



## From the President and Chairs of the CAFC Answer the Call Committee and Data Committee

It is our pleasure to present the *Results of the Great Canadian Fire Census 2022*. This Census represents the largest and most current known data on the fire service nationally. It estimates the total number of firefighters in Canada at 126,000, analyzes the services offered by departments, looks at firefighter and consumer safety, call volumes, and expenditures on training and equipment.

Data is very important to the fire service. In 2021, we collected data from volunteer and composite departments. Considering that career departments serve the majority of Canada's largest cities, this year we did another Census, gathering data from all departments and focussing on the number of firefighters, the services fire departments offer, their demographics, and other key issues such as firefighter and consumer safety, call volumes, and expenditures. In collaboration with the Provinces and Territories, we have tried to identify where the gaps are, and where our future focus should be.

This report is being released just before our Government Relations Week in Ottawa. We hope it will provide policy makers with the data needed to consider our recommendations seriously. As we often say, this is a powerful sector, but its future is precarious unless we take action now.

Finally, we thank the 629 fire departments that completed the Census; the Answer the Call committee and the Data committee who have made this their year's work; the National Advisory Council organizations who bring a whole of Canada perspective to everything we do; Ms. Ose Ikekhuah who did the analysis, Ms. Rhea Laverdure who built the database, Ms. Ashton Rodenhiser of Mind's Eye Creative who created an animated video version of this report, and our Manager of Membership Services and Special Projects, Ms. Anabel Therrien, who led the initiative and penned the report with our Executive Director, Dr. Tina Saryeddine.

We look forward to sharing this with you. If you have any questions or comments, please contact our national office at [info@cafc.ca](mailto:info@cafc.ca). Thank you for your support of our sector.



Fire Chief Ken McMullen  
CAFC President



Fire Chief Vince MacKenzie  
Chair of the Answer the Call  
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Fire Chief Keven Lefebvre  
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## Executive Summary

### Introduction:

The Great Canadian Fire Census is arguably the largest and most complete snapshot of fire departments in this country. Taken as at April 2022, the Great Canadian Fire Census, asked departments to provide the number and type of firefighters, services, call volumes, consumer and firefighter safety information, and information on expenditures. The data is intended to help us monitor the state of the sector, substantiate concerns about key issues and make recommendations for the future.

### Methods:

Based on the survey used for the 2021 Census that focussed only on volunteer departments, the 2022 Census survey was expanded to include career and metro departments. Volunteer departments who completed the survey last year had the option to update their data. Six hundred and twenty-nine (629) fire departments, serving twenty-four million (24M) Canadians participated in the 2022 survey. The location, distribution and types of these departments were analyzed against the distribution of departments across provinces, so that the sample could be properly assessed. Appropriate multipliers were then applied to department type groupings to create national estimates.

### Results:

The Census results show the extraordinary productivity of the sector. However, they also detail the stark realities facing Canada's 3200 fire departments. This includes diminishing numbers of firefighters, increased emergency call volumes, mounting training and equipment costs and the reclassification of firefighting into the top tier of carcinogenic professions. Together, these create a perfect storm for Canada's fire, all-hazard and emergency response capacity. Table 1 summarizes some key findings:

**Table 1: Key Findings**

|  | Estimates       | Percentages  |
|--|-----------------|--------------|
| Total number of firefighters   | 126,000         | .            |
| Number of volunteer firefighters   | 90,000          | 71% of total |
| Number of career firefighters  | 36,000          | 29% of total |
| Number of vacant positions   | 15,000          | 12%          |
| Number of women firefighters   | 14,000          | 11%          |
| Number of firefighters over 50   | 31,000          | 25%          |
| Number of departments reporting calls due to consumer fireworks                              | 600             | 18%          |
| Number of departments reporting deaths or injuries in homes that could have been sprinklered | 144             | 4%           |
| Total number of calls  | 2,021,218       | .            |
| Percentage of calls related to fire suppression  | 7%              | .            |
| Percentage of calls related to extreme weather events  | 9.5%            | .            |
| Percentage of medical-related calls  | 44%             | .            |
| Total expenditures   | \$5,885,419,607 | .            |
| Number of departments that deferred purchases  | 1418            | 41%          |
| Number of departments that deferred training   | 775             | 24%          |
| Number of fire trucks needed   | 800             | 25%          |
| Number of fire stations needed   | 600             | 18%          |
| Number of departments who need new communications systems                                    | 600             | 18%          |

## Discussion:

The Census results have generated significant discussion in three key areas: protecting and retaining Canada's supply of firefighters and response capacity, reducing community risk, and improving the government's ability to address these problems.

