



# Calgary Fire Department

## 2021 Annual Report

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### Fire Safety Education

Providing fire and life safety education/prevention and initiatives for Calgarians with an emphasis on increasing knowledge and awareness that promotes safe behaviours in our communities.



### Fire Inspections and Enforcement

Providing services to building and property owners to enhance public safety, compliance with safety codes, minimize fire-related risks, and protect lives, property and the environment.



### Fire and Emergency Response

Providing responses to fires, fire-related incidents, critical medical interventions, motor vehicle collisions, hazardous material releases, and specialized rescues.

### Acknowledging the land and our commitment to reconciliation

*In these times of Truth and Reconciliation, we would like to take this opportunity to acknowledge that we are gathered on the traditional territories of the people of the Treaty 7 region in Southern Alberta. The Nations of the Treaty 7 region are: the Siksika, Piikani, and Kainai First Nations, who, altogether, form the Siksikaitsitapi (Blackfoot Confederacy). The Chiniki, Bearspaw, and Wesley First Nations, who, altogether form the Iethka Nakoda Wicistabi Stoney Nakoda First Nations; and the Tsuut'ina First Nation.*

*The city of Calgary is also homeland to the historic Northwest Métis and to Métis Nation of Alberta, Region 3.*

*We acknowledge all Indigenous urban Calgarians who have made Calgary their home.*

*We also reflect on the impact of colonization and that the city of Calgary is based on wealth that was generated through the exploitation of Indigenous peoples and their land, and has benefitted from colonial policy. We recognize the ongoing impact of colonization and systemic racism that continues to affect Indigenous peoples in this country. With this acknowledgement comes a corresponding moral obligation to engage in reconciliation with Indigenous peoples, which includes recognizing and understanding the truth about the past and taking action to achieve equity in the future.*



Elder Clarence Wolfleg speaks with CFD Deputy Chief Ken Uzeloc, at the National Day for Truth & Reconciliation and Orange Shirt Day event at Fort Calgary.

### The Calgary Fire Department

#### Our Mission

To serve the community through excellence in fire prevention, education, protection, and safety.

#### Our Vision

To be an international fire service leader.

#### Our Values

Pride, Professionalism, Teamwork, and Respect guide our actions and guide how we work with the communities we serve.



Fallen Firefighter Memorial Ceremony, September 14

#### Accreditation

In 1999, the Calgary Fire Department (CFD) became the first Canadian fire service to receive accredited agency status with the Commission on Fire Accreditation International, and today is the sixth largest fire service in the world to be accredited, and one of nine Canadian fire services to have received this prestigious designation. Of more than 30,000 fire agencies in North America, only 292 have achieved this status so far. The accreditation process has helped the CFD continue to identify and develop best practices, review its current practices, assess hazards and risks, understand the fire safety needs of citizens, promote excellence in the fire service, and strive for continuous improvement.



# Calgary Fire Department 2021 Annual Report

## Message from the Fire Chief



The Calgary Fire Department is dedicated to the health, safety and vitality of Calgarians. Through our lines of service, our 1,507 employees provide an integrated program of emergency and non-emergency response, fire inspections and enforcement, and fire and life safety education. Our services support The City of Calgary's purpose of making life better every day for citizens.

To meet the needs of citizens and the community, the Calgary Fire Department continuously refines its service delivery model based on the evolving characteristics of the community, the various types and levels of risk assessed across the city, demand for services, and community expectations. This has never been more evident than during the unprecedented Coronavirus pandemic, where our staff have remained dedicated, resilient and steadfast in serving and protecting our citizens, while continuing to focus on our shared values of Pride, Professionalism, Teamwork and Respect.

The COVID-19 pandemic had considerable impact on the Calgary Fire Department's service to citizens in 2021. As the busiest year in the history of the Fire Department, firefighters made 120,844 apparatus responses to 70,645 calls for help, a 13 per cent increase in responses and a 16 per cent increase in calls compared to 2020.

With COVID-19 restrictions and fewer opportunities for community risk reduction initiatives including inspections, enforcement, and fire safety education, the number of fire and fire-related calls (including ruptures, explosions, investigations and false alarms) increased by five per cent, with the number of fires increasing by 48 per cent, representing the highest number of fires recorded since 2009. Not only did the number of times firefighters responded to a fire or fire-related event increase, so too did the number of responses to critical medical interventions which saw a 22 per cent increase over 2020, including 58 per cent more overdose and poisoning calls for help. Despite the increase of incidents and resulting strain on our resources, response time performance remained consistent in 2021.

