire prevention, the C.F.P.O. reports directly to the Fire Chief who provides high-level oversight of the division. Activities and events related to public education are typically scheduled by the Deputy Fire Chief with some support from the current Training Instructor who, on occasion, might attend these events depending on availability.

6.2.1 Captain - Fire Prevention Officer

The Captain - Fire Prevention Officer currently leads the delivery of the fire prevention program under the direction of the Fire Chief. Activities of the Fire Prevention Division include conducting fire inspections, ensuring compliance with the Ontario Fire Code (O.F.C.) and initiating prosecutions for violations of the Code. This individual also responds to emergency calls as required. The most recent job description for this position, dated April 2017, outlines the following responsibilities for Captain- Fire Prevention Officer including:

- *Develop and implement fire and life safety inspection program for all buildings requiring inspection, in accordance with municipal policy and applicable legislation and standards;*
- *Conduct comprehensive building inspections of all classes of buildings and occupancies in the Town of LaSalle, including all relevant documentation, follow-up and enforcement measures, to ensure Ontario Fire Code compliance;*
- *Identify corrective actions that must be made to bring properties into compliance with applicable fire codes, laws, regulations, and standards;*
- *Lead the Fire Prevention Division and coordinate various fire prevention programs including pre-planning and in-service inspections with other staff, and provide training relative to fire prevention matters to other staff as required;*
- *Review, provide advice and recommendations, and approve Fire Safety Plans according to Ontario Fire Code requirements;*
- *Examination of plans for new construction and liaise with municipal building department officials, architects, engineers, contractors, and/or building owners for the purposes of fire safety planning and making recommendations for code requirements related to new buildings construction;*
- *Participate in reviews of relevant permit applications for special municipal events including special occasion permits and fireworks displays, and provide recommendations for fire code compliance and fire safety measures;*
- *Meet regularly with the Fire Chief or designate to confirm strategic direction, operational goals & objectives and update progress, evaluate effectiveness of fire prevention programs, and discuss areas of concern;*
- *Conduct meetings, demonstrations or public fire and life safety presentations to educate building owners, employees or residents and assist in code compliance;*
- *Conduct and/or direct fire investigations to determine cause and origin at the direction of the Fire Chief or designate;*
- *Create and maintain complete and accurate records for all inspections, enforcement activity and investigations, consistent with department standards and practices, and municipal records management and retention policies;*
- *Attend peer meetings, conferences, seminars and professional development opportunities as approved by the Fire Chief and remain current with new and amended legislation, standards, qualifications, training, best practices and emerging issues pertaining to the scope of the position;*
- *Respond to varied public enquiries and requests for assistance regarding fire prevention matters;*

- *As a member of the fire service team, respond to public service calls including emergency fire calls, medical emergencies and motor vehicle accidents etc. as directed; and*
- *Participate as a member of the senior leadership team, performing advisory, general supervision and leadership roles, and other duties as assigned.*

The current staffing of the Fire Prevention Division consists of a complement of one staff member who, in addition to the various prevention activities listed above is also a full-time fire suppression Captain. The 2008 Fire Master Plan identified that there was a gap in the depth of staff resources within the prevention division and recommended that some activities be transferred to full-time firefighters through in-service inspections, and that the majority of clerical duties be shifted from the C.F.P.O. to an additional administrative support person; and that the fire service consider hiring an additional Fire Prevention Officer.

As a result of the 2008 Fire Master Plan a full-time Administrative Assistant was hired. However, as indicated within the Fire Master Plan 2015 Interim Review this position has had minimal impact in supporting the fire prevention and public education administrative support needs. Where possible the L.F.S. has also transferred fire prevention and public education roles and responsibilities to the on duty fire suppression staff, however based on the department's current minimum staffing level of one full-time firefighter on duty at all times there is currently limited capacity for taking on these additional tasks.

6.2.2 Division Workspace

The Captain-Fire Prevention Officer functions from workspace located at Station 1 (Headquarters) located at 1900 Normandy Street. This office space is newly renovated and meets the work space needs of this position. There is also an additional office space located adjacent to the C.F.P.O. that is available for other prevention/public education activities.

6.3 Training Standards & Qualifications – Fire Prevention/Public Education Division

The topic of training standards and certification for fire department personnel has been a major subject of interest within the fire service in Ontario for the past decade.

In April 2013, the O.F.M.E.M. announced that the Ontario fire service would be adopting the N.F.P.A. Pro-Qual Standards to replace the previous Ontario Fire Services Standards (O.F.S.S.). The previous O.F.S.S. had been developed by the Ontario Fire Chiefs Association (O.A.F.C.) in partnership with the O.F.M.E.M. to provide guidance to the training and qualifications of fire department staff. Together these competency-based standards were applied in developing a comprehensive provincial fire service training program that included a firefighter curriculum, Fire Prevention Officer Diploma program, Company Officer Diploma program, and a Training Officer Diploma program.

In January of 2014, the O.F.M.E.M. distributed *Communique 2014 – 04* to the Ontario fire service reflecting the grandfathering and transition process to the use of the newly adopted N.F.P.A. Pro-Qual Standards. A “**Grandfathering Policy**” was integrated into the transition to the N.F.P.A. Pro-Qual Standards process “*in order to exempt anyone from having to start over in any program and in order to give recognition for training and education already completed and for experience already gained*”⁸.

In May 2018, the Ministry of Community Safety and Correctional Services (M.C.S.C.S.) adopted **Ontario Regulation 379/18 – Firefighter Certification** under the F.P.P.A. that required every fire department to complete mandatory certification of fire service personnel involved in fire suppression including technical rescue services , communications (fire dispatch) fire prevention, public education and training. On October 5, 2018 this regulation was revoked.

Our research indicates that the required training and qualifications identified within the revoked **Ontario Regulation 379/18 – Firefighter Certification** were consistent with those included within the N.F.P.A. Pro-Qual Standards. Fire services across the Province are continuing to transition to the use of the N.F.P.A. Pro-Qual Standards recognizing that this is not mandatory, and does not require certification. Use of the N.F.P.A. Pro-Qual Standards referenced in **Table 3** remain the current industry best practices in Ontario.

Table 3: N.F.P.A. Pro-Qual Standards

Position	Applicable N.F.P.A. Standard
Fire Inspector Plans Examiner	<i>N.F.P.A. 1031 – Standard for Professional Qualifications for Fire Inspector and Plans Examiner</i>
Fire Investigator	<i>N.F.P.A. 1033 – Standard for Professional Qualifications for Fire Investigator</i>
Fire and Life Safety Educator (Public Education)	<i>N.F.P.A. 1035 – Standard for Professional Qualifications for Fire and Life Safety Educator, Public Information Officer, and Juvenile Firesetter Intervention Specialist</i>

6.3.1 N.F.P.A. 1031 – Standard for Professional Qualifications for Fire Inspector and Plans Examiner

At a minimum, all staff resources conducting fire inspections should have the skills and competencies included within the **N.F.P.A. 1031 – Fire Inspector Level I**. Fire inspections involving more complex issues and requiring interpretation of various legislation and codes are recommended to have the Level II designation. In our experience, successful completion of courses in addition to N.F.P.A 1031 Level I and II requirements including O.F.C. Parts 2 & 6, Part 4, Parts 3 & 5, Courtroom Procedures, and Effective

⁸ O.F.M.E.M. 2013 Grandfathering Policy
http://www.mcscs.ius.gov.on.ca/english/FireMarshal/FireServiceResources/Communiques/OFM_Com_2014-04at.html

Inspections of Commercial Cooking Equipment are necessary to ensure fire prevention division staff are trained to competently perform their role.

Table 4 summarizes the different fire inspector designations included within the N.F.P.A. 1031 standard.

Table 4: N.F.P.A. - 1031 Standard Fire Inspector Designations

Fire Inspector	N.F.P.A. 1031 Standard
Fire Inspector I	An individual at the first level of progression who has met the job performance requirements specified in this standard for Level I. The Fire Inspector I conducts basic fire inspections applies codes and standards.
Fire Inspector II	An individual at the second or intermediate level of progression who has met the job performance requirements specified in this standard for Level II. The Fire Inspector II conducts most types of inspections and interprets applicable codes and standards.
Fire Inspector III	An individual at the third and most advanced level of progression who has met the job performance requirements specified in this standard for Level III. The Fire Inspector III performs all types of fire inspections, plans review duties, and resolves complex code-related issues.

6.3.2 N.F.P.A. 1033 – Standard for Professional Qualifications for Fire Investigator

Staff responsible for conducting fire investigations should have the skills and competencies included in **N.F.P.A. 1033- Standard for Professional Qualifications for Fire Investigator**. The Ontario Fire College and Regional Training Centres currently offer a five day N.F.P.A. 1033 course which adheres to **N.F.P.A. 921- Guide for Fire and Explosions Investigations**. Although the course is currently offered in the Province, our experience is that the waiting lists are substantial. Fire investigations are discussed in greater detail in **Section 6.7.5** of this F.P.S.M.P.

Table 5: N.F.P.A. 1033 Standard for Professional Qualifications for Fire Investigator

Fire Investigator	N.F.P.A. 1033 Standard
Fire Investigator	An individual who has demonstrated the skills and knowledge necessary to conduct, coordinate and complete fire investigations.

6.3.3 N.F.P.A. 1035 – Standard for Professional Qualifications for Fire and Life Safety Educator, Public Information Officer, and Juvenile Firesetter Intervention Specialist.

At a minimum, all staff resources responsible for developing and delivering public education programs should have the skills and competencies included within the **N.F.P.A. 1035 – Fire and Life Safety Educator I**.

Table 6 summarizes the different public education designations included within the N.F.P.A. 1035 standard.

Table 6: N.F.P.A. - 1035 Standard for Public Education Designations

Fire and Life Safety Educator	N.F.P.A. 1035 Standard
Fire and Life Safety Educator I	The individual who has demonstrated the ability to coordinate and deliver existing educational programs and information.
Fire and Life Safety Educator II	The individual who has demonstrated the ability to prepare educational programs and information to meet identified needs.
Fire and Life Safety Educator III	The individual who has demonstrated the ability to create, administer, and evaluate educational programs and information.

6.3.4 N.F.P.A. 1041 – Standard for Fire Service Instructor Professional Qualifications

N.F.P.A. 1041- Standard for Fire Service Instructor Professional Qualifications sets out three classifications of Fire Instructor namely: Fire Instructor I, Fire Instructor II and Fire Instructor III. The differences in the classifications are identified in **Table 7** below.

Table 7: N.F.P.A. 1041 – Standard for Fire Instructor Designations

Fire Instructor	N.F.P.A. 1041 Standard
Fire Instructor I	A fire service instructor who has demonstrated the knowledge an ability to deliver instruction effectively from a prepared lesson plan, including instructional aids and evaluation instruments, adapt lesson plans to the unique requirements of the student and authority having jurisdiction; organize the learning environment so that learning and safety are maximized; and meet the record-keeping requirements of the authority having jurisdiction.
Fire Instructor II	A fire service instructor who, in addition to meet Instructor I qualifications, has demonstrated the knowledge and ability to develop individual lesson plans for a specific topic including learning objective, instructional aids, and evaluation instruments; schedule training sessions based on overall training plan of authority having jurisdiction; and supervise and coordinate the activities of other instructors.
Fire Instructor III	A fire service instructor who, in addition to meeting Instructor II qualifications; has demonstrated the knowledge and ability to develop comprehensive training curricula and programs for the use by single or multiple organizations; conduct organization needs analyses; design record keeping and scheduling systems; and develop training goals and implementation strategies.

To summarize, those individuals responsible for delivery of instruction from a prepared lesson plan are to be trained to Fire Instructor I. Those responsible for delivery and development of lesson plans for specific topics are to be trained to Fire Instructor II, while those with responsibility for the development of entire programs, goals and strategies are to be trained to Fire Instructor III.

6.3.5 Existing Fire Prevention Division Training and Qualifications

The current O.F.M.E.M. Grandfathering Database and information obtained from the Ontario Fire College provided by the L.F.S. identifies four individuals who have been certified to **N.F.P.A. 1031, Standard for Professional Qualifications for Fire Inspector and Plan Examiner, 2014 Edition, Level I.**

Current training records indicate that one individual is qualified to **N.F.P.A. 1031, Level II. There are three individuals who have been certified to N.F.P.A. 1033, Standard for Professional Qualifications for Fire Investigator, 2014 Edition.** Additionally, one staff member is certified to **N.F.P.A. 1035 (Fire Life Safety Educator), 2015 Edition, chapter 4, Level I).**

Table 8 summarizes the current training and qualifications of the staff resources available to delivering fire prevention and public education programs and activities.

Table 8: Current Fire Prevention/Public Education Training and Qualifications

Position	N.F.P.A. 1031 Level I	N.F.P.A. 1031 Level II	N.F.P.A. 1033	N.F.P.A. 1035	N.F.P.A. 1041 Level I	Courtroom Procedures
Fire Chief	✓	-	✓	-	✓	✓
Deputy Fire Chief	✓	-	-	✓	✓	-
Captain - Fire Prevention Officer	✓	-	✓	✓ -	-	✓
1-Full-time Firefighter	✓	✓	✓	-	-	-
2-Full-time Firefighters	-	-	-	-	✓	-
3-Full-time Firefighters	-	-	-	-	✓	-
1- Paid-on-Call Volunteer Firefighter	-	-	-	-	✓	-

This analysis illustrates the wide range of specific training and qualifications (highlighted) of current staff to deliver fire prevention and public education programs and services. The full-time and paid-on-call volunteer firefighters who are identified as having the N.F.P.A. 1041 Instructor Level I qualifications are applicable to their current role within the Operations Division (fire suppression) and not the fire prevention/public education division. However, these qualifications may be beneficial subject to revised roles and responsibilities of these staff in the future.

This analysis also highlights the current level of training and qualifications at the senior (Fire Chief and Deputy Fire Chief) level in comparison to those staff that are directly responsible for the day to day

delivery of these services and programs. Further analysis and recommendations are presented in the following sections of this F.P.S.M.P. to assist Council in identifying strategies to enhance the training and qualifications of all staff assigned to deliver fire prevention/public education services and programs.

6.3.6 Proposed Fire Prevention Division Training and Qualifications

Based on our review of the applicable N.F.P.A. Pro-Qual Standards and our knowledge of current industry best practices, **Table 9** outlines the recommended training and qualifications for those staff assigned to develop and deliver the L.F.S. fire prevention and public education programs and services.

These recommendations recognize that in some instances specific training and qualifications are not currently readily available such as the N.F.P.A. 1031 – Fire Inspector Level III. When training for these higher standards becomes available it should be made accessible to department senior staff such as the Deputy Fire Chief and Captain-Fire Prevention Officer.

Table 9: Proposed Fire Prevention/Public Education Professional Qualifications

Divisional Task	Proposed Professional Qualifications
Public Education Program Design and Evaluation	N.F.P.A. 1035 - Fire and Life Safety Educator Level II
Public Education Program Implementation	N.F.P.A. 1035 - Fire and Life Safety Educator Level II
Media Interviews and Advisories	N.F.P.A. 1035 - Public Information Officer
Fire Inspections	N.F.P.A. 1031 – Fire Inspector Level II B.C.I.N.- General Legal and Fire Protection
Fire Investigations	N.F.P.A. 1033 – Investigator
Fire Safety Plan Approval	As approved by the O.F.M.E.M.
Plan Examination	N.F.P.A. 1031 – Plan Examiner Level II

In our view, the achievement and maintenance of these proposed professional qualifications should be considered a job performance requirement for those roles and responsibilities where applicable.

Council Recommendation #2: That the LaSalle Fire Services develop a strategy for the implementation of the proposed fire prevention/public education professional qualifications presented within the proposed Fire Protection Services Master Plan for all staff assigned to delivering the applicable fire prevention/publication programs and services.

6.4 Fire Prevention Policy

In our experience, a Fire Prevention Policy is a valuable tool reflecting current industry best practices in providing clear direction and clarification to department staff communicating the Council approved service expectations of all fire prevention and public education activities. Policies, particularly in the area

of fire prevention and public education activities and programs are necessary to define performance goals and objectives; inform trend analyses; and inform ongoing monitoring of these services to the public.

The components of a Fire Prevention Policy are provided in **P.F.S.G. 04-45-12 “Fire Prevention Policy”** which presents a framework for developing a fire prevention policy. An example of the purpose of a fire prevention policy includes:

- *To establish policies and procedures for fire department personnel for fire prevention, public education programs and activities as a primary means of protecting lives and property from fire; and,*
- *To maintain compliance with the minimum fire prevention and public education activities as required by the F.P.P.A, 1997.*

A Fire Prevention Policy should also describe the following fire prevention and fire safety education programs and services such as:

- *Fire inspection activities;*
- *Fire code enforcement;*
- *Fire and life safety education;*
- *Fire investigation and cause determination;*
- *Fire loss statistics; and*
- *Fire department operational guidelines identifying how, when and where activities will be conducted.*

The current Fire Prevention Policy for the Town of LaSalle is contained within the **Corporation of the Town of LaSalle’s Policy Manual**, and is identified as **Policy #119**. This policy was last updated on January 25th, 2016 as recommended by **Report No. FIRE 16-03**. Our research indicates that the previous fire prevention policy included a schedule that was initiated in response to *“The Current Fire Prevention Policy was drafted to reflect provincial recommendations of the Office of the Fire Marshal’s Public Fire Safety Guidelines for Municipal Fire Protection”*⁹. **Report No. FIRE 16-03** references that the previous fire inspection schedule represented current industry best practices for municipalities to strive to achieve. This report also identifies the reason for removing the fire inspection schedule was the limited capacity of the L.F.S. to achieve compliance with the identified fire inspection schedule.

Report No. FIRE 16-03 as approved by Council revised the current Fire Prevention Policy to more accurately reflect the current work load capacity of the L.F.S. The current Town of LaSalle Fire

⁹ Report No. FIRE 16-03

Prevention Policy is included within the *Corporation of the Town of LaSalle's Policy Manual* as **Policy #M-F1-002**.

Operational Guideline 14-001 dated August 20th, does not specifically reference the new **Policy #M-F1-002** but does include a purpose that indicates that this operational guideline is intended **"To establish policy and procedures for an effective Inspection Program to meet the needs and circumstances of the community, and available departmental resources"**. The current Fire Prevention Policy and Operational Guideline now focus on the primary objective of achieving compliance with the Fire Protection and Prevention Act. In our view, although the revisions to these documents was needed to reflect the current work load capacity of the L.F.S. it also represents a shift in providing a "reactive" versus "proactive" fire inspection program. In our experience this shift is inconsistent with current industry best practices of evaluating community fire risk and identifying risk reduction strategies through the use of a Community Risk Assessment. It is also inconsistent with the optimization of the **"three lines of defence"** and the strategic priorities of this F.P.S.M.P. that include:

- i. ***The Town of LaSalle is committed to identifying the optimal level of fire protection services through the use of a Community Risk Assessment to determine the fire safety risks present within the Town of LaSalle as the basis for developing clear goals and objectives for all fire protection services provided by the LaSalle Fire Service; and***
- ii. ***Where applicable the Town of LaSalle will seek to optimize the Ontario Comprehensive Fire Safety Effectiveness Model's first two lines of defence, including public education and fire prevention, and the utilization of fire safety standards and fire code enforcement, in developing clear goals and objectives for all fire protection services provided by the LaSalle Fire Service.***

The analysis within this F.P.S.M.P. includes recommendations to re-instate fire inspection and public education schedules. These are recommended to respond to the "key risks" and "key findings" identified within the Community Risk Assessment, and to support the implementation of the proposed strategic priorities contained within this F.P.S.M.P. This F.P.S.M.P. also includes a staff resource strategy to implement and sustain the proposed schedules. Subject to Council's consideration and approval of this F.P.S.M.P. and attaining their support for the proposed fire prevention/public education staff resource plan we recommend that the current Fire Prevention Policy be updated and included within the updated Establishing and Regulating By-law as an appendix.

Operational Recommendation #7: That the LaSalle Fire Service update its current Fire Prevention Policy as described within the proposed Fire Protection Services Master Plan, and that subject to approval by Council it be included as an appendix to the Establishing and Regulating By-law.

6.5 Fire Prevention & Public Education Operational Guidelines

Operational guidelines are an integral component to providing specific direction to all staff in how, when and where department programs and services are to be provided. Our research indicates that the L.F.S. currently has five approved operational guidelines. These guidelines are all current and provide clear direction as to the purpose, scope and procedures to be followed by all staff. **Table 10** provides reference to all current operational guidelines related to the delivery of the department’s current fire prevention and public education programs and services.

As referenced previously within this F.P.S.M.P. there may be a need, subject to Council’s consideration and approval of this F.P.S.M.P. to review and update the current operational guidelines, and where applicable develop and implement additional operational guidelines. In our experience the current list of operational guidelines is limited in the description of all fire prevention and public education programs that the L.F.S. currently provides and that are recommended within this F.P.S.M.P.

Table 10: Current Fire Prevention/Public Education Operational Guidelines

Operational Guideline #	Subject	Last Reviewed Date
14-001	Fire Safety Inspections	August 20,2018
14-002	Fire Investigations	August 20,2018
14-003	Public Education	August 20, 2018
14-004	Fire Pre-Incident Plans	August 20, 2018
14-005	Hoarding Procedures for F.P.O.s	August 20, 2018

Source: LaSalle Fire Service

Operational Recommendation #8: That consideration be given to developing additional fire prevention/public education Operational Guidelines as referenced within the proposed Fire Protection Services Master Plan.

6.6 Fire Prevention Activity and Workload Tracking

N.F.P.A. 1730 Standard on Organization and Deployment of Fire Prevention Inspection and Code Enforcement, Plan Review, Investigation, and Public Education Operations also supports the use of personnel and resource tracking in order to determine the staff resources required to deliver the recommended fire prevention and public education programs and services. It is not uncommon that fire departments do not have a sense of the capability of their current resources to meet service levels due to a lack of data and tracking of historic effort. This is commonly compounded by the lack of performance measures in place against which to track work load effort.

To establish needed resources, N.F.P.A. 1730 presents example tracking tables for fire prevention inspection and code enforcement, plan review, investigations, and public education. The example tracking tables include information like separating inspections by occupancy type, identifying the number of facilities in use, task time, inspection frequency, and resulting total time. Other tables include

similar information including number of tasks, time per task, commute time, other time (including administrative functions), and a resulting total.

Tracking and reporting for the L.F.S. Fire Prevention Division activities have historically been completed at a high level with reporting presented in the Annual Reports. In our experience, this historical practice recognizes the importance the L.F.S. has placed on communicating to Council and the community. In our experience, there would be additional value in collecting and tracking further data with respect to fire prevention and public education initiatives in order to enhance the current reporting process. This could include collecting the following information:

- *Number of Part I Offence Notices issued;*
- *Number of Part III Charges filed;*
- *Number of Ontario Fire Code convictions registered;*
- *Number/percentage of properties inspected in compliance at time of inspection;*
- *Number/percentage of inspections that led to Fire Safety Inspection Orders being issued;*
- *Number of Fire Safety Inspection Orders issued;*
- *Number of re-inspections required per property;*
- *Breakdown (by number/percentage) of properties inspected by O.B.C. occupancy type;*
- *Breakdown (by number/percentage) of enforcement options used throughout the year;*
- *Number of Orders to Close, Authorizations to Close and Immediate Threat to Life issued;*
- *Percentage/number of occupancies inspected that were/were not compliant with smoke alarm legislation; and*
- *Percentage of occupancies/number inspected that were/were not compliant with carbon monoxide legislation.*

This list is not intended to be exhaustive, but to provide samples of the types of data that the N.F.P.A. 1730 standard has identified. It is our understanding that the current FirePro records management software is equipped to facilitate this level of tracking and reporting.

Operational Recommendation #9: That consideration be given to expanding the current workload reporting of the Fire Prevention/Public Education Division as referenced within the proposed Fire Protection Services Master Plan.

6.7 Existing Fire Inspection Program

At a minimum a fire inspection program must comply with the requirements of ***Ontario Regulation 365/13: Mandatory Assessment of Complaints and Requests for Approval and Fire Marshal's Directive 2014-03: Inspections of All Buildings***. As described in previous sections the L.F.S. currently provides a fire inspection program as described in ***Operational Guideline # 14-001: Fire Safety Inspections***. This guideline describes the department's approach to fire inspections that are completed in response to

complaints and requests for fire inspections. This guideline also describes the department's current Routine Inspection Program.

6.7.1 Request or Complaint Fire Inspections

The Captain-Fire Prevention Officer is directly responsible for responding to all complaints or requests for a fire inspection. **Operational Guideline 14-001 – Fire Safety Inspections** identifies the applicable procedures to be followed including the following:

- *Complaints or concerns received regarding fire safety matters will be investigated immediately upon receiving such information;*
- *Where an Immediate Threat to Life is indicated, the Fire Chief is to be advised and action to mitigate the immediate threat should be undertaken immediately;*
- *Inspections required by regulation must be conducted in accordance with the legislation; and*
- *Inspections requested for licensing, or real estate purposes, etc. should be scheduled and conducted as soon as practical, and where possible, within the compliance timelines of the party requesting the inspection.*

These procedures are consistent with current industry best practices and compliance with current legislation.

6.7.2 Routine Inspection Program

The department's current Routine Inspection Program is also described in **Operational Guideline 14-001 – Fire Safety Inspections**. This program has historically been based on the findings of the Simplified Risk Assessment and the prioritization of fire inspections based upon perceived risks, available resources, and as recommended in the Public Fire Safety Guidelines by the O.F.M.E.M. Through consultation with the Fire Chief, the Captain - Fire Prevention Officer develops a schedule of those occupancies where a fire inspection is to be completed.

6.7.2.1 Enhancing Fire Safety in Occupancies Housing Vulnerable Ontarians, Ontario Regulation 150/13

Ontario Regulation 150/13 - Enhancing Fire Safety in Occupancies Housing Vulnerable Ontarians was filed on May 9, 2013. This regulation introduced amendments to the O.F.C. that came into force on January 1, 2014. The O.F.M.E.M. led the development of this new regulation in consultation with a Technical Advisory Committee of industry experts. This regulation is intended to enhance fire safety in occupancies that house vulnerable occupants. The legislation applies to care, care and treatment and retirement homes that are regulated under the Retirement Homes Act.

Ontario Regulation 364/13 – Mandatory Inspection – Fire Drill In Vulnerable Occupancy also requires that a fire inspector observe a fire drill scenario representing the facility's lowest staffing complement (as approved by the Chief Fire Official), conduct a fire safety inspection (utilizing the Annual Inspection

Checklist which forms part of O.F.M.E.M. Directive 2014-002: Vulnerable Occupancies – Fire Drill Scenarios, Fire Drill Observations, Fire Safety Inspections, as a minimum level of inspection), and then update the O.F.M.E.M.’s Vulnerable Occupancy Registry, as appropriate.

The L.F.S. current Routine Inspection Program includes ensuring compliance with these two regulations in overseeing the operations of the Town’s six registered vulnerable occupancies. Our research indicates that the L.F.S. has completed the required registration process for all of these vulnerable occupancies. However, further reporting and updates will be required as further fire inspections and fire drill scenarios are performed. As referenced above vulnerable occupancies have a very specific regulation related to the delivery of fire inspections and fire drills.

This F.P.S.M.P. includes a recommendation that consideration be given to developing additional fire prevention/public education operational guidelines. In our view the fire safety risk and regulations for these occupancies types warrant the need for the L.F.S. to develop a comprehensive operational guideline to direct staff in complying with the municipality’s legislative requirements.

6.7.3 Fire Safety Audits

The L.F.S. currently utilizes on-duty full-time firefighters to facilitate a fire safety audit of buildings identified by the Fire Chief or upon request. The utilization of on-duty full-time firefighters to assist in delivering fire prevention and public education programs is a recognized industry best practice. More recently fire departments across Ontario have been including requirements for full-time firefighters participating in a full-time firefighter recruitment training process to also qualify to the **N.F.P.A. 1031 – Fire Inspector Level I** and/or the **N.F.P.A. 1035 - Fire and Life Safety Educator Level I** standards.

Our research did not identify a specific operational guideline for conducting Fire Safety Audits. In our view there is a need for the L.F.S. to develop a comprehensive operational guideline to direct staff in conducting Fire Safety Audits, and for reference to this program to be included within the updated Fire Prevention Policy.

Operational Recommendation #10: That L.F.S. develop a comprehensive Operating Guideline to provide staff direction on conducting Fire Safety Audits and for Fire Safety Audits to be referenced within the updated Fire Prevention Policy.

6.7.4 Fire Safety Enforcement

Historically, enforcement was not commonly used by municipalities working with property owners to achieve compliance with the Ontario Fire Code. This trend is changing across the province with the support of the O.F.M.E.M., in part through its May 2012 Technical Guideline **O.F.M. T.G. 01-2012 “Fire Safety Inspections and Enforcement.”** This technical guideline is intended to assist municipalities in efficiently and effectively meeting fire safety and enforcement responsibilities.

Dillon's review of this guideline indicates that it supports the direction of the first two lines of defence as a means to optimize the level of fire protection services within a community. The technical guideline provides municipalities with strategies, particularly related to enforcement of the Ontario Fire Code in situations where achieving compliance has or may be more difficult to achieve.

In our experience, there is substantial value to utilizing a variety of techniques to assist a property owner achieve compliance with the Ontario Fire Code. Engaging and educating the public about its responsibility to comply with the O.F.C. is often enough to bring about compliance, however, there are instances where enforcement may be necessary.

Representatives from the O.F.M.E.M. are available to facilitate training sessions relating to enforcement options available to municipalities. Host fire departments are encouraged to invite neighbouring fire prevention staff, an option the L.F.S. may choose to consider in an effort to work with and learn from other jurisdictions within the County of Essex. In our view there is substantial value in hearing about the successes and challenges of others in similar roles. Because these types of sessions are typically hosted in municipally-owned facilities, the costs to the host fire department are typically quite low. We understand that the Fire Chief and Deputy Fire Chief have participated in these training sessions in the past. It would benefit the Town's Chief Fire Prevention Officer to attend one of these educational workshops.

Operational Recommendation #11: That in consultation with the Office of the Fire Marshal and Emergency Management and the County of Essex Fire Chiefs Association, the LaSalle Fire Service consider options for hosting or attending an educational workshop related to Fire Safety Enforcement as presented within the proposed Fire Protection Services Master Plan.

6.7.5 Fire Investigations and Cause Determination

Investigating the origin and cause of a fire is a municipal legislated responsibility. ***N.F.P.A. 1033 Standard for Professional Qualifications for Fire Investigators*** sets out the required skills and knowledge to competently conduct fire scene investigations. Currently, the Fire Chief, Captain-Fire Prevention Officer and one full-time firefighter have completed this training.

Where fires meet specific criteria, the local fire department can request assistance from the O.F.M.E.M. to conduct these investigations. The criteria and process for this request are contained in Fire Marshal's Directive 2019-001, which was updated in May 2019.

In our experience, a high percentage of reported fire cause classified as undetermined may indicate further training is needed with respect to fire investigations or a review of completing the required O.F.M.E.M. Standard Incident Reports to ensure greater accuracy. This review indicates that the L.F.S. has an operational guideline that references current fire investigation practices, ***Operational Guideline***

14-002 – Fire Investigations. O.G. 14-002 requires all personnel conducting formal fire investigations to be certified to N.F.P.A. 1033 Standard for Fire Investigator.

6.7.6 Fire Safety Plans

Fire Safety Plans are required for select occupancy types identified within the O.F.C. These occupancies include Group A – Assembly occupancies, and Group B – Care or Detention occupancies. All remaining major occupancy groups (e.g., Group C – Residential, Group F – Industrial, etc.) also require fire safety plans depending on their occupancy load or other building-related features such as storeys below grade.

The O.F.C. also details the content requirements of a fire safety plan.¹⁰ These requirements include emergency procedures in the case of a fire such as use of the fire alarm, notifying the fire department, and instruction and evacuation of occupants. Fire safety plans must also designate supervisory staff, and details relating to fire drills, control of fire hazards, and maintenance of building facilities. Fire Safety Plans provide an avenue for the training of building staff in the case of a fire incident; for example, the role of care providers at a long-term care facility in an evacuation procedure.

Recent legislated changes require all Chief Fire Officials approving fire safety plans for buildings containing care occupancies, care and treatment occupancies or retirement homes, to successfully complete mandatory training as approved by the Fire Marshal. At this time, the only training that has been approved by the O.F.M.E.M. is offered through Public Services Health & Safety Association (P.S.H.S.A.). The Fire Chief and Deputy Fire Chief completed the original course provided by the O.F.M.E.M. and the Captain-Fire Prevention Officer as completed the P.S.H.S.A. course. These individuals are also appointed as Chief Fire Officials (C.F.O.) for the L.F.S.

Research into preparing this F.P.S.M.P. did not identify an operational guideline describing the department's current practice for the review and approval of Fire Safety Plans, or the required training, certification, and authority of staff. The current Fire Prevention Policy also does not refer to the review and approval of fire safety plans. In our view there is a need for the L.F.S. to develop a comprehensive operational guideline to direct staff in conducting Fire Safety Plan reviews, and for reference to this program to be included within the updated Fire Prevention Policy.

6.7.7 Pre-Fire Planning

The process of pre-fire planning within the fire service is intended to provide a proactive awareness within fire departments about key building features, possible hazards, and other pertinent characteristics about an existing occupancy. Pre-fire planning is typically conducted by on-duty fire suppression staff with information provided from a variety of sources including existing information from the Town, information gathered from the building owner, and site visits. The value of a building

¹⁰ Source: Ontario Fire Code, Section 2.8.2.1.

pre-fire planning is to provide site specific hazards and information to fire suppression crews in advance of responding to an emergency incident.

Operational Guideline 14-004 – Fire Pre-Incident Plans outlines the protocol for fire suppression crews to follow when initiating and carrying out pre-planning activities. This operational guideline also provides for the Fire Prevention Division to coordinate pre-fire planning efforts on a risk prioritization basis. We are aware that some departments in the province utilize software technology specific for this application to support fire suppression staff in conduct the pre-plan and documenting the findings. We are also aware that the FirePro software program has the capability of acting as a repository for pre-plans.

6.7.8 Plans Review

Approval of plans for new construction or site alternations from the perspective of fire protection is a critical component of fire prevention. The degree of plans review performed by a fire prevention division varies between jurisdictions. Building plans can be reviewed for sprinkler, fire alarm and detection, and suppression systems; and site plan and subdivision approval for items affecting fire services, such as fire department access and water supply.

In our experience there is tremendous value to fostering a collaborative relationship between the building department and fire departments within a jurisdiction. While each has an important and distinct function within the municipality, the benefits of working collaboratively to achieve compliance with the Ontario Building Code and the Ontario Fire Code cannot be disputed.

Building plans review involves the evaluation of design plans before construction begins and can be related to actual construction or to a new manufacturing process. Plans review includes evaluating architectural, structural, mechanical, electrical, and/or fire protection drawings to ensure compliance with a variety of codes and standards, including the Ontario Building Code.

While some fire departments opt to employ plans examiners and technologists to ensure thorough and technical plans review, others choose to rely on the expertise provided within the municipality's building department. Ensuring staff are qualified to perform the determined level of plans review is important.

Determining the level of plans review performed by fire prevention divisions is a decision that requires discussion and collaboration between the fire, building and legal departments. The plans review process within a municipality is intended to ensure proper construction and appropriate built-in fire protection systems, which are vital to both the building occupants and first responder safety.

Fire department involvement before construction begins may prevent issues with design specific to fire protection systems and features that can difficult and cost prohibitive to correct at a later stage in the project. These issues may also be addressed through a strong relationship and clear expectations

between the building and fire departments within a municipality. In our experience, a written Memorandum of Understanding, which clearly outlines the responsibilities of building and fire department personnel for plans review can be extremely valuable.

There are also instances when the fire department may issue a Fire Safety Inspection Order for work to be carried out on a building or system that requires a building permit or change of use permit. Fire department personnel issuing fire safety inspection orders are required, under the Fire Protection and Prevention Act, to provide a copy of the order to the Chief Building Official.

Staffing levels and qualifications may assist a jurisdiction in determining the level of involvement of fire department staff. To be involved with the plans review process, fire department personnel do not necessarily require technical training. Personnel with knowledge of fire service operational needs are typically capable of providing a basic level review. However, in jurisdictions where plans review is considered a key function of the fire department, ensuring staff are qualified to perform plans review is necessary.

The role of the L.F.S.'s Fire Prevention Officer includes completing plans review for fire safety. The recently appointed Fire Prevention Officer is currently completing training and credentials related to plans review. Through the role of the F.P.O. we encourage L.F.S. to continue to strengthen procedures for collaboration with the Town's Building Department to apply the appropriate expertise and qualifications of both the fire department and building department to provide technical plans review.

Operational Recommendation #12: That the Town of LaSalle consider drafting a Memorandum of Understanding between the municipality's building and fire departments, which clearly defines the roles and responsibilities of personnel with respect to building and site plan review.

6.7.9 False Alarms

Our review of the department's historical emergency response data indicates that for the period from January 31st, 2014 to January 31st, 2019 false alarms as defined by the O.F.M.E.M. response types, accounted for 23% of the department's emergency call volume in comparison to that of the province for the period from January 1st, 2013 to December 31st 2017 of 16%.

This indicates that false alarm calls may be causing a significant demand on the current resources of the L.F.S. In our experience, these findings support further consideration of a more comprehensive strategy that includes an enhanced and targeted public education campaign, and increased fire inspections of properties where repeat false alarms occur. The review of false alarm calls should also include an investigation of call coding to determine which types of calls are driving the statistical results and to ensure that calls being coded as false alarms are accurate.

An enhanced and targeted public education campaign may include more robust language relating to enforcement options available to the Town to reduce false alarms, including but not limited to charging building owners or managers for not maintaining fire alarm systems in accordance with the O.F.C. Jurisdictions including the City of Toronto and the City of London have chosen to use media releases and press conferences to share the cost to tax payers related to false alarms and the penalties for conviction under the Fire Code as a method of educating the public.

Operational Recommendation #13: That consideration be given to developing a comprehensive strategy for reviewing and managing false alarm calls that includes enhanced and targeted public education strategies, increased fire inspections and enforcement options.

6.7.10 Proposed Fire Inspection Program

Our review indicates that the current fire inspection program includes responding to the legislative requirements for request and complaint inspections. The department also utilizes routine inspections that are based on the historical fire risks present. Our review also indicates that the Town revised its fire inspection program in 2016, due primarily to the availability of staff resources.

We recognize that this strategy represents fiscal responsibility on behalf of the Town. However, by initiating this Fire Protection Services Master Planning process including proactively developing a Community Risk Assessment as required by new provincial regulation, Council now has an opportunity to consider strategies that support the most effective and efficient model for providing fire protection services that provide the most value to the community. In our view these strategies should be fully informed by the findings of the Community Risk Assessment.

6.7.11 Applicable Community Risk Assessment - Key Risks & Key Findings

The C.R.A. identifies both “Key Risks” and “Key Findings” that should be considered as part of assessing the fire inspection needs of the Town in determining the local needs and circumstances, as well as the level of service provided by the municipality. **Table 11** illustrates the identified “Key Risks” applicable to the analysis of fire inspection (Enforcement Program) and services provided by the L.F.S.