Canadians are often surprised when they learn that the majority of the country's fire departments are volunteer. While this is not new, fire chiefs across the country have been increasingly concerned about rising call volumes, decreasing number of firefighters, and mounting costs. These concerns are confirmed by the results of the Great Canadian Fire Census of 2022 and include:

- **Declining supply of firefighters:** we estimated that Canada has about 126,000 firefighters within its 3200 fire departments, a drop from 156,000 as reported in a Canadian study conducted by National Fire Protection Association (NFPA).
- **Increasing demand for service:** At the same time, demand for service is going up. Fire Departments responded to an estimated 2M calls. Only 10% of those were fire suppression related. An astounding 50% was due to emergency medical response; 30% was due to all-hazard response from vehicle extrication to high angle, water rescue, dangerous goods and other; and 10% was due to atypical climate emergencies. This may be due to the convergence of the climate crisis, healthcare crisis, and personnel shortages.
- **Increasing risks:** Call volumes and severity are intensified by the known risks of firefighting. Firefighting is inherently dangerous. There were at least 600 injuries and over 60 deaths that are considered line of duty deaths, whether they were at the active line of duty, presumptive or succumbing to mental health injury.
- **Firefighter exposure:** Repeated exposure to trauma is associated with high risk of post-traumatic stress disorder. Adding to the awareness of mental health injury, the International Association of Cancer Research recently reclassified firefighting as a top tier carcinogenic profession.
- **Resource challenges:** The CAFC's study showed that 41% of the country's fire departments have had to defer training and equipment for more than two years due to fiscal pressures. Of the \$5.6B in fire department expenditures, only 15% is attributed to the 2000+ volunteer fire departments.

## Recommendations:

What can be done to address this situation? Over the next week, Fire Chiefs will be on the Hill for their annual advocacy day. They will discuss recommendations in three key areas.

1. First, we need to protect and retain Canada's supply of firefighters and their response capacity. We need to bring back a federal Joint Emergency Preparedness-type program to help restock and rebuild Canada's supply of training and equipment. We also need to support Bills like Sherry Romanado's Bill C224 for Firefighter Cancer and Gord John's Bill C-201 to increase the volunteer firefighter tax credit. Finally, we need to maintain the federal commitment to first responder mental health.

2. Next, we need to reduce community risk. There should be sprinklers in the new supply of affordable housing. These won't replace firefighters, but they will give people a chance to evacuate. It will reduce more than 144 deaths and injuries due to house fires that could have been sprinklered. We can also FireSmart™ homes and communities against wildfire risk; and we can ban the sale and use of consumer fireworks. Fire departments in 600 communities had to respond to such calls. Fireworks should be left to professionals.
3. Finally, given the number of issues, the CAFC is recommending that Canada consider the formation of a national fire advisor and administration, similar to that of the US Fire Administration. This would help in a whole of government approach to the fire sector.

## Conclusions

The 2022 Census created the most up to date and largest known data set about the fire sector in this country. It's the direct result of the collaboration across the sector and between the Answer the call committee that focusses on volunteer firefighter issues, the data committees, and the National Advisory Council. The data shows that we have a high reliance on volunteer firefighters, a large number of vacancies, and that fire departments are short of funds. It also shows that there are measures that communities can take to reduce the risk and number emergencies. The study shows that departments answer over 2 million calls, most of them successfully, but sometimes there are deaths and injuries. Firefighting is inherently dangerous.

Most importantly, this Census reflects the presence of a strong and united sector. That fire departments large and small across this country took the time to partake in this Census is a testament to their commitment, their care, and the support their communities deserve. We thank them for the leadership, and readers for considering these issues.