Aligned with the broader corporate direction and focus of enhancing the delivery of high-quality public safety services valued and expected by Calgarians, in 2022 we will:

- Ensure employee well-being by focusing on a positive work environment, training and physical and psychological safety.
- Be increasingly innovative, flexible and proactive in the way we plan for and respond to community risk and emergencies.
- Build leadership competency and capacity.
- Increase positive impacts CFD makes in the community and explore partnership opportunities for service delivery.
- Investigate and capitalize on opportunities for financial sustainability.
- Implement a collaborative approach for delivering the Calgary Fire Department's 2023-2026 Service Plans and Budgets.

With the changing and uncertain nature of the COVID-19 situation still upon us, the Calgary Fire Department will continue to monitor the event and make decisions on how best to manage risks through our safety and response protocols, ensuring our members have the information and equipment needed to help protect themselves, their families and our citizens. We will maintain our essential services to citizens, and while we work on recovery planning and returning to a new normal, will continue to support our members and ensure we maintain a viable workforce.

Steve Dongworth

A stylized, handwritten signature in black ink, appearing to read 'SD' followed by a flourish.

Fire Chief

# Calgary Fire Department 2021 Annual Report

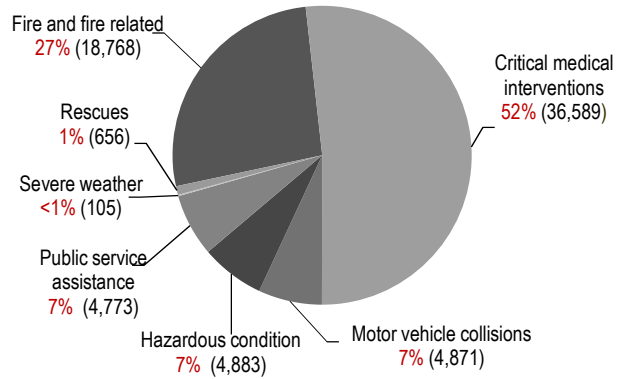
## Trends we're watching

<b>42</b> fire stations (41 in 2020)	<b>1,507</b> employees (1,492 in 2020)	<b>1,326</b> frontline first responders (1,313 in 2020)	<b>1.31M</b> people protected (1.28M in 2020)
<b>16 per cent</b> increase in call volume over 2020	<b>48 per cent</b> increase in fires over 2020	<b>25</b> fire-related civilian injuries (36 in 2020)	<b>2</b> fire-related civilian deaths (5 in 2020)
<b>\$791.7M</b> estimated value saved from fire (\$701.2M in 2020)	<b>52 per cent</b> of calls were critical medical interventions (49 per cent in 2020)	<b>13 per cent</b> increase in pandemic-related calls	<b>57 per cent</b> increase in psychiatric and suicide related calls
<b>49 per cent</b> more Naloxone administered	<b>36,589</b> critical medical interventions	<b>14,190</b> fire inspections completed (16,500 in 2020)	<b>271</b> high-risk occupancy inspections completed (338 in 2020)
<b>36 per cent</b> of the time additional inspections needed for compliance (30 per cent in 2020)	<b>828</b> fire investigations completed (594 in 2020)	Investigators report significant increase in trash and dumpster fires, arsons	<b>58,979</b> vulnerable people engaged in fire safety education
<b>58,913</b> higher-risk people receiving fire safety lessons (3,764 in 2020)	<b>57,392</b> school-based education in high-risk areas (2,402 in 2020)	<b>1,500</b> 100 <sup>th</sup> birthday drive-by greetings (8,676 in 2020 - children incl.)	<b>99 per cent</b> of citizens satisfied with our work

## Incident Responses

Overall, in 2021, the number of incidents we responded to is 16 per cent higher when compared to 2020, with a total of 70,645. Figure 1 shows the breakdown by major incident type and Table 1 shows the incident trends.

