

Calgary



Calgary Fire Department

Vision

To be an international fire service leader.

Mission

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

Values

Pride, professionalism, teamwork and respect.

2018 ANNUAL REPORT

Message from the Fire Chief



We know that our communities trust and value Calgary Fire Department (CFD) services. In the 2018 Citizen Satisfaction Survey, CFD received a 100 per cent importance rating and a 99 per cent satisfaction rating. In addition, 95 per cent of respondents stated that CFD personnel are courteous and professional. Of notable interest, 43 per cent – five per cent more than 2017 – of respondents stated that The City should invest more in CFD, and only 1 per cent of respondents wanted less investment.

This is one of the largest increases in terms of desired investment in the 2018 survey. These results show citizens understand the critical need for CFD to grow with the city, address increases in call volume and the continued need to deliver prompt and effective customer service.

With Calgary's growth and new community development, we will continue to see new and emerging issues that will require a flexible and proactive response environment. In 2018, service demands continued to increase to 63,561 calls, with critical medical intervention calls representing approximately 47 per cent of our calls and opioid calls increasing 38 per cent over 2017.

Our priorities for 2019 include continuing our focus on the mental health of our members, closing the gap in effective response times and receiving accreditation through the Commission of Fire Accreditation International (CFAI). Overall, adapting to city growth will be a challenge; however, CFD will continue to maintain its high quality of service and look for opportunities to build relationships and enhance services to our communities.

Steve Dongworth
FIRE CHIEF

The CFD is committed to providing the following three lines of services

Fire and Emergency Response

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

Fire and Life 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 Inspection 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.

EMPLOYEES

Our people are key to our success and are our most important assets. They protect and safeguard citizens by delivering fire and community safety services to Calgarians living and working in communities across the city.

In 2018, our **1,517** employees delivered fire and community services to **1.27 million** Calgarians.

93 per cent of our employees are uniformed staff, and of the total workforce, **87 per cent** provide frontline emergency services to citizens.

DELIVERING FIRE AND LIFE SAVING EDUCATION

The number of residential fires and fire-related injuries within Calgary is trending upwards. The occupant's reaction to the fire is a strong factor in survivability.

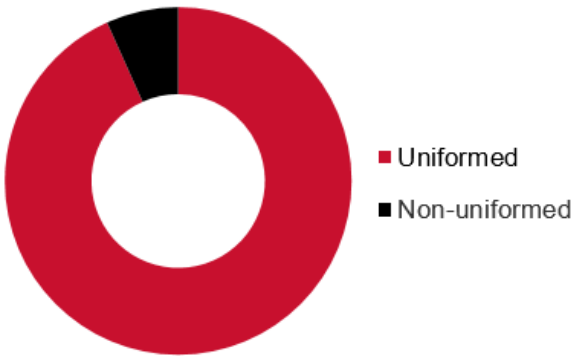
Our most vulnerable are children, seniors, new Canadians and people with mobility challenges. Public fire safety education and training are the key to reducing the fire problem and reducing fire injuries and deaths.

We strive to reach one in nine Calgarians annually with safety information through non-emergency initiatives such as public service announcements, news stories, social media, face-to-face engagement and The City website.

CITIZEN SATISFACTION

We are meeting the expectations of citizens as we continue to refine our services to meet their changing needs. We provide services as efficiently and effectively as possible to ensure we demonstrate responsible fiscal management while never losing sight of what is most important – the safety of our citizens and firefighters.

I am satisfied with the service provided by the Fire Department	99% agree
The Fire Department's programs and services are important	100% agree



We reach more than one in nine Calgarians annually through community fire and life safety initiatives.

Prevention and enforcement

Ensuring applicable fire and building codes are in place	1,476 plans reviewed
Ensuring compliance with the Alberta Building and Fire Codes	5 charges resulting in close to \$187,000 in fines
Ensuring occupant and property safety in businesses and facilities	15,054 inspection activities 21,118 firefighter audits
Ensuring bars, nightclubs and special events follow safety laws and regulations	182 locations visited reaching 69,547 patrons

Education and public assistance

Firefighter in-station and community interactions	Over 60,000 people engaged
Home Safety Program – bringing safe practices and fire prevention education to citizens	24,689 homes visited
Targeted fire and life safety education programs	32,954 high-risk citizens visited
After the Emergency Program – providing caring support to citizens following a crisis	542 residences visited
School-based education in identified high-risk communities	20,190 students engaged
Youth Firesetter Intervention Referral and Education Service	34 youth clients
Fire Prevention Week	2,100 event attendees
Firefighter story time	670 events
Park and Play	3 events reaching 135 students
School Fire Drills	37 schools visited
Fire Safety Education Trailer	Attended 15 schools reaching 1,288 students, 1 Calgary Housing complex, and 15 community events reaching an estimated 26,678 people

Seconds Matter?