## Great Canadian Fire Census 2022

### Introduction

Data is important to the fire service. It is essential for sizing up the sector, monitoring trends and providing accountability for the services we steward and recommendations that we make. For the past two years, the CAFC has made it one of its goals to collect yearly data from Fire Departments across Canada on key issues impacting communities across the country for these reasons.

While a 2021 version of this Census focussed solely on volunteer firefighters, in 2022, we extended the Census to all department types (volunteer, composite, and career), as well as added a series of questions on firefighter and consumer safety, call volumes, and expenditures.

This census is being released on the heels of Government Relations week 2022. In consideration of results of the Census recommendations have been developed following three themes: protect and retain Canada's firefighters and response capacity; reduce risk of fire and emergency in communities nationally; and modernize infrastructure and government machinery.

### Methods

In early 2022, the 2021 census questionnaire was reviewed for lessons learned from its original administration with volunteer and composite departments only. Some of the questions were clarified for 2022. We also expanded the questionnaire to include questions on additional issues such as firefighter and consumer safety, call volumes, and expenditures on training and equipment.

Through the months of May and June, we distributed the questionnaire to fire departments across the country through our membership database, our provincial and territorial counterparts, and sent reminders by email and on social media. Members of the Answer the Call, Data Committee, Board and National Advisory Council as well as other members of the association used their networks to generate as much awareness as possible. We received a total of 629 responses from departments across all the provinces and territories. Of the participating departments, 70% were volunteer, 10% were career, and 20% composite (a mix of both volunteer and career firefighters).

To understand the sample data at a national level, we compared the response rate by department type and by province in the sample, to the manner in which fire departments are distributed across the country along the same two dimensions. The number of departments in the sample by province was proportional to the total number of departments by province nationally. We concluded that we had a geographically representative sample.

Looking at the responses by type of department however, we determined that the percentage of departments by type in the sample compared to across the country over-represented career and composite departments. To address this, we divided the sample into four categories: volunteer; composite, career and metropolitan. For each category we developed a multiplier based on the ratio of departments in each type in the sample to the number of departments of each type in the country.

For example, of all possible responses, 29% of composite departments participated the census. With that percentage. We determined the multiplier by calculating the ratio of total possible departments in each type (100%) in the country to the departments of that type in the sample (29%), resulting in a

multiplier for composite departments of 3.4. To determine our data at a national level, we multiplied our composite totals by 3.4. Following the same method, we calculated the multiplier for volunteer departments at 9.1, and for career at 1.9. You can see in the equation below in table 2 how we calculated our Canadian totals. Note that for Metro departments, we received 100% response rate, and therefore did not need to determine a multiplier. For that group, the sample is the same as the population.

The strengths and limitations of our methods are discussed in the discussion and next steps section of this report.

**Table 2: Method used to go from sample to population**

|  |
|--|
| <b>Total calculation for Canada = (9.1 x total volunteer sample) + (3.5 x total composite sample)<br/>+ (1.9 x total career sample) + (total metro data)</b> |
|--|

## Results

In this section we present the results of Census. The figures presented are calculations based on the actual figures from 629 departments except for deaths and injuries where because of the subject matter, we report actuals for the 629 departments.

Table 3 shows the number of services offered by the four types of fire departments, volunteer, composite, career, and metro. As one might expect, larger and more munificent departments offer more services than the small rural and volunteer departments. However, in all cases, fire departments offer more than fire suppression services. They are all hazard responders.

**Table 3: Number of services offered by departments**

| Number of Services | Total for Volunteer Departments | Total for Composite Departments | Total for career Departments | Metro Departments 2022 (actual) | Total for Canada |
|--------------------|---------------------------------|---------------------------------|------------------------------|---------------------------------|------------------|
| 11-16 services     | 228                             | 85                              | 34                           | 15                              | 362 (11%)        |
| 6-10 services      | 1310                            | 265                             | 40                           | 6                               | 1622 (47%)       |
| 1-5 services       | 1283                            | 75                              | 11                           | 2                               | 1371 (40%)       |
| Non-respondents    | 64                              | 3                               | 2                            | 0                               | 69 (2%)          |

Table 4 shows the types of services that are offered by the four department types. Alongside fire suppression, the five most common services include industrial firefighting, emergency management, wildland firefighting and emergency medical response.

