

# Fire & Emergency Response

Led by: Chief of Calgary Fire Department

## Service Description

Supported by 42 fire stations and 1,328 firefighters, Fire & Emergency Response provides life-saving emergency assistance to Calgarians and visitors across 848 square kilometres. This includes responding to over 70,000 fire and fire-related incidents, critical medical interventions, motor vehicle collisions, hazardous conditions, specialized technical rescues including water rescues, and calls for public service assistance annually. The service also supports Fire Safety Education and Fire Inspection & Enforcement by helping to deliver community risk reduction programs like general fire prevention education and Fire Safety Reports.

## Service Updates

### Key Service Results

The service responded to over 90,000 emergency incidents in 2023 while maintaining first-in unit response performance at fire and medical incidents. Strategic investments made to improve response performance at serious and escalating fires meant that critical resources were assembled on scene over one minute faster on average compared to 2022, an improvement of 6 per cent. A sixth District Chief was added to maintain span of control over frontline operations, improve emergency response to large incidents, and meet the needs of a growing city. The service also deployed two Medical Response Units to help deal with the continued increase in critical medical emergencies in the downtown core. New deployment software was implemented in collaboration with Calgary 9-1-1 using live data and continuous risk analysis to ensure adequate emergency response coverage in the city. The Fire Department also successfully opened Station 45 to provide emergency response coverage in the community of Belvedere and surrounding areas.

### Service Challenges

Increases in service demand and expansion of the coverage area due to new development continue to strain available resources and impede performance improvement efforts. Overall incidents increased 15 per cent, fires increased 14 per cent and critical medical interventions increased by 18 per cent. The service must continue to hire and train record volumes of recruits over the next few years as part of the strategy to maintain and improve service levels in alignment with Council-approved targets, especially considering Calgary's projected population growth. This stresses the capacity of both the recruitment and training functions and has impacts on the ability to deliver necessary incumbent firefighter training. The service is still facing supply chain issues and escalation of costs with key partners internal and external to The City.

### Trends & Potential Uncertainties

Risk levels in the downtown area are increasingly at a disproportionately higher rate compared to the rest of the city due to social disturbance, overdoses and poisonings, and other emerging safety issues. The service responded to 50% more poisoning and overdose emergencies in 2023 compared to 2022. The rate at which demand for service is increasing does not seem to be slowing down and the continued increase in fire incidents is a risk to community safety that needs to be addressed proactively. New stations and resources are required to maintain service levels in new communities at the city's boundaries while the most significant growth in call volume occurs in high-density urban areas. Proximity to surrounding jurisdictions may lead to renewed interest in regional services.



