

YOUR CITY, YOUR FAMILY, OUR DUTY.







# Table of Contents

Introduction	2
1.0 Executive Summary	5
2.0 Background	6
3.0 City of Spruce Grove Fire Services Today	8
4.0 Identified Organizational Success	11
5.0 Fire Service Staffing Requirements	12
5.2 Fire Prevention	15
5.3 Assistant Deputy Chief Officer	17
5.4 Prevention Administrative Assistant	19
6.0 Dispatch	21
7.0 Future Fire Stations Infrastructure	23
8.0 Service Delivery/Initiatives	25
8.1 Fire Services Mutual Aid	25
8.2 Regional Recruitment	25
8.3 Alberta Health Services	26
8.4 Medical First Response	27
8.5 Information Systems	27
8.6 Fire Service Communications	28
8.7 Safety Codes Inspectors	29
8.8 Diversity, Inclusion, Equity, and Belonging	30
8.9 Human Resources Business Partner	30
9.0 Fire Service Training Initiative	31
10.0 Environmental Initiatives	33
11.0 Findings Summary	34
12.0 Annendices	36







## To be the safest community in Canada

#### Mission

To provide quality public safety to the residents and visitors of Spruce Grove

## **Values**

Integrity – Maintain the community's trust: Citizens first
Professional – To those we serve and each other
Approachability – Our door is always open

Communication – Actively listening and sharing: Who we are and what we do

Accountability – Acknowledgement and assumption of responsibility for actions

Respectful – To those we serve and each other

Excellence in Service – In everything we do

Your City, Your Family, Our Duty







## Introduction

In 2022, a committee was formed to create the 2023-2033 Spruce Grove Fire Services (SGFS) Master Plan (MP). The committee was comprised of the Fire Chief, Deputy Fire Chief, two Assistant Deputy Fire Chiefs, and three Captains, with ultimate oversight by the Fire Chief.

The purpose of any Master Plan is to provide consistency in decision making by giving decision makers a steady point of reference which enable informed decision making. The decision to develop this Master Plan with an internal committee comprised of both in scope and out of scope personnel was purposeful and included some of the following rationale:

- Instills a shared sense of responsibility
- Increased operational efficiency and common accountability by leadership
- Provides increased staff satisfaction and buy in
- Manages expectations specific to City needs vs. simply a "copy and paste" approach utilized by most external consultants
- Review of several other Master Plan's showed a significant number of Findings for things SGFS was already doing and considered to be a leader in

Throughout the development of the MP it was continually reinforced through research and comparisons that SGFS was well positioned to deliver an exceptional service to the community that more requires maintaining a steady response to growth versus wholesale changes or significant resource requirements. Any master plan should be a living document that is adaptable and flexible to any changes in industry trends, population growth, or service delivery expectations or opportunities.

#### **Committee Members**

Fire Chief Chad Priebe (Chair)

**Deputy Fire Chief Craig Heatherington** 

**Assistant Deputy Fire Chief Cory Klebanosky** 

**Assistant Deputy Fire Chief Robert Knull** 

**Captain Rob Good (Co-Chair)** 

**Captain Gary Lucas** 

**Captain James Dressler** 

The Committee would like to thank *Retired Fire Chief Kosterman* for this opportunity and guidance with this project.





# 1.0 Executive Summary

The MP reflects the current state of Spruce Grove Fire Services as well as provides an insight into future planning through operational, administrative, and infrastructure analysis. The committee recommends evaluating this plan regularly throughout the next ten years to align with changes in community needs and growth.

The MP identifies the following:

- 1. Staffing requirements
- 2. Organizational structure
- 3. Training initiatives
- 4. Fire station information
- 5. Response measures
- 6. Service delivery
- 7. Environmental initiatives

SGFS's primary role for the City of Spruce Grove is to provide:

- 1. Life safety
- 2. Fire suppression
- 3. Fire prevention
- 4. Education

#### SGFS is committed to:

- Public safety
- 2. Limiting environmental impacts
- 3. Limiting economic impacts

The findings contained within the report reflect the committee's efforts to embrace alignment with City and department values, and commitment to customer service, while remaining fiscally responsible in a proactive integrated fire protection model.

The committee further recognizes that any findings are subject to approval from senior administration and City Council through the Corporate Planning process.





## 2.0 Background

The Committee identified and researched comparable municipalities across Canada for the purposes of preparing this report. These municipalities were evaluated based on the following factors:

- Population
- Population density
- Fire risk
- Master plans
- Staffing levels
- Apparatus
- Organizational structure
- Station locations
- Prevention
- Education
- Training
- Service delivery
- Administrative functions



As mentioned, a review of MPs from comparable departments found that SGFS is well positioned for the future with many of the Findings in those MPs already implemented. By having an internal process of review and creation of this MP, the committee was able to view the department and the entire City as one organization with a desired outcome to further strengthen partnerships and provide seamless continued customer service efficiently.

The committee was able to identify the efficiencies within the current organizational structure more accurately by having firsthand knowledge of operations. This contrasts with traditional third-party MPs where firsthand knowledge may be misinterpreted or ignored all together.

This demonstrated the importance of maintaining our high level of services versus implementing wholesale changes. At the same time, it will remain crucial that this MP is reviewed on a regular basis as recommend ensuring SGFS continues to be an industry leader.





## **Identifying Comparable Municipalities**

A review of the 2022 federal census revealed that Spruce Grove's population grew 10.4% between 2016 and 2021. This translates to a real growth number of 3,537, for a total population of 37,645<sup>1</sup>. Spruce Grove is the 12<sup>th</sup> largest community in Alberta and the 133<sup>rd</sup> largest municipality in Canada. Spruce Grove is a rapidly growing community; in the top 3% of Canadian municipalities based on census data. As the population increased, so too did the city's residential dwelling count, which showed a 12.4% increase for a total of 14,752 dwelling units. The population density is 1003.30/km2. A review of the last two censuses shows Spruce Grove's population has grown by 43.8% over the last ten years. Increases in population, density, and residential dwellings translate directly to what is considered fire risk for communities.

With a vast number of comparable municipalities and significant population differences, the committee worked to narrow the focus of its research to identify appropriate comparators. Municipalities with a population less than Spruce Grove in 2021, or projected to remain lower over the course of the MP, were not included in this report. The rationale for this was to consider a forward-looking approach rather than a retroactive one. Municipal density was also used, as density is a large indicator of fire risk. The committee broke down the federal census data to include communities that were larger in population than Spruce Grove and comparable in density +500/-200, to identify them for evaluation. Density within the city is expected to increase over the next 10 years, so evaluation of density which correlates directly to fire risk plays a major role in identifying comparable departments.

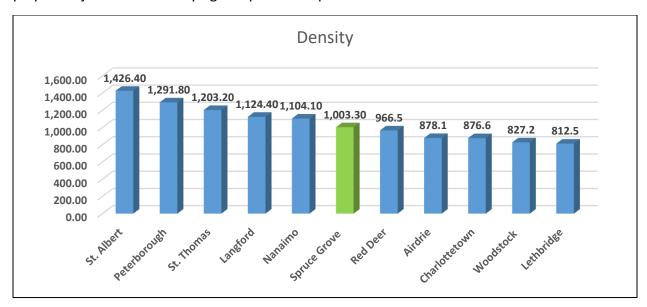


Figure 1 Comparable Municipalities +500 Density-200 Density

<sup>&</sup>lt;sup>1</sup> 2021 2021 Federal Census Data released February 9 2022 <a href="https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/dt-td/Index-eng.cfm?LANG=E&SUB=98P1016&SR=0&RPP=25&SORT=date">https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/dt-td/Index-eng.cfm?LANG=E&SUB=98P1016&SR=0&RPP=25&SORT=date</a>





## 3.0 City of Spruce Grove Fire Services Today

The City of Spruce Grove is located 11 km west of Edmonton within Parkland County. It shares a

border to the west with the Town of Stony Plain. It is important to note that 97% of Canadian municipalities are smaller than Spruce Grove, reaffirming our status as a mid-sized City. According to projections completed in 2019, the population will increase by approximately 1000 people per year for the foreseeable future, with an estimated population of between 46,500 and 53,604<sup>2</sup> by 2033. In 2020, the City annexed an additional 5.18km<sup>2</sup> of land, increasing the Fire and Prevention Services response and coverage areas. The additional land will be used in the future to support the City of Spruce Grove with increased industrial, residential, and commercial



capacity. Based on density calculation, Spruce Grove remains on the low end of metropolitan status in Canada.