Every fire is different

Fires burn differently depending on materials involved, fuel sources and weather conditions, such as wind. The latest research on sprinklers shows that they are effective at containing indoor residential fires about 90 per cent of the time, but do not address other fire risks including external fires and attic fires. Of all the fires that Calgary Fire encounters on a residential property, approximately 42 per cent would not be mitigated by sprinklers as the origin of the fire is outdoors, or within the home where sprinklers have not been installed.

Fires can double in size every 30 seconds

Typically, new home construction results in faster flame spread beyond the room of origin, and can spread to nearby structures. According to the National Fire Protection Association (NFPA), fires can spread up to 1,100 per cent in the first four minutes.

Fire can spread to multiple homes in under 10 minutes

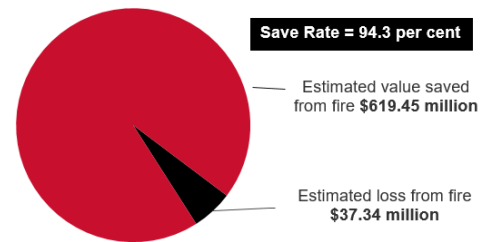
Fire personnel and equipment must arrive quickly as fires spread very rapidly and can flashover in less than five minutes. According to NFPA, the probability of civilian death increases by 1,090 per cent when a fire moves beyond the room of origin, and the probability of civilian injury and average dollar loss per fire more than doubles. Within Calgary, the probability of civilian death can increase by 243 per cent when the fire moves beyond the room of origin and under the same circumstance, the dollar loss due to fire increases by 1,736 per cent. Calgary has experienced fires that range from staying contained to the room of origin to expanding to two or three homes in very short periods of time. In 2018, 22 residential fires spread beyond the structure or origin.

Every second counts when it comes to saving lives

In the case of critical medical interventions, such as cardiac arrest, according to the American Heart Association, each minute a patient waits for cardio-pulmonary resuscitation, the chance of survival is reduced by up to ten per cent, and after ten minutes, the chance of success from defibrillation is only five per cent. Treatment within 3 to 5 minutes of a heart attack increases a patient's survival rate by up to 70 per cent.

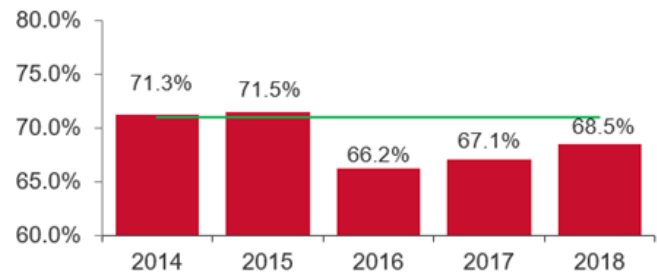
FIRE LOSS / SAVE RATE

Although there was an estimated \$37 million in fire loss, firefighters saved an estimated \$619 million in property and content value from fire loss, a save rate of **94 per cent**.



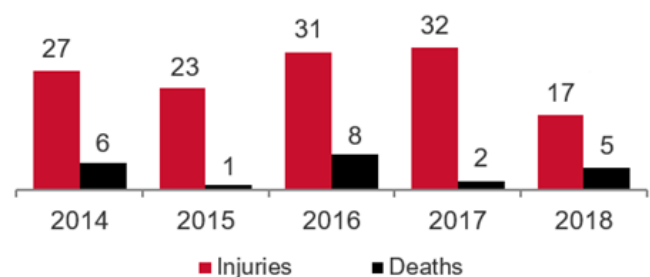
FLAME SPREAD

Our current public safety outcome is to contain 71 per cent of fires to the room or object of origin. In 2018, we limited fire spread in **69 per cent** of building and structure fires.