Table 11: C.R.A. Key Risks

CRA Key Risks Analysis Outcomes	SECOND LINE OF DEFENCE
	For consideration within the proposed Enforcement Program
The Town has six registered vulnerable occupancies.	•
Structural fires are the most frequent fire type and they occurred at a higher rate than the Province between 2013 and 2017 (73% vs. 66%), for a total of 51 fires over the five year period.	•
For the period 2013 to 2017, structure fires occurring in Group C – Residential occupancies account for 76% of total structure fires within the Town.	•

CRA Key Risks Analysis Outcomes	SECOND LINE OF DEFENCE
	For consideration within the proposed Enforcement Program
For the period 2013 to 2017, structure fires occurring in Group F – Industrial occupancies account for 6% of total structure fires within the Town.	•
For the period 2013 to 2017, structure fires occurring in Group A – Assembly occupancies and Group E - Mercantile occupancies each account for 4% of total structure fires within the Town.	•
For the period 2013 to 2017, all reported fire-related civilian injuries (2) and fatalities (1) occurred in Group C – residential occupancies.	•
Of the fires occurring in the Town from 2013 to 2017, the leading cause of unintentionally set fires was due to mechanical/electrical failure at 22% (11 fires), compared to 15% in the Province.	•
Of the fires occurring in the Town from 2013 to 2017, 12% of the fires were intentional, compared to 8% in the Province.	•
During the period from 2013-2017, there were no smoke alarms on the floor or suite of origin present in 18% of the fire incidents the L.F.S. responded to in Group C – Residential occupancies and in 26% of the incidents smoke alarms were present but did not operate.	•

Table 12 illustrates the identified “Key Findings” to the analysis of the existing fire inspection (Enforcement Program) services provided by the L.F.S.

Table 12: C.R.A. Key Findings

CRA Key Findings Analysis Outcomes	SECOND LINE OF DEFENCE
	For consideration within the proposed Enforcement Program
Fighting Island, which has naturalized areas and structures, is a unique destination within the jurisdiction of L.F.S.	•
Many of LaSalle’s residential neighbourhoods are located adjacent to wildland areas.	•
13% of the Town’s property stock consists of other types of attached dwellings including semi-detached houses, row housing, apartments or flats in a duplex and apartments in a building with fewer than five storeys.	•
Newly constructed subdivision units have reduced side yards, indicating a higher exposure risk.	•
There are several buildings within the Town that are four to six storeys.	•
There a number of buildings that present an increased fire risk due to their large floor areas.	•
There are properties within the Town that have fuel-load related concerns, primarily linked to industries or marinas.	•
Additional potential high fire life-safety risk considerations in the Town include eight schools and four licenced day care centres.	•

CRA Key Findings Analysis Outcomes	SECOND LINE OF DEFENCE
	For consideration within the proposed Enforcement Program
Of the fires occurring in the Town from 2013 to 2017, the cause of 31% was undetermined compared to 19% in the Province.	•
Analysis of fire loss data for the period of 2013-2017 indicates that the source of ignition for 37% of fires was undetermined	•
During the period from 2013-2017, there were smoke alarms on the floor or suite of origin present and operating in 36% of the incidents the L.F.S. responded to in comparison to 45% of the incidents in Group C residential occupancies within the province.	•
Overall, call volumes have increased by 21% from 2014 to 2018 with variability in volume over the five year period.	•
Based on O.F.M.E.M. Response Types, the L.F.S. responds to 24% less medical/resuscitator calls than the Province, which is offset by 7% more false fire calls, 9% more CO false calls, and 4% more property fires/explosions calls.	•

6.7.12 Proposed Fire Inspection Schedule

The applicable industry guidelines, standards and best practices presented within this F.P.S.M.P. acknowledge that the optimization of fire prevention and public education services and programs is one of the most effective and efficient strategies to mitigating the fire risks present and providing a safer community. Through its leadership in recognizing the need to address the new **Ontario Regulation 378/18 – C.R.A.** as part of this Fire Protection Services Master Planning process the Town has also acknowledge the importance of an effective and efficient fire inspection program.

The proposed fire inspection schedule (performance objectives) prioritize the identified high risk occupancies within the community and specifically the Town’s legislative requirements including those identified by **Ontario Regulation 150/13 - Enhancing Fire Safety in Occupancies Housing Vulnerable Ontarians**. In our experience, the transition to the proposed fire inspection cycles will require the department to consider the workload of its current resources, options for utilization of other existing staff resources, such as on-duty fire suppression firefighters and the need for additional staff resources within the Fire Prevention Division.

An important element of this transition will be consideration of the recommended training and certification requirements of all staff assigned to conduct fire inspections and related tasks. The analysis within this F.P.S.M.P. will further identify the specific staff resource needs to deliver the proposed fire inspection schedule presented. This will also include a recommendation to request that the Fire Chief develop a detailed implementation plan for Council’s consideration as part of this Fire Protection Services Master Planning process. **Table 13** illustrates the proposed fire inspection schedule.

Table 13: Proposed Fire Inspection Schedule

Occupancy Classification (O.B.C.)	Buildings	Previous Fire Prevention Policy April 26, 2005	Current Fire Inspection Frequencies	Proposed Fire Inspection Schedule (Performance)
Group A – Assembly	Schools, Recreation Centres (Arenas), Curling/Golf Centres	Annual	Routine & Upon Request/Complaint	1 - 2 Years
	Licensed Properties, Nursery/Day Care Facilities, Churches, Special Occasion Permits		Routine & Upon Request/Complaint	1 – 2 Years
Group B – Care or Detention	B2, B3, Retirement Homes, Group Homes	Annual	Annual	Annual
	Other Group B		Routine & Upon Request/Complaint	1 – 2 Years
Group C – Residential	Apartments regulated by Part 9.3 of the O.F.C. (Boarding, Lodging, and Rooming Houses)	Annual	Routine & Upon Request/Complaint	2 – 3 Years
	Apartments regulated by Part 9.5 of the O.F.C. (Buildings up to and including 6 Storeys in Building Height with Residential occupancies)			2 – 3 Years
	Apartments regulated by Part 9.6 of the O.F.C. (Buildings Higher than 6 Storeys in Building Height With Residential Occupancies)			2 – 3 Years
	Apartments regulated by Part 9.8 of the O.F.C. (Two Unit Residential Occupancies)	Upon Notification	Upon Request/Complaint	Upon Request/Complaint
	Hotels regulated by Part 9.9 of the O.F.C. Condominiums / Apartments Known as Primarily Seniors Residences Home Inspection Program	2 - Years Upon Request/Complaint		2 – 3 Years Annual Door- to- Door Request/Complaint
Group D - Business	Business and Personal Services Occupancies	Upon Request/Complaint or 3- Years	Routine & Upon Request/Complaint	3 – 5 Years
Group E - Mercantile	Mercantile Occupancies	2 - Years	Routine & Upon Request/Complaint	3 – 5 Years
Group F - Industrial	Factories and Complexes	2 - Years	Routine & Upon Request/Complaint	1 – 2 Years

Council Recommendation #3: That subject to Council’s consideration and approval of an Implementation Plan that the proposed fire inspection schedule included within the proposed Fire Protection Services Master Plan be approved and included within the proposed Fire Prevention Policy.

6.8 Existing Public Education Program and Activities

The experience of other municipalities has proven that expanding and enhancing public education efforts can be an effective strategy to mitigate emergency call volume and increase the overall level of fire safety within a community. Within the L.F.S. the D.F.C. is responsible for coordinating and administering public education programming. The delivery of public fire safety materials is administered through community in-person programs, via social media tools, the department’s website, and at local events and festivals. **Operational Guideline 14-003** establishes the criteria and procedures for conducting educational events that contain elements of public fire and life safety or emergency planning.

The L.F.S. website provides publicly available information on topics such as smoke alarms, carbon monoxide awareness, fire escape planning, recreational fires, flammable liquids and gas and apartment/condo fire safety. The websites presents public educational materials and resources for specific demographic groups such as children and individuals with disabilities. The fire service is also active on several social media outlets through which fire safety messaging is shared publicly.

Various community programs offered at the L.F.S. include station tour bookings, fire and life safety presentations and the Arson Prevention Program for Children (TAPP-C). A fire safety trailer serves the community as a portable classroom where children can learn about the various hazards within each room of a common household. The L.F.S. attends annual events held within the Town and has set up displays and presentation materials at various locations including the Vollmer Recreational Complex, the local library, retirement homes, elementary schools, and daycare facilities. Seniors and primary grade students are the key targeted demographics of L.F.S. public education programming. The fire service delivers fire safety programming to senior homes 1-2 times per year and visits all six elementary schools once per year alternating each year between grades one and two and grades seven and eight. The fire service focuses heavily on education during Fire Prevention Week. A breakdown of number of children reached and total staffing hours allotted to public education are provided in **Table 14** below.

Table 14: Fire Prevention Week Activities

Year	Total # of Children Reached	Total School Campaign Staff Hours	Grand Total of Staff Hours for Fire Prevention Week
2013	476	134.5	476
2014	754	192	348.5
2015	769	117	300.5
2016	691	164.5	339.5
2017	679	150	150
2018	765	49.25	215.75

Source: L.F.S.

The findings of the C.R.A. include “**key risks**” and “**key findings**” where existing or additional public education programming should be considered as part of the department’s risk reduction strategies. These are presented within the following sections including where further risk reduction strategies should be considered.

6.9 Smoke Alarm/Carbon Monoxide Alarm Program

Under the authority of the Fire Protection and Prevention Act, 1997, the Ontario Fire Code requires a working smoke alarm to be installed on each level of a dwelling unit as well as outside of all sleeping areas. Responsibility for installation and maintenance of the smoke alarm lies with the owner/landlord. To assist the fire department in fulfilling its responsibility for the provision of a smoke alarm program **Public Fire Safety Guideline 04-40B-03: Smoke Alarm Program** outlines the objectives of an effective one.

These objectives include all or a combination of the following:

- *Providing smoke alarm and home fire escape planning information;*
- *Promoting regular testing and maintenance of smoke alarms;*
- *Providing or replacing smoke alarms and/or batteries;*
- *Encouraging residents to regularly maintain their smoke alarms;*
- *Educating residents about the legal requirements for smoke alarms;*
- *Enforcement of all legislation relating to smoke alarms;*
- *Effectively tracking and evaluating your smoke alarm program; and*
- *Modifying the program where necessary to ensure success.*

Ontario Regulation 194/14- Carbon Monoxide Alarms made under the F.P.P.A. came into force on October 15, 2014 induced new requirement for the installation, testing and maintenance of Carbon Monoxide Alarms (C.O. Alarms). As a result, fire services within the province have also been tasked with monitoring compliance with this new regulation. Current industry best practices indicate that fire services are revising their previous Home Smoke Alarm Programs to include monitoring compliance with the new C.O. Alarm regulation.

Current smoke alarm programming efforts meet the minimum objectives included in **P.F.S.G. 04-40B-03**. Smoke alarm, C.O. alarm and home escape planning information is provided to the public in the form of printed materials distributed to homeowners and residents of the community on every service call. The L.F.S. promotes regular testing of smoke alarms through social media channels and at various public events throughout the year. Information related to the smoke alarm program has been provided by the department and includes a record of the number of dwelling visits for the years 2013 to 2016 and the quantity of smoke alarms installed and total canvassing hours completed by fire service staff, specifically during Fire Prevention Week. Smoke Alarm Canvas Activities for the four year period from 2013 to 2016

are summarized in **Table 15**. The door-to-door canvas program was replaced in 2017 by alternate Fire Prevention Week activities, such as open houses and presentations for target audiences.

Table 15: Smoke Alarm Canvas Activities

Year	Homes Visited	Batteries Installed	Smoke Alarms Installed	Total Smoke Alarm Canvas Hours
2013	900	44	150	240.5
2014	465	41	14	156.5
2015	474	14	70	183.5
2016	709	12	90	175

The 2017 Annual Report stated that the LaSalle Fire Service inspected 348 smoke alarms in 129 homes of which resulted in 30 being replaced or installed and 22 batteries replaced. This indicates that there were a number of smoke alarms that were not functional or missing. In a predominantly residential community, this supports the importance of the Smoke Alarm and Carbon Monoxide Program and the necessity of compliance as the focus of the Fire Prevention Division.

6.9.1 Applicable Community Risk Assessment - Key Risks & Key Findings

The C.R.A. identifies both “Key Risks” and “Key Findings” that should be considered as part of assessing the public education needs of the Town in determining the local needs and circumstances, as well as the level of service provided by the municipality. **Table 16** illustrates the identified “Key Risks” applicable to the analysis of the current public education program and services provided by the L.F.S.

Table 16: C.R.A. Key Risks

C.R.A. Key Risks Analysis Outcomes	FIRST LINE OF DEFENCE
	For consideration within the proposed Public Education Program
When excluding parcels classified as open space or vacant, 98% of the Town’s existing property stock is comprised of Group C – Residential Occupancies.	•
The Town has six registered vulnerable occupancies.	•
Seniors (those 65 years and over) are considered to represent one of the highest fire risk groups across the Province based on residential fire death rate (fire deaths per million of population). According to the 2016 Census, seniors represent 16% of the Town’s total population.	•
Of the Town’s total population, 31% fall into the age range of 45 to 64 representing a cohort aging towards the seniors demographic of 65 years or older.	•
For the period 2013 to 2017, structure fires occurring in Group C – Residential occupancies account for 76% of total structure fires within the Town.	•
For the period 2013 to 2017, structure fires occurring in Group F – Industrial occupancies account for 6% of total structure fires within the Town.	•

C.R.A. Key Risks Analysis Outcomes	FIRST LINE OF DEFENCE
	For consideration within the proposed Public Education Program
For the period 2013 to 2017, structure fires occurring in Group A – Assembly occupancies and Group E - Mercantile occupancies each account for 4% of total structure fires within the Town.	•
For the period 2013 to 2017, all reported fire related civilian injuries (2) and fatalities (1) occurred in Group C – residential occupancies.	•
Of the fires occurring in the Town from 2013 to 2017, the leading cause of unintentionally set fires was due to mechanical/electrical failure at 22% (11 fires), compared to 15% in the Province.	•
The most common source of ignition for fires within the Town is due to open flame tools/smokers articles at 16%.	•
The second most common source of ignition for fires within the Town is due to cooking equipment at 14%.	•
During the period from 2013-2017, there were no smoke alarms present or activated in the floor or suite of origin in 18% of fire incidents the L.F.S. responded to in Group C – Residential occupancies and in 26% of fire incidents smoke alarms were present but did not operate.	•

Table 17 illustrates the identified “Key Findings” to the analysis of the existing public education program and services provided by the L.F.S.

Table 17: C.R.A. Key Findings

CRA Key Findings Analysis Outcomes	FIRST LINE OF DEFENCE
	For consideration within the proposed Public Education Program
The geographic size of the Town with its makeup of an urban area and a rural area results in extended emergency response time to some areas of the Town.	•
Fighting Island, which has naturalized areas and structures, is a unique destination within the jurisdiction of L.F.S.	•
Many of LaSalle’s residential neighbourhoods are located adjacent to wildland areas.	•
13% of the Town’s property stock consists of other types of attached dwellings including semi-detached houses, row housing, apartments or flats in a duplex and apartments in a building with fewer than five storeys.	•
There are properties within the Town that have fuel-load related concerns, primarily linked to industries or marinas.	•
Additional potential high fire life-safety risk considerations in the Town include eight schools and four licenced day care centres.	•
Of the fires occurring in the Town from 2013 to 2017, the cause of 31% was undetermined compared to 19% in the Province.	•

CRA Key Findings Analysis Outcomes	FIRST LINE OF DEFENCE
	For consideration within the proposed Public Education Program
Analysis of fire loss data for the period of 2013-2017 indicates that the source of ignition for 37% of fires was undetermined	•
During the period from 2013-2017, there were smoke alarms present and operating in 36% of fire incidents the L.F.S. responded to in comparison to 45% of fire incidents in Group C residential occupancies within the province.	•
Overall, call volumes have increased by 21% from 2014 to 2018 with variability in volume over the five year period.	•
Based on O.F.M.E.M. Response Types, the L.F.S. responds to 24% less medical/resuscitator calls than the Province, which is offset by 7% more false fire calls, 9% more C.O. false calls, and 4% more property fires/explosions calls.	•

The importance of smoke alarms and carbon monoxide alarms are illustrated by the “**key risks**” identified and “**key findings**” of the C.R.A. that confirm Group C – Residential Occupancies account for 98% of the Town’s building stock, and that this occupancy type accounts for 76% of the structure fire loss within the community. Most of the residential building stock in LaSalle consists of single-family dwellings. Many of these homes are of high value and may have large open areas and staircases which may increase fire spread resulting in a high dollar loss. The high percentage of single family dwellings supports the value in having a smoke alarms saves lives door to door program.

The findings of the C.R.A. also indicate that all fire related injuries and one death over the period from 2013 to 2017 occurred in residential occupancies, and that in a large number of the residential occupancy incidents the L.F.S. responded to there was either no smoke alarm present (18%), or none were operational (26%). In our experience, there is substantial value to utilizing a variety of techniques to assist a property owner achieve compliance with the Ontario Fire Code. Engaging and educating the public about its responsibility to comply with the O.F.C. is often enough to bring about compliance, however, there are instances where enforcement may be necessary.

The L.F.S. does not currently have policies or operational guidelines that directly define the goals and objectives of the fire service’s home smoke alarm, C.O. alarm and home scape planning activities. It is recommended that the fire service develop an Operational Guideline for the department’s smoke alarm, C.O. alarm and home escape planning program.

6.10 Proposed Public Education Program

This F.P.S.M.P. recommends strategic priorities for Council consideration including:

- ii. Where applicable the Town of LaSalle will seek to optimize the Ontario Comprehensive Fire Safety Effectiveness Model’s first two lines of defence, including public education and fire**

prevention, and the utilization of fire safety standards and fire code enforcement, in developing clear goals and objectives for all fire protection services provided by the LaSalle Fire Service.

The findings of the C.R.A. identify several areas where the L.F.S. should be considering enhancements to the current public education program. The following sections present the recommended enhancements to the department's existing public education program. The staff resource requirements to support these initiatives is presented within **Section 9.0** of this F.P.S.M.P.

6.10.1 Proposed Enhanced Child/Youth Education Program

The L.F.S. currently prioritizes the delivery of its public education programming to children in grades one, two, seven and eight. The findings of the C.R.A. indicate that 18% of LaSalle's current population (2016 Census) is comprised of children/youth between the ages of 0 to 14. While only 1% higher than that of the province, the proportion of children aged 0-14 living in LaSalle is significant. This percentage supports the development of enhanced public education programming that also targets children/youth of other ages. This would reflect current industry best practices that target formalized public education programs for children/youth while they are still in the elementary level school system. Teaching children/youth fire safety education during their early development years has proven to be an effective strategy towards changing human behaviour as they age. Other emergency services across the province such as the police services have utilized this strategy to educate children/youth through programs such as the Drug Abuse Resistance Education (D.A.R.E.) program.

Operational Recommendation #14: That consideration be given to enhancing the existing child/youth fire safety education program to target all children in the 0-14 age category as presented within the proposed Fire Protection Services Master Plan.

6.10.2 Proposed Enhanced Seniors Fire Safety Program

The L.F.S. delivers fire safety education to seniors' homes on an annual basis. This analysis indicates that seniors (individuals 65 years of age or older) represent 16% of the Town's total population, very similar to the proportion of youth, as discussed in the previous section. Additionally, 31% (2016 Census) are between the ages of 45 and 64, indicating a large proportion of the Town's population are moving towards the senior's demographic of 65 or over.

This information supports the need to consider developing a dedicated adult/seniors fire safety education program. Enhancing existing community relationships and investigating additional partnerships may also be an effective strategy for consideration towards developing and implementing the proposed adult/seniors fire safety education program. Partnering with public facilities that see high volumes of people such as the Windsor Crossing Outlet Mall could enhance public education efforts in terms of distributing printed fire safety information.

Operational Recommendation #15: That consideration be given to enhancing the existing seniors' fire safety program as presented within the proposed Fire Protection Services Master Plan.

6.10.3 Proposed Enhanced Marina Public Education

Marinas present unique and complex fire safety risks due to their close proximity to one another (presenting exposure concerns) and hazards related to fuel and electrical malfunction. Currently the L.F.S. participates in a water safety day focused on pool and boat safety in partnership with the coast guard, police and culture and recreation department. The provision of additional marina fire safety education could be an effective way to enhance the adult fire safety education program and mitigate this risk.

Operational Recommendation #16: That consideration be given to enhancing the existing marina public education program as presented within the proposed Fire Protection Services Master Plan.

6.10.4 Enhanced Smoke Alarm/Carbon Monoxide Alarm Program

The findings of the C.R.A. identify that there remains a significant gap in the community's compliance with smoke alarm requirements. The analysis of the current program indicates that the number of homes visited has varied between 2013 and 2016 as shown in **Table 15**. Overall, the number of homes visited and smoke alarms installed have declined since 2013. While the historical effort of the L.F.S. in delivering this program is commendable, the analysis indicates that public behaviour is not changing as a result of ongoing public education efforts related to smoke alarms and carbon monoxide alarms. Considering a more enforcement-based approach to smoke alarm and carbon monoxide alarm compliance may be warranted. In our experience, further educating the public about the monetary penalties for non-compliance can have a positive impact. Based on the analysis within this F.P.S.M.P. we are recommending that the L.F.S. review the current smoke alarm and carbon monoxide alarm program and develop strategies to enhance the current program in response to the findings of the C.R.A.

Operational Recommendation #17: That consideration be given to enhancing the existing smoke alarm/carbon monoxide alarm program as presented within the proposed Fire Protection Services Master Plan.

6.10.5 Proposed Public Education Schedule

Building on the proactive programs and partnerships in place, there is an opportunity to further define objectives for public education. Implementing goals and objectives for conducting public fire safety education activities and programs is consistent with responding to the strategic priorities identified within this F.P.S.M.P. This would include developing regularly scheduled public education programs and activities (cycles) for providing fire safety education to the various occupancies classifications identified in the Community Risk Assessment. Developing a schedule provides the opportunity to prioritize the delivery of fire safety education programs based on the results of the C.R.A. specifically for vulnerable demographics identified.

Dillon's research into developing fire safety program delivery schedules looked at the relevant N.F.P.A. standards, P.F.S.G.s and industry best practices. **Table 18** reflects the proposed public fire safety education activities and program delivery schedule utilizing the Ontario Building Code (O.B.C.) occupancy classifications. These are presented to form a component of the proposed performance objectives for each of formalized public education programs identified above.

It is recommended that subject to consideration and approval, the proposed public education schedule be included within the department's fire prevention policy to identify fire inspection service level for the Town of LaSalle.

Table 18: Proposed Public Education Activities and Programs Schedule

Occupancy Classification (O.B.C.)	Buildings	Proposed Fire Safety Program Delivery Cycle Objectives
Group A – Assembly	Schools, Recreation Centres (Arenas), Curling/Golf Centres *	1 – 2 Years
Group B – Care or Detention	Licensed Properties, Nursery/Day Care Facilities, Churches, Special Occasion Permits	1 – 2 Years
	B2, B3, Retirement Homes, Group Homes	Annual
	Other Group B	1 – 2 Years
Group C – Residential	Apartments regulated by Part 9.3 of the O.F.C. (Boarding, Lodging, and Rooming Houses)	2 – 3 Years
	Apartments regulated by Part 9.5 of the O.F.C. (Buildings up to and including 6 Storeys in Building Height with Residential occupancies)	2 – 3 Years
	Apartments regulated by Part 9.6 of the O.F.C. (Buildings Higher than 6 Storeys in Building Height With Residential Occupancies)	2 – 3 Years
	Apartments regulated by Part 9.8 of the O.F.C. (Two Unit Residential Occupancies)	Upon Request/Complaint
	Hotels regulated by Part 9.9 of the O.F.C.	3 Years
	Condominiums / Apartments Known as Primarily Seniors Residences	Annual
Group D - Business	Business and Personal Services Occupancies	3 – 5 Years
Group E - Mercantile	Mercantile Occupancies	3 – 5 Years
Group F - Industrial	Factories and Complexes	3 – 5 Years

It is recommended that the proposed enhanced public education program include the following formalized programs that include performance objectives to define the goals and objectives of each program and report on the number of activities conducted annually within each program including:

- *Media releases and public safety announcements;*
- *Smoke alarm, C.O. alarm, and home escape planning;*
- *Public fire and life safety events and displays;*
- *Awareness and targeted education programs, such as students, seniors, and fire-safe living; and*
- *Fire Prevention Week, community event activities.*

Council Recommendation #4: That subject to Council’s consideration and approval of an Implementation Plan that the proposed public education schedule included within the proposed Fire Protection Services Master Plan be approved and included within the proposed Fire Prevention Policy.

6.11 Fire Prevention Summary and Recommendations

The analysis presented within this Fire Protection Services Master Plan confirms that the Town of LaSalle is currently achieving its legislative requirements identified within the F.P.P.A. for the delivery of public education and fire prevention programs. Sustaining and enhancing the fire prevention and public education programs provided by the L.F.S. should be considered a key element of the Town’s growth strategy. This is supported by the recommended strategic priorities presented within this F.P.S.M.P including:

“Where applicable, the Town of LaSalle will seek to optimize the Ontario Comprehensive Fire Safety Effectiveness Model’s first two lines of defence, including public education and fire prevention, and the utilization of fire safety standards and fire code enforcement, in developing clear goals and objectives for all fire protection services provided by the LaSalle Fire Service.”

This F.P.S.M.P. has been informed by the findings of a Community Risk Assessment that was commissioned by the Town in recognition of the new **Ontario Regulation 378/18: Community Risk Assessment** that comes into force on July 1, 2019. In our view commissioning the completion of the C.R.A. as a component of this Fire Protection Services Master Planning process further confirms the Town’s commitment to strategic community planning.

In response to the “key risks” and “key findings” identified by the Community Risk Assessment the analysis and recommendations for the Fire Prevention/Public Education Division identify the opportunity for the L.F.S. to further enhance its fire prevention and public education programs, including proposed delivery schedules.

Information related to the proposed staff resourcing needs of the Fire Prevention/Public Education Division is included within **Section 9.0 – Proposed Staff Resource Strategies** of this F.P.S.M.P. As a result

of the review of the Fire Prevention/Public Education Division, the following recommendations are presented for Council's consideration and approval:

Council Recommendations:

Council Recommendation #2: That the LaSalle Fire Services develop a strategy for the implementation of the proposed fire prevention/public education professional qualifications presented within the proposed Fire Protection Services Master Plan for all staff assigned to delivering the applicable fire prevention/publication programs and services.

Council Recommendation #3: That subject to Council's consideration and approval of an Implementation Plan that the proposed fire inspection schedule included within the proposed Fire Protection Services Master Plan be approved and included within the proposed Fire Prevention Policy.

Council Recommendation #4: That subject to Council's consideration and approval of an Implementation Plan that the proposed public education schedule included within the proposed Fire Protection Services Master Plan be approved and included within the proposed Fire Prevention Policy.

Operational Recommendations:

Operational Recommendation #7: That the LaSalle Fire Service update its current Fire Prevention Policy as described within the proposed Fire Protection Services Master Plan, and that subject to approval by Council it be included as an appendix to the Establishing and Regulating By-law.

Operational Recommendation #8: That consideration be given to developing additional fire prevention/public education Operational Guidelines as referenced within the proposed Fire Protection Services Master Plan.

Operational Recommendation #9: That consideration be given to expanding the current workload reporting of the Fire Prevention/Public Education Division as referenced within the proposed Fire Protection Services Master Plan.

Operational Recommendation #10: That L.F.S. develop a comprehensive Operating Guideline to provide staff direction on conducting Fire Safety Audits and for Fire Safety Audits to be referenced within the updated Fire Prevention Policy.

Operational Recommendation #11: That in consultation with the Office of the Fire Marshal and Emergency Management and the County of Essex Fire Chiefs Association, the LaSalle Fire Service consider options for hosting or attending an educational workshop related to Fire Safety Enforcement as presented within the proposed Fire Protection Services Master Plan.

Operational Recommendation #12: That the Town of LaSalle consider drafting a Memorandum of Understanding between the municipality's building and fire departments, which clearly defines the roles and responsibilities of personnel with respect to building and site plan review.

Operational Recommendation #13: That consideration be given to developing a comprehensive strategy for reviewing and managing false alarm calls that includes enhanced and targeted public education strategies, increased fire inspections and enforcement options.

Operational Recommendation #14: That consideration be given to enhancing the existing child/youth fire safety education program to target all children in the 0-14 age category as presented within the proposed Fire Protection Services Master Plan.

Operational Recommendation #15: That consideration be given to enhancing the existing seniors' fire safety program as presented within the proposed Fire Protection Services Master Plan.

Operational Recommendation #16: That consideration be given to enhancing the existing marina public education program as presented within the proposed Fire Protection Services Master Plan.

Operational Recommendation #17: That consideration be given to enhancing the existing smoke alarm/carbon monoxide alarm program as presented within the proposed Fire Protection Services Master Plan.

7.0 Training Division

L.F.S. provides training to all personnel including full-time and paid-on-call volunteer firefighters to ensure that the legislative requirements of the F.P.P.A. and the O.H.S.A. are being met. Within the Province of Ontario firefighter training is an area that has come under a high level of scrutiny over the past decade. The results of numerous inquests and investigations have concluded that firefighter training must be considered a priority for municipalities, in their role as employer, as fire service leaders, and as supervisors. The analysis within this section focuses on the delivery of training to the Operations (Fire Suppression) Division Staff.

The analysis within this section first presents a discussion around training standards and the options fire departments have in providing training. It then presents a discussion of training standards specifically within the context of L.F.S. This is followed by an examination of the processes, programs, and resources currently in place in regards to training. This includes: division organization and staffing, training standards, annual training program, recruit training, company officer training, technical rescue training, other non-core services, training facilities, and records management. Where gaps are identified in achieving compliance with industry best practices and legislative requirements, further strategies and recommendations are provided for consideration.

This Fire Protection Services Master Planning process has presented the importance of assessing community fire risk as a component of determining the appropriate level of fire protection services to be provided. The information and analysis within this section will present the importance of linking the applicable training requirements of the L.F.S. staff with the level of fire suppression services to be provided by the L.F.S.

7.1 Training Standards in Ontario

In partnership with the Ontario Association of Fire Chiefs, the Office of the Fire Marshal (at the time) and other fire service stakeholders, the Ontario Fire Service Standards (O.F.S.S.) were developed. Together, these competency-based standards were applied in developing a comprehensive provincial fire service training program that included a firefighter curriculum, Fire Prevention Officer Diploma program, Company Officer Diploma program and a Training Officer Diploma program.

In April 2013, the O.F.M.E.M. announced that the Ontario fire service would be adopting the National Fire Protection Association Professional Qualifications (N.F.P.A. Pro-Qual) Standards. In January of 2014, the O.F.M.E.M. distributed *Communique 2014 – 04* to the Ontario fire service reflecting the grandfathering and transition process to the use of the N.F.P.A. Professional Qualifications Standards. A **“Grandfathering Policy”** was integrated into the transition to the N.F.P.A. Pro-Qual Standards process

*“in order to exempt anyone from having to start over in any program and in order to give recognition for training and education already completed and for experience already gained”.*¹¹

In May 2018, the Ministry of Community Safety and Correctional Services (M.C.S.C.S.) adopted Ontario Regulation 379/18 – Firefighter Certification under the F.P.P.A. that required every fire department to complete mandatory certification of fire service personnel involved in fire suppression including technical rescue services , communications (fire dispatch) fire prevention, public education and training. On October 5, 2018 this regulation was revoked.

Ontario Regulation 379/18 – Firefighter Certification reflected the recommendations of an inquest into two fatal fires in Whitby and East Gwillimbury. On April 29th, 2016 the verdict of that inquest recommended to the Ministry of Community Safety and Correctional Services *“To make a Regulation, pursuant to clause 78(1)9k) of the F.P.P.A., requiring mandatory certification and training, to recognized industry standards, for all personnel (as defined in the F.P.P.A.) whose primary job function is to perform: 1(fire inspections, 2) public education, and/or 3) communications (call-taking/dispatch)”*.¹²

Our research indicates that the required training and qualifications identified within **Ontario Regulation 379/18 – Firefighter Certification** are consistent with those included within the N.F.P.A. Pro-Qual Standards. As such, fire services across the Province are continuing to transition to the use of the N.F.P.A. Pro-Qual Standards recognising that this is not mandatory, and does not require certification as required by the **Ontario Regulation 379/18 – Firefighter Certification**. Use of the N.F.P.A. Pro-Qual Standards referenced in **Table 19** remain the current industry best practices in Ontario.

Table 19: Concordance of Ontario and N.F.P.A. Standards

Previous Ontario Standard	New N.F.P.A. Standard
Ontario Firefighter Curriculum	N.F.P.A. 1001 Standard – Level I and Level II
Company Officer Diploma Program	N.F.P.A. 1021 Standard – Level II
Fire Prevention Officer Diploma Program	N.F.P.A. 1031 Standard – Fire Inspector Level I
Training Officer Diploma Program	N.F.P.A. 1041 Standard – Fire Instructor Level II

To provide the training to attain the qualifications identified within these standards, there are several options available to departments including: Ontario Fire College (O.F.C.) and Regional Training Centres

¹¹ O.F.M.E.M. 2013 Grandfathering Policy
http://www.mcscs.jus.gov.on.ca/english/FireMarshal/FireServiceResources/Communiques/OFM_Com_2014-04at.html

¹² Verdict of Coroner’s Jury, Office of the Chief Coroner, last modified March 13, 2017:
<https://www.mcscs.jus.gov.on.ca/english/Deathinvestigations/Inquests/Verdictsandrecommendations/OCCInquestHarrisonTo wieTwiddyandDunsmuir.html>

(R.T.C.s); outside or third party training; in-house training; and out of province training opportunities as outlined below.

7.1.1 Ontario Fire College and Regional Training Centres

One option is to enroll staff in training courses at the O.F.C. The O.F.C. is operated by the Office of the Fire Marshal and Emergency Management under the authority of the Ministry of Community Safety and Correctional Services. Courses are scheduled on an annual basis and offered at the O.F.C. in Gravenhurst and various R.T.C.s across the province. Course fees are affordable, but given high levels of interest by the 449 fire departments in Ontario, it can be challenging to enroll more than a few candidates in each program. This poses challenges for departments requiring training for a large number of candidates. This issue is further compounded as wait lists at the O.F.C. have increased for a variety of reasons in recent years. Courses generally run Monday to Friday, making overtime, travel costs and backfilling position requirements a notable budgetary consideration.

7.1.2 External or Third Party Training Organizations

A further option for training is to hire an external organization or individual qualified to teach a particular N.F.P.A. standard to deliver this training to department personnel. Because this training can be offered locally, there is greater scheduling flexibility, reducing overtime and eliminating travel costs.

Research indicates that municipalities should consider their due diligence in utilizing external organizations or individuals to provide training. There have been several inquests within the province over the past decade involving external or third party training providers. Recommendations from these inquests have identified the need for provincially regulated training qualifications and certification of external and third party organizations.

7.1.3 In-House Training

A third option is for the department to train and qualify its own instructing staff to an N.F.P.A. standard and then have this staff resource deliver the training in-house. Curriculum development and the work associated with staying current with the standards is time consuming and staff intensive, requiring a level of expertise that may not be available within a fire department. However, the in-house option does provide opportunity for training to incorporate department specific considerations (e.g. O.G.s, community risks, etc.) as well as greater flexibility with respect to scheduling, reducing the need for overtime, backfilling and eliminating travel time.

Currently, the O.F.C. is exploring an option of approving learning contracts whereby fire services may train using O.F.C. course materials, which provides the benefit of certification ready courses without the cost of course development by the fire service and approval by the O.F.M.E.M. However, the audit process for courses delivered under learning contracts is still immature.

7.1.4 Out of Province Training

Out of province learning opportunities provide an additional training option. While travel costs may make this option cost prohibitive, there are some courses that are not yet offered in Ontario (e.g., N.F.P.A. 1031 Level III, Plans Examiner I and II, and N.F.P.A. 1041 Level III) that may be beneficial for staff.

7.1.5 Certification

The N.F.P.A. standards are intended to identify the required training for an individual to attain a recognized qualification related to a specific positions roles and responsibilities within the fire service. It is important for departments to note the distinction between “qualifications” and “certifications”. The N.F.P.A. training standards and related qualification **do not consider or require** certification.

Certification is completed by third party organizations such as the International Fire Service Accreditation Congress (I.F.S.A.C.) or the Fire Service Professional Qualifications System (Pro-Board) which provide independent evaluation to measure individual performance as set by the standards. In Ontario, the legislation that requires an employer to train its staff is the *Occupational Health and Safety Act*.

Once qualification is obtained using one of options outlined in the sections above, the fire department may want to consider certification of their training curriculum. In circumstances where certification is desired, the curriculum must be approved by the O.F.M.E.M.’s Academic Standards and Evaluation (A.S.& E.) section. Curriculum that has been approved by the A.S.&E can then be used repeatedly to train firefighters in the same or other jurisdictions within the province. In Ontario, a fire department can contact the O.F.M.E.M. to schedule a certification evaluation to a particular N.F.P.A. standard. The certification process is then governed by I.F.S.A.C. and Pro-Board with the O.F.M.E.M. as the certifying organization in Ontario.

In many cases, successful qualification to an N.F.P.A. standard for the knowledge portion requires a 60% score and the ability to satisfactorily demonstrate skills described in the standard. For certification, the knowledge score requirement is typically 70%, making it a more stringent evaluation of training and skills development. Determining the type of training or standards to be used and whether to qualify or certify staff are all considerations for the fire department.

In summary, fire services in Ontario have multiple ways to train and qualify staff, with certification regulated by the Province. It is important to note that while at this point in time neither qualification nor certification are required by legislation, recent inquests involving issues with fire prevention and firefighter training have highlighted the importance of qualification and certification as industry best practices. **Ontario Regulation 379/18 – Firefighter Certification** required training and certification for certain positions within a fire department. Although this regulation was recently passed then repealed, there is value to ensuring fire department staff are trained to a level of competency for the tasks they perform.

7.2 Division Key Functions

The L.F.S. Establishing and Regulating By-law 6073 (as amended) identifies the provision of training as a core service provided by the department. As identified in the by-law, the Training Division serves to:

- *Provide training for all L.F.S. personnel, including full-time and part-time firefighters, in accordance with recognized standards consistent with the O.F.M.E.M.;*
- *Ensure the ongoing and maintenance training of all personnel including fire suppression, fire prevention and public education, and non-core special operations services; and*
- *Provide health and safety training, officer development, and supervisory and management skills development.*

7.3 Existing Training Division Staff Resources

The existing staff resources within the Training Division responsible for meeting the key functions include the Deputy Fire Chief, the full-time Captain – Training Officer, and full-time firefighters. The Deputy Fire Chief oversees the delivery of training including providing leadership, direction, assistance, and support to the division.

The 2008 Fire Master Plan identified that training was delivered by a dual-role position being a full-time firefighter and part-time Training Officer. To meet the needs of the department at the time, the 2008 Fire Master Plan identified a need for a full-time Training Officer to support training needs for additional full-time firefighters and paid-on-call volunteer firefighters. The 2008 Fire Master Plan also identified a need for administrative support for the department. The Fire Master Plan 2015 Interim Review recognized that the addition of the Administrative Assistant role has contributed to the efficiency and capacity of the division.

The Training Officer position, responsible for coordinating and directing the activities of the division, was transitioned to full-time by the Town in 2012 as recommended by the 2008 Fire Master Plan; however, it remains a dual-role position of full-time Captain (Operations Division) and Training Officer (T.O.). Reporting directly to and working in consultation the Deputy Fire Chief, a summary of the T.O. roles and responsibilities as identified in a 2018 job description include:

- *Develop and implement in-service fire training programs;*
- *Meet regularly with the leadership team to report on progress of activities, provide input, and to receive direction in areas such as future curriculum, scheduling, and budgeting of hours for training sessions, etc.;*
- *Prepare, deliver, or supervise delivery of classroom, practical, or mixed media training sessions;*
- *Prepare lesson plans, checklists, and records of training conducted, and maintain thorough documentation of all training conducted in accordance with departmental policy and applicable standards and legislation;*

- *Evaluate the performance of personnel and effectiveness of training programs; and*
- *Respond to varied public service calls including fire emergency calls, medical emergencies and motor vehicle accidents as directed.*

The position is therefore responsible for responding to emergency service calls and for delivering training to meet the needs of the department. Presently, the role is filled by a Training Instructor until such time that the individual completes Company Officer Level II, NFPA 1041 Instructor Level II, achieves 1st class firefighter status, and has a successful performance evaluation. As a dual-position, there is a large amount of training needed to achieve the qualifications required for the role of Training Officer in addition to the competing demands of the day-to-day operations of the department. In our view, this is having an impact on the ability of the department to meet the workload demands related to: training needs for core services including recruit training; non-core services including technical rescues; staff retirements and paid-on-call firefighter turnover; the transition to NFPA Pro-Qual Standards; and maintaining the standards to safely and effectively provide services.