SGFS is a branch within Community and Protective Services comprised of a Fire Chief (FC), Deputy Chief (DC), and three Assistant Deputy Chiefs (ADC) who are responsible for Training,

Year	Low ( (2015-		Medium Case (2015-2044)			
	Рор.	Rate	Рор.	Rate		
2023	38829	2.2	41528	3.3		
2024	39652	2.1	42747	2.9		
2025	40469	2	43971	2.8		
2026	41267	1.9	45184	2.7		
2027	42051	1.9	46394	2.6		
2028	42818	1.8	47596	2.5		
2029	43577	1.7	48799	2.5		
2030	44321	1.7	49998	2.4		
2031	45059	1.6	51201	2.4		
2032	45782	1.6	52401	2.3		
2033	46500	1.5	53604	2.2		

Emergency Medical Services (EMS), and Enforcement Services Inspector respectively. SGFS has 2.5 FTE Administrative Assistants allocated to fire services. The unionized workforce of SGFS consists of 57.0 FTE positions broken down into four Captains, eight Lieutenants, 44 Fire Fighters (FF), and one Fire Prevention Officer (FPO).

Figure 2 COSG population forecasts.

<sup>&</sup>lt;sup>2</sup> Data collected from City of Spruce Grove internal finance review document 20200505 2020 Population Projections





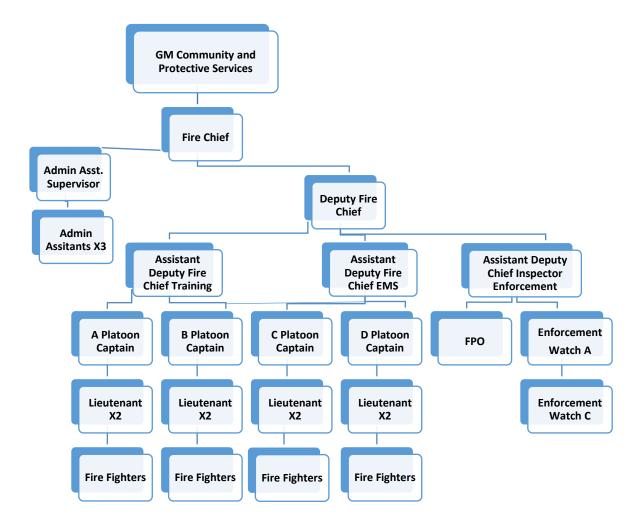


Figure 3 2022 Organizational Chart

In 2022, SGFS increased its response capabilities with the addition of one staffed fire apparatus on call 24 hours per day to meet the growing needs of the community. This addition doubled the previous minimum standard of one staffed fire apparatus. Year over year incident responses have increased within Spruce Grove exceeding 3,200 in 2021. Total responses by SGFS in 2021 exceeded 7,400 with projections in 2022 of exceeding 8,000. The addition of a second staffed apparatus for those responses within the city provides enhanced community safety through either medical or fire response customer service delivery. SGFS has mutual aid agreements with the Town of Stony Plain, Parkland County, the City of St. Albert, and the City of Edmonton. The department contracts two Advanced Life Support (ALS) ambulances to Alberta Health Services (AHS) 24 hours per day, 365 days per year.





SGFS is housed in the Protective Services building, which consists of one centralized fire station in which units strive to meet Key Performance Indicators (KPI) by responding to EMS emergencies within 300 seconds 90% of the time, and fire emergencies within 320 seconds 90% of the time. These response standards are determined by Council as indicated by the City of Spruce Grove Corporate Policy<sup>3</sup> and backed by the National Fire Protection Agency (NFPA) 1710 Standard for Organization and Deployment of Fire Suppression Operations, EMS, and Special Operations in Career Fire Departments<sup>4</sup> Findings.



Spruce Grove Fire Services partnered with Strathcona County and the City of St. Albert in a fire fighter recruitment program aimed at attracting the highest quality candidates for all three departments. When the evaluation process is complete, the highestscoring candidates could have the opportunity to select a job offer from any of the three services. This partnership has proven successful in the collaboration between departments, standardized training of recruited firefighters and financial benefits of cost sharing. Further training and networking opportunities have also been established and identified between the communities thereby increasing collaboration. This agreement recently ended; however, the initiative continues through regional training opportunities.

<sup>&</sup>lt;sup>3</sup> City of Spruce Grove Corporate Policy CP-1005-17

<sup>&</sup>lt;sup>4</sup> https://www.nfpa.org/-/media/Files/Code-or-topic-fact-sheets/NFPA 1710 Fact Sheet.ashx,





## 4.0 Identified Organizational Success

After reviewing comparable municipalities, their organizational structures, and master plans, it was determined the City of Spruce Grove and Spruce Grove Fire Services has built a delivery model focused on operational and cost efficiencies, with a strong organizational structure and culture. SGFS has a long-standing history of collaboration with City business partners and external regional partners with proven success of high service delivery. SGFS has consistently been chosen to participate in pilot programs due to its reputation for excellence and receiving exceptional ratings for external reviews such as with Accreditation Canada.

Emphasis is always placed on finding new efficiencies by considering service to the community and fiscal stewardship over allocated resources. The following outlines many examples of this that was identified through the work of the Committee:

- Providing an integrated Fire-EMS Response model for the last 18 years
- Guaranteed Advanced Life Support (ALS) Medical First Response (MFR) to citizens of Spruce Grove 24 hrs/day
- 14-year contractor partnership with Alberta Health Services (AHS)
- Accredited Integrated Fire EMS Delivery Model with Exemplary Status
- AHS ALS MFR trial partnership
- AHS ALS Critical Care Transport trial partnership
- Hospital study partnerships of Vital Heart, CTAS scoring
- Standard hiring of Advanced Care Paramedics (ACP)
- Providing internal ACP and 1001 fire fighter programming
- Consolidated organizational structure with Enforcement Services
- Fire Mechanics for in-house Protective Services vehicle repair
- Cost effective Chief Officer on-call system
- Hiring practices incorporating diversity, inclusion, equality and belonging principals
- Apparatus, infrastructure, equipment life cycle programming
- Fire Prevention Quality Management Plan (QMP)
- Economic considerations in decision making
- University of Alberta Residency program for medical direction and staff training
- Improved internal and external communications strategy with a Corporate Communications Business partner.
- Digital software and records management
- Zoll Cardiac Monitoring distributor
- Administrative Assistant staff cross-trained for Fire Services and Enforcement Services





# 5.0 Fire Service Staffing Requirements

## 5.1 Operational Suppression Staff

While researching comparable departments, the committee recognized several factors influencing fire suppression staffing levels. There are several examples the Committee discovered that focus on population and density as this helps inform fire risk. In other cases, geographical and department composition factored into municipalities' decision making for staffing levels. The Committee did discover a consistent theme throughout their analysis. Regardless of population size, number of stations, or organizational structure, departments strive to meet staffing levels of 1.2 FF/1000. This is well illustrated in Red Deer and Lethbridge communities as examples. The committee deemed the two communities "well established" and have experienced relative plateaus in population and density; however, suppression staffing levels have remained relatively stable. Comparably, the municipalities of Airdrie and Langford have seen excessive growth during the same five-year time frame and are left to "catch up" in fire service staffing to meet the demands of fire risk and population growth.