# Measuring Our Performance

## Legend

— Actuals

■ Expected Future Performance

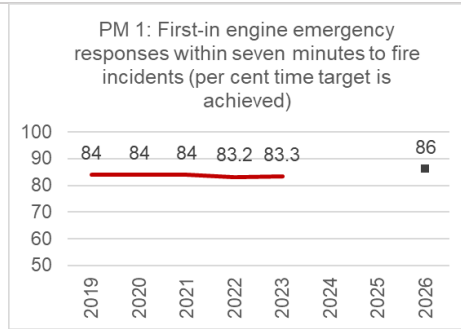
➔ Progressing as planned

⊖ Not progressing as planned

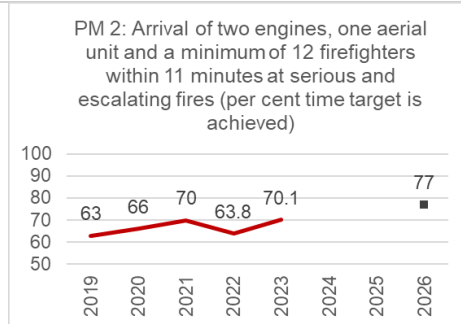
## Performance Measures

## Story behind the numbers

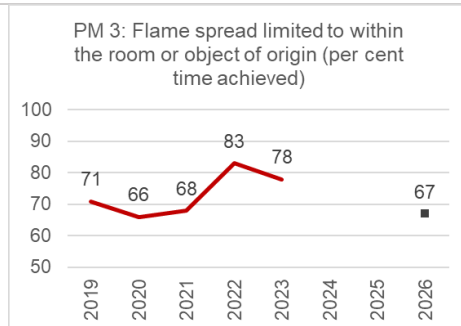
## Status



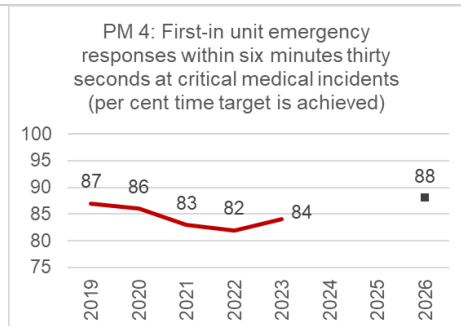
Despite another record-breaking year for service demand, first-in engine arrival at emergency incidents was unchanged compared to 2022. Strategic service improvements and additional frontline resources have been applied to prevent service levels from deteriorating and the service was able to respond to over 90,000 emergency incidents in 2023. While the service is still on track to achieve 2026 performance projections, success will hinge on the strategies implemented to address the rising number of emergency incidents in Calgary.



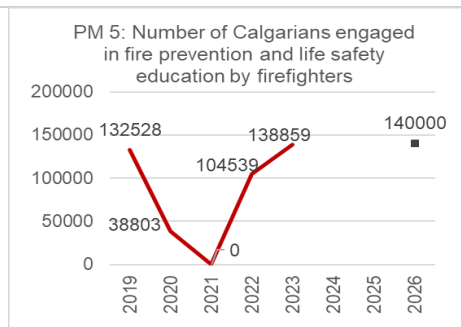
The service observed a 6 per cent improvement in the time required to assemble critical resources at serious and escalating fires. Improvement initiatives included completion of station location upgrades, a real-time dynamic deployment software for response coverage, increased hiring to ensure adequate frontline staffing and the replacement of four aerial units with new tower and ladder units. Since the number of serious and escalating fires tends to be small, there can be significant variation in the 90th percentile statistic for this measure.



While the service is outperforming projections there was a deterioration in the percentage of time flame spread was contained to room or object of origin compared to 2022. Continued changes to structural design, including building materials, spatial separation between occupancies, and room layouts make it harder to contain flame spread. This, alongside a 14 per cent increase in fire incidents in 2023, could be contributing to the deterioration in performance despite the improvement in the time to assemble essential resources at serious fires.

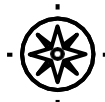


Medical response time performance improved 2 per cent while attending 20% more medical calls compared to the same period in 2022. Demand for medical services and the number of interactions with Calgarians experiencing vulnerabilities continues to be concentrated in the downtown core. The addition of the Medical Response Unit to serve high call volume areas has helped to manage the increase in critical medical calls. Overdose/poisoning incidents increasing by 40% compared to the same period in 2022. The service continues to be on track to achieve 2026 performance projections.



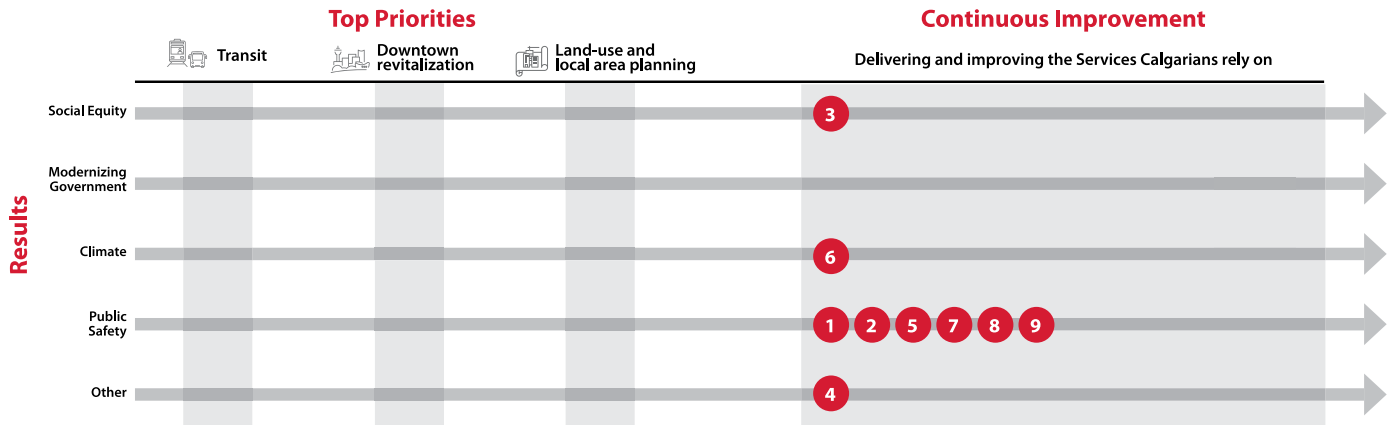
Key engagement programs like the Home Safety Program and the Fire Safety Reports program restarted later than anticipated in 2023. Firefighters are responding to extremely high volumes of emergency incidents while trying to balance mandatory training and wellness requirements. This limits their capacity to engage in public education programs in non-emergency settings. The service continues to participate in School Fire Drills, Firefighter Storytime, and Station Tours requested via 3-1-1.





