2025

Emergency Management Group









Village of Lion's Bay

Core Services Review – Lion's Bay Fire Rescue

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EXECUTIVE SUMMARY

Lions Bay Fire Rescue provides meaningful service to the community, yet the department is carrying significant structural and administrative strain. The absence of a permanent Fire Chief, combined with ongoing turnover and increasing regulatory expectations, has created a level of instability that makes it difficult to maintain the documentation, oversight, and leadership capacity required for the Village's declared Interior Operations service level. Volunteers continue to give considerable time and energy, but the current system is stretched beyond what a volunteer model can reasonably sustain.

This review identified widespread gaps in record keeping, equipment testing documentation, and training verification. Specifically, SCBA certification records, hose testing records, apparatus pump tests, PPE lifecycle tracking, and officer competency documentation was found to be incomplete or unavailable. These issues reflect not a lack of effort but a lack of capacity and the absence of IT support or structured administrative systems. Without reliable records, the Village cannot demonstrate due diligence or confirm that equipment and personnel are fully prepared for interior firefighting. The administrative burden has shifted to a small group of volunteers who are already stretched thin, creating an unsustainable model that relies on personal commitment rather than organizational structure.

The Village does not currently have a community risk assessment or a strategic plan for the fire department. Without these foundational planning tools, long-term decisions related to staffing, training, apparatus replacement, and capital investment are made without a clear understanding of present and emerging risks. Capital reserves are minimal, and the department lacks a predictable financial pathway to address aging apparatus or required equipment replacement. This limits the Village's ability to plan for service sustainability and to ensure that expectations for Interior Operations are matched by adequate resources and oversight.

Lions Bay Fire Rescue's volunteers remain committed, capable, and valued by the community. They respond to a demanding highway corridor, provide consistent medical and rescue support, and maintain strong participation in routine training. Their dedication is evident, but the structure around them has not kept pace with modern expectations. Strengthening leadership, establishing reliable documentation systems, improving administrative support, and developing a long-term strategic and financial plan will be necessary to ensure the department remains safe, compliant, and sustainable.

This review provides Council with service delivery options that reflect the current state of the department, the resources available to the Village, and the level of service the community expects. The path forward will require clear decisions about leadership capacity, administrative support, risk tolerance, and long-term investment. With the right framework in place, Lions Bay

can continue to rely on a volunteer service that is well supported, properly equipped, and positioned to meet the needs of the community for years to come.

Disclaimer

This Core Services Review has been prepared at the request of the Village of Lions Bay to support informed decision making regarding the current and future delivery of fire protection and emergency services. The purpose of this review is to evaluate the department's organizational structure, operational capacity, community risks, and strategic options using the best available data, policy documents, and stakeholder input at the time of writing.

The findings and recommendations contained in this report are based on a combination of publicly available information, departmental records, interviews, mutual aid agreement, and supporting documentation provided by or obtained in consultation with the Village of Lions Bay and other relevant parties. Every effort has been made to ensure accuracy, objectivity, and impartiality in the analysis and conclusions presented.

This report does not constitute legal, engineering, architectural, or financial advice, and no warranties are expressed or implied regarding its use or application. Any reference to infrastructure condition, cost estimates, or facility suitability is based on visual observation and planning level assumptions and should not be interpreted as a certified professional evaluation. The Village of Lions Bay is encouraged to seek independent professional consultation before making financial commitments, approving capital projects, or entering into contractual agreements.

The observations and interpretations expressed in this report do not reflect on the performance or intent of any individual or the department. They are offered solely in the interest of supporting transparent governance, public safety, and evidence based municipal planning.

Use of this report by parties other than the Village of Lions Bay is at their own risk. Emergency Management Group (EMG) assumes no responsibility or liability for decisions made by third parties or for any direct or indirect consequences resulting from the use of this report outside its intended purpose.

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Section 1

Introduction

SECTION 1: INTRODUCTION

The Village of Lions Bay has engaged Emergency Management Group (EMG) to conduct a Core Services Review of Lions Bay Fire Rescue (LBFR). This initiative was authorized to provide Council and Administration with a clear, objective, and evidence-based understanding of the current state of the fire department and to identify actionable strategies for improving service delivery, governance, and long-term sustainability.

The Request for Proposals (RFP) issued by the Village on July 21, 2025, outlines the purpose of this review as an opportunity to evaluate the department's capabilities, challenges, and risks in the context of Lions Bay's unique operating environment. Specifically, the RFP requires a comprehensive assessment of LBFR's organizational structure, staffing, equipment, facilities, training, and role in emergency management, with the goal of delivering immediate (0 to 1 year), short (1 to 3 years), mid term (4 to 10 years), and long-term (11 to 20 years) recommendations that enhance efficiency, compliance, and community safety.

Lions Bay's Fire Rescue Service operates within one of the most geographically and environmentally challenging regions in British Columbia. The Village is a steep, linear community built along Highway 99, bordered by forested terrain and the shoreline of Howe Sound. This combination of steep slopes, dense vegetation, and limited access routes makes both fire protection and emergency response logistically complex. It also amplifies the importance of effective planning, training, and resource allocation.

LBFR is a volunteer-based department that provides structural and interface fire suppression, medical first response, motor vehicle incident response, and emergency preparedness support. The department also supports the Village's Emergency Operations Centre, which is co-located within the fire hall. At the time of this review, the Fire Chief position is vacant, leaving the department under no official leadership.

The RFP emphasizes that the Core Services Review must:

- Evaluate the department's governance, staffing, operations, training, and infrastructure.
- Assess compliance with applicable legislation, standards, and best practices, including the BC Fire Service Training Playbook, the Workers Compensation Act, the Fire Services Act, and relevant NFPA standards.
- Identify gaps, inefficiencies, and risks that may affect service delivery or firefighter safety.
- Provide evidence-based, prioritized recommendations that guide Council in making informed decisions over 5-, 10-, and 20-year horizons.

EMG's approach to this review is guided by the principles of objectivity, transparency, and collaboration. The review process includes document and data analysis, site inspections, and structured engagement with Council, municipal administration, LBFR officers and members, and external partners such as the District of West Vancouver Fire Department, Metro Vancouver Regional District and Britannia Beach Fire Department. Through this engagement, EMG assessed both the operational realities of the department and the broader system of governance and support that influences its effectiveness.

Lions Bay faces a series of interconnected challenges that must be considered in this review. These include:

- Limited and unpredictable water supply governed by restrictive firefighting water reserve policies.
- Geographic isolation and limited mutual aid coverage.
- An absence of permanent fire service leadership.
- A volunteer workforce that is highly transient, with many members seeking experience before transitioning to career fire departments.
- PPE and equipment nearing or exceeding lifecycle standards.
- The need for stronger administrative systems for training records, safety documentation, and operational reporting.

The goal of this review is not only to identify deficiencies but to develop a practical roadmap that aligns with the Village's fiscal capacity, community risk profile, and long-term safety objectives. The final Core Services Review will serve as a tool to support Council's decisions on governance, budgeting, infrastructure investment, and service delivery models, ensuring that fire protection in Lions Bay remains sustainable, compliant, and resilient for years to come.

Section 2

Community and Fire Department Profile



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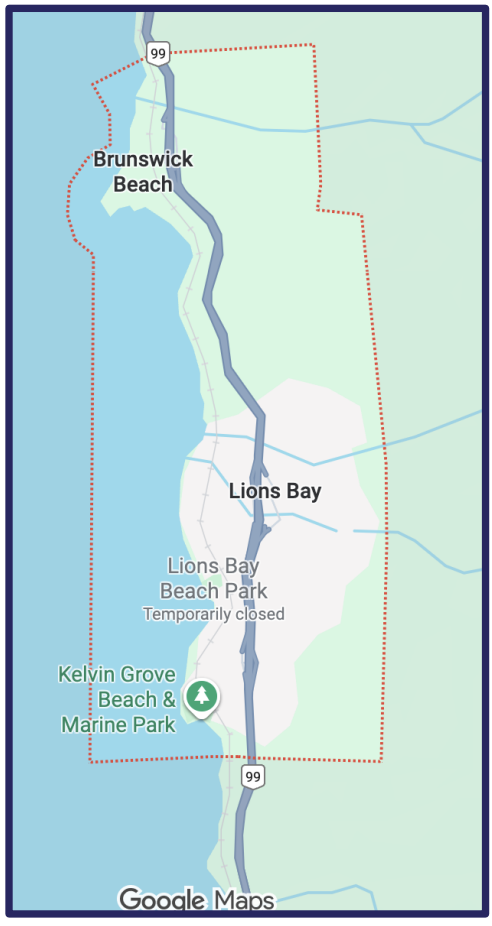
SECTION 2: COMMUNITY AND FIRE DEPARTMENT PROFILE

Understanding the broader community context and the structure of the fire department is essential to evaluating how well emergency services align with local needs and risks. A clear profile of the community and the department provides the foundation for identifying service demands, operational pressures, and the capacity of Lions Bay Fire Rescue to meet present and future expectations.

2.1 Community Profile

Lions Bay is a small seaside village on the eastern shore of Howe Sound in Metro Vancouver. The settlement is linear along Highway 99 and climbs steep forested slopes, which creates challenging access, wildfire interface exposure, and limited developable land.

The 2021 census counted 1,390 residents, up about 4.2 percent from 2016. There were 506 occupied private dwellings in 2021. Land area is about 2.53 square kilometres, which yields a population density near 549 people per square kilometre. The growth rate is modest and below the provincial average, which suggests a generally stable population base rather than rapid expansion.



Most housing is low density and owner occupied single detached on steep terrain with limited room for infill. The village recorded just over five hundred occupied dwellings in 2021 which indicates slow turnover and constrained supply. This physical form drives longer apparatus access times and stresses water distribution during summer demand. Census data reports a median household income of about 140,000 dollars and median after tax household income of about 121,000 dollars in 2020. Average household income is about 199,000 dollars. Typical household size is about 2.8 persons. These figures point to relatively high household earning power compared with many B.C. communities.

The age profile is older than the provincial average. In 2021 there were about 210 children aged 0 to 14, about 830 people aged 15 to 64, and about 350 residents aged 65 and older. Planning assumptions should recognize a meaningful senior cohort and continued demand for medical first response.

Lions Bay is primarily residential with a small commercial presence serving local needs. Many residents commute to employment in Metro Vancouver. Earlier transportation data for Lions Bay shows a heavy reliance on private vehicles, with public transit used by a small minority. The income profile and commuting reliance indicate a bedroom community rather than a diverse local economy.

Settlement on steep forested slopes with a strong wildland urban interface elevates wildfire and slope related risk. The highway corridor concentrates motor vehicle incidents and constrains evacuation options. The municipal website highlights water conservation as an ongoing concern, which aligns with their water shortage and firefighting reserve policy documents and has direct implications for fire flow and hydrant reliability.

Implications for fire service planning in this Core Fire Service Review:

- Population is stable with modest growth, which supports right-sized service improvements rather than large-scale expansion.
- Older age structure and commuting patterns support continued emphasis on medical first response, highway incident response, and mutual aid planning during weekday daytime when local availability may be lower.
- Topography, road network, and low-density housing extend travel times and complicate water supply, which should inform deployment models, tender-based water supply options, and training priorities.

Housing in the village of Lions Bay is predominantly owner-occupied single-family dwellings aligned along the steep slopes and coastal terrain of the Howe Sound corridor. Recent market data indicate that median listing prices for homes in Lions Bay are approximately 2.4 million dollars. The cost-of-living index reflects housing costs that are roughly 172 percent higher than the national average. The high price point and highly constrained supply of developable lots mean entry into the home market here is limited to those with significant equity or income.

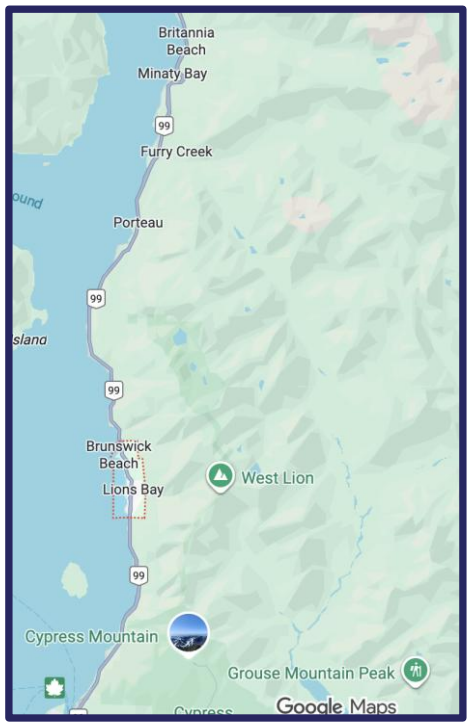
Rental supply in Lions Bay is extremely limited. Given the predominance of single-family homes, the steep terrain and limited zoning for multi-unit development, the availability of rental units is very low. The tight rental market increases pressure on local service delivery, as volunteers and younger workers may find it difficult to secure housing within the village and thus live further afield, which can affect response availability for the fire department.

The housing market in Lions Bay is characterised by high valuations, low turnover, limited rental options, and steep access constraints. These conditions imply the fire service must account for a largely commuter resident base, potential volunteer housing insecurity, and longer response travel times in its planning.

The Village has not completed a formal community risk assessment that consolidates population, housing, terrain, access, and incident data into a clear picture of present and emerging risks. As a result, the fire department is operating without a structured understanding of how local conditions should inform training priorities, staffing expectations, water supply planning, or long-term apparatus and equipment needs. This gap limits the Village's ability to align fire service capability with actual community risk and restricts strategic decision making.

2.1.1 Regional Context

Lions Bay is situated midway along the Sea to Sky Highway between West Vancouver and Squamish. Although the village is geographically isolated by steep terrain and a narrow transportation corridor, it sits within a chain of communities that influence available support and regional response capacity. West Vancouver is approximately15 to 20 minutes to the south and represents the nearest fully staffed career department with apparatus and specialty teams. Squamish, located about twelve minutes to the north of Britannia Beach and approximately 30 minutes north from Lions Bay, functions as the closest major service centre with hospitals, commercial services, and additional emergency resources. Smaller communities such as Furry Creek and Britannia Beach sit between Lions Bay and these larger centres and contribute to the continuous flow of commuter and recreational traffic along Highway 99. Beyond Squamish, Whistler remains a significant regional draw, attracting year-round tourism and increasing highway activity throughout all seasons. This corridor context shapes Lions Bay's operational reality, influencing response times, mutual aid options, and the type of incidents the department is most likely to encounter.



2.1.2 Operational Implications

Lions Bay sits within a heavily travelled commuter and recreation corridor where medical calls, motor vehicle incidents, and interface fire risks are common. Being positioned between Squamish and West Vancouver provides access to stronger regional resources, but those assets are not immediately available when traffic congestion, construction delays, weather, or slow mutual aid response under a 1995 agreement. The reality is that Lions Bay must be able to manage the first critical phase of most emergencies on its own. The village's geography, population patterns, and the steady activity along Highway 99 make it essential for the fire department to maintain a dependable, well trained local response force capable of stabilizing

incidents. This reinforces the need for strong officer and firefighter development, reliable apparatus readiness, and consistent training that supports safe initial operations in a community where help is nearby in theory but not readily available.

2.2 Fire Department Profile

Lions Bay Fire Rescue serves the Village of Lions Bay through a paid-on-call model built on training and commitment. The department consists of approximately 25 to 30 members, one fire station, a small training facility, and three primary apparatus. Although the Village has a population of roughly 1,500 residents and about 500 homes, over the last three years, the department responded to an average of 126 incidents annually. Approximately 75 percent of these calls originate from the Sea to Sky Highway corridor, requiring frequent responses to motor vehicle collisions, medical incidents, and rescue events in addition to local structural and interface fire risks.

The department operates within a staffing environment shaped by a transitional volunteer workforce. More than half of the members are recent graduates from fire training programs who rent temporary accommodation in Lions Bay to gain experience for future career applications. Only a small number of firefighters live in the community full-time, and several of those members are only moderately active. This limits the depth of operational experience available on scene and contributes to variable staffing levels, particularly during daytime hours when many members are working outside the community. The Village's housing market intensifies this challenge. With average home values approaching $2.4 million dollars and very limited rental availability, firefighters struggle to secure long-term residency. This constrains the pool of stable volunteers and continues to drive turnover.

The high turnover of volunteers, combined with the lack of long-term housing options, limits the department's ability to build internal leadership depth. This turnover has forced a small group of experienced members to shoulder a disproportionate share of operational and administrative responsibilities. Several members reported growing fatigue from performing tasks that would normally fall under a full-time administrative or Chief Officer role. This workload pressure is intensified by the absence of IT support or a structured administrative system for managing records, equipment testing, training documentation, and compliance activities. These responsibilities are being completed by volunteers who already balance employment, family, and personal commitments, creating unseen burnout risks and limiting the ability to maintain consistent documentation.

Lions Bay Fire Rescue has earned a strong reputation among new graduates from the Lower Mainland as a department that offers meaningful experience, exposure to real emergency calls, and a pathway to develop competencies required for full-time career positions. This reputation

helps sustain recruitment efforts, but the short duration of stay for many recruits continues to affect continuity, internal leadership development, and long-term operational stability. To help maintain predictable coverage, the department is organized into four platoons, each supervised by a Lieutenant or Captain. Every platoon is assigned one duty weekend every four weeks, during which members must remain in the Village and complete apparatus checks and additional training. This system provides predictable weekend coverage but illustrates the pressure placed on a small group of volunteers and the operational vulnerability created by a commuter-based membership.

The officer group consists of two Captains and two Lieutenants, supported by the former Fire Chief, who now participates only as a firefighter. The process for promoting officers is informal and does not follow a structured developmental pathway. Recent incidents have shown that officers may be required to assume command roles without having gained sufficient operational experience, which reflects the limited depth of experience available within the current leadership structure. Turnover also places additional expectations on the few longer serving members who remain active. These members oversee apparatus readiness, rope rescue equipment, personal protective equipment, medical supplies, and aspects of training, all while balancing their own employment and family responsibilities.

Despite these constraints, Lions Bay Fire Rescue maintains a strong emphasis on training and operational readiness. Members are required to achieve NFPA 1001 Firefighter Level 2 certification along with First Responder or Emergency Medical Responder qualifications. The department trains weekly and maintains competencies in fire ground operations, auto extrication, wildland and interface firefighting, technical rope rescue, and medical first response. The roster is motivated and committed to improving, influenced in part by the number of members seeking career progression in the fire service. This model offers both strength and vulnerability. The department benefits from enthusiastic recruits with strong technical training, yet limited retention restricts the development of sustainable leadership capacity.

The apparatus fleet reflects both the steep geography of the community and the operational requirements of the highway corridor. Engine 61 is the primary response engine for medical and structural calls within the Village. Engine 62 serves as the highway rescue unit and carries the department's hydraulic extrication tools. Rescue 63 is smaller and more maneuverable, suitable for narrow residential roads and for delivering wildland equipment. These apparatus form a functional fleet, but their ongoing reliability depends heavily on consistent maintenance and clear documentation, which the department currently struggles to sustain.

Operational expectations for members are demanding. Firefighters are required to reside in the community or relocate once accepted, attend weekly training, and participate in scheduled duty

rotations. The high cost of housing and very limited rental availability remain significant barriers, which force many firefighters to work outside the community even when they temporarily rent in Lions Bay. This reduces daytime availability and makes it difficult to consistently meet response expectations. The goal of responding within five minutes of being dispatched depends on members being physically present in the Village, reinforcing the importance of recruitment, retention, and housing affordability in sustaining the current service model.

The Village has not completed a community risk assessment to identify the full range of hazards, probabilities, and consequences that influence fire service demand. Without a structured assessment of risk, the department is forced to operate without a clear understanding of which threats are increasing, which require targeted training, and which capital needs will emerge in the near and long term. This absence of a formal risk profile limits strategic planning, complicates resource allocation, and affects the Village's ability to make evidence-based decisions about staffing, apparatus replacement, facilities, and the level of service expected from a volunteer department.

Community and Fire Department Profile Summary

This section outlined the essential context needed to understand how Lions Bay Fire Rescue operates within its community. It described the physical layout, population characteristics, housing market, and risk profile of the village, followed by an overview of the fire department's structure, staffing model, apparatus, and operational demands. Together, these elements provide a clear picture of the environment in which emergency services must function and highlight the practical challenges created by geography, limited housing, commuter patterns, and a transitional volunteer workforce. The combined community and department profiles set the foundation for assessing whether current resources, staffing, training, and governance structures align with the risks and expectations present in Lions Bay.

Understanding both the community profile and the fire department profile is important because effective fire service planning must be rooted in the realities of the local environment. The risks a community faces, the layout and topography of its neighbourhoods, the age and characteristics of its residents, the availability of housing, and the local workforce all influence how emergency services must be structured and deployed. Likewise, the internal makeup of the fire department defines its ability to respond to those risks. A formal community risk assessment would help consolidate these factors by identifying specific hazards, estimating their likelihood and consequences, and aligning response capability with actual community needs. Without this level of understanding, it becomes difficult to identify gaps, anticipate pressures, or make informed decisions about training, staffing, apparatus replacement, operational expectations, and long-term service sustainability. A well-informed analysis ensures

that recommendations are tailored, defensible, and aligned with both community needs and municipal responsibilities.

Section 3



Governance and Regulatory Framework





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SECTION 3: GOVERNANCE AND REGULATORY FRAMEWORK

Identifying the governance and regulatory framework is essential because it establishes the legal authority, responsibilities, and expectations that guide how the fire department must operate. Understanding these obligations, along with recognized industry best practices, ensures that service delivery, training, and operational decisions are aligned with provincial legislation, municipal policy, and the standards required for safe and effective emergency response.

Strong governance is essential for a fire department that operates at an Interior Operations level, yet LBFR lacks several foundational elements that support consistent oversight, direction, and accountability. The absence of a permanent Fire Chief, gaps in documentation, and the lack of a community risk assessment or departmental strategic plan have created a governance framework that relies heavily on volunteer effort rather than structured systems or defined administrative support. These limitations combined influence every part of service delivery and contribute to the operational and administrative strain identified throughout this review.

3.1 Fire Bylaw

While *Fire Bylaw No. 428* establishes Lions Bay Fire Rescue as the municipal fire department and outlines the authority of the Fire Chief, the bylaw does not reflect current legislative requirements or the operational realities of the department. It does not designate inspection authority under the *BC Fire Safety Act*, does not identify the declared level of service, and references the former *Fire Services Act* rather than the current *Fire Safety Act*. These gaps create uncertainty in responsibilities and hinder the Village's ability to demonstrate compliance or provide clear direction to the department.

It identifies the position of the Fire Chief and grants the Chief authority to manage operations, training, supervision, and administration of the department. This establishes a single point of command and accountability when the position is filled.

The bylaw authorizes the department to perform structural firefighting, rescue activities, medical first response, wildland response, and related emergency services. This gives the department the legal scope needed to respond to the types of incidents that occur in the community.

The bylaw confirms that Council retains authority to appoint the Fire Chief and determine compensation. This supports municipal oversight and ensures the department remains accountable to local government.

The Village's primary fire services bylaw establishes Lions Bay Fire Rescue and gives the municipality the authority to operate a fire department. While the bylaw outlines general powers and responsibilities, it does not fully reflect several modern legislative requirements that now guide fire service governance in British Columbia. The first gap is the absence of a clearly designated authority for conducting fire safety inspections, which is required under the BC Fire Safety Act. Without this designation, the Village cannot demonstrate compliance with its mandated inspection responsibilities. The second gap is the lack of a declared level of fire service, an important element introduced through the provincial training standard known as the Structure Firefighters Competency and Training Playbook, herein after referred to as the Playbook. Municipalities are expected to formally identify whether the department operates at an exterior, interior, or full-service level so that training, certification, and operational expectations are aligned with Council's approved level of service.