It is acknowledged by comparable departments that every community needs to be capable of staffing to the level required for their estimated fire risk while maintaining fiscal responsibility. It is common in the industry for municipalities to assess their risk and determine suppression staffing balanced between an acceptable risk and fiscal responsibility. SGFS has achieved, and now attempts to maintain what is deemed a reasonable and practical number of firefighting resources based on the fire risk identified within the community, all while delivering the service in a fiscally responsible way to taxpayers.

The City of Spruce Grove is considered high density, placing it at the low end of what is considered "metropolitan" at a national level. This places the City into the highest risk category as identified by the NFPA<sup>5</sup>. In 2021, the City approved the hiring of 4.0 FTE firefighters which achieved the Findings of the 2014-2019 Fire Service Staffing MP, which was delayed by two years due to the COVID-19 Pandemic. Once completed, this staffing plan brought the operational staff ratio to 1.2 FF/1000 population based on 2019 city census data. The additional firefighters allowed the department to increase response capability from one fire apparatus to two, 24 hours a day, and increased minimum staffing on duty from eight to ten Fire Fighters. Current (2021) SGFS firefighters to population numbers are calculated at 1.17 FF/1000.

<sup>&</sup>lt;sup>5</sup> National Fire Protection Association standards and the Centre for Public Safety Excellence – Commission on Fire Accreditation International.





The national comparators identified in this report were analyzed by giving each municipality equal weight in the average based on population totals and firefighter totals<sup>6</sup>. These comparators have an average of 1.10 FF/1000 population, however, identified comparators within the Province of Alberta averaged 1.21 FF/1000 population<sup>7</sup>. A survey of Canadian fire departments done by the Canadian NFPA 2014-2016 Career Fire Fighter<sup>8</sup> staffing report, concluded average staffing ratios nationally in communities of 50,000-99,999 persons of 1.15 FF/1000 nationally. An updated survey from this source was not available at the time of this MP. The committee recognizes through research that continuous monitoring of the FF/1000 ratio should take place throughout the course of this master plan to ensure the needs of the community and workforce are met.

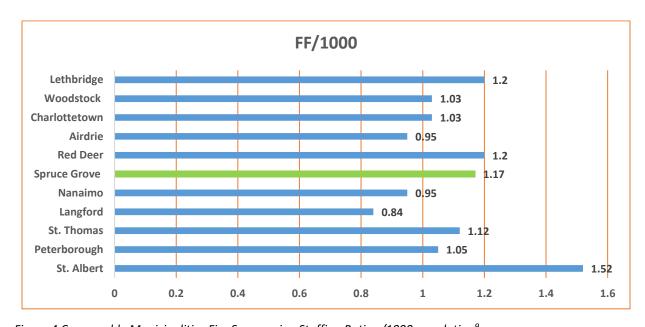


Figure 4 Comparable Municipalities Fire Suppression Staffing Ratios /1000 population<sup>9</sup>

<sup>&</sup>lt;sup>6</sup> Ratio Formula total population: 1000 = X: total # of suppression FF's

<sup>&</sup>lt;sup>7</sup> Alberta integrated Fire EMS model municipalities average is calculated at 1.27 FF/1000 for suppression FF's

<sup>8</sup> NFPA Canadian Fire Department Profile 2014-2016 February 2018 Table 5 pg.8.

<sup>&</sup>lt;sup>9</sup> FD survey numbers from the 2022 collection. Ratio based on 2021 Federal Census Data





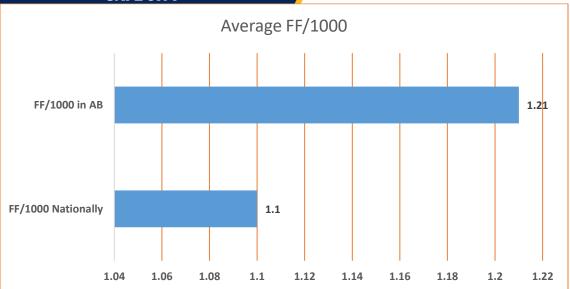


Figure 5 Determined Comparable Municipalities Fire Suppression Staffing Ratios /1000 population Average<sup>10</sup>

At the time of this report, the Collective Agreement<sup>11</sup> permits only hiring full-time staff. Research on national comparators indicated that some departments supplement staffing with casual or paid-on-call personnel. This is an option the City may want to explore; however, it would require negotiations and changes through the collective bargaining process with the Local union association. Of the identified Alberta comparators<sup>12</sup>, all hire only full-time for suppression staff, and all but one provide an integrated Fire and EMS service model. As fire-related risks increase, so too do the potential changes in staffing ratios and requirements of full-time personnel. Significant industrial or high-density residential building influxes may call for a re-evaluation of the staffing ratios within the community.

Finding #1: For the City to actively engage in monitoring effective staffing measures including risk, changes in legislation, population growth and corporate planning processes with the intent to continue to target a firefighter staffing ratio of 1.2FF/1000.

<sup>&</sup>lt;sup>10</sup> FD survey numbers from 2022 collection Ratio based on 2021 Federal Census Data

<sup>&</sup>lt;sup>11</sup> International Association of Fire Fighters Local 3021 Collective Agreement 2020-2022 Article 7.01

<sup>&</sup>lt;sup>12</sup> Lethbridge provisions for Casual Employees, Public Safety Communications Centre Letter of Agreement 5





#### 5.2 Fire Prevention

SGFS currently has 1.0 full-time Fire Prevention Officer (FPO). Research of comparable departments notes SGFS is behind in this area for a proactive approach to fire prevention, leaving the City with a reactionary and risk enhanced approach to fire prevention. Workloads after COVID-19 have indicated an increase in demand above pre-pandemic levels in this area, largely due to development. SGFS has a recently updated the Fire Quality Management Plan (QMP) that now includes Part 4 Flammable Combustible Liquid Tank inspection, permitting, and registry<sup>13</sup>. With legislative changes and the additional requirements for Safe City, fire investigations, public education, permitting, and plan reviews<sup>14</sup>, there is an identified necessity for 2.0 full-time (FPO) position as soon as practical.

Due to the work demands of the ADC Inspector of Enforcement and the duties of Enforcement Services, the support for the FPO has been transferred to Operations Chiefs (Deputy and ADC Training). While outside the scope of this report, it may be beneficial to examine this further. Throughout COVID-19 the FPO position was supplemented with contractor services which have a higher overall cost. Due to the higher costs, SGFS has implemented a cost-effective plan for the secondment of operational staff into fire prevention to aid in the increased demands in the aforementioned areas for the short term.

It is important to note that Fire Prevention is responsible for ensuring fire code compliance for the duration of a building's lifespan. The QMP supports inspections to increase the fire safety of residents and firefighters during an emergency response in high-risk occupancy and properties. At the time of this MP, there are 1291 properties requiring inspection and 176 known tanks within the city. Occupational Health and Safety<sup>15</sup> requirements of a fire service provide insight into every occupancy being a potential work site for SGFS. Highlife hazard occupancies and certain businesses within the city require at least one inspection per calendar year, which could result in up to three follow-up inspections if deficiencies are found. Post-pandemic inspections have shown that increasing the frequency of fire inspections would lead to safer properties and improved compliance with fire code, resulting in fewer violations and life safety hazards to residents and firefighters. During the COVID-19 Pandemic, inspections were conducted on an as-needed basis, leading to a large gap in periodic compliance inspections. This has resulted in a much higher number of occupancies with numerous life safety deficiencies, which has further increased workload requirements for follow-ups to ensure those deficiencies have been corrected.

<sup>&</sup>lt;sup>13</sup> City of Spruce Grove Fire Services Bylaw C-1126-20

<sup>&</sup>lt;sup>14</sup> City of Spruce Grove Fire Services Bylaw C-904-15

<sup>&</sup>lt;sup>15</sup> Occupational Health and Safety Code Ab Regulations 191/2021 Part 2, 7 Emergency Preparedness and Response.