**Table 4: Number of departments offering each of the services.**

| Services                  | Total for Volunteer Departments | Total for Composite Departments | Total for career Departments | Metro Departments 2022 (actual) | Total for Canada |
|---------------------------|---------------------------------|---------------------------------|------------------------------|---------------------------------|------------------|
| Industrial Firefighting   | 1374                            | 2612                            | 65                           | 23                              | 1724 (53%)       |
| Emergency Management Ops. | 1283                            | 0                               | 67                           | 19                              | 1369 (42%)       |
| Wildlands Firefighting    | 2293                            | 360                             | 67                           | 15                              | 2735 (84%)       |

| Services   | Total for Volunteer Departments | Total for Composite Departments | Total for career Departments | Metro Departments 2022 (actual) | Total for Canada |
|--|---------------------------------|---------------------------------|------------------------------|---------------------------------|------------------|
| Assist EMS   | 1547                            | 248                             | 36                           | 14                              | 1845 (57%)       |
| Water & Ice Rescue   | 173                             | 61                              | 49                           | 22                              | 306 (9%)         |
| Vehicle extrication/Machinery  | 410                             | 102                             | 66                           | 23                              | 599 (18%)        |
| Hazmat Response (awareness level only)                               | 146                             | 37                              | 13                           | 3                               | 199 (6%)         |
| Aircraft Rescue  | 82                              | 7                               | 17                           | 4                               | 110 (3%)         |
| HazMat Response  | 64                              | 31                              | 48                           | 20                              | 162 (5%)         |
| Trench Rescue  | 36                              | 67                              | 23                           | 16                              | 82 (3%)          |
| Fast Water Rescue  | 64                              | 37                              | 21                           | 11                              | 133 (4%)         |
| HUSAR  | 18                              | 3                               | 4                            | 7                               | 32 (1%)          |
| USAR   | 127                             | 433                             | 13                           | 6                               | 580 (18%)        |
| High Angle Rescue  | 55                              | 18                              | 29                           | 17                              | 119 (4%)         |
| Technical Rescue   | 91                              | 309                             | 30                           | 18                              | 449 (14%)        |
| Marine Firefighting  | 18                              | 62                              | 4                            | 8                               | 92 (3%)          |
| Ambulance service using dedicated EMS staff under a joint department | 18                              | 62                              | 2                            | 1                               | 83 (3%)          |
| Assist EMS (No relocation)   | 91                              | 309                             | 30                           | 17                              | 417 (13%)        |
| Emergency Medical Fire First Responder                               | 1438                            | 286                             | 59                           | 18                              | 1800 (55%)       |
| Patient transport using cross-trained firefighter-paramedic          | 36                              | 0                               | 4                            | 1                               | 41 (1%)          |

The number of firefighters by department type are shown in Table 5. We began by asking particularly the volunteer departments if they had a set complement of firefighters expected in their departments. Not all do. If a fire department doesn't have a set complement of firefighters, it can't really report vacancies. This confounds our results by under-estimating the number of vacancies. The table shows that there are 140,000 positions but only 126,000 firefighters, leaving a vacancy of 15,000 in a sector where 90,000 are already volunteers. It is important to note that a large percentage of firefighters are over the age of 50. Only 11% are women, but the percentage is higher in volunteer departments than in career departments.