A third governance gap is that the bylaw references powers under the former *Fire Services Act*, which has been replaced by the *BC Fire Safety Act*. The current bylaw has not been updated to align with this newer legislation, which defines expanded duties for local governments, including inspection authority, enforcement processes, and compliance obligations. These gaps do not reflect a failure of the fire department but highlight the age of the bylaw and the need for a modernized legislative framework that supports today's operational and regulatory environment.

Updating the bylaw will provide clearer authority, reduce liability, and better support the fire department's ability to meet its responsibilities in a changing fire service landscape.

3.2 Department Leadership Structure and Accountability

At the time of this review, Lions Bay Fire Rescue does not have an appointed Fire Chief. The department is being led collectively by its two Captains and two Lieutenants, who have divided responsibility for operational oversight, training coordination, and day-to-day administrative duties. While this leadership group has continued to maintain basic service delivery, this structure does not provide the stability, oversight, or accountability expected of a municipal fire department operating at an Interior Operations level of service. The administrative workload alone, associated with equipment testing, PPE management, training documentation, officer development, safety oversight, and operational reporting exceeds what volunteer officers can reasonably sustain without dedicated support. With no IT support and no administrative staff, these responsibilities rely entirely on volunteer time and personal commitment, which is not sustainable.

The former Fire Chief remains an active member of the department but no longer participates in decision making, administrative duties, or officer level functions. His presence strengthens

operational response capacity; however, it does not address the leadership gap created by the vacancy in the Fire Chief position or provide the administrative, supervisory, and regulatory oversight required under provincial legislation. Without a designated Chief Officer, responsibility for verifying WorkSafe BC compliance, maintaining equipment records, confirming training competencies, and ensuring safety systems are enforced remains unclear and hit and miss.

The absence of a Fire Chief creates both immediate and short-term planning challenges. Critical responsibilities such as training certification and planning, occupational health and safety oversight, equipment lifecycle management, policy enforcement, and interagency coordination are not being managed through a defined chain of command. Administrative duties such as documentation, recordkeeping, and communication with Council are shared informally among volunteer officers, which increases the likelihood of inconsistency, gaps, and communication breakdown. Several members indicated fatigue from managing administrative and operational tasks that would normally fall under the Fire Chief.

This leadership gap also creates governance risk for the municipality. Under provincial legislation, the employer is responsible for ensuring the safety of workers and volunteers through compliance with WorkSafe BC and the *Fire Safety Act*. In the absence of an appointed Fire Chief to serve as the designated supervisor, accountability for compliance defaults to the Chief Administrative Officer and ultimately to Council. The chain of command is not to default this accountability to the Officers. This places the municipality in a position of direct responsibility for ensuring that supervision, training, documentation, and operational practices meet regulatory requirements.

Given these factors, the department's current leadership structure is not stable and presents significant near-term risks to operational readiness, member safety, and regulatory compliance. Establishing a clear governance framework and appointing a qualified, compensated Fire Chief should be considered an immediate priority for the Village. The position must have the authority and capacity to manage all aspects of fire department operations, administration, safety systems, and compliance while providing Council and the CAO with accurate, timely, and professional reporting.

3.3 Declared Level of Service

Lions Bay Fire Rescue has declared an Interior Operations level of service under the BC Structure Firefighters Minimum Training Standards. This designation commits the department to perform interior suppression activities, which require certified firefighters, documented competencies, reliable equipment testing, consistent supervision, and clear safety systems. It

also requires the municipality to ensure that the administrative and governance structure needed to support this level of service is in place.

Maintaining an Interior Operations level of service demands more than participation in weekly training. It requires accurate, session-based training records, verified officer competencies, documented incident command readiness, and full compliance with WorkSafeBC requirements for emergency response. It also requires reliable documentation for SCBA testing, ladder inspections, hose testing, and apparatus pump performance. Lions Bay currently lacks the administrative structure and IT support necessary to maintain these documentation requirements. Training records are captured monthly rather than per session and have been inconsistent; officer competencies are not consistently recorded in Vector Solutions, and essential equipment testing records are incomplete or unavailable. These gaps reduce the Village's ability to demonstrate due diligence and create uncertainty about whether Interior Operations requirements are consistently met.

High turnover further complicates the department's ability to maintain Interior Operations readiness. Many members are technically trained but have limited operational experience, and the department's in-house officer development pathway may be limited to how it prepares members for supervisory roles required under the Interior model. This places increased pressure on the few longer-serving members and reduces the depth of leadership available during complex incidents.

Without a permanent Fire Chief to oversee training, documentation, safety systems, and operational review, the Village cannot rely on informal or volunteer-based processes to meet the requirements associated with Interior Operations. These responsibilities demand a level of administrative and supervisory oversight that exceeds what the current volunteer leadership model can provide.

Given these factors, the Village must determine whether it wishes to continue supporting an Interior Operations level of service and, if so, must invest in the leadership, administrative capacity, and documentation systems required to meet these obligations. If the Village chooses to maintain this level of service, appointing a qualified Fire Chief and strengthening administrative support will be essential steps toward ensuring compliance, enhancing safety, and supporting sustainable operations.

3.3.1 Team Leader

Team Leaders in an Interior Operations department must meet all competencies of an Interior Firefighter and then demonstrate the additional knowledge, skills, and judgment necessary to supervise personnel inside the hazard area. This includes conducting tactical size-ups, determining immediate risks to crews, directing hose line placement, and ensuring

accountability procedures are followed at all times. They are expected to understand fire behaviour in enclosed structures, read changing conditions, and recognize early indicators of flashover, structural instability, and compromised egress. Team Leaders must also be able to communicate clearly with the Incident Commander, relay crew status reports, and ensure WorkSafeBC respiratory protection requirements are met. Within the structure, they are responsible for maintaining crew integrity, monitoring air supply, confirming search patterns, and ensuring firefighters use safe entry, exit, and movement techniques in zero visibility environments. These expectations align with NFPA 1021 Fire Officer requirements and are intended to ensure that the supervisor inside the building has the competence to recognize danger and adjust tactics immediately. EMG could not confirm based upon the training records if this has been taking place with regular scheduling throughout the year.

3.3.2 Incident Safety Officer

The Incident Safety Officer holds a broader supervisory role focused entirely on risk monitoring and hazard mitigation during interior operations. They must have a working knowledge of structural fire behaviour, building construction, and the potential for collapse in various occupancy types. They are responsible for assessing the scene for unsafe actions, identifying rapidly changing conditions, confirming the placement and readiness of a rapid intervention team, and ensuring that firefighters entering an IDLH environment are properly equipped and accounted for. The Safety Officer must be able to halt unsafe acts, recommend tactical adjustments to the Incident Commander, oversee rehab and exposure control measures, and verify that WorkSafeBC Part 31 requirements for hazardous atmospheres are being met. They are expected to operate with enough authority and experience to influence command decisions when necessary to protect crews.

Together, the Team Leader and Incident Safety Officer provide the supervision and risk oversight required to support interior attack. Both roles require experience, judgment, and formal training that extends far beyond basic firefighter certification. These positions are critical in an Offensive fire department, and a consistent effort to train members fulfilling these roles must be a priority. As noted with the Team Leader competencies, EMG could not confirm based upon the training records if this has been taking place with regular scheduling throughout the year.

3.4 Fire Safety Act

The *Fire Safety Act*, which replaced the former *Fire Services Act* and has been in effect since August 1, 2024, modernizes how fire prevention and inspection are carried out in British Columbia. It clarifies the duties and authorities of key parties, including placing a legal obligation on property owners to identify and address fire hazards on their land or in their

buildings. The *Act* also requires municipalities to designate qualified Fire Safety Inspectors and Investigators, establishes minimum training expectations, and authorizes both tactical and preventative evacuations when needed during fire emergencies. In addition, it expands the ability of local governments to recover certain costs associated with fire safety activities.

3.4.1 Fire Safety Inspection Authority under the BC Fire Safety Act

The *BC Fire Safety Act* and the accompanying Fire Safety Regulation require municipalities to formally designate who is responsible for conducting fire safety inspections within their jurisdiction. The person performing inspections must be acting under delegated municipal authority and must be competent to the level required for the occupancies being inspected. This designation may be assigned to the Fire Chief, a Fire Prevention Officer, a Building Official, or a contracted service provider. What matters is that the municipality clearly identifies the position responsible and can demonstrate training and competency appropriate to those inspection duties.

Fire Bylaw No. 428 establishes Lions Bay Fire Rescue as the municipal fire department and grants the Fire Chief operational authority. However, the bylaw does not identify the position responsible for conducting fire safety inspections, nor has the Village documented this designation through policy, Council resolution, or administrative appointment. With no appointed Fire Chief at the time of this review, inspection authority and responsibility default to the municipality. This creates uncertainty in regulatory compliance and clarity of accountability.

The absence of a designated local assistant to the Fire Commissioner is further complicated by the lack of a community risk assessment. Without a structured understanding of residential, commercial, and wildland interface risks present in the Village, it is difficult to determine which occupancies require routine inspection, which hazards demand priority, or how fire prevention activities should be aligned with local risk. This leaves the Village without a coordinated fire prevention framework and places responsibility for fire safety readiness on volunteers who do not have the authority, administrative capacity, or IT support to manage inspection related duties. This situation may expose the municipality to governance and liability risk, particularly if a fire occurs in a building that would normally fall under an inspection program.

Ensuring clear inspection authority is important because fire safety inspections are a primary mechanism for identifying hazards, preventing fire spread, and supporting life safety in residential and commercial buildings. Without a designated authority and documented competency, the Village may be exposed to risk if a building fire or safety issue occurs in a property that should have received inspection oversight.

To meet the requirements of the *BC Fire Safety Act* and to support municipal due diligence, the Village should formally designate the position responsible for conducting fire safety inspections

and ensure the individual in that role has or receives training appropriate to the occupancies present in Lions Bay. Another option is to contract fire inspections to a qualified third party, which may be the most cost effective and administratively manageable approach for Lions Bay. The bylaw update can acknowledge the authority, while the specific assignment of inspection responsibility can be documented through CAO appointment, job description, or municipal policy.

3.5 Workers Compensation Act

British Columbia's Workers Compensation Act and its accompanying regulations provide the foundation for protecting the health and safety of firefighters by establishing mandatory workplace safety requirements. Under this legislation, municipalities and fire departments are obligated to ensure safe working conditions, with WorkSafeBC empowered to oversee and enforce compliance. The *Act* also contains presumptive illness provisions that acknowledge certain cancers and diseases as work related for firefighters who meet defined service and exposure criteria. As a result, eligible firefighters are presumed to qualify for compensation without needing to prove the occupational link.

3.6 Wildfire Act

This provincial legislation outlines how wildfires on Crown land and designated forested areas must be prevented, managed, and suppressed. It places clear obligations on individuals and organizations working near forested landscapes to identify fire risks, take preventative measures, and take immediate action if a fire begins. Although municipal fire departments generally focus on incidents within their jurisdictions, they can become involved in wildland urban interface events where structural protection and wildfire response intersect. The Act also enables the Province to recover suppression costs from those found responsible for igniting a wildfire.

3.7 Emergency and Disaster Management Act

The *Emergency and Disaster Management Act* took effect on November 8, 2023, replacing the long-standing Emergency Program Act from 1993. It introduces a modern, all hazards frameworks built around mitigation, preparedness, response, and recovery, and requires municipalities and regional districts to maintain emergency plans and conduct hazard and risk assessments. The *Act* also updates the authority for declaring local emergencies and directing disaster response, while strengthening expectations for collaboration with Indigenous communities and contemporary emergency management practices.

3.8 WorkSafe BC OHS Reg Part 31

WorkSafeBC Occupational Health and Safety Regulation Part 31 sets out mandatory safety requirements for all employers and workers involved in firefighting, whether full time, part time, or volunteer. These regulations prescribe the minimum expectations for training, respiratory protection, personal protective equipment, equipment maintenance, emergency procedures, and safe work practices at fire incidents. Part 31 also establishes clear rules for working in hazardous atmospheres, including two in two out, rapid intervention, and accountability systems, along with requirements for incident command and supervisory oversight. Compliance is not optional, and WorkSafeBC monitors adherence through inspections, investigations, and enforcement actions. Together, these obligations form the legally binding safety framework under which all fire departments in British Columbia must operate.

3.9 British Columbia Structure Firefighters Minimum Training Standards (2024)

Often referred to as the BC Playbook, which identifies the three distinct service levels that a local authority may declare, sets the minimum training standards that every fire department in the province must meet. Its purpose is to ensure that firefighters are trained to a consistent and appropriate level that matches the type of service their department is authorized to provide.

3.10 BC Fire Code and BC Building Code

The BC Fire Code and BC Building Code are provincial regulations that outline the technical fire safety requirements for buildings and facilities throughout the province. The Fire Code, which draws from the National Fire Code, is updated periodically and works alongside the Fire Safety Act by setting standards for fire alarms, sprinkler systems, means of egress, and general fire hazard management within existing structures.

3.11 The NFPA Standards

The National Fire Protection Association is an international organization focused on reducing fire, electrical, and related hazards through widely accepted codes and standards. While NFPA standards are not legislated in British Columbia, they are recognized across the fire service as the benchmark for industry best practice. Their guidance covers firefighter training, apparatus design, operational procedures, and fire prevention, allowing departments to operate with consistent, safe, and defensible practices that support effective emergency response and reduce municipal liability. NFPA standards also influence the design and performance of PPE, breathing apparatus, and fire apparatus, ensuring equipment meets rigorous safety

expectations. In practice, NFPA provides a framework that strengthens firefighter safety, enhances operational consistency, and supports best practices in service delivery.

3.12 NFPA 1720

NFPA 1720 Standard for the Organization Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments sets the organizational and deployment expectations for volunteer and paid on call fire departments and uses response time as a key performance indicator for emergency services. The standard establishes minimum response times and staffing levels based on population density and call volume, and it identifies the number of personnel needed to effectively suppress a fire in a typical two-thousand-square-foot, two-story residential structure without basement exposures. For Lions Bay Fire Rescue, NFPA 1720 provides a benchmark for both turnout expectations and the size of the crew required to safely and effectively manage structure fires within the community.

For LBFR, these guidelines are essential in examining and evaluating response effectiveness. Given that the village of Lions Bay falls within the Suburban Demand Zone, (500-1000 people/mi^2 or 2.6km^2), the LBFR should structure its response plans to meet a minimum of 10 firefighters arriving on scene within 10 minutes, at 80 percent of the time.

Table 4.3.2 Staffing and Response Time of NFPA 1720 identifies the following[DC1][LK2].

Demand Zone	Demographics	Minimum Staff to Respond	Response Time (minutes)	Meets Objectives (%)
Urban Area	>1000 people/mi^2 (2.6km^2)	15	9	90
Suburban Area	500-1000 people/mi^2 (2.6km^2)	10	10	80
Rural Area	<500 people/mi^2 (2.6km^2)	6	14	80
Remote Area	Travel distance > 8 mi (12.87 km)	4	Directly dependent on travel distance	90
Special Risks	Determined by AHJ	Determined by AHJ based on risk	Determined by AHJ	90

- *A jurisdiction can have more than one demand zone.*
- *Minimum staffing includes members responding from the AHJ's department and automatic aid.*
- *Response time begins upon completion of the dispatch notification and ends at the time interval shown in the table.*

The standard further identifies:

> *4.3.4 Upon assembling the necessary resources at the emergency scene, the fire department shall have the capability to safely commence an initial attack within 2 minutes 90 percent of the time.*
>
> *4.3.5 Personnel responding to fires and other emergencies shall be organized into company units or response teams and have the required apparatus and equipment.*
>
> *4.3.6 Standard response assignments and procedures, including mutual aid response and mutual aid agreements predetermined by the location and nature of the reported incident, shall regulate the dispatch of companies, response groups, and command officers to fires and other emergency incidents.*

Meeting the ten firefighters within 10-minutes guideline in NFPA 1720 is an important benchmark for Lions Bay Fire Rescue to demonstrate effective response capability. This standard identifies the staffing and response expectations needed to control structure fires in their early stages, limit property damage, and support life safety. NFPA 1720 recognizes that different population densities require different deployment models, and it provides a consistent framework for volunteer and paid-on-call departments to measure their performance.

For Lions Bay Fire Rescue, aligning staffing levels, turnout times, and operational readiness with NFPA 1720 helps ensure that crews can assemble an effective response force when a structure fire occurs. This involves organizing personnel, ensuring apparatus is ready to deploy, and maintaining consistent training and response procedures. By meeting the intent of NFPA 1720, the department reinforces its commitment to operational reliability and public safety within the village.

3.12.1 Effective Response Force

When assessing the Effective Response Force and the overall performance of Lions Bay Fire Rescue, it is important to consider three core elements: the availability of personnel and equipment, the capability of those resources once deployed, and the degree to which they can deliver effective operations on scene.

- **Availability** - Refers to how quickly and reliably the department can assemble responders and apparatus for an emergency. As a paid-on-call service, Lions Bay relies heavily on volunteers who may be inside or outside the village when an incident occurs, which directly influences turnout strength and response timing.

- **Capability** - Relates to the skills, training, and competence of the firefighters and officers who respond. Lions Bay maintains regular training that includes foundational skills, scenario practice, and ongoing development to support safe structural firefighting, medical response, and rescue operations.
- **Operational effectiveness** - Reflects how well the available and capable resources perform once they arrive at an incident. This includes assembling the minimum number of firefighters, deploying the appropriate apparatus, and reaching the scene within the expected timeframes identified in standards such as NFPA 1720. The ability to bring together a safe and effective response force quickly is a key measure of overall service performance.

Sustaining a reliable response force is essential for Lions Bay Fire Rescue to continue providing timely and effective emergency services. Ensuring adequate staffing, maintaining consistent training, and keeping apparatus properly equipped all support the department's ability to meet recognized response expectations. As the community's needs shift and emergency demands change, ongoing review of response performance, along with strategic efforts in retention and officer development, will remain important to maintaining a dependable level of fire protection and emergency response within the village.

3.13 NFPA 1201

NFPA 1201 Standard for Providing Fire and Emergency Services offers a balanced, principle-based framework for the management and administration of fire and emergency services. Rather than prescribing a step-by-step operational model, the standard outlines core expectations for governance, leadership, planning, training, community risk assessment, and organizational performance to help ensure that departments operate safely and effectively. For Lions Bay Fire Rescue, NFPA 1201 provides a foundation for clear policy development, consistent administrative oversight, officer growth, and service delivery aligned with community needs. Although not legislated, it represents recognized industry best practice and supports long-term consistency, accountability, and sustainability within a volunteer-based fire service.

3.14 FUS Technical Documents

The Fire Underwriters Survey (FUS) evaluates the fire protection capability of communities across Canada using national grading systems that help insurers determine residential and commercial insurance rates. The Public Fire Protection Classification (PFPC) rates communities on a scale from 1 to 10, with Class 1 representing the highest recognized level of fire protection and Class 10 indicating no recognized service. The Dwelling Protection Grade (DPG) uses a scale

from 1 to 5 to assess residential protection, where Class 1 reflects strong capability and Class 5 represents minimal fire protection. These ratings influence the cost of fire insurance for property owners and provide municipalities with a benchmark for assessing the effectiveness of their fire protection systems.

For Lions Bay, the most recent correspondence (2020) confirms that the community continues to hold a PFPC rating of Class 3 within its hydrant-protected area and a DPG of 3A. Both ratings indicate a solid level of fire protection for a small municipality and help support favourable insurance outcomes for residents and businesses. These results reflect the community's current operational capability, training expectations, water supply reliability, and the department's ability to provide a consistent emergency response.

The correspondence also reinforces that maintaining this standing depends on sustaining the core elements evaluated in the grading process. Reliable staffing, ongoing training, apparatus readiness, and dependable water supply are essential to ensuring the community continues to meet recognized fire protection standards. While no confidential or detailed scoring information is referenced here, the overall outcome highlights that LBFR plays a critical role in keeping insurance risk manageable for the community and serves as a foundation for planning the future direction of fire protection services.

3.15 Emergency Communications and Dispatch Services Bylaw

Lions Bay receives fire dispatch and radio communications support through Emergency Communications (E Comm), the regional emergency communications agency serving much of the Lower Mainland. E Comm provides call taking, dispatching, and radio network infrastructure for fire, police, and ambulance agencies across the region. This arrangement ensures that emergency incidents are routed through a recognized public safety communications system, with standardized call processing and coordinated response notification. The use of E Comm supports consistent call handling and provides access to a shared radio system that is compatible with neighbouring fire departments and regional partners.

The Village's participation in the E-Comm dispatch system is authorized through the Lions Bay Fire Rescue Emergency Communications Services Enabling Bylaw No. 464, which enables the municipality to enter into service agreements for emergency communications. This bylaw provides the legal authority for Lions Bay Fire Rescue to rely on E-Comm as its primary dispatch agency. It also ensures that the department operates within the regional communications framework, supports multi-agency interoperability, and maintains compliance with public safety communication standards. The continued use of E-Comm as the dispatch provider supports reliability in emergency notification and enhances the coordination of response efforts both within Lions Bay and with external support agencies.

3.16 Standard Operating Guidelines

Standard Operating Guidelines (SOGs) provide the foundation for consistent emergency response, safety practices, administrative processes, and member expectations. Lions Bay Fire Rescue has developed a set of SOGs that outline operational procedures for common incident types and day-to-day functions. Several of these guidelines have been updated in recent years, reflecting an ongoing effort by the department to align practices with provincial requirements and industry expectations. However, the effectiveness of these SOGs is limited by gaps in revision tracking, inconsistent implementation, and the absence of administrative support to maintain them.