Figure 1: 2021 Responses by Major Incident Type



## Critical Medical Interventions

Critical medical interventions (CMI) now represent approximately 52 per cent of our total call volume. To break this down, members responded to 58 per cent more overdose and poisoning calls than in 2020, 39 per cent more opioid- and fentanyl-related calls and administered 49 per cent more Naloxone in 2021. We also responded to a 57 per cent increase in psychiatric behaviour and suicide attempt-related calls when compared to 2020, and a 13 per cent increase in pandemic-related calls.

With Alberta Health Services dealing with more calls for emergency medical service across the province, the CFD anticipates this will impact service to citizens and additional workload. The average on-scene time for a medical incident was 12 minutes and 47 seconds, which is longer than in 2020.

When crews are committed at a call, they are unavailable to respond to other emergencies. When this happens, Calgary 9-1-1 Fire Dispatch calls in the closest available crew, which may take longer to arrive because they have farther to drive. As a result, crews arrive outside of the target response time. This increases the risk to people, property and first responders.

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Table 1: Major Incident Trends, 2020-2021

Major Incident Type	Incidents		% change	Trend
	2020	2021		
Fire	1,420	2,098	48%	↑
Rupture and explosion	92	97	5%	↑
Critical medical intervention	29,996	36,589	22%	↑
Motor vehicle collision	3,497	4,871	39%	↑
Rescue	610	656	8%	↑
Hazardous condition	4,755	4,883	3%	↑
Public service assistance	4,106	4,773	16%	↑
Investigation	5,280	5,312	1%	↑
False alarm	11,067	11,261	1%	↑
Severe weather	126	105	-17%	↓
Grand Total	60,949	70,645	16%	↑

## Fire and Fire-Related Responses

Fire and fire-related responses, including investigations ruptures/explosions, false alarms and investigations made up over 26 per cent of our calls. Fire incidents were up by the highest percentage, with a 48 per cent jump from 2020. Possible explanations include more people at home and fewer opportunities for community engagement and fire safety education during the pandemic.

In 2021, we saw six large loss fires, totalling approximately \$14M in property loss:

- Marlborough First Calgary Financial fire (\$5M loss)
- Sunnyside apartment building fire (\$2.5M loss)
- Haysboro Arby's fire (\$2.5M loss)
- Sherwood house fire (\$2.1M loss)
- Lafarge Industries fire (\$1M loss)
- Triad Engineering fire (\$1M loss)

The total estimated value saved from all fires in 2021 was \$791.7M compared to \$701.2M in 2020.

## Fire Fatalities and Injuries

Sadly, there were two civilian fire-related fatalities (five in 2020) in 2021. There were 25 fire-related injuries (36 in 2020), with the majority of these resulting from home fires. According to MBN Canada 2020, Calgary's civilian injury rate of 1.76 per 100,000 population is significantly lower than the median rate of 6.43 amongst the major Canadian cities polled.



The CFD wants all homes to have at least one working smoke alarm on every level, including the basement.

Kitchen fires remain the leading cause of fires in Calgary. Properly maintained smoke and carbon monoxide alarms continue to be the first line of defense and are paramount in the reduction of life and property loss. The CFD recommends people remain diligent in never leaving their cooking unattended and continue to be proactive by developing and rehearsing a home escape plan with their household.

## Employee Recruitment and Retention

In 2021, our 1,507 employees delivered fire and community services to almost 1.31 million Calgarians. About 95 per cent of our employees are uniformed staff, and of the total workforce, 88 per cent provide front line emergency services to citizens.

The CFD has a mandatory retirement age for its uniformed, non-management employees at age 60. In 2021, total retirements, resignations and terminations were 51. This makes the total employee turnover rate three per cent. In 2021, 41 of the 51 members who left the CFD, retired. This represents a retirement rate three per cent, an increase of two per cent compared to 2020.

As part of recruitment, the CFD conducted active recruitment outreach in various diverse communities in and around Calgary. In 2021, 75 new recruits completed training with COVID-19 protocols in place.

Table 2: Workforce Overview

Workforce Overview	2019	2020	2021
Total employees	1,474	1,492	1,507
Frontline firefighters	87%	88%	88%
Management and day staff	13%	12%	12%
Retirement rate	2%	1%	3%

## Operating and Capital Budget

The vast majority of the CFD's budget is a relatively fixed cost. Salaries and wages account for 95 per cent of the total operating budget. Next, are the costs of apparatus and equipment, including operation and maintenance. The remainder of the budget covers programs and services, one-time costs, and non-fixed cost spending.