**Table 5: Number of Fire Department members (staff and volunteer) and firefighters in departments**

| Category  | Total for Volunteer Departments | Total for Composite Departments | Total for career Departments | Metro Departments 2022 (actual) | Total for Canada |
|---|---------------------------------|---------------------------------|------------------------------|---------------------------------|------------------|
| Departments with set complement of firefighters     | 1,492                           | 299                             | 84                           | 20                              | 1895 (58%)       |
| Total members in department (all staff)             | 9252                            | 26313                           | 10353                        | 19884                           | 149,051          |
| Number of firefighter positions (filled and vacant) | 89,380                          | 24,956                          | 9,042                        | 16,480                          | 139,858          |
| Number filled firefighter positions                 | 78378                           | 21712                           | 8805                         | 15996                           | 125891 (88%)     |
| Number vacant firefighter positions                 | 11002                           | 3244                            | 234                          | 484                             | 14963 (12%)      |
| Firefighter that meet attendance requirements       | 66739                           | 19023                           | 6226                         | 6251                            | 98240 (78%)      |



|                                  |       |      |      |       |             |
|----------------------------------|-------|------|------|-------|-------------|
| Number of departments by type    | 2885  | 428  | 88   | 23    | 3424        |
| Non-firefighter paid staff       | 3877  | 1241 | 1110 | 2376  | 8603 (45%)  |
| Non-firefighter volunteer staff  | 7016  | 3264 | 67   | 60    | 10407 (55%) |
| Women firefighters               | 10911 | 2054 | 293  | 522   | 13779 (11%) |
| Firefighters over 50             | 22495 | 3964 | 1685 | 2594  | 30739 (25%) |
| Unionized firefighters and staff | 3376  | 8527 | 8371 | 16221 | 36496 (29%) |

Career Firefighters are most often full time paid or possibly part time paid. Volunteer firefighters are often paid on call, paid part-time, or paid honoraria or expenses. Table 6 shows the extent of this variability. Table 7 shows which of the categories are considered by fire departments to be volunteer. This has implications for the administration of the volunteer firefighter tax credit.

**Table 6: Breakdown of firefighters by remuneration categories**

| Remuneration category       | Total for Volunteer Departments | Total for Composite Departments | Total for career Departments | Metro Departments 2022 (actual) | Total for Canada |
|-----------------------------|---------------------------------|---------------------------------|------------------------------|---------------------------------|------------------|
| Full-time paid              | 1347                            | 5709                            | 8447                         | 14522                           | 30025 (22%)      |
| Part-time paid              | 5888                            | 3536                            | 562                          | 152                             | 10138 (7%)       |
| Paid on-call                | 44272                           | 12029                           | 106                          | 709                             | 57116 (41%)      |
| Paid honoraria              | 20193                           | 3142                            | 0                            | 571                             | 23906 (17%)      |
| Paid expenses only          | 5296                            | 139                             | 0                            | 0                               | 5436 (4%)        |
| No remuneration or expenses | 11675                           | 1156                            | 0                            | 0                               | 12831 (9%)       |

**Table 7: Remuneration category considered volunteer.**

| Remuneration category       | Total for Volunteer Departments | Total for Composite Departments | Total for career Departments | Metro Departments 2022 (actual) | Total for Canada |
|-----------------------------|---------------------------------|---------------------------------|------------------------------|---------------------------------|------------------|
| No remuneration or expenses | 1529                            | 228                             | 53                           | 9                               | 1819 (56%)       |
| Paid expenses only          | 1274                            | 167                             | 42                           | 9                               | 1491 (46%)       |
| Paid honoraria              | 1374                            | 190                             | 36                           | 0                               | 1601 (49%)       |
| Paid-on-call                | 1711                            | 211                             | 44                           | 12                              | 1977 (61%)       |
| Part-time paid              | 309                             | 65                              | 21                           | 3                               | 398 (12%)        |

In Table 8, we see that fire chiefs are not always paid full time. This has special implications for the national association, but generally for Canada, it is important to understand how heavily the fire and emergency sector relies on volunteers.

