

CALGARY FIRE DEPARTMENT SUSTAINABILITY PLAN UPDATE

Managing growth

In 2021, we will effectively and efficiently balance the fire and community safety service requirements presented by growth. Every Calgarian will have equitable access to appropriate, affordable and acceptable fire and community safety services. Sustainable, predictable funding allows us to maintain safe equipment, apparatus and facilities to support our service to citizens.

One of our key challenges continues to be keeping pace with growth in Calgary, whether by providing fire service to newer communities or realigning service in older communities where populations have intensified.

In 2015 we started construction on the permanent Royal Vista Station and the replacement of the Mount Pleasant Station. To accommodate demands in both developing and existing areas, we began the planning process for new and replacement stations including Varsity, Tuscany, East/West Macleod, Cornerstone, and Northeast Industrial.

To ensure our long-range capital needs support the Council-approved Service Levels and Response Time Targets (SLRTT), we created a 30-year infrastructure master plan that recommends the upgrade or replacement of 26 existing fire stations, the construction of 11 new fire stations, and the acquisition of 24 new fire apparatus to accommodate new community growth and redevelopment in the next 30 years.

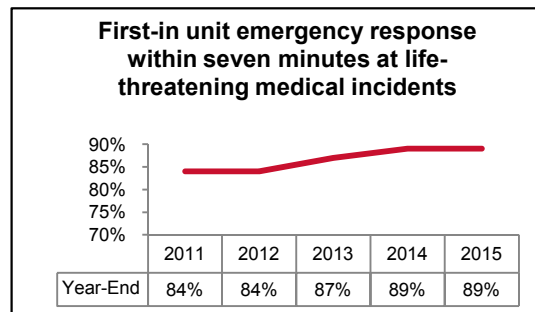
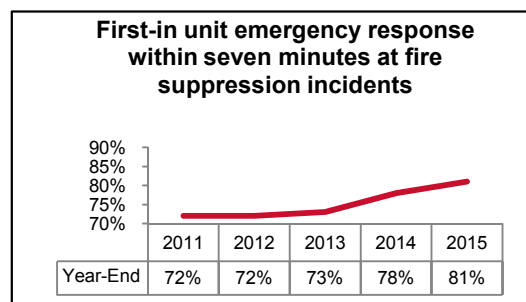
We continued to focus on performance improvement initiatives in support of achieving our long-term response goals. This included the installation and upgrading of traffic pre-emption systems, and transitioning to a new mobile application to provide emergency responders with enhanced reliability and additional mapping functions.

Status	Vision
★ ●	Urban intensification, regeneration and growth include a commitment to new or renewed fire services for communities.
●	We cooperate, collaborate and partner to secure public and private resources for capital investment, service provision and education.
●	We ensure long-term funding sufficiency, the optimal use of assets and the ongoing adoption of innovation through a reserve of funds designated for the lifecycle of fire service assets; mobilization of all other sources of funds to support communities; a commitment of capital and corresponding operating resources to build and operate fire stations prior to Area Structure Plan approval; and the adoption of all possible operational efficiencies.

We continued to improve our service to citizens through better response time performance and narrowing the gap in reaching our long-term response goals:

- When reaching citizens who needed our help at fires, we exceeded our annual response time target by 5% (six seconds faster than 2014 and 34 seconds faster than 2011).
- When reaching citizens who needed our help during medical emergencies, we exceeded our annual response time target by 2% (same time as 2014 and 30 seconds faster than 2011).

While our service to citizens improved by being able to reach them more quickly, we still face challenges due to apparatus busyness and resources required as a result of service demands created by intensification and new residential growth on Calgary’s periphery.