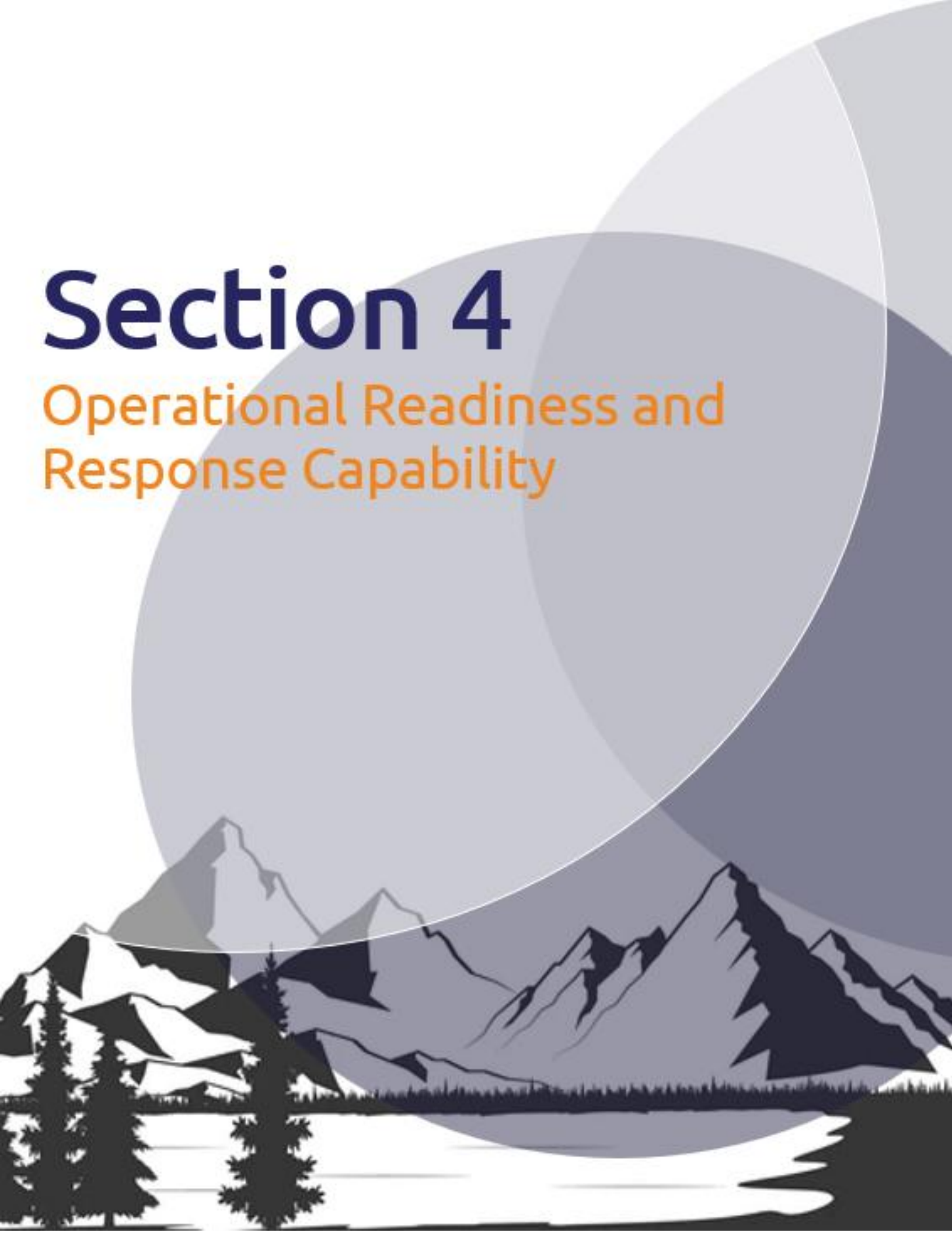
The department does not have an established process for managing SOG revisions, storing version histories, or distributing updates to members in a controlled manner. Revision dates are missing from many guidelines, making it difficult to determine whether the content in use is current or reflects past practices. When SOGs are not supported by structured maintenance and oversight, there is increased risk that operational decisions will be based on habit or individual interpretation rather than approved procedures.

The absence of a permanent Fire Chief contributes to these inconsistencies. SOGs require leadership oversight, regular review, and alignment with new legislation, WorkSafeBC requirements, and operational realities. Without a Fire Chief, the capacity to manage these tasks, SOG maintenance becomes a shared responsibility among volunteer officers who are already managing significant operational and training commitments. This limits the department's ability to ensure that procedures remain accurate, up to date, and reflective of modern fire service expectations.

Strengthening and updating the SOGs will require a structured system for document control, version tracking, and routine review. Establishing clear ownership for SOG maintenance and ensuring procedures are stored in a centralized, accessible format will help support operational consistency and improve compliance with regulatory requirements. These changes will also support new members, stabilize expectations across shifts and platoons, and reduce uncertainty during emergency operations.

Section 4

Operational Readiness and Response Capability



SECTION 4: OPERATIONAL READINESS AND RESPONSE CAPABILITY

Operational readiness depends on the availability of trained personnel, reliable apparatus, fully functional equipment, and a system of documentation that confirms safety and compliance standards are met. Lions Bay Fire Rescue demonstrates a strong commitment to training and maintains equipment that is generally well cared for. However, the department's ability to demonstrate operational readiness is limited by incomplete documentation, inconsistent record-keeping practices, and the absence of administrative and IT support needed to sustain compliance requirements for an Interior Operations fire service.

4.1 LBFR Incident Profile

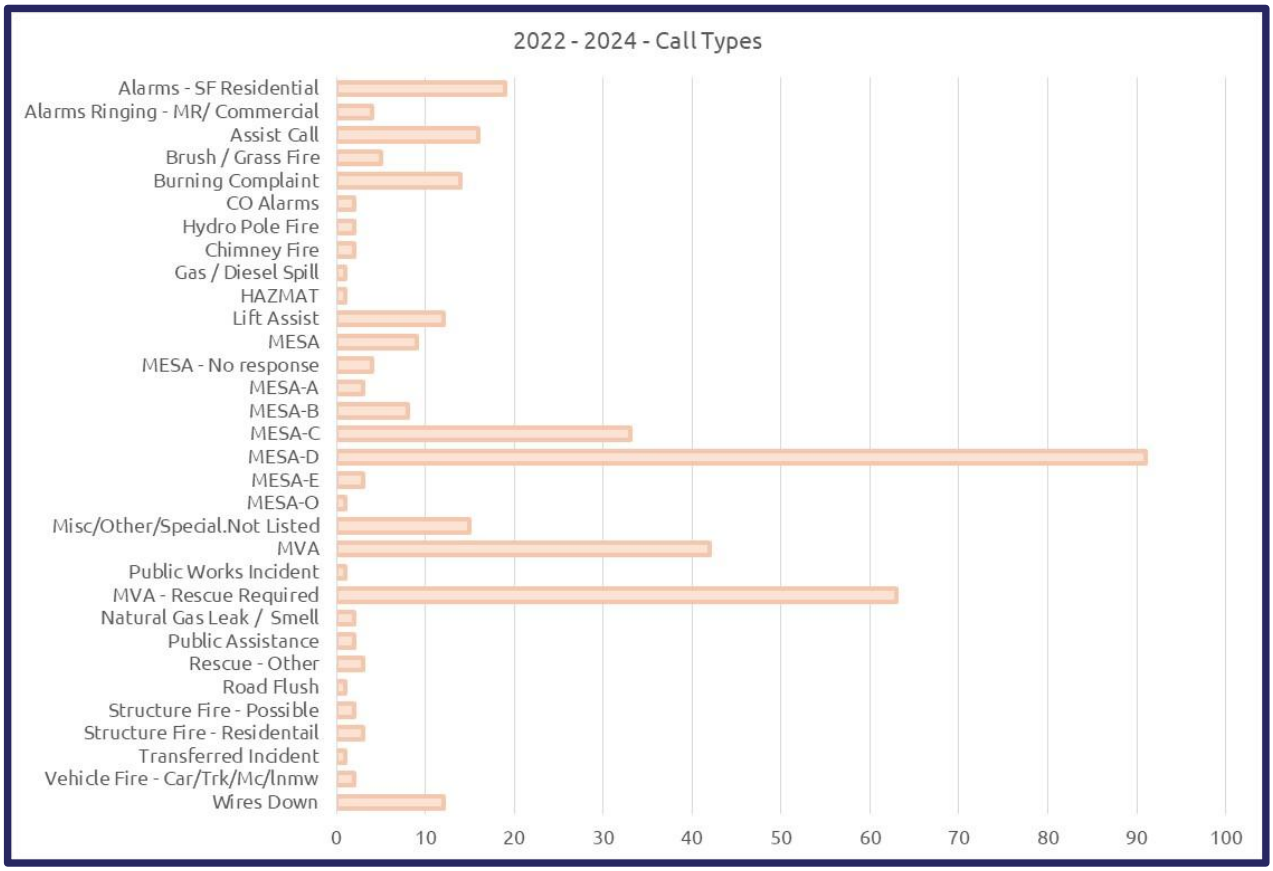
Accurate call tracking is essential for understanding how a fire department is being used and what risks it is being asked to manage. Call data provides a clear picture of the types of emergencies occurring in the community, the training and equipment required to manage them safely, and the staffing levels needed to support reliable response. Without accurate and consistent call type information, it becomes difficult to plan training, allocate resources, support budget requests, or explain service needs to Council and the public. Reliable call tracking is the foundation for informed decision-making and long-term planning.

Over the last three years, Lions Bay responded to approximately 126 emergency incidents per year. Most responses are medical first responses. Over the three-year period reviewed, the department responded to a total of 152 medical-related calls under the Medical Emergency Service Alarm [LK3](MESA) categories. This results in an average of approximately 51 medical response calls per year.

Motor vehicle incidents represent the next largest category of service demand. Motor vehicle collisions requiring rescue and emergency response, over a three-year period, the department responded to a total of 105 motor vehicle-related incidents. This results in an average of approximately 35 motor vehicle-related incidents per year. A significant number of these calls require patient extrication or rescue, which adds complexity to incident management due to traffic hazards, limited shoulder space, and the roadway environment along Highway 99.

This call profile confirms that medical emergencies and motor vehicle incidents are the primary drivers of emergency response in Lions Bay. The frequency of rescue required incidents on Highway 99 places added emphasis on consistent training, clear command structure, and reliable turnout strength. These incident types require calm decision-making, coordinated scene safety measures, and equipment that is maintained and ready for service. As a result, staffing

stability, officer development, and clarity in operational procedures remain central to maintaining safe and effective service delivery for the community.



The call volumes and incident trends that shape operational demand for LBFR are summarized in Appendix 'A', which provides a detailed breakdown of emergency responses from 2022 to 2024. Reviewing these statistics will help illustrate how the department's workload, risk profile, and service demands have evolved over the past three years.

Note on Data Sources or Data Disclaimer

Unless otherwise cited, all quantitative and descriptive information contained in this Core Service Review is derived from the Village of Lion's Bay Fire Rescue records (2022–2024), municipal GIS datasets (2024), and publicly available sources, including Statistics Canada and the Office of the Fire Commissioner. Analyses and interpretations represent EMG Group's professional synthesis of these datasets in collaboration with municipal staff.[LK4]

4.2 Low Frequency High Consequence Incidents

Structure fires in Lions Bay are low-frequency events, but when they occur, the potential consequences are significant. The community's steep terrain, limited hydrant distribution, narrow road access, and proximity to the wildland urban interface increase fire growth potential and reduce the margin for error during operations. A single structure fire in Lions Bay can escalate rapidly and have a substantial impact on both life safety and property loss.

Lions Bay Fire Rescue has identified itself as providing an interior (offensive) level of response under the BC Fire Service Training Playbook. An offensive declaration requires that the department maintain a consistent level of training, supervision, staffing, and operational readiness to safely perform interior fire attack. The Playbook requires that members operating inside a structure fire are trained and competent to the appropriate level, are supervised by qualified officers, and have access to the required equipment and water supply to support interior operations.

Low frequency does not reduce the requirement to meet these standards. It increases the importance of structured training and skill maintenance because the opportunities to reinforce interior attack skills through real incident experience are limited. Skills such as hose advancement, search, ventilation coordination, and air management are perishable. Without regular practice, members can lose confidence and effectiveness in high consequence situations.

Wildland urban interface fire is a high consequence risk for Lions Bay. The forested landscape, slope, and limited evacuation routes mean that a rapidly moving fire could threaten multiple homes before external support arrives. Preparedness requires familiarity with interface tactics, water movement planning, and coordinated response with regional partners.

Maintaining readiness for low frequency high consequence incidents requires:

- Regular hands-on training that reflects actual building types in the village.
- Structured officer development that reinforces decision making under pressure.
- A clear and consistently applied command structure at incidents.
- Reliable turnout strength for interior operations based on the Playbook requirements.
- Safe, functional, and well maintained personal protective equipment

Risk is defined by the consequence of the event, not by how often the event occurs. If the department maintains an offensive declaration under the BC Playbook, then training, staffing practices, equipment maintenance, and officer supervision must consistently align with that level of service.

4.3 Apparatus Response Capacity

A review of Lions Bay Fire Rescue's apparatus is essential to understanding whether the fleet can support the operational demands placed on the department. The age, condition, and configuration of each unit influence reliability, firefighter safety, and the department's ability to meet response expectations for both village incidents and the highway corridor. Evaluating the current fleet helps determine replacement priorities, identify gaps in capability, and ensure that apparatus remain aligned with local risks, terrain, and the declared level of service. This assessment also supports long-term capital planning and helps the Village make informed decisions about future investment.

The department's Standard Operating Guidelines provide the framework intended to ensure all apparatus remain ready for immediate deployment. The SOGs addressing apparatus checks, response procedures, equipment readiness, and safe vehicle operation outline expectations for inspections, crew responsibilities, and adherence to WorkSafeBC requirements. These guidelines are designed to ensure that each unit is mechanically sound, fully equipped, and staffed by personnel who understand their roles during both village and highway responses. Consistent application of these SOGs is essential for maintaining response reliability, supporting the department's declared Interior Operations level, and ensuring that LBFR can assemble a safe and effective response force when emergencies occur.

The LBFR apparatus fleet consists of three primary units that support structural firefighting, medical response, auto extrication, and wildland interface operations. Engine 61 serves as the primary structural response engine. Engine 62 functions as the rescue engine and carries the department's hydraulic extrication tools for highway incidents. Rescue 63 is smaller and more maneuverable, making it suitable for narrow residential streets and supporting wildland and interface operations. The fleet configuration aligns with the Village's risk profile, yet documentation gaps limit the Village's ability to confirm the readiness of these units at any given time.

Maintenance records, annual pump test reports, ladder and hose testing documentation, and lifecycle tracking files were not consistently available during the review. Volunteers indicated that testing and maintenance occur; however, records are not centralized or stored within a controlled system. Without accessible documentation, the Village cannot verify compliance with NFPA 1911, WorkSafeBC requirements, or internal expectations for apparatus readiness. This creates organizational risk, particularly given the age of the fleet and the operational demands associated with high frequency highway responses.

These documentation challenges do not reflect a lack of care on the part of members. They reflect the limitations of a volunteer based administrative model without IT support, structured

documentation processes, or a permanent Fire Chief to oversee compliance. A small group of volunteers carry responsibility for apparatus readiness alongside employment and family commitments. This contributes to fatigue and increases the likelihood of missed documentation or deferred administrative tasks.

Apparatus lifecycle planning is further affected by the absence of a community risk assessment and the lack of a strategic plan for the fire department. Without these planning tools, decisions regarding replacement timing, future fleet configuration, and long-term capital budgeting occur without a clear understanding of operational demand or emerging risk. Capital reserves for apparatus replacement are minimal, which increases dependence on aging units that require close monitoring and more frequent maintenance.

To strengthen fleet reliability and support compliance with industry standards, Lions Bay Fire Rescue will require a structured apparatus maintenance and documentation system, centralized digital record storage, scheduled pump testing with reliable reporting, and a clear lifecycle planning process linked to a sustainable capital reserve strategy. These responsibilities exceed what volunteers can reasonably manage and reinforce the need for dedicated leadership and administrative support.

4.3.1 Engine 61

Engine 61, a 2009 Spartan Gladiator custom-built by Hub Fire Engines, serves as Lions Bay Fire Rescue's primary structural and medical response unit. It is equipped with a Hale QMAX 150 pump rated at 1,250 IGPM and features a 500-gallon CoPoly water tank and a FoamPro 2002 system. Its layout and equipment are configured to support first-due response duties. Reliability of this apparatus is essential for the department to maintain the declared Interior Operations level of service. With regular annual maintenance and pump testing, Engine 61 should be reliable until 2029, and at that time, the LBFR can formally request a 5-year extension with the FUS to maintain insurance grading ratings.



4.3.2 Engine 62

Engine 62, a 1999 Spartan Saulsbury acquired by Lions Bay Fire Rescue in 2011 and placed into service in early 2012, serves as the department's secondary highway rescue and suppression apparatus. Equipped with a Cummins engine, an Allison ISM transmission, and a Hale QMAX 150 pump rated 2000 IGPM, the unit also carries a 500-gallon CoPoly water tank and hydraulic extrication tools, including Holmatro cutters, spreaders, and rams. This apparatus has a high record of mechanical/electrical issues, and is regularly out of service.



4.3.3 Rescue 63 [DC5]

Rescue 63 is a 2006 F 550 Super Duty rapid response and command vehicle acquired in 2022 from the District of North Vancouver Fire Rescue. As the fleet evolved, the unit now functions primarily as Lions Bay Fire Rescue's rescue, medical, and equipment transport vehicle. Its smaller size and strong maneuverability make it well suited for the steep, narrow residential streets common throughout the village, as well as the limited access points along the wildland interface. Rescue 63 responds to the high volume of medical calls and motor vehicle collisions along Highway 99 and is configured to provide rapid access, medical response, and extrication capability in the corridor.

Rescue 63 is also used to tow and deliver the department's wildland equipment trailer during interface fire responses. The vehicle carries a basic complement of emergency lighting and seating for five, and its primary value lies in its ability to respond rapidly to medical and rescue calls, as well as move specialized equipment quickly to areas that larger apparatus cannot reach.



Apparatus Risk Statement



Stakeholders advised that Lions Bay's apparatus receive annual Commercial vehicle Inspections for insurance purposes and that Engines 61 and 62 underwent comprehensive acceptance testing in 2023. Those acceptance tests reportedly included mechanical checks. This is positive and reflects a genuine effort by volunteers to meet safety and regulatory expectations.

The concern is that no documentation was available at the fire hall to verify annual pump testing or ladder testing to NFPA standards. EMG was advised that paperwork was forwarded to the Village Office, but it is not accessible to officers who are responsible for maintaining the trucks. For a small volunteer department, this creates an administrative gap that is understandable, but it still affects operational readiness. There is a significant difference between commercial inspections and annual pump load testing on apparatus, and it is critical to maintain annual pump load testing to ensure the apparatus meets the minimum standard and is recognized by the FUS.

Annual pump tests, ladder tests, hose tests, and SCBA flow tests are all safety critical. These records demonstrate due diligence and confirm that apparatus is capable of supporting the Interior Operations level of service declared by the Village. Without having this completed the municipality cannot confirm compliance with industry standards, cannot reliably assess fleet condition, and cannot make fully informed decisions about maintenance or replacement planning. This gap is a concern and should be addressed.

The volunteers are doing their best within the limits of their available time. The issue is that the workload and documentation requirements have grown beyond what a part-time, volunteer

structure can reasonably sustain. Establishing a local, organized records system for all apparatus testing would reduce risk, improve continuity between officers, and ensure that critical information is maintained in files at Village Hall.

Lions Bay public works technicians are not currently involved in the routine maintenance of fire department apparatus. As a result, LBFR relies on third-party service providers for scheduled maintenance and repair work. This arrangement can create delays in booking, longer turnaround times, and periods where a unit may be out of service for an extended duration. It would be worthwhile for the Village to explore whether public works technicians have the capacity, training, or interest to assume some portion of the regular maintenance program. Even limited involvement could shorten downtime, improve apparatus availability, and provide more predictable maintenance support for the LBFR.

4.4 Hose Testing Compliance

Fire hose is a primary life safety tool for both interior and exterior firefighting operations. Reliable water delivery is essential for fire control, firefighter protection, and the ability to support the Interior Operations level declared by the Village. Over time, hose weakens due to heat exposure, pressure loading, abrasion, UV degradation, and age, and failures often occur suddenly rather than gradually. Confirming hose integrity requires annual service testing supported by accurate documentation rather than assumptions based on appearance or informal checks.

At the time of this review, annual fire hose testing does not appear to be performed, and no testing records were available at the fire hall. There was no inventory identifying hose lengths, manufacturers, age, or test history, and no documentation confirming which sections of hose had passed or failed previous tests. Without this documentation, the Village cannot verify its due diligence in meeting WorkSafeBC expectations.

The National Fire Protection Association standard for hose testing, NFPA 1962, outlines the requirement for annual service testing of in-service fire hose. While British Columbia does not legislate NFPA standards, WorkSafeBC requires municipalities to ensure that equipment used by firefighters is safe and appropriate for the conditions of use. In practical terms, a department offering interior operations must be able to demonstrate that the hoses used for interior attack have been inspected and tested periodically to confirm their integrity.

The absence of documented hose testing presents a direct safety risk. A hose failure during interior operations can cause a sudden loss of water flow, forcing crews to withdraw rapidly and increasing the potential for fire growth, entrapment, or injury. Even during exterior operations, hose failure can compromise exposure protection, impede suppression efforts, and reduce tactical effectiveness. A hose ruptured during a residential fire in October 2025, creating these

issues. Visual inspection alone cannot confirm internal hose integrity. Reinforcement layers may deteriorate from heat, pressure, or moisture exposure even when the exterior jacket appears sound. This is why annual pressure testing is essential for confirming safe serviceability.

This gap is linked to broader organizational challenges including the absence of a permanent Fire Chief, limited administrative capacity, and no designated individual responsible for equipment maintenance programs. Volunteers report that equipment checks occur informally when time permits, but without structured processes, testing schedules, or reliable IT support, essential documentation is incomplete or missing. These conditions create avoidable risk for firefighters and complicate the Village's ability to defend its practices if equipment failure were to contribute to an incident where a firefighter or citizen were seriously injured.

The issue is not limited to whether hose testing has occurred at some point in the past. The risk stems from the absence of a consistent and documented system for inspection, testing, tracking, and timely removal of hose that has reached the end of its service life. Fire hose has a finite lifespan, and when it fails during an interior attack, there is no buffer for error. Decisions about hose readiness must be evidence based rather than dependent on memory or informal assessment.

For a department operating at an interior firefighting level, reliable water delivery is a foundational safety requirement. Hose testing had fallen to the bottom of the priority list due to competing demands on Officer time, which has resulted in limited assurance that the current hose inventory is performing as required. If the department cannot confirm the condition and operational integrity of its hose, supporting interior entry becomes difficult to justify in a safe and defensible manner. Addressing this issue will require assigning clear responsibility for hose and appliance testing oversight, implementing a documented annual testing program, and establishing a centralized inventory and recordkeeping system to ensure that results are retained, reviewed, and acted upon.

4.5 Turnout Gear

A review of Lions Bay Fire Rescue's personal protective equipment program shows that the department does not maintain the level of documentation, inspection, and lifecycle management required to support safe structural firefighting operations. The department does not have completed PPE inspection records, monthly PPE checklists, or tracking sheets that identify the manufacturer, model, date of manufacture, date placed in service, or repair history for each set of turnout gear. There is no complete equipment history for any member's protective ensemble, and the department cannot demonstrate compliance with basic expectations for PPE management.

The department's Standard Operating Guideline for PPE identifies that gear inspections are to occur every Friday and that a Monthly Safety Inspection Checklist must be completed by the Station Captain and submitted to the Duty Chief. Based on the information provided, these inspections are not being performed, and the corresponding forms do not exist. Without documented inspections, cleanings, repairs, or retirement records, it is not possible to verify whether gear in service meets safety requirements or whether damaged or contaminated gear has been removed from use.

Equally concerning is the age of the structural firefighting gear currently in service. Approximately one third of the department's turnout ensembles exceed the 10-year manufacturer service life. NFPA 1851 establishes a maximum service life of 10-years from the date of manufacture, and although NFPA standards are not legislated in British Columbia, the 10-year limit is widely recognized across the Canadian fire service as a minimum safety benchmark. Gear older than 10-years should be removed from service regardless of appearance because the protective qualities of thermal and moisture barriers degrade over time in ways that cannot be identified through visual inspection alone.

Outdated or untested turnout gear presents a direct safety risk, particularly for a department that operates at the Interior Operations level. During structural firefighting, PPE is the final layer of protection between firefighters and extreme heat, toxic environments, and rapidly deteriorating interior conditions. When gear has exceeded its service life or when its inspection history is unknown, there is no reliable assurance that it will perform during a thermal spike, structural compromise, or flashover condition. This creates serious exposure risk for firefighters advancing hose lines, conducting searches, or operating on the fire ground.