**Table 8: Remuneration Model for the Fire Chief**

| Remuneration category | Total for Volunteer Departments | Total for Composite Departments | Total for career Departments | Metro Departments 2022 (actual) | Total for Canada |
|-----------------------|---------------------------------|---------------------------------|------------------------------|---------------------------------|------------------|
| Full-time paid        | 746                             | 346                             | 76                           | 21                              | 1189 (37%)       |
| Part-time paid        | 446                             | 17                              | 4                            | 0                               | 467 (14%)        |

|                          |     |     |   |   |           |
|--------------------------|-----|-----|---|---|-----------|
| Paid honoraria (stipend) | 728 | 6.8 | 0 | 0 | 735 (23%) |
| Unremunerated            | 455 | 0   | 0 | 0 | 455 (14%) |

In table 9, we report the number of firefighter deaths and injuries. Due to the subject matter and unlike the rest of the data where we showed estimates based on calculations from the actual sample, in Table 9 we present the sample data as it was reported for the 629 departments. This means the figure is likely under-reported nationally. You can see that the presumptive illness accounts for the largest proportion of deaths followed by suicide and active line of duty. Please see next steps for further discussion.

**Table 9: Firefighter line of duty deaths and injuries (May 1, 2021-April 30, 2022, or last 12-month reporting cycle). Note this table shows actual reported per the original sample. Given the subject matter, we did not make calculations or estimates.**

| Number of firefighter line of duty deaths due to:                               | Total for Volunteer Departments | Total for Composite Departments | Total for career Departments | Metro Departments 2022 (actual) | Total for Canada |
|---|---------------------------------|---------------------------------|------------------------------|---------------------------------|------------------|
| fatal injury during or immediately following a fire or all hazard response call | 0                               | 1                               | 0                            | 1                               | 2                |
| presumptive illness   | 9                               | 1                               | 23                           | 24                              | 57               |
| succumbing to psychological injury  | 4                               | 0                               | 3                            | 0                               | 7                |
| Number of firefighter injuries resulting from active duty during a call         | 222                             | 315                             | 566                          | 2,467                           | 3,570            |

In Table 10 we discuss the context and category of the injuries. Fire suppression is the most common context of the injury. However, training is also a category with high injury numbers. This underscores the inherent danger of the profession. In Table 10, we see that although presumptive or occupational illnesses are a high cause of death, they are a small percentage of context for injuries. By contrast, we see a high number of physical and psychological injuries, likely explaining high workers compensation board claims.

**Table 10 Context and category of the injuries**

| Context and category           | Total for Volunteer Departments | Total for Composite Departments | Total for career Departments | Metro Departments 2022 (actual) | Total for Canada |
|--------------------------------|---------------------------------|---------------------------------|------------------------------|---------------------------------|------------------|
| Context                        |                                 |                                 |                              |                                 |                  |
| Fire Suppression               | 664.3                           | 173.4                           | 55.1                         | 21                              | 913.8            |
| Training                       | 336.7                           | 115.6                           | 26.6                         | 14                              | 492.9            |
| Fire station                   | 154.7                           | 68                              | 26.6                         | 15                              | 264.3            |
| Mental Health                  | 236.6                           | 47.6                            | 34.2                         | 14                              | 332.4            |
| On scene, not fire suppression | 345.8                           | 85                              | 28.5                         | 12                              | 471.3            |
| Category                       |                                 |                                 |                              |                                 |                  |
| Physical                       | 964.6                           | 248.2                           | 58.9                         | 20                              | 1291.7           |
| Occupational disease           | 91                              | 20.4                            | 15.2                         | 12                              | 138.6            |
| Psychological                  | 218.4                           | 54.4                            | 36.1                         | 15                              | 323.9            |

In Table 11, we show data about consumer safety with a focus on sprinklers and consumer fireworks. We see that fire departments in over 600 communities had to respond to calls involving consumer

fireworks. We also see that 144 deaths or injuries occurred in homes that could have been sprinklered. This is a tragedy for the homeowners and occupants. It is also an unnecessary call burden for departments.

**Table 11: Consumer safety calls focussing on sprinklers and consumer fireworks**

| Number of departments that:   | Total for Volunteer Departments | Total for Composite Departments | Total for career Departments | Metro Departments 2022 (actual) | Total for Canada |
|---|---------------------------------|---------------------------------|------------------------------|---------------------------------|------------------|
| ...responded to at least one consumer firework incident   | 464                             | 139                             | 40                           | 19                              | 662              |
| ...have had fire related fatalities or injuries in new residential construction that could have been sprinklered. | 91                              | 30                              | 19                           | 4                               | 144              |

Table 12 shows the data reported on call volumes. We see that emergency medical calls account for about 50% of the 2M calls; 30% to all hazard calls; 10% to unexpected climate emergencies and only 10% to fire suppression.