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<p>Ensuring safe communities</p>	<p><i>In 2021, every Calgarian will live in a safe community. Our programs and services will reflect the growing and changing community safety demands of our citizens, and will be tailored to the risk, diversity and needs of each community. Stations and firefighters are core to our communities and are key to delivering programs, services, and education that enhance the health, safety, and preparedness of our citizens. We support business in our city by ensuring safe facilities and practices that mitigate risk to their employees and our citizens.</i></p>
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In 2015, our community safety role continued to expand:

- Firefighters responded 118,080 times to 57,521 calls where citizens needed help. 27% of those responses were for a fire alarm or other indication of a possible fire.

Our prevention and safety education programs continued to reduce fires and minimize harm to lives and property:

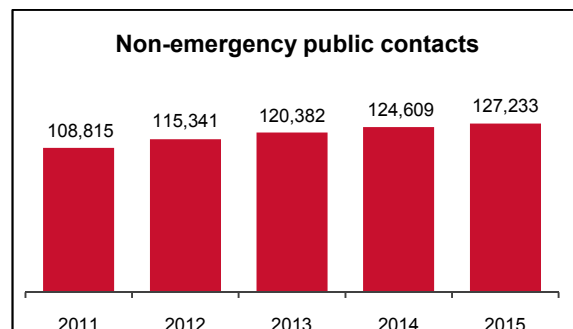
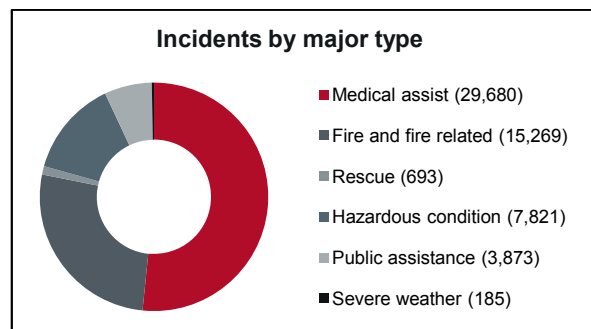
- The number of fires declined by 12% from 2014 (the lowest rate since 2011), and there were 25 civilian fire injuries (two less than 2014), and only one civilian fire death (five fewer than 2014).

To help make a difference in the lives of Calgarians and assist us in becoming more efficient, we added two Medical Response Units (MRUs) to respond out of high medical call-volume stations. Since the MRUs were introduced, we have been able to help Calgarians needing medical assistance in the downtown core 12 seconds faster, and the demand placed on our fire apparatus has lessened.

Status	Vision
★ ● ▽	We provide services fundamental to the quality of life of citizens by managing changing and growing demand for community safety services.
●	Emergency response stations and firefighters are vital elements of our neighbourhoods and contribute to the vibrant urban fabric of our communities.
●	We are an essential element of complete communities.

Our sustainability target of having one community safety officer per 50,000 citizens and one fire inspection and enforcement staff per 15,000 citizens has been adjusted to account for our work to make our stations into community hubs. We continued to take action to encourage Calgarians to adopt safer, more responsible fire safety behaviours:

- Fire crews visited 21,356 homes during the annual Home Safety Program, and performed Compliance and Hazards audits on fire and life safety systems at 22,447 businesses.
- We met our goal of reaching one in ten Calgarians in a non-emergency setting, connecting with over 127,000 Calgarians, providing station visits and fire safety programs and campaigns.
- Our Fire Safety Codes Officers completed 12,816 inspection activities based on 3-1-1 service requests, and our technical services staff evaluated 1,701 plans to ensure compliance with the Alberta Building Code and Alberta Fire Code, making buildings safer.
- Since the inception of our Enforcement and Compliance team, there have been 110 legal files related to Alberta Fire Code violations, which resulted in more than \$275,000 in charges.



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Leading in service to citizens

In 2021, we have clearly demonstrated the life and safety outcomes, value and efficiency of our service. The means by which fire and community safety service is evaluated reflects the difference we have made in the quality of our citizens' lives, our communities and the social fabric of our city. Our commitment to sound science and research will help reduce fire and community safety risks in Calgary. It will also empower us to effectively advocate for changes to legislation and practices that result in safer infrastructure and buildings in our city.