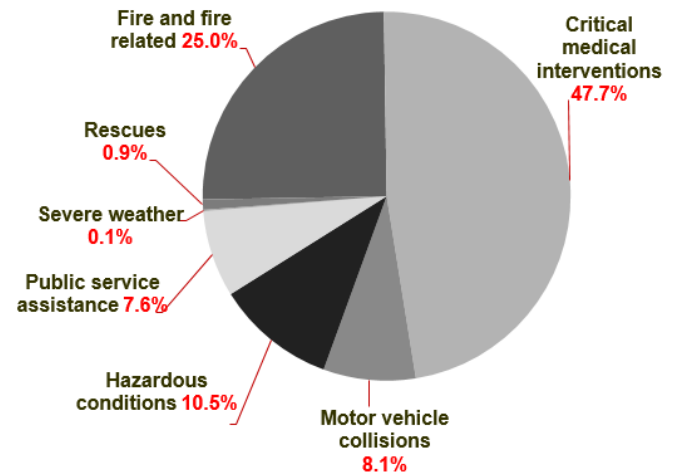
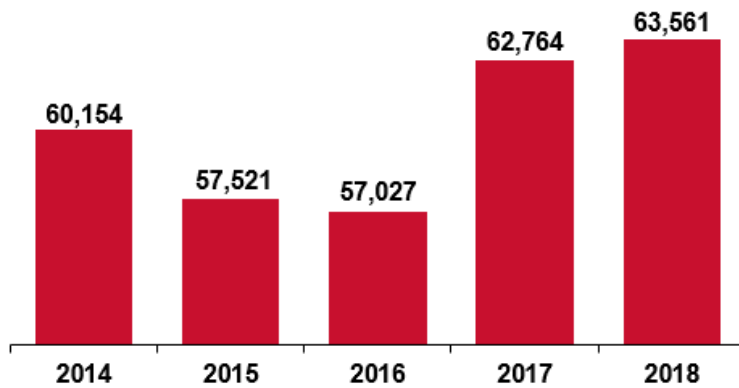
CIVILIAN INJURIES AND DEATHS

Between 2017 and 2018, there was a 47 per cent decrease in fire-related injuries. Despite our efforts, five citizens lost their lives to fire in 2018.



	2014	2015	2016	2017	2018
Total population	1,195,194	1,230,915	1,235,171	1,246,337	1,267,344
Number of fire incidents	1,843	1,620	1,277	1,344	1,342
Fire incident rate (per 1,000 population)	1.5	1.3	1.0	1.1	1.1
Loss from fires (est.)	\$33,241,618	\$44,375,810	\$31,880,529	\$57,782,544	\$37,342,817
Fire loss per capita	\$27.81	\$36.05	\$25.81	\$46.36	\$29.47
Value of property affected by fire (est.)	\$1,171,751,328	\$2,673,696,611	\$664,770,617	\$800,817,585	\$656,792,404
Value saved from fire (est.)	\$1,138,509,710	\$2,629,320,801	\$632,890,088	\$743,035,041	\$619,449,587
Percentage of value saved	97%	98%	95%	93%	94%

RESPONSES



In 2018, firefighters responded to **63,561** calls where citizens needed help, a **1.3 per cent increase** over the previous year.

Calls for critical medical interventions increased 6.8 per cent from the previous year, accounting for over 47 per cent of our total calls in 2018.

	2014	2015	2016	2017	2018
Fire and fire-related	15,148	15,269	14,780	15,694	15,915
Critical medical interventions	25,075	25,001	25,120	28,397	30,317
Motor vehicle collisions	4,011	4,679	4,759	5,380	5,153
Hazardous conditions	9,852	7,821	7,214	6,864	6,692
Public service assistance	4,691	3,873	4,301	5,728	4,833
Severe weather	793	185	173	85	80
Rescues	584	693	680	616	571
Total	60,154	57,521	57,027	62,764	63,561