**Table 12: Fire department calls (May 1, 2021-April 30, 2022, or last 12-month reporting cycle)**

| Type of call  | Total for Volunteer Departments | Total for Composite Departments | Total for career Departments | Metro Departments 2022 (actual) | Total for Canada |
|---|---------------------------------|---------------------------------|------------------------------|---------------------------------|------------------|
| Number of incidents or calls for service to which departments responded                               | 429,766                         | 473,154                         | 332,897                      | 785,401                         | 2,021,218        |
| Percentage of calls that are related to calls due to extreme weather events not usual to their region | 7.35%                           | 9.55%                           | 5.17%                        | 13%                             | 9.50%            |
| Percentage of calls that are medical-related.   | 30%                             | 39%                             | 52%                          | 47%                             | 44%              |
| Percentage that are related to active suppression calls (excluding false alarms)                      | 14%                             | 12%                             | 7%                           | 6%                              | 7%               |

Table 13 shows total expenditures by department type. Note that of the \$5.9B in expenditures across all departments in Canada, only about 15% is used by volunteer departments. This showcases the cost savings of volunteer departments to Canada.

**Table 13: Department expenditures (May 1, 2021-April 30, 2022, or last 12-month reporting cycle)**

| Expenditures         | Total for Volunteer Departments (Millions) | Total for Composite Departments (Millions) | Total for career Departments (Millions) | Metro Departments 2022 (actual) (Millions) | Total for Canada |
|----------------------|--|--|---|--|------------------|
| Total expenditures * | \$822(14%)                                 | \$1,351 (22%)                              | \$1,030 (18%)                           | \$2,680,889,782 (46%)                      | \$5,885,419,607  |

\* Includes wages, benefits, operating expenses, and other, but not capital or one-time equipment expenditures.

Finally, we asked departments to indicate to us if they had to defer training and equipment for more than 2 years due to fiscal pressures. As you can see in Table 14, over 40% of departments indicated that they had. We then asked what kind of training and equipment was needed. We identified 800+ fire trucks and vehicles, 600+ stations, and close to 600 departments needing communications software, radio equipment and tools.

**Table 14: Deferred purchases for more than 12 months**

|  | Total for Volunteer Departments | Total for Composite Departments | Total for career Departments | Metro Departments 2022 (actual) | Total for Canada |
|--|---------------------------------|---------------------------------|------------------------------|---------------------------------|------------------|
| Number of departments that have deferred the purchase of capital or equipment            | 1201                            | 167                             | 40                           | 10                              | 1418 (44%)       |
| Purchases deferred:  |                                 |                                 |                              |                                 |                  |
| Fire Trucks + Other Vehicle  | 701                             | 116                             | 15                           | 6                               | 838 (26%)        |
| New Stations + Station upgrades  | 491                             | 78                              | 27                           | 8                               | 604 (19%)        |
| Communication Software + Computer Software + Radio equipment + Satellite Communication   | 546                             | 37                              | 0                            | 3                               | 586 (18%)        |
| Battery Operated Tools + Compressor Aids + Thermal Imagers + Portable lighting and power | 473                             | 48                              | 10                           | 0                               | 530 (16%)        |
| Diving Suits + Protective clothing + SCBA masks and filters                              | 373                             | 54                              | 17                           | 0                               | 445 (14%)        |
| Hoses + Nozzles + Pumping equipment  | 346                             | 31                              | 0                            | 0                               | 376 (12%)        |
| Other  | 137                             | 24                              | 2                            | 2                               | 164 (5%)         |

|   | Total for Volunteer Departments | Total for Composite Departments | Total for career Departments | Metro Departments 2022 (actual) | Total for Canada |
|---|---------------------------------|---------------------------------|------------------------------|---------------------------------|------------------|
| Number of departments that deferred training needs due to budget constraints. | 628                             | 116                             | 23                           | 9                               | 775 (24%)        |
| Training deferred:  |                                 |                                 |                              |                                 |                  |
| Firefighting  | 328                             | 68                              | 11                           | 5                               | 412 (13%)        |
| Leadership training   | 291                             | 54                              | 10                           | 6                               | 361 (11%)        |
| Vehicle Extrication   | 237                             | 10                              | 2                            | 2                               | 251 (8%)         |



- ◆ Support Gord John's Bill C-201 to increase the volunteer firefighter tax credit.
- ◆ Maintain the federal commitment to first responder mental health.