We participated in a Departmental Review to identify opportunities for better customer service across the Community Services Department. To improve the way we deliver services to the citizens of Calgary, align with the new Community Services framework and strengthen our own operations, we unveiled a new organizational structure.

To meet the demands of a changing city, we completed a Zero-Based Review where operating efficiencies ranging from \$15 million to \$16.2 million were identified and will be realized by 2018.

Results of the 2015 Citizen Satisfaction Survey showed we continue to deliver on citizen expectations. 99% of Calgarians were satisfied with our services, and 100% believed our services are important.

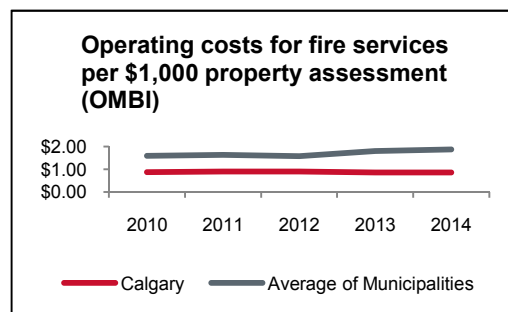
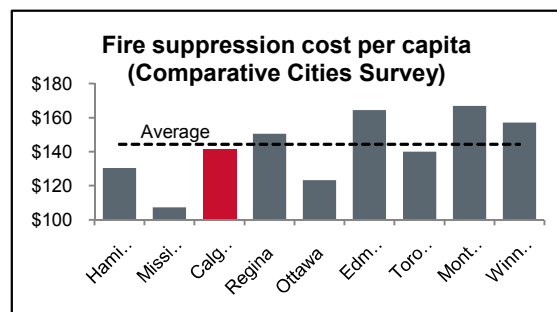
The 2015 Perceptions & Expectations Survey showed that 90% of those surveyed think it is important for our firefighters to be involved in the community, and that we should have the resources to keep pace with Calgary's growth.

For Fire Prevention Week, we used social media to engage the public in a "Smoke Alarm Selfie" contest, reaching over 250,000 people and raising awareness about the importance of smoke alarms.

We conducted a social return on investment evaluation which showed that our fire safety programs create \$2.20 in savings to the public for every dollar invested. We also developed a strategy for future program evaluations on other intervention activities we are involved in.

Results from our annual Comparative Cities Survey showed that our fire suppression cost per capita is better than the average of comparative municipalities. In addition, the latest Ontario Municipal Benchmarking Initiative (OMBI) survey results showed our fire service operating costs per assessed value of the property we protect was \$0.86 per \$1,000, significantly lower than the comparative municipalities' average of \$1.88, and that we are performing at the same level or better at outcome measures such as residential fire injuries and fatalities.

Status	Vision
★ ●	We leverage our experience and share our achievements and leading practices to drive the standards and measures of success for fire and community safety services.
★ ●	We measure our social return on investment to understand and optimize our impact and create more value for citizens and communities.
●	Through collaboration with leading thinkers in the field of fire and community safety, we help drive innovation that reduces risk to lives and property and support efficient operations.



CALGARY FIRE DEPARTMENT SUSTAINABILITY PLAN UPDATE

Evaluating our environmental stewardship

In 2021, we meet or exceed global benchmarks for environmental management in the fire services and have minimized our environmental footprint through innovative practices and collaboration. From a community perspective, we reduce risks to the health, safety and protection of our waterways, land and air by pioneering safe management practices for hazardous materials in our homes and businesses. Our environmental leadership role is the result of pursuing opportunities that demonstrate a sound balance between environmental benefit and economic sensibility.

Organized through The City of Calgary's Environmental & Safety Management group, we participated in a Waste Reduction campaign, where The City realized a successful reduction in paper products.

We continued our partnership with the Parks business unit to identify two additional locations in the city to conduct our pump and aerial training, and also received approval to use a site within Fish Creek Provincial Park to conduct training. Using these sites for our training means less fuel consumption and greenhouse gas emissions, as well as improved natural vegetation growth and reduced dryness, reducing the potential for grass fires and soil erosion.