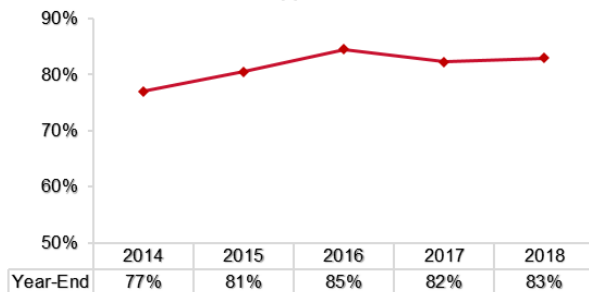


RESPONSE TIME PERFORMANCE

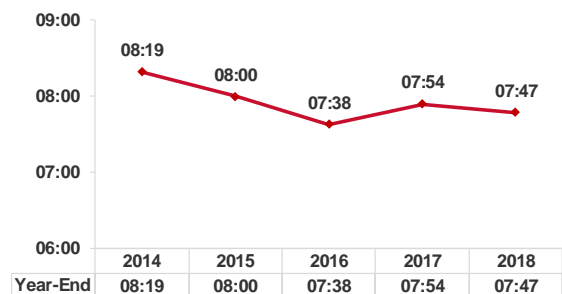
Although we exceeded our annual short-term total response time target for the arrival of a first-in unit at fire suppression and critical medical intervention incidents, it is still taking over two minutes longer than the Council-approved long-term target to assemble 12 firefighters on scene for fire incidents, 90 per cent of the time.

Even though call volumes are higher than ever before – and continue to increase each year – we are getting closer to our long-term target of arriving on-scene within seven minutes, 90 per cent of the time.

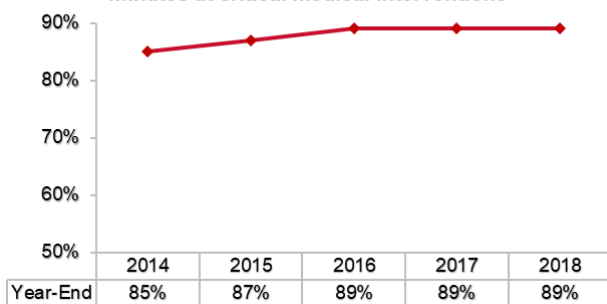
First-in unit emergency response within seven minutes at fire suppression incidents



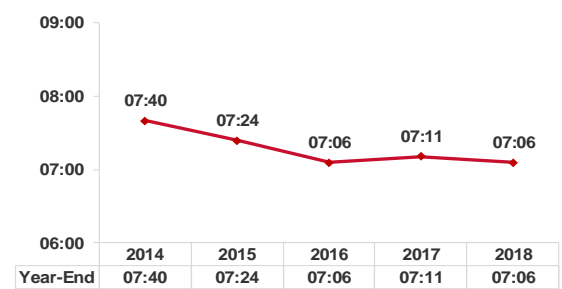
First-in unit total response time (90th percentile) fire suppression



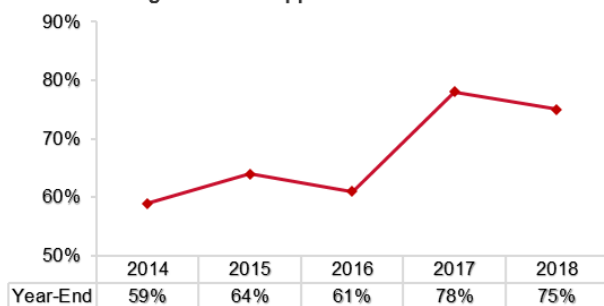
First-in unit emergency response within seven minutes at critical medical interventions



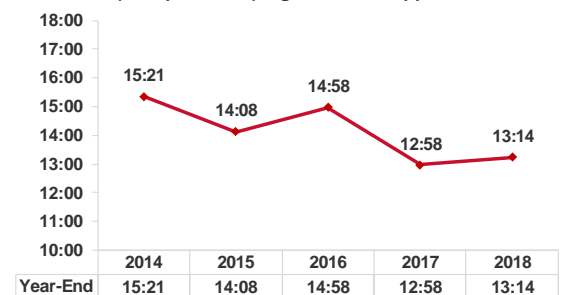
First-in unit total response time (90th percentile) critical medical interventions



Full first-alarm assignment within eleven minutes at high-risk fire suppression incidents



Full first-alarm assignment total response time (90th percentile) high-risk fire suppression



We strive to anticipate and respond to the changing needs of our community

Providing firefighters with appropriate safety practices and training increases their safety and enables them to provide quality service to Calgarians. With the ongoing Fentanyl crisis, firefighters have been provided the nasal spray Naloxone and trained on how to administer it to opioid overdose patients.