Turnout gear is also essential during vehicle fires, EV battery failures, and hazardous highway incidents along the Sea to Sky Corridor. Firefighters may encounter leaking fuels, intense radiant heat, rapid flame progression, and unpredictable explosions during vehicle fires. Compromised or expired gear reduces protection during these responses and increases the likelihood of thermal injuries, burns, and heat stress.

The absence of a structured PPE management program creates significant regulatory and legal risk for the Village. WorkSafeBC requires employers to ensure that personal protective equipment is suitable, safe, and maintained in a condition appropriate to the hazards present. Without documented inspections, testing, and retirement practices, the Village cannot demonstrate due diligence if a PPE failure contributes to an injury or fatality. The lack of records and the presence of expired gear undermine the Village's ability to defend itself in the event of litigation, as the expectation for safe and documented PPE management is well established across the fire service.

The risk arises not simply from whether the gear has ever been tested. It stems from the absence of an ongoing, evidence-based system for inspection, documentation, and retirement of PPE. Firefighting ensembles have a finite lifespan, and failures are often sudden. Without consistent recordkeeping, decisions about which gear is safe for service become assumptions rather than defensible assessments.

The high turnover of volunteers further reinforces the need for a structured PPE program. New members must be issued safe and compliant gear upon joining and must be able to verify their equipment's condition and age. Without documented processes, PPE oversight becomes dependent on memory and individual interpretation rather than consistent administrative practice.

To address these risks, the Village will need to establish a formal PPE lifecycle management program that includes documented inspection schedules, centralized recordkeeping, clear designation of oversight responsibilities, and immediate prioritization of replacing gear that has exceeded the 10-year service life. Strengthening this program will enhance firefighter safety, support WorkSafeBC expectations, and reduce preventable risk to both firefighters and the municipality. In the meantime, any firefighter wearing turnout gear exceeding the 10-year service life must not be permitted to conduct any interior operations.

4.6 Rope Rescue Equipment

A review of Lions Bay Fire Rescue's rope rescue equipment and maintenance practices shows that the department has a foundation in place for managing life safety rope and meeting the expectations associated with technical rescue operations. All life safety rope is stored in designated technical rescue bags and kept in truck compartments that are protected from UV exposure and contamination. This aligns with NFPA 1983 expectations for storage conditions and helps prevent premature degradation caused by sunlight, moisture, oils, or fuel vapours. While not legislated in British Columbia, NFPA 1983 remains the accepted standard for rope systems used in technical rescue, and the department's approach reflects an understanding of these requirements.

The department conducts regular inspections of its rope inventory and maintains rope logs, although records may not be completely up to date, which is a gap in due diligence. Each rope is inspected after use and reviewed at least annually, which supports early identification of wear, glazing, contamination, or sheath deformation. A clear expectation exists that any rope or rope related equipment found to be unfit for service must be reported to an officer and removed from circulation. This practice ensures that operational personnel are aware of their responsibility to identify hazards and supports a culture where equipment safety is taken seriously.

Recordkeeping practices are in place, with inspection and use logs maintained for the majority of ropes, but improvements are needed to ensure that entries are consistently updated and that each rope has a complete history from the time it was issued. Maintaining accurate rope logs is important because rope strength and integrity cannot be evaluated through appearance alone. Use history, loading events, contamination exposure, and the cumulative effects of training sessions all influence when a rope must be retired. Consistent documentation strengthens the department's ability to demonstrate due diligence and supports safe decision making over the life of the equipment.

Lions Bay Fire Rescue demonstrates a commitment to keeping members trained in rope care, inspection, packaging, knot work, and handling techniques consistent with NFPA 1006. These skills are reviewed annually, ensuring that firefighters understand both the technical requirements of the equipment and the safety considerations associated with its use. In addition to routine training, the department conducts a dedicated rope rescue block each year, spanning four to five weeks of Wednesday evenings and Saturday morning sessions for on call crews. This level of practical skill maintenance helps ensure operational readiness when responding to steep terrain or rope supported rescue incidents within the community.

Overall, the department's rope rescue program is functional and operationally capable, with safe handling practices, designated storage, and routine training in place. The primary area requiring attention is the consistency of documentation and recordkeeping, particularly ensuring that inspection logs are fully up to date and complete for every rope in service. Strengthening this administrative component will help ensure compliance with accepted safety standards, support firefighter protection, and reinforce the department's commitment to maintaining reliable technical rescue capability.

4.7 PPE Storage and Extractor

Turnout gear for Lions Bay Fire Rescue is stored on wire storage racks in a confined room located directly off the apparatus bay. There are tightly packed lockers with limited spacing



between sets of PPE and little separation from the adjacent apparatus floor. This type of storage increases the likelihood that gear remains damp after calls or decontamination, which can accelerate fabric breakdown and reduce protective performance. The density of stored gear also makes organization, inspection, and inventory more challenging, particularly for a department with ongoing membership turnover.

The presence of a turnout gear extractor is a clear advantage for the department. Modern PPE is designed to protect firefighters from heat and toxic exposures, but it also absorbs smoke, volatile chemicals, and carcinogenic particulates during structural and vehicle fire response. An extractor uses controlled water temperatures, specialized detergents, and mechanical agitation engineered specifically for turnout gear, ensuring contaminants are removed without damaging thermal liners or moisture barriers. Regular use of an extractor supports WorkSafeBC expectations for minimizing exposure risks and helps extend the service life of PPE. It also aligns with current health and safety practices promoted across the fire service, where clean gear and post incident decontamination are recognized as essential to reducing occupational cancer risk.

4.8 Cancer Awareness and Prevention Strategies

Firefighters experience a much greater likelihood of developing cancer compared with the general population, a trend supported by extensive medical studies and decades of operational evidence. Research involving tens of thousands of firefighters has shown consistently higher cancer incidence and mortality, even though most firefighters begin their careers healthier than average Canadians. When these findings are applied to population level data, the impact is clear. A Canadian male has roughly a forty-five percent lifetime chance of developing cancer. For a firefighter, this probability rises to more than fifty percent. The likelihood of dying from cancer also increases substantially. These elevated risks persist because firefighters are repeatedly exposed to smoke, toxic combustion byproducts and carcinogenic chemicals that enter the body through inhalation, ingestion, or absorption through the skin. Protective equipment reduces exposure, but it cannot eliminate it entirely, especially when contaminants remain on turnout gear, equipment, or in the apparatus bay long after a fire.

These hazards stem from frequent contact with substances such as benzene, heavy metals, asbestos fibres, and polycyclic aromatic hydrocarbons, many of which become more easily absorbed by the body at high temperatures. Modern turnout gear, on scene decontamination, and improved hygiene practices help reduce the risk, but the nature of structural firefighting means exposure can never be fully avoided. As a result, cancer prevention must be integrated

into day-to-day operations through clear procedures for gross decontamination, proper storage and handling of contaminated gear, and station design that minimizes secondary exposure.

Cancer has now surpassed cardiac events as the leading cause of firefighter line of duty deaths across Canada. Data collected over the past decade consistently shows that firefighters are far more likely to develop and die from occupational cancers than the general population. This shift has changed the culture of the fire service. Where soot-covered gear was once mistakenly seen as a sign of hard work, it is now understood to be contaminated with carcinogens that pose a serious long-term health risk.

British Columbia formally recognizes this occupational danger through presumptive cancer is found within the Workers Compensation Act and its associated regulations administered by WorkSafeBC. Under these provisions, firefighters diagnosed with one of the recognized cancers are presumed to have contracted the illness as a result of their service if they meet the minimum years of exposure. This presumption applies to full-time, part-time, paid-on-call, and volunteer firefighters, enabling quicker access to medical support, treatment, and compensation without the burden of proving a direct link to specific incidents.

The presence of a turnout gear extractor is a progressive move for the department. Modern PPE is designed to protect firefighters from heat and toxic exposures, but it also absorbs smoke, volatile chemicals, and carcinogenic particulates during structural and vehicle fire response. Regular use of an extractor supports WorkSafeBC expectations for minimizing exposure risks and helps extend the service life of PPE. It also aligns with current health and safety practices promoted across the fire service, where clean gear and post-incident decontamination are recognized as essential to reducing occupational cancer risk.





Equally important is the presence of a diesel extraction system. A diesel exhaust extraction system is one of the most effective safeguards a fire department can install to reduce cancer-causing exposures in the station. Every time an apparatus starts or idles inside the hall, it releases diesel particulates and gases that accumulate in the air, settle onto turnout gear, and linger on surfaces long after the truck shuts down. These contaminants are classified as known carcinogens and contribute to long-term occupational health risks for firefighters. LBFR's use of a diesel exhaust extraction system significantly reduces these hazards by capturing exhaust directly at the source and preventing it from dispersing through the gear room, apparatus bay, and adjacent work areas. This protects members from inhalation and secondary exposure, keeps gear cleaner, and helps maintain a safer work environment. It also supports compliance with WorkSafeBC expectations for controlling airborne contaminants in the workplace.

Reducing exposure must become an operational priority. Effective measures include consistent post incident cleaning of PPE, strict personal hygiene protocols, proper handling and storage of contaminated equipment, and documented tracking of exposures.

There are no guidelines or references related to contamination control, cleaning of bunker gear, or cancer reduction practices in any of the documents that were reviewed. To address this gap, the department should develop Standard Operating Guidelines that clearly outline expectations for on scene gross decontamination, proper bagging and isolation of contaminated PPE, transport and hygiene practices after an incident, and the correct use of the gear extractor for cleaning. These guidelines should also establish designated contamination control zones within the station and define how exposure incidents will be documented and tracked.

4.7 Self-Contained Breathing Apparatus (SCBA)

Self-contained breathing apparatus is one of the most critical safety systems in any fire department and is foundational for protecting firefighters operating in toxic or oxygen deficient environments. SCBA enables interior attack, vehicle fire suppression, and response to

hazardous atmospheres, and its reliability must be confirmed through documented maintenance rather than assumed through informal practices. For a department operating at the Interior Operations level, the ability to verify SCBA readiness is an essential component of WorkSafeBC compliance and municipal due diligence.

Lions Bay members reported that annual SCBA servicing and flow testing are completed by Associated Fire and that compressor testing is conducted annually by Irwin Air. These are appropriate service providers, and during the review, EMG was provided with paperwork confirming recent annual flow testing. The challenge lies in the completeness and accessibility of the remaining life safety documentation. At the time of the review, no full SCBA file was available at the fire hall to verify the total number of units in service, the manufacturer and age of harnesses, the hydrostatic testing history of cylinders, or the most recent compressor service records. Volunteers noted that some cylinder testing was still outstanding, and that the corresponding records for completed work were retained by the vendors rather than stored in a local system.

Relying on external service providers to hold essential documentation creates avoidable gaps and does not meet the administrative expectations of an Interior Operations fire service. Officers and future Chiefs must be able to immediately determine the testing status, service history, and compliance of each SCBA unit and cylinder. Without onsite documentation, the Village cannot easily verify compliance, confirm equipment readiness, or demonstrate due diligence in the event of an SCBA malfunction or safety concern.

The effort of volunteers is evident, and they are doing everything they can to maintain equipment while balancing operational, training, and personal commitments. The issue is structural rather than individual. The current approach to SCBA recordkeeping is inconsistent and dependent on the availability of a few volunteers who are managing responsibilities that exceed what a volunteer-based system can sustain. When essential life safety information is managed through dispersed practices rather than a structured documentation system, both the municipality and firefighters are placed at unnecessary risk.

To address these concerns, a documented SCBA management program should be implemented immediately and should include a complete SCBA inventory with manufacturer, model, and serial numbers, local files of all annual flow test results, a hydrostatic testing schedule with corresponding records, compressor service documentation stored at the fire hall, and a clearly assigned individual responsible for maintaining the SCBA file. Establishing this program is not about assigning fault. It is about creating a sustainable, defensible system that protects firefighters, supports compliance with WorkSafeBC expectations, and provides the Village with confidence that critical life safety equipment is maintained and documented appropriately.

4.8 Ladder Inspection, Maintenance, and Testing

Ground ladders are critical components of firefighter safety. They are used for access, egress, ventilation, rescue, roof operations, and as escape routes during rapidly changing fire conditions. Because ladders are subjected to heat, mechanical stress, weather exposure, and operational wear, their integrity must be verified on a regular cycle. Annual ladder testing, in accordance with NFPA 1932, is a mandatory safety practice for any department performing interior or exterior fire operations.

During this review, no documentation or test records were provided to verify annual ladder testing. Without written confirmation, the Village cannot demonstrate due diligence or confirm that ladders meet required load testing, hardware inspection, or structural integrity checks. This creates avoidable risk, particularly for a department that relies heavily on portable ladders for two-storey residential access and rapid egress in steep terrain.

As ladders age, the likelihood of rail fatigue, rung separation, worn pawls, and heat damage increases. These issues are not always visible during routine visual inspections and may only be identified during formal testing.

The review of LBFR Operational Guidelines found no ladder-specific OG addressing inspection frequency, cleaning procedures, maintenance expectations, or testing requirements. There is no OG outlining daily or weekly inspection responsibilities, criteria for removing ladders from service, or reference to NFPA 1932 obligations. The absence of a ladder inspection and testing guideline leaves the department without a structured safety framework or clear accountability for compliance.

To ensure firefighter safety, the Village must implement a documented ladder inspection and testing program that includes:

- identification of all ladders in the fleet.
- annual certified testing with written records.
- monthly inspections.
- formal criteria for serviceability and removal from service.
- cleaning and maintenance procedures following use at fire scenes.
- integration into a broader equipment lifecycle management plan.

Without these measures, the Village assumes unnecessary occupational health and safety exposure, and the department cannot reliably confirm the readiness of equipment that may be required for life safety operations.

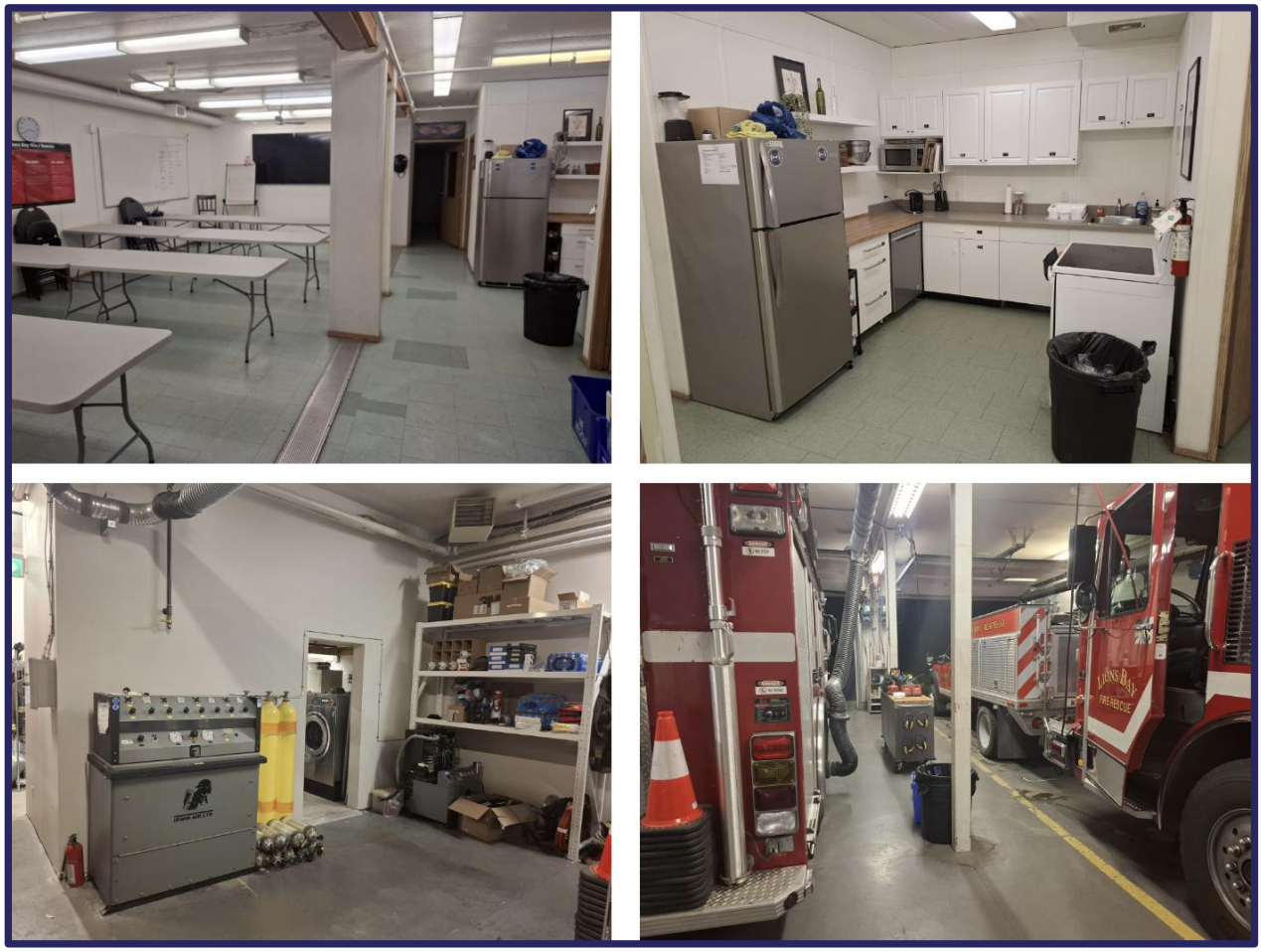
4.9 Fire Hall Assessment

The Lions Bay fire hall [LQ6]provides operational space for apparatus, training, member support, and equipment storage. Several elements are functioning reasonably well for a small community department. The hall is equipped with a vehicle exhaust extraction system that is in working condition, the training and meeting space is serviceable for volunteer operations, and the kitchen and washroom areas provide basic support to the membership. The interior has been kept clean and organized, given the building constraints.

Despite these positives, the building is aging and presents several limitations that affect operational readiness, firefighter safety, and future planning. Apparatus is tightly packed with minimal clearance and narrow travel paths, leaving little ability to expand the fleet and restricting safe movement around vehicles. Structural columns within the apparatus bay obstruct access and reduce flexibility for apparatus placement. The storage of turnout gear and other equipment in sea cans indicates that the station lacks adequate space within the main hall for essential gear, which becomes an inconvenience when this equipment is required.

Based on the age of the building and the interior finishes that were common during its construction era, there is a realistic possibility that asbestos containing materials are present within the fire hall. This cannot be confirmed without a hazardous materials assessment completed by a qualified environmental consultant, but it remains a credible concern that must be addressed. If the Village intends to renovate, upgrade, or make any intrusive modifications to the facility, an asbestos survey will be mandatory to determine whether hazardous materials are present, the degree of risk, and the associated cost implications. The potential presence of asbestos should be treated as a safety, health, and capital risk that warrants near-term attention, given the age and condition of the building.

EMG's review of the Lions Bay fire hall is a visual and operational assessment only. It is not an engineering, structural, architectural, mechanical, electrical, or hazardous materials evaluation. The observations provided in this report are planning level in nature and are intended to compare the existing hall with contemporary fire station design principles, operational workflow expectations, and firefighter safety considerations. Any concerns related to structural integrity, building systems, or hazardous materials must be confirmed through formal assessments conducted by qualified professionals.



Overall, the hall remains functional for the current scale of operations, but it is operating at full capacity. Any increase in apparatus size, addition of new equipment, or expansion of service levels will challenge the capacity of the hall. Long term planning should account for the age of the building, its limited ability to support growth, and the potential cost of required upgrades once hazardous materials assessments and engineering reviews have been completed.

Given the age, limitations, and constrained layout of the current facility, the Village should begin preliminary capital planning for a new fire hall within the next five to 10-years. This planning horizon reflects both the operational pressures already present, and the long term

needs of a department that must maintain reliable service in a challenging response environment. Early planning does not commit the Village to immediate construction, but it ensures that future decisions are deliberate, financially responsible, and grounded in a realistic understanding of the hall's remaining functional lifespan.

Section 5

Training and Documentation



SECTION 5: TRAINING AND DOCUMENTATION

Training and documentation are essential for Lions Bay Fire Rescue because they ensure that firefighters maintain the skills required for safe interior operations and technical rescue work while providing verifiable proof that competencies are current. Accurate records protect both the department and the Village by demonstrating due diligence, supporting regulatory requirements, and confirming that members are qualified to perform high risk tasks.

5.1 Record Management Systems

Lions Bay Fire Rescue uses Vector Solutions to record training activity, track member qualifications, and store completion data for Playbook related competencies. Documentation is being completed, although entries are generally submitted in monthly batches. This creates periods when the system does not reflect the full extent of training being delivered and can give the impression of incomplete records. The Training Officer has confirmed that recent sessions have been entered and provided supporting reports that show interior and exterior skill sign-offs, medical training, and classroom-based instruction.

The issue is timing rather than a lack of documentation. In a volunteer department with high turnover and limited administrative support, monthly batch entry creates predictable lags in record accuracy. Regulatory requirements place responsibility for verifying training records, confirming competency, and approving entries with the Fire Chief or a designate. The absence of a full-time Chief has removed the oversight normally used to ensure that entries are completed promptly and that training aligns with the declared level of service.

Improving record accuracy is achievable without unreasonable burden. Moving from monthly to weekly or at a minimum, biweekly Vector entries would improve currency and support defensibility. The longer-term requirement is the reinstatement of Fire Chief oversight, since documentation, verification, and compliance must be attached to a position with authority and continuity.

5.2 Interior Operations Training

The BC Structure Firefighter Competency and Training Playbook sets clear expectations for departments that declare an Interior Operations level of service. Interior Operations requires firefighters to demonstrate a defined set of skills aligned with NFPA 1001 and related standards. These competencies must be supported by structured training, regular skill maintenance, and documented proof that members are qualified to operate in interior fire environments. Firefighters must first meet all Exterior Operations requirements before completing the additional competencies listed below.

Communications

NFPA 1001 5.2.2. Firefighters must communicate effectively within the incident command system and relay critical information during interior operations.

Exit a Hazardous Area

NFPA 1001 4.3.5. Firefighters must be able to exit a structure or hazardous environment quickly using practiced procedures.

Search and Rescue

NFPA 1001 4.3.9. Firefighters must demonstrate the ability to conduct searches, locate victims, and remove them using recognized techniques.

Loss Control, Overhaul, and Salvage

NFPA 1001 4.3.13 and 4.3.14. Firefighters must perform overhaul, identify hidden fire, conduct salvage, and maintain awareness in post fire environments.

Pre incident Planning

NFPA 1001 5.5.3, with reference to NFPA 1620. Firefighters must understand pre incident plans, building layouts, hazards, and tactical considerations relevant to interior operations.

Interior Fire Attack and Extinguishment

NFPA 1001 4.3.9, 4.3.10, 4.3.13 and NFPA 1001 5.3.1, 5.3.3. Firefighters must demonstrate competency in interior attack, hose handling, extinguishment, and control of flammable gas cylinders. *The Playbook notes that these skills may be achieved with or without live fire exposure, but they must be taught, practiced, and documented.*

Rapid Intervention Team

NFPA 1407 Chapters 4, 5, 7, and 8, and WorkSafeBC OHS Regulation 31.23. Firefighters must be trained to operate as members of a Rapid Intervention Team capable of rescuing trapped or missing firefighters.

These competencies form the foundation of safe and effective interior firefighting. While the Playbook does not prescribe a specific number of live fire training evolutions, departments must provide realistic training and demonstrate that firefighters can perform interior attack competently. When live fire is not feasible, maintaining competency depends on strong scenario design, close officer supervision, and structured skill development.