Future hiring in this area should be based on identified fire risk evaluations and municipal development concurrent with the QMP to improve customer service. Once there are more than three FPO positions within the Prevention branch, an internal organizational and operational structure should be evaluated, which may include a Fire Marshall or equivalent. The City of St Thomas presently has 2.0 FPO, one of which is a Chief Prevention Officer. As SGFS is the closest comparable in growth, future population, and density, the committee recognizes the current SGFS reporting structure as more efficient; however, more than two FPO's as seen in other comparable departments, may require a re-evaluation of that reporting structure.

When considering the implications of hiring FPO positions, there should be a recognition that costs are partially offset through permitting and fee services. Fire Prevention provides a proactive reduction in risk versus a reactionary cost-negative approach which could limit or hinder economic prosperity.

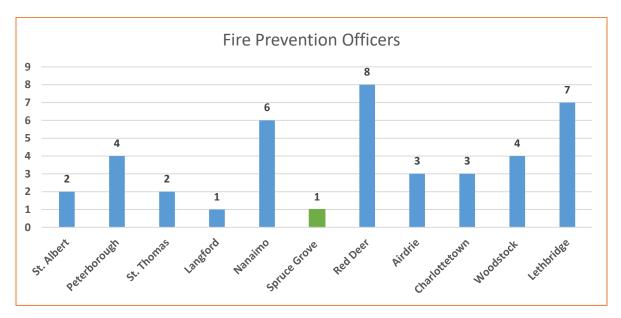


Figure 6 Number of Fire Prevention Officers

Finding #2: That the City add 1.0 FTE FPO in 2025 and additional hiring of FPOs proportional to municipal development and risk to match community needs.





#### 5.3 Assistant Deputy Chief Officer

As emergency services function as a 24-hour-a-day service, the hours of work, department size, and the need to match scheduled management functions with the required annual 8,760 total hours are necessary. Current call volumes and requests for service translate directly to an increase in managerial requirements of the Chief Officers consistent with a growing community. Fire Services requires an out-of-scope manager scheduled on duty 24 hours a day, seven days a week to ensure staff management, standardization of training, and operations across all shifts support a strong customer service approach. SGFS has supplemented these unmanaged hours in a cost-effective Chief Officer on Call format; however, this format has become unsustainable given the close to 6,000 hours per year of managerial presence that is required in addition to the full-time role that the three Operational Chief Officers are already responsible for. Although there is no set guide or ratio to determine the amount of Chief Officer staff to population ratios, organizational considerations should be based on job function, workloads, and an out-of-scope managerial presence that maintains continuity of service and emergency management functions.

Identified by the committee as the closest comparable municipality in population growth, St. Thomas' use of in-scope unionized Platoon Chiefs, on the surface, seems to provide the necessary supervisory presence over the 8,760 hours in a year; however, unionized Platoon Chiefs provide a limited managerial presence and functionality. Full-time suppression staff numbers and two or more fire stations can impact the span of control that may require this supervisory function. The MP recognizes this as a potential part of growth; however, the Committee suggests a more cost-efficient approach for SGFS.

The committee endorses hiring out-of-scope ADC positions instead of in-scope Platoon Chiefs as there is an inherent difference in the level of roles, responsibility, supervisory, and managerial duties provided. ADC officers provide enhanced managerial presence, investigation reporting, discipline, emergency management, continuity of training, and other managerial duties that unionized Platoon Chiefs cannot provide. ADC Officers could eventually complement platoon rotations operationally like Platoon Chiefs and provide scheduled Chief level Officer Management seven days a week, 24 hours per day, reducing the requirements for Chief Officers on call. The ADC Officers provide efficiency and cost saving over the approach traditionally used with in-scope unionized Platoon Chiefs.





Provincially, all departments have designated training chiefs, or in-scope training officers, responsible for all aspects of training firefighters. SGFS has one dedicated ADC responsible for training management, course resourcing, training forecasting, recruit and on-shift platoon training. As suppression staff size increases, so too do the requirements of the ADC of Training, which has left the Platoon officers responsible for implementing training at a platoon level. With increased staff training requirements for Fire, AHS, and EMS,



management at a platoon level can be difficult and create inconsistency in tracking and delivery compliance continuity. An additional ADC in this position will promote a scheduled seven days a week management presence and oversight in training staff members, promoting consistency and operational efficiencies not seen with traditional in-scope unionized platoon chiefs.

Finding #3: To hire a 1.0 FTE Operational Assistant Deputy Chief as soon as possible and evaluate the requirements of Chief Positions and organizational structure over the remainder of the MP, to ensure adequate levels of Chief level Officers are present to successfully manage the demands of a 24-hour a-day operation.





## 5.4 Prevention Administrative Assistant

Currently, there are 4.0 FTE Administrative Assistant's within Protective Services with 2.5 FTE positions allocated specifically to Fire Services. Task allocation is divided among Fire Operations, Emergency Medical Services reporting, training, billing, scheduling, payroll, Enforcement Services, and Fire Prevention. Protective Services Administrative staff can function in any of the roles, which provides a notable efficiency when comparing SGFS to other services. Fire Prevention Administrative needs are being minimally supported due to increased time allocation in other areas and increased data entry due to increased fire reporting, Enforcement ticketing, and Emergency Medical Services reporting.

As the City grows and the Prevention Branch develops as outlined in this MP, an additional Administrative Assistant should be considered to support an increase in the administrative requirements in this branch. This would translate to improved FPO effectiveness allowing them to conduct inspections and follow-ups without time consuming administrative components. Having an additional administrative assistant would also supplement other areas of Protective Services as is current practice. Consistent with other integrated Fire/EMS comparable departments, there are between 3-5 administrative assistants allocated to Fire Services for the same tasks currently being asked of by SGFS 2.5 staff positions. The addition of an administrative assistant would place the city in line with those comparable services, but also supplement current staff in other task allocation areas as required.

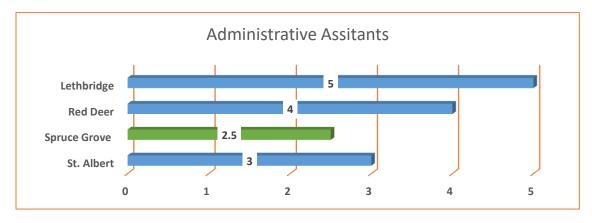


Figure 8 Number of Administrative Assistants Integrated Fire EMS Comparison

Finding #4: To add 1.0 FTE Administrative Assistant in 2026 to assist administrative functions of Protective Services.





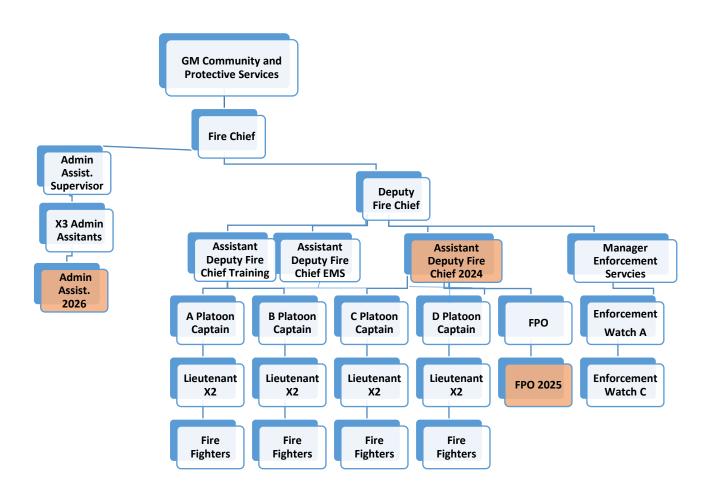


Figure 9 Updated Organizational Chart





## 6.0 Dispatch

Research of comparable services does confirm that most have their own internal dispatching systems. The few that do not were under contract through RFP processes or provincial systems to have dispatch services provided on a contract basis. These services are delivered by full-time dispatching departments that dispatch other career or full-time departments. Since January 2008, SGFS has had a contract with Parkland County (ECC). Parkland Dispatchers provide Public Safety Answering Point (PSAP) E911 call answer, call evaluation, and dispatch for fire-related emergency events in Spruce Grove. Alberta Health Services provides call evaluation and dispatching services for emergency medical events in Spruce Grove through provincial dispatch centers. The contract with ECC has yet to be revisited or updated since 2008. SGFS growth and operational changes have dictated an increase in dispatch service levels. As the only full-time department served by ECC, SGFS requirements for dispatching, software, data collection, and procedures differ from those of other contracting departments served by ECC. The city values the relationship with ECC; however, with the increased requirements of the service and evaluation of the contract with ECC, the Committee believes that SGFS dispatching requirements under this arrangement are not being met. The Committee endorses the RFP process as a transparent and open approach to establishing service levels and ensuring expectations are being met in the most cost-effective manner possible.