In addition to the Deputy Fire Chief and Full-time Captain - Training Officer, full-time firefighters help deliver training (particularly recruit training) through a “train-the-trainer” approach. In addition, paid-on-call volunteer captains or company officers will occasionally assist with training. However, this resource is not consistently available and in the majority of instances does not have the qualifications and experience needed to deliver the training.

As referenced within this F.P.S.M.P., the Ontario fire service is undergoing a significant change through the transition to the N.F.P.A. Pro-Qual Standards. This change is impacting historical training programs including additional training requirements for all department staff, and specifically those staff resources involved in firefighting including both full-time and paid-on-call volunteers. Other factors such as ongoing discussions regarding mandatory certification within the fire service, and inquest recommendations have heightened the awareness of due diligence in this area on behalf of fire departments and municipalities.

7.3.1 Regional Training Committee

While there is currently no internal L.F.S. Training Committee, the Training Instructor is a part of an informal, ad hoc Regional Training Committee. This committee is comprised of most municipal departments in Essex County and meets approximately every two months. The committee: shares experiences and information; discusses trends, challenges, and possible initiatives; and functions to coordinate cross-training exercises. While not a dedicated resource for the L.F.S. this collaboration provides knowledge sharing and the opportunity to establish cost-saving approaches to some training needs.

7.4 Training Standards and Qualifications – Training Division Staff

The L.F.S. recognizes the importance of training and utilizes the N.F.P.A. Pro-Qual Standards as the foundation for informing the training program for all Training Division staff. The L.F.S. also utilized the O.F.M.E.M. “Grandfathering Policy” to seek qualification for a number of department staff. A review of L.F.S. grandfathering document identified that some fire department personnel qualified to N.F.P.A. 1041 Fire Service Instructor, N.F.P.A. 1021 Fire Officer, N.F.P.A. 1031 Fire Inspector, N.F.P.A. 1035 Fire Life Safety Educator and N.F.P.A. 1001 Firefighter standards through this process. However, it should be noted that since this time, some grandfathered staff have retired.

Table 20 identifies the differences between the applicable N.F.P.A. 1041 Instructor Levels I, II and III, including the skills and competencies necessary to successfully achieve the requirements of each level. Each N.F.P.A. level is a progression of performance and capability.

Table 20: N.F.P.A. 1041 Standard

Training Level	N.F.P.A. 1041 Standard
Instructor I	A fire service instructor who has demonstrated the knowledge and ability to: <ul style="list-style-type: none"> • deliver instruction effectively from a prepared lesson plan, including instructional aids and evaluations instruments; • adapt lesson plans to the unique requirements of the students and authority having jurisdiction; • organize the learning environment so that learning and safety are maximized; and • meet the record-keeping requirements of the authority having jurisdiction.
Instructor II	A fire service instructor who, in addition to meeting Instructor Level I qualifications, has demonstrated the knowledge and ability to: <ul style="list-style-type: none"> • develop individual lesson plans for a specific topic including learning objectives, instructional aids, and evaluations instruments; • schedule training sessions based on overall training plan of authority having jurisdiction; and • supervise and coordinate the activities of other instructors.
Instructor III	A fire service instructor who, in addition to meeting Instructor Level II qualifications, has demonstrated the knowledge and ability to: <ul style="list-style-type: none"> • develop comprehensive training curricula and programs for use by single or multiple organizations, conduct organization needs analyses; • design record keeping and scheduling systems; and • develop training goals and implementation strategies.

Industry best practices indicate that an instructor should have successfully completed the N.F.P.A. training and level for a given standard in addition to the equivalent instructor qualification. For example, for a trainer to be qualified to deliver N.F.P.A. 1001 Level I training, he/she will have successfully completed N.F.P.A. 1001 Level I and N.F.P.A. 1041 Level I training. For a trainer to be

qualified to deliver N.F.P.A. 1001 Level II training, he/she will have successfully completed N.F.P.A. 1001 Level II and N.F.P.A. 1041 Level II training.

Table 21 summarizes the current training and qualifications of the staff resources assigned to delivering and overseeing training programs to L.F.S. personnel. At the time of writing this report, the Fire Chief, Deputy Fire Chief, and one full-time firefighter was trained to NFPA 1041 Level II. It was identified as part of the review that the Full-time Captain – Training Officer is working to achieve NFPA 1041 Level I with a longer-term plan to attain Level II qualifications. In addition, there are plans for four paid-on-call firefighters to be trained to NFPA 1041 Level I as part of the “train-the-trainer” model of training delivery. This in line with the requirements for paid-on-call company officers to attain NFPA 2014 Level I as identified in L.F.S. OG#01-008 (see *Company Officer Training* for further discussion.)

Table 21: Current L.F.S. Training Division Qualifications

Position	N.F.P.A. 1041 Level I	NFPA 1041 Level II
Fire Chief	✓	✓
Deputy Fire Chief	✓	✓
Full-time Captain – Training Officer	<i>In Progress</i>	
Full-time Firefighters	✓ (6)	✓ (1)
Paid-on-Call Company Officers	<i>In progress (4)</i>	

Participating in the O.F.M.E.M. “**Grandfathering Policy**” provided existing staff, and specifically Training Division staff with the opportunity to confirm their training qualifications. Continued transition to the utilization of the N.F.P.A. Pro-Qual standards will require further training and qualifications to be attained throughout the department. The N.F.P.A. Pro Qual standards and industry best practices indicate that **all staff resources** assigned to delivering firefighter training should have the skills and competencies included within the N.F.P.A. 1041 – Instructor Level I. The policies of L.F.S. for the delivery of training are in alignment with this best practice. All Company Officers, including paid-on-call volunteers, are required to have N.F.P.A. 1041 Instructor Level 1. As referenced in the prior section, firefighters are trained to this standard because they may occasionally assist with training.

The Deputy Fire Chief who works closely with the Training Instructor to deliver training to the department is trained to N.F.P.A. 1041 Instructor Level II with plans for the Training Instructor to be trained to this level as well. This planned approach is in alignment with the succession planning process referenced in this F.P.S.M.P. for all Training Division staff qualified to the N.F.P.A. 1041 Instructor Level II.

The department should continue to implement the above discussed training standards including having all staff who deliver training to be qualified to at least N.F.P.A. 1041 Instructor Level I, and have all dedicated Training Division staff qualified to the N.F.P.A. 1041 Instructor Level II standards.

7.5 Annual Training Program

Developing and delivering an annual training program for core services provided by L.F.S., including for paid-on-call volunteer and full-time firefighters, is a key role of the Training Division. The annual training program must provide the required training to achieve and sustain the required skills and competencies to provide the Council approved service operations levels, and address an employer’s responsibilities as defined by the *Occupational Health and Safety Act*, specifically the Section 21 Guidance Notes for Firefighters.

In addition to responding to relevant standards, curriculum and health and safety requirements, a comprehensive annual training program should include the following core functions:

- Identification of training needs in relation to services provided;
- Coordination/scheduling of theoretical and practical training;
- Monitoring and evaluation in relation to outcomes achieved;
- Ongoing evaluation in relation to industry best practices and legislative requirements;
- Oversight of program objectives and records management; and
- Ongoing assessment of program delivery for efficiency and effectiveness.

7.6 Current Training Needs

As described in the Administration Division review the levels of service provided by L.F.S. are clearly defined by Council through an Establishing & Regulating By-law (E&R By-law). This includes established services levels for core services (including interior search and rescue and fire attack) and several non-core services. The levels of service established by Council through this by-law directly influences specialized training programs and related division staff resource needs. As part of the consideration of training needs for core services, L.F.S. OG#10-002 *Classification of Fire Personnel* identifies four tiers of paid-on-call volunteer firefighter classifications which require different training needs. These tiers are outlined in **Table 22**. (Classifications for full-time firefighters is governed by the Collective Agreement.) More information on the requirements and resulting demands on training will be presented throughout this chapter.

Table 22: L.F.S. Paid-on-Call Volunteer Firefighter Classifications (O.G.#10-002)

L.F.S. Classification	Description
Recruit Level	Remain at the recruit level until N.F.P.A. 1001 Firefighter Level I qualifications met.
Intermediate Level	Have achieved N.F.P.A. 1001 Firefighter Level I until achievement of Level II and/or 3 years of experience.
General Level	Have achieved N.F.P.A. 1001 Firefighter Level II, hazmat core operations, pump operations, and N.F.P.A. 1006 General Rescue, and a minimum of 3 years’ experience.

L.F.S. Classification	Description
Captain/Company Officer	Have achieved N.F.P.A. 1021 Company Officer Level I and other L.F.S. requirements.

These training needs result in annual training related to core services and general ongoing training requirements. General maintenance training is provided twice monthly for firefighters who have achieved N.F.P.A. 1001 Level I and Level II as outlined in O.G.#10-001 *Training Sessions*. General training may cover topics such as:

- Auto Extrication;
- Driver Training;
- EVO Course;
- CPR Re-Certification;
- Electrical Safety Handbook;
- Live Fire training;
- Forcible Entry;
- SCBA Endurance;
- Firefighter survival course;
- Fitness nights;
- SCBA fit testing;
- Online LaSalle training;
- Ventilation training;
- Condo fire preparedness; and
- Technical rescues (e.g., water rescue, hazardous material, ice water theory, rope rescue, confined space etc.).

7.7 Existing Annual Training Program

Current industry best practices to ensure a department is achieving these requirements are through the formulation and monitoring of an annual training plan. L.F.S. currently utilizes an informal annual training plan to outline the scheduling of the various training programs and activities planned for the year. This informal plan is outlined in **Table 23**. To implement this training, a schedule is developed on a quarterly basis and posted by the Training Instructor on the fire hall floor as well as communicated to staff via email. L.F.S. O.G.#10-004 *Training / Development and Scheduling* identifies that training for core services are to be provided on an annual basis while training for non-core services are provided on an 18 month rotation. This O.G. also references the role of a Training Committee to schedule and deliver training. However, it was identified as part of the review completed for the F.P.S.M.P. that there is currently no internal, formal Training Committee. Training topics are often informally addressed during the senior management team meetings which occur twice monthly.

Table 23: L.F.S. Informal Annual Training Program

Typical Delivery	Annual Topic
January / February	<ul style="list-style-type: none"> • Ice Rescue • CPR / Medical Recertification
April / May / June	<ul style="list-style-type: none"> • SCBA Fit Testing • Driver Training
July / August	<ul style="list-style-type: none"> • Marine Crew
October / November	<ul style="list-style-type: none"> • Auto Extrication
December	<ul style="list-style-type: none"> • Hazardous Materials • Town of LaSalle Health & Safety Modules • Live Fire training
<i>Flexible</i>	<ul style="list-style-type: none"> • Fitness • Officer Development (<i>monthly</i>)

Subject to Council’s consideration and approval of this F.P.S.M.P. the recommendations of this plan include several core changes to the department’s current training program. While considering these recommendations consideration should be given to developing one comprehensive training program for the department that includes specific performance goals and objectives for each program. A comprehensive training program would include an annual plan for the core services and incorporate specialized training needs including those for non-core services.

Operational Recommendation #18: That the department consolidate the current firefighter training initiatives into one Comprehensive Training Program including performance goals and objectives to be defined within a department Operational Guideline.

The sections that follow explore and describe the provision of training for core services in the form of recruit training, and company officer training, as well as non-core services.

7.8 Paid-on-Call Volunteer Recruit Training

It was identified as part of the research completed for this F.P.S.M.P. that the paid-on-call volunteer firefighter recruitment and retention process has become one of the leading challenges for the department since completion of the 2008 Fire Master Plan. This challenge is predominantly being driven by the turnover rate of paid-on-call volunteer firefighters. In our experience with retention and recruitment challenges related to paid-on-call volunteer firefighters, recruit training becomes a key issue that directly impacts the Training Division and specifically the level of fire suppression services a fire department can provide. A recruit level firefighter is defined as a “*newly hired firefighter from time of hire until successful completion of the N.F.P.A. 1001, Firefighter Level 1 curriculum*” per O.G.#1-006. This section explores challenges related to the paid-on-call volunteer firefighter recruitment and retention and the existing conditions related to recruit training for the division.

7.8.1 Volunteer Firefighter Recruitment & Retention (Ontario)

In Ontario, there are 18,772 volunteer firefighters (as of January 2019) comprising nearly two-thirds (61%) of the total provincial complement.¹³ Across Canada as a whole, this proportion of volunteer firefighters increases to 83% (for the period 2014-2016).¹⁴ The service provided by volunteer firefighters is integral to fire safety; however, municipalities are increasingly facing challenges in volunteer firefighter recruitment and retention.

Historically, volunteer firefighters represented a portion of the community that lived and worked in close proximity to the fire station where individuals were allowed to leave work and respond to emergency calls. Providing a service to the community and being active within the community was – and continues to be – a major point of pride for volunteer firefighters. Financial compensation, although warranted, was not the only motivator for those seeking to become a volunteer firefighter.

There are numerous factors impacting volunteer firefighters across the province that can make recruitment and retention a challenge today. Some reasons could subjectively include shifting demographics, economic realities, household structures, and expectations of work-life balance. It is a certainty, however, that performance expectations including sustaining training standards and attendance at training sessions continue to increase the demands municipalities place on volunteer firefighters in the interest of health and safety. Commonly, volunteer firefighters must also sustain minimum response attendance to emergency calls. Thus, the result is an increasing demand on personal commitment to sustain a high degree of training competency and experience gained through responding to calls. Maintaining an appropriate balance between the demands of being a volunteer firefighter and those of family and other commitments is becoming more difficult. Municipalities must begin to develop recruitment and retention strategies for volunteer firefighters that recognize this evolution. The nature of recruitment and retention in the context of the L.F.S. and Town are described in the following section.

7.8.2 Paid-on-Call Volunteer Recruit Process and Training

Recruitment for paid-on-call volunteer firefighters includes a recruitment process followed by training for successful applicants. The sections that follow describe the existing approach to recruitment for L.F.S. followed by the training process.

¹³ OFMEM. (2019, January 3). Number of Fire Departments and Firefighters. Retrieved from Fire Statistics: http://www.mcscs.jus.gov.on.ca/english/FireMarshal/MediaRelationsandResources/FireStatistics/NumberFireDepartmentsFirefighters/stats_fd.html

¹⁴ NFPA. (2018, January). News and Research. Retrieved from Canadian Fire Department Profile: <https://www.nfpa.org/News-and-Research/Data-research-and-tools/Emergency-Responders/Canada-Fire-Department-Profile>

7.8.2.1 Approach to Recruitment and Retention

The L.F.S. paid-on-call volunteer firefighter recruit intake process has been relatively consistent for the past decade. While the process is not outlined in a formal policy, it generally includes a job posting period, a written aptitude test, a physical agility test (the Candidate Physical Ability Test), and an interview. The entire process typically taking a few months to complete. Notice of the recruitment process is shared through newspaper ads, social media (Town and department’s Twitter/Facebook), and word of mouth. Some minor changes to the process has occurred over time including a 2018 return to the policy of requiring residency in LaSalle at the application stage. (Response times are directly impacted by where paid-on-call volunteer firefighters live.)

The approach to paid-on-call volunteer firefighter retention has also remained consistent over the past decade. This has included training opportunities similar to full-time fighters and a positive, team-based culture in a composite department.

7.8.2.2 Recruit Training Process

OG#1-008 outlines the restricted duties as a paid-on-call volunteer recruit level firefighter. Until such time that recruits complete N.F.P.A. 1001 Firefighter Level 1 training, they **will not**:

- *“Perform initial interior structural firefighting duties at emergency incidents.*
- *Form part of the initial response crew for any incidents involving a hazardous environment requiring use of self-contained breathing apparatus.*
- *Be assigned to a Rapid Intervention Team.*
- *Be placed in an acting officer or command role at any emergency or non-emergency event.*
- *Operate any fire service vehicle in a “priority 1” or emergency response mode.”*

These guidelines are in place for health and safety purposes. N.F.P.A. 1001 Firefighter Level I is provided to recruits during two sessions offered monthly. Recruit training includes online self-directed study, in-class theory, and practical hands-on training session. After the successful completion of these session, testing through the O.F.M.E.M. is arranged for finalization. It was identified as part of this F.P.S.M.P. that it typically takes approximately one to one-and-a-half years to achieve Level I training and exit the recruit classification. (A similar amount of time is required to achieve Level II reflecting a total of two to three years to meet Level II qualifications.)

7.8.3 Historical Recruitment and Retention

As described in L.F.S. Annual Reports, there has been *“unprecedented turnover of seasoned and experienced staff”* (2017 Annual Report). This has included experienced paid-on-call volunteer firefighters. Since the 2008 Fire Master Plan, LaSalle Fire Service has experienced increasing challenges related to recruitment and retention. **Table 12** illustrates historical L.F.S. paid-on-call volunteer firefighter recruitment and retention figures from 2012 to 2019 (up to May 16, 2019). The department has strived to maintain a complement of 28 to 30 paid-on-call volunteer firefighters for the past eight

years. Over this same period, turnover has ranged from 10% to 27% annually with an average annual turnover rate of 14%. This turnover has resulted in a need to recruit for one to seven positions each year resulting in a total of **40 recruits** entering into the recruit training program over this eight year period. The historical data also illustrates that the department has successfully been able to recruit for the vacancies in the department.

Table 24: Historical L.F.S. Paid-on-Call Volunteer Firefighter Recruitment and Retention (2012-2019)

	2012	2013	2014	2015	2016	2017	2018	2019**	Average Annual Turn Over
Total Paid-on-Call Volunteer Firefighter Complement	28	28	28	28	28	30	30	30	
# of Departures	4	3	3	3	5	3	8	3	
# of Vacancies Recruited for	7	1	1	4	5	2	4	7	
# of Applications	64	0	50	0	76	0	32	62	
# Recruited	9	1	4	4	7	2	4	9	
Annual Turnover	14%	11%	11%	11%	18%	10%	27%	10%	14%

Source: LaSalle Fire Service
 * Where zero applicants are noted, hiring was completed through a candidate pool list from the previous year hiring process.
 **Totals for 2019 as of May 16, 2019.

In our experience, common turnover rates for volunteer firefighters range from 10% to 20% each year. Overall, on a year by year basis, the turnover rates being experienced by L.F.S. are on the lower end of those experienced in the industry. This turnover and resulting need to provide recruitment training each year reflects a shift within the fire service. Historically, departments were able to provide recruitment training less frequently due to higher retention rates. The need to plan for and provide for recruit training on an annual basis has two key impacts. First, it impacts the training demands and resources required of the department. This includes the operating and capital costs (including equipment, firefighter gear, uniforms, pagers, etc.) of an ongoing need for undertaking a recruitment process and in providing recruit training. Recruit training requires the resources of Training Division staff as well as e-learning costs, and contributions by two to four Company Officers who are typically required to deliver practical training sessions as part of the train-the-trainer model.

Second, ongoing recruit training also impacts the ability of the department to deliver the level of service for fire suppression as established by Council through the Establishing and Regulating By-law. Specifically, as described in the *Recruit Training Process and Training* section above, in alignment with training standards, recruit level firefighters do not provide interior attack for safety purposes until trained to N.F.P.A. 1001 Firefighter Level I. Based on the research to prepare this F.P.S.M.P. the L.F.S. has been experiencing an average paid-on-call volunteer turnover rate of 14% over the past eight years representing a declining level of experience within the total number of paid-on-call volunteer firefighters available to provide fire suppression services.

7.8.4 Proposed Paid-on-Call Volunteer Recruitment and Retention Strategy

To sustain the current Fire Suppression model and provide the best value to the community, the department needs to develop a comprehensive Paid-on-Call Volunteer Firefighter Recruitment and Retention Strategy. The developed strategy needs to recognize the evolution of the role in conjunction with the demographic, economic, and cultural realities of the community. This section presents a range of resources that should be given consideration in development of a recruitment and retention strategy.

7.8.4.1 Alberta - Volunteer Firefighter Recruitment and Retention Strategy (2010)

Recruitment and retention of volunteers is not just a municipal or provincial challenge in Ontario. In May 2010, Volunteer Alberta released the *Volunteer Firefighter Recruitment and Retention Strategy* (Strategy) which was developed for the Alberta Fire Chiefs' Association.¹⁵ The resulting document was informed by a scan of best practices, literature review, and experience across departments in Alberta and beyond.

A separate study conducted by Volunteer Alberta identified six known issues and barrier that are having an impact on the ability of municipalities to recruit and retain volunteer firefighters. As described in the Strategy, these issues and barriers include (pg. 1 and 2):

- **“Employer-related** – *A lack of support of volunteer firefighting by employers especially for on-the-job time;*
- **Family-related** – *Volunteer firefighting requires a time commitment which separates volunteer firefighters from their loved ones at unpredictable times and can impact family income by being called away from work;*
- **Availability of people** – *Many people work outside the community during the day (especially an issue in Alberta);*
- **Time commitment** – *There are increased demands on volunteers time, and odes of practice and discipline action for missing training while necessary, can be discouraging for volunteers;*
- **Perceptions and public image** – *People may begin volunteer firefighting without properly understanding the role, or the overall experience; volunteer firefighters may quit after traumatic experiences. The local reputation of the fire department also may not encourage volunteerism; and*
- **Structural challenges** – *Unrealistic demands from municipalities, but low funding; a lot of time taken up by administrative tasks; high turnover of volunteers.”*

The Strategy goes on to provide local and centralized initiatives that include the identified target audiences including: business owners and employers; community groups; residents (women, immigrant

¹⁵ The Volunteer Alberta “*Volunteer Firefighter Recruitment and Retention Strategy*” released May 2010 is currently available on the Alberta Fire Chiefs Association website at: <https://afca.ca/latest-news/item/238-volunteer-firefighter-recruitment-and-retention-toolkit>.

populations, First Nations populations); fire department members; and political stakeholders. There are fifteen local recommended initiatives that provide detailed guidelines on implementation. The recommendations are also complemented by a comprehensive toolkit to assist with implementation. The recommended local initiatives that can be explored by any municipal fire department include:

1. *Involve current volunteer firefighters in planning formal recruitment drives;*
2. *Raise local awareness through traditional and new media activities;*
3. *Engage in local public relations;*
4. *Use of promotional items;*
5. *Attendance at trade shows;*
6. *Engage in regular and ongoing outreach with local employers;*
7. *Engage community groups on a regular and ongoing basis;*
8. *Reach out to recruitment audiences with targeted messages;*
9. *Regularly engage with political stakeholders;*
10. *Bolster firefighter psychological support services;*
11. *Develop a spousal support network;*
12. *Establish child care services;*
13. *Establish diversity policies in the fire department;*
14. *Create firefighter service recognition awards; and*
15. *Establish a proper volunteer screening process.*

Generally, the recommended centralized initiatives focus on actions that can be taken on a provincial level to encourage volunteer firefighter recruitment and retention. Some of these recommended initiatives include:

- *Create a central website to provide recruitment information to the public and to support local fire departments with tools and information;*
- *Centrally coordinate public relations; and*
- *Explore Canada-wide terminology standardization.*

While the issues and recommendations provided in the Strategy were created within the context of Alberta, many of the issues and recommendations are applicable nation-wide.

7.8.4.2 Nova Scotia - Volunteer Recruitment and Retention (2009)

In 2009, the Office of the Fire Marshal for the Province of Nova Scotia published a report on Volunteer Firefighter Recruitment and Retention that was developed in cooperation with the Fire Service

Association of Nova Scotia.¹⁶ Though targeted to Nova Scotia, this report has some tools that could be adapted to an Ontario department. For example, retention resources include guidance on performance management, progressive discipline, succession planning, rewards and recognition, critical incident stress management, and exit interviews.

7.8.4.3 C.A.F.C. National Recruitment Initiative

In recognition of the volunteer firefighter recruitment and retention challenge and the importance of volunteer firefighters across the country, the Canadian Association of Fire Chiefs (C.A.F.C.) signed an agreement with the Alberta Fire Chiefs Association to expand their volunteer firefighter recruitment strategy across Canada. As part of this initiative, the C.A.F.C. launched the *Answering the Call* website (answerthecall.ca). This website was launched near the end of 2016 and features a map that shows volunteer fire departments that is searchable based on postal code. The site features a “department portal” where a profile can be created for a fire department where the department information and listings.

7.8.4.4 O.F.M.E.M. PFSG 04-84-13 - Volunteer Fire Service Personnel Recruitment and Retention

In October 2006, the O.F.M.E.M. released **P.F.S.G. 04-84-13 – “Volunteer Fire Service Personnel Recruitment and Retention”**. **P.F.S.G. 04-84-13** describes the benefits of having a Recruitment and Retention Program including demonstrating the value and importance of volunteer firefighters and proactive versus reactive leadership. The P.S.F.G. identifies that a Recruitment and Retention Plan is cyclical in nature as shown in **Figure 4**. It also highlights the long-term challenge of retention. Retention is especially critical with the evolution of the demands on volunteer firefighters since the time this P.F.S.G. was released.

¹⁶ The “*Volunteer Recruitment and Retention*” document released November 2009 is currently available at: <https://novascotia.ca/dma/firesafety/docs/VolunteerRecruitmentandRetention.pdf>

Figure 4: Ongoing, Annual Recruitment and Retention Program (P.F.S.G. 04-84-13)



7.8.4.5 Peers and Current L.F.S. Complement

Unfortunately, recruitment and retention challenges related to volunteer (paid-on-call) firefighters are not unique to LaSalle; however, this means that there are resources in the form of peers who have implemented strategies to successfully overcome their challenges. Approach to gathering this information could start at the local level with neighbouring departments and also consider recipients of the C.A.F.C. Recruitment and Retention Award. Based on our experience, the Township of New Tecumseh and Township of Centre Wellington have developed and applied successful recruitment strategies.

In addition, a critical resource to inform the ongoing recruitment and retention program exists in the form of L.F.S., Town staff, and Council. Examples of insight department staff can provide includes around possible barriers to entry (e.g., the Candidate Physical Ability Test, communication methods, historical use of the term “volunteer”, etc.) or retention strategies that may have the most local success (e.g., uniforms, support to attend conferences, insurance/access to benefit programs, etc.). Town staff would be able to help ensure that any strategy meets the legislative requirements of the town including around Ontario Human Rights Code changes to mandatory retirement, and the Workplace Safety and Insurance Board (W.S.I.B.) Presumptive Legislation affecting both full-time and volunteer firefighters.

Operational Recommendation #19: That consideration be given to enhancing the LaSalle Fire Service’s current paid-on-call volunteer firefighter recruitment referencing the volunteer firefighter recruitment and retention strategies presented within the proposed Fire Protection Services Master Plan.

7.9 Company Officer Training

The fire service is a paramilitary organization that relies on a rank structure to manage the roles and responsibilities of the organization and the operational services it delivers. This structure needs to include an appropriate span of control in order to be efficient and effective. Within the existing L.F.S. fire suppression organizational structure, Company Officers include Captains and Acting Captains.

A sufficient number of Company Officers are also required to ensure the function of incident command can be implemented at all emergency scenes, and depending on the incident action plan, have sufficient additional officers to facilitate other roles such as sectoring of the scene, and Safety Officer.

Municipalities are required to ensure that a sufficient number of supervisors (officers) are trained to oversee the workforce. Within the *Occupational Health and Safety Act*, Part III, Duties of Employers and Other persons, Section 12, subsection (2) states that: *“Without limiting the strict duty imposed by subsection (1), an employer shall, “(c) when appointing a supervisor, appoint a competent person”*. As an employer, the Town of LaSalle is legislated by this section of the O.H.S.A. to ensure that all supervisors, which includes the role of incident commander, be competent.

The O.H.S.A. defines a “competent person” to mean a person who:

- (a) *“is qualified because of knowledge, training and experience to organize the work and its performance,*
- (b) *is familiar with this Act and the regulations that apply to the work, and*
- (c) *has knowledge of any potential or actual danger to health or safety in the workplace.”*

Industry best practices reflect that a Company Officer training program should be ongoing as an element of a broader Officer Development Program. This strategy further supports succession planning and career development for future senior officers. The ***N.F.P.A. 1021 - Standard for Fire Officer Professional Qualifications*** is a recognized best practice for this type of training.

The L.F.S. recognizes the importance of the role of a comprehensive Company Officer program. The Company Officer program was reviewed in 2016 due to the advent of the transition to NFPA Pro-Qual Standards, and internal promotions. The program was enhanced to align with the new Provincial standards and incorporate in-house, online, and external training. Last revised in 2017, L.F.S. OG#1-008 “Volunteer Company Officer” outlines a policy to *“ensure a progression of suitably trained and experienced company officers”*. The guideline identifies the minimum requirements for Company Officer being:

- *Thorough knowledge and understanding of applicable legislation and standards;*
- *Leadership, Communication and Supervision;*
- *Pre-Incident planning and Incident Safety Officer;*

- *Incident Management / Fire ground Command;*
- *Instructor I; and*
- *Officer I.*

Though not explicitly stated, these requirements would be referring to N.F.P.A. 1041 Fire Service Instructor Level I and N.F.P.A. 1021 Fire Officer Level I. As discussed in **Section 5.8.2**, it is recommended that all guidelines are reviewed and updated to include reference to specific qualifications and standards.) As identified in the O.G., currently these requirements are not definitive as criteria into the promotional process. This approach to Company Officer training including the requirements reflects current industry best practices.

Achievement of some N.F.P.A. 1021 Fire Officer Level I requirements are supported through the monthly officer training sessions provided primarily to Captains (full-time). As part of the review and consultation completed for this F.P.S.M.P., it was identified that there is a challenge providing local access to Company Officer training for paid-on-call volunteer firefighters. The Regional Training Committee is working to develop an approach to help address this gap in the form of workshops available to local area paid-on-call volunteer officers.

The recently reviewed Company Officer program recognizes the importance of a sufficient number of company officers and training standards in alignment with N.F.P.A. 1021. The informal annual training plan includes access to Company Officer training on a regular basis as part of general training to ensure skills and competencies are retained and that new or advanced training is provided. The Company Officer program would benefit from being a part of a Comprehensive Training Program to ensure that the department continues in this positive direction.

Operational Recommendation #20: That the LaSalle Fire Service Company Officer Training Program be included within the proposed Comprehensive Training Program.

7.10 Succession Planning

There is currently no formal succession plan in place for L.F.S. Like many departments, succession planning is aligned with promotional opportunities. It was identified that informal opportunities for exposure exist in the form of regular leadership and officer meetings as well as through committees. The Fire Master Plan 2015 Interim Review highlighted the relative experience distribution of personnel in 2008 versus 2015. This table has been updated to reflect experience to 2019 as well as shown in **Table 25** below. Over this ten year period, the proportion of suppression staff with nine or fewer years of experience shifted from 45% to 68%. Over the same period the proportion of suppression staff with less than five years of experience has shifted from 31% to 56%. This reflects a loss of experience in the department. This shift highlights the importance of proactive succession planning, especially should this trend continue.

Table 25: Years of Experience - Suppression Personnel - 2008 vs. 2015 (2015 Interim Review)

Years of Experience	2008		2015		2019	
	# of Suppression Staff	%	# of Suppression Staff	%	# of Suppression Staff	%
> 5 Years	11	31%	12	32%	23*	56%
5 to 9 Years	5	14%	13	35%	5	12%
10 to 14 Years	8	23%	4	11%	7	17%
15+ Years	11	31%	8	22%	6	15%
Total	35	100%	37	100%	41	100%

Source: Fire Master Plan 2015 Interim Review and L.F.S.

* 2019 data is as of June 2019 and includes nine new recruits

Departments across the province are finding that they benefit from a more proactive approach to succession planning as a component of company officer development. Such an approach could include developing a clear framework of skills and experience required for advancement within the department. To expose staff to these opportunities, formal mentoring programs, job shadowing, cross training, or secondments are all options. In addition, a proactive succession plan helps assure senior Town staff and elected officials that there are trained and skilled candidates available in the event vacancies occur within the department.

7.11 Incident Command Training

Incident command training is considered a core element of Company Officer Training. Guidance Notes to protect the health and safety of firefighters are developed by the Ontario Fire Service Section 21 Advisory Committee and distributed by the Ministry of Labour. **Firefighters Guidance Note #2-1 – Incident Command** reflects the importance of having an Incident Command System. This guidance note references a number of recognized systems including the **“Phoenix Fireground Command System”** which was developed by Alan V. Brunacini, the former Fire Chief of the Phoenix Fire Department.

Incident Command System (I.C.S.) are designed to positively affect the outcome of an emergency scene operation and the health and safety of firefighters. These systems can have a dramatic effect on the efficiency and effectiveness of the emergency response and safety on the emergency scene. This includes all incidents that the fire department may respond to including the fireground, hazardous materials incidents, automobile extrications, water/ice rescues and any other incident the fire department responds to where emergency responders and apparatus must be coordinated.

Incident command should be established by the first arriving officer and be sustained until the emergency is mitigated. The Incident Commander (officer) is responsible for all aspects of managing the

emergency incident including developing an **“Incident Action Plan”** and managing all operations on scene. This includes:

- *Establish immediate priorities, especially the safety of responders, other emergency workers, bystanders, and people involved in the incident;*
- *Stabilize the incident by ensuring life safety and managing resources efficiently and cost effectively;*
- *Determine incident objectives and strategies to achieve the objectives;*
- *Establish and monitor incident organization;*
- *Approve the implementation of the written or oral Incident Action Plan; and*
- *Ensure adequate health and safety measures are in place.*

The Blue Card program is a program that provides incident command training and is based on the work of Fire Chief Brunacini and is one of the most widely utilized programs in the fire service. The program utilizes both on-line and in-class simulation training which focuses primarily on Incident Command training for structural fire responses, but is applicable to all emergency incident responses. OG#1-008 *Volunteer Company Officer* references the need for incident command training as core to the educational requirements for a Company Officer.

7.12 Technical Rescue Training Program

As part of the analyses completed for this F.P.S.M.P., the 2013 Training and Sustainability Review of Non-Core Emergency Services was reviewed. The 2013 review considered the typical non-core Emergency services provided to a community. This included consideration of specialized services typically referred to as “technical rescues” and a number of other non-core services. This section focuses on the technical rescue services provided by L.F.S.

In addition to basic firefighting training, L.F.S. must also consider the training needs associated with technical rescue services, such as automobile extrications. Technical rescues are considered those services that require a higher standard of training. The health and safety requirements for firefighters during technical rescue operations can be high. The level of training required should be established through the identified service levels for each technical rescue service approved by Council and included within the Establishing and Regulating By-Law.

The three levels of training as established in ***N.F.P.A. 1670 Standard on Operations and Training for Technical Search and Rescue Incidents*** are:

1. Awareness Level – reflecting the minimum capability of organizations;
2. Operations Level – reflecting the capability of organizations to respond, use equipment, and apply techniques to support and perform a technical rescue; and,

3. Technician Level – reflecting the capability of organizations to not only provide the Operational Level services but also to coordinate, perform, and supervise a technical rescue.

Sustaining the high degree of training for all firefighters participating in these responses, including qualifications in order to safely and efficiently provide these specialty technical rescue programs requires substantial training resources. This includes proper training equipment, props, and opportunities for a range of services (e.g., vehicles for auto extrication). Personnel must also be available to deliver the specialty programs. In part because these resource implications are linked to the identified service levels, it is important that service levels for technical rescues are approved by Council and align with community risk.

The L.F.S. Establishing and Regulating By-law 6073 (as amended March 8, 2016) Appendix B identifies several non-core services provided by the department that L.F.S. is authorized by Council to provide. The identified non-core services includes Medical First Response and Rapid Defibrillation, and five technical rescue services. **Table 26** presents a summary of the existing Council approved technical rescue services provided by the L.F.S. as described in the current Establishing and Regulating By-law.

Table 26: Current Council Approved Technical Rescue Service Levels

Program	Service Level
Comprehensive Water and Ice Rescue	Vessel-based/water entry*
Hazardous Materials Response	Operations Level
Confined Space Rescue (<i>up to 50 ft.</i>)	Operations Level
Trench Rescue	Awareness Level
Elevator Rescue	--
<i>*Reflects Technician Level of service.</i>	

The analyses of these specialized emergency responses presented in the sections that follow have considered the findings of the C.R.A., training requirements to support these services, and options that may be available for alternative delivery of these services.

7.12.1 Hazardous Materials Response

The C.R.A. identifies the presence of major provincial transportation routes being Highway 401 and one rail line that travels southwest through the municipality. Hazardous materials are commonly transported along these corridors. An incident would require the response of the L.F.S. However, in these instances the transportation of dangerous goods are regulated by the ***Transportation of Dangerous Goods Act, 1992***. This includes regulations that require the carrier to provide emergency response capabilities.

Sustaining ***operations level*** of emergency response capability requires financial resources to retain / maintain equipment and sustain training for L.F.S. For example, each firefighter is currently required to complete a minimum of five full days of training to complete the awareness and operations level

training, as well as further time to complete the required skills and testing process. Based upon the risk within the community, the Town and L.F.S. has determined operations level capability for hazardous materials response to be the appropriate level of service.

Our research indicates that Windsor Fire & Rescue Services (W.F.R.S.) is one of the nine municipal fire services that has a Memorandum of Understanding (M.O.U.) with the O.F.M.E.M. W.F.R.S. is one of the three specialized teams available to support local responders across the province. The M.O.U. is overseen, administered, and supported by the O.F.M.E.M.¹⁷ W.F.R.S. operates at a Level 3 (Technician Level) for Chemical / Biological / Radiological / Nuclear / Explosive (CBRNE) and HAZMAT Response.¹⁸ Support may be requested by contacting the Provincial Emergency Operations Centre. LaSalle Fire Service is part of a County-wide existing operating agreement that provides access to W.F.R.S.'s Technician Level Hazardous Materials resources as required.

Operational Recommendation #21: That the LaSalle Fire Service consider maintaining the current County-based operating agreement to provide Technician Level hazardous materials response support.

7.12.2 Comprehensive Water and Ice Rescue

As identified in the current Establishing and Regulating By-law, L.F.S. currently provides both surface water rescue and ice search and rescue at a vessel-based/water entry (technician) level. These types of services have been the subject of much discussion within the fire service as a result of a May 2017 Coroner's inquest into the death of a firefighter during a training exercise. This inquest recommended that all **ice/cold swift water rescue services** training be put in abeyance until such time as the recommendations of the jury were addressed.

Information provided to fire departments across the Province by the O.F.M.E.M. contained in Communique 2017-06 dated October 10, 2017 encouraged municipalities to assess their delivery of these types of specialized rescue services and specifically their respective Establishing and Regulating By-law.

The findings of the May 2017 Coroner's Inquest highlight the need for stringent training requirements for firefighters to facilitate any type of rescue where water or ice is present. The presence of these elements identifies conditions that warrant very careful consideration of the services the L.F.S. should be providing.

¹⁷ OFMEM. (2018, July 30). Chemical / Biological / Radiological / Nuclear / Explosive Response Teams. Retrieved from Ministry of the Solicitor General: <https://www.mcscs.jus.gov.on.ca/english/FireMarshal/multi-agencyemergency/CBRNE/CBRNE.html>

¹⁸ OFMEM. (2016, January 18). Communiqué 2016-05 Provincial Resources for Hazmat/CBRNE Incident Response and HUSAR. Retrieved from Ministry of the Solicitor General: https://www.mcscs.jus.gov.on.ca/english/FireMarshal/FireServiceResources/Communiqués/OFM_Com_2016-05.html

As part of the review completed for this F.M.P, it was identified that the operational guidelines and the current Establishing and Regulation By-law, reflects the findings of the Coroner's' Inquest. They require that all staff involved be fully trained and qualified to conduct water and ice rescue services, and that they be tethered at all times to a point on shore or to a boat/vessel.