To ensure continued best practices in our health, safety and environmental practices, an internal audit of our environmental management system (EnviroSystem) was conducted to measure compliance with our ISO 14001 registration. The audit was successful and our registration continued.

To help build awareness of our environmental and safety management systems, we updated our EnviroSystem Awareness course for our staff, reflecting current environmental practices.

We partnered with the Alberta Chapter of the Canada Green Building Council (CaGBC) and MMM Group Limited to showcase our South Calgary Station 5 to emerging green builders and the public. The tour showcased our Leadership in Energy & Environmental Design (LEED) Gold Certification energy efficient features, and highlighted how LEED can be used in an emergency response environment.

In partnership with The City's Waste & Recycling Services, our designated Household Hazardous Waste program sites collected household hazardous waste from citizens, and our firefighters collected and disposed of over 54,000 litres of fluid from motor vehicle accidents and other emergency calls.

Status	Vision
★ ●	We measure, and seek to reduce whenever financially feasible, the carbon footprint, water use and waste of our operations and fires within our communities.
●	We are an energy neutral organization.
●	We develop partnerships for environmental safety to support a reduction in fire and hazardous materials risks and the impact of climate-related hazards and events.

Reducing environmental contaminants (2015)
Firefighters disposed of an estimated 54,025 litres of fluids from motor vehicle accidents and other emergency calls.
Waste diversion and reduction (2015)
Six fire stations and three landfill Throw & Go locations designated as Household Hazardous Waste program sites collected 1,046,932 kilograms of household hazardous waste chemicals from citizens.
Household Hazardous Waste program sites collected 165,750 kilograms of propane tanks, helium tanks and other cylinders from citizens.
Household Hazardous Waste program sites diverted 648,500 litres of waste oil and 23,985 litres of flammable liquids from Calgary landfills, and diverted 1,708,311 litres of latex paint and waste oil paint liquids from Calgary landfills.
In partnership with Waste & Recycling Services, the Household Hazardous Waste program sites collected 3.367 metric tonnes of materials from citizens.

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Valuing and empowering our workforce

In 2021, our workforce has just-in-time access to the types of training and development that support our service to citizens. Our human resources management and programs align with our organizational goals and motivate and support staff in achieving our vision. We apply technology as a strategic tool and enabler for public service innovation, productivity growth and reduction of our environmental footprint. Working in concert with our unions, we create service delivery and workforce strategies that protect the safety of our citizens and reflect consideration for all of the factors impacting sustainability.

In 2015, our 1,477 employees delivered fire and community services to 1.23 million Calgarians. Ninety-three percent of our employees are uniformed staff, and of the total workforce, 87% provide frontline emergency services to citizens.

Our staff participation rate in the Annual Employee Satisfaction Survey almost doubled in 2015, and our index rose to an all-time high of 147.6 points. Our strongest attributes were Character and Commitment with 94% of our employees reporting that they are proud of the meaningful work they do.

Working with Calgary Firefighters IAFF Local 255 union, we developed a Diversity and Inclusion program. This multi-phased program will build on our culture to ensure we have a diverse, inclusive workplace where our employees feel safe, protected and valued.

As part of an overall strategy to ensure a psychologically safe and healthy workplace, we piloted a Road to Mental Readiness (R2MR) program. As the first department to adapt this program for the fire service, peer trainers taught close to 300 people skills to deal with stressful situations and recognize when it is time to seek assistance.