City	Dispatch
St. Albert	Internal <sup>16</sup>
Peterborough	Internal
St. Thomas	Internal
Langford	Provincial
Nanaimo	Provincial
Red Deer	Internal
Airdrie	RFP
Charlottetown	Internal
Woodstock	RFP
Lethbridge	Internal

Figure 10 Comparable Fire Department Dispatch Services

<sup>&</sup>lt;sup>16</sup> St. Albert recently had a third-party review of dispatch. Final outcomes from that review were not available at the time of this MP.





Finding #5: To follow best practices have The City of Spruce Grove Fire Services negotiate changes within the existing contract that best represents the SGFS service expectations and needs. If agreement cannot be made through those discussions develop a Request for Proposals for Fire Dispatch Services.

Dispatching services and 911 PSAP are two separate complex entities. PSAP is an overall expensive endeavour and should remain regional, while the dispatching processes should be placed internally. The Committee has identified several efficiencies of having an internal system. Internal dispatching benefits not only the Fire Service but benefits other areas of the City of Spruce Grove to increase the overall Customer Service Experience Strategy starting in the fall of 2022. Internal dispatch would provide increased proficiency and the first point of contact for residents supporting the City's dedication to enhanced customer service in a 24-hour capacity for any City Service requests, such as a 311/211 model. Dispatch would provide the first point of contact for customer service control, increasing speed, time of dispatches, the accuracy of addressing, and ratification of complaints or concerns, thus decreasing total time from call to arrival of request for any services.

Finally, important software, protocol, and customer service changes could be implemented as soon as approved. Further efficiency is found with the potential elimination of existing external work-alone contracts, Enforcement Services contracts, City security camera monitoring and permitting, ticketing, and general City inquiries. This would streamline citizens' first point of contact for all City services and improve the customer experience 24 hours a day. Supplemental workloads, when not dispatching, could include data entry, ticketing, billing, and general operations support as administrative staff for all City departments.

Finding #6: Collaborate with other City departments regarding the need to analyze and potentially explore an overall City-wide internal dispatch system within the time frame of this Master Plan.





# 7.0 Future Fire Stations Infrastructure

Completion of the Protective Services building in 2019 allowed for the continued growth of the department and will serve as the Fire Service headquarters for years to come. At the time of construction, a second station was not foreseen for the next 12-15 years based on geographical boundaries and population growth forecasts. Extensive research and modeling were done when considering the current fire station location and construction. The current building fulfills future needs as the primary location for Emergency Management, Logistics, Training, Administration, Enforcement Services, and Equipment Maintenance and Repair. Currently, the Protective Services building has capacity to house an additional 8.0 FTE suppression



firefighters, with the possibility of expanding that number utilizing existing infrastructure.

Further station considerations should be based on the following Key Performance Indicators (KPI):

- A residential population of 4,500<sup>17</sup> persons south of the railroad tracks; or
- Significant increases in commercial and industrial<sup>18</sup> growth; or
- Operational staffing levels in excess of 80<sup>19</sup> suppression staff.

Further consultation with the Planning and Development department, as well as operational considerations, would need to take place to identify more accurate timelines for population prediction and growth for the implementation of a satellite station and its location to best serve the community.

Finding #7: The City of Spruce Grove should identify land within the timeframe of the MP for a future Satellite Fire Station.

<sup>&</sup>lt;sup>17</sup>4500 persons would be a large enough population (small town) to require adequate Fire protection with respect to the geographical division of the City of Spruce Grove by the railroad tracks potentially delaying response standard KPI's

<sup>&</sup>lt;sup>18</sup> Growth in Industrial risk based on large companies, high risk industrial as identified in fire code and QMP.

<sup>&</sup>lt;sup>19</sup> Current Building infrastructure allows for up to 80 FTE Firefighters or 20 FF / platoon 4 platoon system





Through the identified comparable cities studied, other main drivers for additional fire station development are based on area response times, ensuring timely response to emergency events, which in turn mitigate risk. Currently, response times and standards are set through municipal bylaws and approved by Council based on NFPA standards and accepted practice for full-time fire departments. Based on the presented 2022 Fire Services annual report, SGFS is continuing to meet response indicators, however, statistical evaluation of the KPIs for those responses should be considered for additional fire station locations.

Finding #8: Continue to monitor and report on response standards, population densities, operational requirements, and development as part of the planning process for the consideration and implementation of new fire stations.

The MP committee also recognizes that opportunity exists with cost-sharing initiatives and development levies for new development that can significantly offset the cost of new capital projects like fire stations. Further research into community social projects that are jointly housed with fire services can also provide a collaborative approach to future fire station development and tackle other areas of social services requirements within the community. As Spruce Grove's community demographics change, there will be a continued need for support systems in the form of providing housing or community services. Other cities have already identified this as a path forward, and the opportunity exists for the City of Spruce Grove to be a leader in this area for mid-sized cities while improving services to the community.

Finding #9: Explore offsite levies or joint initiative housing or social projects to offset the cost of both projects while integrating the community needs into those capital projects.

This research acknowledges the response capability of the Stony Plain Fire Department to Spruce Grove as an additional resource. The Town of Stony Plain is a primary mutual aid partner and within the limits of the current modeling and response area. This MP endorses discussions and further exploration of a possible amalgamation of the Town of Stony Plain Fire Department and the City of Spruce Grove Fire Services. While there have been very high-level overtures to date, no successful negotiations or significant analysis in this area have occurred between both municipalities. Amalgamation could eliminate the need for the addition of a fire station south of the railroad tracks, however without a direct route between the communities south of the tracks, the need to add a fire station may remain to meet the response KPIs.





Several identified comparable communities were noted to have an amalgamation of fire services. They were not used in this report as one fire department serviced separate municipalities which greatly altered its density and population number parameters, as found in Aurora, Ontario as an example. If amalgamation is explored, it is recommended that further study and research take place with possible delegations from both the Town of Stony Plain and the City of Spruce Grove to travel to these communities to find the best path forward. This may aid in further decision-making for both Administrations and Councils.

The Committee recognizes any amalgamation discussion could potentially face challenges regionally, politically, and internally; however, research and best practice demonstrate that it is prudent planning to, at the very least, explore whether there are possible benefits and efficiencies that outweigh any perceived or real obstacles.

## 8.0 Service Delivery/Initiatives

#### 8.1 Fire Services Mutual Aid

Current Mutual Aid Agreements are in place with Parkland County and the Town of Stony Plain.
Further agreements with municipalities exist through the Capital Region Emergency Preparedness Partnerships (CREPP). Mutual Aid agreements help ensure mutual aid support within a reasonable time frame to prevent incidents from



overextending available resources and mitigating economic and environmental impacts. Comparable identified services all have mutual aid agreements in place with surrounding jurisdictions.