Through consultation with senior department staff in regards to the department's current Surface Water/Ice Search and Rescue service level training and operations, emphasis was placed on the importance of ensuring the current training and qualifications of all firefighters participating in this type of specialized rescue were consistent with the applicable N.F.P.A. standards, such as N.F.P.A 1006 and 1670 and other applicable training requirements. To further complement the applicable training standards it was agreed that the department's current practice is to ensure that any firefighter participating in this type of rescue would be tethered to the shore or the boat at all times. In this instance the term "tethered" is defined as *a firefighter while conducting a training, or rescue operation on ice, or in the water shall be attached to the shore (shore-based) or to a boat (vessel-based) by a rope that is designed for the purpose of rescuing the firefighter.*

As referenced by the O.F.M.E.M. it is recommended that the current Establishing and Regulating By-law be revised to clearly define the L.F.S. Surface Water/Ice Search and Rescue services as being "shore-based" (tethered) or "vessel-based" (tethered) at all times.

Operational Recommendation #22: That consideration be given to revising the existing surface water and ice search and rescue services to reference shore-based (tethered) and vessel-based (tethered), and that surface water and ice search and rescue services levels identified in By-law No. 026-2018 be revised to shore-based (tethered at all times).

7.12.3 Confined Space/Trench Rescue

Ontario Regulation 632/05 – Confined Spaces defines a confined space "*means a fully or partially enclosed space*"¹⁹. This regulation also sets forth employers responsibilities including the provision of on-site rescue procedures. There is currently no legislative requirement for the Town to provide either confined space or trench rescue services. In many instances a trench rescue can also be defined as a confined space. The current Establishing and Regulating By-law identifies that Confined Space Rescue (up to 50 feet) is provided to an ***operations level*** and Trench Rescue at an ***awareness level***.

Historically, L.F.S. trained instructors to the standard for confined rescue who then delivered in-house training as part of an annual training plan. As part of the review completed for this F.P.S.M.P. it was identified that the Confined Space Rescue training program is constrained due to recent staff turnover. This combined with the transition to N.F.P.A. standards has resulted in a gap in the training program for

¹⁹ Ontario Regulation 632/05 – Definitions Section 1. Confined Space

confined space. Awareness Level trench rescue training continues to be provided as part of the annual training plan.

It is important for firefighters to be able to identify a confined space. As such **awareness level** training should be considered the minimum level of training for all firefighters. Our review of historical emergency response data from January 2014 to January 2019 did not identify a response to either a confined space, or trench rescue incident over this time period. This does not mean it did not occur it was just not identified. As discussed in the C.R.A., there are also areas within the Town that would be defined as a confined space, and construction within the community could result in trench rescue.

In comparison to the other demands for emergency response services, such as fire suppression or responding to motor vehicle collisions requiring patient extrication, the probability of responding to a confined space or trench rescue incident is quite low. In our view, consideration should be given to revising the level firefighter training to an **awareness level** for confined space and seeking to develop a service agreement with a neighboring community, or the private sector for operation/technician level response for confined space/trench rescue.

Operational Recommendation #23: That the LaSalle Fire Service consider revising its current confined space/trench rescue capabilities to Awareness Level, and the consideration be given to developing an automatic aid, or service agreement with a neighbouring community, or the private sector to provide Technical Level confined space/trench rescue response support.

7.12.4 Summary Specialized Emergency Responses

Recent changes to the current Establishing and Regulating By-law provide clear and specific definition of the level of specialized emergency response services to be provided by the L.F.S. The findings of the C.R.A. and this Fire Protection Services Master Planning process have identified options for Council's consideration to revise the existing service levels provided by the L.F.S. in several areas and to develop automatic aid and/or private sector partnership agreements to support the L.F.S.

This strategy is intended to focus the training and capabilities of the L.F.S. in those areas of higher probability of occurrence. The benefits of implementing this strategy will result in some additional training resource capacity that should be refocused on the core training needs of the L.F.S. related to the delivery of fire suppression services. This strategy recognizes that there is a need to further expand the number of fire suppression resources (firefighters) to address community growth.

The analyses of these specialized emergency responses have considered the findings of the C.R.A., training requirements to support these services and options that may be available for alternative delivery of these services. **Table 27** presents a summary of the proposed Technical Rescue Service levels.

Table 27: Proposed Technical Rescue Service Levels

Program	Existing Service Level	Proposed Service Level	Proposed Service Agreement
Water and Ice Rescue	Vessel-based/water entry	Technician Shore-Based (tethered) / Vessel-Based (tethered)	No
Hazardous Materials Response	Operations Level	Operations Level	Yes
Confined Space Rescue (<i>up to 50 ft.</i>)	Operations Level	Awareness Level	Yes
Trench Rescue	Awareness Level	Awareness Level	Yes

7.13 Other Non-Core Services

In addition to the technical rescues, there are other non-core services provided by L.F.S. that do not fall under the purview of N.F.P.A. 1760. Other services include elevator rescue and services provided by a marine crew. Considered on their own, these services reflect relatively small training needs; however, they contribute to the overall demands and resources required to provide these services safely and effectively.

7.13.1 Elevator Rescue

The analysis presented within the C.R.A. identified that from January 2014 to January 2019, L.F.S. responded to an average of one elevator rescue call per year. There is no N.F.P.A. standard that identified the qualification and competencies required to carry out elevator rescue. The last elevator training received by L.F.S. was an eight hour course delivered by a Technical Standards & Safety Authority (T.S.S.A.) qualified trainer to the training instructor in the role in 2011. In 2014, a 3.5 hour course was delivered to the full-time firefighters and paid-on-call volunteer captains.

7.13.2 Marine Services

To support the comprehensive water and ice rescue services as well as the delivery of fire suppression services from a water-based vessel, L.F.S. has a marine crew. To ensure qualifications and competencies of the marine crew, L.F.S. has established internal department training levels modelled by an O.P.P. course:

- **Marine Training Basic** - Equipment familiarization, learning certain knots, rules and regulations on the water, etc.
- **Marine Training Crew** – Operation of the small rescue boat, equipment familiarization, towing, launching and recovering the small vessel
- **Marine Operations I** – Launching and recovering the Phoenix (L.F.S. boat), docking, slow and fast maneuvers, etc.

- **Marine Operations II** – Towing a vessel, man overboard, person recovery in water, operating fire pump, operating the Phoenix vessel
- **Marine Operations III** – Navigation, charting, search patterns.

All emergency response staff are trained to at least the Marine Training Crew level and hold a valid boat operators card. The marine crew who operates the larger L.F.S. boat (the Phoenix) are required to complete all of the above-identified levels of training and hold a:

- Valid boating license,
- A radio operators card; and
- A marine emergency card of a MED-A3 certification.

Currently 14 staff are trained for operation of the Phoenix including seven full-time (three currently in training) and seven paid-on-call volunteer firefighters. It was identified as part of the review completed for this F.M.P that the marine crew qualifications and competencies are not established as part of any operational guidelines.

Operational Recommendation #24: That a clearly defined Operational Guideline be developed to define the required training and roles and responsibilities of the LaSalle Fire Services in providing marine services, and that these services be included within the proposed Establishing and Regulating by-law.

7.14 Respiratory Protection Program

L.F.S. has a comprehensive 2012 Respiratory Protection Program that includes reference to the applicable O.H.S.A. Section 21 Guidance Note #4-9 Respiratory Protection Program. In addition, there are a series of Operational Guidelines that relate to Self-Contained Breathing Apparatus (S.C.B.A.). This includes ***OG#11-003 S.C.B.A. General Maintenance, OG#11-004 Breathing Air Compressor/Cascade System, and OG#11-005 Respiratory Protection Program.*** It is recommended that consideration be given to consolidating all department policies, procedures and routine orders referring to the respiratory protection program into one Operational Guideline in alignment with O.H.S.A. Section 21 Guidance Note #4-9 and industry best practices.

Operational Recommendation #25: That consideration be given to consolidating all department policies, procedures and routine orders referring to the respiratory protection program into one Operational Guideline.

7.15 Online Training

Access to online training programs can provide greater flexibility in delivering content within a comprehensive training program. Currently the department utilizes online training as part of recruit training and some aspects of Company Officer training. This includes the use of: International Fire Service Training Associations (I.F.S.T.A.) ResourceOne which provides access to N.F.P.A. courses; Target Solutions to complement training with department-specific materials; and the Town of LaSalle's online training system for access to Workplace Hazardous Materials Information System (W.H.M.I.S.) and Health and Safety Training. It was identified as part of this review that the department is experiencing the benefits of the flexibility offered by online training, particularly for recruit training. The use of online training has also allowed for a better use of in-person class time by allowing for a focus on practical aspects of training.

Operational Recommendation #26: That consideration be given to further enhancing the utilization of on-line training as a component of delivering the proposed Comprehensive Training Program.

7.16 Training Facilities

The 2008 Fire Master Plan identified a lack of adequate training facilities and recommended that the facility limitations, such as the lack of a dedicated location to conduct training, no access to live fire facilities, and no storage space, be addressed. As reported in the Fire Master Plan 2015 Interim Review, the Town and L.F.S. has made great strides to address this gap. This has included the repurposing of a former salt dome, shown in **Figure 5**, to accommodate specialized training including the use of a roof ventilation prop, and a two-storey structure used for self-rescue and search and rescue training. Spacious and well-equipped classrooms and a new dedicated outdoor lot and compound continue to serve the department well. Water based training is completed on the Detroit River or Town-owned pools. In addition, site-specific training is conducted for the unique hydrant system found on the Rt. Hon. Herb Gray Parkway. The Fire Master Plan 2015 Interim Review identified that there was still no local access to live fire training. Live fire training is explored in greater detail in the next section.

7.16.1 Live Fire Training

The purpose of live fire training is to provide realistic fire training simulations under safe and controlled conditions. Live fire training exercises are intended to simulate the actual fire conditions that a firefighter may encounter and simulate heat, humidity, restrict vision and smoke conditions. This type of training is also very beneficial for firefighters, including recruits and Company Officers alike, to better understand fire behaviour including identifying evolving smoke conditions as they may relate to the potential for fire extension or conditions such as a "flashover".

The Fire Master Plan 2015 Interim Review identified regional access to live fire training facilities as an ongoing challenge. At the time of the Fire Master Plan 2015 Interim Review, the closest available facilities were found in Michigan, Sarnia, or Blyth. To address this critical gap, area municipalities partnered together to purchase a Mobile Live Fire Training Unit (M.L.F.T.U.) (Figure 6). The M.L.F.T.U. is shared at different time intervals scheduled throughout the year. The unit is multi-purpose and was designed for versatility providing multiple simulation configurations with the option of a second story that can be easily extended if needed. The M.L.F.T.U. is a resource that provides fire departments with the capability to conduct live-fire training within their own boundaries on a more regular basis. The provision of training through a shared resource such as this allows for economic feasibility and strengthened partnerships between neighbouring fire services.



Figure 5: Repurposed Salt Dome



Figure 6: Shared Mobile Live Fire Training Unit

The L.F.S. is in possession of the unit for five week periods divided into two separate sessions throughout the year (10 weeks total). To maximize on training opportunities other options for live fire training facilities are available including at

a live-fueled training centre at Lambton College (Sarnia) and through the Ontario Fire College training facility in Gravenhurst. Although these are viable options, they are not ideal geographically and would require firefighters to travel long distances for training.

The importance of firefighter health and safety during live-fire simulations is emphasized in L.F.S. O.G. 10-008 – *Live Fire Training and Considerations for Acquired Structures*. This O.G. establishes the procedures for conducting a training plan that involves a live-fire component.

Operational Recommendation #27: That live fire training be completed by all firefighters on an annual basis as identified within the proposed Fire Protection Services Master Plan as a component of the proposed Comprehensive Training Program.

7.17 Summary of Training Division

As referenced within this F.P.S.M.P., the fire service is undergoing a significant change through the transition to the N.F.P.A. Pro-Qual Standards. This change is impacting historical training programs including additional training requirements for all department staff, and specifically those staff resources involved in firefighting. Other factors such as ongoing discussions regarding mandatory certification within the fire service, and Coroner inquest recommendations have heightened the awareness of due diligence in this area on behalf of fire departments and municipalities. Delivering a comprehensive training program for all firefighters within the Town of LaSalle is being further challenged by the process of recruiting paid-on-call volunteer firefighters. As a result of the continuing turnover of paid-on-call volunteer firefighters the recruitment and training process for recruit paid-on-call volunteer firefighters as becoming an ongoing process. Although this is not uncommon across the province, it is a challenge that the L.F.S. is being challenged to sustain based on the existing depth of training resources available. In our view the ability of the L.F.S. to sustain the use of paid-on-call volunteer firefighters will rely significantly on the ability of the department to develop a sustainable recruitment and training program.

Information related to the proposed staff resourcing needs of the Training Division is included within **Section 9.0 – Proposed Staff Resource Strategies** of this F.P.S.M.P. As a result of the review of the Training Division, the following recommendations are presented for Council’s consideration and approval:

Operational Recommendations:

Operational Recommendation #18: That the department consolidate the current firefighter training initiatives into one Comprehensive Training Program including performance goals and objectives to be defined within a department Operational Guideline.

Operational Recommendation #19: That consideration be given to enhancing the LaSalle Fire Service’s current paid-on-call volunteer firefighter recruitment referencing the volunteer firefighter recruitment and retention strategies presented within the proposed Fire Protection Services Master Plan.

Operational Recommendation #20: That the LaSalle Fire Service Company Officer Training Program be included within the proposed Comprehensive Training Program.

Operational Recommendation #21: That the LaSalle Fire Service consider maintaining the current County-based operating agreement to provide Technician Level hazardous materials response support.

Operational Recommendation #22: That consideration be given to revising the existing surface water and ice search and rescue services to reference shore-based (tethered) and vessel-based (tethered), and

that surface water and ice search and rescue services levels identified in By-law No. 026-2018 be revised to shore-based (tethered at all times).

Operational Recommendation #23: That the LaSalle Fire Service consider revising its current confined space/trench rescue capabilities to Awareness Level, and the consideration be given to developing an automatic aid, or service agreement with a neighbouring community, or the private sector to provide Technical Level confined space/trench rescue response support.

Operational Recommendation #24: That a clearly defined Operational Guideline be developed to define the required training and roles and responsibilities of the LaSalle Fire Services in providing marine services, and that these services be included within the proposed Establishing and Regulating by-law.

Operational Recommendation #25: That consideration be given to consolidating all department policies, procedures and routine orders referring to the respiratory protection program into one Operational Guideline.

Operational Recommendation #26: That consideration be given to further enhancing the utilization of on-line training as a component of delivering the proposed Comprehensive Training Program.

Operational Recommendation #27: That live fire training be completed by all firefighters on an annual basis as identified within the proposed Fire Protection Services Master Plan as a component of the proposed Comprehensive Training Program.

8.0 Operations Division

The LaSalle Fire Service is recognized as a “*composite*” or “*combination*” fire department defined as “*having emergency service personnel comprising less than 85 percent majority of either volunteer or career membership*”²⁰. The Operations Division (fire suppression) of the L.F.S. is overseen by the Deputy Fire Chief and includes six full-time and thirty paid-on-call volunteer firefighters. The two full-time Captains assigned to the Fire Prevention and Training Divisions also respond to emergency incidents during normal business hours Monday through Friday. The L.F.S. currently maintains a minimum of one full-time firefighter on duty at all times.

In addition to fire suppression-related services the L.F.S. provides emergency response services to a wide range of other types of incidents, including motor vehicle accidents within the community and on Highway 401, response to medical assistance calls, technical rescues related to confined spaces in construction projects and other designated spaces, water/ice incidents on the Detroit River and surrounding waterways and medical related responses.

There have been a number of significant changes within the fire service related to the delivery of fire suppression services since the Town completed its last Fire Master Plan in 2008. These changes focus on the current transition within the industry to the use of risk-based analysis in determining the required fire suppression deployment model. Previous fire suppression deployment guidelines such as P.F.S.G. 04-08-12 “Staffing – Single Family Dwellings” referenced in the Town’s 2008 Fire Master Plan have since been rescinded by the O.F.M.E.M.

The research and analysis presented within this F.P.S.M.P. provide a comprehensive review of current industry best practices related to delivering fire suppression services within the Town of LaSalle. This analysis is presented with recommendations for Council’s consideration in adopting the most effective and efficient fire suppression deployment model that provides the most value to the community. This includes utilizing the findings of the Community Risk Assessment and further utilization of the first two lines of defence, identified by the Comprehensive Fire Protection Model, including optimizing public education and fire prevention programs, and the further use of fire safety standards and enforcement.

8.1 Importance of Time with Respect to Fire Growth

Time is a critical component with respect to the growth of a fire and the success of intervention by firefighters. Research conducted by the O.F.M.E.M. and National Research Council of Canada indicates that a fire in a non-sprinklered residential occupancy can spread from the room where the fire originates

²⁰ NFPA 1720 Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments – Section 3.3.15 Fire Department

in ten minutes or less. Tests have shown that the fire can extend from the room of origin in as little as three minutes, under fast fire growth conditions.

Fire growth rates, defined by the Society of Fire Protection Engineers as slow, medium and fast, are listed in **Table 28**. The fire growth rates are measured by the time it takes for a fire to reach a one megawatt (M.W.) fire. This is roughly equivalent to an upholstered chair burning at its peak. A two M.W. fire is approximately equal to a large upholstered sofa burning at its peak.

Table 28: Time to Reach 1 M.W. and 2 M.W. Fire Growth Rates in the Absence of Fire Suppression

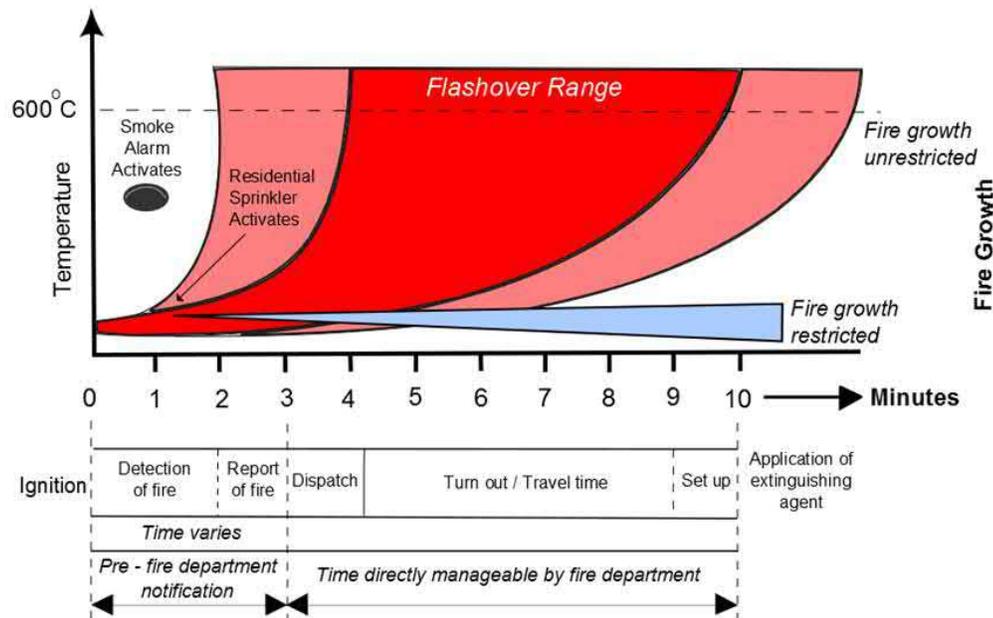
Time to Reach 1 MW and 2 MW Fire Growth Rates in the Absence of Fire Suppression

Fire Growth Rate	Time in Seconds to Reach 1MW	Time in Seconds to Reach 2 MW
Slow	600 seconds	848 seconds
Medium	300 seconds	424 seconds
Fast	150 seconds	212 seconds

(Source: "Operational Planning: An Official Guide to Matching Resource Deployment and Risk", Office of the Fire Marshal and Emergency Management, January 24, 2011, p. 4).

Within the ten-minute time period, flashover conditions can occur. Flashover occurs when the combustible items within a given space reach a temperature that is sufficiently high for them to auto-ignite. The graph in **Figure 7** highlights the importance of the first two lines of defence including early detection actions of the occupants. Early detection occupant actions include working smoke alarms, home escape planning, and prompt notification of the fire department. The success of firefighting intervention, given the exponential increase in fire temperature and the potential for loss of property/loss of life with the progression of time, further support the importance of public education and prevention programs.

Figure 7: Example Fire Propagation Curve



Source: Fire Underwriters Survey "Alternative Water Supplies for Public Fire Protection: An Informative Reference Guide for Use in Fire Insurance Grading" (May 2009) and N.F.P.A. "Fire Protection Handbook" (2001)

The fire propagation curve reflects the importance of time during the Detection 'detection – report' stage. This is the time period not impacted by any actions by the fire department. The time period controlled by the fire department begins when the call is initially received by dispatch and includes several other components leading up to the initiation of intervention by fire operations staff.

Understanding factors such as "growth rate" and "time" in terms of how quickly a fire can reach a critical stage such as flashover are important considerations in assessing fire operations performance targets. For example, where areas of the community may have extended response times due to long travel distances, (i.e., in excess of ten minutes), the potential for the fire to have spread from the room of origin or to have already reached a flashover state will be significantly higher.

In these situations, consideration should be given to the first two lines of defence including the provision of more public education and fire prevention activities as a means to inform the public on how to be prepared and react in the event of a fire.

8.2 Current Fire Suppression Deployment Guidelines, Standards and Best Practices

Within the Province of Ontario there is no specific legislated standard that a community must achieve with regard to the type of firefighter (career/part-time/volunteer) or the number of firefighters required

to respond to any given incident. The F.P.P.A. does, however, require that a municipal Council assess their fire protection resources based on determining its “*local needs and circumstances.*”²¹

Over the past decade there has been a transition within the fire service industry across North America to the utilization of community risk-based analysis. Community risk-based analysis is used to determine the appropriate level of firefighter deployment based on the critical tasks to be performed to effectively, efficiently and safely conduct fire suppression operations.

The O.F.M.E.M. is the agency responsible for overseeing the delivery of fire protection services within the Province of Ontario, and N.F.P.A. is the most highly recognized fire service association in North America. These agencies cumulatively represent the authorities for identifying the applicable fire suppression deployment benchmarks for the Town of LaSalle. In addition to these two authorities valuable information is also available from the experience of other provinces and agencies. The following sections present the findings of research into the existing fires suppression deployment guidelines, standards and industry best practices that are applicable to this Fire Protection Services Master Planning process.

8.2.1 Fire Suppression Response Times

Within the fire service fire suppression response times are measured and analyzed according to percentile ranking (i.e. percentage of responses meeting a specified timeframe). The 90th percentile (i.e. where 90% or 90 out of 100 responses meet a specific response time target) is a common industry best practice for reporting and understanding emergency first responder performance. Fire and emergency services commonly measure and report 90th or 80th percentile response time data for system planning and resource deployment purposes.

Within the fire service, **Total Response Time** is calculated by assessing three primary factors that include the following:

$$\text{Dispatch Time} + \text{Turnout Time} + \text{Travel Time} = \text{Total Response Time}$$

8.2.1.1 Dispatch Time

Within the Town of LaSalle the process for emergency call taking (alarm answering) and fire dispatching (alarm processing) of the L.F.S. fire suppression services are operated by the Town of LaSalle Police Service. The applicable performance benchmarks for assessing these services is contained within the **N.F.P.A. 1221 – Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems** (2016) that includes the following:

²¹ Fire Protection and Prevention Act, 1997 Part II Municipal Responsibilities Section 2. (1) (b)

“Emergency Alarm Processing / Dispatching: A process by which an alarm answered at the communications centre is transmitted to emergency response facilities (E.R.F.s) or the emergency response units (E.R.U.s) in the field.”²²

The N.F.P.A. 1221 standard is an industry best practice for fire department dispatch time requirements. It requires that 95% of alarms received on emergency lines shall be answered within 15 seconds, and 99% of alarms shall be answered within 40 seconds. It requires processing of the alarm call (dispatching) to be completed within 64 seconds, for 90% of all calls (90th percentile), and within 106 seconds for 95% of calls. This means that 90 out of 100 calls are required to be dispatched within 64 seconds and that 95 out of 100 calls must be dispatched within 106 seconds. Further analysis of the current L.F.S. dispatch times is included within the Communications Division section of this F.P.S.M.P.

8.2.1.2 Turnout Time

Within the fire service the definition of turnout time is best defined within the by the *N.F.P.A. 1710 Standard for Organization and Deployment of Fire Suppression Operations by Career Fire Departments* as:

“the time interval that begins when the emergency response facilities (ERFs) and emergency response unit (ERUs) notification process begins by either an audible alarm or visual annunciation of both and ends at the beginning point of travel time.”²³

Within the Town of LaSalle this definition is applicable to both the full-time and paid-on-call volunteer firefighters. For the full-time firefighters their turnout time begins when they are alerted by the Communications Centre to respond and ends when the fire apparatus acknowledges they are leaving the fire station and begin responding to the incident. For the paid-on-call volunteer firefighters the turnout time also begins when they are alerted by the Communications Centre to respond and ends when they either arrive at the fire station and acknowledge they are responding on a fire apparatus, or alternatively, when they arrive at the incident in their personal vehicle. Further analysis of the historical L.F.S. turnout times is included within the following sections of this F.P.S.M.P.

8.2.1.3 Travel Time

Travel time is also appropriately defined within the *N.F.P.A. 1710 Standard for Organization and Deployment of Fire Suppression Operations by Career Fire Departments* as:

“The time interval that begins when a unit is enroute to the emergency incident and ends when the unit arrives at the scene.”

²² N.F.P.A. 1221 2016 Edition

²³ N.F.P.A. 1710 Standard 2016 Edition

Within this F.P.S.M.P. this reflects the amount of time from when the responding apparatus leaves the fire station until that apparatus arrives at the emergency incident. Further analysis of the historical L.F.S. travel times is included within the following sections of this F.P.S.M.P.

8.2.2 Office of the Fire Marshal & Emergency Management

Public Fire Safety Guideline 04-08-10 – Operational Planning: An Official Guide to Matching Resource Deployment and Risk was released by the O.F.M.E.M. in January of 2011. This guideline is intended to be an element of a municipality’s risk management process. This guideline states that *“The purpose of this guideline is to encourage municipalities and fire departments to use this tool so that they can make informed decisions regarding the delivery of fire suppression services.”*²⁴

This guideline includes a *“Critical Task Matrix”* that is defined by the O.F.M.E.M. as *“The critical Task Matrix is based on the Incident Management System (I.M.S.). It will assist in identifying fireground staffing capabilities based upon low, moderate, high and extreme risk levels within your community. The O.F.M.E.M. has identified the critical tasks from the Incident Management System that are used during fireground operations. These tasks are consistent with applicable legislation, industry best practices and the Ontario Fire College Curriculum.”*²⁵ The matrix recognizes that within the I.M.S. that:

- Upon arrival and rapid size-up, the incident commander can upgrade or downgrade response
- Crews can be reassigned to other tasks once original assignments are complete;
- Response protocols can be established with specific risk levels used to assist with pre-planning to obtain more resources based on the escalating nature of the emergency;
- Fire departments perform rescue and building personnel conduct evacuations according to their approved fire safety plans; and,
- Some tasks will never be assigned based on the tactical approach chosen by the incident commander (offensive versus defensive).

The matrix identifies the lower effectiveness response level (L.E.R.L.) and upper effectiveness response level (U.E.R.L.) indicating the range of firefighters required to effectively, efficiently and safely conduct fire the identified suppression fireground critical tasks associated with each level of risk present. For example, the range of firefighters required to respond to a fire in a single family residential dwelling (Group C- Residential Occupancy) identified within the Community Risk Assessment as a moderate risk occupancy would be from 16 to 43 firefighters. Whereas the response to a registered care facility (Group B- Care or Detention Occupancy) identified within the Community Risk Assessment as a high risk occupancy would be from 36 to 83 firefighters. **Figure 8** reflects the fire suppression deployment ranges included within P.F.S.G. 04-08-10.

²⁴ PFSG 04-08-10 Operational Planning: An Official Guide to Matching Resource Deployment and Risk

²⁵ PFSG 04-08-10 Operational Planning: An Official Guide to Matching Resource Deployment and Risk

Figure 8: P.F.S.G. 04-08-10 Critical Task Matrix

Fireground Critical Task		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 and Extinguish)	2	2	2	2	2	2	2	2
	Additional Pump Operator(s)	0	0	0	2	2	4	4	6
	Additional Attack Line Backup	0	0	0	4	4	8	8	12
	Search and 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								
Additional Firefighters									
Summary	Incident Response Range	4	13	16	43	36	83	49	108
	Total Fire Department Including External								
	Fire Call Incident Response Range								
Notes:									
<ul style="list-style-type: none"> L.E.R.L. = Lower Effective Response Level U.E.R.L. = 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 to ensure the optimum level of protection for the municipality.
- Simultaneous events will require further consideration due to additional personnel requirements beyond the scope of the matrix.
- Incident Command will assume responsibilities for the accountability and entry control tasks when no person has been assigned, or until a person has been assigned the task.

Source: P.F.S.G. 04-08-10 - Operational Planning: An Official Guide to Matching Resource Deployment and Risk

8.3 National Fire Protection Association (N.F.P.A.)

The National Fire Protection Association develops and manages a series of codes and standards which guide fire protection service delivery across North American. The following standards relate to the delivery of fire suppression services by a composite fire service, such as the L.F.S.

8.3.1 N.F.P.A. 1710 Standard (2016 Edition)

N.F.P.A. 1710 *“Standard for the Organization and Deployment of Fire suppression Operations, Emergency medical Operations, and Special Operations to the Public by Career Fire Departments”* provides a resource for determining and evaluating the number of career firefighters required based upon recognized industry best practices. This standard is designed for larger municipalities that, as a result of many factors, are operating their fire department utilizing primarily full-time (career) firefighters. The applicable references within the N.F.P.A. 1710 standard include:

- *This standard applies to the deployment of resources by a fire department to emergency situations when operations can be implemented to save lives and property; and*
- *The standard is a benchmark for most common responses and a platform for developing the appropriate plan for deployment of resources for fires in higher hazard occupancies or more complex incidents.*

These N.F.P.A. references support the strategic priority of saving lives and property, as well as recognizing the standard as a **“benchmark”** for determining the appropriate level of resources based on the complexity and level of risk present. This standard identifies the recommended minimum number of firefighters to be deployed as either the “Initial Company”, or the “Initial Full Alarm Assignment” required based upon the type of fire risk present.

8.3.1.1 Initial Company – “Initial Response”

The N.F.P.A. 1710 standard refers to the ‘Initial Company’ as an ‘Engine Company’ and further defines the minimum staffing level of an Engine Company as four firefighters whose primary functions are to pump and deliver water and perform basic firefighting at fires, including search and rescue. Within the fire service the term “Engine Company” can also be described as a Pumper, Pump/Rescue or Quint.

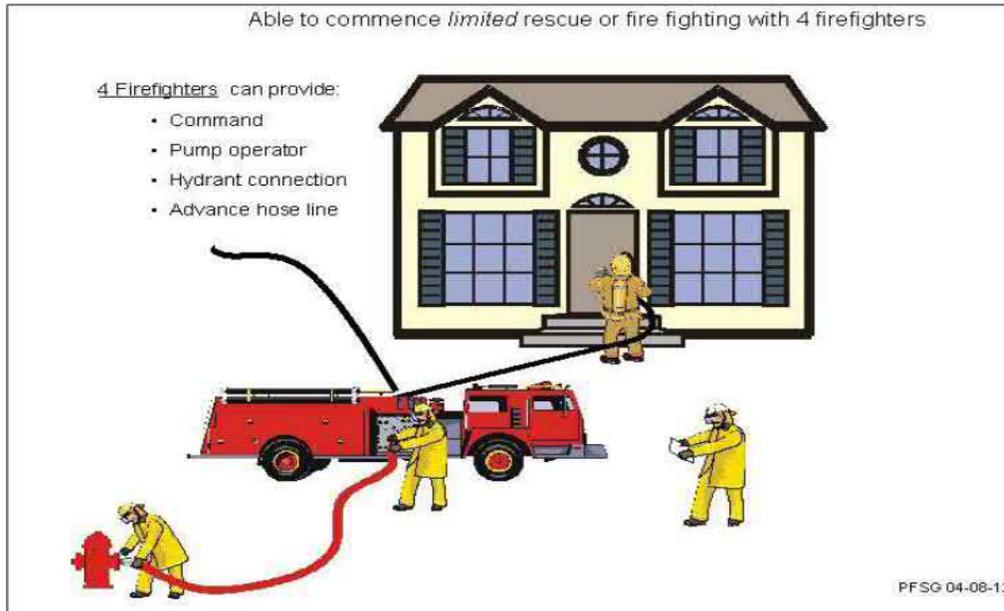
The Initial Company is also commonly referred to as the “**Initial Response**” that is defined as the number of firefighters initially deployed on the first apparatus responding to an incident. Fire service leaders and professional regulating bodies have agreed that until a sufficient number of firefighters are assembled on-scene, initiating tactics such as entry into the building to conduct search and rescue, or initiating interior fire suppression operations are not safe practices. If fewer than four firefighters arrive on scene, they must wait until a second vehicle, or additional firefighters arrive on scene to have sufficient staff to commence these activities.

An initial response of four firefighters once assembled on-scene is typically assigned the following operational functions. The officer in charge shall assume the role of Incident Commander; one firefighter shall be designated as the pump operator; one firefighter shall complete the task of making the fire hydrant connection; and the fourth firefighter shall prepare an initial fire attack line for operation.

The assembly of four firefighters on the fire scene provides sufficient resources to safely initiate some limited fire suppression operations. This first crew of four firefighters is also able to conduct the strategic operational priority of “size-up” whereby the officer in-charge can evaluate the incident and where necessary, request an additional depth of resources that may not have been dispatched as part of the initial response.

Fire scene responsibilities of an **Initial Company** are highlighted in **Figure 9**.

Figure 9: Initial Company –Initial Response



(Office of the Fire Marshal, Ontario, Public Fire Safety Guideline 04-08-12, December, 2001)

8.3.1.2 Single-Family Dwelling - Initial Full Alarm Assignment – “Depth of Response”

In addition to defining the deployment requirements of the “*Initial Company-Initial Response*” the N.F.P.A. 1710 standard also identifies the recommended minimum number of “*total firefighters*” that should be deployed based on the building occupancy type and fire risk present.

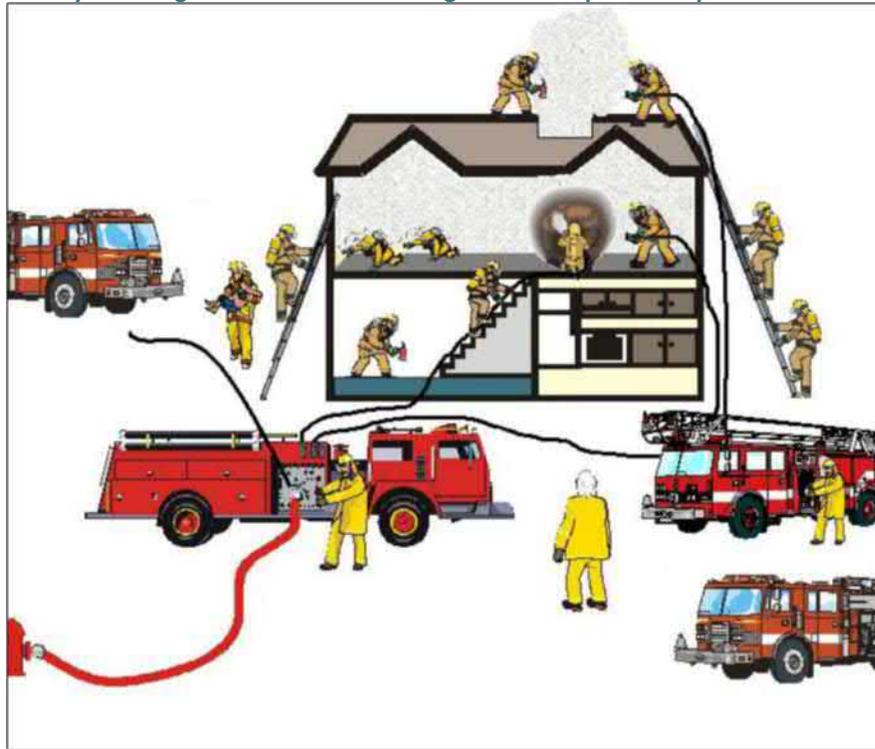
The N.F.P.A. 1710 standard defines a “*Single Family Dwelling*” as a 2,000 ft² (186 m²), two-storey single-family dwelling without a basement and with no exposures present. This represents a typical home of wood frame construction located in a suburban neighbourhood having access to a municipal water supply including fire hydrants.

The N.F.P.A. 1710 standard recommends a minimum deployment of fourteen firefighters, and fifteen if an aerial device is required to respond to a fire in a single-family dwelling. This deployment represents the recommended initial full alarm assignment also referred to as the “*Depth of Response*”.

It is very important to recognize that the “*Initial Full Alarm Assignment*” representing the “*Depth of Response*” is referring to the “*total number*” of firefighters “*initially*” assigned to an incident. The total number of firefighters assigned to an incident can vary based on the type of occupancy and the level of fire risk present. Fires involving occupancies that have been assigned a higher level of fire risk such as high risk or high-rise high risk occupancies will require a higher number of firefighters as part of the initial full alarm assignment.

The N.F.P.A. 1710 fire scene responsibilities for a single-family dwelling including an aerial are highlighted in **Figure 10: Single-Family Dwelling – Initial Full Alarm Assignment – Depth of Response**

Figure 10: Single-Family Dwelling – Initial Full Alarm Assignment – Depth of Response



(Shown including an aerial device – 15 firefighters) Modified from the Office of the Fire Marshal, Ontario, Public Fire Safety Guideline 04-08-12, December, 2001.

8.3.1.3 Apartment – Initial Full Alarm Assignment – Depth of Response

The N.F.P.A. 1710 standard defines an apartment as a typical 1200 ft² (111 m²) apartment within a three-story, garden style apartment building. Based on this type of building occupancy and fire risk this standard recommends a minimum deployment of twenty five firefighters, and twenty six if an aerial device is required.

The N.F.P.A. 1710 standard recommends this same minimum initial depth of response deployment to an “Open-Air Strip Shopping Centre” as the initial full alarm assignment.

8.3.1.4 High-Rise – Initial Full Alarm Assignment – Depth of Response

High-rise buildings pose unique risks for fire suppression. The 2016 Edition of the N.F.P.A. 1710 standard introduces specific considerations and targets for response time and staffing levels for fire incidents in high-rise buildings. The standard recommends 610 seconds (10 minutes, 10 seconds) or less travel time for the deployment of suppression staff to a high-rise fire incident. Recommended staffing levels are outlined based on critical fire-scene tasks, totaling 39 firefighters for an initial full

alarm assignment to a fire suppression incident at a high-rise high risk building. The timelines and staffing levels correspond to the challenges related to vertical response and specific operational requirements for structural firefighting in high-rises.

Prior to the development of this standard, municipalities had begun to create their own guidelines and/or procedures to follow during a high-rise fire. The common guidelines or procedures found revolve around how to ascend a building when the fire service elevators are not working and how long it will take and how many firefighters or apparatuses are required to arrive at high-rise building fires.

8.3.2 N.F.P.A. 1720 Standard

N.F.P.A. 1720 “Standard for the Organization and Deployment of Fire suppression Operations, Emergency medical Operations, and Special Operations to the Public by Volunteer Fire Departments” provides a resource for determining and evaluating the number of part-time (volunteer) firefighters required based upon recognized industry best practices.

The N.F.P.A. 1720 standard further supports the minimum initial response staffing to include four firefighters including “Initial firefighting operations shall be organized to ensure that at least four fire fighters are assembled before interior fire suppression operations are initiated in a hazardous area”. This particular standard recognizes that the four firefighters may not arrive on the same vehicle, but that there must be four on the scene prior to initiating any type of interior firefighting operations.