Table 3: Budget Comparison

Operating and Employees	2019	2020	2021
Operating budget	\$224.0M	\$228.8M	\$233.7M
Capital budget	\$27.7M	\$35.7M	\$49.8M
Capital expenditures	\$19.5M	\$8.9M	\$18.6M

Our operating funds are planned, budgeted, and approved as part of The City's multi-year business planning and budgeting process.

In 2021, our adjusted Council-approved operating budget was \$233.7 million excluding a onetime transfer to reserves. As part of the planned budget process, the CFD had an increase in 2020 of 20 budgeted, full-time employees for two coverage engines to reduce the gap to achieve an Effective Response Force (ERF) for multi-alarm incidents. This investment resulted in an almost four per cent improvement in our ERF performance goal of arriving within 11 minutes, 90 per cent of the time to serious and escalating fires, compared to 2020.

Despite the addition of 20 frontline positions, the CFD is running very light and lean considering the population increase. CFD's operating cost per \$1,000 property value is \$0.86, one of the lowest of Canadian major municipalities and considerably lower than the median of \$1.12 (MBN Canada).

CFD opened Station 44, a new temporary emergency response station in Livingston to provide much needed service to the Northeast community. The station is a leased building from the Livingston Community Association. Cost for the temporary station was \$1.8 million including site work and equipment.

Our capital budget provides for the maintenance of our physical assets, for life-cycling of our facilities and equipment, and for needed apparatus, equipment, technology, and new station construction. In 2021, our Council-approved capital budget allocation was \$49.8 million.

## Protecting Our Members

### Employee Health and Safety

Our Health and Safety team continued to ensure that firefighters were able to effectively perform in their roles and mitigate risk through COVID-19. We successfully conducted all contact tracing and managed all COVID-19-related issues for the CFD by providing members with information and direction related to exposures, testing and status/trending reports. This included contact tracing for 42 incidents of COVID-19 in the workplace. This led to 72 COVID-19 positive members in the workplace and contacting 441 members resulting in 171 members requiring isolations. The Health and Safety team also followed up on 402 patients from medical incidents who were reported by Emergency Medical Services to be COVID-19 positive. This led to personal protective equipment auditing and the ongoing review of medical calls with positive COVID-19 patients to enable quicker identification of close contacts.

### Wellness

Our Wellness team works diligently to support our members. In 2021, they were able to maintain a high level of care to members during COVID-19 despite the Wellness Clinic being temporarily closed to in-person assessments until mid-June. After re-opening for in-person assessments, they completed 59 per cent, or 876, of wellness medicals and 76 recruit medicals.

Due to COVID-19-related closures, the Wellness Clinic lost 783 medical appointments, and 556 active members missed their 2021 wellness appointments.

Throughout 2021, our Wellness Clinic psychologists remained available and responsive by phone and virtually to help with members' psychological needs. Further to the death of CFD Firefighter Derek Sharman, our psychologists provided rapid grief support to members and produced a grief support video.

Virtual fitness programs and nutritional assessments were offered throughout the year.

### Respect and Inclusion

In 2021, the CFD developed an Inclusion Competency Framework and Inclusion training plan. The framework defines the knowledge, skill and ability needed to work and lead in an inclusive fire service.

The first of three modules of the Inclusion 101 e-learning Program were launched.

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The CFD supported Indigenous Truth & Reconciliation through our creation of Every Child Matters Orange Ribbon decals for all City vehicles. The decals, which now adorn the back of CFD's response apparatus, help raise awareness of the harm done to Indigenous peoples and their communities. The CFD also participated in the planning and execution of The City's National Day for Truth and Reconciliation which included an aerial flag salute.

Women firefighters, in collaboration with the Calgary Public Library, developed and facilitated four virtual sessions of the Junior Fire Sisters Camp in 2021. The camp shared with girls aged 13 to 17, a glimpse of what it's like to be a woman firefighter. The program is designed to empower and build teen girls' confidence and resilience through mentorship from remarkable CFD role models.