# Progress on Service Delivery

## Alignment with Council Refined Priorities and Result Areas



- Legend**
- Completed
  - Progressing as planned
  - Not progressing as planned
  - Not started
  - Initiative number

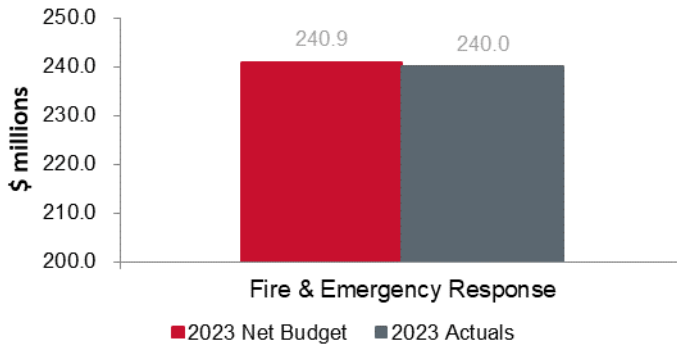
Initiative	Initiative Update	Status
1 Improve emergency response and outcomes at serious fires by decreasing the time needed to assemble essential firefighting resources (two engines, one aerial, and a minimum of 12 firefighters) within 11 minutes at the incident. The service will focus on increasing the number of aerial units deployed across the city and the number of firefighters staffing those units.	The service was able to assemble essential firefighting resources at serious and escalating fires within the 11-minute target 70 per cent of the time, a 7 per cent improvement from the previous year. The service received three tower units and one ladder unit to replace existing aerials and will begin increasing staffing to four people in 2024 as part of the strategy to improve service levels and response time performance.	
2 Maintain service levels by ensuring adequate staffing levels to balance operational demands including emergency response, community risk reduction initiatives, training and wellness.	Over 100 new firefighter recruits completed training and joined the frontline in 2023. The service is hiring and training recruits at record levels to meet service demand as Calgary's population grows. Work is underway to prevent service disruptions by addressing staffing challenges due to higher absenteeism and lower overtime availability. The service also responded to calls for assistance from the province, deploying firefighters, apparatus and equipment to Grande Prairie, Yellowhead County and Yellowknife, while maintaining adequate staffing levels to meet service levels in Calgary.	
3 Foster an equitable, diverse and inclusive workplace that understands and represents the community served and where staff feel valued and experience a sense of belonging. The service will expand learning opportunities for, and remove barriers to, equity, diversity, inclusion and belonging, explore more equitable recruitment, selection and promotion processes, implement recommendations from The City's Anti-Racism Program, and practice Trauma Informed Leadership.	The Respect and Inclusion Office expanded and launched an Inclusion 101 course to improve awareness, understanding and competencies of equity, diversity, and inclusion. In July 2023, Camp Courage Calgary welcomed 24 girls and gender diverse youth to experience the possibility of a career as a first responder. Community outreach efforts were enhanced with additional spoken languages and attending more community events. Improvements to uniform clothing were implemented to foster inclusion and belonging. Employee recognition programs were restarted and improved, including Beyond The Call.	