Next, we need to reduce community risk:

- ◆ There should be sprinklers in the new supply of affordable housing. These won't replace firefighters, but they will give people a chance to evacuate. They will reduce the more than 144 deaths and injuries due to house fires in new residential construction that could have been sprinklered.
- ◆ We can also FireSmart™ homes and communities against wildfire risk. Fire Departments play an important role in this.
- ◆ We can ban the sale and use of consumer fireworks. Fire departments in 600 communities had to respond to such calls. Fireworks should be left to professionals.
- ◆ It is also essential that we pay special attention to these same issues in Indigenous Communities where organizations like the National Indigenous Fire Protection Council (NIFSC) notes the risk of death from fire is ten times worse than the nation average.

Finally, given the number of issues, the CAFC has long advocated that Canada consider the formation of a National Fire Advisor and Administration, similar to that of the US Fire Administration. This would help in a whole of government approach to the fire sector. This may be especially feasible now given the new office of the Minister of Emergency Preparedness.

### Next Steps, Strengths, and Limitations

The next steps are to ensure that policy leaders and Canadians have a clear sense of the findings and state of the sector. The report is being released on the heels of the 2022 Government Relations week in Ottawa which will provide an excellent opportunity to discuss many of these issues. We will share the results broadly along with our recommendations.

We will also repeat the Census in 2023 and begin trending the data over time. The data from 2021 and data from 2022 have been entered into a database so that (a) departments can update future data rather than redo the entire survey each year and (b) we can begin trending changes over time. This will also permit us to add questions without burdening the system which will give more detail on questions raised through this report.

In repeating the Census, we will also be able to address some of the limitations in this study. There were a few questions where in retrospect could have been more precise. For example, we did not provide respondents with a definition of "new residential construction". We took for granted that many small volunteer departments may not even have a formal budget or finance process with "deferred expenses". We believe the estimate of over 41% of fire departments having deferred expenses for more than two years is thus under-reported. Similarly, when it comes to line-of-duty deaths, particularly by suicide, reporting this may have been very difficult. In future, we may look at a partnership with the Canadian Fallen Firefighter Foundation (CFFF) and provincial and territorial associations to provide mutual support in this area.

The strengths of this census include the recency and relative completeness of the data. The data was collected as at April 2022 and released in December of the same year. It is also designed and

administered in a manner that is sensitive to the sector. It was led by both the Answer the Call committee and the Data committee, combining social exchange considerations with technical ones. Another strength is the relative response rate. Fire Departments from all provinces and territories contributed to the data. Finally, we note that the quality of the data. We purposefully designed a questionnaire that was easy to fill. Fire Chiefs in turn completed the questionnaire with accuracy and thoughtfulness.

## Conclusion

The 2022 Census created the most up to date and largest known data set about the fire sector in this country. It's the direct result of the collaboration across the sector and between the Answer the call committee that focusses on volunteer firefighter issues, the data committees, and the National Advisory Council. The data shows that we have a high reliance on volunteer firefighters, a large number of vacancies, and that fire departments are short of funds. It also shows that there are measures that communities can take to reduce the risk and number emergencies. The study shows that departments answer over 2 million calls, most of them successfully, but sometimes there are deaths and injuries. Firefighting is inherently dangerous.

Most importantly, this Census reflects the presence of a strong and united sector. That fire departments large and small across this country took the time to partake in this Census is a testament to their commitment, their care, and the support their communities deserve. We thank them for the leadership, and readers for considering these issues.

## Acknowledgements

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