Within this standard the N.F.P.A. identifies five different categories described as “Demand Zones” that relate to the type of risk that may be found within a typical community; either by population density, travel distance, or special circumstances. The standard then identifies a minimum level of firefighters that would be recommended for each of these categories. **Table 29** presents the N.F.P.A. 1720 standard minimum staffing levels by demand zone.

Table 29: N.F.P.A. 1720 – Minimum Staffing Levels

Demand Zones	Demographics	Minimum # of Firefighters Responding	Response Time (Turnout + Travel) in Minutes	Performance Objective
Urban Area	>1000 people per square mile	15	9	90%
Suburban Area	500-1000 people per square mile	10	10	80%
Rural Area	<500 people per square mile	6	14	80%
Remote Area	Travel Distance + or – 8 miles	4	Dependent upon travel distance	90%
Special Risks	To be determined by municipality	To be determined by municipality	To be determined by municipality	90%

The N.F.P.A. 1720 standard utilizes population density as a factor in evaluating the minimum number of firefighters recommended for depth of response. As a standard primarily for use by volunteer fire

departments it recognizes lower population densities are typically found in smaller communities in comparison to much higher population densities found in large urban centres.

The N.F.P.A. 1720 standard identifies an initial response deployment of four firefighters to effectively, efficiently and safely conduct initial fire suppression operations.

The N.F.P.A. 1720 standard identifies a depth of response deployment range of four to 15 firefighters depending on the risks associated with fire demand zones to effectively, efficiently and safely conduct initial fire suppression operations.

8.4 **National Institute of Standards and Technology (N.I.S.T.)**

The National Institute of Standards and Technology (N.I.S.T.) is an industry recognized leader in fire service research. Many of the guidelines and standards referenced within this F.P.S.M.P. have considered the research completed by N.I.S.T. This research includes two significant reports including the *“Report on Residential Fireground Field Experiments”* completed in 2010, and the *“Report on High-Rise Fireground Field Experiments”* completed in 2013.

In contrast to a fire in a typical single family dwelling that may include one or two storeys a fire in a mid-rise, or tall building requires fire suppression resources to access multiple stories above ground level. Within the fire service this is commonly referred to as **“vertical response”**. Vertical response refers to the additional fire suppression resources and response time required to transition from the curbside of an affected mid-rise or tall building to the location of the actual emergency incident on an upper storey.

Research conducted by the Toronto Fire Services (T.F.S.) included within Briefing Note #14-Feb 13²⁶ confirms that there are currently no specific performance guidelines or benchmarks relating to responses in high-rise residential buildings. The T.F.S. analysis indicates that in 2014 the range of time required for the first crew of firefighters to ascend from the curbside to the area affected by fire in high-rise buildings is between 5 minutes and 11 seconds and 5 minutes and 53 seconds. As identified in the N.I.S.T. report, the T.F.S. confirms that fires in high-rise buildings require significantly more firefighters in order for fire suppression operations to be conducted in a safe and effective manner.

²⁶ City of Toronto, 2015 Operating Budget Briefing Note Vertical Response Times
Source: <http://www.toronto.ca/legdocs/mmis/2015/bu/bgrd/backgroundfile-76355.pdf>

8.5 Province of British Columbia – Structure Firefighters Competency and Training Playbook

The Office of the Fire Commissioner in British Columbia, in consultation with the Fire Chiefs Association of British Columbia, and the British Columbia Fire Training Officers Association has developed the **Structure Firefighters Competency and Training Playbook (B.C. Playbook)**.

In our view the most recent addition amended in May of 2015 provides valuable insight into determining the level of fire suppression services to be provided by a municipality including those in Ontario. In further support of the O.F.M.E.M Public Fire Safety Guidelines and N.F.P.A. standards, the B.C. Playbook identifies three specific fire suppression service levels for Council’s consideration towards identifying the appropriate fire suppression service levels for the Town of LaSalle. In addition to response times, and the number of firefighters responding, the B.C. Playbook links the training qualifications of firefighters to fire suppression service levels.

The *Playbook* is applicable to all fire services personnel within the Province of British Columbia as defined by their **Fire Services Act**. The principles of the Playbook indicate that it is the direct responsibility of the “*authority having jurisdiction*” (A.H.J.) to declare its firefighting service level. The declared fire suppression service level must then be established as a formal policy (by-law, policy or contract) and be fully reflected in operating guidelines within the fire department.

The Playbook identifies the following service levels from which an A.H.J. may choose.

8.5.1 Fire Department Providing - Exterior Operations Service Level

The B.C. Playbook recognizes that based on local needs and circumstances a fire department may only be able to attack (suppress) a fire from the exterior of the building or structure. Exterior Operations Level fire service firefighters shall not enter any building, vehicle dumpster or other object if an immediately dangerous to health (I.D.H.L.) atmosphere is present. If an I.D.L.H. atmosphere is present, Exterior Operation firefighters shall only engage in external fire suppression activities. Operational Guidelines that restrict them to Exterior Operations must be written and enforced by the department, even though they may possess equipment that would otherwise permit them to respond at a higher level.

On occasion where the department responds to a simple incident and an I.D.L.H. atmosphere does not yet exist, it is reasonable to address the issue from inside the structure. However, if an I.D.L.H. atmosphere develops or the fire progresses beyond the object of origin, or the environment or structure become compromised in any way, all firefighters must immediately withdraw to the exterior and combat the situation from the outside. Where the I.D.L.H. atmosphere no longer exists as a result of fire suppression operations or otherwise, subject always to an appropriate risk assessment by the Incident Commander, it may be appropriate for members of an Exterior Operations Service Level department to enter the structure.

Where there is a potential risk of an I.D.L.H. atmosphere developing, or risk from smoke or particulate matter when conducting external operations (including overhaul), Self-Contained Breathing Apparatus (S.C.B.A.) must be worn in accordance with WorkSafe BC requirements.

8.5.2 Interior Operations Service Level

Interior Operation Fire Departments may engage in internal fire suppression activities within simple structures or objects such as a vehicle, single family dwelling or other small structure. Interior Operations may also include larger or more complex structures that the A.H.J. has assessed and pre-planned for, such that it determines that structure to be safe for Internal Operations qualified firefighters. Firefighters must be trained specifically to the risks associated with these structures.

Interior Operations Level fire services will have Operational Guidelines, that must be written and enforced by the department, that describe advanced training in fire operations activities that allow for a calculated fire attack within permitted structures and objects.

Interior Operations must be undertaken in accordance with the requirements of WorkSafe B.C. (including, in particular, S. 31.23 of the Occupational Health and Safety Regulation). The Incident Commander must recognize the need, and staff appropriately, for a Rapid Intervention Team (R.I.T.) with trained firefighters following the WorkSafe B.C. requirements.

8.5.3 Full Service Level

Full Service Operations Fire Departments are equipped and have completed the appropriate training identified in the B.C. Playbook to provide a full spectrum of fire services. These services are based on the Competencies included within the 'N.F.P.A. 1001 Firefighter Level II Standard and relevant N.F.P.A. Fire Officer Standards.

Full service fire departments will have Operational Guidelines that must be written and enforced by the department, that describe advanced training in fire operations activities.

These fire departments are organized such that the suppression activities that occur are based on response protocols which include the appropriate staffing levels, and number and type of apparatus on scene.

8.6 Commission on Fire Accreditation International

The Centre for Public Safety Excellent (C.P.S.E.) serves as the governing body for the two organizations that offer accreditation, education and credentialing within the fire service across North America: the Commission on Fire Accreditation International (C.F.A.I.) and the Commission on Professional Credentialing (C.P.C.).

The Commission on Fire Accreditation International (C.F.A.I.) defines itself through its Mission: *“to assist the fire and emergency service agencies throughout the world in achieving excellence through self-assessment and accreditation in order to provide continuous quality improvement and the enhancement of service delivery to their communities.”*

The objective of the C.F.A.I. program is to define an accreditation system that is a credible, achievable, usable, and realistic model. The ultimate C.F.A.I. goal is to provide an accreditation process to improve the abilities of municipalities to both understand and recognize their respective community fire risks, provide balanced public / private involvement in reducing these risks and improve the overall quality of life for community members using the accreditation model.

The **‘Principles of Accreditation’** are defined by the C.F.A.I. as follows:

- **Accreditation:** A process by which an agency evaluates and recognizes a program of study as meeting certain predetermined standards or qualifications. It applies only to institutions or agencies and their programs of study or their services;
- **Certification/Professional Designation:** Certification is a process whereby an individual is tested and evaluated in order to determine his or her mastery of a specific body of knowledge. Professional designation is similar to certification and is proven by which an individual is evaluated based upon experience, education and related accomplishments and is awarded a designation based upon this third party evaluation; and
- **Standardization:** A process by which a service is assessed against some fixed standard of performance and quality.

The **“C.F.A.I. Accreditation Model”** is comprised of the following required elements:

- **Organizational Self-Assessment;**
- **Standards of Cover;**
- **Community Risk Analysis; and**
- **Strategic Plan.**

The C.F.A.I. accreditation process relies significantly on fire suppression standards such as N.F.P.A. 1710 and 1720. However, in many areas the C.F.A.I. utilizes broader and different definitions in comparison to those utilized by N.F.P.A. For example, the term **“Effective Response Force”** (E.R.F.) is used by the C.F.A.I. rather than the N.F.P.A. **“Initial Full Alarm Assignment”**. The C.F.A.I. **“Effective Response Force”** is defined as the *“minimum amount of staffing and equipment that must reach a specific emergency response zone location within a maximum prescribed total response time and is capable of initial fire suppression, E.M.S. or mitigation. Effective Response Force is the result of critical tasking analysis as part of the community risk assessment.”*

Of interest to this Fire Protection Services Master Planning process is the importance of **“continuous improvement”** that is recognized by the C.F.A.I. accreditation process. In our view the development of the Community Risk Assessment and this Fire Protection Services Master Plan support Council’s commitment to sustaining and improving the services provided by the LaSalle Fire Service.

8.7 Proposed Fire Suppression Performance Benchmarks

Based on our review of current industry guidelines, standards and best practices and in consultation with the Fire Chief, the analysis within this F.P.S.M.P. has identified the fire suppression performance benchmarks that would be considered applicable to the Town of LaSalle given the level of fire risk identified by the Community Risk Assessment.

8.7.1 Proposed Initial Response Fire Suppression Performance Benchmark

In our view the N.F.P.A. 1710 initial response performance benchmark of four firefighters arriving on scene within a four minute travel time to 90% of the incidents within the defined urban area of the Town of LaSalle remains the most applicable performance benchmark for assessing the L.F.S. initial response capabilities. This is consistent with the 2008 Fire Master Plan analysis. **Table 30** identifies the proposed initial response performance benchmark identified in N.F.P.A. 1710:

Table 30: Proposed Initial Response Performance Benchmark

Fire Suppression Response Type	Proposed Fire Suppression Performance Benchmark
Initial Response	Four firefighters arriving on scene within a four minute travel time to 90% of fire suppression related incidents within the defined urban area of the Town.

Council Recommendation #5: That the proposed fire suppression performance benchmark for initial response within the defined urban area included within the proposed Fire Protection Services Master Plan be utilized to monitor and report to Council and the community.

8.7.2 Proposed Depth of Response Fire Suppression Performance Benchmark

The 2008 Fire Master Plan applied *P.F.S.G 04-08-12 Staffing – Single Family Dwellings* that referenced a staffing of ten firefighters in ten minutes to 90% of calls to assess depth of response. This P.F.S.G. was rescinded by the O.F.M.E.M. on November 10th 2010.

In our view the N.F.P.A. 1720 standard that utilizes population density to inform the recommended staffing and response time performance benchmarks is applicable to the Town of LaSalle. Based on our analysis of the 2016 Census data for the Town of LaSalle (Census Subdivision) the current population density of the Town is approximately 744 people per square mile.

This indicates that the Suburban Area Demand Zone performance benchmark of ten firefighters arriving on scene within ten minutes of combined turnout time plus travel time to 80% of the incidents within the Town of LaSalle is the most applicable performance benchmark for assessing the L.F.S. depth of response capabilities. **Table 31** identifies the proposed depth of response performance benchmark identified in N.F.P.A. 1720:

Table 31: Proposed Depth of Response Performance Benchmark

Fire Suppression Response Type	Proposed Fire Suppression Performance Benchmark
Depth of Response	Ten firefighters arriving on scene within a ten minute turnout time + travel time to 80% of fire suppression related incidents within the geographically area of the Town.

Council Recommendation #6: That the proposed fire suppression performance benchmark for depth of response within the Town of LaSalle identified within the proposed Fire Protection Services Master Plan be utilized to monitor and report to Council and the community.

The following sections detail our analysis of the existing emergency response deployment capabilities of the L.F.S. The analysis was carried out using Esri Network Analyst, a Geographical Information System (G.I.S.) tool developed specifically for the purpose of assessing networks, such as roads. Various modelling scenarios were developed to assess the L.F.S. existing response coverage, including initial response and depth of response capabilities by measuring against the proposed fire suppression performance benchmarks.

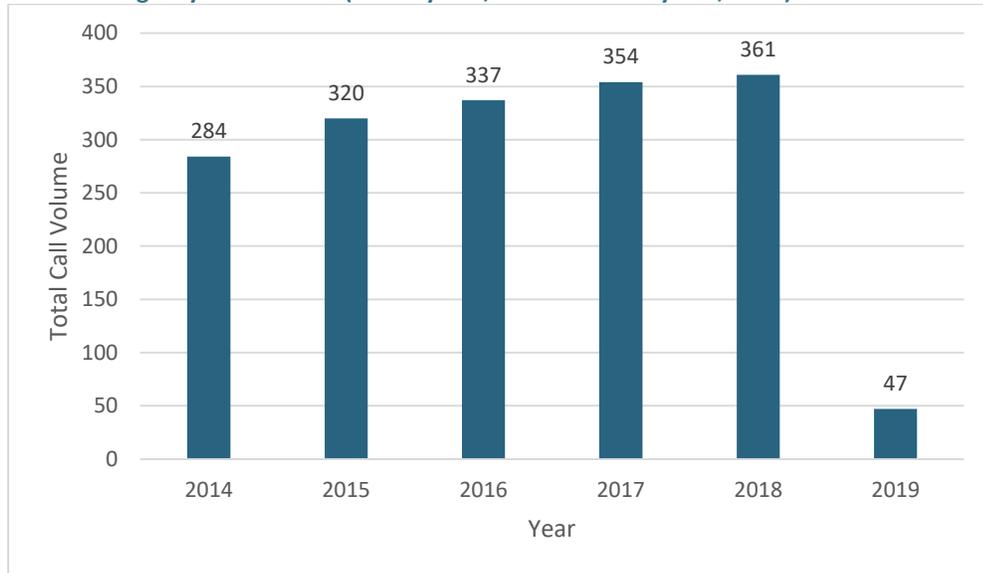
8.8 Historic Emergency Response Performance (Fire Suppression)

The results of the analysis of emergency response statistics and time assessment (response capabilities) of the LaSalle Fire Service are presented within the following sections. This analysis is based on emergency call data collected by the department for the period from January 31st, 2014 to January 31st, 2019.

8.8.1 Annual Emergency Call Volume

The annual call volume provides a high level understanding of the probability of incidents occurring within the Town. A summary of the total number of emergency calls within the Town for the period from January 31st, 2014 to January 31st, 2019 is shown in **Figure 11**. Although the 2014 and 2019 emergency call data represent partial years there is a visible trend of increasing call volume over this period.

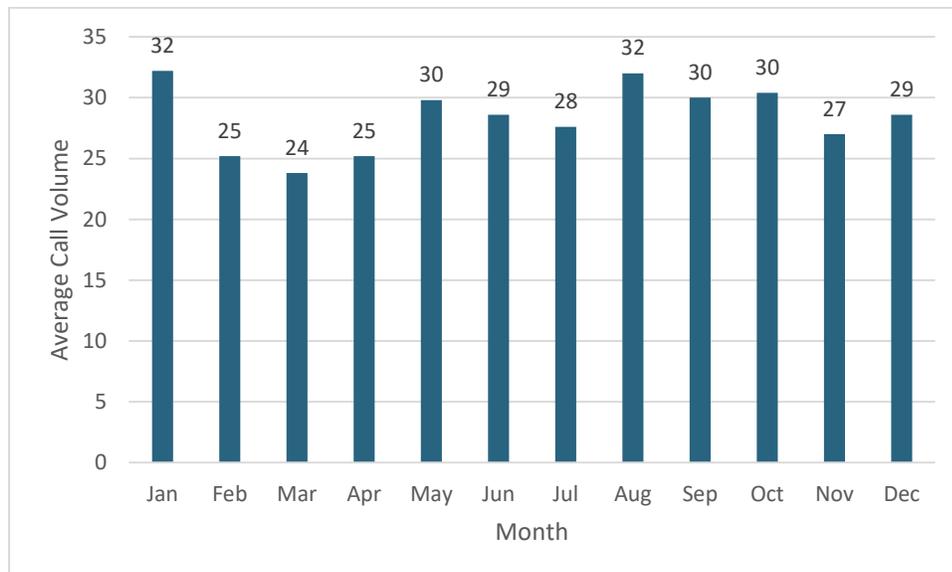
Figure 11: Annual Emergency Call Volume (January 31st, 2014 to January 31st, 2019)



8.8.2 Monthly Emergency Call Volume

Our analysis of the monthly emergency call data for the period from January 31st, 2014 to January 31st, 2019 is shown in **Figure 12**. This analysis indicates that January and August have historically had the highest volume of emergency calls. In our experience this analysis illustrates how the emergency call volume can shift seasonally. There is a slightly higher average of emergency calls during the summer and early fall when people are most active outdoors, and a higher average in December when the use of alternative heating devices such as wood stoves and fireplaces are used.

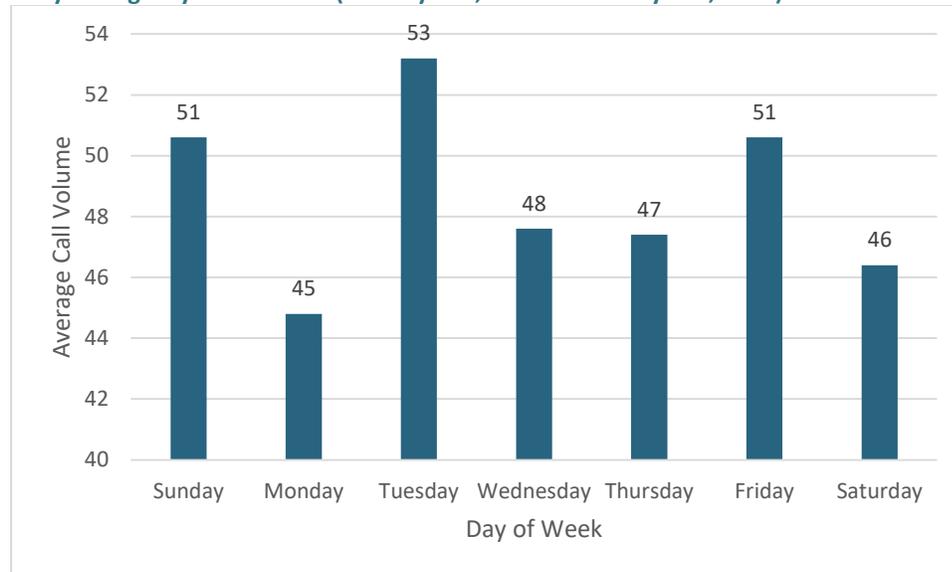
Figure 12: Monthly Emergency Call Volume (January 31st, 2014 to January 31st, 2019)



8.8.3 Weekly Emergency Call Volume

Our analysis of the weekly emergency call data for the period from January 31st, 2014 to January 31st, 2019 is shown in **Figure 13**. This analysis indicates that there is only a small variance in the number of emergency response calls based on the day of the week. The number of emergency response calls range from a low of 45 on Mondays to a high of 53 on Tuesdays with an average of just under 49 emergency calls per day of the week.

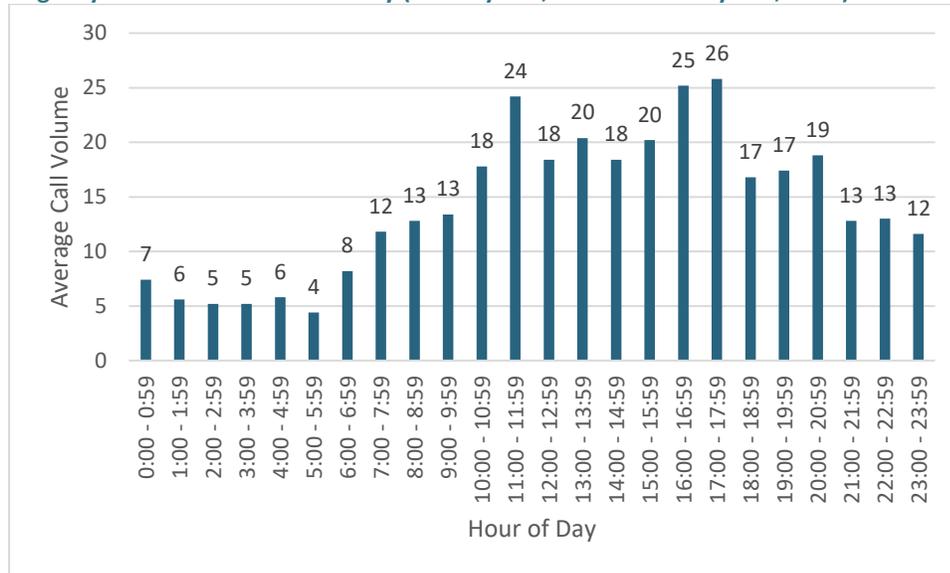
Figure 13: Weekly Emergency Call Volume (January 31st, 2014 to January 31st, 2019)



8.8.4 Emergency Call Volume – Time of Day

Our analysis of the time of day emergency call data for the period from January 31st, 2014 to January 31st, 2019 is shown in **Figure 14**. This analysis indicates that the highest volume of emergency calls historically occurs between the hours of 4pm and 6pm during a typical traffic rush hour (motor vehicle accidents), or during the typical evening dinner preparation (cooking). In our experience this analysis illustrates a typical distribution of emergency calls based on time of day. Historically the Town has a higher volume of calls while the community's residents and visitors are awake and active. There is a lower number of emergency calls from midnight to 6am when residents and visitors are typically asleep. It should be recognized that this is the time period when residents and visitors are most vulnerable to the life safety risk of a fire.

Figure 14: Emergency Call Volume – Time of Day (January 31st, 2014 to January 31st, 2019)



8.8.5 Emergency Call Types

The emergency call types the L.F.S. responded to during the period from January 31st, 2014 to January 31st, 2019 are shown in **Figure 15** based on the O.F.M.E.M. Emergency Response Type. For comparative purposes a similar analyses of the historical emergency call types across the province is illustrated in **Figure 16** based on the most current available O.F.M.E.M. response data for the period from January 1st 2013 to December 31st 2017.

Figure 15: L.F.S. Emergency Call Types January 31st, 2014 to January 31st, 2019)

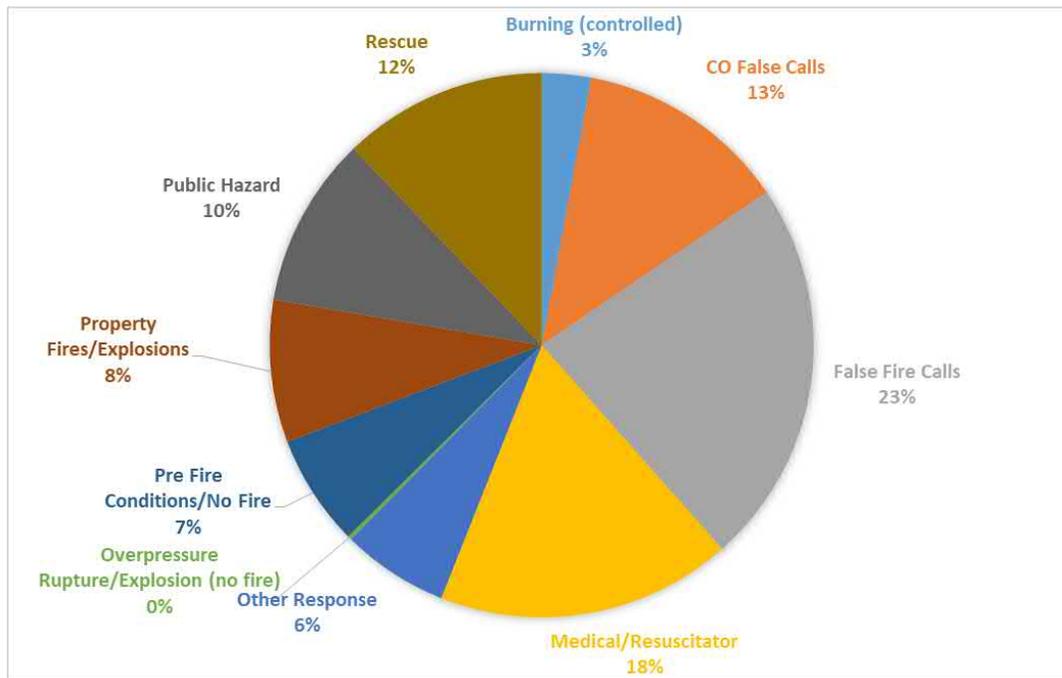
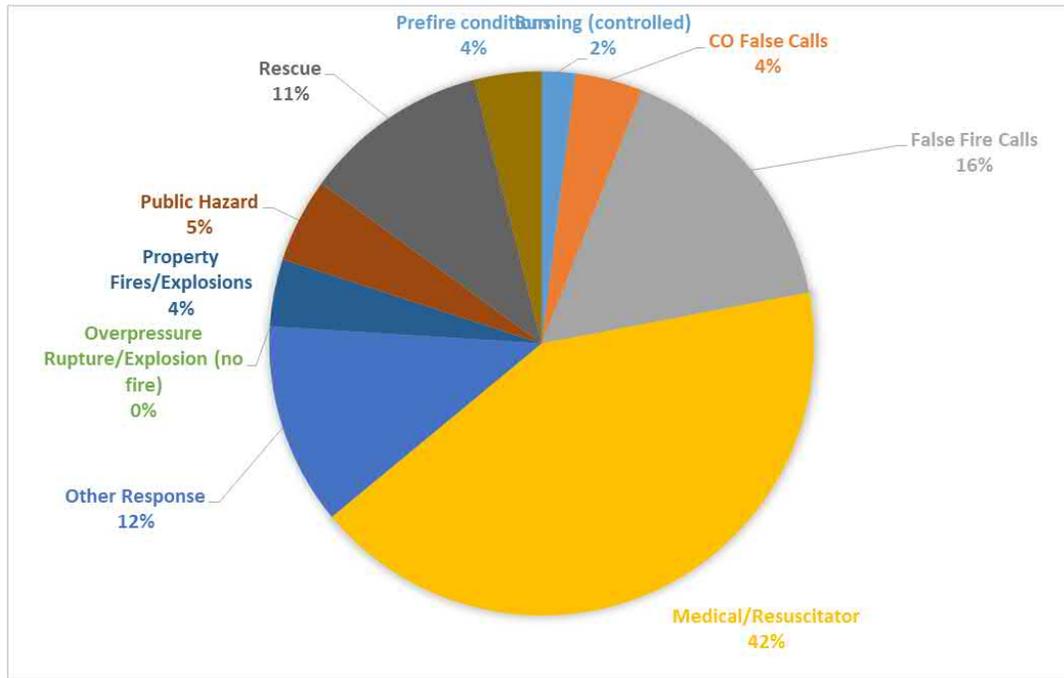


Figure 16: O.F.M.E.M. Emergency Call Types (January 1st, 2013 to December 31st, 2017)



This comparison identifies some unique differences between the historical types of calls experienced in other municipalities across the province with the historical experience of the Town of LaSalle. The Town of LaSalle has a higher volume of property fires/explosions 8% than that of other municipalities across the province of 4%. The Town also has a higher volume of false fire calls of 23% than that of the province of 16%. These factors highlight the importance of enhancing the L.F.S. current fire prevention and public education programs and services. It also highlights the importance of developing and sustaining an effective fire suppression deployment model.

The Town of LaSalle has a much lower volume of medical/resuscitator calls of 18% than that of the province of 42%. In part that can be associated with the types of medical calls the L.F.S. responds to as defined by the current Tiered Response Agreement discussed in **Section 5.6.4**.

8.9 Applicable Community Risk Assessment - Key Risks & Key Findings

The C.R.A. identifies both “Key Risks” and “Key Findings” that should be considered as part of assessing emergency response (fire suppression) deployment coverage in determining the local needs and circumstances, as well as the level of service provided by the municipality. **Table 32** illustrates the identified “Key Risks” applicable to the analysis of the existing fire suppression services provided by the L.F.S.

Table 32: C.R.A. Key Risks

C.R.A. Key Risks Analysis Outcomes	THIRD LINE OF DEFENCE
	For consideration within the proposed Emergency Response
When excluding parcels classified as open space or vacant, 98% of the Town’s existing property stock is comprised of Group C – Residential Occupancies.	•
33% of the Town’s residential building stock was built prior to 1981 and the introduction of the Ontario Fire Code.	•
The Town has six registered vulnerable occupancies.	•
Structural fires are the most frequent fire type and they occurred at a higher rate than the Province between 2013 and 2017 (73% vs. 66%), for a total of 51 fires over the five year period.	•
For the period 2013 to 2017, structure fires occurring in Group C – Residential occupancies account for 76% of total structure fires within the Town.	•
For the period 2013 to 2017, structure fires occurring in Group F – Industrial occupancies account for 6% of total structure fires within the Town.	•
For the period 2013 to 2017, structure fires occurring in Group A – Assembly occupancies and Group E - Mercantile occupancies each account for 4% of total structure fires within the Town.	•
For the period 2013 to 2017, all reported fire related civilian injuries (2) and fatalities (1) occurred in Group C – residential occupancies.	•
Of the fires occurring in the Town from 2013 to 2017, 12% of the fires were intentional, compared to 8% in the Province.	•
During the period from 2013-2017, there were no smoke alarms present or activated in the floor or suite of origin in 18% of fire incidents the L.F.S. responded to in Group C – Residential occupancies and in 26% of fire incidents smoke alarms were present but did not operate.	•
Vehicle collisions account for 83% of the rescue calls over a five year period or an average of 50 calls annually.	•
Of the technical rescue types, vehicle extrication is the most common type of rescue with sixteen calls over a five year period or an average of 3 calls annually.	•
Of the technical rescue types, water-related rescues (water rescue and water-ice rescue) are the second most common type with a total of thirteen rescue calls over a five year period or an average of 3 calls annually.	•

Table 33 illustrates the identified “Key Findings” to the analysis of the existing fire suppression services provided by the L.F.S.

Table 33: C.R.A. Key Findings

CRA Key Findings Analysis Outcomes	THIRD LINE OF DEFENCE
	For consideration within the proposed Emergency Response
The geographic size of the Town with its makeup of an urban area and a rural area results in extended emergency response time to some areas of the Town.	•
The road network contributes to emergency calls including for motor vehicle collision, vehicle fires, and automobile extrication.	•
There are a number of at-grade crossings within Town boundaries that may impact the Fire Service’s emergency response travel times.	•
Fighting Island, which has naturalized areas and structures, is a unique destination within the jurisdiction of L.F.S.	•
Based on a spatial analysis of the Town’s floodplain mapping, areas close to the Detroit River, Turkey Creek and the Canard River have the potential for flooding.	•
Many of LaSalle’s residential neighbourhoods are located adjacent to wildland areas.	•
13% of the Town’s property stock consists of other types of attached dwellings including semi-detached houses, row housing, apartments or flats in a duplex and apartments in a building with fewer than five storeys.	•
Newly constructed subdivision units have reduced side yards, indicating a higher exposure risk.	•
There are several buildings within the Town that are four to six storeys.	•
There a number of buildings that present an increased fire risk due to their large floor areas.	•
There are properties within the Town that have fuel-load related concerns, primarily linked to industries or marinas.	•
Additional potential high fire life-safety risk considerations in the Town include eight schools and four licenced day care centres.	•
There are shifts in commuter populations throughout the day; this population shift may impact the demand for fire protection services.	•
The hazards that are most likely to occur within the Town include fog, lightning, severe thunderstorms and road transportation incidents.	•
The top four hazards in the Town as identified by the 2017 H.I.R.A. includes Tornado, Terrorism, Epidemic, and Transportation Incident.	•
Analysis of the existing Public Safety Response Profile indicates the availability of an integrated emergency response, including police, fire, and ambulance resources.	•

CRA Key Findings Analysis Outcomes	THIRD LINE OF DEFENCE
	For consideration within the proposed Emergency Response
The Town has key facilities/employers that contribute to the economic well-being of the municipality including Centreline, Zehrs, and Windsor Crossing Outlet Mall.	•
During the period from 2013-2017, there were smoke alarms present and operating in 36% of fire incidents the L.F.S. responded to in comparison to 45% of fire incidents in Group C residential occupancies within the province.	•
Overall, call volumes have increased by 21% from 2014 to 2018 with variability in volume over the five year period.	•
Analysis of call volume by day of week for the period of January 31st 2014 to January 31st 2019 indicates that the highest number of calls occur on Tuesdays.	•
Analysis of call volume by time of day for the period of January 31st 2014 to January 31st 2019 indicates that the highest call volume occurs between the hours of 4pm and 6pm.	•
Analysis of call volume by time of day for the period of 2013-2017 indicates that calls decline at 9pm and remain at the lowest levels until approximately 6am.	•
Based on O.F.M.E.M. Response Types, the L.F.S. responds to 24% less medical/resuscitator calls than the Province, which is offset by 7% more false fire calls, 9% more CO false calls, and 4% more property fires/explosions calls.	•
There were more property fires/explosions in May during January 31st 2014 to January 31st 2019 when compared to other months of the year.	•
Analysis of average call volume by day of week for the period of January 31st 2014 to January 31st 2019 indicates that the highest proportion of calls occurs on Saturdays.	•
Analysis of the property fire/explosion occurrences for the years January 31st 2014 to January 31st 2019 indicate the highest volume of calls for this response type is 4:00pm and 6:00pm.	•

8.10 Existing Fire Suppression Deployment Capabilities

This section presents the assessment of the existing fire suppression deployment capabilities of the L.F.S. based on an in-depth analysis of its historical deployment capabilities for the period from January 31st 2014 to January 31st 2019.

This includes G.I.S. modelling analysis of the existing initial response and depth of response capabilities of the L.F.S. in comparison to the proposed fire suppression performance objectives identified in **Table 34.**

Table 34: Proposed Fire Suppression Performance Benchmarks

Response Type	Proposed Fire Suppression Performance Benchmarks
Initial Response	Four firefighters arriving on scene within a four minute travel time to 90% of fire suppression related incidents within the defined urban area of the Town.
Depth of Response	Ten firefighters arriving on scene within a ten minute turnout time + travel time to 80% of fire suppression related incidents within the geographically area of the Town.

8.10.1 Modelling Methodology

Esri’s Network Analyst tool was used to create a model of the Town’s current road network and simulate the fire suppression response coverage of the L.F.S. to navigate the Town’s road network.

G.I.S. layers were provided by the Town for the existing road network. Relevant base road information, such as road length and road classification, was extracted from the G.I.S. data. The historic call locations for all “emergency response” incidents such as structure fires, vehicle fires and medical calls as designated by the applicable O.F.M.E.M. response codes²⁷ for the period from January 31st 2014 to January 31st 2019 were utilized to calibrate the model. Any calls with a five second or less, or thirty minute or more dispatch time, turn out time or travel time were removed from the data set.

These types of calls represent incidents where the department operating guidelines require the use of all emergency lights and warning systems therefore representing the most consistent and expedited type of responses. These emergency calls were then added to the network and coded based on travel time to reach the call. An iterative process was applied to assess the speeds throughout the road network to calibrate the model to reflect historic travel times and emergency response performance of the first responding apparatus for all calls with an emergency response code.

Table 35 identifies that the current posted speeds for the existing current road network reflect the actual historical response capabilities of the L.F.S. The G.I.S. calibrated model was then used to assess the applicable fire suppression performance benchmarks.

Table 35: Model Calibration

Posted Speed Limit (km/hr)	Modelled Speed (km/h)
40	40

²⁷ There are instances when the same O.F.M.E.M. Response Codes may be applied to incidents that are not “emergency response” calls. Our review indicates that there is an insufficient volume of these potential overlaps to substantially impact this analysis.

Posted Speed Limit (km/hr)	Modelled Speed (km/h)
50	50
60	60
70	70
80	80
100	100

8.11 Existing Initial Response Capabilities

The calibrated road network, combined with the fire station location, was used to build a graphical “service area polygon” around the fire station. This polygon represents the emergency response coverage that can be provided in the specified amount of time (i.e. initial response coverage) of the **initial arriving apparatus only**. The current L.F.S. fire suppression deployment model includes the paid-on-call volunteer firefighters responding directly to emergency incidents in their personal vehicles, as such this required the analysis of how many firefighters responded to be done independently of the G.I.S. modelling.

The existing initial response capabilities of the L.F.S. were assessed in comparison to the proposed Initial Response Fire Suppression Performance Benchmark of **Four firefighters arriving on scene within a four minute travel time to 90% of fire suppression incidents within the defined urban area of the Town of LaSalle.**

8.11.1 Existing Initial Apparatus Response Capabilities

The L.F.S. currently maintains a minimum of one full-time firefighter on duty at all times. During normal business hours Monday through Friday the on duty full-time firefighter may be supported by other full-time staff including the Fire Chief, Deputy Fire Chief, Captain/Training Officer and the Captain Prevention subject to their availability to provide the initial response. At all times the initial response is also supported by the paid-on-call volunteer firefighters, and if necessary a call back of the off duty full-time firefighters.

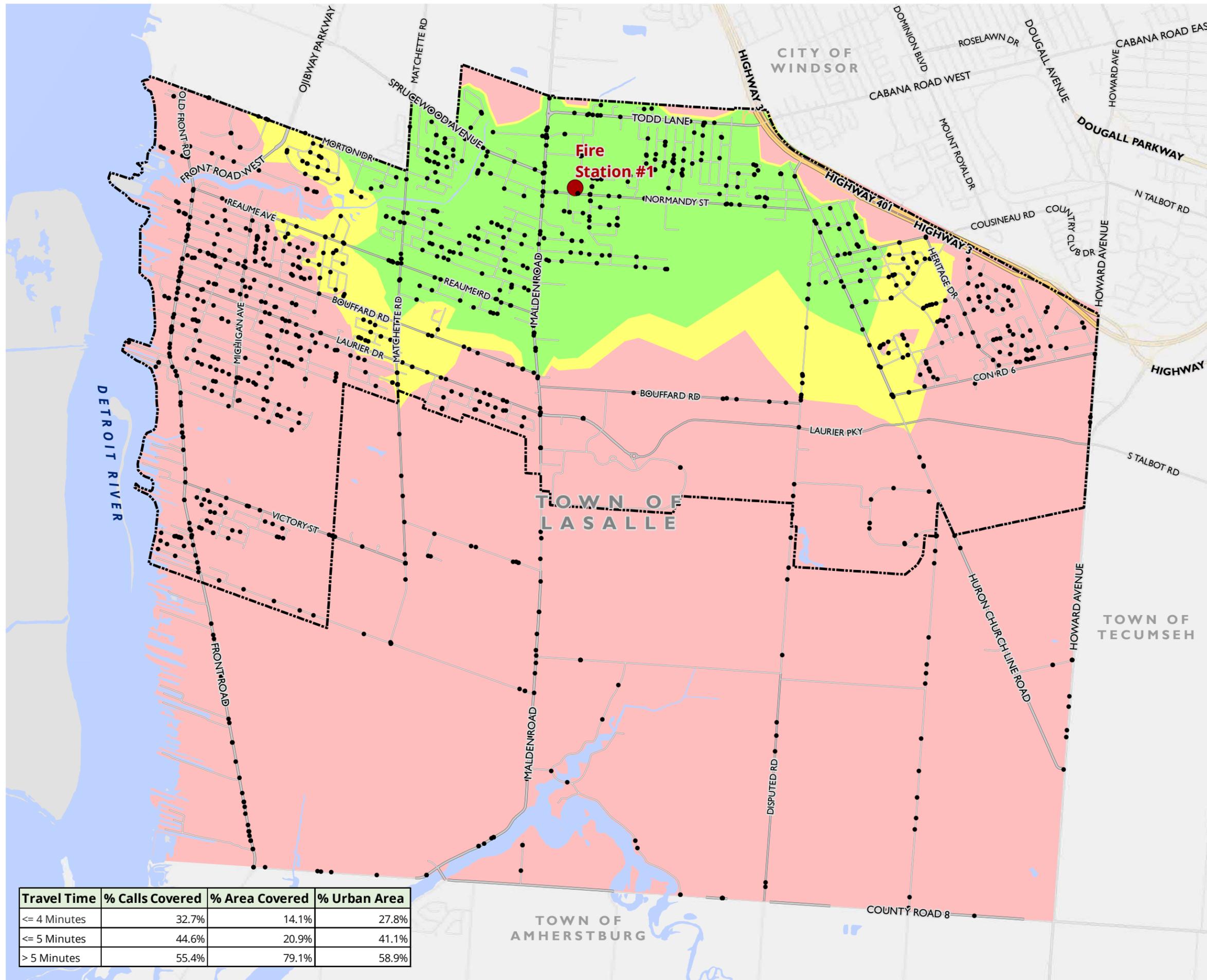
Figure 17 illustrates the locations of the historical emergency calls for the period from January 31st 2014 to January 31st 2019. This model indicates that within a four minute travel time, the initial responding apparatus is able to provide coverage to 14.1% of the urban area, and 32.7% of the historical emergency calls.



