

Service Level for Fire Services

Scope

Service Level (SL) documents are prepared to allow citizens of the City of Saskatoon (City) to review and understand the services *currently* provided. This document includes activities completed under the Fire Services budgeted service line. This service may be completed by various divisions in the City.

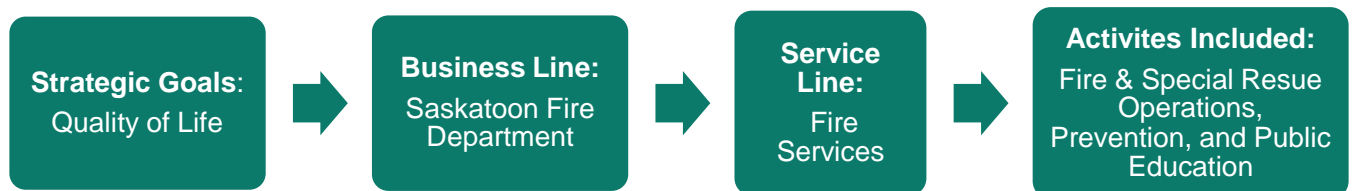
Service Overview - what we do

The Saskatoon Fire Department (SFD) manages the Fire Service line, which includes a total of 334 staff trained to support and provide 24-hour emergency response service. This provides residents of Saskatoon an emergency services delivery system consisting of a wide range of components, for the purpose of preventing emergencies and reducing the loss of life and property.

The SFD responds to and mitigates emergencies involving the rescue of persons, incidents of fire, unplanned releases of hazardous materials (HazMat), and pre-hospital emergency medical incidents. The SFD also protects the city's tax base through extensive inspection, prevention and enforcement programs. The SFD services are guided by numerous National Fire Protection Association (NFPA) standards, among other acts and bylaws, to ensure safe, efficient, and quality service is provided to keep our city safe.

Purpose - why we do it

The Saskatoon Fire Department provides community-based, citizen-focused Fire Services to create a safe and comfortable environment for the residents of Saskatoon.



Activities within Service Line	Service Attributes and Customer Values	Service Level Outcomes	Customer Performance Measures
1. Fire and Special Rescue Operations	Safety Responsiveness Efficiency Reliability Quality	<p>Firefighters respond to all fire emergencies and emergencies requiring specialized training, such as Emergency Medical Care, Water, HazMat, and Technical rescue.</p> <p>Equipment, apparatus, and Fire Stations are maintained to ensure operational staff are equipped for responses.</p> <p>Citizen emergency calls are handled promptly and either redirected or responded to appropriately.</p>	<ul style="list-style-type: none"> • Emergency response is available 24 hrs/day, 365 days/yr • NFPA 1710 standard outlines the following total response time of 6 minutes and 20 seconds: <ul style="list-style-type: none"> ○ Crews are dispatched within 1 minute of incoming call ○ Fire crews leave station within 80 seconds ○ 4 minute travel time • Responders are certified and trained to national standards, to ensure quality and efficient service • Appropriate tools, equipment and apparatus are maintained to provide reliable service
2. Prevention, Inspections & Investigations	Safety Quality Reliability Affordability Responsiveness	<p>Preventative fire building inspections and property maintenance inspections result in reduced risk of incidents.</p> <p>Cause of fire incident is determined in a timely manner through investigation.</p>	<ul style="list-style-type: none"> • Fire building inspections are conducted on commercial and multi-residential buildings on an annual or semi-annual schedule to ensure fire safety and reliability of buildings. • Property maintenance complaints are followed up within the target number of days from being received, based on priority: <ul style="list-style-type: none"> Priority 1: 7 days Priority 2: 30-180 days Priority 3: 90-365 days • Current ratio is 4.5 inspectors per 100,000 population • Future measure of inspectors per square meter of building and district population will be determined, as more data becomes available
3. Public Education and Community Relations	Quantity Quality Professionalism Accessibility Reliability	<p>Educates citizens and businesses on how to stay safe at home, in vehicles, and in the community.</p> <p>Maintain positive community relationships through Fire Safety Presentations, Fire Station tours, and working with community groups.</p>	<ul style="list-style-type: none"> • Feedback from community partners has indicated that focused public education in schools and in the community show a positive effect for citizen safety. • Future measure on # of people engaged and educated per prevention program will be communicated, as more data becomes available

*A common performance measure in Municipal Benchmarking Network Canada (MBNCanada) is Fire Station Notification Response Time 90th Percentile (min:sec), or 90% of the time. In 2015, the median was 6:37, ranging from 5:29 (Calgary) to 7:21 (Windsor). The SFD responds to fire related emergencies within 6 minutes and 17 seconds, 90% of the time. This ranks Saskatoon 4th among the 9 cities measured.