Interior Operations also require trained supervision capable of directing tactics, managing risk, and safeguarding firefighters inside hazardous environments. The Playbook identifies three supervisory roles that must be supported and documented: the Team Leader (Interior), the Incident Safety Officer (Interior), and the Incident Commander (Interior). Each role builds on the Interior Operations Firefighter competencies and requires additional training and evaluation.

Team Leader, Interior

The Team Leader provides direct supervision of interior crews and is responsible for tactical direction, accountability, and safety inside the structure. In addition to all Interior Operations Firefighter competencies, the Team Leader must be trained in incident management, personnel supervision, tactical size up, risk assessment, tactical action planning, implementation of tactical assignments, interior communications, and accountability practices such as PARs, location tracking, and entry control. These expectations reflect NFPA 1001 and the supervisory demands of interior operations.

Incident Safety Officer, Interior

The Safety Officer monitors interior conditions, identifies hazards, recommends control measures, and intervenes when unsafe conditions or practices arise. The Playbook requires the Safety Officer to meet all Team Leader competencies and the additional requirements outlined in NFPA 1521, sections 5.3.1 through 5.3.4. These include evaluating building and fire conditions, identifying unsafe operations, monitoring fire behaviour and structural stability, coordinating with the Rapid Intervention Team, and supporting accountability systems. This role is essential for meeting WorkSafeBC requirements and providing an additional layer of safety oversight.

Incident Commander, Interior

The Incident Commander is responsible for overall management of interior structure fires, including strategic decision making, risk management, resource deployment, and coordination of all fire ground activities. Competencies aligned with NFPA 1021 include initiating and transferring command, conducting size up, applying risk management principles, developing and communicating the Incident Action Plan, coordinating interior and exterior operations, managing resources and accountability, integrating safety functions, and overseeing post-incident activities. This role requires documented training and ongoing evaluation to ensure proficiency in managing dynamic fire ground conditions.

Although the department trains regularly and strives to meet Playbook expectations, the absence of structured documentation and formal oversight limits the Village's ability to

demonstrate that every firefighter meets Interior Operations requirements. These gaps are administrative rather than operational and stem from limited staffing, volunteer workload, and the lack of a full-time Fire Chief.

5.2.1 Team Lead Records

Declaring an Interior Operations level of service requires more than training firefighters in task level skills. It also requires documented evidence that Team Leaders, Safety Officers, and Incident Commanders have been trained and evaluated in the competencies associated with their supervisory roles. These positions are essential for firefighter safety, due diligence, and compliance with the Training Playbook.

At present, Lions Bay Fire Rescue has limited documentation confirming that officers have received training consistent with these supervisory requirements. This represents a significant gap in operational readiness and regulatory defensibility. Strengthening officer development and implementing reliable records management practices will be necessary for the Village to uphold its declared level of service and ensure firefighter safety during interior operations.

5.3 Officer Training

Officer development and promotion have historically lacked a formal pathway. For many years, the department operated under long serving leadership and relied on informal practices rather than documented guidelines. Only recently has the department begun modernizing its expectations.

Under former Chief Barret Germschied, members seeking officer roles were required to demonstrate seniority, commitment, and leadership potential. Candidates completed an in-house officer development course based loosely on Fire Officer One. The course included approximately 10-hours of blended theory, presentations, and practical scenario work using the department's Tiny Town tabletop simulation model. Successful completion of this process was viewed as a prerequisite for supervisory responsibilities. The former fire chief is to be commended for this as internal officer development in volunteer departments is weak or rare in many cases.

The department functions on a four-shift structure, and members who become the designated officer for a shift are promoted to Lieutenant. Advancement beyond this level has been limited. In the past decade, only two members have progressed from Lieutenant to Captain, each after several years in a supervisory role. This reflects both the small size of the department and the limited number of long serving members with the experience needed for further leadership development. Based on the current membership profile, it appears unlikely that there are

internal candidates who are immediately prepared to assume additional officer responsibilities without significant training and mentorship.

The administrative and operational workload placed on the remaining officers has exceeded what volunteers can reasonably sustain. This creates a genuine risk that member fatigue, stress, or burnout could place existing officer positions in jeopardy and further reduce the department's leadership capacity.

5.4 Training Documentation and Record Keeping Practices

Training is one of the most important determinants of operational readiness and firefighter safety. Interior operations require consistent, structured instruction supported by accurate documentation that confirms competency and compliance with the Training Playbook. Documentation is not optional. It provides the proof that skills were taught, reinforced, and evaluated, and it forms the foundation of due diligence for both the department and the municipality.

Training occurs every Wednesday evening throughout the year, and participation is generally strong. Lions Bay Fire Rescue also follows a predictable annual cycle of major training themes that members understand well. The training year typically progresses as follows:

- Mid-September through early March focuses on fire ground operations and fire behaviour, including hose movement, scenario evolutions, and simulated structure fire conditions using the burn building and smoke machine. When weather limits outdoor work, training shifts to classroom-based fire behaviour instruction.
- March through April is dedicated to auto extrication, including weekly practice and a two-weekend introductory program for new members.
- May focuses on wildland and interface training, which aligns with the community's forested setting and the nature of many of the department's calls.
- June and July emphasize technical rescue, particularly ropes and rope based scenarios.
- August through mid-September incorporates medical training and additional topics identified by the officer group.

This structure shows a genuine commitment to training and skill maintenance. The Training Officer has confirmed that training documentation is being entered into Vector, and the records provided demonstrate that key competencies, attendance, and lesson content are captured. The current practice is to enter these records approximately once per month, which satisfies minimum due diligence requirements, although it creates a delay between the training session and the corresponding documentation entry. Entering training data sooner after each

session would strengthen record accuracy, improve alignment with best practices, and provide clearer real time visibility of member competency. A weekly entry schedule, or at a minimum biweekly, would support this goal without placing an unreasonable burden on the Training Officer.

The review confirmed that documentation delays are tied to workload rather than lack of commitment. The Training Officer and senior members are carrying out administrative duties that normally fall to a full-time Fire Chief or administrative support role. Without IT support or centralized systems, training files must be created, stored, and managed manually, or on alternate systems, which creates predictable gaps in formal documentation.

Improving the timeliness and structure of documentation will allow the Village to demonstrate clearer alignment with its declared level of service and support compliance with mandatory instruction in areas such as SCBA use, search techniques, fire behaviour, rapid intervention, ladder operations, and emergency scene safety. The administrative strain placed on volunteer officers is a contributing factor, and the department will benefit from a simple and sustainable process that reduces reliance on individual effort while strengthening overall accuracy.

As an Interior Operations department, Lions Bay Fire Rescue must be able to demonstrate that every firefighter, Team Leader, Incident Safety Officer, and Incident Commander meets the competencies required under the BC Structure Firefighter Training Playbook. Training records cannot be inconsistent or incomplete. They are the only defensible method for confirming that members are qualified to perform their assigned roles safely and in compliance with provincial requirements. Strengthening documentation and training practices will improve operational readiness, enhance firefighter safety, and ensure the Village can support and defend its declared level of service. (Appendix B identifies the Playbook required JPRs/Competencies for Interior Operations).



Lions Bay Fire Rescue is fortunate to benefit from having a training facility, shown above, which provides a practical advantage for meeting many of the job performance requirements outlined

in the BC Structure Firefighter Minimum Training Standards. The facility offers a controlled environment where firefighters can practice core skills such as ladder work, hose handling, search techniques, ventilation, and basic fire behaviour scenarios. Having consistent access to a dedicated structure supports a stable training rhythm, reduces reliance on external facilities, and helps the department maintain the competencies required for Interior Operations despite turnover and the challenges of a volunteer schedule.

5.5 Succession Planning

Succession planning is essential for the stability and long-term viability of any fire department. It ensures that leadership responsibilities are understood that skills are developed over time, and that operational decision making remains consistent even when personnel change. Without a clear plan for developing and preparing future leaders, a fire department becomes dependent on informal authority, personal relationships, and whoever is available on a given day. This increases uncertainty and risk during emergency operations, where clarity in command is critical.

As noted earlier, in Lions Bay, the absence of an appointed Fire Chief has resulted in Captains and Lieutenants sharing leadership responsibilities. While these officers have continued to support day-to-day operations, this arrangement is not sustainable and is nearing a breaking point. Leadership by committee can work temporarily, but it does not provide the structure, authority, or accountability needed for safe and effective emergency response. It also places officers in situations where they may be required to make high consequence decisions without the training, experience, or organizational support normally associated with senior command roles.

Succession planning is particularly important given the membership profile in Lions Bay. A large portion of the department consists of new or inexperienced firefighters who are in the community only temporarily. With limited long term retention and very few senior members living in the Village, the department does not currently have a natural line of future leaders. Without a structured approach to mentorship and officer development, the department will continue to face sudden gaps in experience, training depth, and incident command capability.

Establishing a consistent leadership pathway allows the department to identify potential future officers early, provide them with progressive training, and build the confidence required for decision-making under pressure. It ensures that the next Fire Chief does not step into the role unsupported, and that Captains and Lieutenants are prepared for the responsibilities they will hold. Most importantly, it strengthens safety on the fireground by ensuring that when a critical incident occurs, the person in command has the training, authority, and clarity to lead the team effectively.

The Village recently posted for a Fire Chief position with an annual compensation level of approximately $30,000.00. While this reflects the Village's intent to fill the leadership vacancy, the compensation level does not align with the responsibilities or expectations of a Fire Chief in a modern paid-on-call fire service. The Fire Chief is accountable for operational readiness, administrative oversight, training and competency alignment, record keeping, safety management, and compliance with provincial legislation, including the BC Fire Safety Act and the BC Fire Service Training Playbook. These duties require experience, training, and the ability to lead during high-consequence events.

The cost of living in Lions Bay makes the recruitment challenge more pronounced. Housing costs in the community are among the highest in the region, and rental options are extremely limited. A Fire Chief must live in or near the Village to maintain reasonable response capability and to provide consistent leadership presence. A salary in the range of $30,000 does not align with these realities and will significantly constrain the applicant pool. At this level the Village will be unable to attract candidates with the training, leadership experience, and operational judgement required to safely guide the department.

The Village requires stable leadership to ensure that the declared level of service can be met and that the department is able to operate confidently within the regulatory framework that applies to municipal fire services in British Columbia. Establishing a realistic and competitive compensation structure is an essential step in attracting and retaining a qualified Fire Chief capable of supporting both the operational and administrative needs of the department.

5.6 Medical Training

Medical training is delivered throughout the year and supports both medical first response competency and highway rescue operations. Recertification cycles vary based on how many members require renewal at a given time. When multiple members are due, the department completes recertification in-house through the Training Officer, who is qualified to deliver the program. When only a few members require renewal, the department arranges external training. This approach provides flexibility, but it also increases the importance of accurately tracking certification expiry dates and maintaining documented proof that all medical responders remain current.

5.7 Health and Wellness

Health and wellness play a central role in maintaining the readiness, resilience, and long term sustainability of a volunteer fire department. Lions Bay Fire Rescue demonstrates a culture of physical activity and informal peer support, but the department would benefit from a more structured and consistent approach to both physical and psychological wellness.

5.7.1 Physical Health and Fitness

The department maintains an active and positive fitness environment. Members regularly participate in weekly fitness activities known as Thunder Thursday, along with Monday gym sessions in the school gym. Additional fitness opportunities occur on Sunday mornings when volunteers are available. Activities include pickleball, basketball, and aerobic conditioning such as beep tests. The department also has a well-equipped gym within the fire hall that members may use at their convenience.

This routine helps support the physical readiness needed for interior firefighting, technical rescue, and highway operations. It also strengthens morale and team cohesion. For volunteer departments, enforcing formal fitness standards is difficult and often unrealistic. Lions Bay's approach reflects what most volunteer organizations face: physical readiness depends heavily on personal commitment and available time.

5.7.2 Mental Health and Psychological Readiness

The department demonstrates an open and supportive environment regarding mental health. Two members are trained in Critical Incident Stress Management and provide peer support following difficult calls. Officers promote open conversation about stress, emotional impact, and operational pressures, and members appear comfortable discussing these topics informally. The department also aims to deliver Resilient Minds training annually, though in practice the cycle is closer to every 18 months.

This informal, peer-driven support system is a strength and reflects a healthy team culture. Consistent access to training, clear post incident support processes, and predictable touchpoints for psychological readiness would better position the department to manage cumulative stress, reduce burnout, and meet duty of care expectations.

5.7.3 Health & Wellness Overall Observations

Lions Bay Fire Rescue benefits from committed volunteers who value physical fitness and maintain open dialogue about mental wellness. These are important foundations. However, the department does not have any Operational Guidelines or formal policies related to Critical Incident Stress Management, post incident psychological support, or broader health and wellness practices. As a result, the department relies heavily on informal peer support and the availability of individual members rather than a structured system. The next step is to formalize these efforts so that health, wellness, and psychological support are consistent, sustainable, and not dependent on individual initiative. Doing so will better support volunteer longevity,

operational readiness, and the Village's responsibility to provide a safe and supportive environment for its responders.

5.7.4 Occupational Health and Safety

British Columbia legislation requires employers to maintain formal occupational health and safety structures that support worker participation and hazard prevention. Under the Workers' Compensation Act, any workplace with twenty or more workers must establish a Joint Occupational Health and Safety Committee, while smaller workplaces must designate a Worker Health and Safety Representative. WorkSafeBC's OHS Regulation, Part 3, further outlines the responsibilities of these committees and representatives, including regular meetings, documented inspections, hazard reviews, and formal training requirements.

For fire departments, these expectations are reinforced in Part 31 of the OHS Regulation, which applies specifically to firefighting operations. Section 31.3 states that if the employer is required to have a Joint Committee or a Worker Health and Safety Representative, then the fire department must also maintain its own dedicated committee or representative. This ensures that the unique hazards of firefighting are addressed through targeted oversight, rather than being absorbed into general municipal processes.

Because LBFR operates as part of the Village workplace, these legislative requirements apply fully to the department. Firefighters, whether volunteer or paid on call, are considered workers under the authority of the Village, and the municipality is responsible for ensuring compliance with WorkSafeBC health and safety provisions.

At present, Lions Bay Fire Rescue does not have a functioning Occupational Health and Safety Committee, Co-Chair, or designated representative. EMG was advised during the review that LBFR was not aware of WorkSafeBC expectations for committee structure, meeting frequency, or documentation standards. No OHS meeting minutes, hazard assessments, or inspection reports were available for review. This absence represents a governance and compliance gap and limits the Village's ability to demonstrate due diligence or meet its obligations under the Workers' Compensation Act.

These administrative and safety related gaps are compounded by the lack of a structured occupational health and safety framework within the fire department. This reflects the broader pattern seen in training, equipment management, and documentation, where volunteer effort exceeds available capacity and where the absence of a full-time Fire Chief and IT support leaves essential compliance work incomplete.









Section 6 – Finance

SECTION 6: FINANCE

The financial analysis for Lions Bay Fire Rescue focuses on identifying whether current budgets align with operational expectations, safety requirements, and the declared service level of the Village. Review of the 2022 to 2025 budget cycle shows that while several line items have increased, key safety critical areas remain underfunded and lack structured replacement planning. The department's financial structure also relies heavily on unpaid volunteer labour to offset costs that would otherwise be municipal obligations. Understanding these financial pressures is essential to evaluating the sustainability of the current fire service model.

The review also confirmed that Lions Bay Fire Rescue operates without a Community Risk Assessment or a Fire Department Strategic Plan, both of which are essential for aligning budgets with risk and long-term service expectations. Without these planning tools, financial decisions are reactive rather than strategic, and the municipality lacks a clear roadmap for future staffing, training, and capital needs.

6.1 Materials and Supplies

The funding allocated for protective clothing is insufficient to meet immediate safety requirements. Approximately one-third of the department's turnout gear has exceeded the ten-year service life outlined by NFPA 1851. The 2025 budget includes $10,000 for protective clothing, which would only support the acquisition of two sets of turnout gear. At approximately $4,500 per set, there is the potential for $36,000 needed to bring the inventory back into compliance. Continued reliance on expired turnout gear places both firefighters and the municipality at risk due to non-compliance with occupational health and safety expectations.

Supplies and Materials totals show a three-year average expenditure of $12,670, and this category appears broad and undefined. Additional clarity is necessary to confirm that essential equipment and consumables are being funded appropriately and not absorbed through miscellaneous accounts.

The review also identified that volunteer officers are managing PPE procurement, tracking, and assessment without IT systems or administrative support. This has contributed to gaps in inventory accuracy and made it difficult for the Village to plan long-term replacement schedules. Volunteers expressed fatigue from carrying responsibilities typically managed by a full-time Fire Chief or administrative position.

6.2 Salaries and Benefits

Compensation for volunteer participation is consistent and predictable, but the current allocation for the fire chief honorarium does not reflect the scope and workload required for a part-time fire chief in a modern fire service. EMG did not conduct a formal comparative analysis of officer and firefighter honorariums; however, based on our experience working with paid-on-call departments across the province, the current levels in Lions Bay appear to be below those offered in most comparable services. From an initial perspective, the honorarium structure does not align with the training commitments, administrative expectations, and operational responsibilities placed on members.

Emergency call-outs for firefighters have averaged 18,370 dollars annually over the past three years, which demonstrates that the operational cost of a paid-on-call response model is relatively modest. The financial pressure on the Village is not driven by call-out compensation. It is driven by the increasing administrative, training, and compliance requirements that cannot be met through volunteer time alone and that require dedicated leadership capacity to manage safely and consistently.

The current administrative, regulatory, and training workload has grown significantly and is no longer manageable within the compensation or hours expected of a part-time position. This reinforces the need for a realistic staffing model, as the current structure relies on volunteers to absorb tasks that exceed their available time and capacity.

6.3 Training and Professional Development

Training expenditures averaged $12,862 over the past three years. This level of funding supports only basic training needs and does not reflect the additional instructional burden created by a junior membership with high turnover. Departments with significant turnover require more instructor supervision, more frequent basic skills refreshers, and structured officer development, all of which increase training costs. Even with a roster of 20 members, the current allocation falls well short of what is required. At an absolute minimum, $1,000 dollars per member should be allocated annually for training, and even at that level, the department would be operating at the lower edge of what is considered acceptable for maintaining essential competencies.

6.4 Maintenance and Capital

The 2025 maintenance budget increases significantly due to a $100,000 reserve contribution toward future fire apparatus replacement. This is a positive step. However, $100,000 per year will not cover the full cost of a structural fire engine without a multi-year capital plan.

Apparatus replacement requires long-term planning, accurate cost forecasting, and regular reserve contributions that reflect the expected lifecycle of each unit.

Maintenance costs continue to show considerable variation. SCBA maintenance, vehicle servicing, hose replacement, and building related repairs indicate inconsistent scheduling and periods of deferred maintenance. Reliance on volunteers to perform basic maintenance tasks results in inconsistent standards and does not align with best practices for safety critical equipment. The absence of a structured capital replacement plan limits the municipality's ability to forecast financial obligations for SCBA, hose, ladders, tools, radios, and facility upgrades.

6.5 Overall Financial Assessment

The financial review confirms the same patterns identified in the operational and stakeholder analyses. Several safety critical items, including turnout gear, hose, SCBA, and training, lack predictable budgets or structured replacement cycles. Operational budgets have not kept pace with inflation, volunteer availability, or increased regulatory and training expectations. The current budget also relies heavily on volunteers performing tasks that are typically funded municipal responsibilities, masking the true cost of service delivery.

The absence of a Community Risk Assessment and Fire Department Strategic Plan further contributes to financial instability. Without these planning tools, the Village cannot accurately align budget decisions with operational demand, community hazards, or service level expectations. This creates uncertainty for Council, the fire department, and the public.





Section 7

Emergency Management and Mutual Aid



Emergency Management Group

SECTION 7: EMERGENCY MANAGEMENT AND MUTUAL AID

Stakeholder engagement and document review provided limited information regarding the Village's emergency management program. Participants expressed uncertainty about who holds responsibility for emergency planning, how emergency management activities are coordinated, and what level of preparedness currently exists within the municipality. This lack of clarity suggests that emergency management has not been formalized or consistently communicated to staff, elected officials, or the fire department.

7.1 Emergency Management

Emergency management is a core municipal responsibility under provincial legislation. Municipalities are expected to maintain current emergency plans, conduct regular risk assessments, establish an Emergency Operations Centre, and ensure coordinated response structures that integrate all relevant departments, including fire, public works, and bylaw services. Communities must also maintain clear activation procedures, designated leadership roles, and effective communication systems to manage events such as wildfire threats, major water supply disruptions, extended power loss, and significant highway incidents.

The information available for this review indicates that Lions Bay's emergency management program remains in the early stages of development. The Emergency Management Coordinator, who is not affiliated with the fire department, is leading plan development but has limited resources and is still building the foundational components of the program. The Emergency Management Plan is not yet completed, and there is heavy reliance on Metro Vancouver for guidance and support. The Village's EOC has not yet been fully developed or documented, and its operational readiness could not be verified. While fire is identified as a participant in the EOC structure, it does not play a coordinating or leadership role, and the relationship between the EOC and the fire service appears to be informal and not clearly defined.

Stakeholders expressed uncertainty regarding how the emergency management program functions in practice. Fire officers and firefighters noted that they were unsure how emergency plans are activated, who provides operational leadership during significant events, and what the expectations are for fire participation in the EOC. Several participants were unclear about evacuation procedures, critical infrastructure protection roles, and who is responsible for managing communications during community level emergencies. These gaps suggest that emergency management activities may not be fully integrated with fire service operations, particularly in the areas of wildfire preparedness, evacuation planning, public alerting, and coordination with external agencies.

These information gaps do not reflect a lack of effort by individuals, but rather point to the need for clearer structure, defined roles, and consistent communication. A comprehensive assessment of emergency management capacity will require access to current plans, EOC documentation, activation procedures, training records, and interagency coordination protocols. Strengthening this function will be essential to improving community readiness and ensuring alignment with provincial expectations for municipal emergency management programs.

7.2 Implications of the Emergency and Disaster Management Act for Lions Bay

British Columbia's Emergency and Disaster Management Act places new statutory expectations on municipalities and significantly expands the responsibilities of local authorities. Under this legislation, municipalities must maintain current emergency plans, conduct formal risk assessments, establish clear activation procedures for emergencies, support coordinated response structures, and plan for recovery. The Act replaces the former Emergency Program Act and introduces a modernized emergency management framework that will be fully supported through forthcoming regulations expected to take effect by January 2027.

The information available for this review indicates that Lions Bay is in the early stages of developing the required emergency management foundations. The Emergency Management Plan is not yet completed, the Emergency Operations Centre is not fully defined or documented, and there is no clear system for integrating the fire department into emergency response leadership. The part-time Emergency Management Coordinator is working on these components, but the program has not yet reached the level of readiness expected under the new legislation.

Several gaps identified in this review relate directly to the requirements of the Act. Stakeholders expressed uncertainty about how emergency plans are activated, who leads the municipal response during significant events, and how the Village coordinates public alerts, evacuation procedures, and risk assessments. The heavy reliance on Metro Vancouver for direction and support further suggests that the Village has not yet established a self-sufficient internal framework for emergency preparedness and response. Metro Vancouver Regional District is currently working on an emergency management mutual aid agreement for the region, which will provide additional external support, but it does not replace the need for Lions Bay to develop its own internal capacity and clarity in emergency management roles and procedures.