## People and Culture

Great strides were made in 2021 as CFD continued to honour our people and elevate the voices of those from under-represented groups. We took efforts to apply an approach of looking through an inclusion lens at systems, policies, and current ways of doing things. With the work of the Joint Human Relations Council and the Advisory Council on Inclusion, our goal of demonstrating value for each of our people is contributing to a culture of acceptance and belonging.



Station 17 Charlie Platoon Parade Day, September

## Training

Training is the backbone of the CFD. The investment produces a well-prepared team that, through repetition, increases the speed of an operation and enhances proper execution while reducing injuries amongst responders.

In 2021, the Fire Training Academy produced and implemented an Alternative Learning Path in conjunction with the running of two recruit classes. This program further supports the skill development and success of our recruits in their training experience.

The Fire Training team launched 'The Fire Service Network', a platform with multiple, online presentations and webinars, to expand access to virtual training for members. The platform was recognized as a finalist in The City of Calgary's One City Awards as a tremendous project that exemplifies safety and efficiency in our corporate culture.

Other notable accomplishments include the delivery of the new Qualified District Chief Training program and the rollout of the new Training Compliance Record system.



Low slope training, April



## Protecting people, property and the environment

### New Equipment and Apparatus

In 2021, the CFD commissioned nine Spartan Gladiator engines to replace three aging engines that will be decommissioned and added six new apparatus to the fleet for new stations. These apparatus are the workhorse of the CFD fleet with powerful engines, and maximum room for responders, equipment, and storage.



Two of the CFD's new Spartan Gladiator Engines

### Growth Response Stations

In 2021, the CFD opened the Livingston Temporary Emergency Response Station No. 44, at 1248 Livingston Way NE. This station now services the growing communities of the Keystone Hills area.



New Livingston Response Station in N.E Calgary

As of January 2022, the CFD does not anticipate any new stations to open during the upcoming year, however, Belvedere Temporary Response Station No. 45, located within the East Hills Shopping Centre, is slated to be opened and operational in the first half of 2023.

As communities continue to develop, we are working to ensure adequate emergency response coverage is available to meet citizen needs supported in our Council approved targets and The City's Growth Management Plan.

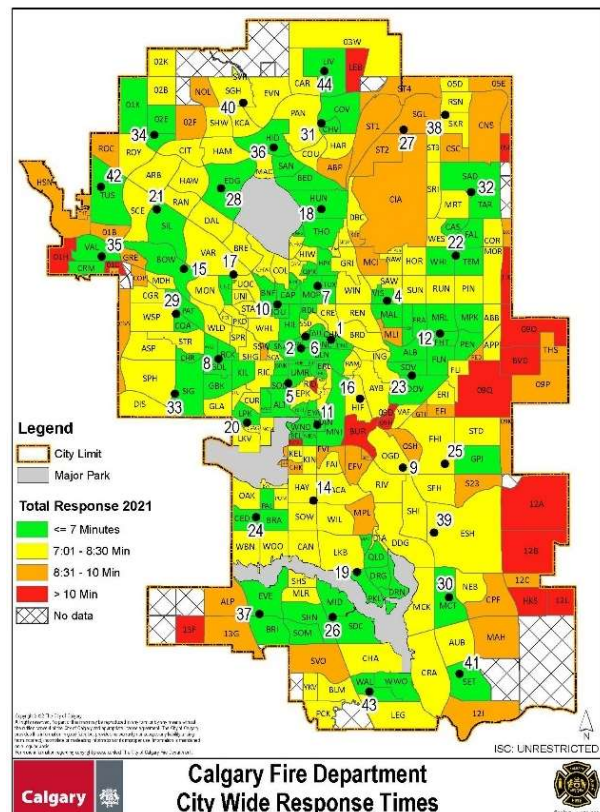
## Fire and Emergency Response Performance

The CFD has a target response time of arriving within seven minutes, 90 per cent of the time at fire and fire-related incidents, and within six minutes and 30 seconds at critical medical intervention incidents. This means that for nine out of 10 fire and fire-related calls, we aim to arrive within seven minutes, and within six minutes and 30 seconds at medical calls.

The 90th percentile is used instead of an average as it more closely reflects what citizens can realistically, reliably expect from CFD in terms of response time.