Finding #10: To continue to participate in, review, and regularly update all current Mutual Aid agreements with regional partners.

#### 8.2 Regional Recruitment

The Fire Service embarked on a regional approach to firefighter hiring and recruitment practices in 2015. Regional recruitment was supported by Strathcona County Emergency Services, the City of Spruce Grove Fire Services, and their respective Human Resource





departments ending early in 2023. Over the years the system has provided a multitude of applicants and led to a highly competitive staff recruitment process. This partnership provided efficiency in measurable cost savings to each municipality and the prospective candidates. A regional approach to training for successful candidates has also proven beneficial, with increases in base-level job skills and knowledge.

Finding #11: That the SGFS continues to advocate for and renew the regional recruiting process or explore partnerships outside the Capital Region to remain a highly competitive employer in the Capital Region.

#### 8.3 Alberta Health Services

Two SGFS ambulances are currently contracted to AHS. Staffing these units utilizes 20.0 FTE of the 56.0 FTE suppression staff. The ADC of EMS is responsible for EMS contract compliances, complaints, commendations, service accreditation, inventory control, and acting as a direct liaison with Alberta Health Services as part of the fulfillment of this contract.

Of researched comparable services, three were identified as providing an integrated Fire-EMS response model. All three were located within Alberta and are under contract with AHS. Visible efficiencies are found within the integrated models where all personnel are cross-trained and can respond to any emergency-related incident. This provides overall efficiencies to the Fire Services, EMS and, most importantly, the community's service level through the contract with AHS and an integrated Fire-EMS model.

As the City population grows above 40,000 and call volumes increase as reported year-overyear, exploration of expanding the contractual ambulances from two to three through contract



negotiations with AHS should be explored. This additional ambulance would increase integrated efficiencies. Additional staff hiring would need to occur to achieve the contractual change and maintain the 1.2 FF/1000 ratio. However, some of the cost offsets of additional staff could be augmented by the increased contract fees provided to the City to provide the service.

Finding #12: Subject to beneficial terms and conditions, the City should continue in the EMS Service Agreement with AHS and in 2023 actively engage in negotiating a long-term contract promoting partnerships within the agreement.





#### 8.4 Medical First Response



Throughout Alberta, there are different Medical First Response (MFR) models that provide different levels of medical care. Comparable services provide MFR to some degree based on medical training and the level of care approved by the municipality. SGFS requires all 56 FTE suppression members to be trained to the level of Advanced Care Paramedic. This guarantees the service provides the highest level of ALS care to residents of Spruce Grove 24 hours a day whether an ambulance or the MFR unit arrives for

service. SGFS strives to provide this service to the citizens of Spruce Grove within 300 seconds 90% of the time. Ensuring the service guarantees and continues to provide ALS MFR services is the best way to ensure community members receive the highest service level of Advanced Care when required in an emergency.

Finding #13: That the City continues to guarantee and provide Medical First Response at an Advanced Life Support level for the residents of Spruce Grove.

## 8.5 Information Systems

As growth within the City and technology continues to advance, so too does our dependence on IS support. As Fire Services is a 24-hour-a-day business, technology has become a key component of Fire Service operations including mapping, dispatch, data entry, pre-planning, prevention, Computer-Aided Dispatch (CAD) interfaces, and inspections through mobile platforms. A recent collaboration with IS concluded with a proposed business case for upgrading Fire Services incident and call management software aimed at increasing data collection and improved updating of information and equipment. This is to replace the current software that SGFS has outgrown. The addition of an IS business partner could also aid the Emergency Operations Centre (EOC) and Emergency Management groups. While current service levels of IS support have been timely and efficient, it has become apparent that the introduction of an IS Business Partner model to Protective services would aid in first-hand knowledge of operating software, upgrades, and functionality testing within all the protective services.





Finding #14: In collaboration with IS and senior leadership, the City explore an IS Business Partner model for Protective Services with accompanied resourcing considered in future Corporate Plans.

#### **8.6 Fire Service Communications**

As social media and platforms for receiving information become more prevalent, the committee recognizes that the increased ability to distribute vital information in a controlled manner has become necessary. Protective Services was recently approved for information sharing through social media platforms to do just that. Comparable fire departments currently use social media to promptly communicate information to the public. Collaboration with the existing Corporate Communications branch has created a Communications Business Partner within

Community and Protective Services to



ensure Fire Service content and reported messages are being received by the appropriate audiences and following the appropriate guidelines to improve the City's customer service.

Social media messages allow the City and the Fire Service the opportunity to provide real-time updates on situations to residents from City controlled platforms and also allow for proactive public relations messaging. Messages from Fire Services could aid residents in community events, public prevention, traffic incidents or delays, fire emergencies, and any local emergent updates from Emergency Management. This increased public communication will aid in improved overall customer service and information sharing, providing real-time up to date information and improving safety.

Finding #15: That the City continues and enhances the collaboration with the Corporate Communications Department Business Partner to build a strong Social Media presence within the organization thereby improving customer service and information access to the public.







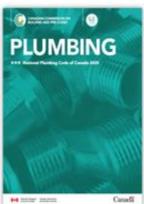
As more development occurs, the committee recognizes an increased partnership requirement between all Safety Codes Officers. Building Inspectors and Prevention Officers have worked collaboratively on new developments and code enforcement from both a building construction and fire code perspective. There are many examples where all code inspectors are under one umbrella, whereas others are separated, such as in the City. Regardless of structure, the Committee believes there are opportunities to enhance further collaboration, processes, and service delivery in these functional areas. This can speed up approval processes and permitting applications making the City a more attractive and efficient place to do business.

This collaborative, enhanced approach could benefit the City by increasing permitting and planning review capabilities and decreasing the time it takes to begin construction. This will improve the City's ability to compete economically with neighbouring communities by potentially drawing in development and economic drivers with improved efficiency and improved customer service. Providing cross-training to each area would also improve efficiency in the event code officers are away or if a vacancy occurs. This process could prove cost-effective in-service delivery.

Finding #16: That the City works across departments to improve collaboration, processes, and communication for all safety code functions of the city.













#### 8.8 Diversity, Inclusion, Equity, and Belonging

SGFS has been at the forefront of diverse and inclusive hiring practices for the last 18 years with innovative recruiting strategies. As a partner to the City, SGFS must continue and update its actions regarding Diversity, Inclusion, Equity, and Belonging (DIEB). SGFS seeks to continue to integrate a DIEB lens into its planning, decision-making, and service delivery models. The continued and updated focus in these areas needs to remain at the forefront of representing

and understanding the diverse community that Spruce Grove has and will continue to grow into.

Integration with other City departments should be a priority in this area so that SGFS is working in a consistent manner with the overall organization. Training staff to recognize and work within the DIEB framework and aiding in the development of programs and building further inclusivity into the work group will better serve citizens.



Finding #17: That SGFS continue to lead and support City led initiatives that enhance the Diversity, Inclusivity, Equity, and Belonging strategies and programs of the department, the City, and the community at large.

#### 8.9 Human Resources Business Partner

Community and Protective Services (CAPS) has a Human Resources (HR) Business partner. This HR partner is responsible for working in conjunction with all of CAPS to provide a liaison function between CAPS and HR. With current workforce staff housed within Protective Services and the inherent need within the City for HR personnel, there would be an identifiable benefit to having an HR Business partner involved full-time within Protective Services at some point during the timeframe of this MP.

Currently, while physically located within the Protective Services building, the HR business partner's time is split between all departments within CAPS. As the MP has indicated, call volume and overall growth in the city, has, and is expected to increase. A business partner





allocated solely to Protective Services could prove crucial to addressing the complex and developing needs of the service.

Return to Work

Stay at Work

Treatment and

This HR business partner could also be involved in disability management for the entire City. Other municipalities have hired specific disability managers for their organizations with great success as a direct point of contact to the third-party provider or WCB in cases of injury, illness or disability. In other organizations, these positions have proven cost-effective and beneficial by getting employees back to work, providing real-time updates on the recovery progress, and navigating both the worker's and cities' interests.