The Act also anticipates formal coordination agreements, continuity planning, and structured engagement between departments. Lions Bay's current emergency management structure

does not yet demonstrate these characteristics. The lack of integration between the fire service and the EOC, combined with incomplete planning documents and unclear leadership roles, indicates that the Village is not yet aligned with the expectations that will soon be required by regulation.

Addressing these gaps will be critical for meeting future compliance requirements and for strengthening community readiness. Completing the Emergency Management Plan, defining the roles of the EOC and the fire service, and establishing clear activation and coordination procedures should be prioritized to ensure that Lions Bay is positioned to meet its obligations under the Emergency and Disaster Management Act.

7.3 Mutual Aid Status

Lions Bay Fire Rescue currently relies on a patchwork of legacy agreements and a regional document that no longer reflects modern fire service practices. While these documents historically provided a basic framework for cooperation, they predate today's operational standards, training requirements, and legislative expectations. A review of existing documentation confirms that the Village does not have a contemporary mutual aid agreement that aligns with the BC Structure Firefighter Minimum Training Standard, the BC Fire Safety Act, or current incident management practices.

The municipal mutual aid agreement signed in 1995 included Lions Bay as one of multiple Metro Vancouver jurisdictions. During the research process for this Core Service Review, it was noted by several external agencies that this mutual aid agreement is still utilized today. Although technically still in force, it predates the Playbook, the BC Emergency Management System, recognized ICS requirements, modern apparatus standards, and today's interoperability expectations for communications and equipment. Given the evolution of the fire service over the past three decades, this agreement no longer provides the clarity and must be updated.

The Inter Agency Operational Procedures and Reimbursement Rates Agreement (2021) between the Office of the Fire Commissioner, the Fire Chiefs Association of BC (FCABC) and the BC Wildfire Service (BCWS) remains valid but applies specifically to provincial wildfire deployments and associated cost recovery. It does not function as a structural firefighting mutual aid agreement and cannot serve as a substitute for municipal or regional arrangements.

Most recently, during research of this core service review, a draft Mutual Aid Agreement from the Squamish Lillooet Regional District was provided for review. The draft is well structured and reflects common British Columbia municipal practice. It establishes the basis for cooperation between Lions Bay Fire Rescue and the Britannia Beach Volunteer Fire Department. While operationally sound, the agreement would benefit from several refinements before execution.

These include identifying each department's declared service level, clarifying Fire Chief authorization for deployment, providing flexibility in resource allocation, strengthening cost recovery provisions, identifying a preferred mutual aid radio channel, incorporating annual joint planning or training expectations, and completing administrative elements such as boundary maps and a defined five-year term. These revisions are practical and easily incorporated, and they do not hinder the agreement's overall viability.

Taken together, these findings underscore that Lions Bay currently lacks a contemporary and operational mutual aid framework. This gap presents risk, especially given the Village's limited staffing depth, reliance on volunteer officer availability, and the steep terrain and travel constraints that influence when and how external support can arrive. While a renewed mutual aid or automatic aid model will eventually be required for long-term resilience, Lions Bay must first address internal gaps in training documentation, officer development, operational guidelines, equipment compatibility, and leadership stability. Only after these foundational elements are strengthened can neighbouring jurisdictions reasonably enter into a formal, modernized mutual aid agreement with the Village.

7.4 Wildland Urban Interface Planning

The review did not identify a formal Wildland Urban Interface plan for the Village. While one firefighter supports FireSmart activities to reduce wildfire risk within the community, these efforts are limited in scope and do not constitute a coordinated WUI strategy. Responsibility for wildfire suppression outside municipal boundaries rests with the Province, and it appears that Lions Bay relies heavily on Metro Vancouver for guidance and regional support. No documentation was provided to confirm whether Metro Vancouver maintains a WUI plan that directly incorporates Lions Bay or whether the Village has adopted any local interface planning, fuel management strategies, or evacuation readiness measures. Given the community's location, steep terrain, limited water supply, and constrained evacuation routes, the absence of a formal WUI plan presents an elevated risk during periods of heightened wildfire activity. A structured WUI plan would help clarify roles, responsibilities, response triggers, and community preparedness measures in alignment with provincial wildfire management expectations.

Given Lions Bay's steep terrain, dense forest interface, limited evacuation routes, and reliance on a constrained water supply, the community sits in a wildfire environment that matches the higher risk categories identified by the BC Wildfire Service under the WUI Risk Class Framework. Many BC municipalities have proactively adopted Community Wildfire Resiliency Plans to guide fuel management, evacuation readiness, and coordinated mitigation efforts before wildfire conditions escalate. A formal WUI plan would provide the Village with a structured, evidence-based approach to reducing interface risk, clarifying responsibilities, and strengthening

community resilience, aligned with provincial expectations for wildfire preparedness. Proposed WUI Plan Components include:

- Wildfire hazard and risk assessment tailored to Lions Bay's topography, vegetation, and settlement pattern.
- Identification of priority fuel management zones and recommended treatment methods.
- Strategies for defensible space around homes and critical infrastructure.
- Identification of evacuation routes, pinch points, staging areas, and anticipated challenges.
- Clear roles and responsibilities for Village staff and LBFR.
- Response triggers for evacuation advisories, orders, and tactical evacuations.
- Strategies for water supply resilience during wildfire conditions.
- Public education and FireSmart engagement programs.
- Integration with the Village Emergency Plan and Emergency Operations Centre procedures.
- Annual review and update cycle to keep the plan current with changing conditions and provincial guidance.

Developing a formal WUI plan will ensure that Lions Bay moves from reactive wildfire preparedness to a structured, forward-looking approach that strengthens community safety and supports informed decision-making during periods of heightened wildfire risk.[1]

[1] British Columbia FireSmart, Community Wildfire Resilience Plan Instruction Guide 2024.



Section 8

Strategic Risk Assessment

EMG Emergency Management Group

SECTION 8: STRATEGIC RISK ASSESSMENT

The strategic risk review identifies the conditions that most significantly affect the safety, reliability, and long-term sustainability of fire service delivery in Lions Bay. These risks are not theoretical. They are grounded in the operational limitations documented throughout this report, the feedback provided through confidential stakeholder engagement, and the incomplete or missing information related to core safety and compliance activities. The assessment highlights where the Village is most exposed, where the fire department requires immediate support, and where current practices fall short of what is needed to maintain the declared level of service. Understanding these risks is essential for informed decision-making and for establishing a realistic and defensible path forward.

The strategic risks facing LBFR extend across operational readiness, safety systems, training, governance, and financial sustainability. The combination of leadership instability, high turnover, limited administrative capacity, and inconsistent safety practices places the Village in a position of risk and exposure. The following assessment outlines the key risks identified through document review, stakeholder engagement, and site analysis.

8.1 Leadership and Governance Risk

The absence of a Fire Chief has resulted in inconsistent oversight of operations, equipment, training, and safety. Officers are performing supervisory tasks beyond their capacity and training. Critical responsibilities such as annual testing, documentation, risk assessment, and recordkeeping are not occurring consistently. Without a designated Fire Chief, accountability defaults to the CAO and Council, which increases municipal liability and limits operational direction.

8.2 Operational Readiness Risk

Lions Bay Fire Rescue has declared an Interior Operations level of service, yet several foundational elements required to support interior attack are not consistently in place. The BC Structure Firefighter Competency and Training Playbook outlines the training requirements for departments performing interior firefighting, but meeting these requirements on paper does not guarantee that a department can safely deliver this service in real time. Interior firefighting depends not only on having trained members, but on having those trained members available within a reasonable response timeframe and in sufficient numbers to form a complete and safe crew.

During this review, it was difficult to confirm that enough qualified personnel are available during typical response periods to meet the expectations for team leadership, incident

command, rapid intervention support, and interior entry. Daytime availability is particularly limited and relies heavily on temporary members who commute outside the community for work. High turnover further reduces the depth of experience available during critical calls. These gaps affect crew integrity, delay task assignments, and reduce the ability to establish safe operational groups at the scene.

Without reliable availability of firefighters, interior attack cannot be consistently or safely supported. These vulnerabilities undermine the declared level of service and increase the risk to firefighters, residents, and property. Ensuring operational readiness requires not only formal training but the sustained presence of appropriately trained members who can respond consistently and quickly enough to support interior operations.

Operational readiness is further affected by the lack of long-term planning tools. Without a Community Risk Assessment or Fire Department Strategic Plan, the Village cannot align personnel levels with community hazards or forecast the minimum supervisory capacity needed to support interior operations consistently.

8.3 System and Compliance Risk

The absence of documented hose testing, incomplete SCBA flow tests, missing ladder testing records, and expired structural firefighting gear present a significant safety risk. This is compounded by the lack of NFPA 1851 compliant PPE records, lack of inspection forms, and no documented decontamination procedures. The condition of the fire hall and the presence of suspected asbestos create further exposure risk. Taken together, these gaps place the Village in a position of avoidable occupational health and safety exposure.

8.4 Training and Competency Risk

In was communicated to EMG that the training records in Vector Solutions are incomplete and inconsistent. However, the Training Officer provided records that indicate they are complete. The department has a high proportion of new firefighters with less than two years of experience, and many with less than one year of experience, while officer availability is limited. Without consistent training documentation, it will be difficult for the Village to demonstrate due diligence if an incident leads to investigation or review.

8.5 Equipment Reliability and Infrastructure Risk

One apparatus is beyond typical frontline age for a department performing interior fire attack. Hose reliability is questionable, and turnout gear for approximately one-third of the roster exceeds the 10-year life cycle. The department relies on volunteer maintenance for SCBA,

vehicles, and station equipment. This creates inconsistencies and increases the potential for preventable equipment failure during high consequence incidents.

8.6 Water Supply and Firefighting Limitation Risk

The Firefighting Water Reserve Policy and Water Shortage Policy impose strict operational cutoffs that can restrict or eliminate hydrant availability during summer drawdown or Code Red, Code Orange, and Code White conditions. During Code White, hydrants are fully inoperable. These restrictions significantly reduce the ability to conduct interior operations and require a shift to exterior or defensive strategies. The lack of internal tender capacity or reliable water shuttle operations creates a major suppression gap during these periods. Without a consistent alternative water supply, the department cannot sustain attack lines, support prolonged suppression activity, or maintain safe flow rates for interior entry or defensive operations. This increases dependence on other departments equipped for tender support and elevates life safety risk for both firefighters and residents. The current water system cannot support consistent delivery of the declared level of service during shortage conditions, particularly when hydrant infrastructure is compromised.

8.7 Volunteer Capacity and Sustainability Risk

The housing market and rental scarcity prevent long-term volunteer retention. Many members remain only one to three years before moving to career departments. This turnover prevents the accumulation of experience, disrupts training continuity, and limits the development of future officers. Relying on temporary firefighters to meet the department's response capacity is not sustainable and creates ongoing instability in both staffing and leadership. Dependence on a small core of senior members increases burnout risk and leaves critical functions vulnerable to gaps in availability when the roster is dominated by short-term, transient personnel.

The review confirmed that many senior members are carrying administrative, training, and maintenance responsibilities normally assigned to the Fire Chief. This workload is not sustainable, and several members expressed fatigue from the cumulative pressure of operational and administrative expectations.

8.8 Emergency Management Risk

Stakeholders expressed limited awareness of who holds responsibility for emergency planning, coordination, and preparedness activities. The Village's emergency management program appears fragmented, with unclear roles and inconsistent communication. This creates

vulnerability during wildfire threats, extended power loss, water supply disruption, or major rescue events on Highway 99.

8.9 Financial Planning and Transparency Risk

The department's budgets for training, PPE, testing, and capital replacement do not align with modern safety requirements. Reliance on volunteers to offset municipal obligations obscures true costs. Turnout gear replacement, SCBA maintenance, hose testing, ladder testing, and pump testing require predictable funding. Budget transparency between municipal administration and fire service leadership is limited, with officers reporting a lack of visibility into spending progress.

The lack of a Community Risk Assessment and Fire Department Strategic Plan limits the Village's ability to align finances with actual risk. Without these tools, council must make budget decisions without clear justification for equipment replacement, training investment, staffing levels, or long-term service expectations.

8.10 Overall Strategic Risk Observation

The combined findings of this review show that Lions Bay Fire Rescue is operating within a set of structural, operational, and resource constraints that significantly affect its service delivery. These challenges are not isolated issues. They form a pattern that points to deeper systemic limitations across leadership, training, safety compliance, equipment reliability, water supply, emergency management, and staffing sustainability. Many of these vulnerabilities have developed gradually over time as the expectations of modern fire service delivery have increased, while the department's foundation has remained largely unchanged. The reliance on temporary firefighters, incomplete safety systems, and limited administrative capacity has created a level of exposure that cannot be addressed through minor adjustments or incremental improvements. The following risk categories illustrate how these conditions intersect to create an environment where service reliability is uncertain, firefighter safety is at risk, and the long-term sustainability of the fire service requires deliberate and coordinated action from the Village.

Addressing these risks will require structured planning, stable leadership, reliable documentation systems, and long-term financial alignment based on a clear understanding of community risk and service expectations.

Section 9

Water Supply and Infrastructure Resilience



SECTION 9: WATER SUPPLY AND INFRASTRUCTURE RESILIENCE

The availability and reliability of firefighting water is a critical factor in determining the level of service a fire department can safely provide. In Lions Bay, water supply represents one of the most significant operational constraints faced by the fire service. The Village relies on a limited storage system with no redundancy, which means that seasonal fluctuations, tank drawdown, and restricted inflow can directly limit the department's ability to perform structural firefighting. The following section outlines the water supply policies adopted by Council in 2024, the operational impacts of those restrictions, and the associated risks to life safety, fire containment, and long-term service sustainability.

9.1 Operational Limitations

The Village's water system presents a significant operational limitation for firefighting and directly affects the ability of Lions Bay Fire Rescue to maintain the declared level of service. The community relies on two storage tanks, Harvey and Magnesia, with no secondary supply, no redundant source, and limited inflow capacity during the summer months. During periods of reduced inflow, tank volumes can drop quickly, placing the system in Water Short Supply or Water Constrained Supply status and triggering restrictions on the use of water for firefighting.

Council adopted the Firefighting Water Reserve Policy in March 2024, which establishes tank-level cutoffs for fire suppression during water shortage events. Under this policy, firefighting operations must cease when either storage tank falls to 50 percent capacity during Water Short Supply status and 75 percent capacity during Water Constrained Supply status. These thresholds were set to prevent full depletion of the mains, which could lead to system failure, contamination risks, prolonged flushing requirements, and significant public health impacts. These conditions and cutoffs are documented in the firefighting water reserve policy provided to Council.

The Water Shortage Policy adopted in April 2024 further defines Code Red, Code Orange, and Code White conditions, each reflecting increasing degrees of water scarcity. Under Code Red and Code Orange, the Village may activate stringent conservation measures, lock out irrigation systems, shut off suspect service connections, deploy non-potable water barrels, and begin coordination for bottled water supply. Under Code White, water demand exceeds supply, requiring a complete shutdown of street mains and service curb stops, with hydrants rendered inoperable until supply and water quality can be restored. These conditions are outlined in the water shortage policy.

EMG was not provided with any operational water supply plan that outlines how firefighting activities are to be supported when the Village declares a water shortage. There was no documentation indicating whether other departments should be placed on standby for tanker shuttle operations, how external water sources are to be accessed, or what procedures LBFR is expected to follow when hydrant flow is restricted or unavailable. The absence of a clear operational plan creates uncertainty for incident commanders and increases the risk that critical decisions will need to be made without predefined guidance during an already high-risk event.

9.2 Operational Impacts

The combination of tank cutoffs and shortage statuses results in the following operational constraints:

- Firefighting water may be restricted or unavailable during prolonged dry periods.
- Interior attack may not be possible if hydrants cannot be supplied at the required pressures and flow.
- Mutual aid departments would be required to bring their own water supply to support suppression.
- Response strategies would shift toward exterior operations and prevention of fire spread.
- Insurance grading and fire risk profiles may be negatively affected, particularly if hydrant reliability cannot be assured.
- Residents may experience more frequent recommendations to evacuate early during interface fire threats due to limited suppression capability.

9.3 Alternative Water Supply

When tank thresholds limit hydrant use, the department would require a mobile water supply through tenders or portable tanks. Lions Bay has no internal tender capability and would need to rely on other fire departments for tender operations. This creates longer setup times, delayed water delivery, and increased dependence on mutual aid agencies.

9.4 Water Supply Risk Statement

The Village's water infrastructure creates a significant limitation on the fire department's ability to perform structural firefighting during periods of reduced water supply. Hydrant-dependent operations may be restricted or unavailable when storage tanks fall below the 50 percent or 75 percent cutoff thresholds. During Code White events, hydrants are fully inoperable. These limitations increase risk to life safety, reduce the probability of successful structure fire containment, increase reliance on external mutual aid resources, and may affect insurance

ratings due to uncertainty in sustained water flow. The current water system does not support consistent delivery of the declared interior fire suppression level of service during water shortage conditions, and the department must plan operations and training accordingly.

9.4.1 Recommended Actions During Code White

A Code White event represents the most severe water shortage condition in the Village. During this status, water demand exceeds supply, and the system requires shutdown of street mains and service curb stops. Hydrants become fully inoperable until tank volumes and water quality can be restored. To ensure clarity of roles and reduce risk to residents and firefighters, the following actions are recommended for both the Village and Lions Bay Fire Rescue during Code White conditions.

9.4.2 Village Responsibilities

The Village should clearly declare Code White conditions through all municipal communication channels and advise residents that firefighting water is unavailable from hydrants. Bottled water supply, non-potable water barrels, and temporary water storage should be coordinated to support essential needs. The Village should activate an appropriate emergency management structure and issue public advisories for neighbourhoods at elevated interface risk. Mutual aid partners should be notified in advance of the potential need for tender operations, even if no incident is occurring. All non-essential water use should be restricted and conservation orders fully enforced.

9.4.3 Fire Department Responsibilities

Lions Bay Fire Rescue is designated as an Interior Operations department, yet interior entry is only defensible when a reliable and sustained water supply is available to support firefighter safety. The risk associated with an inadequate water supply is amplified by the terrain and geography of Lions Bay, where steep slopes, limited access routes, and closely spaced interface properties allow fires to escalate rapidly and restrict apparatus positioning. During water shortage conditions, particularly Code White, incident commanders face a significant challenge in determining whether interior attack can be conducted safely or whether operations must shift to a defensive strategy. When hydrant supply cannot be guaranteed, interior firefighting becomes increasingly difficult to justify due to the risk of rapid-fire growth, loss of suppression capability, and compromised firefighter protection.

Lions Bay Fire Rescue should not be placed in a position where incident commanders must decide between interior or exterior operations solely based on insufficient water supply. That determination rests with the Village's elected officials, who are responsible for establishing the

level of service and the conditions under which interior operations can be safely supported during Code White conditions.

Mutual aid tenders or water shuttle operations should be requested from regional partners such as West Vancouver or Squamish if an incident occurs. There is a critical need for the Village to identify and confirm alternate water supply options for Code White conditions, as the absence of sustainable hydrant flow leaves the community exposed to significant life safety and property protection risk. Pre incident plans should be adjusted to reflect the lack of sustained water flow, and early notification to residents regarding interface evacuation readiness may be required. The department should formally advise the Village of the elevated risk associated with Code White conditions.



Section 10

Consultation and Engagement Summary

Emergency Management Group

SECTION 10: CONSULTATION AND ENGAGEMENT SUMMARY

10.1 Summary of Stakeholder Feedback

Stakeholder engagement for this review was conducted through private, confidential conversations with firefighters, officers, administrative staff, and elected officials. To support honest participation in a small community environment, all discussions were held in strict confidence, and individual names or statements will not be disclosed. The purpose of this approach is not to attribute concerns to specific participants, but to identify consistent themes that reflect the broader experiences, pressures, and expectations shared across the organization. The findings presented in this report are therefore based on collective patterns, repeated observations, and common issues identified across multiple interviews, rather than on isolated perspectives.

Stakeholder engagement provided a clear picture of the pressures affecting Lions Bay Fire Rescue, the expectations of elected officials, and the realities experienced by firefighters and officers. Despite different perspectives, every group identified concerns about sustainability, safety, and the long-term viability of the current fire service model.

Across elected officials, several themes emerged. Stakeholders noted ongoing concern about the financial impact of any service level change and the challenge of balancing essential public safety functions with limited tax tolerance. Some questioned whether alternate regional models or shared services could reduce administrative pressure on the municipality. Governance challenges were acknowledged, including inconsistent decision pathways and delays in addressing the fire chief vacancy. These dynamics contribute to uncertainty about long-term direction and the capacity of the current structure to meet community needs.

Multiple councillors described strong value in maintaining local control and preserving the identity of the fire service, while also expressing concern about the sustainability of the volunteer leadership model. Several noted the decline in available volunteers and the increasing administrative complexity that makes the fire chief role difficult to fulfill without dedicated time or professional support. Broader issues such as wildfire risk, insurance implications, and the limited availability of development revenue were raised as ongoing pressures that influence Council's decision making and ability to modernize the department.

Administrative perspectives emphasized operational realities and the difficulty of maintaining minimum readiness without stable leadership. Concerns were raised about potential building condition hazards at the fire hall, the absence of a designated health and safety function, limited progress on emergency management planning, and the time requirements associated with training oversight, risk assessment, and regulatory compliance. It was noted that the scope

of the fire chief's role exceeds what can reasonably be expected from a volunteer in a small community.

Fire officers and firefighters provided detailed insight into the strain placed on the current model. Many are balancing full-time employment, family responsibilities, and significant volunteer expectations. The fire chief leadership vacancy has increased pressure on captains and lieutenants, who now carry additional administrative and supervisory responsibilities. Firefighters described challenges related to expired or poorly fitting bunker gear, inconsistent direction at calls, delayed access to PPE for new members, and limited opportunities for additional training due to officer availability. Concerns were also raised about equipment age, hose reliability, as one recently failed at an emergency scene, and the absence of a duty officer system to support decision making. Housing availability and cost were identified as barriers to retention, particularly given the large number of firefighters who relocate temporarily to gain experience.

Former leadership perspectives reinforced many of these themes. The responsibilities associated with maintaining safe operations, developing training programs, completing risk assessments, and updating bylaws were described as exceeding volunteer capacity. Budget constraints, lack of regular financial reporting to the department, and delays in addressing leadership succession planning were also noted as contributing factors.

Across all groups, a consistent conclusion emerged. Lions Bay Fire Rescue cannot maintain its declared service level or current operational expectations without stable leadership, structured administration, and improvements to health and safety practices. Stakeholders expressed pride in the department's history and value to the community, yet recognized that the system has reached a point where incremental adjustments will not resolve the underlying issues. There is broad desire for a fire service that is safe, sustainable, and supported by clear governance, predictable funding, and a leadership model that reflects the realities of today's risk environment.

10.1.1 Key Themes Identified Through Confidential Stakeholder Engagement

Confidential interviews revealed a clear and consistent set of themes across all groups involved with Lions Bay Fire Rescue. While experiences varied, the same core issues surfaced repeatedly and formed a unified picture of the pressures facing the department.

10.1.2 Leadership Stability

Participants consistently identified the absence of a fire chief as the most significant factor affecting operations, training, supervision, and administrative continuity. The vacancy was viewed as unsustainable and a primary contributor to organizational strain.

10.1.3 Governance Alignment

Several participants noted challenges with decision making, communication, and clarity around service expectations. The lack of a shared understanding of the resources required to maintain a structurally capable fire service has affected both short-term and long-term planning.