Map 1 reflects 70,645 response times to incidents responded to 2021. Overall, the map shows areas where we were able and not able to respond within response time targets.

Map 1: City Wide Response Times



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Table 4 shows the percentage of time and 90<sup>th</sup> percentile performance of a first-in unit arriving on scene at a priority incident in 2021, and in comparison to the previous year.

Table 4: Response Times by Major Incident (First-in)

First-In Performance (First-in engine performance is for fire and fire-related) (First-in unit is for medical, technical rescue, hazardous material)	Target Arrival Time	2020		2021	
		% within	90 <sup>th</sup> percentile	% within	90 <sup>th</sup> percentile
Fire and fire-related	7 min.	84%	07:34	84%	07:40
Critical medical intervention	6 min. 30 sec.	86%	06:56	83%	07:08
Technical rescue	7 min.	73%	09:07	73%	08:36
Hazardous material	7 min.	76%	08:28	72%	08:38

Our long-term performance benchmark is for 90 per cent of first-in units to arrive on scene within six minutes and 30 seconds at critical medical intervention incidents, and within seven minutes for all other incidents. As shown in Table 4, a first-in engine arrived within seven minutes 84 per cent of the time at a fire and fire-related incident. Our performance at the 90<sup>th</sup> percentile in 2021 was seven minutes and 40 seconds (six seconds slower than 2020). This means, on average, it is taking the CFD longer to arrive on scene with an engine that carries its own limited water supply, as well as the specialized equipment needed to establish a continuous water supply to fight a fire.

### Flame Spread

Our current public safety outcome is to contain 67 per cent of fires to the room or object of origin. In 2021, we limited flame spread in 68 per cent of building and structure fires, an improvement from 66 per cent of fire spread limited in 2020. This represents an increase in the percentage of time flame spread was contained to room or object of origin.

Table 5: Flame Spread

Flame Spread at Building/Structure Fires	2020	2021
Percentage of flame spread confined to room or object of origin	66%	68%

### Initial Positive Action

Essentially, Initial Positive Action (IPA) is the first action undertaken by the first responder, to address or minimize the impact of an incident. The IPA measure is collected for critical medical interventions, motor vehicle collisions and fire calls. This data also assists in resource planning, station planning, and crew training, including district familiarization and situational awareness, as well as helping to plan reliable and responsive deployment strategies. At fire incidents, time to IPA increased by one minute seven seconds over 2020, which means, on average, firefighters began tactical response slower. At motor vehicle collisions, time to IPA was 26 seconds slower in 2021 over 2020.

Table 6: Initial Positive Action (IPA) Performance

Average Time to IPA	2020	2021
Fire incidents	03:16	04:23
Critical medical intervention incidents	02:39	02:35
Motor vehicle collision incidents	01:58	02:24

Capturing time to IPA demonstrates the challenges and impact on response time performance that crews experience. These include responses to multi-building condominium units and institutions, address delays and errors when responding to incidents, and the increase in densification in high-rise, multi-family and multi-building complexes within the inner city and along transportation corridors.

With critical medical interventions, we are shy of achieving our long-term benchmark of arriving within six minutes and 30 seconds, 90 per cent of the time. Our performance at the 90<sup>th</sup> percentile in 2021 was seven minutes and eight seconds (12 seconds slower when compared to 2020). In 2020, the total response time benchmark for critical medical interventions reduced from seven minutes to six minutes and 30 seconds to reflect the portion of call answering time that is unavailable from Alberta Health Services. IPA decreased four seconds over 2020.

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## Effective Response Force

In 2021, we expanded the definition of a full first-alarm assignment (Effective Response Force or ERF) to include a minimum of two engines and one aerial. Previously, ERF was the assembly of 12 firefighters regardless of the vehicles used. ERF is required at serious and escalating incidents to ensure adequate resources and is required to be on scene within 11 minutes.

Table 7 shows that in establishing an ERF at high-risk fire suppression calls, our performance for 2021 was 70 per cent, short of our Council-approved annual target of 79 per cent, and short of our long-term benchmark of 90 per cent. In 2021, performance at the 90th percentile was 13 minutes and 20 seconds (five seconds faster than 2020).

This represents an almost four per cent improvement in the ERF performance forecast of 11 minutes, 90 per cent of the time for serious and escalating fires, compared to 2020.