Initiative	Initiative Update	Status
4 Improve employee health, wellbeing and resilience by expanding mental health and psychological supports, reducing stigma in the workplace and culture and continuing to support medical health and physical wellbeing.	Mental Health exposures are now reported in the Safety Data Management System to improve psychological safety in the workplace. The investment in psychological services for 2023-2026 has improved the accessibility of these vital mental health supports for first responders. There were 800 medical referrals in 2023, and 17 per cent of psychologist visits were referrals for relationships, general anxiety and sleep. A Memorial Wall to honour fallen firefighters was established at headquarters.	
5 Enhance service efficiency and effectiveness by leveraging new and emerging firefighting equipment and technology.	The service is deploying Portable On-Demand units (POD) to improve the effectiveness of special responses. A real-time, dynamic, software tool was implemented in collaboration with Calgary 9-1-1 to provide alerting and recommendations that address coverage issues and service gaps. Wildland firefighting enhancements in 2023 included new pumps and equipment upgrades for all bush buggies to improve the service's wildland-urban interface response capabilities. The first phase of a program to upgrade water delivery at fires in alignment with industry best practice is complete.	
6 Mitigate the environmental impact of fire service delivery by assessing the feasibility of alternative fuel sources to power the heavy fleet while continuing to explore emerging firefighting technology and equipment to mitigate environmental impacts.	The service continues to investigate ways to mitigate the environmental impacts of fire service delivery. The service has a contract to test an electric fire engine and is working with Facilities on the implementation of charging infrastructure. The service is exploring opportunities with academic institutions to identify and research feasible technologies that could mitigate environmental impacts. Enhancements to the water delivery system for firefighting are also expected to lower water consumption while increasing effectiveness at fire incidents.	
7 Maintain the standard of service delivery by improving processes for frontline firefighters to maintain and enhance the necessary skills and competencies to perform their roles effectively and meet legislated Occupational Health and Safety requirements.	Investments to increase the number of firefighters and training officers improved service capacity. The service trained over 100 new recruits in 2023 and will maintain this pace for the remainder of the cycle to meet service needs. The probationary period for recruits has been expanded to 18 months to allow more time for evaluation and development of skills and competencies. Over 200,000 hours of incumbent firefighter training was delivered to maintain skills and competencies for service delivery, including over 60,000 hours due to the implementation of the Advanced First Aid program.	
8 Mitigate risks related to the Green Line project, including construction accidents like tunnel collapses, and the potential for service impacts due to road closures and traffic pattern changes. These risks are new ground for the service and require working with service partners to determine emergency response needs, impacts from construction work, response protocols, training requirements and specialized equipment needs.	The service continues to be involved in Green Line design activities. To minimize service disruptions, the service cooperated with Enabling Works for road closures and detours related to Green Line underground utilities relocation.	
9 Align the expansion of fire service delivery with community growth and development and meet the needs of Calgarians by ensuring that capital assets and infrastructure are timely, adequate, and well-maintained.	Station 45 opened successfully in 2023 to provide emergency response coverage in the community of Belvedere and surrounding areas. A station optimization study provided the leadership team with recommendations for station improvements to enhance emergency response operations and employee wellbeing. A governance plan was implemented to improve strategic decision making for capital projects and new processes will enable more effective and efficient management of capital budgets. Infrastructure planning and construction has incurred delays due to increased complexity and resource constraints.	



## Service Updates on Financial Performance

### Net Operating Budget and Actuals as of December 31, 2023

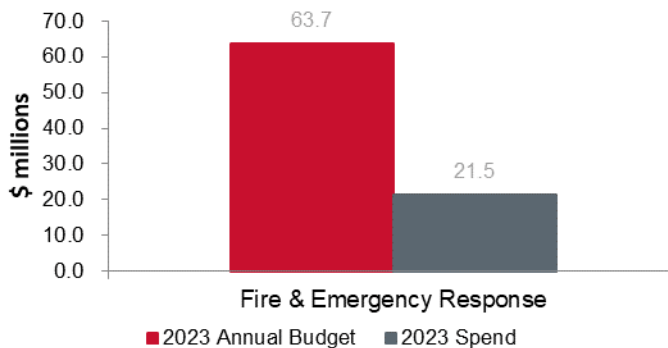


### Operating Budget Updates - 2023 net operating budget vs actuals:

Fire and Emergency Response has a favourable operating variance of \$0.9 million. The primary drivers of the variance were due to Salary and Wages from vacancies that were filled throughout the year, partially offset by higher Materials, Equipment & Supplies cost due to increased maintenance of older equipment and inflation.

In 2023 Fire and Emergency Response opened a new station in Belvedere allowing further development within the community as well as hiring three classes of new recruits to fill the outstanding vacancies to improve response times and reduce staff burnout within Fire and Emergency Response.

### Capital Budget and Spend as of December 31, 2023



### Capital Budget Updates - 2023 total capital budget vs 2023 spend:

Fire and Emergency Response has spent 33.8 per cent of the 2023 approved capital budget. The underspend is due to delays in construction of new fire stations driven by inflation and alignment with integrated civic facilities planning priorities.

In 2023, the capital expenditures have been primarily used to purchase new heavy fleet and equipment for Fire and Emergency Response which was much needed to address deferrals of heavy fleet purchases from previous budget cycle constraints.