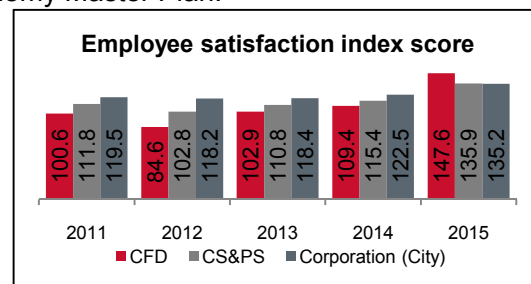
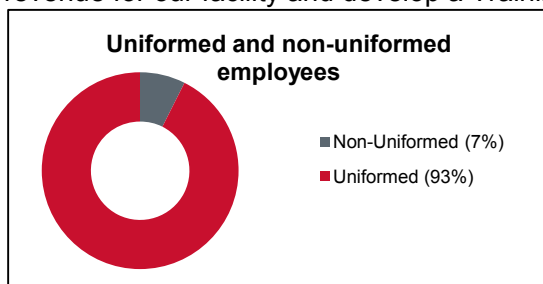
We engaged our workforce by developing a number of formal and informal working groups and committees, and developed polls and surveys to elicit feedback on various initiatives and projects.

To enable us to better report and make decisions based on sound data, we implemented a new records management system that will integrate for the first time in to one place, data from various internal and external sources.

As a result of increased awareness and targeted communication, our lost-time claims frequency was 5.2, well below our 2015 target of 6.3 claims per 200,000 hours worked by employees.

While our Training Academy generated over \$125,000 in revenue (an increase of 37% over 2014), we will continue to look for ways to meet our sustainability goal of generating at least \$2 million in revenue for our facility and develop a Training Academy Master Plan.

Status	Vision
●	We fully understand and manage our capital risk to ensure we meet the evolving service needs of our citizens.
▽●	Our employees will have the skills and knowledge to deliver a breadth of fire and community safety services to citizens through world-class training, technology and innovation.
★●	Our management and labour work collaboratively to create a safe, engaged and sustainable workforce.



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Building service resiliency through emergency management

In 2021, we have established relationships, planning and protocols critical to maintaining our service to citizens throughout the course of any large-scale disaster or emergency. By leveraging our stations and firefighters located throughout Calgary, we are a key partner in helping create resilient, self-activating communities. We are closely tied to forecasting emerging disaster and emergency events, and prepare our workforce and communities to respond safely, effectively and appropriately.

Recognizing the increasing importance of emergency preparedness and response, the Calgary Emergency Management Agency (CEMA) transitioned from the Fire Department to its own business unit, ensuring The City is well-prepared to help Calgarians during adverse events in our community.

To enhance safety and prepare for potential incidents across the country, we supported other agencies and levels of government including Transport Canada’s Emergency Response Task Force to develop technical and regulatory solutions and interim measures for the transportation of flammable liquids by rail, and we participated in the Calgary Airport Authority’s “Operation Silver” security training exercise to practice and test emergency response preparedness plans.

As part of The City of Calgary’s planned improvements to enhance our flood and emergency preparedness, we upgraded our radio communication system and updated our radio system disruption plan to ensure continued reliability of our radio communications during emergencies. We also developed an Information Technology Disaster Recovery Management strategy to ensure operational resiliency for our critical technology systems, and we set up a portable radio replacement working group to assist in recommending new portable radios.

In partnership with CEMA, we participated in Calgary’s largest preparedness event – Disaster Alley – to talk to citizens about how they can prepare for an emergency or disaster.

We responded to over 600 calls over the course of two days as a severe summer storm hit Calgary in August, bringing heavy rain and hail. The Municipal Emergency Plan was activated and several roads were closed during the storm due to flooding and power outages. During the event, Calgary 9-1-1 received six times the average number of calls. Over a seven-hour stretch, our fire crews responded to 274 calls, a 250% increase over our average daily call volume.

Status	Vision
●	We achieve public safety resiliency through partnerships locally, regionally, provincially, nationally and internationally
★●	The Fire Department has a comprehensive emergency management program to ensure uninterrupted critical fire and community safety services during any large-scale emergency incident.
●	We contribute to the preparedness and self-activation of communities in the response to, and recovery from, large-scale disasters and emergencies.



Rain and Hail Storm (Calgary, AB August 4, 2015)



Liquid Natural Gas learn and burn session at Training Academy