Historical trends, including resource and apparatus staffing constraints, increasing call volumes, and incident density are likely to factor heavily on performance in the future. The CFD will continue to monitor ERF performance as post-pandemic conditions stabilize.

Table 7: ERF Response Time Performance

High-Risk Fire Suppression ERF (Minimum two engines and one aerial)	2020	2021
Percentage of responses within 11 minutes	66%	70%
90th percentile time	13:25	13:20

## Fire Inspections and Enforcement Performance

In 2021, despite pandemic restrictions, Safety Codes Officers undertook 14,147 inspections, in addition to regular permit and compliance monitoring services, to meet legislated obligations under The City's Quality Management Plan – a great example of teamwork and collaboration.

The risk-based inspections pilot continues to advance with 204 high-risk residential building inspections and another 389 re-inspections completed on those buildings, to ensure all are compliant with the current fire code.

In addition, with the decreased 3-1-1 service requests, Fire Safety Codes Officers were utilized to complete unscheduled inspections in all the remaining high-risk residential buildings.

Even as the COVID-19 pandemic forced many businesses to suspend regular operations over the year, Fire Safety Codes Officers worked with City of Calgary stakeholders and the business community to maintain safety code compliance as more operations pivoted to different models. The CFD also worked with Alberta Gaming and Liquor Corporation and Alberta Health Services to rapidly approve permits for outdoor spaces, including patios.

To limit interactions with the public and prevent transmission of COVID-19, no fire safety reports were completed by firefighters in 2021. Fire Safety Codes Officers continued to find avenues to address public concerns. Response crews plan to resume inspections, when able, and complete paperless fire safety reports for all buildings where an approved business license holder exists, when increased public contact is deemed safe as per COVID-19 restrictions.



Fire inspections help minimize fire-related risks, and protect lives, property and the environment.

In 2021, work of our Fire Enforcement Compliance Team culminated in significant industry impact. A Calgary fire protection company and its owner were charged under the Fire Safety Codes Act for multiple offenses of conducting work on life safety systems using unqualified or untrained staff. The company was found guilty on 15 counts, and the owner on four counts, with each being fined \$270,000 and \$30,000 respectively. Some of the employees and some of the businesses where the work was conducted were also charged and found guilty.

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In 2019 a re-inspection fee was implemented to deter multiple repeat inspections, yet the per cent of occupancies requiring re-inspection continued to trend upward in 2021. The consequences of this trend include decreased capacity to inspect additional properties, potentially lower completion rates for 3-1-1 customer service requests, and fewer proactive risk-based inspections.

In the past two years, there were more inspections performed on higher risk properties that had not been inspected for quite some time. These occupancies tend to have a higher rate of re-inspection to eventually achieve compliance. There is concern that occasionally, the re-inspection fee is not an effective deterrent, particularly if the cost of resolving code issues is substantially higher than the fee for multiple re-inspections. The team is investigating options for rectifying this situation.

As some commercial spaces remain closed or unoccupied, Fire Inspections and Enforcement continue to face challenges on multiple fronts. The decline in the number of new, or existing businesses, is lowering demand for services that generate funding for vital positions within this section of the department. Many property and business owners are also allowing inspections and maintenance of life safety systems to lapse. Aside from the increased safety risk, there may be an overwhelming demand for inspection services once pandemic restrictions are lifted.

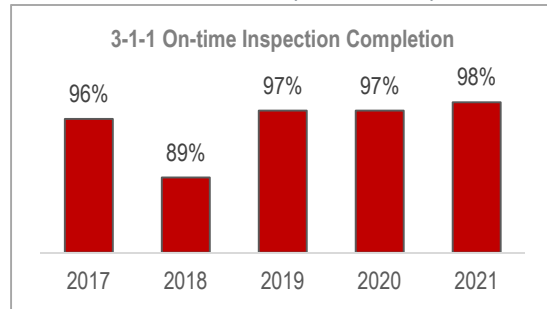
Table 8 shows inspection activities decreased by 10 per cent in 2021, also a reflection of COVID-19.

Table 8: Inspection Activity By Year



Table 9 shows District Fire Safety Codes Officers' on-time completion rates for request and complaint inspections remained consistent at 98 per cent in 2021.