10.1.4 Volunteer Capacity and Workload

There was widespread agreement that the current workload exceeds what can reasonably be expected from volunteers. Administrative duties, equipment maintenance, training oversight, FireSmart activities, and emergency management responsibilities have placed ongoing pressure on officers and senior members.

10.1.5 Experience Depth and Turnover

Stakeholders noted that a large proportion of the membership consists of new, temporary firefighters. Limited experience depth and high turnover create challenges for officer development, training supervision, and operational consistency.

10.1.6 Health and Safety Concerns

Participants raised several health and safety issues, including aging bunker gear, delays in receiving PPE, inconsistent incident command, limited supervision during training, equipment reliability, and the cumulative impact of workload and call volume on mental health. The absence of a formal health and safety function and concerns regarding the condition of the fire hall were also mentioned.

10.1.7 Equipment and Infrastructure

Aging apparatus, hose reliability issues, and reliance on volunteer maintenance were noted as ongoing challenges. Participants identified the need for structured lifecycle planning, consistent testing, and predictable funding to support safe operations.

10.1.8 Training Structure

Maintaining training consistency was identified as a challenge due to officer availability, competing commitments, and the number of junior members requiring guidance. Participants expressed interest in more structured training, clearer skill expectations, and additional instructional support.

10.1.9 Budget Clarity and Resource Limitations

Participants expressed uncertainty about available funding, budget tracking, and replacement planning. Inflation and aging infrastructure have placed additional pressure on the department, contributing to a reactive financial environment.

10.1.10 Housing and Retention

The cost and scarcity of local housing were identified as key barriers to long-term volunteer participation, contributing to turnover and limiting the department's ability to build sustained experience.

10.1.11 Emergency Management Clarity

Several participants noted uncertainty regarding roles and responsibilities related to emergency management planning and coordination, raising questions about overall preparedness.

10.1.12 Overall Readiness

Across all interviews, participants expressed concern that the current model does not align with the demands of a modern fire service. While there is strong commitment and pride in the department, there is a shared recognition that long-term sustainability will require structural support, clear direction, and improved resources.

Bringing these themes together, it is clear that the issues raised through confidential engagement are not isolated opinions or individual frustrations. They represent shared experiences across all parts of the organization and highlight structural pressures that have been building for several years. Understanding these themes is important because they identify the conditions that must be addressed to maintain firefighter safety, meet provincial expectations, and ensure that Lions Bay Fire Rescue can continue providing reliable service to the community. These findings form the foundation for the path forward and establish the

areas where focused, coordinated action will be required to build a safer and more sustainable fire service model for the village.

Section 11

Options and Future Service Models



Emergency Management Group

SECTION 11: OPTIONS AND FUTURE SERVICE MODELS

The following service delivery options are presented to Council based solely on the information gathered during the LBFR Core Services Review. These scenarios are not recommendations. They are strategic pathways intended to help the Village understand what models are available, what each option requires, and the operational, financial, and governance implications associated with each approach. EMG provides these options in good faith, based on the evidence and limitations identified in the review, and recognizes that future decisions rest entirely with Council once risks, costs, and community expectations are fully considered.

Reinforced Volunteer Model with FTE Fire Chief

This option preserves the volunteer service model and acknowledges the significant effort of the current officers, who have carried the department through a period of considerable strain. Their commitment has kept the service operational, although the administrative, regulatory, and operational demands have reached a point where a volunteer or part-time leadership structure can no longer meet the requirements of an Interior Operations department. Modern fire services rely on consistent oversight, structured administrative support, reliable documentation, and the ability to ensure that training, safety practices, and operational standards meet both industry expectations and WorkSafeBC requirements. These responsibilities cannot be sustained through volunteer capacity.

A full-time Fire Chief is therefore essential. This role provides the daily leadership needed to support and guide officers, rebuild administrative and training systems, validate records, manage regulatory obligations, and strengthen operational readiness. A full-time Chief would establish stability, restore predictability, and bring the structure necessary for Lions Bay Fire Rescue to function safely and confidently within its declared level of service.

Based on regional cost of living, industry salary benchmarks, and the scope of responsibilities, the Village should anticipate that a full-time Fire Chief would require an annual salary of at least $100,000. This reflects not only the operational and administrative workload but also the level of accountability carried by the Chief in areas such as compliance, training oversight, safety management, emergency response, and long-term departmental planning.

This option represents the strongest commitment to maintaining a local volunteer fire service while ensuring that it is supported by the leadership capacity required to operate safely and sustainably.

Pros and Cons for Option 1

Reinforced Volunteer Model with a Full-Time Fire Chief

Pros

- Restores leadership stability by assigning clear responsibility for training oversight, record keeping, administrative continuity, safety management, and regulatory compliance.
- Improves operational readiness by providing daily decision making and direction instead of relying on volunteers who are already at capacity.
- Supports officer development and succession planning through consistent mentoring, evaluation, and structured training.
- Enhances the Village's ability to demonstrate due diligence, particularly in relation to WorkSafeBC expectations, Playbook requirements, and incident documentation.
- Strengthens volunteer retention by providing predictable guidance, reducing internal strain, and addressing long standing gaps in governance and supervision.
- Maintains full local control of the fire service, which is important to many residents and aligns with the Village's desire for a community focused emergency response model.

Cons

- Requires a significant financial commitment for salary and benefits, which may challenge the Village's budget given existing fiscal constraints.
- Recruitment will be difficult due to the regional cost of living, the limited housing options in Lions Bay, and competition for qualified candidates.
- Transitioning from a volunteer-led structure to a full-time Chief may require cultural adjustment within the department, particularly for officers accustomed to distributed leadership.
- A single full-time Chief provides stability but does not fully address long-term administrative capacity, which may still require future support if call volumes or regulatory obligations increase.

Appoint an Interim Fire Chief for 12 to 24 months

An interim Chief drawn from outside the community or seconded from another department could provide immediate leadership while the Village reassesses long-term needs. This stabilizes operations, restores oversight for operational and capital planning, documentation, and provides the structure needed to support officer development and succession planning.

This option buys time. It allows the Village to maintain service continuity while determining whether a permanent Fire Chief, a contracted service, or a different service delivery model is most sustainable.

The challenge is availability. Interim Chiefs with the appropriate credentials may not be readily available, and housing proximity remains a factor. However, a defined term makes the position more attractive.

Pros and Cons for Option 2

Interim Fire Chief for 12 to 24 Months

Pros

- Provides immediate leadership stability while avoiding the long-term financial commitment of a permanent full-time Chief.
- Restores oversight for leadership, safety practices, and regulatory compliance, which are the areas under the most strain.
- Buys time for the Village to reassess its long-term fire service model, evaluate emerging regional discussions, and explore shared service or contracted leadership options.
- Reduces pressure on volunteer officers who have been carrying supervisory and administrative responsibilities beyond the expectations of their roles.
- Allows the incoming interim Chief to focus on stabilization, rebuilding systems, and identifying structural needs without the political weight of a permanent appointment.
- Creates an opportunity to bring in an experienced leader who can assess the department objectively and provide recommendations based on a defined mandate and timeline.

Cons

- Recruitment may still be challenging because qualified candidates must live near the Village or manage reasonable response expectations.
- An interim appointment does not resolve long term governance questions, and the department may experience renewed instability once the term ends if no permanent solution is in place.
- May require higher hourly compensation to attract someone willing to serve in a short-term role, especially in a competitive regional market.
- Some volunteers may struggle with temporary changes in leadership style or direction, particularly when the interim Chief's mandate is focused on reform and system stabilization.
- Administrative continuity may be affected at the end of the term unless a clear transition plan is established early.

Fee for Service Model, West Vancouver

A traditional fee for service model is unlikely to be immediately viable for Lions Bay, but the possibility of a structured partnership with West Vancouver Fire Rescue should not be dismissed. West Vancouver operates a modern, fully staffed department with established training programs, strong administrative systems, and the capacity to provide leadership, oversight, and operational support. A partnership model could take several forms. These include a fee for service arrangement for response from West Vancouver Station 2, or even a staffed engine company operating out of the Lions Bay fire hall if both municipalities determined that such a model was feasible and beneficial.

Any option involving West Vancouver carries operational, financial, and governance implications that can only be understood through direct dialogue between the two municipalities. This type of partnership requires detailed examination of expectations, cost structures, response capability, supervision, record management, and the integration of Lions Bay's volunteer members into a broader command system. It also requires clarity regarding authority, command roles during structure fires, and the responsibilities of the contracted leadership.

Early engagement with West Vancouver does not commit Lions Bay to any specific model. Instead, it provides an opportunity to understand what is feasible, what is not, and what the operational and financial impacts may be for each approach. A partnership model of this nature may offer long term stability and access to experienced leadership,

but it must be evaluated carefully to ensure alignment with community needs and the Village's capacity to support the arrangement.

Pros and Cons for Option 3

Shared Leadership or Service Partnership with West Vancouver Fire Rescue

Pros

- Provides access to experienced command level leadership and established administrative systems that can immediately strengthen training oversight and regulatory compliance.
- Offers the potential for improved response capability from a fully staffed municipal department with significant operational depth.
- Reduces reliance on volunteer officers to manage complex administrative and supervisory responsibilities that exceed the expectations of their roles.
- Enhances due diligence and defensibility by integrating Lions Bay into a larger organization with robust documentation practices, safety programs, and incident review processes.
- Allows the Village to explore a range of partnership models without committing to a full amalgamation or service integration.
- May support long-term sustainability by stabilizing leadership, improving operational readiness, and reducing internal strain on volunteers.

Cons

- Formal agreements will be required, and negotiations may be complex, particularly regarding cost, authority, and operational expectations.
- West Vancouver may not have immediate capacity or interest in providing the level of support required, which could limit the range of realistic partnership models.
- Depending on the model selected, Lions Bay may experience reduced autonomy, particularly in areas related to command decisions, training standards, and administrative processes.
- Costs could be significant depending on the scope of the partnership, and the Village will need a clear understanding of both fixed and variable expenses.
- Integration of volunteer members into a career based command structure may require cultural adjustment , memorandum of understanding with the local union and clear communications to ensure smooth operation.

- This option requires time for exploration, negotiation, and approval, which means it is not an immediate solution to current leadership gaps.

Metro Vancouver Regional District

Metro Vancouver Regional District has historically focused on large scale regional services such as water supply, wastewater treatment, regional planning, and emergency management coordination. Fire suppression has not traditionally been one of its direct operational responsibilities. However, the landscape is shifting. Metro Vancouver's Electoral Area and Small Communities Committee recently approved work to explore enhanced emergency management roles and shared service opportunities for small jurisdictions, including the Village of Anmore, Village of Belcarra, Bowen Island Municipality, Tsawwassen First Nation, Electoral Area A, and the Village of Lions Bay.

This work includes the development of a business case to better understand whether shared emergency management functions could be formalized through new regional structures. This emerging direction demonstrates that Metro Vancouver is willing to explore models that support communities facing increasing hazard exposure, limited administrative capacity, and escalating regulatory expectations.

Any movement toward Metro Vancouver oversight of Lions Bay Fire Rescue would require formal engagement initiated by the Village. A request from the Mayor and Council, supported by the CAO, would need to be submitted to Metro Vancouver for consideration. If Metro Vancouver determined that the request aligned with its strategic direction, the matter would proceed to the Board of Directors for approval. This means the option is procedural rather than automatic and depends heavily on Metro Vancouver's appetite to expand its role, along with Lions Bay's willingness to relinquish or share authority for fire protection. Such a transition would introduce costs that the Village would have to evaluate, approve, and fund. The magnitude of any cost implications would become clearer only after Metro Vancouver completed its internal review and business case analysis.

The broader provincial context adds relevance to this option. Recent amendments under the Fire Safety Act and the Local Government Act have made it easier for regional districts to assume responsibility for fire inspections and investigations, either directly or through contracted arrangements. These changes were designed to address capacity challenges faced by smaller communities and to create more consistent fire safety oversight across the province. While the legislation does not compel regional districts to deliver full fire suppression services, it expands their ability to participate in fire safety functions, particularly in areas with high wildfire risk or limited administrative depth.

Lions Bay's exposure to wildland urban interface hazards, steep terrain, limited access routes, and susceptibility to landslides makes the Village an example of the type of community that could benefit from stronger regional integration of emergency management functions.

Before Metro Vancouver could be considered a realistic provider of fire protection services, several factors would require detailed assessment. These include Metro Vancouver's willingness to enter into a fire service role, the service level required to address Lions Bay's hazards and geography, the ability of a regional model to support training, apparatus readiness, and inspection roles under the new Fire Safety Act, and the funding structure needed to sustain such a service without inequity to other jurisdictions. Governance considerations would also be significant because a transition to regional oversight could alter how operational priorities are set, how risks are managed, and how service expectations are defined.

Metro Vancouver's potential involvement represents an emerging and still exploratory direction rather than an established model. Even so, the current work underway at Metro Vancouver demonstrates that there is at least conceptual space to discuss whether a shared or regionalized approach could benefit communities with high hazard exposure and constrained local capacity. For Lions Bay, initiating a dialogue does not commit the Village to any specific path, but it may provide clarity on what regional support could look like and whether it represents a viable alternative to the current structure.

Pros and Cons for Option 4

Exploration of a Broader Regional Governance or Support Model (Metro Vancouver or West Vancouver)

Pros

- Opens the door to long-term stability by aligning Lions Bay with larger, better-resourced organizations that have established training programs, administrative capacity, safety systems, and compliance frameworks.
- Reduces the administrative burden on volunteer officers by shifting oversight responsibilities, documentation requirements, and regulatory alignment to an external authority with full-time staff.
- May provide access to regional emergency management expertise, shared planning resources, and coordinated wildfire or interface preparedness initiatives.

- Could lower long-term risk exposure for the Village by ensuring that training verification, safety programs, and operational readiness are managed by professionalized systems rather than volunteer capacity.
- Allows Lions Bay to continue operating a local fire service while receiving external support, depending on the model selected.
- Creates opportunities to participate in future regional shared service initiatives being considered by Metro Vancouver, which may benefit small communities facing similar challenges.
- Does not require immediate commitment. Exploration allows the Village to fully understand feasibility, costs, and governance implications before making any decisions.

Cons

- This is not an immediate solution to the current leadership gap, since regional integration or shared governance discussions require time, formal engagement, and approval processes at multiple levels.
- Governance complexity is significant, and any agreement would require careful definition of roles, responsibilities, decision making authority, and financial commitments.
- Depending on the model selected, Lions Bay may experience reduced autonomy over its fire service, particularly in operational standards, training expectations, and leadership decisions.
- Costs could vary widely depending on the level of support requested, the structure of the agreement, and the administrative overhead required by the regional partner.
- Cultural integration between a small volunteer department and a larger regional system may require adjustment, especially for volunteers who value local control and identity.
- Political appetite for regional governance varies among councils and may influence the feasibility of any long-term agreement.

After reviewing the Village's current operational challenges, leadership gap, regulatory obligations, and the capacity limitations placed on volunteer officers, the most practical and sustainable option for Lions Bay is Option 1: Reinforced Volunteer Model with a Full Time Fire Chief with the added mandate to work with Council and the CAO to explore a broader regional governance model with the Metro Vancouver Regional District.

A full-time Chief immediately provides the daily leadership, administrative structure, training oversight, and regulatory alignment required for LBFR to function safely within its declared Interior Operations level of service. The department has committed volunteers, a strong

training rhythm, and the foundation needed for a resilient service model, but these strengths cannot be sustained without dedicated leadership. A full-time Fire Chief restores continuity, strengthens due diligence, and ensures consistent supervision of training, safety programs, documentation, and officer development. It also preserves local control, which remains important to the character of the community. Nevertheless, there is the potential in the future that a full-time Fire Chief may not be realistic, and alternate options must be explored.

Options 2, 3, and 4 present viable pathways for future exploration, and the Village should continue to keep these alternatives on the horizon. However, they do not address the immediate leadership and oversight requirements that exist today. Lions Bay needs stability now, and a full-time Fire Chief is the most direct and effective way to achieve it.

The Village has reached a decisive moment. Lions Bay cannot continue with its current approach and expect the fire department to remain viable, safe, or reliable. Every option in this review requires a level of operational and capital investment that must be supported through clear and deliberate decisions. Council now needs to determine the future of fire protection in the Village and commit to the resources necessary to support that decision. Choosing a service model without committing the funding to sustain it will leave the department and the Village in the same cycle of risk. The reality is that a modern fire service demands consistent investment, and Lions Bay must now decide on the future direction of its fire service.

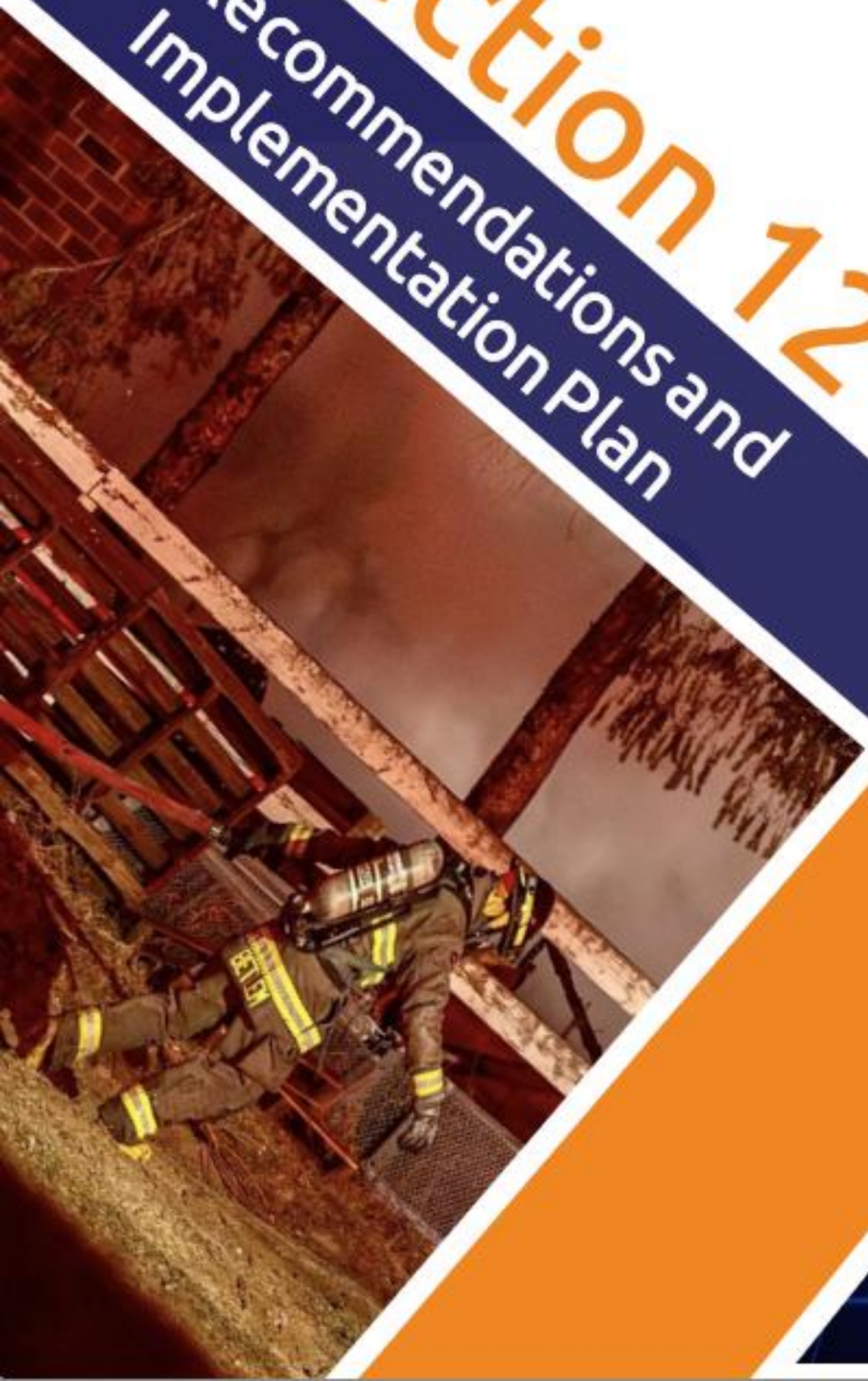
See options comparable table below:

Option	Description	Strengths	Limitations	Estimated Cost Impact
Option 1 - Reinforced Volunteer Model with Full-Time Fire Chief	Maintain volunteer department structure while hiring a full-time Fire Chief to restore leadership, oversight, and administrative capacity.	Strongest improvement to training oversight, documentation, safety systems, and Playbook compliance. Maintains full local control. Provides daily leadership and long-term stability. Supports officer development.	Requires significant financial investment. Recruitment will be challenging due to regional housing costs and limited candidate pool.	Approximately $100,000 annually plus benefits.
Option 2 - Interim Fire Chief for 12 to 24 Months	Bring in a qualified leader on a short-term basis to stabilize operations, rebuild systems, and provide oversight while long-term solutions are evaluated.	Provides immediate leadership and restores critical oversight. Reduces pressure on volunteer officers. Buys time to reassess future service delivery. Allows an external leader to evaluate departmental needs objectively.	Does not resolve long-term governance questions. Administrative continuity may be affected at end of term unless a clear transition plan is established.	Slightly higher than a full-time Chief on an hourly basis, depending on contract structure.

Option	Description	Strengths	Limitations	Estimated Cost Impact
Option 3 – Shared Leadership or Service Partnership with West Vancouver Fire Rescue	Engage West Vancouver in structured discussions regarding fee for service arrangements, or a staffed engine model.	Provides access to experienced command leadership, established administrative systems, and strong operational depth. Enhances due diligence and supports consistent training and documentation. May reduce long-term risk exposure.	Requires negotiation of complex agreements. May reduce local autonomy. Costs could be significant and variable. Integration with a career-based system requires cultural adjustment.	Highly variable; dependent on negotiated terms and scope of support. Providing leadership support would be a cost recovery based on West Vancouver salary rates. Placing a full-time crew in Lions Bay would likely be in excess of $2.5M.
Option 4 - Explore Regional Governance or Support through Metro Vancouver or West Vancouver	Participate in broader regional discussions on shared fire service resources and potential long-term governance models.	Offers potential for long-term system stability. Provides access to regional expertise and coordinated planning. Reduces administrative burden on local volunteers. Allows the Village to evaluate large scale solutions without immediate commitment.	Not a short-term solution. Requires extensive discussion, approvals, and analysis. May reduce autonomy. Costs and governance implications are uncertain until discussions progress.	Unknown until regional models are defined.

Section 12

Recommendations and Implementation Plan



Emergency Management Group

SECTION 12: RECOMMENDATIONS AND IMPLEMENTATION PLAN

The core service review recommendations include:

Rec #	Recommendation	Implementation Timeline	Estimated Cost	Rationale
1	Appoint a compensated Fire Chief	Immediate to three months	~$100,000 dollars annually	Stable leadership is required for governance, safety oversight, documentation, and operational consistency. The department cannot function safely without a designated Chief officer.
2	Establish the training management and documentation system using Vector Solutions	Immediate to six months	Included in current subscription	Training is being completed but records are usually entered only once a month. This delay prevents timely verification of competencies, attendance, and required skills. Vector must be used consistently with entries made weekly or, at minimum, every two weeks to ensure accurate tracking.
3	Implement annual equipment testing for pumps, hose, ladders, and SCBA	Immediate to six months	5,000 to 12,000 dollars annually	These programs are essential for firefighter safety and municipal liability protection. Records are required for due diligence.
4	Remove expired PPE and prioritize replacement. All FF turnout gear exceeding 10-years not be permitted interior firefighting functions.	Immediate to twelve months	3,500 to 4,500 dollars per set	PPE has exceeded service life in several cases. Interior operations cannot be supported safely without compliant gear.
5	Establish a PPE lifecycle tracking program	Immediate to twelve months	Minimal	Tracking manufacture dates, repairs, and end of life supports compliance and safe operations.
6	Update the fire services bylaw and designate inspection authority	Immediate to nine months	Minimal	The current bylaw references outdated legislation. Revising it strengthens compliance with the Fire Safety Act and clarifies responsibilities.