Resource Allocation – what does it cost

The total cost of service line:

Service Line	Number of Activities	2016 Budgeted Cost to Deliver Service	2016 Actual Cost to Deliver Service	Variance in 2016
Fire Services	3	\$46,885,200	\$46,738,562	\$146,637

Note: The previous 3 year trend is unfavorable; therefore, the favorable variance in 2016 is not an accurate indicator of any gap in funding levels.

Cost to provide the three main activities in this service line, based on previous year:

Service Activity	Budgeted Cost per Activity	Actual Cost per Activity	Variance	Actual Cost per Unit
1. Fire and Special Rescue Operations <i>Unit: # square km =236.4</i> <i>Unit: # capita = 270,000</i>	\$44,726,788	\$44,592,800	\$133,988	\$188,630 per km ² \$165 per capita
2. Prevention, Inspections + Investigations	\$1,891,017	\$1,862,635	\$28,382	\$7,880 per km ² \$6.90 per capita
3. Community Relations + Public Education	\$267,393	\$283,126	\$(15,732)	\$1.05 per capita

*MBNCanada does not publically report Fire Service cost metrics per capita or square kilometer for comparison with the above unit costs. However, one of the 6 metrics reported publically is “Total Fire Cost per Staffed In-Service Vehicle Hour” or sometimes referred to as Fire Truck Service Cost, which includes staffed vehicles available to respond to emergency calls. In 2015, 9 municipalities reported on this metric resulting in an average cost of \$297/hr. The SFD total cost per staffed in-service vehicle hours was right on par at \$297/hr, while other western cities with similar response models ranged from \$257/hr (Winnipeg) to \$317/hr (Calgary).

Financial Assumptions

- Management, Administration and Building Maintenance Costs are prorated to each activity, based on activity cost prior to allocating these general expenses.
- Public education & Community Relations includes two dedicated FTE salaries, and does not include other staff who dedicate their time when available.

Supporting Information – what exactly we do

1. Fire and Special Rescue Operations

This area includes Fire suppression, and special emergency programs such as Emergency Medical Care, Water, Hazardous Materials release, and Technical rescue. Dispatch is part of operations to ensure that quick and appropriate service is sent to the emergency site. Maintenance and strategic location of equipment and fire hall buildings is an equally critical task to ensure reliable and consistent timely response to all areas of the city.

Deployment and trained staffing levels is a major driver to the level of service provided, and is determined by probability of incident occurrence based on historical statistics, risk of danger, and consequence of negative outcome with a utilitarian perspective. Staff certification and training is a large component to ensuring quality response is delivered in special emergency services. National standards outline competency by the following three levels: 1) awareness, 2) operations, and 3) technician. Currently, SFD strives to *train* to the top technician level in all of its specialty programs. SFD *staffs* to an operational level, although technician level would be desirable for deployment capacity.



2. Prevention, Inspections and Investigations

Fire Prevention and Investigation Division focuses on building uses that offer a high potential for preventing unwanted ignition and elimination of hazardous conditions. SFD is mandated by specific bylaws, which the division delivers a number of programs to achieve. Programs that are paramount to this initiative include Safety and Property Maintenance, Fire Building Inspections, Fire Investigations, and Plan Reviews.

- SFD is responsible for handling all complaints related to the Property Maintenance and Nuisance Abatement Bylaw, with the objective of establishing minimum standards for buildings, structures, and yards to provide safe living conditions. Response to complaints are based on the priority level and date with which each are received, with Priority 1 complaints being the most urgent. Priority is assigned based on safety, potential to harm the public, cause damage to buildings, or nuisance:

- Priority 1 complaints are those that present a direct risk exposing the public to an unacceptable risk of injury, *i.e. Dangerous or sharp materials in yards, unstable buildings, chimney, fireplace, or smoke alarm in disrepair.*
- Priority 2 complaints are those that present a limited risk to an unacceptable risk of injury to persons, or related to a building exposed to an unacceptable risk to cause damage, *i.e. Rodents or insect infestation, water leaking/flooding, graffiti.*
- Priority 3 complaints are those that present a negligible risk to injury to persons or causing damage to a building, but otherwise create a nuisance, *i.e. junked vehicles, garbage and junk storage yard, fence in disrepair*
 - *Long grass and weeds* is being transitioned to Community Standards division as a pilot program
- Fire building inspections are conducted on all commercial and multi-residential building on an annual basis or semi-annual basis.
- Fire investigation, and determination of cause and origin of fires, is used to establish prevention priorities and provide information to the public and provincial authorities.