Finding #18: Within the timeframe of this Master Plan, and subject to the changes in overall department growth, complexity, and need, hire a 1.0 FTE Human Resources Business Partner dedicated for Protective Services with an additional function as a disability manager for the entire City of Spruce Grove workforce.

## 9.0 Fire Service Training Initiative

SGFS has always been committed to ensuring staff are highly trained and have been provided the resources necessary to facilitate emergency response. A partnership was utilized in a cost-sharing venture with the City of St. Albert in the development and design of the Fire Services Training grounds within the community. The new Protective Services building was constructed with future training needs in mind. This has allowed SGFS



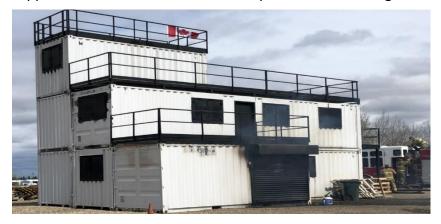
opportunities such as the partnership with Professional Medical Associates (PMA) to facilitate in-house Advanced Care Paramedic (ACP) and Primary Care Paramedic (PCP) training programs. Neighboring communities utilize the training facilities during training periods weekly. There has been an increased demand for this service in the region due to the costs of other rental





locations in the area. This provides a valuable resource that can be explored further with partnership agreements and establishment of a training hub for numerous smaller municipalities.

The SGFS training grounds and access to the numerous classroom spaces within Protective Services allow for continued training of outside agencies. An opportunity exists to provide fire training in-house in conjunction with PCP/ACP training. The addition of NFPA standard firefighter training programs for paid customers should be explored. This is a possible revenue source for the City and a recruitment tool for attracting future staff. Further training and certification programs/courses could be provided to external departments in skill development, officer courses, and live-fire training. If a training academy became operational, it would support the continued demand in the province for Investigation and Inspections training where



opportunities could also be explored with Safety Codes Council. At a community level, service-level programs could be implemented to provide basic CPR and first aid to new parents, members of the community, businesses within the City, and other City Departments.

Further aspects of training could be explored through the development of a Fire Cadet program. This would allow additional opportunities for community-based programs to recruit, diversify, and promote community-focused, long-term retention of employees while mentoring youth in potential career path decisions in the future.

Finding #19: That SGFS explore and implement a Training Academy to provide training services based on either revenue neutral or positive.

Finding #20: That the City enhance the current training grounds facility for future use.

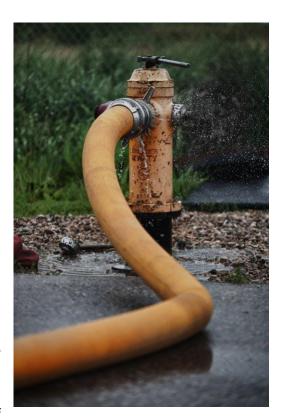


## 10.0 Environmental Initiatives

In alignment with the City of Spruce Grove's Strategic Plan 2022-2025<sup>20</sup>, Fire Service recognizes a need to incorporate environmental considerations into our existing infrastructure. Numerous opportunities exist in the Fire Services, and some should be implemented within this MP's time frame. The SGFS training tower is included in the City's life cycle programming and will be due for replacement within the time frame of this MP. Conversion of the training tower to natural gas or clean-burning fuels could be a part of this life cycle replacement with either an addition to existing infrastructure or as part of a new design to alleviate fire training's current carbon footprint.

Water capture devices for fire training and testing of fire apparatuses have a visible cost and water savings for municipalities. An average fire services training evolution can utilize as much as 10,000 litres of water. With four separate platoons doing this level of training in a six-month period, the consumption of potable water can be as high as two million litres. By adding water capture devices to training evolutions, this water is then recycled and can be used repeatedly without the added waste as seen in traditional firefighter training evolutions. Regional partnerships should also be explored to aid in costing offsets for such devices.

SGFS, in conjunction with Fleet and Facilities, should explore feasible environmental options on Fire Service vehicles like Command or Brush Units as their service replacement schedule dictates. Exploration of grants for use of solar energy panels for Protective Services or to provide power to the training grounds in collaboration with Fleet and Facilities should be investigated further and be a part of this MP moving forward.



Finding #21: That the City develops future cooperative plans and business cases for environmental initiatives such as water capture devices, solar energy, and training facility conversion.

<sup>&</sup>lt;sup>20</sup> https://www.sprucegrove.org/government/reports-plans/strategic-plan/





## 11.0 Findings Summary

Finding #1: For the City to actively engage in monitoring effective staffing measures including risk, changes in legislation, population growth and corporate planning processes with the intent to continue to target a firefighter staffing ratio of 1.2FF/ 1000.

Finding #2: That the City add 1.0 FTE FPO in 2025 and additional hiring of FPOs proportional to municipal development and risk to match community needs.

Finding #3: To hire a 1.0 FTE Operational Assistant Deputy Chief as soon as possible and evaluate the requirements of Chief Positions and organizational structure over the remainder of the MP, to ensure adequate levels of Chief level Officers are present to successfully manage the demands of a 24-hour a-day operation.

Finding #4: To add 1.0 FTE Administrative Assistant in 2026 to assist with administrative functions of Protective Services.

Finding #5: To follow best practices and have The City of Spruce Grove Fire Services negotiate changes within the existing contract that best represents the SGFS service expectations and needs. If agreement cannot be made through those discussions develop a Request for Proposals Fire Dispatch Services.

Finding #6: Collaborate with other City departments regarding the need to analyze and potentially explore an overall City wide internal dispatch system within the time frame of this Master Plan.

Finding #7: The City of Spruce Grove should identify land within the timeframe of the MP for a future Satellite Fire Station.

Finding #8: Continue to monitor and report on response standards, population densities, operational requirements, and development as part of the planning process for the consideration and implementation of new fire stations.

Finding #9: Explore offsite levies or joint initiative housing or social projects to offset the cost of both projects while integrating the community needs into those capital projects.

Finding #10: To continue to participate in, review, and regularly update all current Mutual Aid agreements with regional partners.

Finding #11: That the SGFS continues to advocate for and renew the regional recruiting process or explore partnerships outside the capital region to remain a highly competitive employer in the Capital Region.





Finding #12: Subject to beneficial terms and conditions, the City should continue in the EMS Service Agreement with AHS and in 2023 actively engage in negotiating a long-term contract promoting partnerships within the agreement.

Finding #13: That the City continues to guarantee and provide Medical First Response at an Advanced Life Support level for the residents of Spruce Grove.

Finding #14: In collaboration with IS and senior leadership, the City explore an IS Business Partner model for Protective Services with accompanied resourcing considered in future Corporate Plans.

Finding #15: That the City continues and enhances the collaboration with the Corporate Communications Department Business Partner to build a strong Social Media presence within the organization thereby improving customer service and information access to the public.

Finding #16: That the City works across departments to improve collaboration, processes, and communication for all safety code functions of the city.

Finding #17: That SGFS continue to lead and support City led initiatives that enhance the Diversity, Inclusivity, Equity, and Belonging strategies and programs of the department, the City, and the community at large.

Finding #18: Within the timeframe of this Master Plan, and subject to the changes in overall department growth, complexity, and need, hire a 1.0 FTE Human Resources Business Partner dedicated for Protective Services with an additional function as a disability manager for the entire City of Spruce Grove workforce

Finding #19: That SGFS explore and implement a Training Academy to provide training services based on either revenue neutral or positive.

Finding #20: That the City enhance the current training grounds facility for future use.

Finding #21: That the City develops future cooperative plans and business cases for environmental initiatives such as water capture devices, solar energy, and training facility conversion beginning in 2023.