Rec #	Recommendation	Implementation Timeline	Estimated Cost	Rationale
7	Begin contamination control and cancer reduction procedures	Immediate to six months	Minimal	Firefighter cancer risk requires consistent decontamination practices. The department has an extractor but no formal procedures.
8	Assign responsibility for training coordination, documentation, and safety compliance to the Fire Chief	Immediate	No cost beyond compensation of Fire Chief	Clear assignment of duties ensures consistency, accountability, and regulatory compliance.
9	Implement officer development aligned with NFPA 1021	Short Term (1 to 3 years) ongoing	3,000 to 7,000 dollars per year	Officer depth is limited. Proceed with formal online training programs and live training sessions.
10	Review and revise all SOGs and adopt a formal revision cycle	Short Term (1 to 3 years) ongoing	Minimal	SOGs contain extensive definitions and lack revision dates. An annual review cycle ensures consistency and operational clarity.
11	Revise mutual aid contracts	Short Term (1 to 3 years)	Minimal	Integration with regional partners improves response capacity and supports municipal emergency planning.
12	Confirm service level funding	Short Term (1 to 3 years)	Variable depending upon expectations	The Village must ensure funding aligns with its service level commitment.
13	Validate apparatus lifecycle planning and performance expectations	Short Term (1 to 3 years)	Depends on replacements	Ensures apparatus are reliable, suitable for terrain, and replaced before safety becomes affected.

Rec #	Recommendation	Implementation Timeline	Estimated Cost	Rationale
14	Begin apparatus replacement according to lifecycle	Mid Term (4 to 10 years)	Dependent on unit replaced	Predictable apparatus replacement supports operational reliability and long-term budgeting.
15	Conduct a comprehensive fire hall assessment	Short Term (1 to 3 years)	Cost of engineering assessment	Identifies long term needs related to structure, seismic resistance, and functional adequacy.
16	Advance regional collaboration or shared service opportunities	Immediate (0 to 1 year)	Variable	Aims to improve resilience and efficiency through collaboration with neighbouring communities.
15	Evaluate long-term training space requirements or pursue regional training partnerships	Mid Term (4 to 10 years)	Variable depending on partnership	Ensures the department can train safely and consistently as standards evolve.
16	Fire hall replacement or major modernization based on assessments	Long Term (11 to 20 years)	Significant capital investment	Long term infrastructure planning ensures the facility supports future training, apparatus, and emergency management needs.
17	Continue apparatus lifecycle investments	20 years	Significant capital investment	Ensures the fleet remains reliable and aligned with risk and terrain.
18	Implement wildfire and interface mitigation strategies	Immediate (0 to 1 year)	Variable depending on scope	Climate driven risk requires planning for wildfire exposure and interface risk.

Section 13



Conclusion





Emergency Management Group

SECTION 13: CONCLUSION

The LBFR Core Services Review confirms that the department is built on a foundation of committed volunteers who care deeply about their community and who continue to provide essential emergency services despite increasing operational and administrative demands. Their dedication is clear. The challenges identified in this review do not reflect a lack of effort. They reflect the reality that the expectations, regulatory requirements, and complexity of modern fire service delivery have expanded beyond what a small volunteer leadership team can reasonably sustain without stronger structural support.

The review highlights gaps in governance, equipment replacement schedules, officer development, occupational health and safety compliance, and maintenance recordkeeping. These gaps create operational and legal risk and reduce the Village's ability to demonstrate due diligence. At the same time, they present a clear opportunity for improvement. By strengthening leadership, establishing consistent administrative processes, modernizing SOGs, and implementing a reliable training and documentation framework, Lions Bay can build a safer and more resilient fire service that aligns with its declared level of service.

The service delivery scenarios provided in this report give Council a structured foundation for determining the long-term direction of fire and rescue services in the Village. Each option carries different implications for cost, autonomy, governance, and sustainability. The decisions made by Council in the coming months will shape how emergency services are delivered for many years and will influence the experience of both responders and the community they serve.



Emergency Management Group

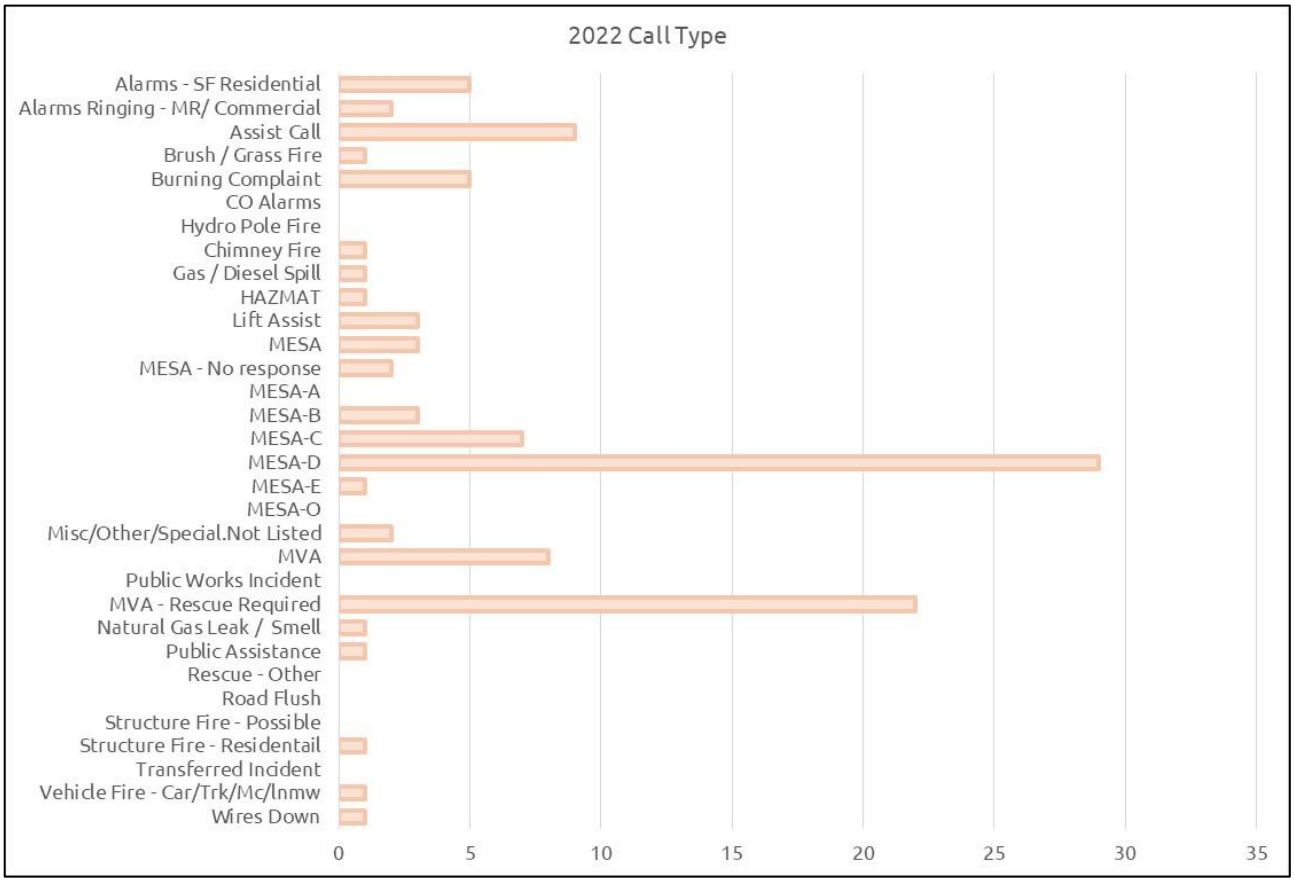
Appendices

Appendix 'A' – LBFR 2022 – 2024 Call Volume Stats

Appendix 'B' – Interior Operations JPRs / Competencies

APPENDIX 'A': LBFR 2022-2024 CALL VOLUME STATS

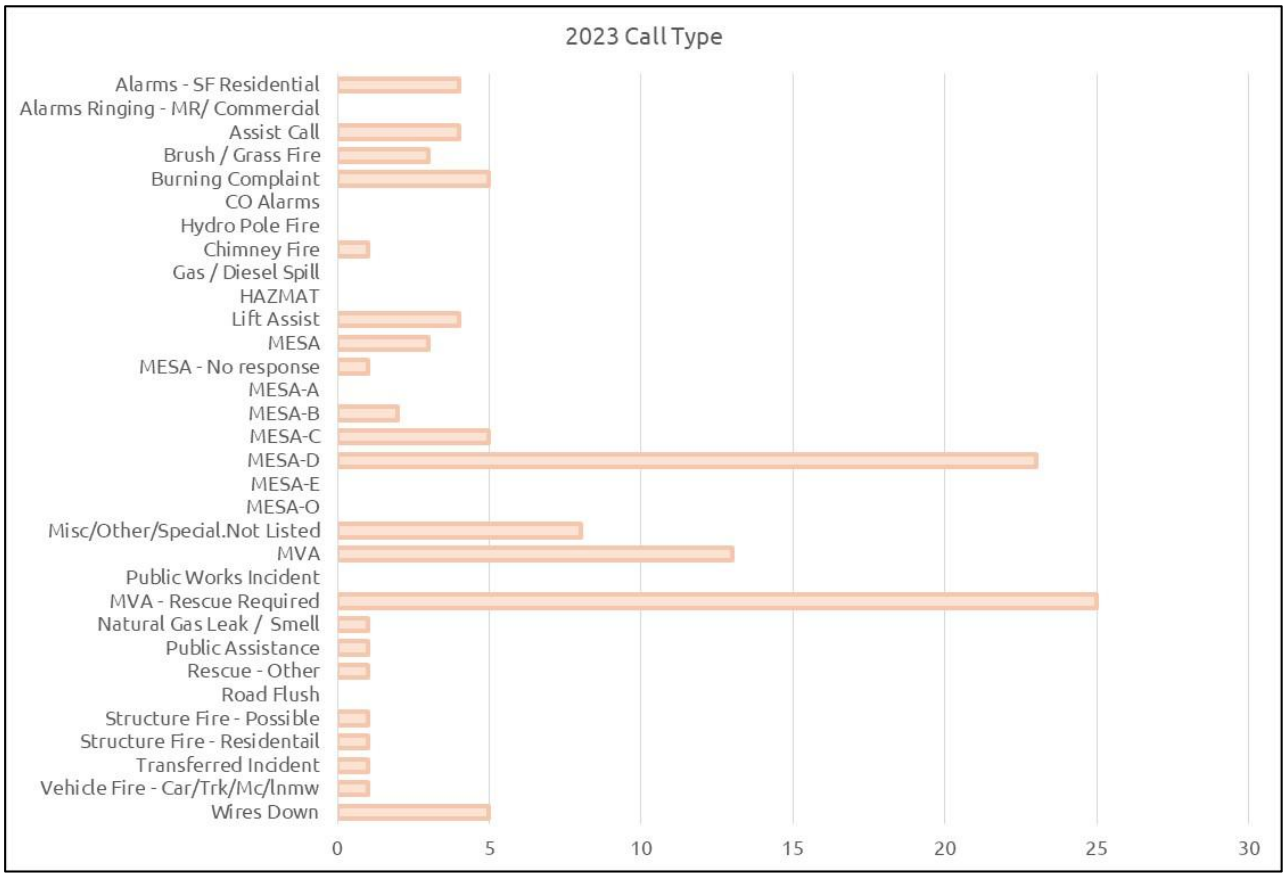
2022 Calls



Based on the 2022 call data, the top five call types are:

1. MESA D – 29 calls
2. MVA – Rescue Required – 22 calls
3. Assist Call – 9 calls
4. MVA – 8 calls
5. MESA C – 7 calls

2023 Calls

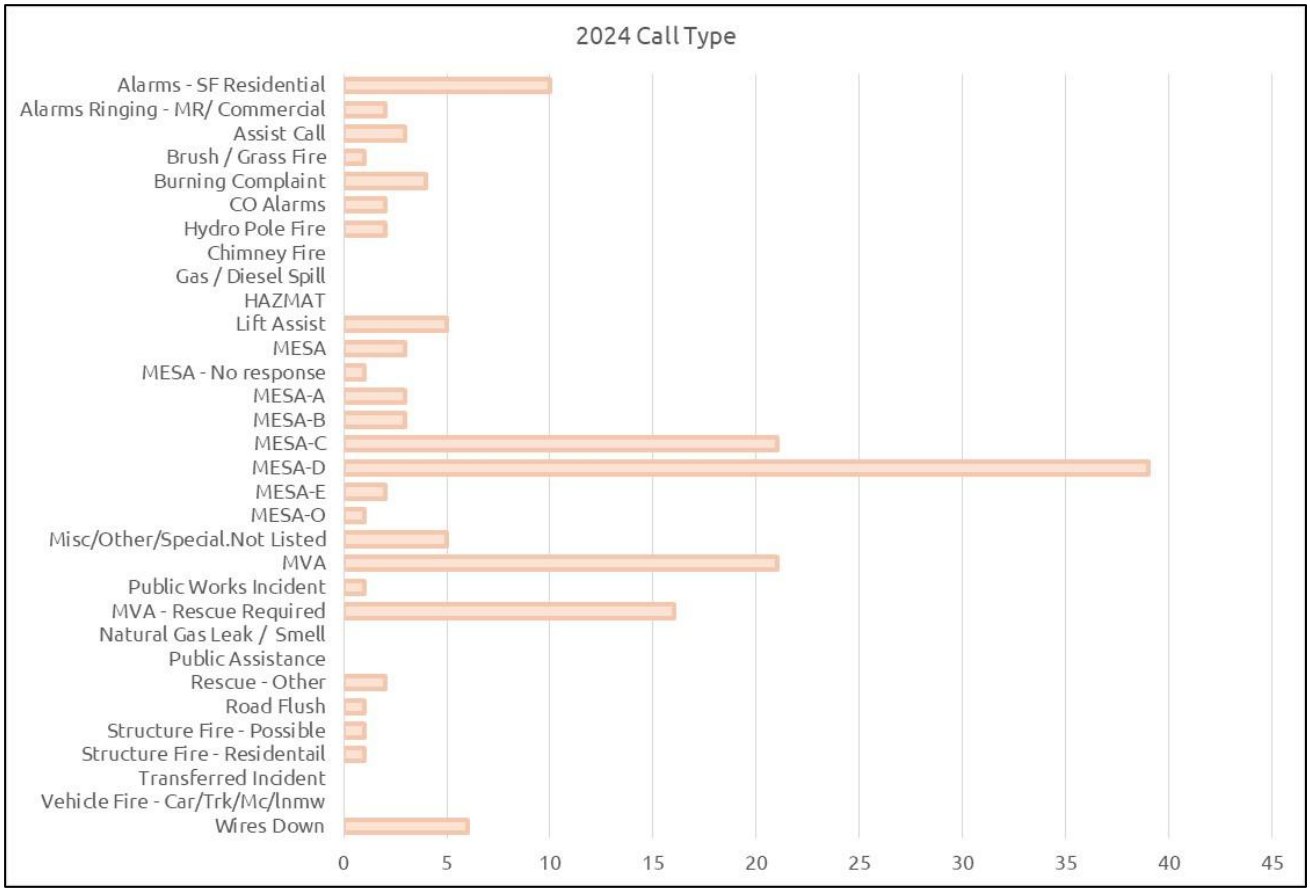


Based on the 2023 call data, the top five call types are:

1. MVA – Rescue Required – 25 calls
2. MESA D – 23 calls
3. MVA – 13 calls
4. Miscellaneous or Other Not Listed – 8 calls
5. Burning Complaint – 5 calls

(Brush or Grass Fire and MESA C also have 5 calls each, tying for fifth place.)

2024 Calls



Based on the 2024 call data in your chart, the top five call types are:

1. MESA D – 39 calls
2. MESA C – 21 calls
3. MVA – 21 calls
4. MVA – Rescue Required – 16 calls
5. Alarms – Single Family Residential – 10 calls

APPENDIX 'B': INTERIOR OPERATIONS JPRS/COMPETENCIES

Interior Operations Firefighter – JPRs/Competencies
Scope: Capable of operating inside of a structure at the task level, the Interior Operations Firefighter applies the following competencies to perform fire ground tasks as assigned by the Team Leader (Interior) or Incident Commander (Interior) in accordance with the Incident Action Plan (IAP).
Requirements: *Must meet all Exterior Operations Firefighter competencies; plus,* *the following NFPA Job Performance Requirements and related competencies below:*
Communications: NFPA 1001 (2019 edition) – 5.2.2
Exit a Hazardous Area: NFPA 1001 (2019 edition) – 4.3.5
Conduct a Search and Rescue: NFPA 1001 (2019 edition) – 4.3.9
Loss Control – Overhaul and Salvage: NFPA 1001 (2019 edition) – 4.3: 4.3.13, 4.3.14
Pre-Incident Planning: NFPA 1001 (2019 edition) – 5.5.3 NFPA 1620 (2020 edition) Standard for Pre-Incident Planning – familiarity requirement
Interior Fire Attack/Extinguishment: (accomplished with or without involvement of "live fire") NFPA 1001 (2019 edition) – 4.3: 4.3.9, 4.3.10, 4.3.13 5.3: 5.3.1, 5.3.3 (control of flammable gas cylinder)
Rapid Intervention Team Member – RIT: NFPA 1407 (2015 edition) – Chapters 4,5,7,8 WorkSafeBC OHS Regulation Part 31: 31.23

Apparatus Driver/Operator (Interior) – JPRs/Competencies

Scope: The Apparatus Driver/Operator (Interior) drives a variety of small utility vehicles and large fire trucks to and from incident scenes and in non-emergency situations. They may also operate complex vehicles and features such as fire pumps, aerial devices, water tenders, etc. upon meeting additional competencies.

Requirements:
Preference for all Interior Operations Firefighter competencies; plus,
must meet all the following NFPA Job Performance Requirements and competencies to drive any fire department vehicle:

WorkSafeBC OHS Regulation Part 31: 31.5 (1) (e) and 31.27 to 31.32.

Driver's License requirements in the Fire Service based on the size of apparatus

Class 5 Vehicle licence (single axle)
Class 3 Commercial vehicle license
Air brake endorsement

Specialty Requirements:
Must meet all Apparatus Driver/Operator (Interior) competencies above; plus,
the NFPA Job Performance Requirements for each additional function that they perform below:

Additional competencies for Drivers/Operators:
Emergency Vehicle Driver – EVD: *(for drivers of large fire apparatus)*
NFPA 1002 (2017 edition) – 4.2
4.3

Emergency Vehicle Operator – EVO:
For apparatus equipped with a fire pump: *(only for drivers operating a fire pump)*
NFPA 1002 (2017 edition) – 4.2
5.1
5.2
For apparatus equipped with an aerial device: *(only for drivers operating aerial devices)*
NFPA 1002 (2017 edition) – 4.2
6.1
6.2
For mobile water supply apparatus: *(only for drivers operating water tenders)*
NFPA 1002 (2017 edition) – 4.2
10.1
10.2

Team Leader (Interior) – JPRs/Competencies
Scope: Capable of operating inside of a structure at the task level, the Team Leader (Interior) applies the following competencies within the scope of supervising Interior Operations Firefighters in the performance of specific tasks as assigned by the Incident Commander (Interior) in accordance with the Incident Action Plan (IAP), including task size-up, action planning, communications, and personnel accountability.
Requirements: *Must meet all Interior Operations Firefighter competencies; plus,* *completion of the following:*
Incident Management: NFPA 1001 (2019 edition) – 5.1: 5.1.1, 5.1.2 5.2: 5.2.1
Personnel Management and Supervision: NFPA 1021 (2020 edition) – 4.1: 4.1.1 4.2: 4.2.1, 4.2.2, 4.2.3
Tactical Size-up: NFPA 1021 (2020 edition) – 4.5: 4.5.2, 4.5.3
Risk Management: NFPA 1500 (2018 edition) – 4.2 8.4 8.5
Tactical Action Planning: NFPA 1001 (2019 edition) – 5.3.2 NFPA 1021 (2020 edition) – 4.6: 4.6.1 & 4.6.2
Implement the Tactical Action Plan: NFPA 1001 (2019 edition) – 5.3.4 NFPA 1500 (2018 edition) – 8.6: 8.6.4, 8.6.5, 8.6.6
Communications: NFPA 1001 (2019 edition) – 5.3.2
Rapid Intervention Team (RIT) NFPA 1500 (2018 edition) – 8.8
Personnel Accountability: NFPA 1500 (2018 edition) – 8.5: 8.5.2, 8.5.3, 8.5.4, 8.5.5, 8.5.6, 8.5.7, 8.5.8, 8.5.9, 8.5.10, 8.5.11 WorkSafeBC OHS Regulations Part 31.5(1)(a)

Incident Safety Officer NFPA 1521 (2020 edition) – 5.2
ICS 200

Incident Safety Officer (ISO) (Interior Operations) – JPRs/Competencies
Scope: The Incident Safety Officer (Interior Operations), when activated by the Incident Commander (Interior), monitors the safety of all emergency responders operating at an emergency incident including altering or suspending unsafe activities. This function also supports the Incident Commander (Interior) in ongoing incident size-up and the development of the Incident Action Plan (IAP).
Requirements: *Must meet all Team Leader (Interior) competencies; plus,* *completion of the following:*
NFPA 1521 (2020 edition) – 5.3: 5.3.1, 5.3.2, 5.3.3, 5.3.4

Incident Commander (Interior) – JPRs/Competencies
Scope: The Incident Commander (Interior) manages the overall incident by applying the following competencies within the scope of tactical size-up; tactical action planning; and developing an Incident Action Plan (IAP). This function establishes Incident Command; manages communications; ensures scene safety; and supervises and accounts for all emergency responders operating at the incident in the implementation of the IAP.
Requirements: *Must meet all Team Leader (Interior) and Incident Safety Officer (Interior) competencies; plus, completion of the following:*
Risk Management: NFPA 1500 (2018 edition) – 8.6.8.1 8.7: 8.7.1, 8.7.4.4.1, 8.7.4.4.4, 8.7.5 8.8: 8.8.1, 8.8.4.1, 8.8.7
Initiate the Incident Command System – ICS: NFPA 1500 (2018 edition) – 8.1: 8.1.1, 8.1.2, 8.1.3, 8.1.5, 8.1.6, 8.1.7, 8.1.8
Develop an Incident Action Plan – IAP: NFPA 1021 (2020 edition) – 4.6: 4.6.1
Implementation of the Tactical Action Plan: NFPA 1021 (2020 edition) – 4.6: 4.6.2 NFPA 1500 (2018 edition) – 8.6: 8.6.1.3, 8.6.13, 8.6.13.1, 8.6.13.2
Communications: NFPA 1500 (2018 edition) – 8.6.15.6 8.7: 8.7.2, 8.7.3
Personnel Accountability: WorkSafeBC OHS Regulations Part 31.5(1)(a)