TOWN OF LASALLE

EXISTING INITIAL RESPONSE CAPABILITIES MODEL
FIGURE 17

- Emergency Call 2014-2019
- Fire Station
- ▭ Urban Boundary
- ≤ 4 Minutes Travel Time at Network Speed
- ≤ 5 Minutes Travel Time at Network Speed
- > 5 Minutes Travel Time at Network Speed



Travel Time	% Calls Covered	% Area Covered	% Urban Area
≤ 4 Minutes	32.7%	14.1%	27.8%
≤ 5 Minutes	44.6%	20.9%	41.1%
> 5 Minutes	55.4%	79.1%	58.9%



MAP DRAWING INFORMATION:
DATA PROVIDED BY MNR, TOWN OF LASALLE

MAP CREATED BY: GM
MAP CHECKED BY: SC
MAP PROJECTION: NAD 1983 UTM Zone 17N



PROJECT: 188324
STATUS: DRAFT
DATE: 2019-06-11

8.11.2 Existing Initial Firefighter Response Capabilities

As indicated previously the current practice of the L.F.S. is to allow the paid-on-call volunteer firefighters to respond directly to emergency incidents utilizing their personal vehicles. The total number of initial responding firefighters is recorded within each of the historical emergency response reports. For the same period from January 31st 2014 to January 31st 2019 this data indicates the **average number of firefighters responding with the initial responding apparatus was 2.6 firefighters**. This includes the on duty full-time firefighter, other full-time staff and the paid-on-call volunteer firefighters. In comparison to the proposed fire suppression benchmark for initial response of deploying a minimum of four firefighters on the initial apparatus within a four minute travel time to 90% of the emergency incidents this analysis indicates that the **L.F.S. is currently able to deploy one firefighter on the initial responding apparatus**.

8.11.3 Paid-on-Call Volunteer Response Pilot Project – Initial Response

To further inform the existing initial response and depth of response capabilities of the L.F.S. the department conducted a pilot project from October 15th 2018 to January 31st 2019. This pilot project included all paid-on-call volunteer firefighters wearing a G.P.S. tag on their protective clothing that sent a message to a receiver located on the initial responding apparatus. The objective of this pilot project was to record the actual response time for each paid-on-call volunteer firefighter that responded to the incident. During this period the L.F.S. responded to 117 emergency incidents.

The findings of the paid-on-call pilot project indicate that the average response time (turnout time + travel time) to assemble **four firefighters on scene was 7 minutes and 48 seconds**. In comparison the 90th percentile was **10 minutes and 50 seconds**.

8.11.4 Summary of Existing Initial Response Capabilities

In summary, subject to the availability of other full-time staff Monday through Friday during normal business hours the L.F.S. initial responding apparatus staffing may vary from the minimum of one full-time firefighter up to the recommended number of four firefighters. Our analysis of all “emergency” incidents for the period from January 31st 2014 to January 31st 2019 indicates that the average staffing of the initial responding apparatus at all times is 2.6 firefighters, and the 90th percentile staffing is one firefighter. The response time (turnout time +travel time) to assemble the recommended initial response of four firefighters averaged **7 minutes and 48 seconds** and in comparison to the proposed performance benchmark of the 90th percentile was **10 minutes and 50 seconds**.

This analysis highlights the current challenge of the L.F.S. to deploy a sufficient number of firefighters to achieve a recognized industry best practice of deploying four firefighters within a four minute travel to 90% of the emergency calls within the defined urban area.

8.12 Existing Depth of Response Capabilities

The existing depth of response capabilities of the L.F.S. was assessed in comparison to the proposed Depth of Response Fire Suppression Performance Benchmark of ***Ten firefighters arriving on scene within a combined turnout time + travel time of ten minutes to 80% of fire suppression incidents within the Town of LaSalle.***

8.12.1 Existing Initial Apparatus Depth of Response Capabilities

Our analysis indicates that for this period of time (January 31st 2014 to January 31st 2019), the 80th percentile turnout time of the initial responding apparatus was 88 seconds (1.5 minutes). This is the first responding apparatus staffed by the on duty full-time firefighter. This leaves a travel time for this performance benchmark of 513 seconds (8.5 minutes) from the fire station. **Figure 18** illustrates the locations of the historical emergency calls for the period from January 31st 2014 to January 31st 2019 and indicates that the initial responding apparatus ***is currently able to cover 59.1% of the Town's geographical area, and 86.6% of the historical emergency incidents*** within the Town within 8.5 minutes of travel time.

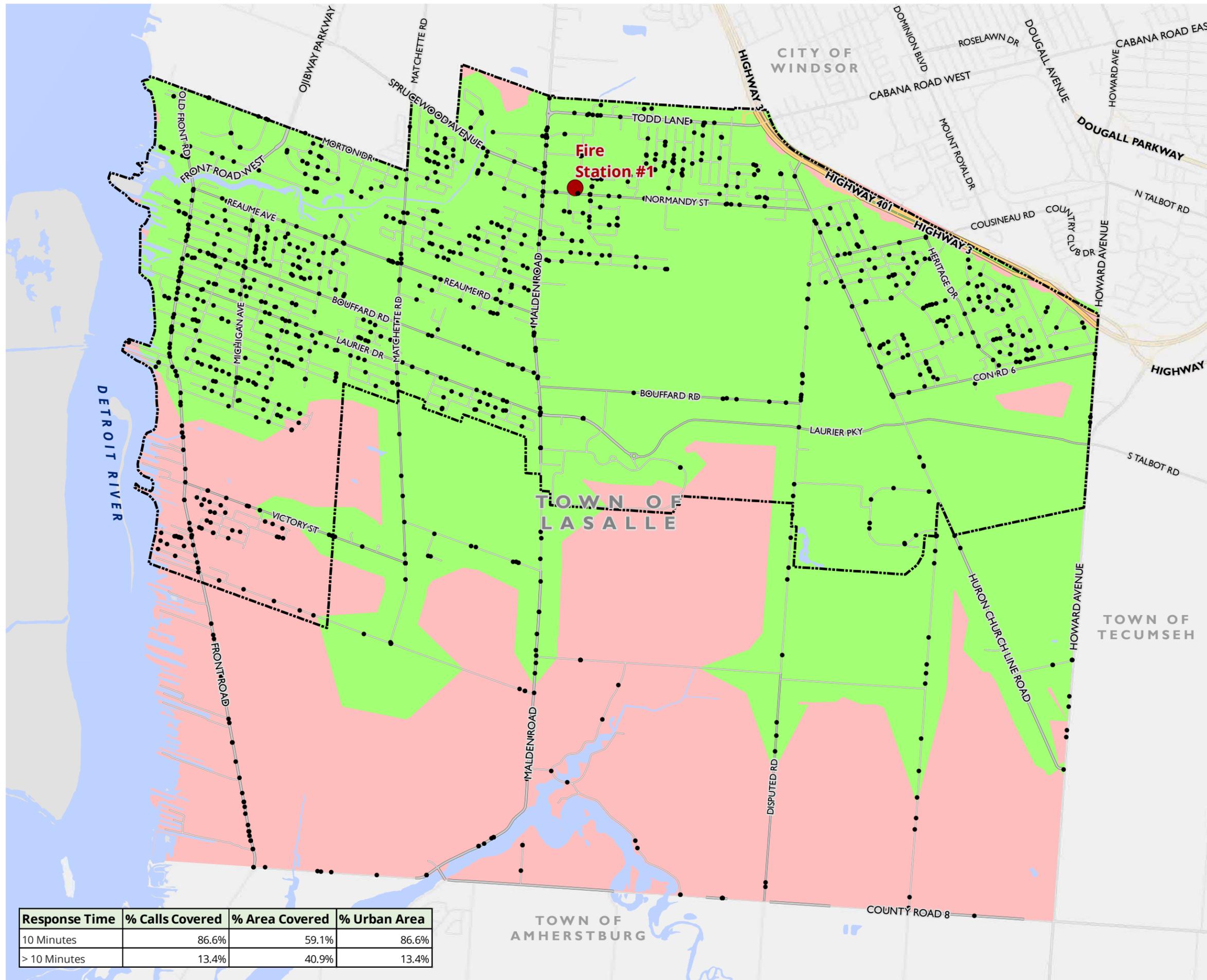


TOWN OF LASALLE

EXISTING DEPTH OF RESPONSE CAPABILITIES MODEL

Figure 18

- Emergency Call 2014-2019
- Fire Station
- ▭ Urban Boundary
- 10 Minutes Response Time at Network Speed
- > 10 Minutes Response Time at Network Speed



Response Time	% Calls Covered	% Area Covered	% Urban Area
10 Minutes	86.6%	59.1%	86.6%
> 10 Minutes	13.4%	40.9%	13.4%



MAP DRAWING INFORMATION:
DATA PROVIDED BY MNR, TOWN OF LASALLE

MAP CREATED BY: GM
MAP CHECKED BY: SC
MAP PROJECTION: NAD 1983 UTM Zone 17N



PROJECT: 188324
STATUS: DRAFT
DATE: 2019-06-11

8.12.2 Existing Depth of Response Firefighter Capabilities

The emergency response incident reports for the period from January 31st 2014 to January 31st 2019 indicate that the **average number of firefighters responding as the initial depth of response was 7.7 firefighters**. This also includes the on duty full-time firefighter, other full-time staff and the paid-on-call volunteer firefighters. In comparison to the proposed fire suppression benchmark for depth of response of deploying a minimum of ten firefighters within a ten minute turnout time + travel time to 80% of the emergency incidents this analysis indicates that the L.F.S. is currently **able to deploy three firefighters within ten minutes 80% of the time**.

8.12.3 Paid-on-Call Volunteer Response Pilot Project – Depth of Response

The findings of the paid-on-call volunteer firefighter pilot project depth of response capabilities are illustrated in **Table 36**. This analysis indicates that the historical average time to assemble ten firefighters on scene is thirteen minutes and thirty seven seconds and the 80th percentile time is seventeen minutes and thirty nine seconds.

Table 36: Paid-on-Call Pilot Project Depth of Response

Number of Firefighters Responding	Average Time to Assemble 10 Firefighters on Scene	80th Percentile Time to Assemble 10 Firefighters On Scene
4	07:48	09:45
6	09:23	12:02
8	10:53	13:49
10	13:37	17:39

8.12.4 Summary of Existing Depth of Response Capabilities

As presented within the analysis of the L.F.S. existing initial response capabilities the department is able to deploy the recommended number of firefighters to achieve the proposed fire suppression deployment performance benchmarks for both the initial response and depth of response proposed performance. However, based on the current minimum staffing of one full-time firefighter on duty at all times, the availability of other full-time staff during normal business hours and the availability of the paid-on-call volunteer firefighters the L.F.S. is **currently unable to achieve the recommended deployment within the identified response times**.

8.13 Previous Fire Station Needs Analysis

The Town of LaSalle has completed a significant amount of research and analysis into the need for a second fire station. This includes the following:

- 2008 Fire Master Plan Report;
- Fire Master Plan 2015 Interim Review;
- 2017 Fire Master Plan Recommendation - Second Fire Station (Report CAO-16-17); and

- *2018 Fire Master Plan Implementation - Second Station Implementation & Costing Models (Report FIRE 18-06).*

The most recent 2018 Fire Master Plan Implementation Report (FIRE 18-06) resulted in Council's direction to complete this Fire Protection Services Master Planning process that includes further analysis into the need and location for a second fire station.

It is important to note that since completion of the 2008 Fire Master Plan the Town of LaSalle relocated Fire Station #1 (Headquarters) from its previous location at 5950 Malden Road to its current location at 1900 Normandy Street. This relocation did not result in a significant change in location of the Town's only fire station in regards to its delivery of fire suppression services. However, it did result in a significant financial investment to renovate the new Fire Station #1 (Headquarters) to accommodate the workspace improvement needs that were identified in the 2008 Fire Master Plan.

Of further importance to this Fire Protection Services Master Planning process is the linkage of a proposed staffing model to a proposed second fire station location. The **2017 Fire Master Plan Recommendation - Second Fire Station (Report CAO-16-17)** contained a strong focus on the proximity of the current paid-on-call volunteer firefighters to respond to the station from their primary residence. This factor is an important element of a "**volunteer firefighter**" response model that relies on the ability of a paid-on-call volunteer firefighter to respond to the fire station first, and then respond to the emergency incident with a fire apparatus. In our experience it is equally important to consider other factors such as the availability of the paid-on-call volunteer firefighters to respond at any given time of the day, where the paid-on-call volunteer firefighters may be responding from, this may include their primary residence, place of employment or other area within the community, and the travel times from the proposed fire station representing initial response coverage of the fire department.

The analysis within this F.P.S.M.P. highlights that the current complement of paid-on-call volunteer firefighters primarily respond directly to emergency incidents in their personal vehicles. This practice is followed regardless of where the paid-on-call volunteers may live, work or may be at the time of an emergency call. In our view this practice is inconsistent with current industry best practices and should be eliminated regardless of current or future fire station locations. The analysis of the current paid-on-call volunteer response capabilities also highlights the extended amount of time (turnout time) it takes to assemble the required initial response and depth of response resources at an emergency incident.

Within the Town of LaSalle the paid-on-call volunteer firefighters represent a core component of the L.F.S.' ability to provide fire suppression services. This F.P.S.M.P. includes recommendations designed specifically to support the sustainability of the paid-on-call volunteer model within the Town of LaSalle. However, it must be recognized that the utilization of paid-on-call volunteer firefighters within the Town of LaSalle needs to shift from its historical roots of being the primary providers of fire suppression services to a more realistic, and sustainable model of providing the depth of response capabilities for

delivering fire suppression services. In our view this is the most significant factor affecting the need and location of a second fire station.

The **2017 Fire Master Plan Recommendation - Second Fire Station (Report CAO-16-17)** included two options for Council's consideration related to the need for a second fire station, these included:

- *The acquisition of suitable property at the northwest corner of Laurier Drive and Matchette Road for the construction of a satellite fire station and alternate Emergency Operations Centre (E.O.C.) and further that Council adopt and approve the incremental staffing strategy as recommended in this report, subject to annual budget approval, to ultimately achieve the master plan recommendations consistent with recognized response standards, of two on-duty firefighters at each station.*
- *Preparation of site plans and preliminary drawings for the construction of a satellite fire station and alternate E.O.C. at the former Centennial Arena site on Front Road, contingent on a minimal full-time staffing model and an increase of nine full-time firefighters to coincide with implementation of the station, in order to meet intended response improvements.*

Each of these options places emphasis on the need to increase the minimum number of full-time firefighters on duty at all times within the Town to four from the current operating model that includes a minimum of one full-time firefighter on duty at all times. In our view recommending the transition to the use of full-time firefighters from the current, and proposed second fire station location further acknowledges the importance of transitioning to the use of full-time firefighters to staff the initial responding apparatus, and the utilization of paid-on-call volunteer firefighters to staff secondary and additional fire suppression apparatus. In our view the result is less emphasis on the need to consider the proximity of a proposed second fire station location to the location of the primary residence of the current paid-on-call volunteer firefighters.

Based on our research, experience and analysis contained within this F.P.S.M.P. the Town of LaSalle should be prioritizing its efforts to enhance its current fire suppression capabilities by prioritizing its transition to the recommended minimum staffing of four full-time firefighters on duty at all times to fully staff the initial responding apparatus from the current Fire Station #1. This should coincide with prioritization of recommendations to sustain the use of paid-on-call volunteer firefighters to staff secondary and additional fire suppression apparatus.

In our view, the need to consider a second fire station should place significant emphasis on the projected 10 year, and 20 year community planning horizons, and projected land use such as increased residential development.

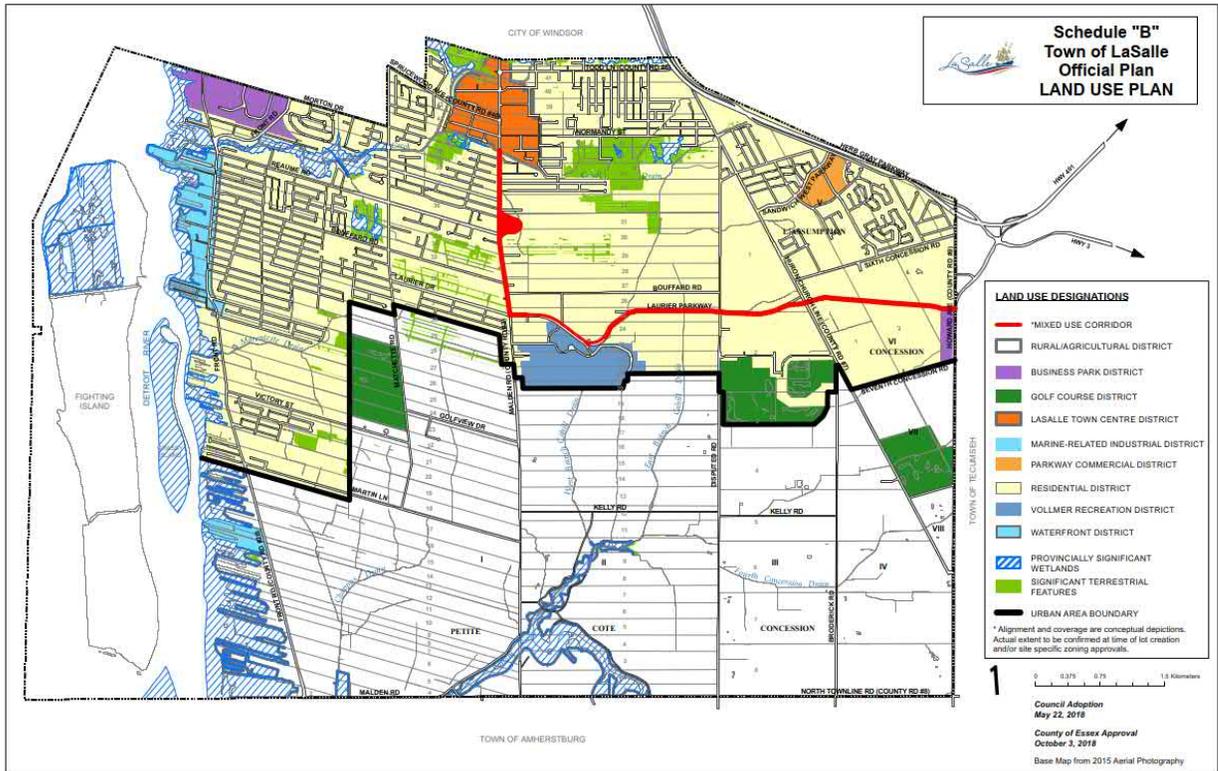
8.14 Town of LaSalle Official Plan (2018)

To support the analysis of the current and future fire suppression services provided by the L.F.S. as part of this F.M.P, Dillon worked with the Town to establish “assumed future growth” which is driven in part by the Town’s Official Plan (2018). This section presents the Assumed Future Growth but first discussed the overall structure and land uses in the Town.

8.14.1.1 Land Use

The Town of LaSalle’s Official Plan (2018) (O.P.) establishes a community structure for growth which includes a defined Urban Area, corridors, and the Rural/Agricultural Area. The O.P. (Section 2.2.) states that the Urban Area will be the focus for growth over the next 20 years. To direct and manage this growth to meet the needs of the community, the OP identifies a number of land use designations that are found within the Urban Area (see **Figure 19**). Some notable designations include Residential District, Waterfront District, LaSalle Town Centre District, Mixed Use Corridor, and the Business Park District.

Figure 19: Town of LaSalle Land Use Plan (Official Plan Schedule B)



8.14.1.2 Future Development Considerations

To qualitatively inform the fire suppression emergency response coverage analysis, Town staff identified future development areas based on two time horizons: one to nine years; and ten years and over. Each of these future development areas have corresponding land use designations. An overview of the applicable designations and their permitted uses is presented in **Table 37**. This includes identification of a principal use of land for each of the designations in order to simplify the consideration of future development as part of the station location assessment. The applicable principal uses identified through this exercise are: residential, employment, and mixed use.

When considering future development areas, it is important to note that:

- The future scenario being assessed is based on a long-term horizon of development for the Town (20 years).
- The identified development areas are based on the best available information and the current known development potential. The actual timing and location of future development will depend on a range of factors including servicing capacity, market demand, and developer interest. This could result in a longer horizon than the identified 20 years.
- The permitted uses in the future development areas are general. Implementation of the Official Plan will be carried out through tools such as a zoning by-law which will provide more detailed permissions around land uses within the identified future development areas.

The future development areas identified by the Town are shown in **Figure 20**. While the Mixed Use Corridor is not identified as a discrete future development area, it is shown in the figure due to its role as a corridor as part of the urban structure of the Town. The nature and timing of development along the Mixed Use Corridor is dependent on a number of factors; thus, a specific horizon year is not assigned to it.

Figure 20 also shows a planned future collector road network. Road network connectivity is critically important for accessing future (and existing) development to provide emergency response coverage. In order to assess future station location options, it was necessary to assume a future road network. (This is consistent with the approach in the 2008 Fire Master Plan where the Town identified a more detailed future road network for the purposes of assessing station location options.) The Official Plan Schedule D - Transportation Plan reflects the best available information regarding the planned collector road network. The future model assumes a full build-out of the planned road network reflecting a long-term horizon. The Town is currently undergoing a Transportation Master Plan which will provide further detail and direction on the timing of transportation infrastructure needs. The configuration and timing of the future road network will also be informed by how future development manifests.

It will be important for the Town to monitor the timing of development, including of the road network, as part of implementation of this F.P.S.M.P.

Table 37: Overview of Applicable Town of LaSalle Official Plan Land Use Designations

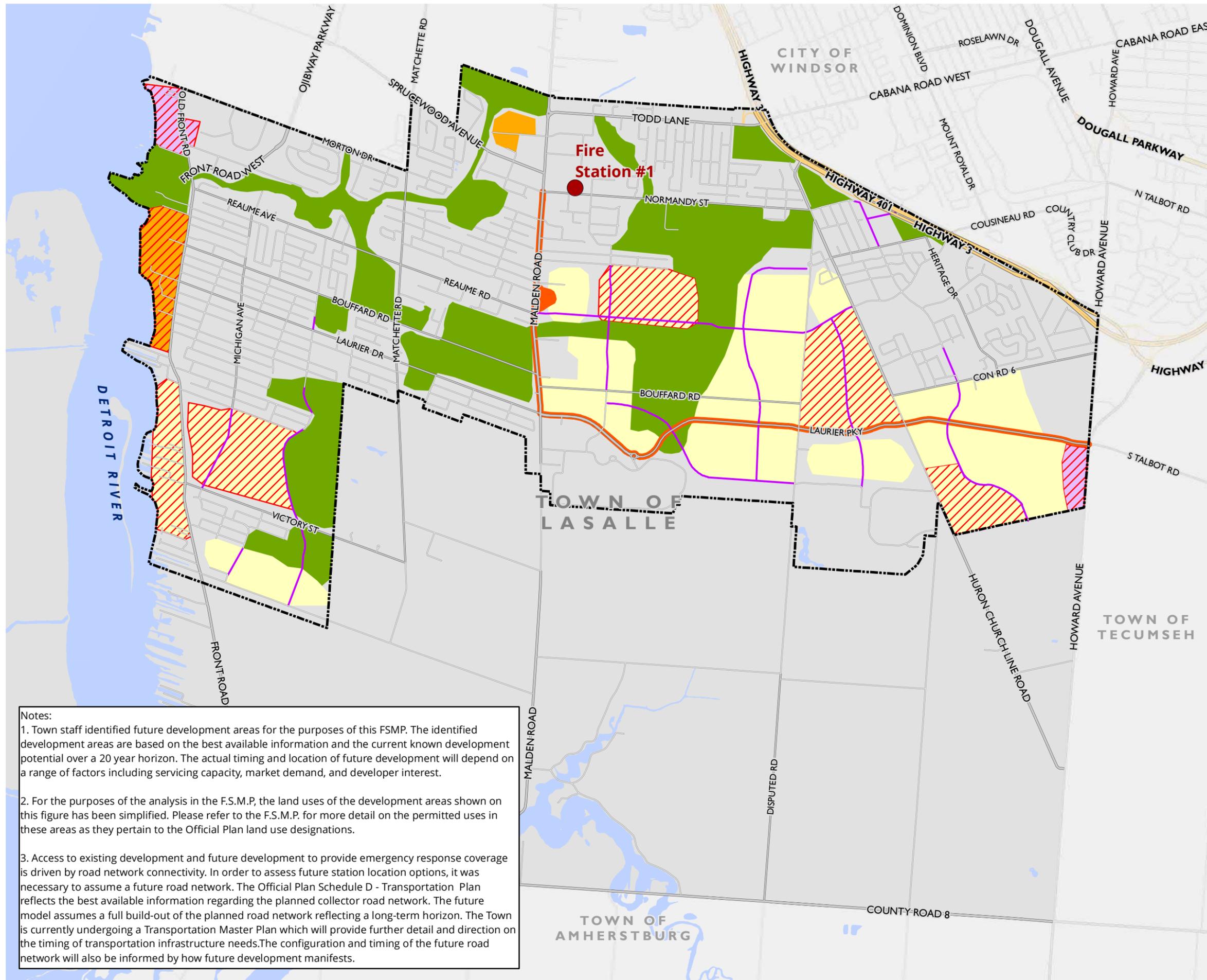
Designation	Description	Principal Use
Residential District	Permits for a full range of residential dwelling types including low-rise, mid-rise, and high-rise built forms, communal housing, and seniors housing. Also permits for community facilities, parks and open space, and public uses.	Residential
LaSalle Town Centre District	Permits for a mix of uses including mid-rise and high-rise residential uses which may include special needs or seniors housing. Also permits for retail, service commercial uses, cultural facilities, and public uses.	Mixed Use
Waterfront District	Permits for a mix of uses including townhouse and apartment-style residential uses which may include special needs or seniors housing. Also permits for marina-related land uses, institutional uses (including hospitals and health clinics), cultural facilities, and public uses.	Mixed Use
Business Park District	Permits for a range of employment uses including manufacturing, warehousing, and business and professional offices as well as limited retail, recreational facilities, and public uses.	Employment
Mixed Use Corridor	Serving as the connective spine of the Town, permits for a mix of uses including apartment style mid-rise and high-rise residential uses including communal housing, special needs housing, housing for seniors, and residential care facilities. Also permits for institutional uses, commercial uses, hotels, community facilities, and public uses.	Mixed Use



TOWN OF LASALLE

**ASSUMED FUTURE DEVELOPMENT
FIGURE 20**

- Fire Station
 - Urban Boundary
 - Planned Collector Road (3)
 - Mixed Use Corridor
 - Natural Land
- Future Development (1) (2)**
- 1-9 Years**
- Mixed Use
 - Residential
- 10 Years and Over**
- Employment
 - Mixed Use
 - Residential



Notes:

1. Town staff identified future development areas for the purposes of this FSMP. The identified development areas are based on the best available information and the current known development potential over a 20 year horizon. The actual timing and location of future development will depend on a range of factors including servicing capacity, market demand, and developer interest.
2. For the purposes of the analysis in the F.S.M.P, the land uses of the development areas shown on this figure has been simplified. Please refer to the F.S.M.P. for more detail on the permitted uses in these areas as they pertain to the Official Plan land use designations.
3. Access to existing development and future development to provide emergency response coverage is driven by road network connectivity. In order to assess future station location options, it was necessary to assume a future road network. The Official Plan Schedule D - Transportation Plan reflects the best available information regarding the planned collector road network. The future model assumes a full build-out of the planned road network reflecting a long-term horizon. The Town is currently undergoing a Transportation Master Plan which will provide further detail and direction on the timing of transportation infrastructure needs. The configuration and timing of the future road network will also be informed by how future development manifests.



MAP DRAWING INFORMATION:
DATA PROVIDED BY MNR, TOWN OF LASALLE

MAP CREATED BY: GM
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PROJECT: 188324
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DATE: 2019-06-27

8.15 Proposed Fire Station Location Model

The 2008 Fire Master Plan identified five options for future fire station locations. These included:

- *Sustain the existing fire station location (5950 Malden Road);*
- *Move the existing fire station to new growth area;*
- *Move the existing fire station to a centralized location;*
- *Move the existing station location and add a new fire station; and*
- *New fire station in the area of Matchette Road and Laurier Parkway and relocate the existing fire station to the eastern section of LaSalle.*

In May of 2013 the Town relocated the fire station from its previous location at 5950 Malden Road to its current location at 1900 Normandy Street. As a result the Fire Master Plan 2015 Interim Review conducted by the Fire Chief included further analysis of the future fire station needs of the L.F.S. that included the following:

- *Analysis of the new location at 1900 Normandy Street;*
- *Build a second fire station on Hazel Street between Laurier Drive and Bouffard Drive; and*
- *Relocate the existing fire station to the area of Laurier Parkway and Disputed Road and a second fire station in the area of Hazel Street between Laurier Drive.*

The Fire Master Plan 2015 Interim Review recommended the construction of a second fire station on Hazel Street between Laurier Drive and Bouffard Drive as a priority initiative for the Town. Our review indicates that the rationale for this recommendation was predominately driven by the residence location of the current paid-on-call volunteers, and a strategy that targeted balancing the turnout time of the paid-on-call volunteers to respond to the closest fire station to assemble a response crew.

The 2018 Fire Master Plan Implementation - Second Station Implementation & Costing Models (Report FIRE 18-06) identified two options for Council's consideration including developing a satellite station at either the northwest corner of Laurier Drive and Matchette Road, or alternatively on the site of the former Centennial Arena on Front Road.

In our view, the new Fire Station #1 (Headquarters) located at 1900 Normandy Street reflects an improvement over the previous Fire Station #1 facility with regards to workspace. However, the relocation did not result in a significant change in location with regards to fire suppression service delivery. The current location does not support the future growth the a two station model as proposed within the 2008 Fire Master Plan and as referenced within the Fire Master Plan 2015 Interim Review and 2018 Fire Master Plan Implementation - Second Station Implementation & Costing Models (Report FIRE 18-06).

8.15.1 Proposed Fire Station Location Scenario #1

This first fire station location scenario considers sustaining the existing location of Fire Station #1 (Headquarters) at 1900 Normandy Street and adding a proposed Fire Station #2 to be located on Hazel Street between Laurier Drive and Bouffard Drive. This is the location that was recommended in the 2015 F.M.P. Interim Review.

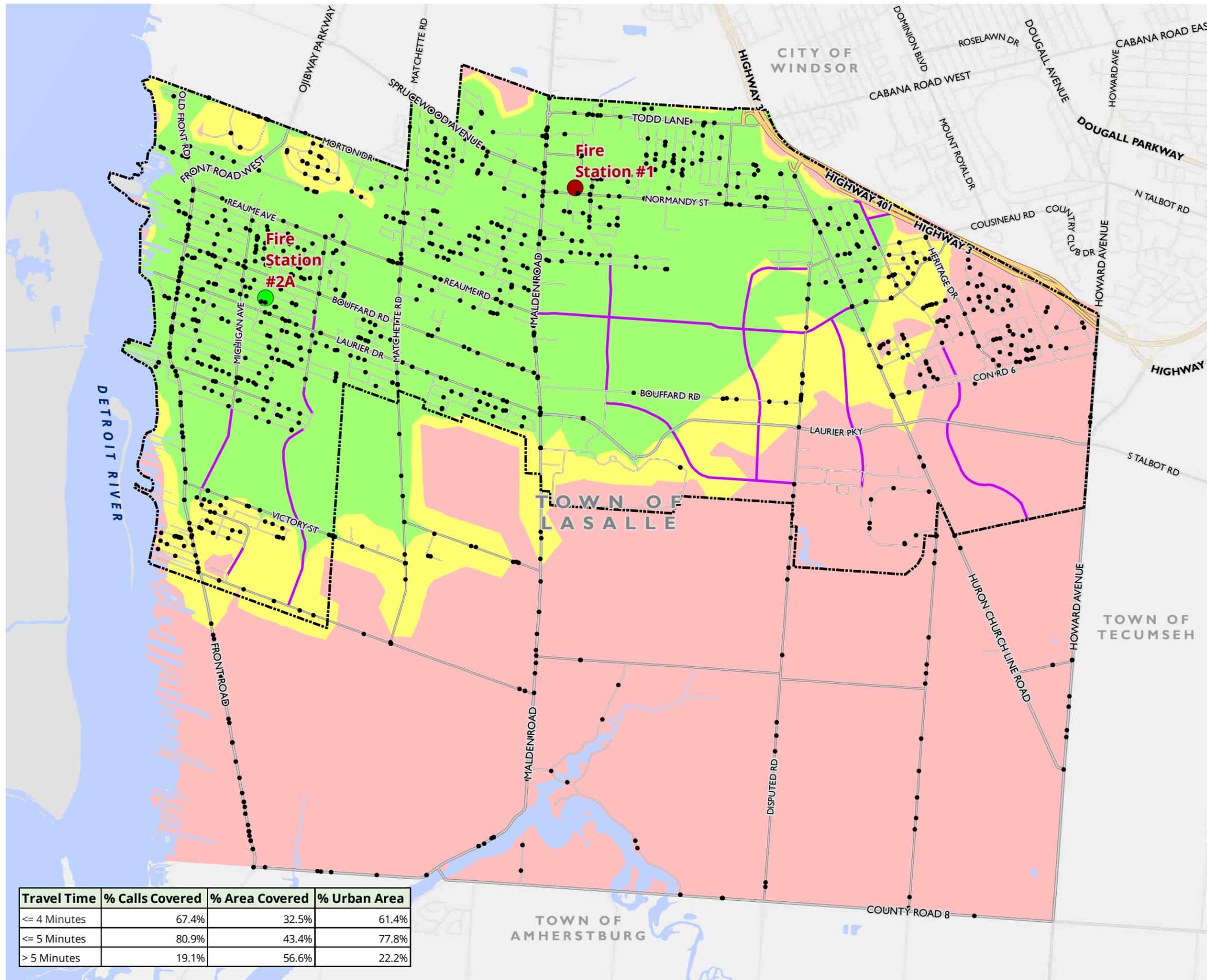
Our analysis of this scenario indicates that within a four minute travel time the L.F.S. would have been able to respond to 67.4% of the historical emergency calls for the period from January 31st, 2014 to January 31st 2019. The department could also provide initial response coverage within a four minute travel time to 61.4% of the defined urban area of the Town, and 32.5% of the Town's geographical area.



TOWN OF LASALLE

INITIAL RESPONSE CAPABILITIES MODEL SCENARIO I
FIGURE 21

- Emergency Call 2014-2019
- Existing Fire Station
- Proposed Fire Station
- ▭ Urban Boundary
- Planned Collector Road
- ≤ 4 Minutes Travel Time at Network Speed
- ≤ 5 Minutes Travel Time at Network Speed
- > 5 Minutes Travel Time at Network Speed



Travel Time	% Calls Covered	% Area Covered	% Urban Area
≤ 4 Minutes	67.4%	32.5%	61.4%
≤ 5 Minutes	80.9%	43.4%	77.8%
> 5 Minutes	19.1%	56.6%	22.2%



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8.15.1.1 Proposed Fire Station Location Scenario #2

This scenario also considers sustaining Fire Station #1 (Headquarters) in its current location at 1900 Normandy Street (Headquarters) and adding a proposed Fire Station #2 in the area of Matchette Road and Laurier Drive. This is the same location as presented within the 2008 Fire Master Plan.

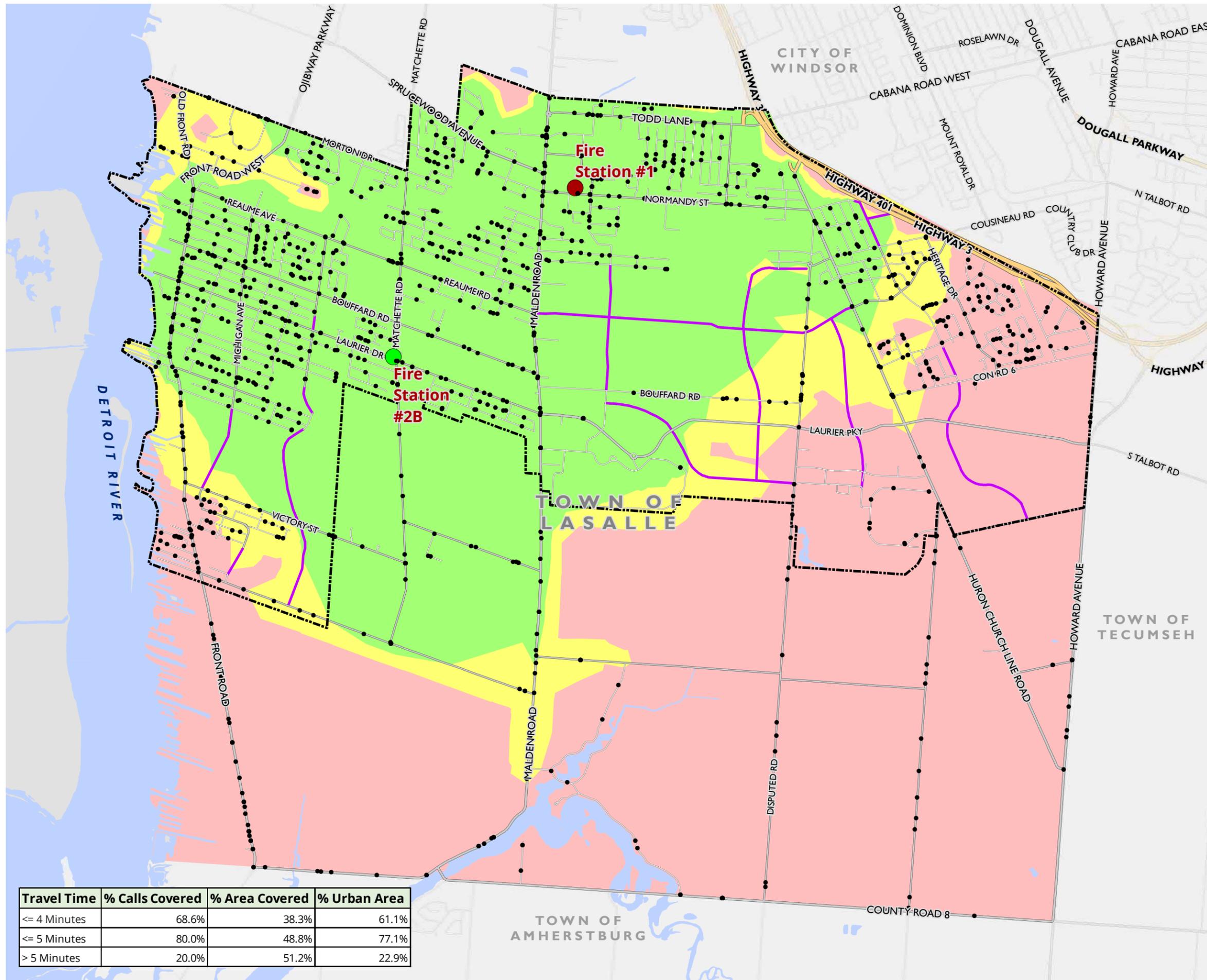
This scenario indicates that the within a four minute travel time the L.F.S. would have been able to respond to 68.6% of the historical emergency calls for the period from January 31st, 2014 to January 31st 2019. The department could also provide initial response coverage within a four minute travel time to 61.1% of the defined urban area of the Town, and 38.3% of the Town's geographical area.