3. Public Education and Community Engagement

Public Education consists of fire and life safety presentations to schools, businesses, older adults and new immigrants, including fire station tours. FIRE Cadet and Remembering When are just a couple programs that SFD supports. Community Engagement encompasses school liaison activities, National Aboriginal Day, Pow wows, and fundraising events like Light the Night Walk. Truck requests at parades and festivals, such as Canada Day, are also common engagement activities.

Constraints

Risk factors that impact the ability to deliver a service:

- Increase in unique calls (i.e. white powder) and emergencies
- Availability of trained staff to provide specialized emergency responses
- Appropriate placement of Fire Stations to ensure prompt response to emergency
- Availability and quality of equipment and apparatus
- Availability of special training facilities and contractors

Bylaws that dictate a required level of service:

- Fire and Protective Services Bylaw
- Property Maintenance and Nuisance Abatement Bylaw
- Underground Encroachment and Sidewalk Safety Bylaw
- Transportation of Dangerous Goods Bylaw
- Private Swimming Pools Bylaw
- Saskatoon Fire Bylaw 7990

Supporting References

The Saskatoon Fire Department maintains substantial compliance with the following National Fire Protection Association (NFPA) Standards. Training, competencies, location deployment, and staffing levels are based on the governing bodies:

- Fire Standards: Fire Fighter Level 1 & 2 (1001/1002), Fire Officer Level 1 & 2 (1021), Hazmat (472), certifications for all rescue practices (1670, 1006), Standard on Apparatus Repair + Maintenance (1911, 1915), Standard on Turnout Gear (1971)
- Special Rescue Training Standards: International Trauma Life Support (ITLS) course certifications, cardiopulmonary resuscitation (CPR) and automated external defibrillator (AED), Surface water rescue and Canadian lifesaving rescue certificate, Public safety dive certification from Emergency Response Diving International, National Occupational Competency Profile (NOCP) standards on Primary Care Paramedic (PCP) and Emergency Medical Service (EMS), Saskatchewan College of Paramedics governing EMS
- Saskatoon Health Region (SHR) tiered response agreement and partnership
- Service Agreements with surrounding communities
- The Fire Safety Act, The Emergency Planning Act, and The Cities Act

Optional Service Levels - what else is possible

The table below provides service level options and associated costs should there be a need or desire to adjust the current level of service. All costing information presented is estimated based on data from previous year (2016). Options include:

No.	Service Level Option	Change in Service Level	Service Line Budget 2016	Est. Annual Cost	Overall Funding Result
1	Status Quo	<ul style="list-style-type: none"> No change 	\$46,885,200	\$46,885,200	\$0
2	Reduce Service level: Community Relations	<ul style="list-style-type: none"> Reduce or eliminate community engagement, but continue public education Fire fighters time, that is currently spent helping Community Relations Coordinators when available, would be distributed back to Operations training Contrary to current citizen expectations of Fire's community engagement 	\$46,885,200	\$46,877,200	<p><u>Estimated Savings:</u></p> <ul style="list-style-type: none"> Promotional materials: \$3,000 Overtime costs: \$5,000 <p>Total Option Saving: \$8,000</p>
3	Increase Service Level: Fire Building Inspections	<ul style="list-style-type: none"> SFD is mandated to provide building inspections to ensure buildings and facilities are safe for operations, citizen's health, and are constructed to meet minimum fire resistant and prevention standards. Completed building inspections reduces the risk in number and size of fires, improves building safety and reliability in our community, and therefore increases level of service. Fire inspectors handle property maintenance complaints and fire building inspections. Priority 1 <i>property maintenance complaints</i> are completed first due to life safety, leaving a backlog of mandated <i>building inspections</i>. An additional inspector assigned strictly to <i>fire building inspections</i> will result in approximately a 14% increase in completed building inspections. 	\$46,885,200	\$47,010,200	<p>Addition of:</p> <ul style="list-style-type: none"> \$125,000 for an FTE dedicated to fire building inspections in 2018, to achieve a 14% increase per year in completed building inspections, required to meet mandated inspection schedule Additional resources would be required in future years to reach 100% completion of building inspections <ul style="list-style-type: none"> 2019 a second inspector to increase an additional 14% of annual building inspections Evaluate performance for future FTE required

No.	Service Level Option	Change in Service Level	Service Line Budget 2016	Est. Annual Cost	Overall Funding Result
4	Increase Service Level: Fire & Special Rescue Operations	<ul style="list-style-type: none"> Currently, fully staffed at operation trained level Increase in level of service to fully staff all special rescue programs at technical level Improved quality of service due to quicker application of technical service 	\$46,885,200	\$46,981,200	Addition of: <ul style="list-style-type: none"> \$64,000 for Rescue minimal technical staffing levels \$32,000 for Hazmat minimum technical staffing levels Total Option Addition: \$96,000