Table 9: 3-1-1 On-Time Inspection Completion



### Fire Safety Education Performance

Since the pandemic began, the team of three Community Safety Officers redesigned many of the CFD's program resources to reduce the risk of fire in homes. Applying a number of different methods, the Community Safety team targeted high-risk audiences who will benefit from fire-safety information and resources, to assist with the risk-reduction process.

Most programs were delivered virtually, and public service messages and tips were promoted through social media and The City of Calgary website.

In 2021, the school fire drill program was moved to the Calgary 3-1-1 platform. Via the online request system, school principals can now request the presence of their local fire station and crew to attend fire drills. This should ultimately result in a significant increase in the attendance of firefighters at school fire drills in Calgary.

Meeting firefighters and learning about their role in society, installing fire alarms, playing educational games, and practicing a fire escape plan are all ways to help children understand fire safety basics.

Playing with fire is the leading cause of death for pre-school aged children. The focus of the Youth Fire setters Intervention Referral and Education Services (Y-FIRES) Program is to alter fire-setting behavior in children through education and referral.



Crew from Station 1 meeting with residents of Willow Park on the Bow during Seniors Week



## Calgary Fire Department 2021 Annual Report

In 2021, Community Safety Officers continued their efforts to deliver the Y-FIRES Program using video and audio meetings to educate youth fire-setters and their families. In 2021, 12 clients were educated, compared to 15 youth fire setters in 2020. Our belief is that the virtual education is not as effective as face-to-face education. In 2022, Community Safety Officers will meet with the child and family, in-person, at a safe location where both parties can take all pandemic safety measures.

In the second half of 2020, the CFD received approval from The City of Calgary Innovation Fund, to develop a state-of-the-art virtual reality program. The financial support also included corporate sponsorship. In 2021, the first of three simulations for vulnerable populations were completed. Language support for this initiative will include Spanish, Arabic, Tagalog, French, Punjabi, Cantonese, and the Blackfoot languages.

It will also include on-screen text, in the event the user is deaf or hard of hearing. The system will also have the capability to be delivered to Calgary's aging population with programming directed towards fall prevention education.

This is a huge step forward for the Community Safety section as this type of technology in the fire service is relatively unique. The programming also includes built-in surveys that will provide information on the uptake of education by the user and provide demographic information to help guide future outreach.

Table 10: 2021 Fire Safety Education Results

Fire safety education strategies	2019	2020	2021
Total vulnerable citizens engaged	64,423	4,511	57,861
Total house visits by crews	26,021	0	0
Total citizen engagements	46,767	3,764	58,913
Total people contacted via virtual platforms	Not collected	Not collected	57,489
Social media reach during Fire Prevention Week	Not collected	300,724	253,889
School fire drills	204	43	0
School-based education	26,309	2,402	57,391
Drive-by birthday greetings	n/a	8,676	1,500

## 2021 Notable Moments



January – We stood with the Calgary Police Service to remember Sergeant Andrew Harnett who was killed in the line of duty



May - Together, we celebrated the life and contributions of CFD Firefighter Derek Sharman.



June – Crews visited several seniors' facilities around Calgary during Senior's Week.



June – Women firefighters participated in four virtual sessions of the Junior Fire Sisters Camp to empower and build teen girls' confidence and resilience through mentorship from remarkable CFD role models.

## Calgary Fire Department 2021 Annual Report



July – We joined forces with the Canadian Snowbirds for their Calgary Flyover in a salute to front-line health-care workers, first responders, essential workers, and all people doing their part to limit the spread of COVID-19.



September - We honoured our city's fallen firefighters, during our annual memorial ceremony at The City of Calgary Municipal Building, in the Police Officers and Firefighters Tribute Plaza.



August – We raised the Pride Progress Flag outside the CFD to celebrate Pride in our city as a sign of our commitment to learning, growing, and taking purposeful steps to becoming a more equitable and inclusive workplace.



September - We led the development and distribution of The City's orange ribbon stickers to remember children who died at residential schools.



August – We instituted CFD Flag Day as a celebration of our history, our symbolism, our values, and our fallen.



September - We joined with the community in a spirit of reconciliation and hope because every child matters.



September - We joined the Calgary Hitmen to promote Fire Prevention Week and the Great Neighbour movement.