TOWN OF LASALLE

INITIAL RESPONSE CAPABILITIES MODEL SCENARIO 2 FIGURE 22

- Emergency Call 2014-2019
- Existing Fire Station
- Proposed Fire Station
- ▭ Urban Boundary
- Planned Collector Road
- ≤ 4 Minutes Travel Time at Network Speed
- ≤ 5 Minutes Travel Time at Network Speed
- > 5 Minutes Travel Time at Network Speed



Travel Time	% Calls Covered	% Area Covered	% Urban Area
≤ 4 Minutes	68.6%	38.3%	61.1%
≤ 5 Minutes	80.0%	48.8%	77.1%
> 5 Minutes	20.0%	51.2%	22.9%



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8.15.1.2 Proposed Fire Station Location Scenario #3

This scenario considers locating the proposed Fire Station #2 on Hazel Street between Laurier Drive and Bouffard Drive and relocating Fire Station #1 (Headquarters) to the Disputed Road location in one of the proposed development areas. This is the same location as presented within the 2008 Fire Master Plan and 2018 Fire Master Plan Implementation - Second Station Implementation & Costing Models (Report FIRE 18-06).

This scenario indicates that the within a four minute travel time the L.F.S. would have been able to respond to 68.7% of the historical emergency calls for the period from January 31st, 2014 to January 31st 2019. The department could also provide initial response coverage within a four minute travel time to 73.2% of the defined urban area of the Town, and 39.1% of the Town's geographical area.

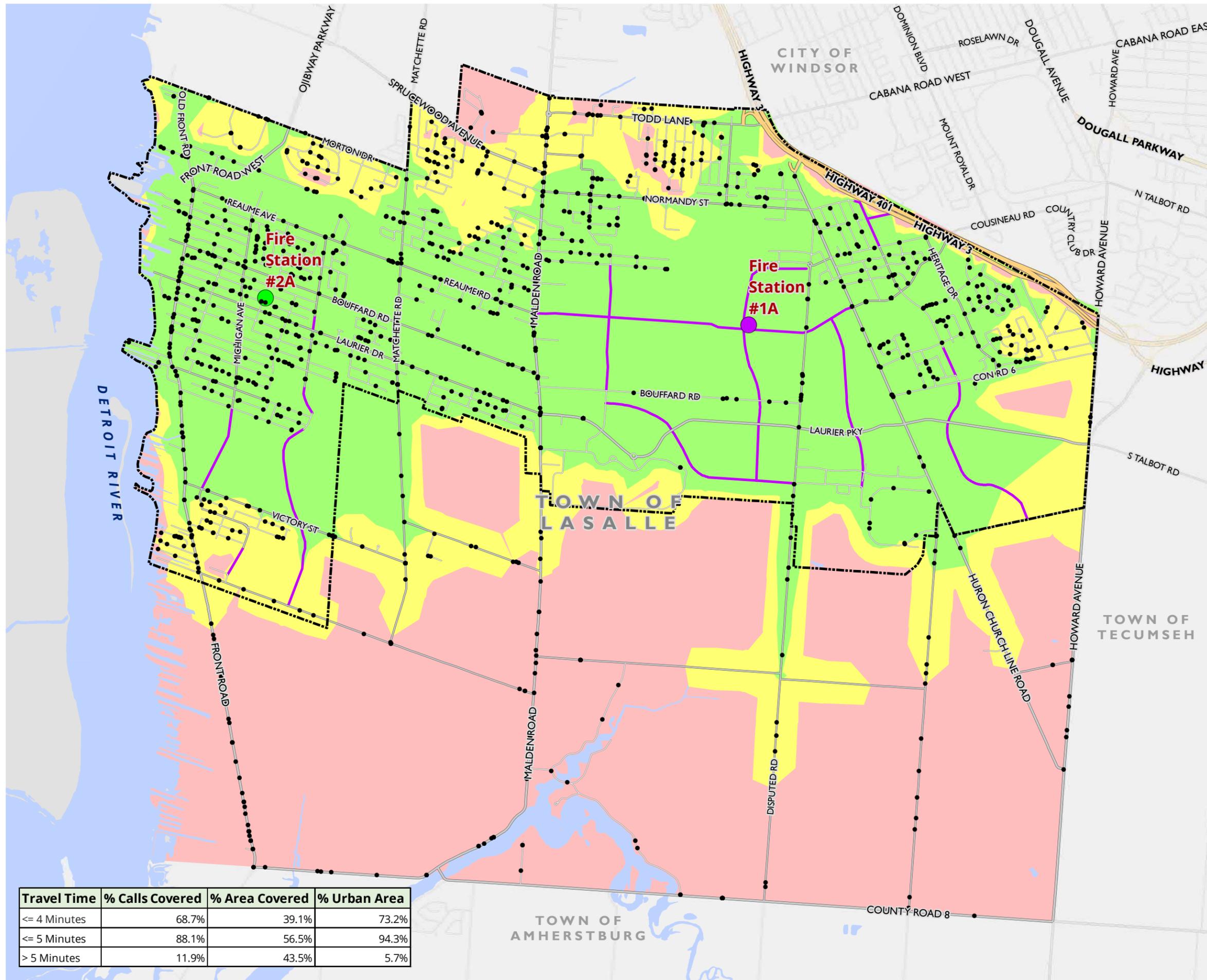


TOWN OF LASALLE

INITIAL RESPONSE CAPABILITIES MODEL SCENARIO 3

FIGURE 23

- Emergency Call 2014-2019
- Proposed Fire Station
- Relocated Fire Station
- ▭ Urban Boundary
- Planned Collector Road
- ≤ 4 Minutes Travel Time at Network Speed
- ≤ 5 Minutes Travel Time at Network Speed
- > 5 Minutes Travel Time at Network Speed



Travel Time	% Calls Covered	% Area Covered	% Urban Area
≤ 4 Minutes	68.7%	39.1%	73.2%
≤ 5 Minutes	88.1%	56.5%	94.3%
> 5 Minutes	11.9%	43.5%	5.7%



MAP DRAWING INFORMATION:
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DATE: 2019-06-21

8.15.1.3 Proposed Station Location Scenario #4

This scenario considers locating the proposed Fire Station #2 in the area of Matchette Road and Laurier Drive and in the future relocating Fire Station #1 (Headquarters) to the Disputed Road location in one of the proposed development areas. These are the future fire station locations recommended by the 2008 Fire Master Plan.

This scenario indicates that the within a four minute travel time the L.F.S. would have been able to respond to 73.3% of the historical emergency calls for the period from January 31st, 2014 to January 31st 2019. The department could also provide initial response coverage within a four minute travel time to 74.8% of the defined urban area of the Town, and 45.9% of the Town's geographical area.

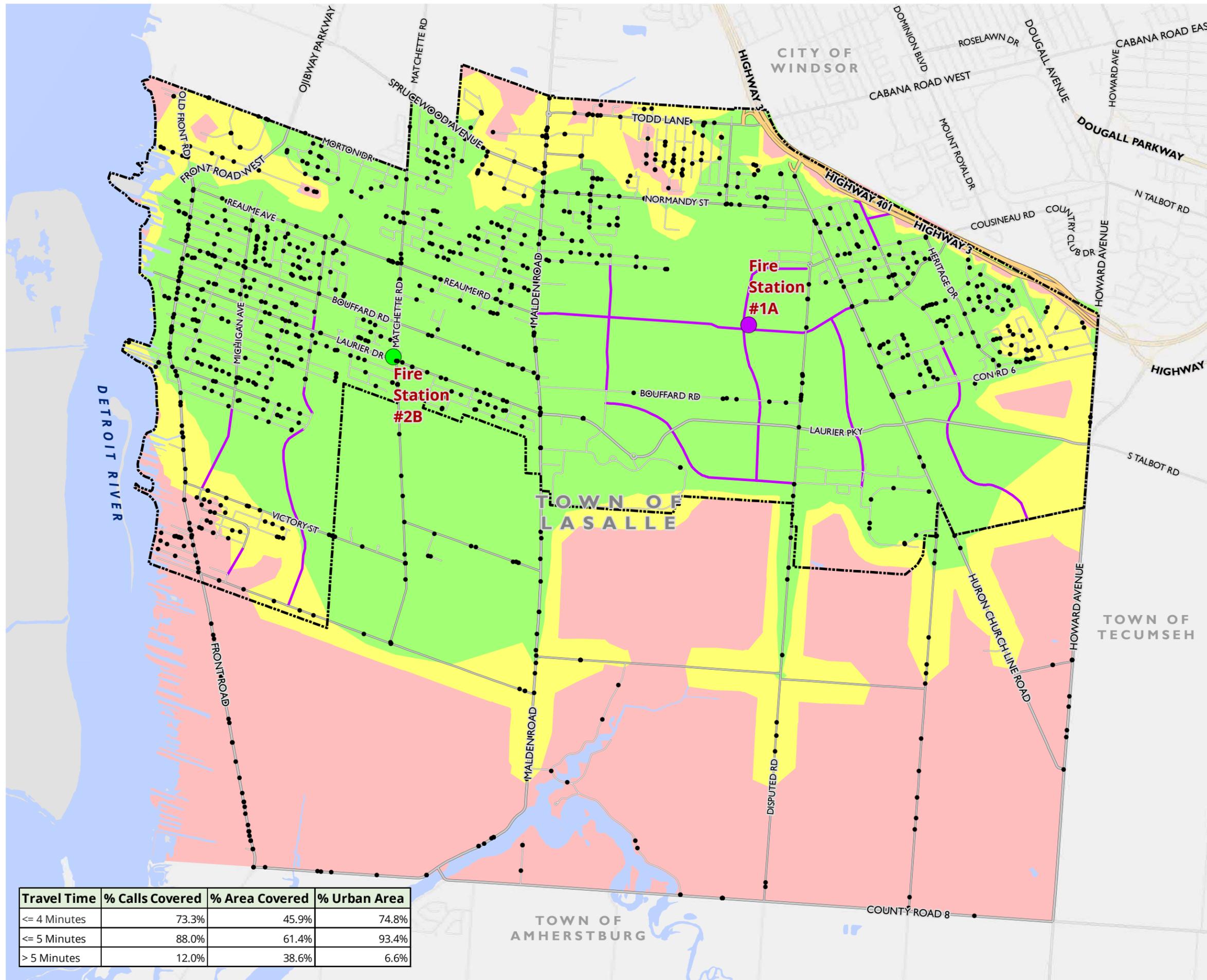


TOWN OF LASALLE

INITIAL RESPONSE CAPABILITIES MODEL SCENARIO 4

FIGURE 24

- Emergency Call 2014-2019
- Proposed Fire Station
- Relocated Fire Station
- ▭ Urban Boundary
- Planned Collector Road
- ≤ 4 Minutes Travel Time at Network Speed
- ≤ 5 Minutes Travel Time at Network Speed
- > 5 Minutes Travel Time at Network Speed



Travel Time	% Calls Covered	% Area Covered	% Urban Area
≤ 4 Minutes	73.3%	45.9%	74.8%
≤ 5 Minutes	88.0%	61.4%	93.4%
> 5 Minutes	12.0%	38.6%	6.6%



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MAP CREATED BY: GM
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PROJECT: 188324
STATUS: DRAFT
DATE: 2019-06-21

8.15.2 Proposed Fire Station Location Model Summary

As referenced within this F.P.S.M.P. there are several factors to be considered when planning for future fire stations, operationally these include consideration of the fire suppression deployment model and if the fire department utilizes volunteer (paid-on-call) firefighters, the four minute travel time coverage for the initial responding apparatus, and the percentage of historical emergency calls covered within a four minute travel time.

In addition, municipalities must consider future community growth and the type of growth planned such as commercial, industrial or residential. The analysis of assumed future community growth over the next 10 and 20 year planning horizons indicates large areas of planned residential growth towards the south and south eastern areas of the Town.

Although historical emergency call coverage is an important element, the percentage of defined urban area coverage and coverage of the Town's geographical area have more merit for consideration of future fire station locations. It is impossible to predict where future emergency calls may occur, however, they can be associated with the types of use such as commercial, industrial or residential. The assumed future community growth over the next 10 and 20 year planning horizons includes a number of additional residential growth areas. Based on historical patterns it can be assumed that these areas will result in a similar emergency call volume as existing residential areas within the Town.

As referenced within the 2008 Fire Master Plan and the 2018 Fire Master Plan Implementation - Second Station Implementation & Costing Models (Report FIRE 18-06) the long-term fire suppression deployment model of the L.F.S. should target the provision of initial response by full-time firefighters. The analysis within this F.P.S.M.P. continues to support this goal with the short-term priority that includes staffing the existing Fire Station 1 (Headquarters) with a minimum of two full-time firefighters at all times and transitioning to the deployment of four full-time firefighters at all times as soon as is fiscally responsible. In our view, the provision of initial response by full-time firefighters results in less importance to plan the location of future fire stations based on where the paid-on-call volunteer firefighters live. In addition, the locations of paid-on-call firefighter residences could potentially change over time with volunteer firefighter turnover and was therefore not the primary factor in planning the future fire station location.

Table 38 presents a summary of the four Fire Station location scenarios that were considered. In our view Scenarios #1 and #2 illustrate an initial response coverage that leaves a future gap in coverage of the planned residential growth areas in the south and south eastern areas of the Town. In our view these two scenarios may result in the need to consider a third Fire Station at some time in the future to service the planned community growth. Scenarios 3 and 4 illustrate the benefits of relocating the existing Fire Station #1 from its current location to a new location on Disputed Road in one of the proposed development areas.

Table 38: Proposed Fire Station Location Model Summary

Scenario	% Of Historical Calls Covered	% Of Defined Urban Area Covered	% Of Town's Geography Covered
Existing	32.7%	27.8%	14.1%
1	67.4%	61.4%	32.4%
2	68.6%	61.1%	38.3%
3	68.7%	73.2%	39.1%
4	73.3%	74.8%	45.9%

This analysis indicates that Scenario #4 provides the highest level of performance in each of the categories presented. This scenario is very similar to the recommended fire station location model presented within the 2008 Fire Master Plan and remains the recommended long-term strategy for the Town of LaSalle. In our view, the Town should consider an implementation strategy for the L.F.S. to transition to the proposed Scenario #4 fire station locations that includes the following steps:

1. *Continue to develop a future fire station capital funding strategy that includes transitioning to two new Fire Stations in the long-term ten year planning horizon;*
2. *In the short-term (within approximately 1 year) purchase property in the area of Matchette Road and Laurier Drive to construct the future proposed Fire Station #2;*
3. *In the short-term (1-3 years) purchase property for the proposed relocation of Fire Station #1 (Headquarters) as presented within the proposed F.P.S.M.P. in the proposed residential development area adjacent to Disputed Road;*
4. *In the short-term (2-3 years) construct the proposed Fire Station #2;*
5. *Within the Town's facilities asset management program identify the current Fire Station #1 (Headquarters) as an option for re-purposing to other uses within the next 8 to 10 year planning horizon; and*
6. *At the mid-point (5 year) point of this 10-year F.P.S.M.P. life cycle, reconsider the timing of relocating Fire Station #1 (Headquarters) in conjunction with updated planning information related to the planned community growth in the south and south/east areas of the Town.*

Council Recommendation #7: That consideration be given to developing a Fire Station implementation strategy to transition to the proposed Scenario #4 Fire Station Location model presented within the proposed Fire Protection Services Master Plan.

8.16 Operations Division Summary and Recommendations

The “composite” fire department model including the use of both full-time and paid-on-call volunteer firefighters has served this community extremely well. More recently the sustainability of this model, and specifically the sustainability of paid-on-call volunteer firefighters has become increasingly challenging for the L.F.S. The most critical component of this has been sustaining a level of experience

(years of service) within the current complement of paid-on-call volunteer firefighters that is commensurate with the level of fire suppression service the L.F.S. has historically been able to achieve. The analysis of the L.F.S. existing initial response and depth of response capabilities indicates that the department is currently not able to provide a level of fire suppression services that would be considered applicable to the current fire risks within the community, and not consistent with current industry best practice performance benchmarks. In addition to the challenges related to sustaining the paid-on-call volunteer firefighters the L.F.S. has not been able to increase the number of full-time firefighters as previously recommended in the 2008 Fire Master Plan.

The analysis within this F.P.S.M.P. indicates that the L.F.S. and the Town of LaSalle are at a pivotal point in the decision making process with regards to the level of fire suppression services to be provided to the community. The recommendations contained within this F.P.S.M.P. include targeting fire suppression performance benchmarks that are consistent with current industry best practices and the findings of the Community Risk Assessment attached to this F.P.S.M.P. The F.P.P.A. requires that a municipality determine its level of overall fire protection services that include fire suppression services to be provide based on a thorough analysis of local *“needs and circumstances.”* This F.P.S.M.P. is intended to provide Council with this analysis of local needs and circumstances, excluding Council’s decision making with respect to the financial capacity of the Town.

Information related to the proposed staff resourcing needs of the Operations Division is included within **Section 9.0 – Proposed Staff Resource Strategies** of this F.P.S.M.P. As a result of the review of the Operations Division, the following recommendations are presented for Council’s consideration and approval:

Council Recommendations:

Council Recommendation #5: *That the proposed fire suppression performance benchmark for initial response within the defined urban area included within the proposed Fire Protection Services Master Plan be utilized to monitor and report to Council and the community.*

Council Recommendation #6: *That the proposed fire suppression performance benchmark for depth of response within the Town of LaSalle identified within the proposed Fire Protection Services Master Plan be utilized to monitor and report to Council and the community.*

Council Recommendation #7: *That consideration be given to developing a Fire Station implementation strategy to transition to the proposed Scenario #4 Fire Station Location model presented within the proposed Fire Protection Services Master Plan.*

9.0 Proposed Staff Resource Strategies

The recommendations of the 2008 Fire Master Plan and the Fire Master Plan 2015 Interim Review are consistent in recommending additional staff resources for the L.F.S. The analysis within this F.P.S.M.P. identifies the areas where additional full-time staff, and paid-on-call volunteer firefighters have been increased.

However, the analysis within this F.P.S.M.P. shows that the realities of the community's fiscal responsibilities have not allowed the L.F.S. to maintain the same speed of growth as that of the community. As a result, there is an increasing gap in the levels of service the department is currently able to provide in comparison to the identified community fire risk that is present. In 2016, at the direction of the Fire Chief, the Town reduced its fire prevention/public education program due to the fact that the L.F.S. did not have the staff resource capacity to achieve the previously approved Council fire prevention inspection schedule. Since completion of the 2008 Fire Master Plan the department has also been unable to increase the number of full-time firefighters as recommended by the 2008 Fire Master Plan and has been experienced a high turnover rate of paid-on-call volunteer firefighters over the past five years.

The proposed staff resource strategies have been developed to target enhancing the level of fire protection services being provided by the L.F.S. through prioritization of the findings of the community risk assessment, application of the ***“three lines of defence”*** and in support of the proposed strategic priorities presented within this F.P.S.M.P. The proposed staff resource strategies are intended to recognize the current fiscal capabilities of the Town while balancing the need for providing an effective and efficient level of fire protection services.

The proposed staff resource strategies have been designed to provide the maximum optimization of additional staff resources through the use of multi-tasking wherever possible. This includes the need for enhancing the training and qualifications of staff to be diverse and enhance the department's ability to assign the ***“right person doing the right work”***.

9.1 Proposed Administrative Support Position

The availability of data to support this F.P.S.M.P. can in a large part be associated with Council's support of hiring the current Administrative Assistant that was proposed in the 2008 Fire Master Plan. In our view this position is an example of the ***“right person doing the right work”***. The Fire Master Plan 2015 Interim Review identifies that this position has had minimal impact in supporting the areas of fire prevention/public education and training due to the workload within the Administration Division. In our view there is a similar efficiency to be achieved in these areas as has been achieved within the Administration Division. This F.P.S.M.P. has identified numerous activities in the Fire Prevention/Public

Education and Training divisions that require the skills and experience of a qualified administrative support position.

It is recommended that the Town of LaSalle hire a full-time resource to support the administrative functions of the Fire Prevention/Public Education and Training Divisions. In our view this position is required to support the Captain-Fire Prevention Officer and Captain Training, in addition to supporting the proposed recommendations to implement staff committees in these areas. Research into preparing this F.P.S.M.P. has identified that the Captain-Fire Prevention Officer and Captain Training could be more effective in achieving their primary roles and responsibilities if other administrative tasks could be delegated. In our view the hiring of this new position should be considered an immediate priority for the Town of LaSalle.

Council Recommendation #8: That Council consider prioritizing the hiring of additional administrative / clerical support for the Fire Prevention/Public Education and Training Divisions of the LaSalle Fire Service as presented within proposed Fire Protection Services Master Plan.

9.2 Proposed Operational Staff Resource Strategy

The analysis within this F.P.S.M.P. identifies the current gaps in the department's ability to achieve the proposed fire suppression performance benchmarks. The analysis also highlights that the L.F.S. has been unable to increase the staff resources in this division due to the fiscal capabilities of the Town. Our research and observations in preparing this F.P.S.M.P. conclude that the current fire suppression capabilities of the L.F.S. are insufficient in their capabilities to respond to the current fire risk present within the community based on current industry best practices.

In addition to this performance challenge the department is facing a further challenge related to the sustainability of the current "composite" fire department model including both full-time and paid-on-call firefighters. The level of experience within the current paid-on-call volunteer group is declining more rapidly than the skills and competencies can be replaced. In our view the current minimum staffing of one full-time firefighter on duty also creates a potential health and safety workplace concern, as well as an operational concern of only deploying one firefighter on the first responding apparatus.

The proposed operational staff resource strategy has been developed in support of the proposed strategic priorities of this F.P.S.M.P. These recognize the importance of applying the ***"three lines of defence"*** and not prioritizing fire suppression as the only solution. As such the proposed operational staff resource strategy seeks to optimize the benefits when considering hiring additional full-time staff by enhancing services within multiple divisions of the L.F.S. resulting in an enhanced overall fire safety plan for the community.

This strategy specifically targets the hiring of additional full-time firefighters with the skills and competencies to support multiple areas of the L.F.S. service delivery model including fire prevention,

public education, training and fire suppression. This strategy also targets a staff resource strategy designed to sustain the utilization of paid-on-call volunteer firefighters.

9.2.1 Proposed Minimum Staffing of Two Full-time Firefighters at All Times

In our view the Town can no longer delay the transition to a minimum on duty staffing of two full-time firefighters at all times. The analysis within all previous reports and the findings of the Community Risk Assessment support the need for the Town to improve its fire suppression capabilities. The Town has been the beneficiary of a historical composite fire department that includes both full-time and paid-on-call volunteer firefighters. This team of firefighters continues to strive to attain the most effective and efficient level of fire suppression services. However, this model has reached its capacity for sustainability. As such this F.P.S.M.P. is recommending an increase in both the number of full-time and paid-on-call firefighters.

In our view the implementation of a minimum staffing of two full-time firefighters at all times allows the Town the opportunity to further optimize its historical strategy of multi-tasking. The implementation of this minimum staffing strategy would allow the Town to further enhance its staff resource capabilities in other areas including training and fire prevention/public education. In our view the recommended minimum staffing of two full-time firefighters on each of the four shifts should include one full-time firefighter on each shift having the additional qualifications of a Fire Inspector/Fire & Life Safety Educator Level I, and the other firefighter having the qualifications as referenced with the proposed Shift Training Instructor position.

The implementation of this option as presented provides the Town with the opportunity to enhance its overall fire protection services, and further support the sustainability of the current composite fire department model. The implementation of this option would require the Town to hire six additional full-time firefighters to sustain a minimum complement of two full-time firefighters on duty at all times. The estimated operating cost impact of this option is \$780,000 and the estimated initial operating cost is \$450,000.

Council Recommendation #9: That Council consider prioritizing the hiring of six additional full-time firefighters to support enhancing the initial response, and related fire protection services provided by the LaSalle Fire Services as presented within the proposed Fire Protection Services Master Plan.

9.2.2 Proposed Utilization of Paid-on-Call Volunteer Firefighters

Our research indicates that the Town of LaSalle has increased the total number of paid-on-call volunteer firefighters only once in the last two decades. The analysis within this F.P.S.M.P. indicates that the historical model of a paid-on-call volunteer firefighter having a service of 15, 20 or 25 years is no longer the norm. In our experience this factor is becoming common across Canada. As referenced within this F.P.S.M.P. the recruitment and retention of volunteer firefighters is one of the largest challenge within the fire service across Canada.

In our view the L.F.S. has done well to sustain its current complement of paid-on-call volunteer firefighters. However, the current recruitment and training process are overwhelming the ability of the current staff resources to sustain this model. In our experience this is also not uncommon. In our view the L.F.S. needs to revise its current recruitment and training process to accommodate the fact that there will be an annual turnover rate, and that service commitments may no longer achieve those of the historical experience of the department.

In our view the cost effectiveness and efficiency that the paid-on-call volunteer firefighters provide to the Town support the importance of sustaining this model. The analysis within this F.P.S.M.P. support Council's consideration of the following strategies that target this goal.

9.2.2.1 Proposed Increased Total Complement of Paid-on-Call Volunteer Firefighters

The analysis within this F.P.S.M.P. identifies an existing gap in the L.F.S.'s ability to assemble the number of firefighters required to achieve the proposed depth of response fire suppression performance benchmark of ten firefighters arriving on scene within a combined turnout time + travel time of ten minutes to 80% of fire suppression incidents within the Town of LaSalle.

Historically communities operating volunteer fire departments succeeded with a complement of 20 to 25 volunteer firefighters per station. This complement relied heavily on the availability of these individuals to leave their place of work, live in close proximity to the fire station and be available on a regular basis to train and respond. Today's volunteer firefighters (paid-on-call) are involved in more social activities, work priorities and life's priorities, making it increasingly difficult to commit the time necessary to sustain the required training competencies and response capabilities of a volunteer firefighter. As a result, recent trends within the industry are indicating the need to increase the total complement of volunteer firefighters within a fire department. These trends indicate a total complement of 35 to 40 volunteers per station as more reflective of today's operational needs.

Subject to Council's consideration and approval of Option 2 to increase the minimum on duty staffing of full-time firefighters to two at all times there will still be a need to increase the total pool of paid-on-call volunteer firefighters to achieve the proposed depth of response fire suppression performance benchmark. Increasing the total number of paid-on-call volunteer firefighters is the most efficient and cost effective strategy to achieve this goal. It is recommended that the Town increase the total number of paid-on-call volunteer firefighters to 48. It is anticipated that this increase may need to occur incrementally within the short-term horizon, to be a manageable process.

In addition to providing a short-term solution to achieving the proposed depth of response capabilities of the L.F.S. this strategy also supports the foundation for developing a larger total pool of paid-on-call volunteer firefighters that will be required in the future to staff the proposed second fire station.

Council Recommendation #10: That Council consider prioritizing the incremental hiring of 18 additional paid-on-call volunteer firefighters to support enhancing the fire suppression services provided by the LaSalle Fire Services as presented within the proposed Fire Protection Services Master Plan.

9.2.2.2 Proposed Schedule for Paid-on-Call Volunteer Firefighters

In our experience implementing a schedule for the paid-on-call volunteer firefighters can be an effective strategy to support a fire department's initial and depth of response capabilities. The Township of Centre Wellington has utilized this process to sustain its use of volunteer firefighters. Their fire department currently assigns their volunteer firefighters based on a platoon system consisting of six volunteers assigned to one of six platoons at each of their two fire stations. This represents a total complement of 36 volunteer firefighters at each of their fire stations.

In this model the volunteer firefighters are assigned a schedule on a rotating basis whereby they make a commitment to be readily available to respond to the fire station when altered. In recognition of this commitment the volunteers do receive a small compensation. It is also recognized that if a volunteer firefighter is working during his/her schedule they will not be available to respond. This is managed by the Fire Chiefs ability to distribute the volunteer firefighters on their assigned platoons as evenly as possible based on their individual work commitments.

We are illustrating the Centre Wellington volunteer firefighter on call schedule as what we believe to be a current industry best practice. This scheduling process does provide a higher level of certainty of the number of volunteer firefighters that will be responding at any given time. In our view this is a strategy that would be beneficial to enhancing the current firefighter deployment capabilities of the L.F.S. In addition to recommending that the L.F.S. increase the total number of paid-on-call volunteer firefighters to forty eight we are recommending that the L.F.S. develop a platoon system, and scheduling process as utilized by the Centre Wellington Fire and Rescue Services.

Council Recommendation #11: That the LaSalle Fire Service consult with the paid-on-call volunteer firefighters in developing and implementing an on call schedule as presented within the proposed Fire Protection Services Master Plan.

9.2.3 Proposed Training Committee

Our research indicates that it has been a challenge for the L.F.S. to sustain Captain/Training Officer since it was first introduced as full-time in 2012. It appears that this position has become an alternative career path to becoming a full-time firefighter. The current candidate has been assigned as a Training Instructor until such time as he attains the required qualifications for this position including the Company Officer Level II, NFPA 1041 Instructor Level II, and achieves 1st class firefighter status. Once these qualifications are achieved and the candidate competes a successful performance evaluation this will position will be filled.

This F.P.S.M.P. recommends an increase in the number of full-time firefighters. In the event that the current candidate chooses to apply for a full-time firefighter's position in the future we highly recommend that the L.F.S. reconsiders its recruitment process for the position of Captain/Training Officer.

In our view the L.F.S. would benefit from developing a Training Committee chaired by the Deputy Fire Chief with membership including a cross section of L.F.S. staff resources. The implementation of the proposed Training Committee should include the development of defined terms of reference that include for example the following roles and responsibilities:

- *Stakeholder input into the development and delivery of the proposed Comprehensive Annual Training Program;*
- *Responsibility for the development, review and renewal of related Operating Guidelines to support the proposed Comprehensive Annual Training Program;*
- *Conducting research as requested by the Captain/Training Officer to inform the programs and lesson plans required to facilitate the proposed Comprehensive Annual Training Program;*
- *Oversee the review and application of all related O.H.S.A. Section 21 Guidance Notes as may be applicable to the proposed Comprehensive Annual Training Program; and*
- *Provide assistance to the Captain/Training Officer in delivering the proposed Comprehensive Annual Training Program to all members of the L.F.S.*

Operational Recommendation #28: That the LaSalle Fire Service consider the implementation of a formalized Training Committee as referenced within the proposed Fire Protection Services Master Plan.

9.2.4 Proposed Training Instructors

On an interim basis the L.F.S. has implemented the roles and responsibilities of a Training Instructor (Captain/Training Officer). This type of position is quite common within composite fire departments who utilize both full-time and paid-on-call volunteer firefighters. In our view the continued use of this position, and its utilization of full-time firefighters, including one per shift would be an effective strategy to minimizing the existing and future training staff resource gap.

In our view the implementation of Training Instructors would include the following:

- *Identifying four full-time firefighters (one per shift) to fulfill the role of Training Instructor;*
- *The primary roles and responsibilities of the proposed Training Instructors would be to deliver the following:*
 - *Paid-on-call volunteer firefighter recruit training program;*
 - *Comprehensive Annual Training Program to all full-time and paid-on-call volunteer firefighters; and*
 - *Technical rescue training program.*

- *The proposed Training Instructors would report directly to the Captain/Training Officer on all matters related to the department's training initiatives.*

Operational Recommendation #29: That the LaSalle Fire Service consider the implementation the Training Instructors as referenced within the proposed Fire Protection Services Master Plan.

9.2.5 Proposed Fire Prevention/Public Education Committee

The recommendations of this F.P.S.M.P. include expanding on the roles and responsibilities of on duty full-time firefighters in the areas of training, fire prevention and public education. In our experience this will require additional coordination of the services and programs that are being provided both within the Training Division and Fire Prevention/Public Education Division.

It is recommend that the L.F.S. develop a formalized Fire Prevention/Public Education Committee to be chaired by the Fire Chief. Similarly to the proposed Training Committee this committee should include membership of the Captain-Fire Prevention and the full-time firefighters assigned to delivering fire prevention/public education programs. The implementation of the proposed Fire Prevention/Public Education Committee should include the development of defined terms of reference that include for example the following roles and responsibilities:

- *Stakeholder input into the development and delivery of the proposed updated Fire Prevention Policy;*
- *Responsibility for the development, review and renewal of related Operating Guidelines to support the proposed Fire Prevention Policy;*
- *Conducting research as requested by the Captain-Fire Prevention to inform the proposed fire inspection and public education schedules;*
- *Oversee the review and application of all related O.H.S.A. Section 21 Guidance Notes as may be applicable to the proposed Fire Prevention Policy; and*
- *Provide assistance to the Captain-Fire Prevention in delivering the proposed fire inspection and public education schedules.*

Operational Recommendation #30: That the LaSalle Fire Service consider the implementation of a formalized Fire Prevention/Public Education Committee as referenced within the proposed Fire Protection Services Master Plan.

9.2.6 Proposed Minimum Staffing of Four Full-time Firefighters at All Times

The analysis within this F.P.S.M.P. confirm the findings and recommendations of the 2008 Fire Master Plan and Fire Master Plan 2015 Interim Review that the Town of LaSalle needs to prioritize the transition to a minimum on duty staffing of four full-time firefighters on duty at all times. This will require the Town to hire 14 additional full-time firefighters in order to sustain a minimum deployment capability of four full-time firefighters at all times. It is recognized that this will require a significant financial investment on behalf of the Town.

Based on an estimated cost of salaries and benefits for one full-time firefighter of \$130,000 per year, and an estimated initial capital cost of \$7,500 for each new full-time firefighter for uniforms and protective clothing this represents an estimated total annual operating cost increase of \$1,820,000 and an estimated initial capital investment of \$1,050,000. Based on our knowledge of the current financial capabilities of the Town this option would result in a significant property tax impact, and ongoing financial burden to the Town at this time. However, in our view this option should be considered by Council, and a financial strategy should be developed to provide the ability for the L.F.S. to transition to this full-time staffing model as soon as fiscally possible.

Council Recommendations #12: That the Town of LaSalle prioritize the development of a financial strategy to transition to a minimum staffing of four full-time firefighters on duty at all times as soon as fiscally possible.

9.3 Proposed Staff Resource Strategy Recommendations

As a result of the review of all L.F.S. divisions, the following recommendations are presented for Council's consideration and approval:

Council Recommendations:

Council Recommendation #8: That Council consider prioritizing the hiring of additional administrative / clerical support for the Fire Prevention/Public Education and Training Divisions of the LaSalle Fire Service as presented within proposed Fire Protection Services Master Plan.

Council Recommendation #9: That Council consider prioritizing the hiring of six additional full-time firefighters to support enhancing the initial response, and related fire protection services provided by the LaSalle Fire Services as presented within the proposed Fire Protection Services Master Plan.

Council Recommendation #10: That Council consider prioritizing the incremental hiring of 18 additional paid-on-call volunteer firefighters to support enhancing the fire suppression services provided by the LaSalle Fire Services as presented within the proposed Fire Protection Services Master Plan.

Council Recommendation #11: That the LaSalle Fire Service consult with the paid-on-call volunteer firefighters in developing and implementing an on call schedule as presented within the proposed Fire Protection Services Master Plan.

Council Recommendations #12: That the Town of LaSalle prioritize the development of a financial strategy to transition to a minimum staffing of four full-time firefighters on duty at all times as soon as fiscally possible.

Operational Recommendations:

Operational Recommendation #28: That the LaSalle Fire Service consider the implementation of a formalized Training Committee as referenced within the proposed Fire Protection Services Master Plan.

Operational Recommendation #29: *That the LaSalle Fire Service consider the implementation the Training Instructors as referenced within the proposed Fire Protection Services Master Plan.*

Operational Recommendation #30: *That the LaSalle Fire Service consider the implementation of a formalized Fire Prevention/Public Education Committee as referenced within the proposed Fire Protection Services Master Plan.*

10.0 Fleet and Facilities

P.F.S.G. 04-07-12 *Types of Apparatus and Equipment* was developed to provide communities, such as the Town of LaSalle, with options to follow in determining the level of fire suppression and types of fire apparatus and equipment that should be available within the community. P.F.S.G. 04-07-12 provides the following information for consideration:

- *Demands on municipal resources force all communities to re-evaluate the level and nature of services they provide;*
- *Traditional approaches to the delivery of fire suppression with full-size triple combination pumpers may not necessarily be the most appropriate way to deliver this component of community fire safety, particularly in small communities with limited availability of firefighting personnel;*
- *The primary mission of all fire departments should be to ensure that the community is provided with an optimal level of fire protection in a cost effective and efficient manner. This optimal level may require a much greater emphasis on fire prevention and public education activities - with residents being responsible for protection within their own residences;*
- *New technology provide options;*
- *Must be appropriate to the fire suppression needs of the community;*
- *Dependent upon availability of human resources needs to work closely with neighbouring communities; and*
- *Focus must still be on community fire safety initiatives.*

P.F.S.G. 04-07-12 refers to the *N.F.P.A. 1901 Standard for Automotive Fire Apparatus (2009 Edition)* as a reference for the standards that should be considered in determining the appropriate apparatus for a community. N.F.P.A. 1901 provides the following definitions of major fire apparatus:

The ***N.F.P.A. 1901 - Standard for Automotive Fire Apparatus (2009 Edition)*** provides the following definitions of major fire apparatus:

- **Pumper:** Fire apparatus with a permanently mounted fire pump of at least 750 gallons per minute (3000 litres per minute) capacity, water tank and hose body whose primary purpose is to combat structural and associated fires.
- **Initial Attack Apparatus:** Fire apparatus with a fire pump of at least 250 gpm (1000L/min) capacity, water tank, and hose body whose primary purpose is to initiate a fire suppression attack on structural, vehicular, or vegetation fires and to support associated fire department operations.
- **Mobile Water Supply Apparatus (Tanker):** A vehicle designed primarily for transporting (pick-up, transporting, and delivering) water to fire emergency scenes to be applied by other vehicles or pumping equipment.

- **Quint:** Fire apparatus with a permanently mounted fire pump, a water tank, a hose storage area, an aerial ladder or elevating platform with a permanently mounted waterway, and a complement of ground ladders.
- **Special Services Fire Apparatus:** A multipurpose vehicle that primarily provides support services at emergency scenes.

In addition to N.F.P.A. 1901 the industry commonly refers to the following types of major fire apparatus:

- **Rescue:** A vehicle specifically designed for the purposes of transporting specialized rescue equipment such as vehicle extrication equipment, water/ice rescue equipment, hazardous materials equipment, and additional fire suppression support equipment such as additional self-contained breathing apparatus.
- **Pump/Rescue:** A vehicle that combines the traditional functions of a pumper and a rescue apparatus into one multi-functional apparatus.
- **Aerial Device:** A vehicle equipped with an aerial device, elevating platform, or water tower that is designed and equipped to support firefighting and rescue operations by positioning personnel, handling materials, providing continuous egress, or discharging water at positions elevated from the ground.

10.1 Existing Fleet and Facilities Staff Resources

The L.F.S. fleet consists of four support vehicles, three major apparatus and one reserve apparatus. The coordination of requests for maintenance and the delivery and oversight of the maintenance and repair of all fleet and equipment have been managed by the Deputy Chief. There is one certified mechanic on staff who provides maintenance, repair and inspections on all support vehicles. Major repairs and specialized testing of fleet and equipment is outsourced to third party vendors as required.