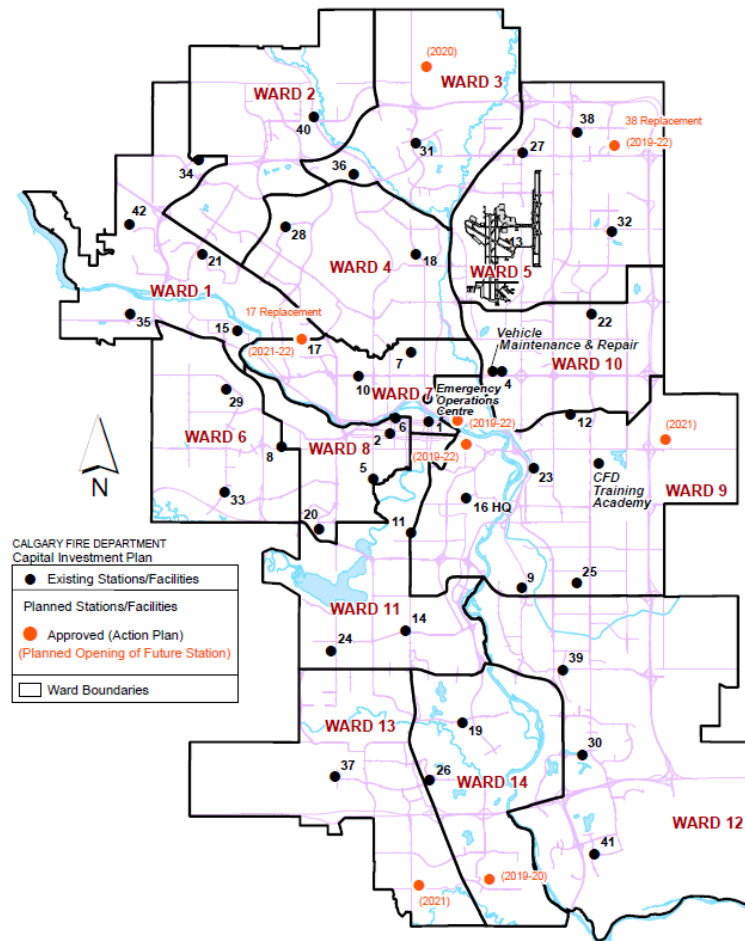
In 2018, firefighters attended to 1,536 suspected Fentanyl overdose patients, and administered the lifesaving Naloxone 296 times. The city of Calgary is also seeing a rise in methamphetamine use and incidents related to the drug. As a result, Calgary Fire is currently working on a program to train firefighters on how to interact with citizens who have used methamphetamines or other drug substances, and how to respond to incidents at potential drug laboratories.

Demand for our services continues to increase.

Our goal is to effectively and efficiently balance fire and public safety service requirements, while ensuring every Calgarian has equitable access to appropriate, affordable and acceptable fire and community safety services.

We develop long-range capital plans and regularly evaluate where stations and resources should be allocated to ensure the optimal level of fire protection for the citizens of Calgary.

FUTURE FIRE STATION PLANS



BUDGET

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

In 2018, our Council-approved operating budget was **\$234.3 million**.

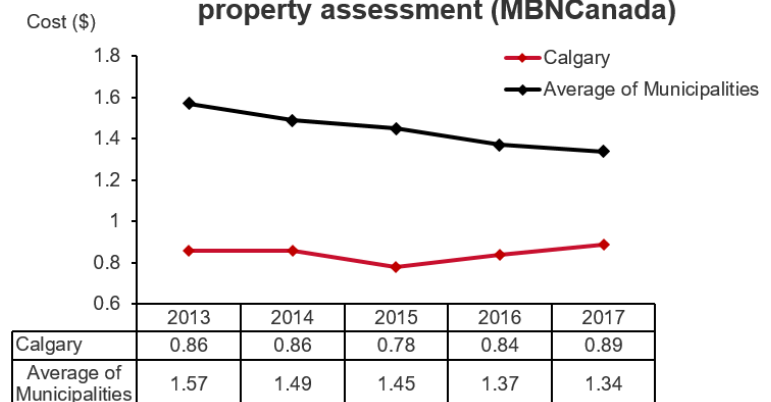
Our capital budget provides for the maintenance of our physical assets, for life-cycling of our facilities and equipment, and for needed apparatus, equipment, technology, and new station construction.

In 2018, our Council-approved capital budget allocation was **\$52.0 million**.

COST COMPARISON TO ASSESSED VALUE

CFD's operating cost of **\$0.89** per \$1,000 property assessment (Municipal Benchmarking Network Canada survey results) is significantly lower in comparison with other municipalities (average of \$1.34).

Operating costs for fire services per \$1,000 property assessment (MBNCanada)



Additional information: visit www.Calgaryfire.ca or call 3-1-1 (www.calgary.ca/311Online).