# 12.0 Appendices

City	Province	2021 Pop	2016 Pop	% Population Change	2021 Dwelling	Dwelling Change	Land Area	Density
St. Albert	Alta.	68,232	65,589	4	27,019	10.5	47.84	1,426.40
Peterborough	Ont.	83,651	81,032	3.2	38,006	3.3	64.76	1,291.80
St. Thomas	Ont.	42,840	38,909	10.1	18,596	8.7	35.61	1,203.20
Langford	B.C.	46,584	35,342	31.8	19,968	34	41.43	1,124.40
Nanaimo	B.C.	99,863	90,504	10.3	45,138	10.4	90.45	1,104.10
Spruce Grove	Alta.	37,645	34,108	10.4	14,752	12.4	37.52	1,003.30
Red Deer	Alta.	100,844	100,418	0.4	43,404	2.6	104.34	966.5
Airdrie	Alta.	74,100	61,581	20.3	27,037	20.7	84.39	878.1
Charlottetown	P.E.I.	38,809	36,094	7.5	18,364	6.8	44.27	876.6
Woodstock	Ont.	46,705	41,098	13.6	19,528	10.9	56.46	827.2
Lethbridge	Alta.	98,406	92,729	6.1	42,862	7.5	121.12	812.5

<sup>\*</sup>Listed above are the identifiable comparable cities within the 2021 Census Data based on population greater than Spruce Grove and +500 - 200 population density.

<sup>\*\*</sup>Charlottetown, PEI could be dropped from the comparable list as over the next ten years it is possible the City of Spruce Grove will surpass in population based on growth rate.





	SAFECII				<u></u>				
City	FF Ratio (FF/1000)	Full Time	# of FF	# of stations	Number of platoons	# Admin	FPO	Dispatch	
St. Albert	1.52	Yes	104	3	4	3	2	Internal	
Peterborough	1.06	Yes	88	3	4	1.5	4	Internal	
St. Thomas	1.13	Yes	48	2	4	2	2	Internal	
Langford	0.84	Comp	20 FTE, 57 Vol	3	4	1	1	Prov.	
Nanaimo	0.95	Comp	88 10 POC	5	4	3	6	Prov.	
Spruce Grove	1.17	Yes	44	1	4	2.5	1	ECC	
Red Deer	1.2	Yes	122	5	4	4	8	Internal	
Airdrie	1.06	Yes	70	3	4	3	3	RPF	
Charlottetown	1.03	Comp	9 FTE- 5 CAS 94 Vol.	2	2	1	3	Internal	
Woodstock	1.02	Yes	48	2	4	1	4	RFP	
Lethbridge	1.2	Yes	118	5	4	5	7	Internal	
Leduc	1.38	Comp	36FTE 33POC 5Casual	2	4	3	2	RFP	
Stony Plain	1.28	Comp	5 FTE 36 Casual Total 43	1	1	0.5	FTE Staff	ECC	

<sup>\*</sup>Data collected from identified comparable departments in 2022

<sup>\*\*</sup>Above is the comparable collected data for this report with **suppression staff numbers** and any efficiency as reported for integrated fire departments.

<sup>\*\*\*</sup>The paid-on-call ratio of 3/1 and casual ratio of 2/1 was utilized to calculate the FF/1000.

<sup>\*\*\*\*</sup>Charlottetown, PEI geographical location dynamic supports the current composition of the department as noted by the department's FC.

<sup>\*\*\*\*\*</sup>The City of Leduc and Town of Stony Plain are presented in this report only as a reference due to their geographical location.

<sup>\*\*\*\*\*\*</sup>Those without in-house dispatch noted an RFP program or regional/provincial dispatch model.

<sup>\*\*\*\*\*\*</sup>St. Albert recently had a third-party review of dispatch however final outcomes were not available at the time of this MP.





	SAFECII								
City	FF Ratio (FF/1000)	Full Time	# of FF	# of stations	Number of platoons	# Admin	FPO	Dispatch	
St. Albert	1.84	Yes	126	3	4	3	2	Internal	
Peterborough	1.06	Yes	88	3	4	1.5	4	Internal	
St. Thomas	1.13	Yes	48	2	4	2	2	Internal	
Langford	0.84	Comp	20 FTE, 57 Vol	3	4	1	1	Prov.	
Nanaimo	0.95	Comp	88 10 POC	5	4	3	6	Prov.	
Spruce Grove	1.48	Yes	56	1	4	2.5	1	ECC	
Red Deer	1.57	Yes	160	5	4	4	8	Internal	
Airdrie	1.06	Yes	70	3	4	3	3	RPF	
Charlottetown	1.03	Comp	9 FTE- 5 CAS 94 Vol.	2	2	1	3	Internal	
Woodstock	1.02	Yes	48	2	4	1	4	RFP	
Lethbridge	1.63	Yes	161	5	4	5	7	Internal	
Leduc	1.38	Comp	36FTE 33POC 5Casual	2	4	3	2	RFP	
Stony Plain	1.28	Comp	5 FTE 36 Casual Total 43	1	1	0.5	FTE Staff	ECC	

<sup>\*</sup>Total number of FTE for all departments are included above. Data collected from identified comparable departments in 2022

<sup>\*\*</sup>Based on the above **numbers of FTE**, integrated Departments have ratios as follows: Spruce Grove 1.48/1000, St. Albert 1.84/1000, Lethbridge 1.63/1000, Red Deer 1.57 FF/1000- This directly shows the increased staff for the AHS contracts each municipality maintains and is represented for transparency. Used in this report were the totals of available fire suppression staff and the efficiency as the surveyed department reported, as indicated in the previous chart.





City	Province	Pop 2021	Pop 2016	% Change	# Dwellings 2021	% Change	Sq KM, 2021	Density 2021
Châteauguay	Que.	50,815	47,906	6.1	20,412	5.4	34.31	1,481.20
St. Albert	AB	68,232	65,589	4	27,019	10.5	47.84	1,426.40
Repentigny	Que.	86,100	84,285	2.2	34,710	2.5	61.52	1,399.60
Peterborough	Ont.	83,651	81,032	3.2	38,006	3.3	64.76	1,291.80
Aurora	Ont.	62,057	55,445	11.9	22,253	14.8	50	1,241.10
St. Thomas	Ont.	42,840	38,909	10.1	18,596	8.7	35.61	1,203.20
Langford	B.C.	46,584	35,342	31.8	19,968	34	41.43	1,124.40
Nanaimo	B.C.	99,863	90,504	10.3	45,138	10.4	90.45	1,104.10
Blainville	Que.	59,819	56,863	5.2	22,859	8.8	54.97	1,088.20
Spruce Grove	AB	37,645	34,108	10.4	14,752	12.4	37.52	1,003.30
Red Deer	Alta.	100,844	100,418	0.4	43,404	2.6	104.34	966.5
Saint-Jérôme	Que.	80,213	74,346	7.9	38,776	9.8	90.18	889.5
Airdrie	AB	74,100	61,581	20.3	27,037	20.7	84.39	878.1
Charlottetown	P.E.I.	38,809	36,094	7.5	18,364	6.8	44.27	876.6
Woodstock	Ont.	46,705	41,098	13.6	19,528	10.9	56.46	827.2
Lethbridge	АВ	98,406	92,729	6.1	42,862	7.5	121.12	812.5
Leduc	AB	34,094	29,993	13.7	13,507	10.1	42.25	806.9
Stony Plain	AB	17,993	17,189	4.7	7,475	7.5	35.45	507.6

<sup>\*</sup>Raw data provided for all identified comparable cities. Municipalities indicated in grey were not used within this study due to either a lack of data provided back to the committee or the cities were involved in a Regional Fire Service Model like Aurora, Ontario.

<sup>\*\*</sup>The City of Leduc and Town of Stony Plain have been provided as reference. Based on growth rates, the City of Spruce Grove will be larger in population than either municipality for the duration of this Master Plan. The City of Leduc does fit within the density parameters established by the committee.