Daily inspections of the department’s equipment resources are performed by firefighters and, where required, minor repairs are carried out in-house. Similar to major fleet repairs, all specialized repairs to equipment are outsourced.

10.2 Major Fire Apparatus

The L.F.S. prioritizes the state of repair and condition of all major fire apparatus and equipment and operates a major fire apparatus fleet that reflects the needs of a modern fire service. The current fleet operated by the L.F.S. represents what would be expected based on the fire risks presented within the community.

O.G. 4-003 – Vehicle Maintenance – LOGS

provides for the maintenance and repairs for each vehicle of the L.F.S. fleet. Each vehicle is inspected on a weekly basis and all issues, repairs and preventative maintenance are recorded. Operating Guideline 4-003 also calls for annual inspections of the fleet by certified emergency vehicle technicians (E.V.T.s). As previously noted, there is one certified mechanic on staff who performs in-house repairs and maintenance on support vehicles, however this individual does not possess the qualifications of an E.V.T. and therefore all major repairs are contracted to outside companies.



The current major apparatus fleet assigned to the fire station is listed in **Table 39**. The L.F.S. fleet consists of three front-line major apparatus; one tower, a tanker and an engine.

Table 39: Current Major Fire Apparatus Fleet

Station	Vehicle Number	Major Fire Apparatus Description	Year	Replacement Cycle	Forecasted Replacement Year
Station 1	202	KME Tower	2003	25 years	2025
	203	KME Tanker	2001	20 years	2019
	207	Thibault Engine	2014	20 years	2034

10.2.1 Replacement of Major Apparatus

The Fire Underwriters Survey (F.U.S.) requires that all major fire apparatus meet either the **Underwriters Laboratory of Canada standard U.L.C. - S515 - 04** or the **N.F.P.A. 1901 - Standard for Firefighting Apparatus Construction, Equipment and Testing**. F.U.S. identifies the following major fire apparatus replacement guidelines:

- Major cities 12 – 15 years, with an additional five years in reserve;
- Medium size cities 15 years, with additional five years as back up, and five years in reserve; and
- Small municipalities 20 years, with an additional five years second line or reserve.

As a smaller municipality, the applicable replacement strategy for the Town of LaSalle would reflect a 20 year front-line life cycle with an additional five year (reserve use) overall life cycle plan. During the data collection process, the L.F.S. indicated that Vehicle 203 (KME Tanker) was in the in the budget for replacement. Upon replacement, this vehicle is planned to replace the current reserve apparatus in the department’s fleet.

10.2.2 Reserve Apparatus

Maintaining a fleet of reserve major fire apparatus reflects current industry best practices and is supported by the Fire Insurance Underwriters as due diligence on behalf of the municipality. The term “reserve” can be interpreted to mean this apparatus may not necessarily be required. In our experience the term “service ready” is more applicable to this category of major fire apparatus. It should be recognized that this apparatus may be needed under emergency conditions to sustain the level of Council approved fire suppression services in the event of an apparatus breakdown. This apparatus also provides greater flexibility in the event of a major incident. The current reserve apparatus, engine 206 (1995) will be replaced with vehicle 203, scheduled for replacement in 2019.

10.3 Small & Specialized Vehicles

In addition to the major fire apparatus the L.F.S. operates a number of small and specialized vehicles. This includes vehicles for administration staff (Fire Chief and Deputy Fire Chief) and fire prevention staff. A list of the small and specialized vehicles found within the L.F.S. are listed in **Table 40**. Our review indicates that all of the small and specialized vehicles are consistent with those that would be found in a modern fire service.

The fire service’s marine unit consists of a 2014 search and rescue boat (Phoenix), equipped with a fire pump and the latest electronic equipment. They also possess one vessel used for search and rescue along the shoreline and in shallow waters (LaSalle Fire Rescue II).



Table 40: Current Small Vehicle Fleet

Station	Vehicle Number	Specialized Vehicle Description	Year	Replacement Cycle	Forecasted Replacement Year
Station 1	200	Dodge Caravan	2010	10-15 years	2021
	201	Dodge Caravan	2010	10-15 years	2020
	204	Chevy Pickup	2016	15 years	2031
	205	Chevy Pickup	2015	15 years	2030

10.4 Equipment

Firefighting equipment is essential to fire suppression, technical rescues and firefighter safety. The type of fire equipment used by the fire department can include personal protective clothing (or bunker gear), self-contained breathing apparatus (S.C.B.A.), hoses, ladders, rescue equipment such as auto extrication tools and many other specialized equipment as required. The department has several operational guidelines as outlined in **Table 41** that are specific to the use and maintenance of self-contained breathing apparatus, protective equipment and gear and tool decontamination.

Table 41: Equipment Operational Guidelines

Policy Number	Policy Title
O.G. 11-001	Use of Self Contained Breathing Apparatus
O.G. 11-002	Wearing of Beards
O.G. 11-003	S.C.B.A. General Maintenance
O.G. 11-004	Breathing Air Compressor, Cascade System
O.G. 11-005	Respiratory Protection Program
O.G. 9-007	Gear and Tool Decontamination
O.G. 3-001	Personal Protective Equipment (P.P.E.)
O.G. 3-002	Eye Protection/Hand Protection
O.G. 3-003	Personal Protective Equipment for Wildland Firefighting
O.G. 3-004	Protective Clothing and Equipment

Personal Protective Equipment, specifically S.C.B.A. equipment was last purchased in 2009 which has a replacement cycle of approximately 10 to 15 years. This equipment is due for replacement as soon as 2020. The department plans to replace an extrication tool which was purchased in 2003 with the acquisition of a new apparatus that will replace the current KME Tanker.

Operational Guideline 9-007 – Gear and Tool Decontamination describes the procedures for decontaminating personnel, gear and tools following a fire incident. According to the department’s guideline all contaminated gear is required to be placed in bags and into the back of apparatus 204 or 205 following interior firefighting activity. With the current practices of many volunteer firefighters responding directly to emergency scenes, bunker gear is often transported in personal vehicles. This practice requires additional diligence to ensure that gear is properly cleaned on a regular basis, particularly following use at any active fire scene. The L.F.S. has flagged that the availability of spare bunker gear has been a challenge, in part, by the decontamination requirements following fires and the significant staff turnover experienced in recent years. In order to maintain an appropriate level of spare bunker gear, the L.F.S. should consider purchasing additional sets in multiple sizes to allow for the availability of spare gear while decontamination of primary gear is taking place. The department can also budget for equipment replacement within the annual operating budget for smaller equipment replacement.

Operational Recommendation #31: That the LaSalle Fire Service consider the purchase of additional sets of spare bunker gear in multiples sizes to accommodate the decontamination requirements following fire incidents.

10.5 Fleet and Facilities Division Summary and Recommendations

Our review of the fleet, facilities and equipment of the L.F.S. indicates that the operations within this area are consistent with industry best practices. The L.F.S. maintained an effective fleet and equipment maintenance and repair program which also aligns with industry standards. One major apparatus and a number of equipment items are due for replacement in 2020. Overall the major fire apparatus operated by the L.F.S. are well maintained and in good condition.

Our review of the fleet, facilities and equipment of the L.F.S. has identified the following recommendations for consideration:

Operational Recommendation:

Operational Recommendation #31: That the LaSalle Fire Service consider the purchase of additional sets of spare bunker gear in multiples sizes to accommodate the decontamination requirements following fire incidents.

11.0 Emergency Management

In addition to his roles and responsibilities as designated by the F.P.P.A. the Fire Chief is also designated as the Town's Community Emergency Management Coordinator (C.E.M.C.). This includes ensuring sustained compliance with the Emergency Management and Civil Protection Act (E.M.C.P.A.) and Ontario Regulation 380/04 which lays out the minimum standards required by municipalities and provincial ministries for emergency management programs.

Under the Act, the Solicitor General has authority to make regulations setting standards for the development, implementation and maintenance of emergency management programs required by communities. It further requires every municipality, minister of the Crown and designated agency, board, commission and other branch of government ensure that their emergency management programs and emergency plans conform to the standards set within the Act. There are six main standards of which each municipality is required to fulfill under the Act.

To verify compliance with the E.M.C.P.A., municipalities are required to annually review and submit the following documentation:

- Emergency Response Plan (E.R.P.);
- Proof of training;
- Proof of exercises;
- Evidence of public education program;
- Municipal Hazard Identification Risk Assessment (H.I.R.A.);
- Critical Infrastructure (C.I.) List; and
- Emergency Management Program By-law.

The Town's Emergency Response Plan (or Plan) is dated 2017 and was issued under the authority of By-law No. 5917. The E.R.P. is available to the public on the Town's website with the exception of the Plan's associative confidential annexes.

11.1 Town of LaSalle Emergency Response Plan

The Town of LaSalle E.R.P. (last updated in 2017) outlines the roles and responsibilities of those individuals responsible for directing and managing operations and for providing support and resources to the emergency site known as the Municipal Control Group (M.C.G.). M.C.G. members consist of:

- Mayor;
- Chief Administrative Officer;
- Community Emergency Management Coordinator;

- Chief of Police;
- Fire Chief;
- Director of Public Works;
- Corporate Communication & Promotions Officer;
- Director of Finance;
- Director of Culture & Recreation;
- Human Resources Officer;
- Director of Strategic Initiatives;
- Medical Officer of Health or designate;
- Chief, Essex-Windsor EMS or designate;
- Windsor/Essex social Services;
- Public, Separate and French School Boards; and
- Municipal Representatives & Agencies as required (County Emergency Planner).

In reviewing the E.R.P., it appears that the position of Emergency Coordinator (or Community Emergency Management Coordinator) and the Fire Chief (or Fire Coordinator) are two separate positions within the Municipal Control Group. Our research indicates that the Fire Chief occupies the position of the local C.E.M.C. It is recommended that future versions of the E.R.P. indicate that these positions are occupied by the same individual as to clarify for the readers of the Plan the responsibilities assigned to each M.C.G. personnel.

Under the provisions of the Plan, the Town may request assistance from the County of Essex at any time by contacting the County Warden, C.A.O. or C.E.M.C. The **County of Essex Emergency Response Plan** is included in greater detail below.

Section 3 of the Plan designates the LaSalle Police Dispatch Centre as the agency responsible for initiating the notification system used to alert response organization personnel and the M.C.G. Notification procedures indicate there are three levels of response; routine monitoring, partial activation and full activation. For notifying its citizens that an emergency exists, the Town uses a public alerting system that includes 211 Ontario for public inquiries and information, media outlets, Reverse 911, and emergency vehicles if required. Recently, the LaSalle Fire Service in collaboration with an inter-departmental municipal team launched a voluntary mass notification system that provides residents with timely information regarding emergency-related alerting and notification.

The Town conducts an annual emergency exercise to test the effectiveness of the Plan and continues to provide training the M.C.G. as part of an ongoing effort.

Operational Recommendation #32: That the Town of LaSalle consider revising the current Emergency Response Plan to more accurately define the responsibilities assigned to all members of the Municipal Control Group as referenced within the proposed Fire Protection Services Master Plan.

11.2 Community Hazards and Local Resources

The Town's most recent Hazard Identification and Risk Assessment (2017) assigns consequence and probability to a number of hazards (caused by natural, human and technological forces) in order to help municipal emergency management staff prepare for the Town's most probable and consequential risks.

Hazards identified as posing the greatest risk to the Town (based on the highest risk level generated by probability x consequence) include tornadoes, terrorism events, epidemics and transportation incidents. Many of these risks are addressed through separate sub-plans to the Town's E.R.P. or the County of Essex E.R.P. described below, portions of which are confidential and some of which are for public viewing.

The most frequent events **almost certain** to be experienced by the Town include fog, lightening, severe thunderstorms/rain events and transportation incidents via roads. Prolonged rain events and heavy precipitation can lead to periods of increased flooding. With respect to flooding, the Essex Region Conservation Authority (E.R.C.A.) is responsible for monitoring water levels within the local watershed and issuing flood warnings to local municipal governments through a warning system. The E.R.C.A. prepares and provides flood contingency planning and is responsible for assisting the Town and/or the county in the event of a flooding emergency requiring response.

Although determined to be of lower risk to residents, heat waves are considered **likely** to occur. For temperate-related risks, specifically the occurrence of heat waves, the Windsor-Essex County Health Unit issues heat warnings to residents throughout the Windsor-Essex County area based on the duration and severity of temperature and humidex levels.

11.3 County of Essex Emergency Response Plan

The County of Essex Emergency Response Plan (E.R.P.) issued under the authority of By-law No. 62-2016 provides the framework by which Essex Region will respond to any emergency situation. The E.R.P. cites the legislative authority for conducting emergency operations, the roles and responsibilities of the officials involved in carrying out the E.R.P., the policies and procedures that guide the Plan and the various components contained within it.

Under the County E.R.P., each municipality within the Region is responsible for providing the initial response resources to an emergency situation within their jurisdiction. Depending on the magnitude and size of the event and the number of municipalities affected, the County of Essex may assume the responsibility to take command of the emergency. However, should a municipality decide to request resources or any type of assistance from the County, they can do so without requesting that the County-level emergency plan be activated.

In the event of an emergency, emergency management personnel are able to communicate to the public through various means of notification and alerting systems. Those listed in the Plan include:

- Door-to-door notices;
- Sirens;
- Emergency vehicles;
- Pre-determined telephone contacts and notices;
- Auto-dial telephone notification and mass calls;
- Media and weather alerts; and,
- Public call centres for public inquiries and notices.

The County E.R.P. is supported by several appendices that provide significant information relevant to the community services provided within the County and address specific emergency management functions that outline protocols and procedures for County specific hazards and threats. For example, due to the County's proximity to the Fermi 2 Nuclear Generated Power Plant in Monroe County, Michigan the County has created a nuclear specific emergency plan. The E.R.P. indicates that the Town of Amherstburg will coordinate the emergency response efforts resulting from an accident at the Fermi 2 Plant and has undertaken the development of emergency plans and procedures based on provincial legislation, regulations and guidelines. Further discussion about the Fermi 2 Plant is provided in Section 7.0 of *Appendix A*.

11.4 **Emergency Management Summary and Recommendations**

The Town is required to meet the requirements set out in the Emergency Management and Civil Protection Act and its regulations. The following emergency management recommendation supports the need to ensure a safe, healthy and resilient community.

Operational Recommendations:

Operational Recommendation #32: *That the Town of LaSalle consider revising the current Emergency Response Plan to more accurately define the responsibilities assigned to all members of the Municipal Control Group as referenced within the proposed Fire Protection Services Master Plan.*

12.0 Fire Communications

Fire communications include receiving and recording all fire alarms, switchboard activities and other emergency calls, and dispatching the proper apparatus and equipment in accordance with standard operating guidelines. This section provides an overview of the dispatch services, training and qualifications, and the radio communications system.

12.1 Dispatch Services

The LaSalle Police Service (L.P.S.) currently provides emergency call taking and dispatching of all fire calls. The L.P.S. provides additional fire dispatching services to the Municipality of Leamington and the Town of Kingsville. Overseen by a Staff Sergeant of the Police Service, communications are provided by nine full-time employees and eight part-time employees. Dispatchers work twelve hour shifts with two employees on shift at a time. The primary dispatch centre is located in the police headquarters building adjacent to the L.F.S. fire station. A local call to 9-1-1 is rerouted to L.P.S. dispatch through a communications centre in North Bay. In the event that L.P.S. communications are disrupted or no longer function, there is a backup base in Kingsville and dispatch services would be covered through the Windsor Police Service in the interim with the North Bay centre being notified of the transfer.

Since dispatch services are provided by another department that is a part of the Corporation of the Town of LaSalle, dispatch is guided by a series of operational guidelines and training materials as opposed to a formal dispatch agreement.

The operational guidelines are listed in **Table 42** and cover a range of topics such as “CO Alarms” and “Wires Down.”

Table 42: Communication Operational Guidelines – L.F.S.

Operational Guideline #	Subject	Last Reviewed Date
1-001	Fire Run In General Terms	Feb 17, 2016
1-002	Animal Rescue	Feb 17, 2016
1-003	Bomb Threat	Feb 17, 2016
1-004	Brush Fire	Feb 17, 2016
1-005	Burning Complaint	Feb 17, 2016
1-006	Clandestine Drug Laboratories / Grow Operation	Feb 17, 2016
1-007	CO Alarm – With And Without Symptoms	Feb 17, 2016
1-008	Duty Chief Notification	Nov 23, 2016
1-009	Fire Alarms Commercial / Residential Alarm Systems	Feb 17, 2016
1-010	Fluid Control	Feb 17, 2016

Operational Guideline #	Subject	Last Reviewed Date
1-011	Ground Search For Lost/Missing Person	Feb 17, 2016
1-012	Hazmat Incident Response	Feb 17, 2016
1-013	House / Structure Fire	Feb 17, 2016
1-014	Ice Rescue - Boat	Feb 17, 2016
1-015	Industrial Accident	Feb 17, 2016
1-016	Medical Assistance	Feb 17, 2016
1-017	Mutual Aid And Automatic Aid	Nov 21, 2017
1-018	Motor Vehicle Collisions / Extrications	Feb 17, 2016
1-019	Potential For Violence Or Personal Safety Hazards	Feb 17, 2016
1-020	Rubbish / Bonfire	Feb 17, 2016
1-021	Vehicle Fire	Feb 17, 2016
1-022	Water Rescue	Feb 17, 2016
1-023	Wires Down	Feb 17, 2016

Source: LaSalle Fire Service

The delivery of fire dispatching services, and specifically the qualifications and certification of all staff assigned to the delivering of emergency call taking and fire dispatching services, has come under significant scrutiny across the province as a result of Corners Inquests and fire investigations. This emphasizes the importance of examining communications performance benchmarks and particularly training and qualifications.

12.1.1 Communications Performance Benchmarks

The training materials developed in 2005 and are designed to meet a range of learning objectives including providing the learner with basic knowledge of topics such as:

- Fire prevention;
- Qualifications of dispatchers;
- Information gathering for fire incidents;
- Basic radio techniques; and,
- Incident command/management system.

The training materials refer to performance benchmarks for the fire service and dispatch as being guided by P.F.S.G.s and N.F.P.A. Standards including N.F.P.A. 1221 and N.F.P.A. 1061. However, it does not go into detail regarding expectations or dispatch objectives of the centre.

This F.P.S.M.P. assesses call taking (alarm answering) and fire dispatching (alarm processing) in comparison to **N.F.P.A. 1221– Standard for the Installation, Maintenance, and Use of Emergency**

Services Communications Systems, which is considered an industry best practice for dispatch time requirements. The analysis of dispatch times were completed using historic call data from January 31st, 2014 to January 31st, 2019. The analysis found that the 90th percentile dispatch time for all emergency calls (lights and sirens) was 79 seconds and the 95th percentile dispatch time for all emergency calls (lights and sirens) was 96 seconds. For all calls, the 90th percentile dispatch time was 88 seconds and the 95th percentile dispatch time for all calls was 122 seconds. The L.P.S. continues to provide sufficient dispatch services for L.F.S. This performance should be measured on a regular basis against performance benchmarks presented in N.F.P.A. 1221 as established through an operating guideline. The results should be reviewed to identify trends or issues as they arise.

Operational Recommendation #33: It is recommended that priority be given to establishing performance benchmarks for emergency call taking and dispatch services identified within N.F.P.A. 1221 - Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems which are reviewed through a regular process.

12.1.2 Training and Qualifications

As part of the review completed for this F.S.M.P, it was identified that the in-house training of dispatchers occurs over a three month period with a full-time communicator. Training materials outline general qualifications of dispatchers including: speak clearly and distinctly; think and act promptly in emergencies; and having knowledge of incident command. While the centre does follow the recommendations of N.F.P.A. 1061, the L.P.S. does not currently require that dispatchers be certified to the N.F.P.A. 1061 - Standard for Professional Qualifications for Public Safety Telecommunications Personnel requirements.

The previously referenced scrutiny across the province related to emergency call taking and fire dispatching is emphasized by the recent events whereby legislation was passed – though subsequently rescinded -- to require mandatory qualifications and certification of all staff assigned to this area. Though dispatch services are provided by LaSalle Police Services, the police department provides fire protection services per the definition under the *Fire Protection and Prevention Act*. In our view, there is sufficient evidence for municipalities to recognize the need to minimize any potential liability in this area by prioritizing the training of all staff responsible for the delivering of emergency call taking and fire dispatching services both internally and externally to other municipalities.

The applicable requirements for a communications centre operator are contained within the **N.F.P.A. 1061 - Standard for Professional Qualifications for Public Safety Telecommunications Personnel**. Current industry best practices reflects that at a minimum a communications centre should be trained and qualified to “Level I” of this standard.

Operational Recommendation #34: That the Fire Chief discuss the approach to training all Communications Centre staff to the N.F.P.A. 1061 - Standard for Professional Qualifications for Public

Safety Telecommunications Personnel – Level I qualifications and certification with the dispatch services provider.

12.2 Radio Communications & Next-Generation 911

Radio communications systems are a critical component of fire services. This includes radios and related networks. It was identified that the Town of LaSalle has retained a third-party firm to complete a comprehensive review of the radio systems. This is a three phase study. Phase 1 of the study included an inventory and establishment of existing conditions for the radio communications for all municipal users. This resulted in the identification of issues and gaps. Phase 2 is currently underway and includes proposing and evaluating four future options resulting in specific recommendations and conceptual designs as part of Phase 3.

Communications considerations goes beyond municipal borders. Next-Generation 911 (N.G. 9-1-1) is a USA and Canadian initiative to modernize the 9-1-1 system in recognition of technology changes including the use of mobile phones. This new system will see telecommunications networks transition to Internet Protocol (I.P.) Technology which will allow for enhanced and innovative 9-1-1 services such as *“streaming video from an emergency incident, sending photos of accident damage or a fleeing suspect, or sending personal medical information, including accessibility needs, which could greatly aid emergency responders.”*²⁸

The Canadian Radio-television and Telecommunications Commission (C.R.T.C.) has announced its determinants on the implementation and provision of NG9-1-1 networks across Canada. Telecom Regulatory Policy CRTC 2017-182 released on June 1st 2017 indicated that:

“In this decision, the Commission is setting out its determinations on the implementation and provision of NG9-1-1 networks and services in Canada. This will require coordination and collaboration between numerous stakeholders, including the Commission; telecommunications service providers that provide 9-1-1 services (TSPs); 9-1-1 network providers; the CRTC Interconnection Steering Committee (CISC); federal, provincial, territorial, and municipal governments; emergency responders; and public safety answering points (PSAPs). As such, in this decision, the Commission is making a number of recommendations in which all stakeholders will have a role to play, including the establishment of a national PSAP and emergency responder coordinating body.”

In March 2019, the CRTC released Telecom Regulatory Policy CRTC 2019-66 which states:

²⁸ Canadian Radio-television and Telecommunications Commission. (2017, June 01). *Telecom Regulatory Policy CRTC 2017-182*. Retrieved from Government of Canada: <https://crtc.gc.ca/eng/archive/2017/2017-182.htm>

“In this decision, the Commission sets out determinations to further the implementation and provision of next-generation 9-1-1 (NG9-1-1) networks and services in Canada, so that Canadians can access new, improved, and innovative emergency services with Internet Protocol-based capabilities. The Commission aims to increase the efficiency of NG9-1-1 network design and related interconnection arrangements so that the NG9-1-1 networks are secure, reliable, resilient, and cost-effective for stakeholders.

Specifically, the Commission sets out the roles and responsibilities with respect to the Location Information Server / Additional Data Repository (LIS/ADR) functionalities and its NG9-1-1 interconnection framework. To help all Canadians benefit from the same quality of NG9-1-1 networks, the Commission imposes various obligations on telecommunications service providers and incumbent local exchange carriers (ILECs), including small ILECs.

Finally, the Commission requests that the CRTC Interconnection Steering Committee make recommendations to the Commission, with an expectation that they be submitted by 31 October 2019, regarding various matters related to the provision of the LIS/ADR functionalities that require further development.”²⁹

Larger municipal dispatch services are testing these systems before they are implemented in municipalities like LaSalle. Eventually to implement N.G. 9-1-1, communication upgrades needs for L.P.S will need to occur including an Internet Protocol based phone system that is compatible with the Computer-Aided-Dispatch system and related logging needs. This will include the need to accommodate and log text messages, photos, and eventually videos. L.P.S. is currently in the process of getting quotes for the cost of these upgrades.

It is important that the L.P.S continue to follow the implementation of N.G. 9-1-1 and report to Council as the potential impacts become clearer in the future.

²⁹ Canadian Radio-television and Telecommunications Commission. (2019, March 07). *Telecom Regulatory Policy CRTC 2019-66*. Retrieved from Government of Canada: <https://crtc.gc.ca/eng/archive/2019/2019-66.htm>

12.3 Fire Communications Summary and Recommendations

Our review of fire communications has identified the following recommendations for consideration:

Operational Recommendations:

Operational Recommendation #33: *It is recommended that priority be given to establishing performance benchmarks for emergency call taking and dispatch services identified within N.F.P.A. 1221 - Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems which are reviewed through a regular process.*

Operational Recommendation #34: *That the Fire Chief discuss the approach to training all Communications Centre staff to the N.F.P.A. 1061 - Standard for Professional Qualifications for Public Safety Telecommunications Personnel – Level I qualifications and certification with the dispatch services provider.*

13.0 Implementation Plan

The recommendations of this F.P.S.M.P. have been developed in consideration of the strategic priorities identified within this plan. To achieve this objective, this F.P.S.M.P. includes an implementation strategy that categorizes the recommendations of this plan into those that can be implemented by the Fire Chief within the boundaries of his current authority delegated by Council, these are presented as Operational Recommendations. Recommendations that require direct Council approval related to policy decisions, or financial commitments are presented as Council Recommendations.

13.1 Council Recommendations

Council Recommendations include those that require a policy decision or financial commitment on behalf of the Town. **Table 43** summarizes the recommendations of this F.P.S.M.P. that have been deemed as Council Recommendations. The recommendations in this table are presented in order of priority.

Table 43: Council Recommendations

Recommendation No.	Council Recommendations	Additional Detail	Estimated Capital Budget Impact	Estimated Operating Budget Impact	Proposed Schedule
1	<p>That the strategic priorities identified within the proposed Fire Protection Services Master Plan be adopted to form the strategic framework for the delivery of fire protection services within the Town of LaSalle, including:</p> <ul style="list-style-type: none"> i. The Town of LaSalle is committed to identifying the optimal level of fire protection services through the use of a Community Risk Assessment to determine the fire safety risks present within the Town of LaSalle as the basis for developing clear goals and objectives for all fire protection services provided by the LaSalle Fire Service; ii. Where applicable, the Town of LaSalle will seek to optimize the Ontario 	-	-	-	Short-term (1-3 years)

Recommendation No.	Council Recommendations	Additional Detail	Estimated Capital Budget Impact	Estimated Operating Budget Impact	Proposed Schedule
	<p>Comprehensive Fire Safety Effectiveness Model’s first two lines of defence, including public education and fire prevention, and the utilization of fire safety standards and fire code enforcement, in developing clear goals and objectives for all fire protection services provided by the LaSalle Fire Service; and</p> <p>iii. The Town of LaSalle will prioritize the utilization of strategies that support the sustainability of fire protection and emergency services that provide the most effective and efficient level of services resulting in the best value for the community.</p>				
9	<p>That Council consider prioritizing the hiring of six additional full-time firefighters to support enhancing the initial response, and related fire protection services provided by the LaSalle Fire Services as presented within the proposed Fire Protection Services Master Plan.</p>	<p>Increase minimum on-duty staffing to two firefighters. Capital costs for uniforms/bunker gear/P.P.E., facility needs, etc. (estimate \$10K per firefighter) Operating costs for new personnel (6 @ \$135K each for salary and benefits)</p>	\$60K	\$810K	Short-term (1-3 years)
2	<p>That the LaSalle Fire Services develop a strategy for the implementation of the proposed fire prevention/public education professional qualifications presented within</p>	<p>Operating costs pertaining to training needs /</p>	-	\$8K	Short-term (1-3 years)

Recommendation No.	Council Recommendations	Additional Detail	Estimated Capital Budget Impact	Estimated Operating Budget Impact	Proposed Schedule
	the proposed Fire Protection Services Master Plan for all staff assigned to delivering the applicable fire prevention/publication programs and services.	backfilling of shifts			
3	That subject to Council’s consideration and approval of an Implementation Plan that the proposed fire inspection schedule included within the proposed Fire Protection Services Master Plan be approved and included within the proposed Fire Prevention Policy.	-	-	-	Short-term (1-3 years)
4	That subject to Council’s consideration and approval of an Implementation Plan that the proposed public education schedule included within the proposed Fire Protection Services Master Plan be approved and included within the proposed Fire Prevention Policy.	Operating costs subject to paid-on-call hours for program delivery	-	TBD	Short-term (1-3 years)
5	That the proposed fire suppression performance benchmark for initial response within the defined urban area included within the proposed Fire Protection Services Master Plan be utilized to monitor and report to Council and the community.	-	-	-	Short-term (1-3 years)
6	That the proposed fire suppression performance benchmark for depth of response within the Town of LaSalle identified within the proposed Fire Protection Services Master Plan be utilized to monitor and report to Council and the community.	-	-	-	Short-term (1-3 years)
10	That Council consider prioritizing the incremental hiring of 18 additional paid-on-call volunteer firefighters to support	Incremental hiring: six hires each year for	\$42K	\$60K	Short-term: year 1

Recommendation No.	Council Recommendations	Additional Detail	Estimated Capital Budget Impact	Estimated Operating Budget Impact	Proposed Schedule
	enhancing the fire suppression services provided by the LaSalle Fire Services as presented within the proposed Fire Protection Services Master Plan.	three years of short-term horizon. Capital costs for uniforms/bunker gear/P.P.E., etc. (estimated @ \$7K per paid-on-call volunteer firefighter) Approximate annual compensation for paid-on-call volunteer firefighter estimated at \$10K	\$42K	\$60K	Short-term: year 2
			\$42K	\$60K	Short-term: year 3
11	That the LaSalle Fire Service consult with the paid-on-call volunteer firefighters in developing and implementing an on call schedule as presented within the proposed Fire Protection Services Master Plan.	Six on call positions at \$50 each per day = \$300 per day, 365 days per year	-	\$109.2K	Short-term (1-3 years)
7	That consideration be given to developing a Fire Station implementation strategy to transition to the proposed Scenario #4 Fire Station Location model presented within the proposed Fire Protection Services Master Plan.	Purchase land for Station #2	\$1.5M	-	Short-term (1-3 years)
Purchase land for relocated Station #1		\$2M	-	Short-term (1-3 years)	
Design & Construct Station #2		\$3M	-	Short-term (1-3 years) – aim to align the opening of Station 2 with the hiring of firefighters in Council	

Recommendation No.	Council Recommendations	Additional Detail	Estimated Capital Budget Impact	Estimated Operating Budget Impact	Proposed Schedule
		<p>Design & Construct relocated Station #1</p> <p>Review growth and planning information in the Medium-term (4-6 years) to confirm timing of station build.</p>	\$5M	-	<p>Recommendation #12</p> <p>Long-term (7-10 years)</p>
12	That the Town of LaSalle prioritize the development of a financial strategy to transition to a minimum staffing of four full-time firefighters on duty at all times as soon as fiscally possible.	<p>Hire an additional 8 firefighters to increase minimum on-duty staffing to four firefighters.</p> <p>Capital costs for uniforms/bunker gear/P.P.E., facility needs, etc. (estimate \$10K per firefighter)</p> <p>Operating costs for new personnel (6 @ \$135K each for salary and benefits)</p>	\$80K	\$1.08M	Medium-term (4-6 years)
8	That Council consider prioritizing the hiring of additional administrative / clerical support for the Fire Prevention/Public Education and Training Divisions of the	Operating cost for salary and benefits of	-	\$80K	Medium-term (4-6 years)

Recommendation No.	Council Recommendations	Additional Detail	Estimated Capital Budget Impact	Estimated Operating Budget Impact	Proposed Schedule
	LaSalle Fire Service as presented within proposed Fire Protection Services Master Plan.	administrative resource			

13.2 Operational Recommendations

Table 44 summarizes the recommendations of this F.P.S.M.P. that have been deemed as Operational Recommendations that can be administered and implemented by the Fire Chief within his current authority. In some cases this may require additional work by the Fire Chief in preparing further documentation and reporting to Council for approval.

Table 44: Operational Recommendations

Recommendation No.	Operational Recommendations	Additional Detail	Estimated Capital Budget Impact	Estimated Operating Budget Impact	Proposed Schedule
1	That consideration be given to updating the LaSalle Fire Service mission, vision and core values as referenced within the proposed Fire Protection Services Master Plan.	-	-	-	Short-term (1-3 years)
2	That subject to Council's consideration and approval of the proposed Fire Protection Services Master Plan that the Establishing and Regulating By-law No. 6073 be reviewed and updated as required.	-	-	-	Short-term (1-3 years)
3	That the LaSalle Fire Service conduct a review of all services and programs that may be applicable for cost recovery within the User Fees and Charges By-law No. 7852.	-	-	-	Short-term (1-3 years)
4	That consideration be given to initiating a review of the process for developing and communicating department policies and operating guidelines as described within the proposed Fire Protection Services Master Plan.	-	-	-	Short-term (1-3 years)
5	That the LaSalle Fire Service consider updating the depth of analysis included within the department's Annual Report to Council and the public to include an update to the Community Risk Assessment and address the requirements of 'Ontario Regulation 377/18 – Public Reports', as	-	-	-	Short-term (1-3 years)

Recommendation No.	Operational Recommendations	Additional Detail	Estimated Capital Budget Impact	Estimated Operating Budget Impact	Proposed Schedule
	referenced within the proposed Fire Protection Services Master Plan.				
6	That a further review of the LaSalle Fire Services records management technology and processes be conducted as a component of the implementation process of the proposed Fire Protection Services Master Plan.	-	-	-	Short-term (1-3 years)
7	That the LaSalle Fire Service update its current Fire Prevention Policy as described within the proposed Fire Protection Services Master Plan, and that subject to approval by Council it be included as an appendix to the Establishing and Regulating By-law.	-	-	-	Short-term (1-3 years)
8	That consideration be given to developing additional fire prevention/public education Operational Guidelines as referenced within the proposed Fire Protection Services Master Plan.	-	-	-	Short-term (1-3 years)
9	That consideration be given to expanding the current workload reporting of the Fire Prevention/Public Education Division as referenced within the proposed Fire Protection Services Master Plan.	-	-	-	Short-term (1-3 years)
10	That L.F.S. develop a comprehensive Operating Guideline to provide staff direction on conducting Fire Safety Audits and for Fire Safety Audits to be referenced within the updated Fire Prevention Policy.	-	-	-	Short-term (1-3 years)
11	That in consultation with the Office of the Fire Marshal and Emergency Management and the County of Essex Fire Chiefs Association, the LaSalle Fire Service consider options for hosting or attending an educational workshop related to Fire Safety	-	-	-	Short-term (1-3 years)

Recommendation No.	Operational Recommendations	Additional Detail	Estimated Capital Budget Impact	Estimated Operating Budget Impact	Proposed Schedule
12	Enforcement as presented within the proposed Fire Protection Services Master Plan. That the Town of LaSalle consider drafting a Memorandum of Understanding between the municipality's building and fire departments, which clearly defines the roles and responsibilities of personnel with respect to building and site plan review.	-	-	-	Short-term (1-3 years)
13	That consideration be given to developing a comprehensive strategy for reviewing and managing false alarm calls that includes enhanced and targeted public education strategies, increased fire inspections and enforcement options.	-	-	-	Short-term (1-3 years)
14	That consideration be given to enhancing the existing child/youth fire safety education program to target all children in the 0-14 age category as presented within the proposed Fire Protection Services Master Plan.	Operating costs for program materials	-	\$5K	Short-term (1-3 years)
15	That consideration be given to enhancing the existing seniors' fire safety program as presented within the proposed Fire Protection Services Master Plan.	Operating costs for program materials	-	\$5K	Short-term (1-3 years)
16	That consideration be given to enhancing the existing marina public education program as presented within the proposed Fire Protection Services Master Plan.	Operating costs for program materials	-	\$5K	Short-term (1-3 years)
17	That consideration be given to enhancing the existing smoke alarm/carbon monoxide alarm program as presented within the proposed Fire Protection Services Master Plan.	-	-	-	Short-term (1-3 years)

Recommendation No.	Operational Recommendations	Additional Detail	Estimated Capital Budget Impact	Estimated Operating Budget Impact	Proposed Schedule
18	That the department consolidate the current firefighter training initiatives into one Comprehensive Training Program including performance goals and objectives to be defined within a department Operational Guideline.	-	-	-	Short-term (1-3 years)
19	That consideration be given to enhancing the LaSalle Fire Service's current paid-on-call volunteer firefighter recruitment referencing the volunteer firefighter recruitment and retention strategies presented within the proposed Fire Protection Services Master Plan.	Costs dependent upon strategy selected and implemented	To be determined	To be determined	Short-term (1-3 years)
20	That the LaSalle Fire Service Company Officer Training Program be included within the proposed Comprehensive Training Program.	-	-	-	Short-term (1-3 years)
21	That the LaSalle Fire Service consider maintaining the current County-based operating agreement to provide Technician Level hazardous materials response support.	-	-	-	Short-term (1-3 years)
22	That consideration be given to revising the existing surface water and ice search and rescue services to reference shore-based (tethered) and vessel-based (tethered), and that surface water and ice search and rescue services levels identified in By-law No. 026-2018 be revised to shore-based (tethered at all times).	-	-	-	Short-term (1-3 years)
24	That a clearly defined Operational Guideline be developed to define the required training and roles and responsibilities of the LaSalle Fire Services in providing marine services, and that these services be included within	-	-	-	Short-term (1-3 years)

Recommendation No.	Operational Recommendations	Additional Detail	Estimated Capital Budget Impact	Estimated Operating Budget Impact	Proposed Schedule
	the proposed Establishing and Regulating by-law.				
25	That consideration be given to consolidating all department policies, procedures and routine orders referring to the respiratory protection program into one Operational Guideline.	-	-	-	Short-term (1-3 years)
26	That consideration be given to further enhancing the utilization of on-line training as a component of delivering the proposed Comprehensive Training Program.	Costs dependent upon on-line training platform / program selected	To be determined	To be determined	Short-term (1-3 years)
27	That live fire training be completed by all firefighters on an annual basis as identified within the proposed Fire Protection Services Master Plan as a component of the proposed Comprehensive Training Program.	-	-	-	Short-term (1-3 years)
28	That the LaSalle Fire Service consider the implementation of a formalized Training Committee as referenced within the proposed Fire Protection Services Master Plan.	-	-	-	Short-term (1-3 years)
30	That the LaSalle Fire Service consider the implementation of a formalized Fire Prevention/Public Education Committee as referenced within the proposed Fire Protection Services Master Plan.	-	-	-	Short-term (1-3 years)
31	That the LaSalle Fire Service consider the purchase of additional sets of spare bunker gear in multiples sizes to accommodate the decontamination requirements following fire incidents.	Approximately 12 sets of additional bunker gear – approximately \$3,000 per set of bunker gear	\$36K	-	Short-term (1-3 years)
32	That the Town of LaSalle consider revising the current Emergency Response Plan to	-	-	-	Short-term (1-3 years)

Recommendation No.	Operational Recommendations	Additional Detail	Estimated Capital Budget Impact	Estimated Operating Budget Impact	Proposed Schedule
	more accurately define the responsibilities assigned to all members of the Municipal Control Group as referenced within the proposed Fire Protection Services Master Plan.				
33	It is recommended that priority be given to establishing performance benchmarks for emergency call taking and dispatch services identified within N.F.P.A. 1221 - Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems which are reviewed through a regular process.	-	-	-	Short-term (1-3 years)
34	That the Fire Chief discuss the approach to training all Communications Centre staff to the N.F.P.A. 1061 - Standard for Professional Qualifications for Public Safety Telecommunications Personnel – Level I qualifications and certification with the dispatch services provider.	Potential for training cost impacts for dispatch provider	-	-	Short-term (1-3 years)